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& Contae **Luimnigh**

Limerick City
& County Council



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N69 BALLYENGLAND JUNCTION IMPROVEMENT SCHEME

Part 8 Planning Report

N69BE-CCC-CW-XX-RP-C-0001



Client: Limerick City and County
Council
Date: 02/12/2022

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Rev	Change Description
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P01	Client comments incorporated
P02	TII comments incorporated
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1. Introduction

Limerick City and County Council (LCCC) appointed Clandillon Civil Consulting (CCC) to provide technical consultancy services to develop the N69 Ballyengland Junction Improvement Works through detailed design, statutory procedures, tender and construction. The appointment was made under Transport Infrastructure Ireland's (TII) Road Safety Technical Services Framework Lot 1. CCC is undertaking the role of Project Supervisor for the Design Process (PDSP) for the duration of the commission.

The technical consultancy services are provided under Lot 1 of the Framework Agreement for Road Safety Technical Services for the Design of Road Safety Schemes, with Limerick City and County Council and TII acting as Client.

The works are located at the junction between the N69 and L-6005, within the townland of Ballyengland Lower, situated east of Askeaton town. The N69 is a busy commuter route linking the mid-west area of the country to the west of Limerick and the north of County Kerry. The N69 forms part of the Wild Atlantic Way, and it provides vital connectivity between the deep-water port located in the village of Foynes and the rest of the Munster region. Additionally, the deep-water port in Foynes Village is a busy commercial port that attracts a high number of Heavy Goods vehicles along the N69 Route.

The scope of the service is to provide a realigned junction scheme between N69 and L-6005 - this consists of realigning the junction, providing improved visibility for the vehicles exiting onto the N69 from L-6005 and increasing the level of safety around the area, as further described in Chapter 2 and 3.

1.1 Policy

Under TII's Road Safety Technical Services Framework Lot 1, TII has provided funding for safety improvement schemes on the national road network where safety issues have been identified.

2. Site Location

The works are located at the junction between the N69 and L-6005, within the townland of Ballyengland Lower, situated east of Askeaton town, as shown in **Figure 1** and **Figure 2**.

Figure 1: Scheme Location

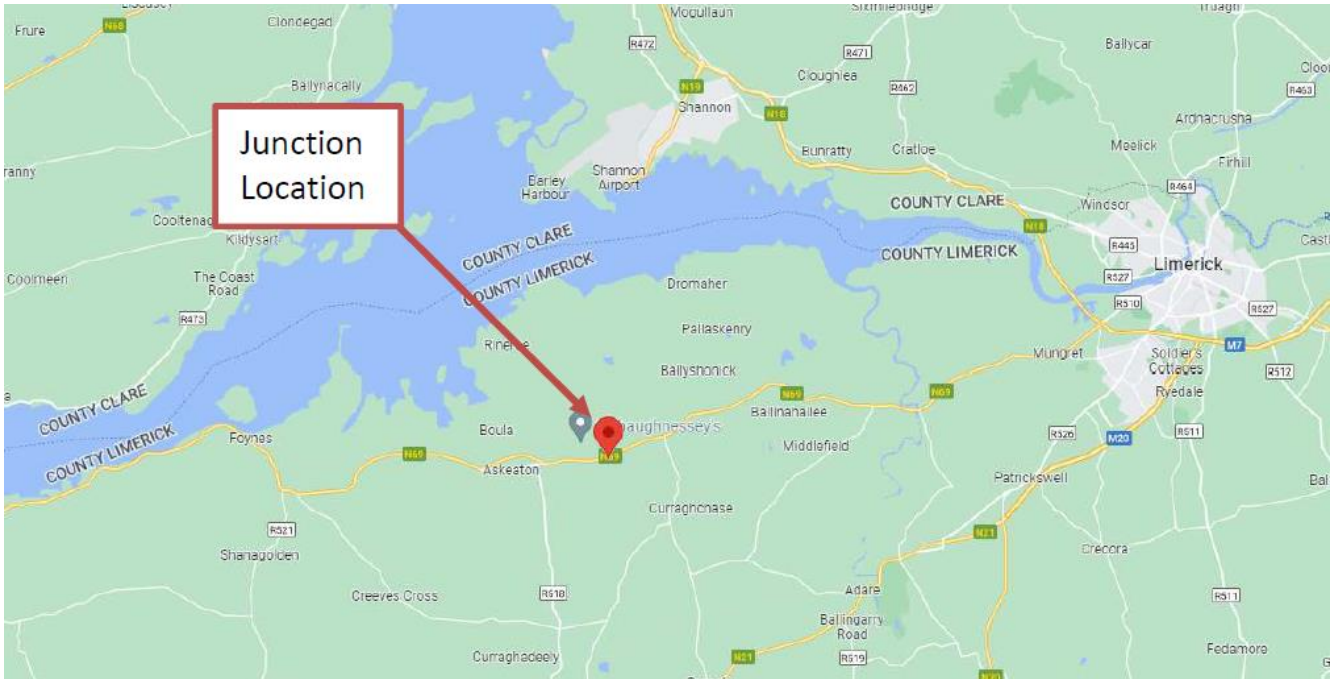


Figure 2: Scheme Location



2.1 Existing Road Environment and Geometry

The existing road environment consists of a skew junction with encroaching vegetation which provides limited visibility for vehicles joining the N69, as shown in **Figure 3**.

Figure 3: Existing N69 Ballyengland Junction



2.1.1 N69

The N69 (major road) is characterised by agricultural lands both in the south and north with frequent direct accesses to houses and private properties.

Along this section, the posted and operational speed limit is 100 km/h and the carriageway is approximately 7.5m wide (one 3.75m wide lane in each direction) with no footpath or hardstrip on either side. On the west side of the junction, the N69 follows a straight alignment and an almost flat vertical profile. On the east side of the junction (Limerick direction), the alignment is characterized by a horizontal left-handed curve with large radius (approx. 1000m) and the longitudinal profile is rising with an approx. 3.5% gradient followed by a crest curve with K value of approx. 40 (radius approx. 4,000m). This vertical curve is partially hindering visibility at the junction, especially for low height objects.

The road lining along this section of the N69 consists of two solid white lines for the centre line, preventing overtaking, with dashed lines at the junction for access to and from the local road. There are also yellow dashed lines at the major road edge.

Figure 4: N69 view east side from the junction



Figure 5: N69 view west side from the junction



2.1.2 L-6005

L-6005 is a local road that gives access to several houses and agricultural activities. The posted speed limit is 80 km/h, while the operational speed is significantly lower, considering that the road is very narrow and, in some areas, the simultaneous passage of two cars in opposite directions is not achievable.

Along the first section of the road (immediately after Ballyengland junction), the width is maximum 5.5 m but can reach a minimum of less than 4.0m with no footpath and hardstrip either side. The road is following an almost straight alignment and the profile is rising in altitude following a 2.5% gradient. There are no longitudinal road markings along this section of the road.

Figure 6: L-6005 view from the junction



Figure 7: L-6005 view immediately after the junction



3. Description of the Proposed Development

3.1 Objectives

The problem identified at this location relates to poor sightlines for road users when exiting this junction from the Local Road L6005 onto the N69. The main objective of the proposed scheme is to square up the junction as much as possible and to improve visibility at the junction.

3.2 Proposed Development

The overall length of intervention along the L-6005 is approximately 60 m.

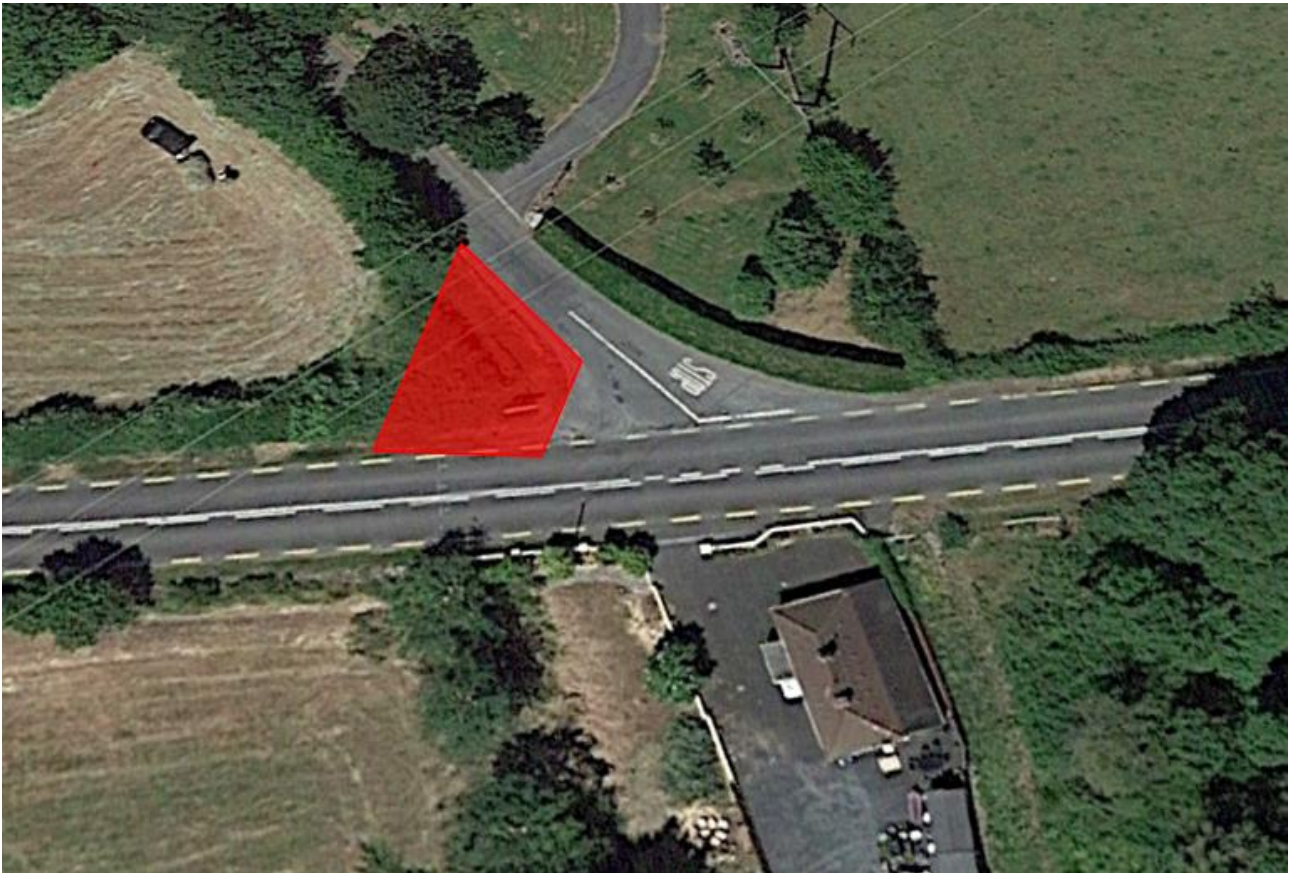
The works will include road widening, accommodation works, upgraded road signage, services diversions as required, new surface water drainage system, and all ancillary works necessary for completion. Posted speed limit will remain the same along the L-6005, 80 km/h.

Figure 8: New proposed layout



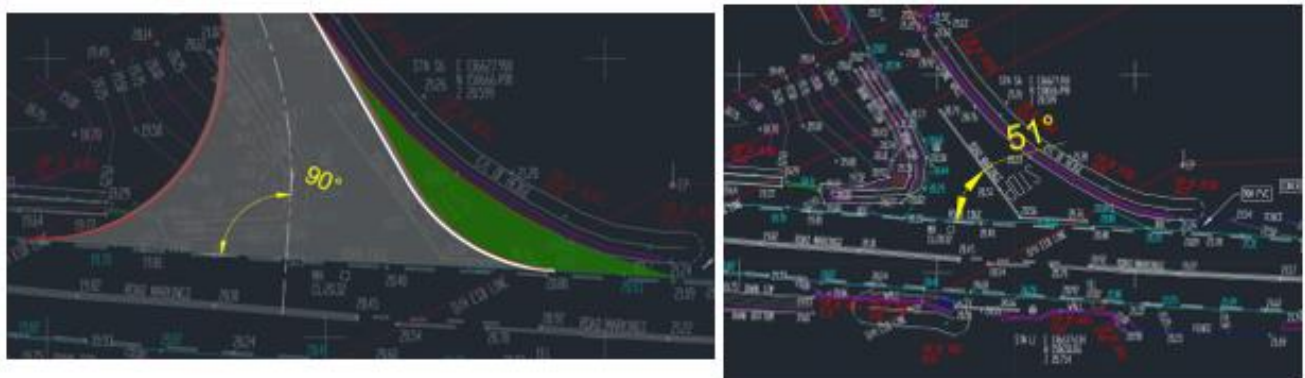
The existing junction will be realigned to provide a right angled approach from L6005 to the stop line, by widening on the western corner and kerbing an area on the eastern corner, as shown in **Figure 8 and 9**.

Figure 9: Indicative widening area



The new road layout changes the angle of approach from 51° to 90°.

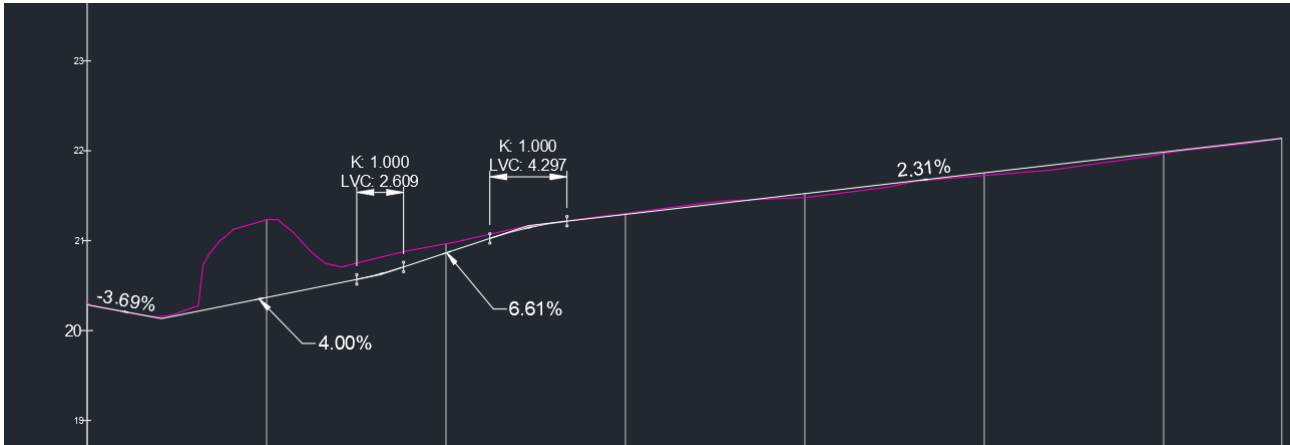
Figure 10: Comparison of the approach angle at the junction



The proposed alignment starts at chainage 0+000 in the centreline of N69. As soon as the alignment meets the L-6005 road, a new horizontal curve with radius 30 m and 18 m long is introduced, to reconnect with the existing centre of the L-6005 road at chainage 0+026 approximately. Afterwards, the alignment is continuing as per centreline of the existing road.

From a vertical point of view, the new road alignment is initially following the cross slope of the N69 (approximately 3.69%). When the N69 meets the new L-6005 layout, a dwell area longer than 10 m and with maximum gradient 4% is provided, complying with DN-GEO-03060 as a Relaxation in the dwell area (ref. Ch. 5.6.4 of the standard).

Figure 11: Design Profile (white line) of the new road alignment



After the dwell area, a steeper gradient of 6.61% is provided, in order to have the access located on the east of the L-6005 around chainage 0+025 of the new road alignment reachable without any large-scale earthworks. However, this gradient fully complies with DN-GEO-03031 standard, which requires a maximum gradient of 7% for Local Roads.

Figure 12: Private access at the junction



Finally, the design profile is reconnecting with the existing road gradient, which is around 2.3%.

The 4%, 6.61% and 2.31% gradients are connecting each other with two very short and tight vertical curves, with a K value of 1.

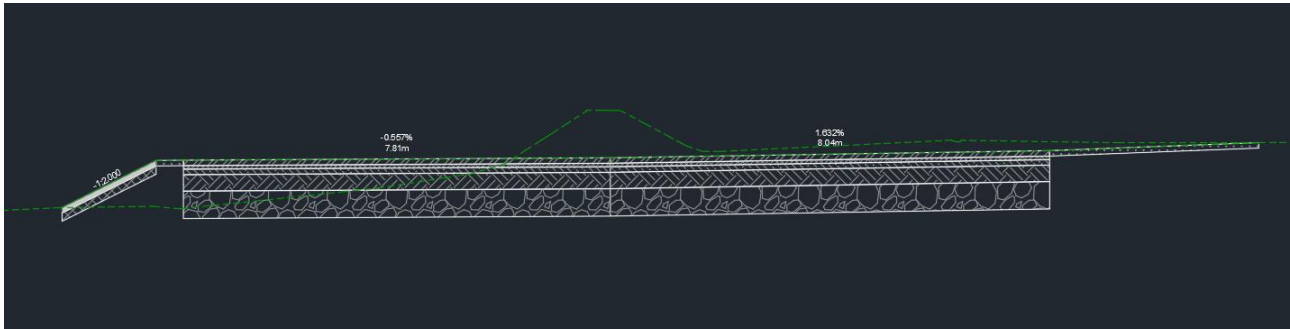
It is useful to report that the existing gradient at the junction (measured along the centre line), as previously stated, is around 2.5%. The existing alignment and junction, however, start from a more eastern, and as result higher, point compared to the new layout. Also, the development of the existing alignment is longer compared to the new proposed one, which means consequently the new layout would require a slightly steeper gradient.

3.2.1 General Arrangement

The new general arrangement consists of a T junction. As shown in **Figure 8**, to tie in with the N69, along the L-6005 road the fillet radii will be 13 m of value. Moreover, a 0.5 m hardstrip on the west and east side of the junction is provided for the first 20 m on the L-6005. For the east side of the junction, verge will replace the existing lane.

On the west side of the junction, the cross section will be in fill, with a height of embankment of less than 1.0 m tapering with existing ground, as shown on the left part of **Figure 13**.

Figure 13: Typical cross section at the junction (facing L-6005)



3.2.2 Visibility checks

Visibility has been checked at the junction.

On the west side of the junction, there will be a need to set back the existing hedge to a location behind the sight triangle, as it is a high obstruction hindering visibility to the approaching vehicles. The full 215 m of sight distance cannot be achieved without major modification of the existing bridge 102 m from the junction. Costly bridge works are beyond the scope of this safety scheme, and so clear visibility will be provided only as far as the location of the bridge. In fact, taking a X value of 3 m, the design provides 102 m sight distance to the west.

Moreover, the farm gate shown in **Figure 14** shall be relocated, in accordance with TII and the landowner.

Figure 14: Farm gate (field access)



Figure 15: West side view from the junction



Figure 16: Existing Bridge



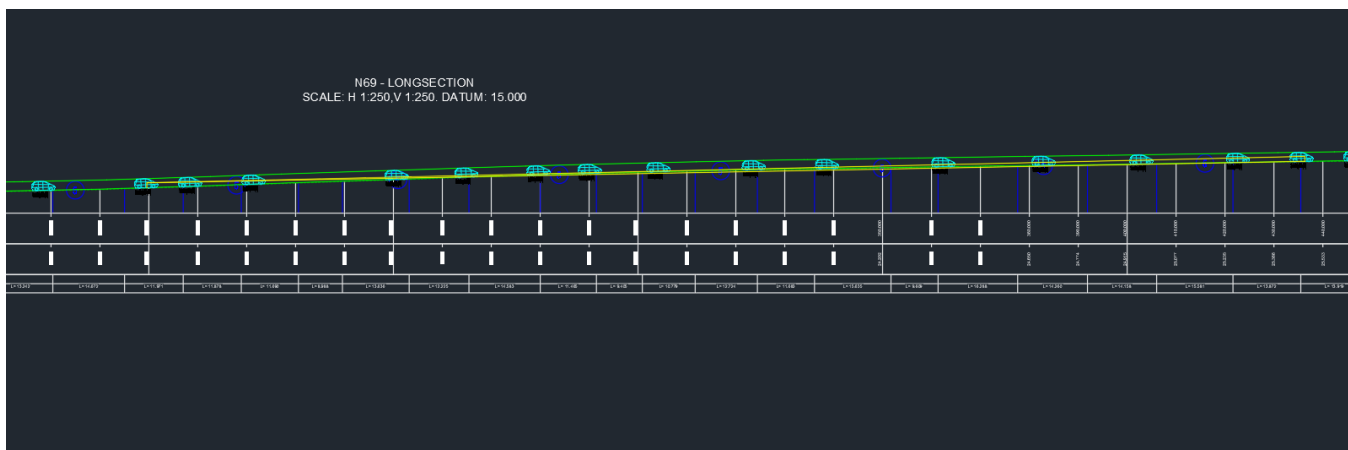
On the east side of the junction, there will be the same need to set back the existing hedge to a location behind the sight triangle, as it is a high obstruction hindering visibility to the approaching vehicles.

Figure 17: East side view from the junction



It is proposed to remove the hedge and boundary vegetation to achieve 174 m sight distance in the eastern direction. Further cleaning of vegetation through the bend to achieve 215 m could result in higher operational speeds.

Figure 18: Vertical visibility check to east side of the junction



Clear visibility will be provided as far as the location of the tree shown in **Figure 19**.

Figure 19: Existing tree



3.2.3 Vertical and horizontal manoeuvres checks

Finally, using the Vehicle Tracking software, a check of the wheeltrack of the vehicles has been carried out with a heavy vehicle 18 m long. The proposed layout will not pose any problems for large vehicles.

Figure 20: Vehicle Tracking check



Also, a vertical check has been made, to confirm that no parts of any kind of vehicle is bottoming out creating damage to the road surface or to the bottom of the vehicle itself.

3.3 Design Standards

The design has been carried out following the standards:

- DN-GEO-03060 “Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions)”;
- DN-GEO-03031 “Rural Road Link Design”.

3.4 List of Departures

The following departures from standards will be required:

Table 1: Departures Required

N°	Departure Reason	Standards Required
1	Provision of 174m of "Y" distance to the east side of the junction	"Y" value required is 215m (Tab. 5.5 of DN-GEO-03060)
2	Provision of 102m of "Y" distance to the west side of the junction	"Y" value required is 215m (Tab. 5.5 of DN-GEO-03060)
3	K values of the new vertical alignment below the standard	Tab. 1.3 of DN-GEO-03031

3.5 Drainage

The existing fields are drained naturally by soakaway to ground. It is not proposed to alter this arrangement. At the north west corner of the realigned junction, a low point is created on the edge of pavement due to the need to tie the steep vertical gradient of the L6005 onto the N69. This will be drained using a gully at the low point to the drain to the natural drainage in the field, thereby replicating the existing regime.

The full drainage design shall be developed at detail design stage. It is expected that the drainage will match the existing systems in place with amendments made as necessary to facilitate the revised junction layout.

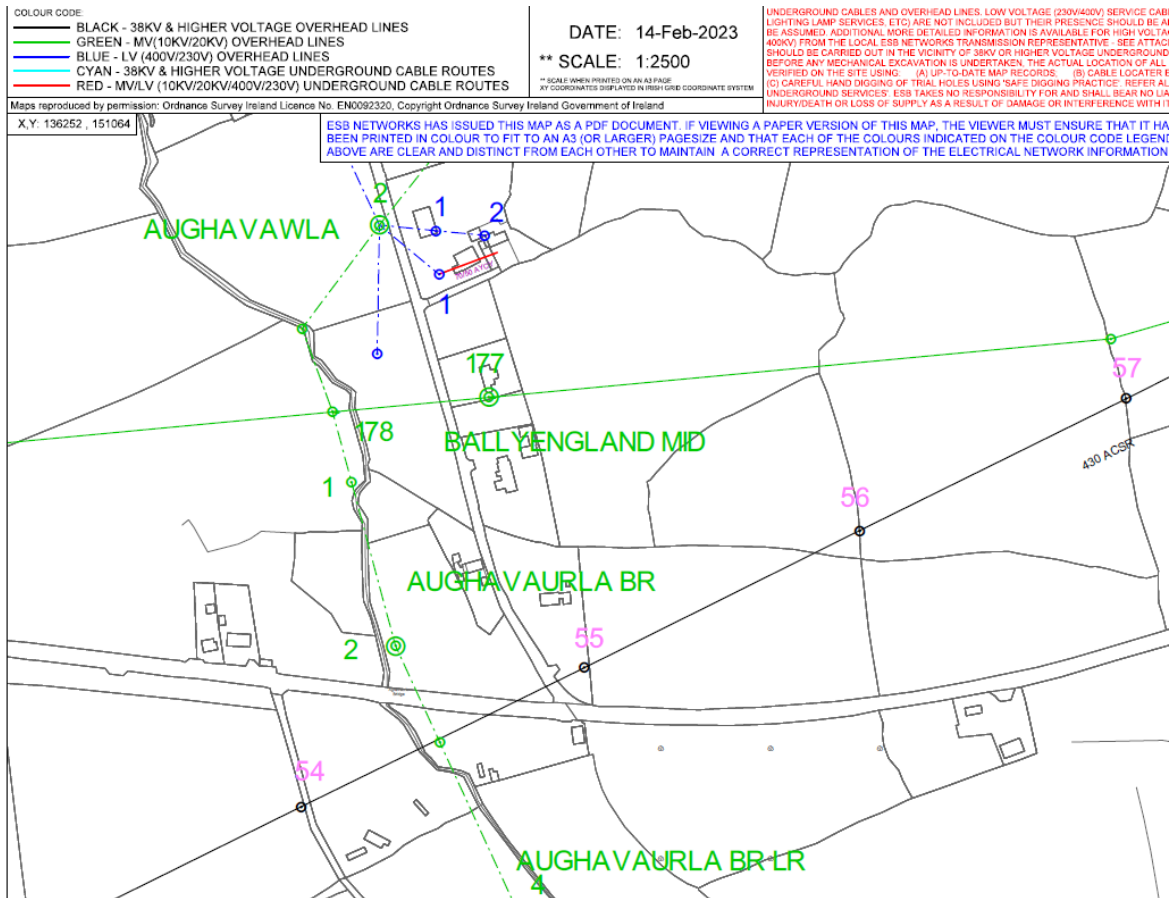
3.6 Utilities

ESB transmission lines and Irish Water pipes are running across the junction, as shown in the following images.

Figure 21: Irish Water pipes - plan



Figure 22: ESB transmission lines - plan



4. Environmental Considerations

Appropriate Assessment (AA) and Environmental Impact Assessment (EIA) screening reports have been undertaken. These have concluded as follows;

- The AA screening report (contained in **Appendix B**) concluded that “...Based on the available information gathered during field and desk surveys, it is the professional opinion of the author that the likelihood of significant impacts arising from the proposed development on all European Designated Sites, with the exception of Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA can be ruled out on the basis of a lack of connectivity..... In the case of these two Designated Sites where direct connectivity with the proposed development exists, potential risks arise from increased input to surface water from sediment and organic matter as byproducts of proposed works however, these are not considered to be significant....”.
- The EIA screening report (contained in **Appendix C**) concluded that “...The proposed development does not fall into a category or exceed thresholds under the Planning Acts that trigger the mandatory requirement for an EIA, and therefore a statutory EIA is not required...” and that “...there is not a real likelihood of significant effects on the environment arising from the N69 Ballyengland Junction Improvement and therefore the preparation of an Environmental Impact Assessment Report (EIAR) is not required...”.

5. Description of the Works

The project comprises approximately 300m works along the N69 and 60m along the L-6005. The works will include junction realignment, hedge cut back, new 75mm half battered drainage kerbs on both sides of the junction and drainage measures and appropriate signs and roadmarkings. Posted speed limit will remain at 100km/h on the N69 and 80km/h on L6005.

The proposed works are shown in drawings N69BE-DR-GA-0001 and N69BE-DR-GA-0101 in **Appendix A**.

Landtake will be required to set back the boundaries at either side of the junction and the boundary treatment proposed will be to replace the existing hedgerows. Maximum set back distances are 2.8 m on the west side of the junction, 3.2 m on the east side of the junction. Moreover, Timber Post and Tension Mesh Fence will be installed as shown in drawing N69BE-DR-GA-0101.



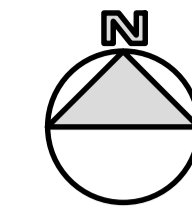
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APPENDIX A - PART 8 DRAWINGS



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PART 8 PLANNING

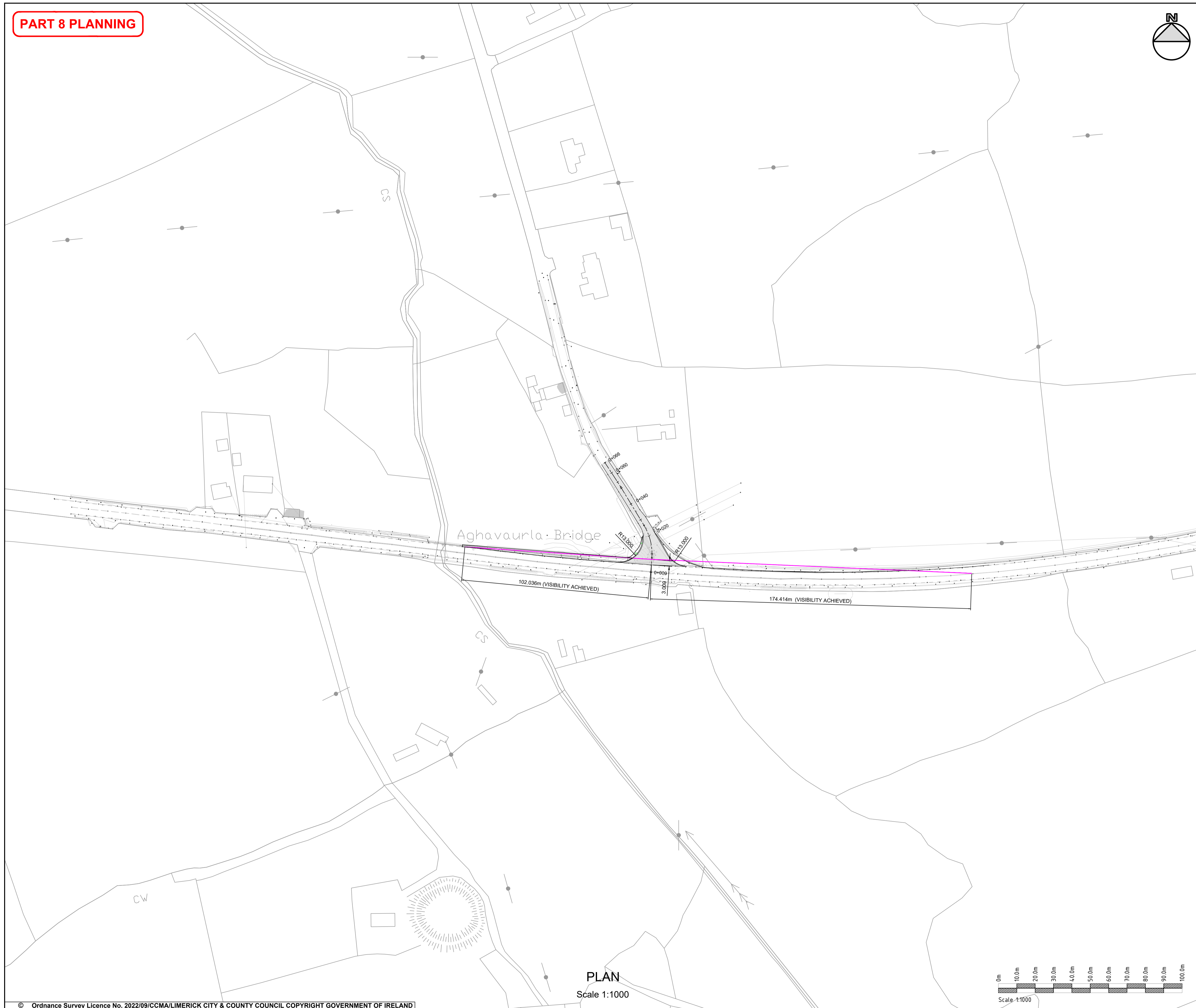


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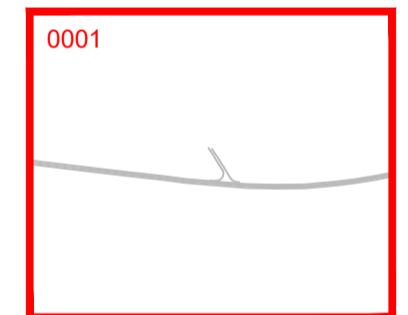
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3. Co-ordinate system used is Irish Transverse Mercator.

LEGEND

- CENTRELINE
- EDGE OF PAVEMENT
- MAXIMUM VISIBILITY ACHIEVED



KEYPLAN



REV	DATE	DESCRIPTION	BY	CHK	APD
P04	23/03/2023	PART 8 PLANNING	LT	LT	SC
P03	20/02/2023	PART 8 PLANNING	LT	LT	SC
P02	20/12/2022	PART 8 PLANNING	MV	LT	SC
P01	14/11/2022	FOR DISCUSSION	MV	LT	SC

CONSULTANT

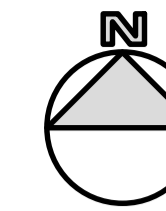
CLIENT

PROJECT **N69 BALLYENGLAND JUNCTION IMPROVEMENT SCHEME**

DRAWING TITLE **GENERAL ARRANGEMENT VISIBILITY SPLAYS SHEET 1 OF 1**

DESIGNED	DRAWN	CHECKED/APPROVED
LT	MV	SC
DATE	SCALE	SHEET SIZE
21/09/2022	1:1000	A1
DRAWING NUMBER	REVISION	
N69BE-DR-GA-0001	P04	

PART 8 PLANNING

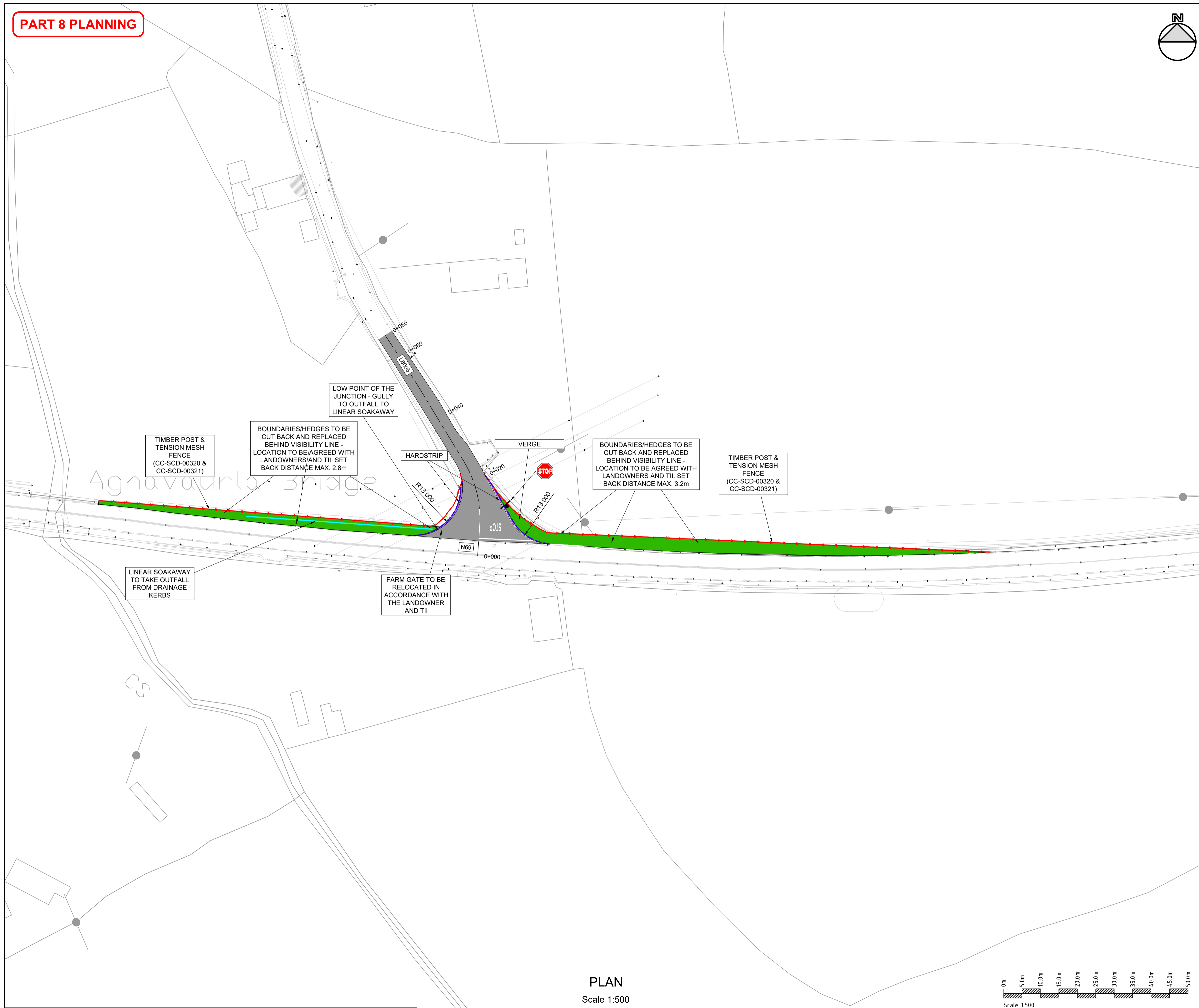


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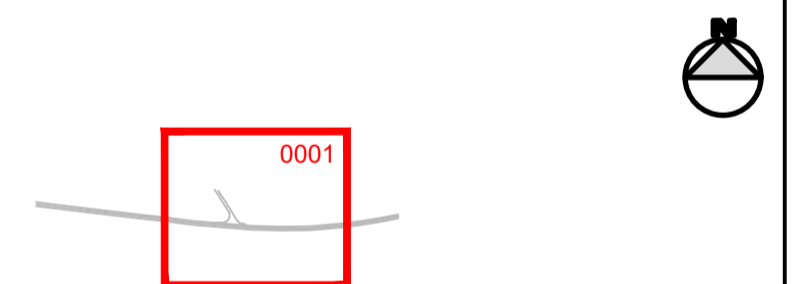
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3. Co-ordinate system used is Irish Transverse Mercator.
4. The full drainage design shall be developed at detail design stage. It is expected that the drainage will match the existing systems in place with amendments made as necessary to facilitate the revised junction layout.

LEGEND

- CENTRELINE
- EDGE OF PAVEMENT
- PAVEMENT EXTENT
- PAVEMENT EXTENT (HARDSTRIP)
- GRASSED VERGE
- TIMBER POST & TENSION MESH FENCE (CC-SCD-00320 & CC-SCD-00321)
- 75mm HALF BATTERED DRAINAGE KERB
- LINEAR SOAKAWAY



KEYPLAN



P03	19/04/2023	PART 8 PLANNING	LT	LT	SC
P02	23/03/2023	PART 8 PLANNING	LT	LT	SC
P01	20/02/2023	PART 8 PLANNING	LT	LT	SC
P00	20/12/2022	PART 8 PLANNING	MV	LT	SC
REV	DATE	DESCRIPTION	BY	CHK	APD



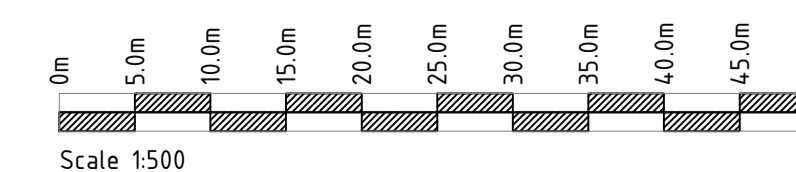
PROJECT
N69 BALLYENGLAND JUNCTION IMPROVEMENT SCHEME

DRAWING TITLE
GENERAL ARRANGEMENT

SHEET 1 OF 1

DESIGNED LT	DRAWN MV	CHECKED/APPROVED SC
DATE 20/12/2022	SCALE 1:500	SHEET SIZE A1
DRAWING NUMBER N69BE-DR-GA-0101	REVISION P03	

PLAN
Scale 1:500





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APPENDIX B - APPROPRIATE ASSESSMENT SCREENING REPORT





Appropriate Assessment Screening

N69 Ballyengland Junction Improvement Scheme

By: Luke Marron and Dr Deborah McCormick, Flynn Furney Environmental Consultants
For: Limerick City & County Council
Date of Issue: 19th September 2022

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1. Introduction

This report comprises information in support of screening for Appropriate Assessment (AA) in line with the requirements of Article 6[3] of the EU Habitats Directive (EC 92/43/EEC) on the Conservation of Natural Habitats and of Wild Fauna and Flora; the Planning and Development (Amendment) Act 2010; and the European Union (Birds and Natural Habitats) Regulations 2011 as amended, for a realignment of the road which comprises the Ballyengland junction adjoining the N69.

This screening exercise aims to determine whether the proposed works have the potential to significantly impact upon the conservation objectives and overall integrity of any Natura 2000 sites. This assessment is based upon a desk study and field work carried out by suitably qualified ecologists. Also included is a general assessment of the ecological status of the site and the potential impacts of the proposed works on the ecology of the surrounding area, including Designated Sites.

The following definitions are used for the terms “impact” and “effect”:

Impact – Actions resulting in changes to an ecological feature, e.g. the construction activities of a development removing a hedgerow.

Effect – Outcome to an ecological feature from an impact, e.g. the effects on an animal population from loss of a hedgerow.

The Competent Authority is obliged to examine the likely significant effects individually or in combination, of the proposed development on European Designated Sites in light of their specific Qualifying Interests (QIs) and Conservation Objectives (COs). If AA screening determines that there is likely to be significant effects on one or more of these sites, or the impacts are uncertain, then full AA must be carried out for the proposed development, including the compilation of a Natura Impact Statement to inform the decision making.

For the purposes of this assessment, a “significant effect” is:

“...an effect that either supports or undermines biodiversity conservation objectives for ‘important ecological features’ ... or for biodiversity in general. Conservation objectives may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity).

Effects can be considered significant at a wide range of scales from international to local. A significant effect is an effect that is sufficiently important to require assessment and reporting so that the decision maker is adequately informed of the environmental consequences of permitting a project.

In broad terms, significant effects encompass impacts on structure and function of defined sites, habitats or ecosystems and the conservation status of habitats and species (including extent, abundance and distribution).”

- CIEEM Guidelines for Ecological Impact Assessment in the UK and Ireland (2018)

Sections 4 and 5 of the report comprises the AA Screening that specifically focuses on the potential for impacts on Natura 2000 sites deemed to be at risk from the proposed development.

2. Background to Screening for Appropriate Assessment

2.1. European Designated Sites

Sites designated for the conservation of nature in Ireland include:

- Special Areas of Conservation (SACs);
- Special Protection Areas (SPAs), and;
- Natural Heritage Areas (NHAs)

SPAs and SACs form the Natura 2000 network of sites. It is these sites that are of relevance to the screening process for this Appropriate Assessment Screening.

SPAs and SACs are prime wildlife conservation areas in the country, considered to be important on a European as well as Irish level. SPAs and SACs are designated under EU Habitats Directive, transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended.

Natural Heritage Area (NHA) is the basic designation for wildlife in Ireland. These are areas considered important for their habitats or species of plants and animals whose habitat requires protection and are protected by the Wildlife (Amendment) Act of 2000.

All European Designated Sites (henceforth simply referred to as “Designated Sites”) that are connected to the proposed development were considered during the desktop study in order to assess the potential for significant effects upon their QIs and COs. This stage of the process is used to determine whether any of the Designated Sites can be regarded as not being relevant to the process of Appropriate Assessment of the project, having no potential to be significantly affected.

2.2. Legislative Context

The methodology for this screening statement is clearly set out in a document prepared for the Environment DG of the European Commission entitled ‘Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6 paragraphs 3 and 4 of the Habitats Directive 92/43/EEC’ (Oxford Brookes University, 2001). This report and contributory fieldwork were carried out in accordance with guidelines given by the Department of Environment, Heritage and Local Government (2009, amended February 2010).

The assessment process is given in Articles 6[3] and 6[4] of the Habitats Directive and is commonly referred to as “Appropriate Assessment” or AA.

Article 6 of the Habitats Directive sets out provisions which govern the conservation and management of Natura 2000 sites. Article 6[3] and 6[4] of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6[3] establishes the requirement for Appropriate Assessment:

“Any plan or project not directly connected with or necessary to the management of the [Natura 2000] site but likely to have a significant effect thereon, either individually or in combination with other plans and projects, shall be subjected to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In light of the conclusions of the assessment of the implication for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

Article 6[4] continues:

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

It is the responsibility of the proponent of the plan or project to provide the relevant information (ecological surveys, research, analysis etc.) for submission to the 'competent national authority'. If satisfied that the information is complete and objective, the competent authority will use this information to screen the project, i.e. to determine if an AA is required and to carry out the AA, if one is deemed necessary. The competent authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned."

The appropriate assessment process has four stages. Each stage determines whether a further stage in the process is required. If, for example, the conclusions at the end of Stage One are that there will be no significant impacts on the Natura 2000 site, there is no requirement to proceed further. The four stages are:

1. Screening to determine if an appropriate assessment is required;
2. Appropriate assessment;
3. Consideration of alternative solutions, and;
4. Imperative reasons of overriding public interest/derogation.

Stage 1: Screening for AA

This report provides a stage one Screening for Appropriate Assessment. It aims to establish whether the plan or project is directly connected with or necessary to the management of Designated Sites; or in view of best scientific knowledge, if the plan or project, individually or in combination with other plans or projects, is likely to have a significant effect on a Designated Site. This is done by examining the proposed plan or project and the COs of any Designated Sites that might potentially be affected.

The study is based on a preliminary impact assessment using both publicly available data and data collected during site surveys. This is followed by a determination of whether there is a risk that the effects identified could significantly impact any Natura 2000 sites, and if so an Appropriate Assessment (AA) is required. The need to apply the precautionary principle in making any key decisions in relation to the tests of AA has been confirmed by European Court of Justice case law. Therefore, where significant effects are likely, possible, or uncertain at screening stage, a stage two AA will be required.

3. Methodology

3.1. Desk Study

A desktop study was carried out as part of this screening process to gain an understanding of the surrounding human and natural environments. This included a review of available data from a range of sources on the site and its immediate environs.

3.2. Data Used To Carry Out The Assessment

The following sources of data were employed:

- Environmental Protection Agency (EPA) Appropriate Assessment Tool;
- EPA Maps (to identify watercourses, hydrology and Natura 2000 site boundaries);
- NPWS protected species database and online mapping;
- The Geological Survey of Ireland hydrological and lidar data and map viewer;
- The National Biodiversity Data Centre archives;
- Inland Fisheries Ireland, and;
- An Bord Pleanála's online database

3.3. SPR Model

This assessment was carried out using the source-pathway-receptor (SPR) approach, a standard tool in environmental assessment. The SPR concept in ecological impact assessment relates to the idea that for the risk of an impact to occur, a source is needed (e.g. a development site); an environmental receptor is present (a lake); and finally there must a pathway between the source and the receptor (a watercourse linking the development site to the lake). Even though there might be a risk of an impact occurring, it does not necessarily mean that it will occur, and in the event that it does occur, it may not have significant effects on the receiving environment. Identification of a risk means that there is a possibility of ecological or environmental damage occurring, with the level and significance of the impact depending upon the nature and exposure to the risk and the characteristics of the receptor.

In this instance, the most relevant receptors are any relevant Natura 2000 sites with connectivity of the proposed works. These were considered during the desktop study stage of this screening assessment in order to assess the potential for significant effects upon their QIs and COs.

3.4. Field Survey

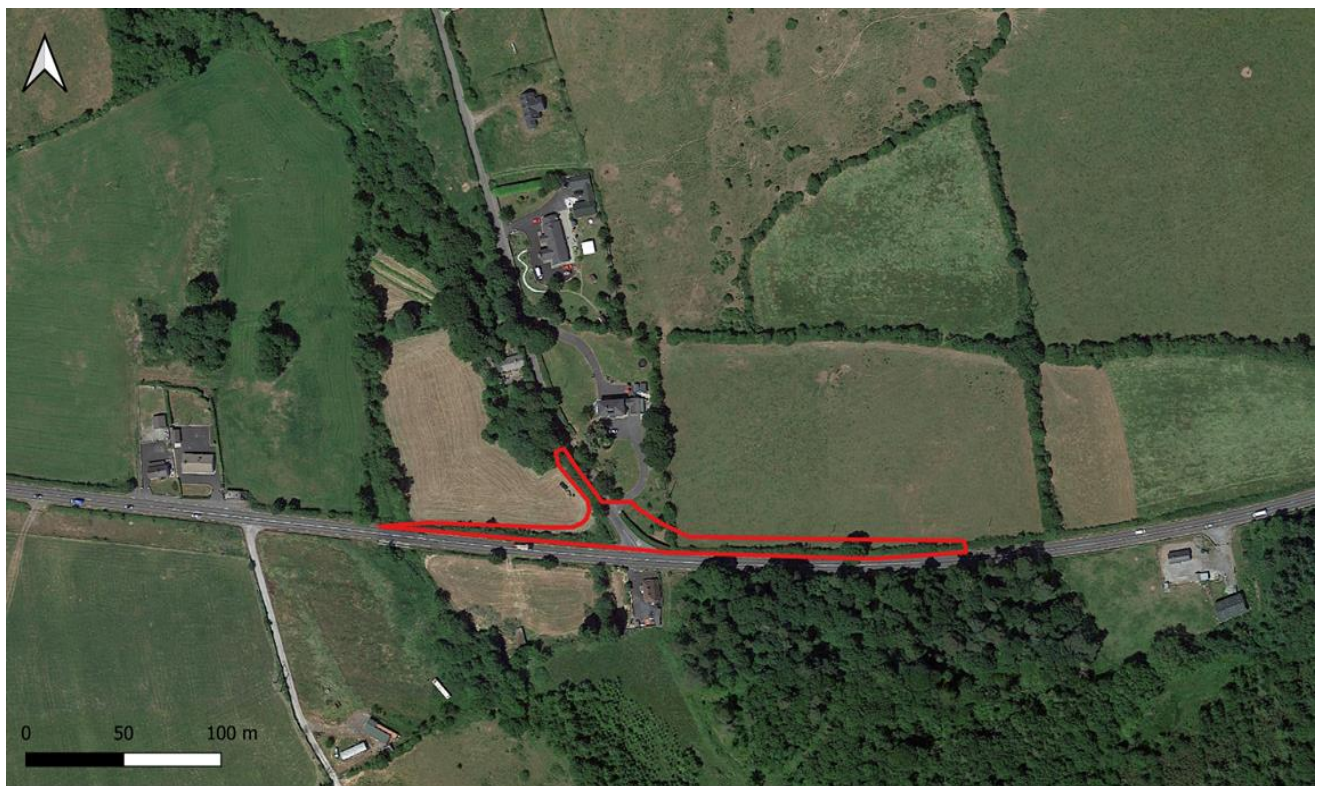
The field survey was carried out on 20th August 2022. Baseline ecological conditions were assessed. Habitats were classified according to A Guide to Habitats in Ireland (Fossitt, 2000). Where applicable, the habitat types and species usage were recorded (Smith et al. 2011; Scannell and Synnott, 1987; Wyse Jackson et al. 2016). Habitats were classified and dominant plant species noted according to the guidelines

given by the JNCC (2010) with reference to best practice guidance for habitat survey and mapping (Smith et al., 2011) and Census Catalogue of the Flora of Ireland (Scannell & Synnott, 1987).

4. Screening of Designated Sites

4.1. Site Location

The works are located at the junction between the N69 and L-6005, within the townland of Ballyengland Lower, situated east of Askeaton town.



Legend


 Site boundary



Figure 1: Overview of the general works area.

4.2. Receiving Environment

A description of the habitats of significant ecological value that were observed within the immediate surroundings of the works area are listed below, with descriptions adapted from “A Guide to Habitats in Ireland” by Julie A. Fossitt, 2000.

A description of the habitats of significant ecological value that were observed within the immediate surroundings of the works area are listed below and depicted in figure 2.

The area for proposed work will mainly affect habitats consisting of WL1 and GA1 which are highly common throughout Ireland in any area relating to agriculture. Both habitats are of relatively low ecological value consisting mainly of common native species.

The GA1 habitats were species poor consisting of mainly Rye grass *Lolium sp.* with intervals of Ragwort *Jacobaea vulgaris*, red clover *Trifolium pratense*, and white clover *Trifolium repens*. The WL1 habitats were dominated by Hawthorn *Crataegus monogyna*, Blackthorn *Prunus spinosa* and Bramble *Rubus fruticosus* accompanied by common hedgerow plants such as Hedge bindweed *Calystegia sepium*, Cleavers *Galium aparine* and Dog rose *Rosa canina* with varying frequency throughout the area.

Some trees were scattered throughout the area of WL1 habitats (Sycamore *Acer pseudoplatanus*, Ash *Fraxinus excelsior*, Oak *Quercus robur*) however the larger more mature trees were located at the back of the field to the west illustrated by WL2 habitats in Figure 2. A small patch of ED3 would be likely fully removed by the proposed works however this was a small area which consisted of almost entirely Hedge bindweed *Calystegia sepium* thus is of negligible ecological value.



Legend

- Site boundary
- GA1
- WL2
- ED3
- WL1



Figure 2: Habitat map of the site and surrounding area

4.2.1. Surface water

The Cragmore river runs under the Aghavaurla bridge at the bottom corner on the west side of the western field. From here it flows in a north westerly direction for approx. 1.5km until joining the Deegerty river. The Deegerty river then continues for approx. 2.2km joining into the Deel river in Askeaton which flows north for another 2.7km until it reaches the Shannon (Fig.3).

4.2.2. Groundwater

Groundwater vulnerability is a term used to represent the natural ground characteristics that determine the ease with which infiltrating water and potential contaminants may reach groundwater in a vertical or sub-vertical direction. Subsoil permeability indicates how readily water from the surface can permeate through to the groundwater below.

The work site is located within a region with two of the higher groundwater vulnerability categories:

- Extreme (Light pink areas in Fig.4)
- Rock at or near Surface or Karst (Darker red areas in Fig.4)

Due to the proximity of the bedrock (and most likely the aquifer) to the surface, subsoil permeability has not been classified in the works area (Fig. 5)

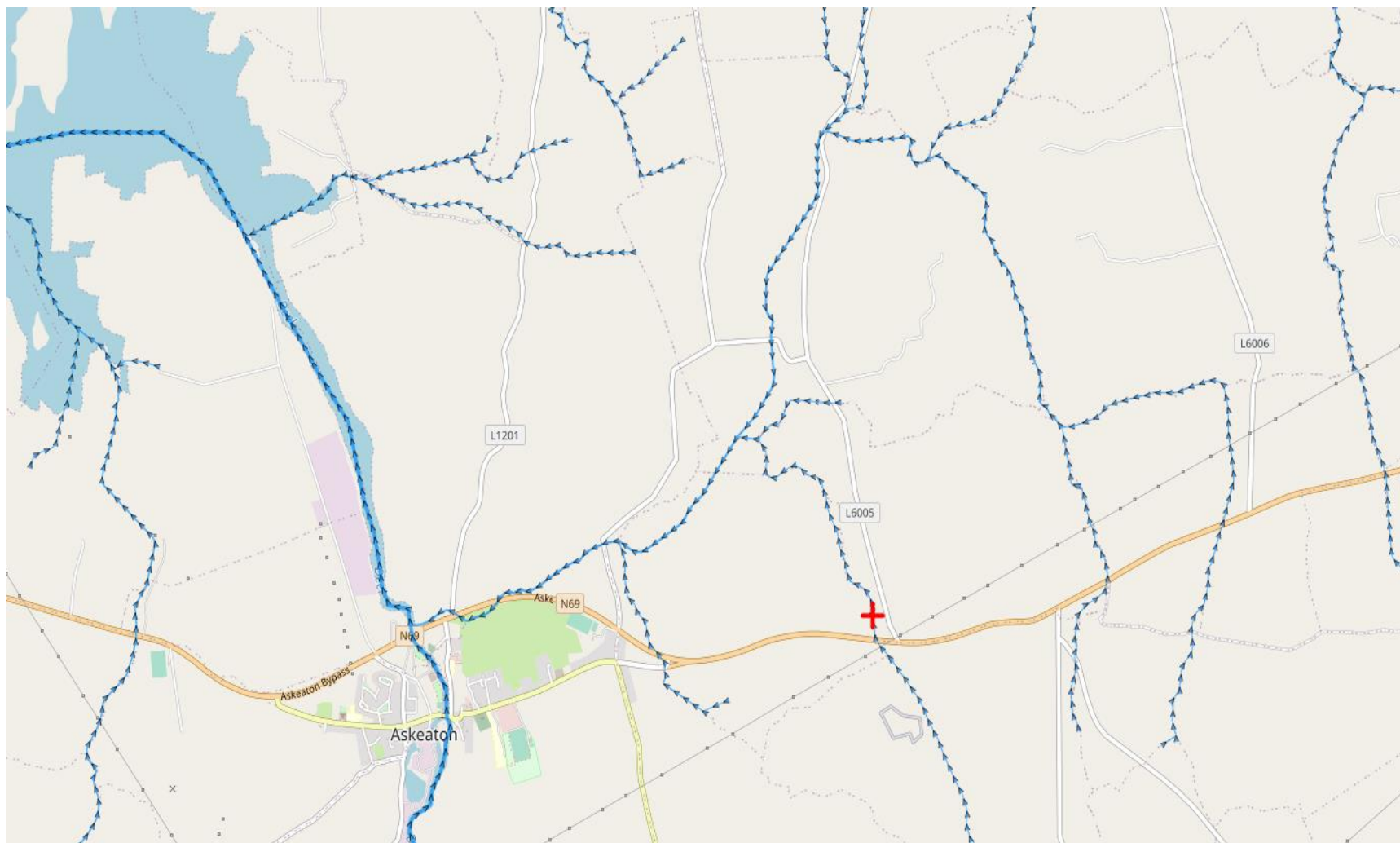


Figure 3: Surface water and flow direction of surrounding area.



Figure 4: Groundwater vulnerability of surrounding area.



Figure 5: Subsoil permeability of surrounding area.

4.2.3. Breeding Birds

All species of wild bird that occur naturally in Ireland are fully protected at all times by the Wildlife Act and relevant amending legislation. Similarly, all birds naturally occurring in the wild state are afforded a measure of protection by the EU Birds Directive, but derogations may reduce protection for specific reasons. As such, any vegetation clearance must be carried out outside of the bird nesting season (March 1st - August 31st).

Proposed works will not take place during the bird nesting season thus they should not impact any nesting birds. While at the site some common bird species (Rook) could be seen however these observations were generally made away from the area in which the works shall commence as the N69 road is quite busy thus no birds were seen perching in or on the hedgerows directly adjacent to the road. Were works to take place during the nesting season then a pre-construction survey may be necessary.

4.2.5. Mammals

No mammal tracks including signs of bat roosting were discovered while at the site. The larger mature trees at the back of the field did not appear to host any bats lacking any dark staining at passages or hollowed knots.

4.2.9. Invasive Species

The Wildlife Acts, 1976 and 2000, contain a number of provisions relating to invasive non-native species (INNS), covering several sections and subsections of the Acts. It is prohibited, without licence, to plant or otherwise cause to grow in a wild state, in any place in the State, any species of flora, or the flowers, roots, seeds or spores of invasive flora listed on the Third Schedule. Articles 49 and 50 of the aforementioned Acts set out the legal implications associated with alien invasive species and Schedule 3 (the Third Schedule) of the regulations lists non-native species subject to the restrictions of Articles 49 and 50, which make it an offence to plant, disperse, allow dispersal or cause the spread of invasive species.

No schedule 3 species were found at the site, only two lower risk invasive was seen at the site the Sycamore trees *Acer pseudoplatanus* and old man's beard *Clematis vitalba*.

4.3. Proposed Works

The proposed works to the junction are intended to provide a sightline of up to 174m to the east, and up to 102m to the west. These works are set to be performed over a period of 18 weeks.

- A. Approximately 109.5m of the existing boundary wall/hedgerows to the east will be set back.
- B. The existing wall will be replaced with TII approved fencing.
- C. Realignment of the junction.
- D. Realigning and setting back the ditch to the west of the junction (approximately 102m length) including relocation of farm gated access, piping open drain and provision of a 2m road verge.

4.4. Works, Site Characteristics and Risks to the Environment

Principal risks to the environment involve mobilisation of sediment/nutrients to surface water or groundwater via discharge from the works area, and loss of habitat and disruption to the local environment during the construction phase. Given the location of the proposed works adjacent and within an existing road footprint, it is unlikely that surface water discharge will impact the nearby watercourse and given the nature of the works it is unlikely that changes in the pattern of groundwater infiltration adjacent to the road will occur.

The proposed works are unlikely to cause additional disruption to local ecology as they are taking place directly beside a busy road and given the highly modified nature of the receiving environment. There will be a loss of some existing hedgerow during the proposed works, but these will be replaced as part of the project. The designated area for setting back hedgerow goes up to the Aghavaurla bridge but not past, thus the impact on fluvial activity or increased access of light to river water should be limited or negligible.

4.5. Nearby Designated Sites

Table 1: Designated Sites near the proposed project.

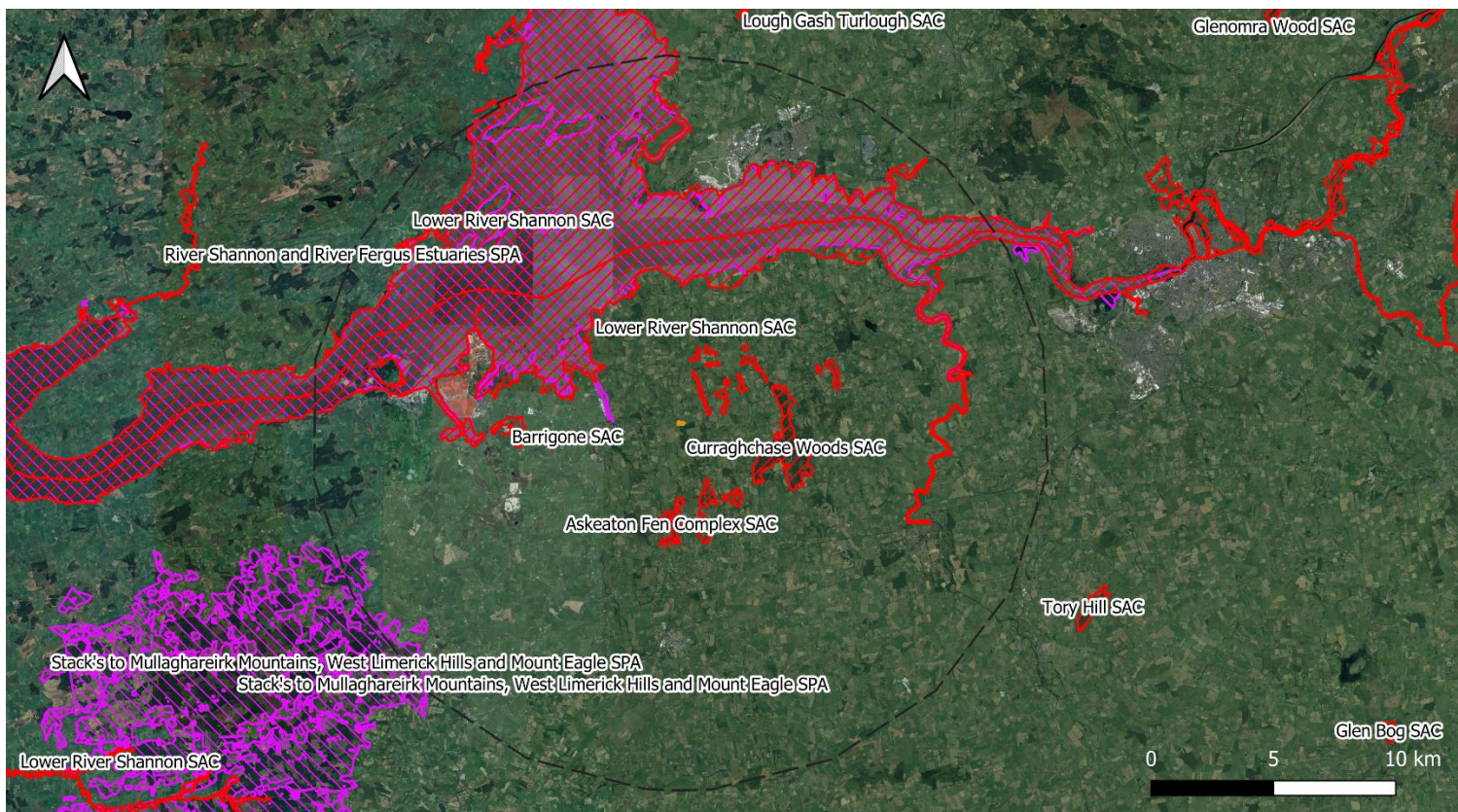
Site Name and Code	Qualifying Interests (* denotes a priority habitat)	Conservation Objectives	Distance (m)	Connectivity to Project
Askeaton Fen Complex SAC 002279	7210 Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> * 7230 Alkaline fens	To maintain the favourable conservation condition of Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> * in Askeaton Fen Complex SAC	1223.37	Hydrological connectivity
Curraghchase Woods SAC 000174	91E0 Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>) 91J0 <i>Taxus baccata</i> woods of the British Isles* 1303 Lesser Horseshoe Bat (<i>Rhinolophus hipposideros</i>) 1016 Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>)	To restore the favourable conservation condition of Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (Alno-Padion, <i>Alnion incanae</i> , <i>Salicion albae</i>) in Curraghchase Woods SAC	3466.90	No direct connectivity
Lower River Shannon SAC 002165	1110 Sandbanks which are slightly covered by sea water all the time 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1150 Coastal lagoons* 1160 Large shallow inlets and bays 1170 Reefs	To restore the favourable conservation condition of Freshwater Pearl Mussel in the Lower River Shannon SAC	3693.22	Hydrological connectivity

	<p>1220 Perennial vegetation of stony banks 1230 Vegetated sea cliffs of the Atlantic and Baltic coasts 1310 Salicornia and other annuals colonising mud and sand 1330 Atlantic salt meadows (Glaucopuccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi) 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) 1349 Common Bottlenose Dolphin (Tursiops truncatus) 1355 Otter (Lutra lutra) 1029 Freshwater Pearl Mussel (Margaritifera margaritifera) 1106 Salmon (Salmo salar) 1095 Sea Lamprey (Petromyzon marinus) 1096 Brook Lamprey (Lampetra planeri) 1099 River Lamprey (Lampetra fluviatilis)</p>			
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Barrigone SAC 000432	5130 Juniperus communis formations on heaths or calcareous grasslands 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) 8240 Limestone pavements* 1065 Marsh Fritillary (Euphydryas aurinia)	To restore the favourable conservation condition of Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) in Barrigone SAC	6189.07	No direct connectivity
River Shannon and River Fergus Estuaries SPA 004077	A054 Pintail (Anas acuta) A137 Ringed Plover (Charadrius hiaticula) A143 Knot (Calidris canutus) A056 Shoveler (Anas clypeata) A062 Scaup (Aythya marila) A179 Black-headed Gull (Chroicocephalus ridibundus) A140 Golden Plover (Pluvialis apricaria) A052 Teal (Anas crecca) A050 Wigeon (Anas penelope) A141 Grey Plover (Pluvialis squatarola) A164 Greenshank (Tringa nebularia) A162 Redshank (Tringa totanus) A048 Shelduck (Tadorna tadorna) A017 Cormorant (Phalacrocorax carbo) A046 Light-bellied Brent Goose (Branta bernicla hrota) A142 Lapwing (Vanellus vanellus) A160 Curlew (Numenius arquata) A157 Bar-tailed Godwit (Limosa lapponica) A149 Dunlin (Calidris alpina) A156 Black-tailed Godwit (Limosa limosa) A038 Whooper Swan (Cygnus cygnus)	To maintain the favourable conservation condition of Wigeon in the River Shannon and River Fergus Estuaries SPA	2648.19	Hydrological connectivity

	Habitats Wetlands			
Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA 004161	A082 Hen Harrier (<i>Circus cyaneus</i>)	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA	13127.78	No direct connectivity

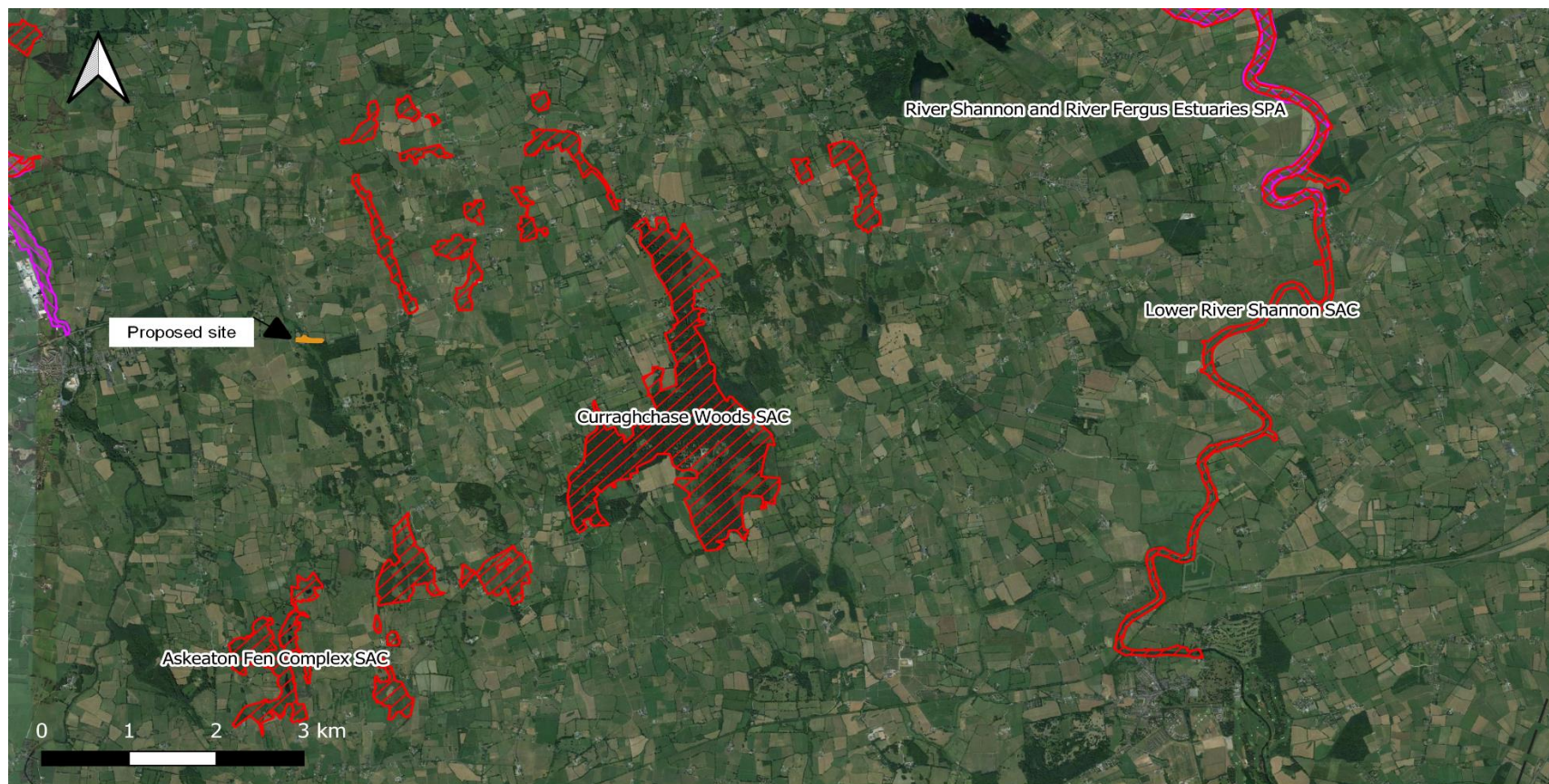
It must be noted that there may be inaccuracies with some of the boundaries of Designated Sites on NPWS digital mapping and so the SAC and SPA boundaries used for this assessment are interpreted based on available data.



- Legend
- Site boundary
 - ZoI
 - SAC
 - SPA



Figure 6: Proximity of the works to the nearby SACs and SPAs.



Legend

- Site boundary
- ZoI
- SAC
- SPA



Figure 7. Work site proximity to Natura 2000 sites

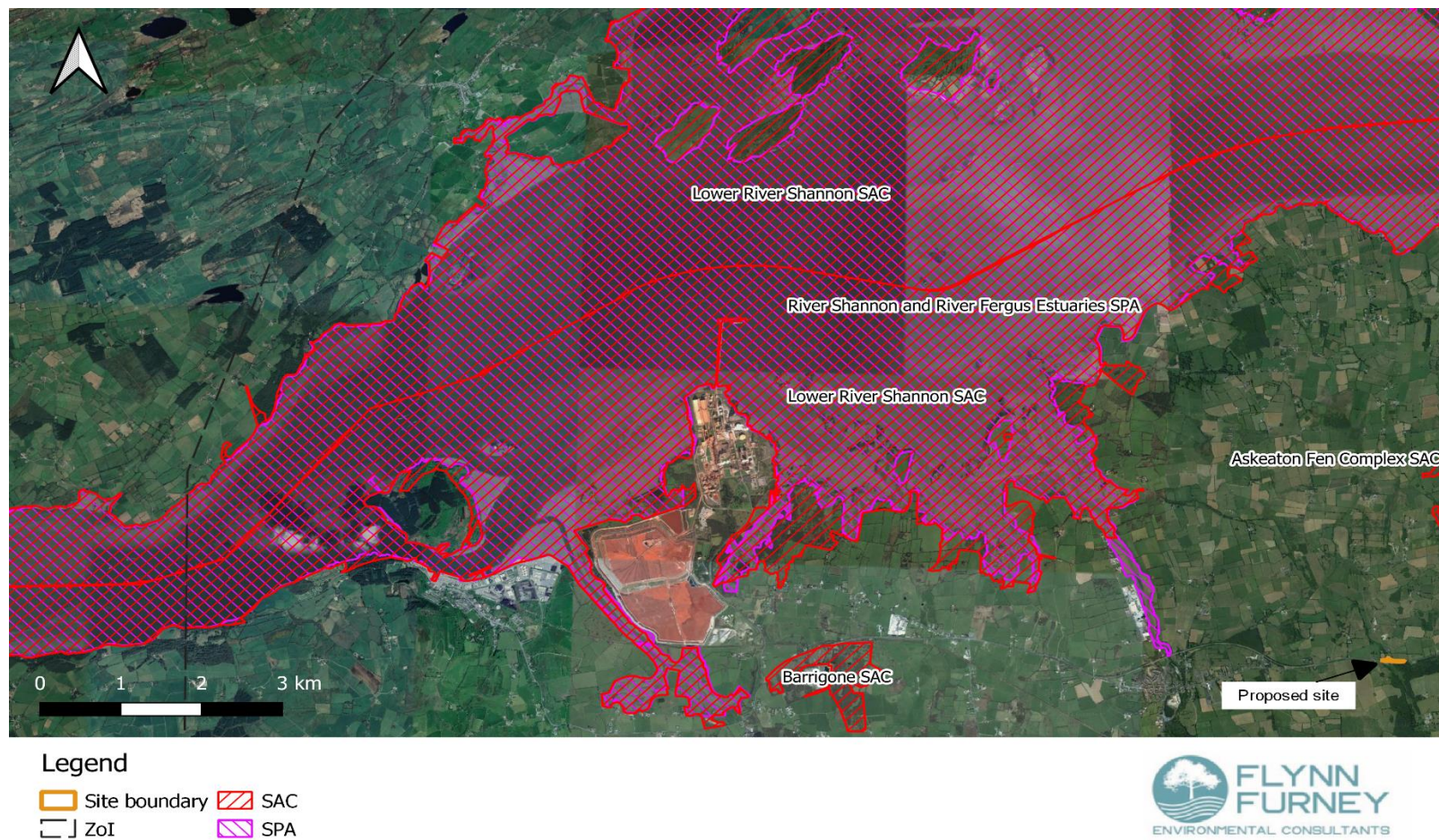


Figure 8. Work site proximity to Natura 2000 sites (ii)

5. ASSESSMENT CRITERIA

5.1. Relation To Management Of Nearby Designated Site(s)

The work sites only direct connection to nearby designated sites is via the Cragmore river. The Cragmore river is related to 3 designated sites via hydrological connectivity

- Askeaton Fen Complex SAC 002279
- Lower River Shannon SAC 002165
- River Shannon and River Fergus Estuaries SPA 004077

However, of these sites only 2 are relevant as the Askeaton Fens Complex is upstream of the proposed works area thus would not be affected by the areas of Cragmore adjacent to the works to the direction of flow. The SAC and SPA concerning the Shannon River are downstream from the proposed work site thus the hydrological link via the Cragmore is relevant. The distance of river between the Cragmore River and the Lower Shannon River is approximately 5.571km.

5.2. Direct Or Indirect Impacts

Potential direct or indirect impacts to nearby designated sites via hydrological connection however they are unlikely to be of significant impact to surpass habitat tolerance due to the small scale of the proposed works.

5.2.1. Surface and groundwater pollution

Particulates from road works could enter the nearby river whether by wind or surface run off. No drainage network could be clearly discerned while at the site thus pre-existing drainage networks are overgrown beyond immediate recognition. The hedgerow border at the side of the road entering the western field is quite high (See Fig 10,11,12 in Appendix) which currently reduces direct entry for run off which should be considered during realignment of the road. The reduction of surrounding hedgerow will likely increase the risk of surface water run off received by the Cragmore river however the nature of the QIs for which the relevant European sites are designated are estuarine or marine in nature and highly unlikely to be affected by small-scale fluctuations in sediment loading within the Cragmore river. Similarly, although there is a slight risk of increased fines/nutrient impact on local groundwater due to the proximity of the aquifer to the surface, the risk of impact to the QIs of the relevant European sites is negligible given the nature and scale of the works, the distance of the works area to the European sites and the nature of the relevant QIs.

The qualifying interests of the nearby Natura 2000 sites relate to estuaries and riverine habitats/species. Sensitive riverine species such as the Freshwater pearl muscle are present in the Shannon SAC but inhabit a tributary river called the Cloon river which feeds into the Shannon via Lisscasey on the other side of the

Shannon and is not connected to the Cragmore river. Thus, estuarine species are more likely to be in contact with the debris from the intended works. The estuarine habitats and by extension their species already experience sedimentation due to their nature of being an end point for many rivers before re-joining the sea. Therefore, the tolerance of the habitats and the species within should be sufficient to render the excess run off from the work site negligible particularly due the scale of the Shannon system in comparison to the Cragmore. This will be particularly true in the case of many of the oceanic species covered by the Shannon SAC/SPA such as the Sea birds & dolphins.

5.2.3. Construction/installation of infrastructure and potential QI habitat loss

No infrastructure will be constructed or installed within a European site or affecting any supporting ecological features as part of this project.

5.2.4. Invasive Species

No schedule 3 species invasive species were found at the site, some lower level invasive and naturalised plants (Sycamore & Old mans beard) were found at the site but are unlikely to be spread by the planned works.

5.3. Cumulative And Incombination Impacts

A review of the national planning application database showed no relevant nearby work sites which would create the risk combination or cumulative impacts.

5.4. Likely Changes To The Designated Site(s)

Nearby designated sites are unlikely to be changed by works.

6. Screening Conclusions

This report presents the information for the relevant authority, Limerick City and County Council, to carry out a screening for AA. A recommendation that a stage II is/is not required is made below, based on the findings of this assessment, which are summarised in Table 4. It is for the relevant authority to reach one of the following conclusions:

- (i) A stage II AA of the proposed development is required if it *cannot* be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European Designated Sites.
- (ii) A stage II AA of the proposed development is not required if it *can* be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on any European Designated Sites.

Table 4: Assessment of likely effects on any Designated Sites

Assessment of Likely Effects	
Size and scale	Works will occur over a 375m area however, they occur along a line thus they should not incur a large area of effect.
Land-take	The works take place outside any European sites; no land is being taken for this project. Some Land will be acquired from private owners for an agreed price.
Distance from the Natura 2000 site or key features of the site;	Askeaton Fen Complex SAC – 1223.37m Curraghchase Woods SAC – 3466.90m Lower River Shannon SAC –3693.22m Barrigone SAC – 6189.07m River Shannon and River Fergus Estuaries SPA – 2648.19m Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle - 13127.78m
Resource requirements (water abstraction etc.);	No resources are required from any European site for this project.
Emissions (disposal to land, water or air);	No emissions to land or water beyond those of a small construction project are expected, and none which will impact on any European site.

Excavation requirements;	There are no excavations within any European site, and any excavation necessary will take place within the existing road footprint.
Transportation requirements;	There are no requirements for any transportation of materials through any European site.
Duration of construction, operation, etc.;	18 weeks
Timing of works	As yet unknown
Cumulative or In-combination Impacts with other Projects and Plans	None

Based on the available information gathered during field and desk surveys, it is the professional opinion of the author that the likelihood of significant impacts arising from the proposed development on all European Designated Sites, with the exception of Lower River Shannon SAC and River Shannon and River Fergus Estuaries SPA can be ruled out on the basis of a lack of connectivity.

In the case of these two Designated Sites where direct connectivity with the proposed development exists, potential risks arise from increased input to surface water from sediment and organic matter as biproducts of proposed works however, these are not considered to be significant for the following reasons:

1. The nature and scale of the works involved should not create large quantities of sediment or biological matter which could disrupt the nearby river or nearby designated areas.
2. The majority of works do not take place adjacent to the waterbody reducing the potential for risk of excess sediment or biological matter input thus the amounts experienced should be negligible to tolerance levels of connected designated habitats.
3. The qualifying interests of the relevant Natura 2000 sites which relate to rivers are unlikely to experience impacts from the proposed works due to distance from the site, direct of river flow or lack of connectivity to the Cragmore river.
4. The Qualifying interests of the relevant Natura 2000 sites which relate to estuaries are unlikely to experience direct impact from the proposed works due to the nature of the habitats and the scale of the habitats in comparison to the scale of the input of sediment/biological matter from the proposed works.

Based on the findings of this assessment, it is the professional opinion of the author that a Stage II AA of the proposed development is not required.

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Appendix I: Photos

Figure no.	Description	Image
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10	ED3 corner of junction	

11	Hedgerow of western field on left hand side	
12	Hedgerow facing up the N69 with from perspective of the nearby bridge	

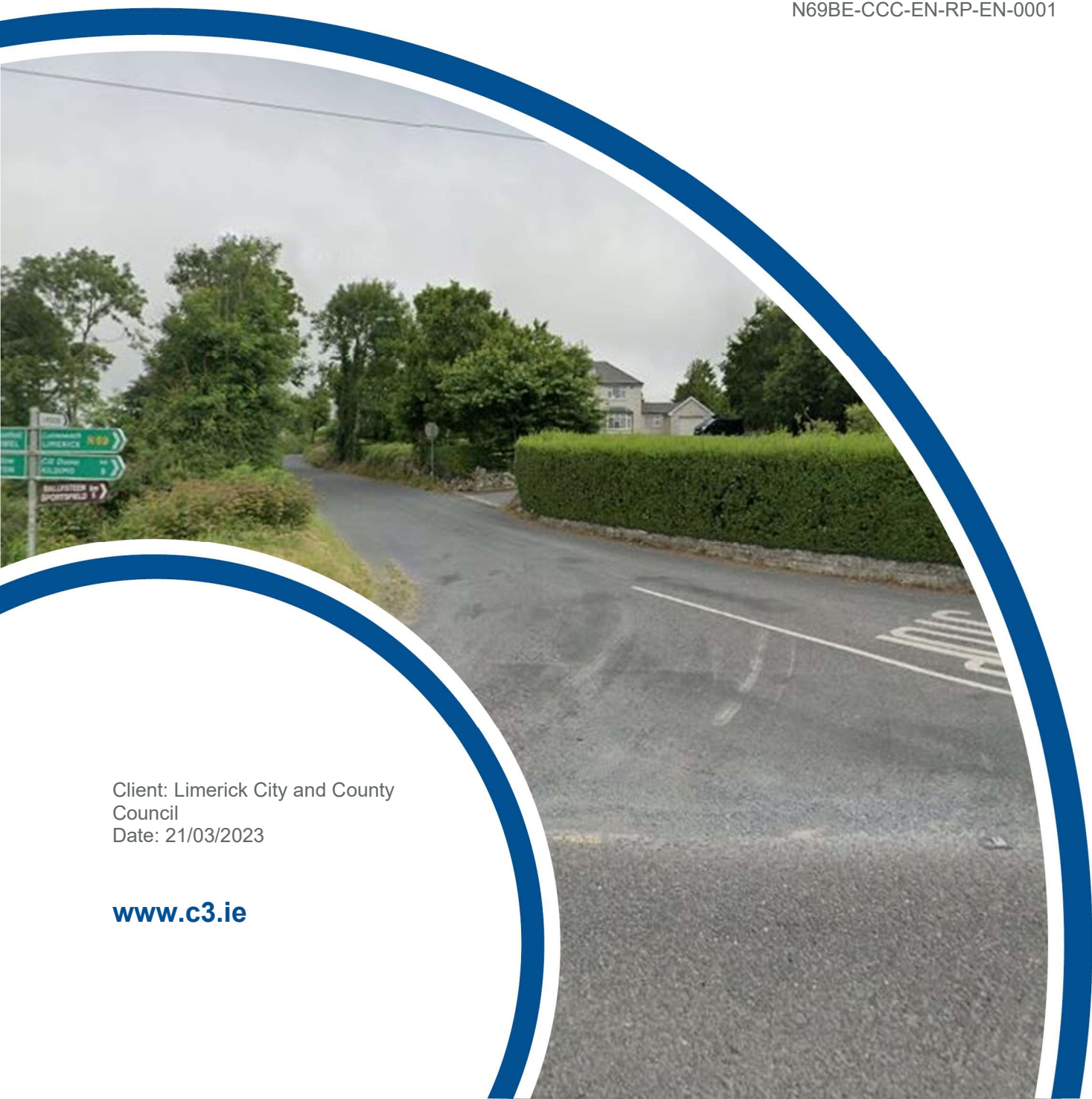
APPENDIX C - ENVIRONMENTAL IMPACT ASSESSMENT SCREENING REPORT



N69 BALLYENGLAND JUNCTION IMPROVEMENT SCHEME

EIA Screening Report

N69BE-CCC-EN-RP-EN-0001



Client: Limerick City and County
Council
Date: 21/03/2023

www.c3.ie



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Issue and revision record

Date	Rev	Change Description	Author	Checker	Approver
22/09/2022	P00	First Issue for Client Review	Daniel Fitzpatrick	Heather Scully	Senan Clandillon
21/03/2023	P01	Second Issue	Daniel Fitzpatrick	Heather Scully	Senan Clandillon

Detailed Change Log

Rev	Change Description
P01	Updated following Client Comments

1. Introduction

Clandillon Civil Consulting (CCC) has prepared an Environmental Impact Assessment (EIA) Screening Report on behalf of Limerick County City and Council (LCCC) to determine whether EIA is required for a proposed development which includes a junction improvement (hereafter referred to as the proposed development).

Details on the proposed development are provided in Section 3 of this report and in the drawings provided in the planning package.

The problem identified at this location relates to poor sightlines for road users when exiting this junction from the Local Road L6005 onto the N69. Additionally, a number of items for improvement were identified around the junction during the Road Safety Inspection process carried out on the N69 in 2015 – 2017.

The proposed works to the junction will provide a sightline of up to 174m to the east, and up to 102m to the west.

2. Legislation and Guidance

2.1 Introduction

This section describes the relevant European and National Legislation and guidance for this EIA Screening Report.

2.2 Overview of Legislation and Guidance

2.2.1 Introduction

The current requirements for EIA for projects are set out by the European Union in Council Directive 2011/92/EU on the Assessment of the Effects of Certain Public and Private Projects on the Environment as amended by Directive 2014/52/EU. Further details are provided in Section 2.2.2 below.

The Planning and Development Acts 2000 to 2022 and the Planning and Development Regulations 2001 to 2022 were both amended by the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (SI No. 296 of 2018) to take account of the requirements of the EIA Directive (Directive 2014/52/EU).

Section 172 of the Planning and Development Acts 2000 to 2022 sets out the requirement for EIA whilst the prescribed classes of development and thresholds that trigger a mandatory EIA are set out in Schedule 5 of the Planning and Development Regulations 2001 to 2022 and Section 50 of the Roads Act (1993 to 2015). Further details are provided in Section 2.2.6 below.

Section 103 of the Planning and Development Regulations 2001 to 2022 and Section 50(1)(b) and 50(1)(c) of the Roads Act 1993 to 2015 sets out the requirements for screening a sub-threshold development for EIA. Further details are provided in Section 2.2.6 below. Finally, the information to be provided by the applicant or developer for the purposes of screening sub-threshold development for EIA is set out in Schedules 7 and 7A of the Planning and Development Regulations 2001 to 2022. Further details are provided in Section 2.2.6 below.

A review of the above legislation was undertaken for the purpose of this EIA screening report and is further analysed in the sections below. The following guidance and consultation documents have also been considered during the preparation of this report:

- Department of Housing, Planning, Community and Local Government (2018) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018);
- Department of Housing, Planning, Community and Local Government (2017) Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems;
- Department of the Environment, Heritage and Local Government (2003) Environmental Effect Assessment (EIA) Guidance for Consent Authorities regarding Sub-Threshold Development;
- Environmental Protection Agency (2022) Guidelines on the Information to be contained in Environmental Impact Assessment Reports;
- European Commission (2017) Guidance on EIA Screening; and
- European Commission (2015) Interpretation of definitions of project categories of Annex I and II of the EIA Directive.
- Environmental Planning of National Road and Greenway Projects (RE-ENV-07008) (2023)

2.2.2 EIA Directive

EIA Directive 2014/52/EU provides criteria that are applied in the screening phase to determine if a development is likely to have a significant effect on the environment. The criteria are as follows:

- the **Characteristics of the Projects**, which must be considered having regard, in particular, to the size and design of the whole Project, the cumulation with other existing and/or approved Projects, the use of natural resources, the production of waste, pollution and nuisances, and the risk of major accidents and/or disasters and the risks posed to human health.
- the **Location of the Projects**, so that the environmental sensitivity of geographic areas likely to be affected by Projects must be considered, having regards to the existing and approved land use, the relative abundance, availability, quality and regenerative capacity of natural resources and the absorption capacity of the natural environment in particular.
- **Type and Characteristics of the potential impact** with regards to the impact of the Project on the environmental factors specified in Article 3(1).

The characteristics of the project, its location and potential impact are described and assessed in Sections 3 – 8 of this report.

2.2.3 Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment

The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) have transposed Directive 2014/52/EU and are incorporated into the Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (the Guidelines). Chapter 3 of these Guidelines deals with the EIA Screening process.

As referred to in Section 3.5 of the Guidelines, the EIA Screening process is based on professional expertise and experience, having due regard to the ‘Source – Pathway – Target’ (SPT) model, which identifies the source of likely significant impacts, if any, the environmental factors (target) which will potentially be affected, and the route (pathway) along which those impacts may be transferred from the source to the receiving environment.

As per Section 3.1 of the Guidelines, the screening determination *“is a matter of professional judgement, based on objective information relating to the proposed project and its receiving environment. Environmental effects can, in principle, be either positive or negative”*.

The EIA Screening process must also have regard to the European Court ruling that the EIA Directive has a “wide scope and a broad purpose” when determining if an EIAR is required.

The Chapter 3 Guidelines have been considered in developing the assessments and conclusions outlined in Sections 3 - 8 of this report.

2.2.4 Guidelines on the Information to be contained in Environmental Impact Assessment Report (EPA, May 2022)

The stated primary objective of the guidelines is to improve ‘the quality of EIARs with a view to facilitating compliance (with the Directive). By doing so they contribute to a high level of protection for the environment through better informed decision-making processes.’ According to the guidelines the start of the EIA process involves making a decision about whether an EIAR needs to be prepared or not. The guidelines note that the decision-making process begins by examining the regulations and if this does not provide a clear answer then the nature and extent of the project, the site and the types of potential effects are examined.

2.2.5 Environmental Impact Assessment Screening OPR Practice Note PN02 (2021)

This Practice Note was published in June 2021 by the Office of the Planning Regulator (OPR) and provides information and guidance on screening for EIA by planning authorities. It includes useful templates and addresses issues that commonly arise. The OPR Practice Note does not have the status of Ministerial Guidelines issued under Section 28 of the Planning and Development Act 2000, but are issued for general information purposes only, in accordance with the OPR’s statutory remit to engage in education, training and research activities.

2.2.6 Planning and Development Regulations 2001 to 2022

The prescribed classes of development and thresholds that trigger a mandatory Environmental Impact Assessment are set out in Schedule 5 of the Planning and Development Regulations 2001, as amended. A review of the project types listed in the aforementioned Schedule 5 has been carried out.

2.2.7 Screening for Mandatory EIA

This first part of the EIA Screening exercise determines whether EIA is a statutory requirement for the proposed development under the discretionary provisions of the Planning and Development Act 2000 to 2022, Schedule 5 of the Planning and Development Regulations 2001 to 2022 and, in the case of road projects, Section 50 of the Roads Act 1993 to 2015 and Article 8 of the Roads Regulations 1994.

A review of Parts 1 and 2 of Schedule 5 of the Planning and Development Regulations 2001 – 2022 has determined that the proposed development does not screen in for mandatory EIA on the basis of any of the thresholds set out therein. Table 1, below, presents the findings of the screening assessment in respect of the Roads Act 1993 to 2015 and Roads Regulations 1994.

Table 1: Screening Matrix for Mandatory EIA for Road Projects

Screening Matrix for Mandatory EIA for Road Projects		
Mandatory Threshold	Regulatory Reference	Assessment
Construction of a Motorway	S. 50(1)(a) of the Roads Act, 1993, as amended by S. 9(1)(d)(i) of the Roads Act, 2007 (as amended)	The proposed development is not a Motorway. Mandatory threshold not reached.
Construction of a Busway	S. 50(1)(a) of the Roads Act, 1993, as amended by S. 9(1)(d)(i) of the Roads Act, 2007 (as amended)	The proposed development is not a Busway. Mandatory threshold not reached.
Construction of a Service Area	S. 50(1)(a) of the Roads Act, 1993, as amended by S. 9(1)(d)(i) of the Roads Act, 2007 (as amended)	The proposed development is not a Service Area and does not incorporate a Service Area. Mandatory threshold not reached.
Any prescribed type of proposed road development consisting of the construction of a proposed public road or the improvement of an existing public road, namely: <ul style="list-style-type: none"> The construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be eight kilometres or more in length in a rural area, or 500 metres or more in length in an urban area The construction of a new bridge or tunnel which would be 100 metres or more in length. 	Article 8 of the Roads Regulations, 1994 (prescribed type of road development for the purposes of S. 50(1)(a)(iii) of Section 50 of the Act	<p>Neither the existing road nor the proposed realigned road include four or more lanes. Mandatory threshold not reached.</p> <p>The proposed development does not involve the construction of a bridge or a tunnel of more than 100m in length. Mandatory threshold not reached.</p>

In conclusion, it has been determined that the proposed development is not of a class which exceeds a threshold specified in the Planning and Development Regulations 2001 – 2022, the Roads Act 1993 to 2015 or the Roads Regulations 1994, and therefore does not trigger a mandatory EIA. It follows that the proposed development is a sub-threshold development.

2.2.8 Sub-Threshold EIA

Article 120 of the Planning and Development Regulations 2001 to 2022 states the following:

‘Where a local authority proposes to carry out a subthreshold development, the authority shall carry out a preliminary examination of, at the least, the nature, size or location of the development’

The information provided in this report provides details on the characteristics of the proposed development and its likely significant effects (if any) on the environment. It also provides the relevant details under each of the criteria set out in Schedule 7A of the Planning and Development Regulations 2001 to 2018.

The characteristics of the project, its location and potential impact are described and assessed in Sections 3 - 8 of this report.

Schedule 7A of the Planning and Development Regulations 2001 to 2022 ‘Information to be provided by the Applicant or Developer for the purposes of Screening Sub-Threshold Development for the Environmental Impact Assessment’. The requirements include:

- Description of the proposed development
- Review of relevant information within local and county development plans
- Appropriate Assessment of study area
- Description of the aspects of the environment likely to be significantly affected.

The nature, size and location of the development is described in Chapter 3 of this report, while a description of potential environmental impacts is outlined in Chapter 5 - 8.

An Appropriate Assessment screening report has also been completed. The information required from Schedules 7 and 7A of the Planning and Development Regulations 2001 to 2022 and responses which address the information to be provided are included in Section 8 of this report.

Table 2: The size and design of the whole of the proposed development

Section 7 Requirement
The size and design of the whole of the proposed development,
Cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment,
The nature of any associated demolition works,
The use of natural resources, in particular land, soil, water and biodiversity,
The production of waste,
Pollution and nuisances,
The risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge, and
The risks to human health (for example, due to water contamination or air pollution).

Table 3: The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to

Section 7 Requirement
Question: The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to—
the existing and approved land use,
the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,

Section 7 Requirement

the absorption capacity of the natural environment, paying particular attention to the following areas:

- wetlands, riparian areas, river mouths;
- coastal zones and the marine environment,
- mountain and forest areas;
- nature reserves and parks;
- areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;
- areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;
- densely populated areas;
- landscapes and sites of historical, cultural or archaeological significance.

Table 4: The likely significant effects on the environment of proposed development

Section 7 Requirement

Question: The likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) of the definition of ‘environmental impact assessment report’ in section 171A of the Act, taking into account—

the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected)

The nature of the impact,
 the intensity and complexity of the impact,
 the probability of the impact,
 the expected onset, duration, frequency and reversibility of the impact,
 the possibility of effectively reducing the impact.

the transboundary nature of the impact,

the cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment

Section 50(1)(b) and 50(1)(c) of the Roads Act 1993 to 2015 sets out the requirements for screening a sub-threshold development for EIA.

Section 50(1)(b) of the Roads Act (1993 to 2015) states:

‘If An Bord Pleanála considers that any road development proposed (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the

improvement of an existing public road would be likely to have significant effects on the environment, it shall direct the development be subject to an environmental impact assessment’.

Section 50(1)(c) of the Roads Act 1993 to 2015 states:

“Where a road authority or, as the case may be, the Authority considers that a road development that it proposes (other than development to which paragraph (a) applies [paragraph (a) relates to development mandatorily requiring EIA]) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform An Bord Pleanála in writing prior to making any application to the Bord for an approval referred to in section 51(1) in respect of the development.”

The findings of the EIA screening assessment prepared for the project has informed our professional opinion as to whether an EIAR is warranted for the proposed project, with due regard to all relevant statutory requirements and technical guidance. However ultimately it is the responsibility of the competent authority to make a determination as to whether an EIAR is required for a particular project.

3. Description of the Development

3.1 Project Overview

3.1.1 Proposed Development

The problem identified at this location relates to poor sightlines for road users when exiting the junction from the N69 to the local road L6005.

Additionally, a number of items for improvement were identified around the junction during the Road Safety Inspection (RSI) process carried out on the N69 in 2015 – 2017.

The proposed works to the junction are intended to provide sightlines of up to 174m to the east, and up to 102m to the west. These works are set to be performed over a period of 18 weeks.

- Approximately 109.5m of the existing boundary wall/hedgerows to the east will be set back.
- The existing wall will be replaced with TII approved fencing.
- Realignment of the junction.
- Realigning and setting back the ditch to the west of the junction (approximately 102m length) including relocation of farm gated access, piping open drain and provision of a 2m road verge.

3.1.2 Construction Methodology

The proposed development will include the following:

- Site clearance, including the removal of existing hard surfaces, certain trees, hedgerows and field boundaries;
- Realignment of the junction;
- Construction of new property boundaries;
- Construction of road drainage systems including:
 - new surface water drains in the form of grassed surface water channels;
 - limited numbers of carrier drains
 - Deepening and/or realignment of an existing ditch; and
 - Provision of culverts associated with the new ditch.

- Landscaping and reinstatement works.

4. Local and County Development Plans

The Limerick Development Plan 2022-2028 was adopted by the Elected Members of Limerick City and County Council and came into effect on 29th July 2022. The Plan sets out the blueprint for the development of Limerick from an economic, social, physical and environmental perspective.

Table 5: Relevant Policies and Objectives taken from the Limerick Development Plan 2022-2028

Relevant Policies and Objectives taken from the Limerick Development Plan 2022-2028		
Policy/Objective No.	Title	Policy/Objective
TR P1	National Investment Framework for Transport Investment	It is a policy of the Council to support the implementation of the Department of Transport's National Investment Framework for Transport Investment.
TR P2	Five Cities Demand Management Study	It is a policy of the Council to support the recommendations of the Department of Transport's Five Cities Demand Management Study
TRP3	Integration of Land Use and Transport Policies	It is a policy of the Council to support and facilitate the integration of land use and transportation policies, to ensure the delivery of sustainable compact settlements, which are served by sustainable modes of transport.
TR P4	Promotion of Sustainable Patterns of Transport Use	It is a policy of the Council to seek to implement in a positive manner, in cooperation with other relevant authorities and agencies, the policies of the NPF, RSES and the Department of Transport's Smarter Travel, A Sustainable Transport Future 2009 – 2020 (and any subsequent updates), to encourage more sustainable patterns of travel and greater use of sustainable forms of transport, including public transport, cycling and walking.
TR P5	Sustainable Mobility and Regional Accessibility	It is a policy of the Council to support sustainable mobility, enhanced regional accessibility and connectivity within Limerick, in accordance with the National Strategic Outcomes of the National Planning Framework and the Regional Spatial and Economic Strategy for the Southern Region/
TR P6	Delivery of Transport Infrastructure in line with National Policy	It is a policy of the Council to support the delivery of transport infrastructure identified within the National Planning Framework, National Development Plan 2021-2030 (and any update) and the Regional Spatial and Economic Strategy for the Southern Region and to support enhanced connectivity within Limerick and inter-urban connectivity within the regions.
TR P7	Sustainable Travel and Transport	It is a policy of the Council to support, facilitate and co-operate with relevant agencies to secure sustainable travel within Limerick and seek to implement the 10-minute city/town concept, promote compact growth and reduce the need for long distance travel, as a means to reduce the impact of climate change.
TR O2	Design Manual for Urban Roads and Streets	It is an objective of the Council to support the appropriate road design standards of all roads and streets within the urban areas, including suburbs, towns and villages within the 60km/h zone as per the Design Manual for Urban Roads and Streets and TII Publication Standards DN-GEO-03084 The Treatment of Transition Zones to Towns and Villages on National Roads

Relevant Policies and Objectives taken from the Limerick Development Plan 2022-2028

TR O4	Universal Design	It is an objective of the Council to ensure that all transport schemes incorporate high-quality urban realm design that is attractive, safe, comfortable and accessible for all individuals.
TR O5	Limerick – Shannon Metropolitan Area Transport Strategy	It is an objective of the Council to facilitate the implementation and delivery of the proposals that will be contained in the final Limerick Shannon Metropolitan Area Transport Strategy, in conjunction with the National Transport Authority, Transport Infrastructure Ireland and Clare County Council and other relevant stakeholders. This partnership will achieve successful integration between land use and transport planning, and targeted growth along high quality public transport corridors and sustainable higher densities.
TR P8	Local Transport Plans	It is a policy of the Council to prepare a Local Transport Plan (LTP), Mobility and Public Realm Plan for the Key Town of Newcastle West, in consultation with the National Transport Authority, Transport Infrastructure Ireland and other relevant stakeholders, as part of the Local Area Plan process and for other settlements as deemed necessary.
TR O6	Delivering Modal Split	It is an objective of the Council to: a) Promote a modal shift away from the private car towards more sustainable modes of transport including walking, cycling, carpool and public transport in conjunction with the relevant transport authorities. b) Support investment in sustainable transport infrastructure that will make walking, cycling, carpool and public transport more attractive, appealing and accessible for all.
TR O7	Behavioural Change Measures	It is an objective of the Council to: a) Continue to implement behavioural change initiatives and ‘softer measures’ aimed at enabling and promoting sustainable travel across Limerick’s workplaces, campuses, schools and communities as identified in LSMATS; b) Facilitate and implement school streets and school zones, including slow zones around schools, park and stride facilities and promote and facilitate active travel options for school children, to reduce the health and safety risks associated with traffic congestion, pollution and inactive lifestyles
TR O22	Micro-Mobility	It is an objective of the Council to facilitate and support the use of scooters, e-scooters and emerging personal mobility modes of travel in line with relevant legislation.
TR P11	Road Safety and Carrying Capacity of the Road Network	It is a policy of the Council to seek improvements to road safety and enhance carrying capacity of the road network throughout Limerick, through minimising existing traffic hazards, including access onto roads, which are substandard in terms of width and alignment and preventing the creation of additional or new traffic hazards in the road network, maintaining the carrying capacity and securing appropriate signage.

Relevant Policies and Objectives taken from the Limerick Development Plan 2022-2028

TR O37	Land Uses and Access Standards onto All Roads	It is an objective of the Council to ensure that any development involving a new access to a public road, or the intensification of use of an existing access onto a public road, that would compromise the safety and capacity of the road network, will not be permitted unless the new or existing access meets the appropriate design standards.
TR O38	Improvements to Regional and Local Roads	It is an objective of the Council to provide for and carry out sustainable improvements to sections of regional roads and local roads, that are deficient in respect of alignment, structural condition, or capacity, where resources permit and to maintain that standard thereafter.
TR P12	Safeguard the Capacity of National Roads	It is a policy of the Council to: a) Protect the capacity of the national road network, having regard to all relevant Government guidance and associated junctions, including DoECLG Spatial Planning and National Roads Guidelines (DoECLG, 2012) in the carrying out of Local Authority functions and; b) Ensure development does not prejudice the future development, or impair the capacity of, the planned national roads, which includes the N/M20 Cork to Limerick Scheme and Foynes to Limerick Road (including Adare Bypass) projects and other schemes referenced in Section 7.4; c) Continue to engage, at an early stage, with relevant transport bodies, authorities and agencies in respect of any plans or projects that are located in proximity to national road infrastructure.
TR O39	National Roads	It is an objective of Council to: (a) Prevent, except in exceptional circumstances and subject to a plan-led evidence-based approach, in consultation with Transport Infrastructure Ireland, in accordance with the Section 28 Ministerial Guidelines Spatial Planning and National Roads Guidelines for Planning Authorities (DoECLG, 2012), development on lands adjacent to the existing national road network, which would adversely affect the safety, current and future capacity and function of national roads and having regard to reservation corridors, to cater for possible future upgrades of the national roads and junctions b) Avoid the creation of any new direct access points from development, or the generation of increased traffic from existing direct access/egress points to the national road network, to which speed limits greater than 60km/h apply; c) Facilitate a limited level of new accesses, or the intensified use of existing accesses, to the national road network on the approaches to, or exit from, urban centres that are subject to a speed limit of between 50km/h and 60km/h. Such accesses will be considered where they facilitate orderly urban development and would not result in a proliferation of such entrances;

Relevant Policies and Objectives taken from the Limerick Development Plan 2022-2028

TR O40	National Road Network Drainage Regimes	It is an objective of the Council to ensure all developments protect and safeguard the capacity and efficiency of the drainage regimes of the national road network.
TR P13	Strategic Regional Road Network	It is a policy of the Council to protect the investment in the strategic regional road network and maintain and improve road safety and capacity.
TR O42	Roads and Streets	It is an objective of the Council to secure improvements to the road network in Limerick, including improved pedestrian and cycle facilities, in conjunction and co-operation with relevant stakeholders, subject to resources becoming available.
TR O43	Upgrade works / New Road Schemes	<p>It is an objective of the Council to provide for and carry out sustainable improvements to sections of the national, regional and local road network, to address deficiencies in respect of safety, alignment, structural condition or capacity where resources permit. The following schemes shall be included:</p> <ul style="list-style-type: none"> • Southside Link connecting Southill to Rosbrien Road; • Rear of the Crescent Shopping Centre to Rosbrien Road; • School House Road to Kilbane Roundabout, Groody Link Road; • N20 O'Rourke's Cross Improvements; • N69 Hegarty's Cross to Askeaton – Phase 1 and Phase 2; • N21 Adare Western Approach Improvements Scheme; • N69 Court Cross; • N69 Mungret and Boland's Cross Road Improvements; • N21 Devon Cross; • N21 Ward's Cross.
TR O51	Roadside Signage	It is an objective of the Council to regulate, control and improve signage throughout Limerick and avoid a proliferation of roadside signage, in accordance with the Spatial Planning and National Roads – Guidelines for Planning Authorities (DoECLG, 2012) and the National Roads Authority's policy statement on the Provision of Tourist and Leisure Signage on National Roads (March 2011) and any updated versions of these documents.
TR O52	Directional Signage	It is an objective of the Council to facilitate the provision of directional signage for amenities, tourist attractions and local attractions and along cycle and pedestrian routes, at appropriate locations throughout Limerick, in accordance with planning and traffic regulations.
TR O53	Noise and Transportation	It is an objective of the Council to identify appropriate mitigation measures to reduce noise levels from traffic where they are potentially harmful, in accordance with Limerick's Noise Action Plan

The area covered by the Askeaton Local Area Plan 2015 – 2021 has been incorporated into the Limerick Development Plan. Moreover, as of the 11th of February 2020, Limerick City and County Council extended the duration of the Askeaton Local Area Plan for a further five years, until 2025.

The current Plan is available at: Local Area Plan - Askeaton | Limerick.ie

Table 6: Relevant Policies and Objectives from the Askeaton Local Area Plan 2015-2021

Policy/ Objective Number and Description of Policy/Objective	
Transport and Movement Strategic Policy	To promote and facilitate a sustainable transport system that prioritises and provides for walking, cycling and public transport facilities while ensuring appropriate traffic management.
TM O1	Facilitate implementation and delivery of the proposals that will be contained in the final Limerick Shannon Metropolitan Area Transport Strategy.
TM O2	Ensure all proposed developments comply with the policies, objectives and Development Management Standards of the Limerick County Development Plan 2010 – 2016 (as extended), and any replacement thereof.
TM O4	Encourage, promote and facilitate a modal shift towards more sustainable forms of transport in all developments.
TM O11	Protect the capacity of the national road network, having regard to all relevant Government guidance including DoECLG “Spatial Planning and National Roads Guidelines” (DoECLG, 2012) in the carrying out of Local Authority functions and ensure development does not prejudice the future development or impair the capacity of the planned core network under TEN-T Regulations, which includes the N/M20 Cork to Limerick Schemes and Foynes to Limerick Road (including Adare Bypass) projects
TM O12	Prevent inappropriate development on lands adjacent to the existing national road network, which would adversely affect the safety, current and future capacity and function of national roads and having regard to reservation corridors to cater for possible future upgrades of the national roads and junctions.
TM O16	Improve the efficiency of junctions to enhance the free flow of people within and through the Environs.
TM O22	Implement in full, the Cycle Network as will be set out in the final LSMATS, with priority given in the short term to delivering the primary cycle network and cycle routes serving schools.
TM O25	Ensure all developments protect and safeguard the capacity and efficiency of the drainage regimes of the national road network.

5. Appropriate Assessment

A screening for Appropriate Assessment was carried out as part of the environmental evaluation of the proposed scheme. This screening assessment concluded, in view of the best scientific knowledge and in view of the conservation objectives of the Natura 2000 sites reviewed in the screening exercise, the proposed development individually/in combination with other plans and projects (either directly or indirectly) is not likely to have any significant effects on any of the European sites.

Therefore, Appropriate Assessment is not required.

6. Baseline Environment

This Chapter of this report considers the receiving environment and the potential impact of the scheme in respect of:

- Population and Human Health;
- Biodiversity;
- Land and Soils;
- Material Assets;
- Landscape and Visual;
- Air Quality and Climate;
- Water; and
- Cultural Heritage.

6.1 Population and Human Health

The proposed development will have a positive effect on the local community in Ballyengland, and nearby Askeaton, as well as the wider Limerick area. The development will provide improved sightlines at the junction which will increase user safety in the area. The improvement of these sightlines will result in further use of the road by vulnerable users, a reduced use of cars by possible increased use of public transport and a decrease in accidents and / or collisions. There are two number of residential properties within the proximity of the development.

During the construction stage, there is the potential for some disruption being experienced by nearby residents and road users from the construction traffic and noise and dust emissions associated with construction activities, however these will be temporary and will not cause significant negative impacts. Traffic associated with the construction stage of the proposed works will be managed appropriately using a Construction Traffic Management Plan (CTMP), in order to minimise effects on residents and the operation of the local road network. The CTMP, which will be prepared by the construction contractor for the proposed development, will be implemented for the duration of the works with the aim of minimising disruption to traffic flow on the road network. It is not predicted that significant negative effects will arise.

Sensitive receptors are located near the proposed works and include one residential dwelling along the southern side of the N69, and the eastern side of the Local Road L6005, there is one residential property which could be affected.

Careful and considered local consultation will be carried out with nearby residents to ensure that the minimum amount of disturbance will be caused. Access to existing residential areas and proposed residential units will be maintained for the duration of the works.

The land take required for the provision of the increased sightlines on the northern edge of the N69 will have a permanent negative impact on the residents of the affected properties. In addition, the land take will necessitate the removal of some hedgerow, grassed areas, boundary walls and fencing and may necessitate the relocation of some electricity poles.

It is considered that the proposed works will not create any significant adverse effects with respect to population or human health.

The completed project will be characterised by high quality facilities designed to the following Standards: TII Geometric Design of Junctions (priority junctions, direct accesses, roundabouts, grade separated and compact grade separated junctions)

6.2 Biodiversity

The ecological assessment undertaken for the development, concluded the site is not within or adjacent to any area designated for nature conservation. An initial site visit and walkover survey was carried out on 20th August 2022. Baseline ecological conditions were assessed. Habitats were classified according to Fossitt (2000). Where applicable, the habitat types and species usage were recorded (Smith et al. 2011; Scannell and Synnott, 1987; Wyse Jackson et al. 2016). Habitats were classified and dominant plant species noted according to the guidelines given by the Joint Nature Conservation Committee (JNCC 2010) with reference to Smith et al. (2011).

Habitat types present within and in close proximity to the project area will mainly affect habitats consisting of WL1 and GA1 which are highly common throughout Ireland in any area relating to agriculture. Both habitats are of relatively low ecological value consisting mainly of common native species. Sightline improvement works will take place long the two existing roads where some treelines will require removal.

There were no signs of protected mammal species recorded during the field survey. No protected mammal species will be affected by any works to existing roadside boundary areas.

During the field survey, bird species that were identifiable were noted. No Special Conservation Interest species of the nearest SPA were recorded. Vegetation clearance may be required along the section where realignment works are required at the junction (L6005) and alongside the N69 where the junction re-alignment is meant to take place. This habitat is of no value to Qualifying Interests of the nearest Natura 2000 sites. It should be noted that it is illegal to disrupt or interfere with birds nesting in Ireland between the 1st of March and 31st of August. Therefore, if works require hedge cutting or removal then a dedicated bird survey would be required to ascertain if any birds are nesting within the hedgerow which requires management.

Amphibians were not recorded during the field surveys. The lack of drains or wet patches within the surrounding area make it unsuitable for breeding amphibians. The wet grassland adjacent to the road would provide suitable foraging habitat for the Common Frog (*Rana temporaria*).

No third schedule invasive plant species were recorded within the works area. However, there were two lower risk invasive species seen at the site: the Sycamore trees *Acer pseudoplatanus* and old man's beard *Clematis vitalba*.

In conclusion, it is recommended that works may proceed as planned without any significant negative ecological effects arising.

6.3 Cultural Heritage Assessment

6.3.1 Assessment Methodology

For the purpose of the cultural heritage assessment a desktop survey was carried out, which included the analysis of archaeological, historical and cartographic sources. Monuments and sites located within 200m of the proposed development were included in the assessment.

The following documents were examined to establish the archaeological, architectural and cultural heritage potential of the proposed scheme:

- Record of Monuments and Places for County Limerick
- Limerick Development Plan 2022-2028
- Record of Protected Structures for County Limerick
- National Inventory of Architectural Heritage
- Cartographic sources

- Aerial photography
- Excavation bulletins.

6.3.2 Archaeology

A record of archaeological heritage is maintained on the ‘Record of Monuments and Places’, which was established under Section 12 of the National Monuments (Amendment) Act, 1994 (No. 17 of 1994). Structures, features, objects or sites listed in this Record are known as Recorded Monuments.

A review of the RMP indicated that there are no archaeological monuments within 200m of the site. However, there are four recorded archaeological sites within 500m of the proposed development site, these are as follows:

Table 7: Recorded Sites of Archaeological Heritage

Recorded Sites of Archaeological Heritage			
RMP Code / RPS Reg. Number	Class / Name	Description	Distance from proposed development
LI011-099	Ringfort - rath	In pasture, atop hill. Circular area (35.6m N-S; 36.4m E-W) enclosed by earthen bank (int. H 0.3m; ext. H 0.65m), best preserved N->ENE. Mortared stone wall (H 1.6m) runs around external base of bank NW->SE. Avenue which led to Stewick House (now in ruins) skirts around side of enclosure N->E. Avenue leading to modern dwelling branches off from former avenue at N and skirts around enclosure to NW, where dwelling house and garden lie immediately W of enclosure. An oil tank has been erected atop bank/wall at NNE. Mature beech trees grow along top of bank. Level interior, under pasture; slight dip in NE quadrant immediately behind oil tank.	226m
Reg. No. 21901105	Stewick House	1780 - 1800 Original Use: country house	268m
LI011-044	Ringfort - rath	In undulating pasture, on gentle S-facing slope in area of limestone outcropping. Monument, depicted as embanked circular enclosure (diam. c. 30m) on 1841 OS 6-inch map, has been levelled. No trace of monument evident when inspected.	364m
LI011-048	Enclosure	In pasture, on gentle S-facing slope. Monument, depicted on 1923 OS 6-inch map as ovoid enclosure (c. 30m E-W; c. 40m N-S), has been levelled except for section of enclosing earth-and-stone bank (int. H 0.35m) W->NE. This forms part of field boundary system; a dry-stone field wall runs along external face of bank and continues as linear boundary to SW and E.	398m
N/A	Aghavaurla Bridge	Bridge	N/A
941	Lime Kiln	Vernacular industrial structure	N/A

No sites of archaeological significance have been identified from the examination of the excavations database (www.excavations.ie) within 200m of the proposed development.

The impact of the proposed development on sites of Cultural Heritage significance is therefore deemed to be low.

6.4 Landscape and Visual

The landscape character areas within County Limerick have incorporated the scenic views and prospects of earlier County Development Plans, which will ensure continuity between, and further development of, landscape policies for the County. There are 10 differing landscape areas (Landscape Character Areas, LCA) in County Limerick. The proposed works are located within the Shannon Integrated Coastal Management Zone. This area is described below:

This zone comprises a large area of northern County Limerick and is bounded on one side by the Shannon Estuary while its southern boundary is defined by the gradually rising ground, which leads onto the agricultural zone and the western hills to the southwest. The presence of the estuary is the defining characteristic of the region. The landscape itself is generally that of an enclosed farm type, essentially that of a hedgerow dominant landscape. This differs from the other agricultural landscapes of the County in that the field patterns, particularly close to the estuary, tend to be less regular than those elsewhere in the County.

Proposed works will take place in a rural area along a busy stretch of national road and therefore the landscape is not typical of the Landscape Character Area and is less sensitive to proposed land uses.

A number of residential dwellings are located along the N69 where works are proposed. These sites will be the most impacted by the changes arising from the proposed development. The proposed development will mean that the agricultural land adjacent and adjoining walls will have boundaries altered with some land take possible. Sections of hedgerow will require removal. It is not anticipated that the scheme will increase the number of users of the N69 but rather that the development will improve safety for road users at the junction.

Works along the N69 may necessitate land take from an adjacent field to the west of the existing roadway.

There is no potential for the proposed project to impact directly or indirectly on listed or scenic views or protected landscapes.

Localised impacts on adjacent residences will be mitigated by appropriate landscape planting mitigation and consultation with affected landowners.

The nature of the proposed development being principally adjacent to the N69 is unlikely to have any significant impact on the landscape of the area.

6.5 Land and Soils

The GSI Quaternary Sediments map reveals the site is underlain by till and shallow/outcropping karstified bedrock, however, It is likely that the ground immediately adjacent to the road will be made ground. The soils and subsoils underlying and surrounding the site are described as being moderate permeability subsoils overlain by well drained soils. The recharge coefficient is estimated at 60%. No ground investigation has been carried out to date but the GSI map viewer denotes the depth to bedrock is relatively shallow based on information collated from geotechnical boreholes and wells in the environs ranging from 3m to 6m.

The GSI (1:100,000 scale) bedrock mapping indicates that the site is underlain by Waulsortian Limestones, which can be described as massive, unbedded lime-mudstone. The aquifer beneath

the site is classified as a Regionally Important Aquifer - Karstified (conduit) however, there were no karst features recorded within 5km of the study area. The GSI map viewer records a dug well located close to the site (ref: 1115SEW032) (accuracy within 1km), drilled on December 30th, 1899, with a depth of 3.4m.

Aquifer or groundwater vulnerability is the ease with which the groundwater may be contaminated by human activity and depends upon the aquifer's intrinsic geological and hydrogeological characteristics. The vulnerability is determined by the permeability and the attenuation capacity of any overlying deposits. The vulnerability of the aquifer directly beneath the Site is classified by the GSI as Extremely vulnerable.

Given the nature of the proposed development which will take place predominantly along the existing road/local pathway footprint, it is likely that the ground adjacent will be made ground and it can therefore be concluded that the proposed works will have limited negative impacts on the area if best practice is adhered to. No ground investigation has been undertaken to date however, construction and drainage design will have to take cognisance of the extremely high groundwater vulnerability status and the location of the site atop a regionally important karstified aquifer.

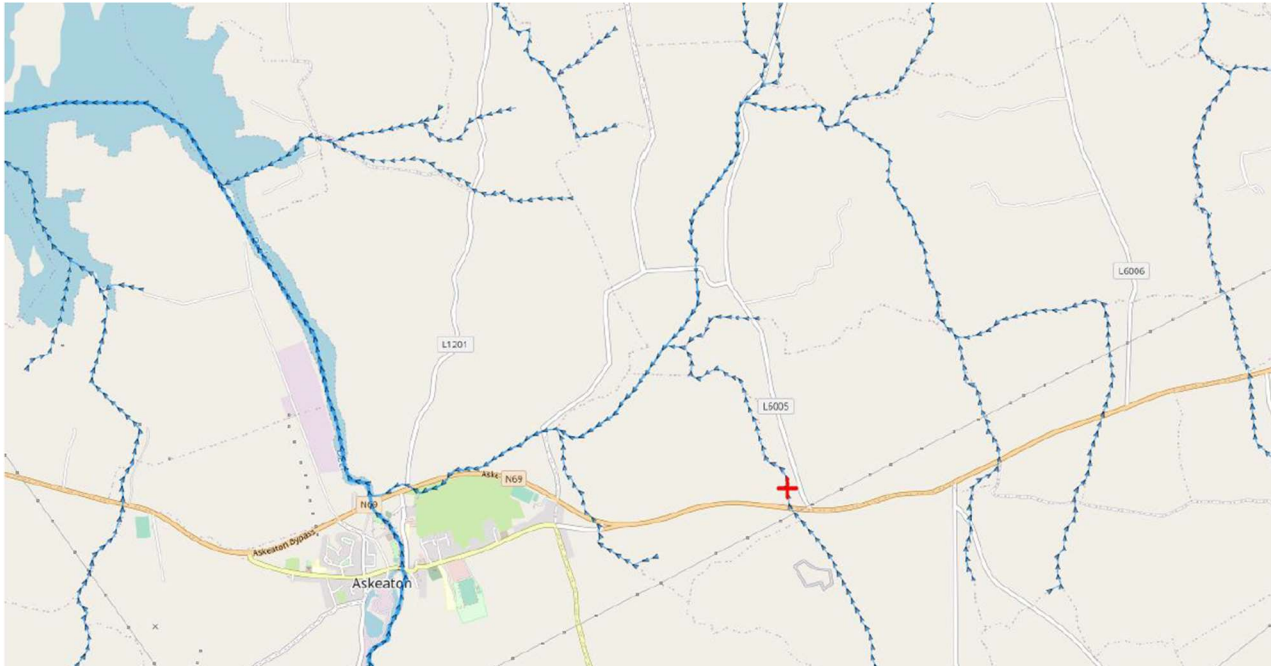
6.6 Hydrology and Flood Risk

The proposed scheme is located within the Shannon Estuary South catchment, and the Deel Newcastle West sub catchment. The river sub basin within which the proposed scheme lies is the Deegerty_10 which is approximately 12.3km² and flows in a northerly direction.

Figure 1 Extract from EPA (www.catchments.ie) showing main watercourses, flow direction and river subbasin within which the proposed scheme is located



Figure 2 River flow direction



Watercourses in the vicinity of the scheme have not been heavily modified, they often run along field boundaries. Additional watercourse crossings are not proposed. The capacity of existing culverts will be determined at the detailed design stage to assess whether additional works are needed at these locations.

6.6.1 Flood Risk

The works associated with this improvement scheme take place along the N69 which passes over the Cragmore River at the western end of the proposed development. Therefore, the risk of increased flooding as a result of the works associated with the development needs to be assessed.

The works cross the watercourse to the west of the proposed junction alignment, where the route crosses over an existing bridge carrying the N69. The location lies within the Deel Newcastle West sub catchment, and the Deegerty 10 sub basin. The river appears to flow in a northerly direction joining another watercourse which enters the Shannon Estuary at Askeaton.

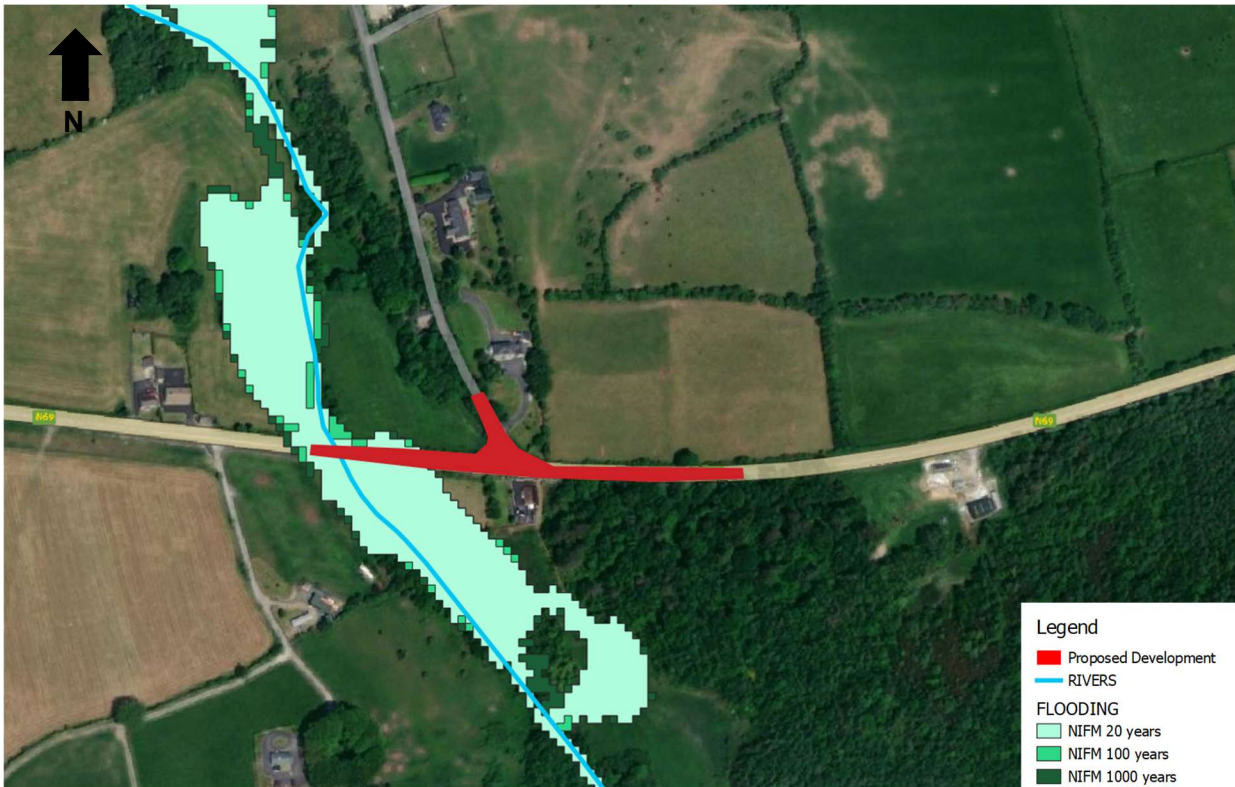
It is not anticipated that the extension of the existing culvert carrying the watercourse beneath the N69 will have any impact on the existing drainage regime given the nature of the road improvement works proposed.

This river is the only significant hydrological feature within the area. Both the OPW and National Indicative Fluvial Maps (NIFM) are available for the study area, cover all the scheme area and have been assessed. NIFM have been produced for catchments greater than 5 km² in areas for which flood maps were not produced under the National CFRAM Programme and should be read in this context. This data shows the modelled extent of land that might be flooded by rivers (fluvial flooding) during a theoretical or 'design' flood event with an estimated probability of occurrence, rather than information for actual floods that have occurred in the past.

The proposed development enters an area in the western section, which is identified by the NIFM to be within areas identified as a NIFM 20 Year, 100 Year and 1000 Year flood plains. These layers identify that the extent of the land seen in Figure 3 below might be flooded by rivers in an extreme flood event. The development is within the townland of Ballyengland Lower, and approximately 80m of it falls within NIFM 20 Year, 100 Year and 1000 Year flood plains.

This zone is within the townland of Ballyengland Lower and approximately 82m of the route is within an area presented with this flood risk.

Figure 3: Area potentially affected by flood risk



6.6.2 Hydrogeology

The GSI has classified the groundwater vulnerability along the route as Extreme in locations of made ground with bedrock outcrop (ie mapped bedrock depths between 0 to 3mbgl).

Groundwater status along the proposed route is denoted as ‘good’ quality in the ESM map viewer tool. The proposed active travel route is above a regionally important aquifer, a locally important aquifer which is moderately productive only in local zones and a local important aquifer which is generally moderately productive. The area is known to be of “high” and “moderate” vulnerability in the south of the route and classified as “low” vulnerability to the north of the route. It is not anticipated that the proposed active travel route will negatively impact aquifers/groundwater as it would be developed at grade with no land cutting involved.

Current Pollution Prevention Guidelines (PPGs) shall be adhered to as standard practice for all work around watercourses to prevent pollution (including muddy runoff) for both construction of the and future maintenance work.

Proposed works will predominantly take place within made ground adjacent to and within the N69 roadway. Significant land take is not expected. Drainage regime is highly modified through previous development. It is not expected that the proposed works will increase the risk of flooding.

6.7 Air Quality

In terms of Air Quality, it is noted that the proposed works are located in an area defined by the EPA as ‘Region 3: Large Towns (EPA mapping)’. The Air Quality Index is (1) Good (last update 21/03/23).

The website www.airquality.ie gives information on the air quality for locations throughout the country and also any associated health advice. The ambient air quality network is managed by the EPA. In addition, Limerick City and County Council have installed 3 no. air quality monitors which can provide live indicative air quality data to the public. The locations are Limerick City and Askeaton. These monitors measure particulate matter (PM) which is commonly used as an indicator of dust particles in air, including total suspended particulates, PM₁₀ and PM_{2.5}.

Air quality results and reports for Limerick City and County Council can be accessed at the following website: Air Quality | Limerick.ie

It is considered that the route of the proposed works is not particularly sensitive to additional emissions and that the surrounding environments are mainly influenced by existing emissions from road transport on the N69 and adjacent roads.

For the construction phase, this stage of the project will lead to the production of greenhouse gas (GHG) emissions from traffic and the fuel used by mobile plant and equipment. However, these impacts are not anticipated to create any significant adverse effects as they will be short term and temporary in nature.

It is assumed that a Site Waste Management Plan will be developed and there will be contractual requirements for the principal contractor to demonstrate best practice principles and procedures to minimise the consumption of resources such as fuels and raw materials.

There is potential for dust from site construction works such as excavations, earthworks and the movement of site traffic. Dust can be spread by vehicles entering and exiting the site. It is anticipated that the appointed contractor will be required to implement dust measures to reduce/avoid any potential dust impacts.

Noting the above and the nature, size and location of the development, significant adverse effects on the environment are unlikely with respect to climate change, GHG emissions and air quality.

6.8 Noise and Vibration

Noise and vibration will be generated during the construction of the proposed development due to construction traffic, machinery and excavation works.

The main noise and vibration source during the construction phase will be from the proposed excavation works. Disturbance to nearby residents or workplaces along the scheme will be temporary. Any potential rock breaking activities will be temporary, carried out during daytime hours, and will be screened from off-site receptors by continuous construction hoarding. This typically provides a 10dB reduction in off-site noise levels. A variety of potential vibration-causing items of plant are likely to be used such as excavators, lifting equipment and dumper trucks.

Noise and vibration will be controlled by the implementation of standard construction practices. Examples of such practices are outlined in the CEMP (Construction Environmental Management Plan).

The British Standard BS 5228-1/2:2009+A1:2014 Code of Practice for Noise and Vibration Control on Construction and Open Sites – Noise and Vibration outlines guidance on construction noise criteria, as well as prediction methodologies to estimate the impact. From the Standard, applicable daytime noise limits at sensitive receptors are 65dB LAeq. An exceedance of this limit by more than 10dB is considered to be a significant impact. In relation to vibration, the Standard identifies that a vibration level of 1.0mm/s can be tolerated if prior warning and explanation is given to residents. Levels of 10mm/s or more is 'likely to be intolerable for any more than a very brief exposure to this level'.

It is expected that significant adverse effects on the environment are considered to be unlikely with respect to noise and vibration.

6.9 Material Assets

Landowners have been identified along the proposed route of the works. Landholdings comprise residential dwellings and agricultural fields. There appears to be seven folios close to the road in which the development will be taking place.

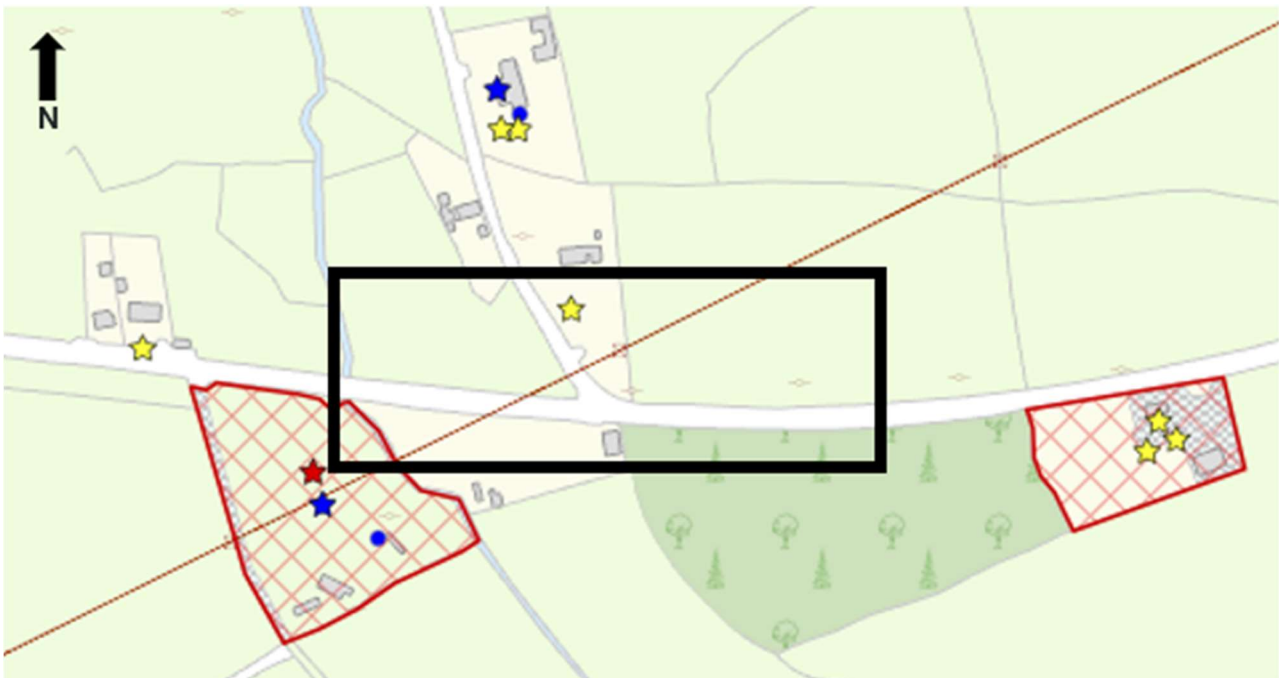
The various landholdings were identified by reference to www.landdirect.ie

The Limerick City and County Council online Planning Application System was consulted to determine whether there were any recent planning applications granted which could impact on or be impacted by the proposed development.

It is considered that there has been no recently granted or conditional planning applications will be impacted by the proposed works.

Locations where planning has been granted, refused, no decision or are conditional are indicated by a star. Planning sites are indicated by a red hatched area.

Figure 4: Planning Applications near Development



6.9.1 Utilities

Utilities have been mapped following consultation with Local Authorities and providers as well as a review of online mapping.

The following utilities have been identified within area of the proposed development:

- 1) Irish Water: Along the northern edge of the N69, running east to west (vice versa), there is a 400mm ductile iron. This runs through the proposed development. Moreover, there is a fire hydrant to the east of Aghavaurla Bridge.
- 2) ESB: There is a 38KV and Higher Voltage Overhead Line running diagonally across the junction from north east to south west (53 – 57), while there is also MV (10KV/20KV) overhead lines running from northwest – south east. It is unlikely that any changes will be required to these overhead lines.

3) Eir: There is evidence of an existing Eir Box within the proposed development, however this is unlikely to require any relocation.

Therefore:

- The Contractor will be responsible for putting measures in place to ensure that there are no interruptions to existing services and that all services and utilities are maintained unless this has been agreed in advance with the relevant service provider. All works near existing services and utilities will be carried out in ongoing consultation with the relevant utility company and will follow any requirements or guidelines they may have.
- Further methods to be implemented by the Contractor to minimise the risk of damage to existing services will be as follows
- Undertake surveys to establish full extent of underground services prior to the commencement of construction;
- The use of Ground Penetration Radar (GPR) and CAT (cable avoidance tool), to provide greater confirmation of the locations of existing assets;
- The use of trial holes, where required, again to provide greater knowledge on the exact location of existing assets.
- If disruption to utility services is necessary for the completion of the works, it shall be kept to a minimum and shall take place, as far as possible, during off-peak use hours.

Overall, it is considered that there will be no significant negative impacts on land use and material assets as a result of the proposed development.

7. Cumulative Impacts

A review of nearby projects which have the potential for cumulative impacts on the environment when considered together with the proposed development was completed.

These are:

- SID Solas Éireann Development Limited
- Cignal Infrastructure Limited

7.1 SID Solas Éireann Development Limited

The proposed development (ref: 22313816), located at Ballinknockane and Ellaha, Askeaton, Co. Limerick is that of a new 110kV substation to feed into the existing Aughinish – Kilpaddocke 110kV overhead line. Although this proposed development is not close to the subject scheme, the potential for in-combination environmental effects could arise for construction-phase traffic, but with the implementation of appropriate construction-phase traffic management plans and controls, the potential cumulative effects will not be significant.

A decision on the planning application is due on 14/12/2022.

7.2 Cignal Infrastructure Limited

The proposed development (ref: 211351), located at Craggs Td, Askeaton, Co. Limerick, is that of the permission to construct a 24 metre high multi-user tower telecommunications structure, carrying antenna and dishes within a 2.4 metre high palisade fence compound together with associated ground equipment and associated site works including new access track at Craggs Ts., Co. Limerick.

Although this proposed development is not close to the subject scheme, the potential for in-combination environmental effects could arise for construction-phase traffic, but with the implementation of appropriate construction-phase traffic management plans and controls, the potential cumulative effects will not be significant.

A decision on the planning application was due on 22/11/2021.

8. EIA Screening Assessment

Table 8: Characteristics of the Proposed Development

Characteristics of the Proposed Development	
Section 7 Requirement	Response
The size and design of the whole of the proposed development,	<p>The proposed works to the junction are intended to provide sightlines of up to 174m to the east, and up to 102m to the west. These works are set to be performed over a period of 18 weeks.</p> <ul style="list-style-type: none"> • Approximately 102m of the existing boundary wall/hedgerows to the east will be set back. • The existing wall will be replaced with TII approved fencing. • Construction of a run-over area, and realignment of the junction. • Realigning and setting back the ditch to the west of the junction (approximately 102m length) including relocation of farm gated access, piping open drain and provision of a 2m road verge.
Cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment,	<p>Projects which have the potential for cumulative impacts on the environment when considered together with the proposed development was completed.</p> <p>These are:</p> <ul style="list-style-type: none"> • SID Solas Éireann Development Limited • Signal Infrastructure Limited
The nature of any associated demolition works,	<p>The proposed development will include the following:</p> <ul style="list-style-type: none"> • Site clearance, including the removal of existing hard surfaces, certain trees, hedgerows and field boundaries; • Construction of new properties boundaries; • Construction of road drainage systems including: • New surface water drains in the form of grassed surface water channels; • Limited numbers of carrier drains • Deepening and/or realignment of an existing ditch; and • Provision of culverts associated with the new ditch.
The use of natural resources, in particular land, soil, water and biodiversity,	<p>While construction materials will be required in carrying out the proposed works, it is not considered that there will be a significant use of natural resources as part of the proposed works. Services such as water and power (mobile generators) may be required during the construction phase, however, it is not expected that there will be a significant use of these resources due to the nature of the works proposed.</p>
The production of waste,	<p>Surplus construction materials which are not required for use on site will be reused, recovered or disposed off site. An appropriate waste collection permit holder will</p>

Characteristics of the Proposed Development	
	be used for removal of wastes from site. All by products and wastes removed from site will be reused, recovered or disposed of in accordance with the Waste Management Act, 1996, as amended.
Pollution and nuisances,	Construction activities will be restricted to within the defined works boundaries. The employment of standard best practice measures and construction techniques as described in the CEMP will serve to minimise the risk of pollution of soil, storm water run-off or groundwater.
The risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge, and	There is a low possibility that accidents will occur as the construction works are standard in nature and well understood. Standard construction practices will ensure that the risk of accidents will be low. It is envisaged that the risk of accidents, having regard to substances or technologies used is very low and therefore will not result in significant environmental effects.
The risks to human health (for example, due to water contamination or air pollution).	Throughout all project phases, standard construction materials will be used and will not be harmful to human health or the environment. The contractor will ensure that the proposed works are carried out in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013 (S.I. No. 219 of 2013)

Table 9: Location of the Proposed Development

Location of the Proposed Development	
Section 7 Requirement	Response
Question: The environmental sensitivity of geographical areas likely to be affected by the proposed development, with particular regard to— the existing and approved land use,	<p>Much of the ground immediately underlying the site has been modified through construction/utilities works along the existing roadway, junctions and residential properties and can be considered to be 'made ground'. Given the nature of the proposed development which will take place predominantly along the existing road corridor, it is likely that the ground immediately affected will be made ground and it can therefore be concluded that the proposed works will have no negative impact on land and soil characteristics in the area.</p> <p>A small number of residential dwellings are located along the N69 where works are proposed at Ballyengland. These residences will be the most impacted by the changes arising from the proposed development. One dwellings along the southern side of the N69 be impacted, and two to the north which will have permanent alterations to their boundaries with some land take possible. Sections of hedgerow will require removal. It is not anticipated that the scheme</p>

Location of the Proposed Development	
	will increase the number of users of the N69 but rather that the development will encourage alternative modes of transport such as walking or cycling by providing a safe means of travel and a reduction in speeds along this route.
the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground,	The main natural resource in the area is agricultural land. There may be temporary impacts on the environment during construction due to noise or dust emissions depending on the activity involved and the ambient conditions at the time. However, the construction works are standard in nature and well understood. Implementation of standard best practice measures and construction techniques will be set out by the Contractor in their CEMP and this will ensure no significant impact on the abundance, quality and regenerative capacity of natural resources in the area. Careful and considered local consultation will be carried out with nearby residences to ensure that the minimum amount of disturbance will be caused. The necessary removal of some areas of grass and hedgerow will be mitigated by a sympathetic replanting and boundary reinstatement strategy.
the absorption capacity of the natural environment, paying particular attention to the following areas:	
wetlands, riparian areas, river mouths;	N/A
coastal zones and the marine environment,	N/A
mountain and forest areas;	N/A
nature reserves and parks;	N/A
areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive and;	N/A (See AA Screening Report)
areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure;	N/A
densely populated areas;	The works are not located within a densely populated area. One off residences are located south of the N69 at Ballyengland, as well as north.
landscapes and sites of historical, cultural or archaeological significance.	The proposed development is not located in close proximity to any archaeological sites, protected structures or potential cultural significance.

Table 10: Types and Characteristics of Potential Impacts

Types and Characteristics of Potential Impacts	
Section 7 Requirement	Response
<p>Question: The likely significant effects on the environment of proposed development in relation to criteria set out under paragraphs 1 and 2, with regard to the impact of the project on the factors specified in paragraph (b)(i)(I) to (V) of the definition of 'environmental impact assessment report' in section 171A of the Act, taking into account—</p>	
<p>the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected)</p>	<p>The works will take place along the N69 and a Local Road L6005. The length of the scheme is approximately 375m. Potential environmental impacts are mainly related to land take and construction. The impacts are anticipated to be localised and minor along the road length. A relatively small number of residences will be affected as set out in the EIAR Screening main report</p>
<p>The nature of the impact, the intensity and complexity of the impact, the probability of the impact, the expected onset, duration, frequency and reversibility of the impact, the possibility of effectively reducing the impact.</p>	<p>Population and Human Health</p> <p>The improvement of these sightlines will result in further use of the road by vulnerable users, a reduced use of cars by possible increased use of public transport and a decrease in accidents and / or collisions.</p> <p>During the construction stage, there is the potential for some disruption being experienced by nearby residents and road users from the construction traffic and noise and dust emissions associated with construction activities, however these will be temporary and will not cause significant negative impacts. Traffic associated with the construction stage of the proposed works will be managed appropriately using a Construction Traffic Management Plan (CTMP), in order to minimise effects on residents and the operation of the local road network. The CTMP, which will be prepared by the construction contractor for the proposed development, will be implemented for the duration of the works with the aim of minimising disruption to traffic flow on the road network. It is not predicted that significant negative effects will arise.</p> <p>Sensitive receptors are located near the proposed works and include one residential dwelling along the southern side of the N69, and the eastern side of the Local Road L6005, there is one residential property which could be affected.</p> <p>Careful and considered local consultation will be carried out with nearby residents to ensure that the minimum amount of disturbance will be caused. Access to existing residential areas and proposed residential units will be maintained for the duration of the works.</p> <p>The land take required for the provision of the increased sightlines on the northern edge of the N69 will have a permanent negative impact on the residents of the affected properties. In addition, the land take will necessitate the removal of some hedgerow, grassed areas, boundary walls and fencing and may necessitate the relocation of some electricity poles.</p>

Types and Characteristics of Potential Impacts

It is considered that the proposed works will not create any significant adverse effects with respect to population or human health.

Biodiversity

Habitat types present within and in close proximity to the project area will mainly affect habitats consisting of WL1 and GA1 which are highly common throughout Ireland in any area relating to agriculture. Both habitats are of relatively low ecological value consisting mainly of common native species. Sightline improvement works will take place along the two existing roads where some treelines will require removal.

There were no signs of protected mammal species recorded during the field survey. No protected mammal species will be affected by any works to existing roadside boundary areas.

No Special Conservation Interest species of the nearest SPA were recorded. Vegetation clearance may be required along the section where realignment works are required at the junction (L6005) and alongside the N69 where the junction re-alignment is meant to take place. This habitat is of no value to Qualifying Interests of the nearest Natura 2000 sites. It should be noted that it is illegal to disrupt or interfere with birds nesting in Ireland between the 1st of March and 31st of August. Therefore, if works require hedge cutting or removal then a dedicated bird survey would be required to ascertain if any birds are nesting within the hedgerow which requires management.

Amphibians were not recorded during the field surveys. The lack of drains or wet patches within the surrounding area make it unsuitable for breeding amphibians. The wet grassland adjacent to the road would provide suitable foraging habitat for the Common Frog (*Rana temporaria*).

No third schedule invasive plant species were recorded within the works area. However, there were two lower risk invasive species seen at the site: the Sycamore trees *Acer pseudoplatanus* and old man's beard *Clematis vitalba*.

In conclusion, it is recommended that works may proceed as planned without any significant negative ecological effects arising.

Land and Soils

The GSI Quaternary Sediments map reveals the site is underlain by till and shallow/outcropping karstified bedrock, however, It is likely that the ground immediately adjacent to the road will be made ground. The soils and subsoils underlying and surrounding the site are described as being moderate permeability subsoils overlain by well drained soils. The recharge coefficient is estimated at 60%. No ground investigation has been carried out to date but the GSI map viewer denotes the depth to bedrock is relatively shallow based on information collated from geotechnical boreholes and wells in the environs ranging from 3m to 6m.

The GSI (1:100,000 scale) bedrock mapping indicates that the site is underlain by Waulsortian Limestones, which can be described as massive, unbedded lime-mudstone. The aquifer

Types and Characteristics of Potential Impacts

beneath the site is classified as a Regionally Important Aquifer - Karstified (conduit) however, there were no karst features recorded within 5km of the study area.

The GSI map viewer records a dug well located close to the site (ref: 1115SEW032) (accuracy within 1km), drilled on December 30th, 1899, with a depth of 3.4m.

Aquifer or groundwater vulnerability is the ease with which the groundwater may be contaminated by human activity and depends upon the aquifer's intrinsic geological and hydrogeological characteristics. The vulnerability is determined by the permeability and the attenuation capacity of any overlying deposits. The vulnerability of the aquifer directly beneath the Site is classified by the GSI as Extremely vulnerable.

Given the nature of the proposed development which will take place predominantly along the existing road/local pathway footprint, it is likely that the ground adjacent will be made ground and it can therefore be concluded that the proposed works will have limited negative impacts on the area if best practice is adhered to. No ground investigation has been undertaken to date however, construction and drainage design will have to take cognisance of the extremely high groundwater vulnerability status and the location of the site atop a regionally important karstified aquifer.

Archaeology

A review of the RMP indicated that there are there are no archaeological monuments within 200m of the site. However, there are four recorded archaeological sites within 500m of the proposed development site, these are as follows:

- Ringfort – rath (227m distance from proposed development)
- Stewick House (269m distance from proposed development)
- Ringfort – rath (365m distance from proposed development)
- Enclosure (400m distance from proposed development)
- Aghavaurla Bridge (N/A)
- Lime Kiln (N/A)

No sites of archaeological significance have been identified from the examination of the excavations database (www.excavations.ie) within 200m of the proposed development.

The impact of the proposed development on sites of Cultural Heritage significance is therefore deemed to be low.

Landscape and Visual

The proposed works are located within the Shannon Integrated Coastal Management Zone. This area is described below:

This zone comprises a large area of northern County Limerick and is bounded on one side by the Shannon Estuary while its southern boundary is defined by the gradually rising ground, which leads onto the agricultural zone and the western hills to the southwest. The presence of the estuary is the defining characteristic of the region. The landscape itself is generally that of an enclosed farm type, essentially that of a hedgerow dominant landscape. This differs from the other agricultural

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landscapes of the County in that the field patterns, particularly close to the estuary, tend to be less regular than those elsewhere in the County.

Proposed works will take place in a rural area along a busy stretch of national road and therefore the landscape is not typical of the Landscape Character Area and is less sensitive to proposed land uses.

A small number of residential dwellings are located along the N69 where works are proposed. These sites will be the most impacted by the changes arising from the proposed development. The proposed development will mean that the agricultural land adjacent and adjoining walls will have boundaries altered with some land take possible. Sections of hedgerow will require removal. It is not anticipated that the scheme will increase the number of users of the N69 but rather that the development will improve safety for road users at the junction.

Works along the N69 may necessitate land take from an adjacent field to the west of the existing roadway.

There is no potential for the proposed project to impact directly or indirectly on listed or scenic views or protected landscapes.

Localised impacts on adjacent residences will be mitigated by appropriate landscape planting mitigation and consultation with affected landowners.

The nature of the proposed development being principally adjacent to the N69 is unlikely to have any significant impact on the landscape of the area.

Hydrology

The proposed scheme is located within the Shannon Estuary South catchment, and the Deel Newcastlewest sub catchment. The river sub basin within which the proposed scheme lies is the Deegerty_10 which is approximately 12.3km² and flows in a northerly direction.

Watercourses in the vicinity of the scheme have not been heavily modified, they often run along field boundaries. Additional watercourse crossings are not proposed. The capacity of existing culverts will be determined at the detailed design stage to assess whether additional works are needed at these locations.

The works associated with this improvement scheme take place along the N69 which passes over the Cragmore River at the western end of the proposed development. Therefore, the risk of increased flooding as a result of the works associated with the development needs to be assessed.

The works cross the watercourse to the west of the proposed junction alignment, where the route crosses over an existing bridge carrying the N69. The location lies within the Deel Newcastlewest sub catchment, and the Deegerty 10 sub basin. The river appears to flow in a northerly direction joining another watercourse which enters the Shannon Estuary at Askeaton.

It is not anticipated that the extension of the existing culvert carrying the watercourse beneath the N69 will have any impact

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on the existing drainage regime given the nature of the road improvement works proposed.

The proposed development enters an area in the western section, which is identified by the NIFM to be within areas identified as a NIFM 20 Year, 100 Year and 1000 Year flood plains. These layers identify that the lands which might be flooded by rivers in an extreme flood event. The development is within the townland of Ballyengland Lower, and approximately 80m of it falls within NIFM 20 Year, 100 Year and 1000 Year flood plains.

This zone is within the townland of Ballyengland Lower and approximately 82m of the route is within an area presented with this flood risk. The GSI has classified the groundwater vulnerability along the route as Extreme in locations of made ground with bedrock outcrop (ie mapped bedrock depths between 0 to 3mbgl).

Groundwater status along the proposed route is denoted as 'good' quality in the ESM map viewer tool. The proposed active travel route is above a regionally important aquifer, a locally important aquifer which is moderately productive only in local zones and a local important aquifer which is generally moderately productive. The area is known to be of "high" and "moderate" vulnerability in the south of the route and classified as "low" vulnerability to the north of the route. It is not anticipated that the proposed active travel route will negatively impact aquifers/groundwater as it would be developed at grade with no land cutting involved.

Proposed works will predominantly take place within made ground adjacent to and within the N69 roadway. Significant land take is not expected. Drainage regime is highly modified through previous development. It is not expected that the proposed works will increase the risk of flooding.

Air Quality

In terms of Air Quality, it is noted that the proposed works are located in an area defined by the EPA as 'Region 3: Large Towns (EPA mapping). The Air Quality Index is (1) Good (last update 21/03/23).

Limerick City and County Council have installed 3 no. air quality monitors which can provide live indicative air quality data to the public. The locations are Limerick City and Askeaton. These monitors measure particulate matter (PM) which is commonly used as an indicator of dust particles in air, including total suspended particulates, PM10 and PM2.5.

It is considered that the route of the proposed works is not particularly sensitive to additional emissions and that the surrounding environments are mainly influenced by existing emissions from road transport on the N69 and adjacent roads.

For the construction phase, this stage of the project will lead to the production of greenhouse gas (GHG) emissions from traffic and the fuel used by mobile plant and equipment. However, these impacts are not anticipated to create any significant adverse effects as they will be short term and temporary in nature.

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	<p>It is assumed that a Site Waste Management Plan will be developed and there will be contractual requirements for the principal contractor to demonstrate best practice principles and procedures to minimise the consumption of resources such as fuels and raw materials.</p> <p>There is potential for dust from site construction works such as excavations, earthworks and the movement of site traffic. Dust can be spread by vehicles entering and exiting the site. It is anticipated that the appointed contractor will be required to implement dust measures to reduce/avoid any potential dust impacts. Noting the above and the nature, size and location of the development, significant adverse effects on the environment are unlikely with respect to climate change, GHG emissions and air quality.</p> <p>Noise and Vibration</p> <p>Noise and vibration will be generated during the construction of the proposed development due to construction traffic, machinery and excavation works.</p> <p>The main noise and vibration source during the construction phase will be from the proposed excavation works. Disturbance to nearby residents or workplaces along the scheme will be temporary</p> <p>From the Standard, applicable daytime noise limits at sensitive receptors are 65dB LAeq. An exceedance of this limit by more than 10dB is considered to be a significant impact. In relation to vibration, the Standard identifies that a vibration level of 1.0mm/s can be tolerated if prior warning and explanation is given to residents. Levels of 10mm/s or more is 'likely to be intolerable for any more than a very brief exposure to this level'.</p> <p>It is expected that significant adverse effects on the environment are considered to be unlikely with respect to noise and vibration.</p>
the transboundary nature of the impact,	N/A
the cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment	<p>There is limited planned development within the development area. There are currently no known existing or permitted projects (including under other legislation that is subject to EIA) that could give rise to significant adverse cumulative effects. Standard traffic management procedures will effectively reduce any such impacts arising from works on the local population/human health who utilise the N69 and the affected local roads. There will be habitat loss within the footprint of the works which is unable to be reduced as earthworks will be required for the shared use path. Dust and noise suppression and management via CEMP during the construction phase will effectively reduce any such impacts on the local population/human health. Overall, the proposed development will have a positive impact on the population in the area by increasing safety for vehicular and pedestrian users/cyclists. Adverse cumulative effects are anticipated in relation to nuisance and disturbance impacts. Implementation of CEMP, Traffic Management Plans and mitigation measures will minimise the risk of adverse cumulative impacts.</p>

9. Preliminary Examination Conclusion

The proposed development does not fall into a category or exceed thresholds under the Planning Acts or the Roads Acts that trigger the mandatory requirement for an EIA, and therefore a statutory EIA is not required.

Having carried out the EIA screening assessment of the proposed scheme and considering the type and relatively small scale of the proposed development and the nature of the receiving environment in addition to the nature, size and location of the proposed development, significant impacts on aspects such as population and human health, biodiversity, land and soil, material assets, air quality, noise and vibration, water, landscape and visual and cultural heritage are not expected and can be ruled out.

This report has discussed possible positive and negative impacts of the proposed development, however, it is not anticipated that any of these are likely to have a significant impact on the environment. It is also noted that the potential for impacts on nearby Natura sites have been assessed by means of an Appropriate Assessment Screening Report can be excluded and the proposed development is therefore not subject to Appropriate Assessment and the preparation of a Natura Impact Statement.

Accordingly, based on the aforesaid EIA screening set out in this report, it is concluded that there is not a real likelihood of significant effects on the environment arising from the N69 Ballyengland Junction Improvement and therefore the preparation of an Environmental Impact Assessment Report (EIAR) is not required.

10. References

- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, Department of Department of Housing, Planning and Local Government, August 2018.
 - EIA Directive (Directive 2011/92/EU as amended by 2014/52/EU).
 - Environmental Impact Assessment of Projects: Guidance on Screening, European Commission, 2017.
 - Guidelines on the Information to be contained in Environmental Impact Assessment Reports, Environmental Protection Agency, May 2022.
 - Environmental Impact Assessment Screening OPR (Office of the Planning Regulator) Practice Note PN02 (2021)
 - Planning and Development Act 2000, as amended.
 - Planning and Development Regulations 2001, as amended.
 - Roads Act 1993, as amended.
 - Environmental Impact Assessment of Projects: Guidance on Screening, European Commission 2017
 - An Bord Pleanála Website Planning Searches. [Online]. Available at: <http://www.pleanala.ie/>
 - Environmental Sensitivity Mapping (ESM) Webtool (online) Accessed at: <https://www.enviromap.ie/>
 - Environmental Protection Agency (EPA) Catchments website (online) Accessed at: <https://www.catchments.ie/>
 - Water Framework Directive Water Maps Map Viewer (online) Accessed at <http://www.wfdireland.ie/maps.html>
 - Limerick County Dev Plan [Limerick Development Plan 2022-2028 | Limerick.ie](https://www.limerick.ie/development-plan)
- Floodmaps [Flood Maps - Floodinfo.ie](https://www.floodinfo.ie/)
- www.excavations.ie
 - National Inventory of Architectural Heritage www.niah.ie
 - Air Quality (online) Accessed at: www.airquality.ie
 - Transport Infrastructure Ireland (online) Accessed at: <https://www.tiipublications.ie/library/DN-GEO-03060-02.pdf>
 - Ordnance Survey Ireland (online) Accessed at: <https://osi.ie/products/professional-mapping/historical-mapping/#>
 - Land Direct (online) Accessed at: <https://www.landdirect.ie/pramap/>
 - Environmental Planning of National Road and Greenway Projects (RE-ENV-07008) (2023)