Environmental Impact Assessment Screening Report

PEDESTRIAN SCHEME BALLYGUILEMORE, WICKLOW TOWN, CO. WICKLOW

Wicklow County Council

Prepared by

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MSc ACIEEM

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1 INTRODUCTION

Wicklow County Council are seeking to upgrade the road to include a pedestrian scheme on the L-5103 at Ballyguilemore, due south of Wicklow Town, Co. Wicklow, hereafter referred to as the 'Proposed Scheme', to facilitate safe passage for pedestrians and cyclists. Minimal civil works including localised alterations to existing road and kerb. The anticipated duration of the works to implement the scheme is 3-4 months.

1.1 ABOUT THE AUTHORS

Deborah D'Arcy was commissioned by Wicklow County Council to provide an EIA screening for the extension of the footpath and localised upgrade of L-5103. Deborah D'Arcy is an Ecologist with an MSc in Ecological Assessment and an MSc in Environmental Resource Management and 8 years ecological consultancy experience and is an Associate Member of the Chartered Institute of Ecology and Environmental Management, the chief professional body for Ecologists in Ireland and as such is bound by their professional code of conduct. Deborah provided input on biodiversity assessments and technical review of the document.

This EIA screening was authored by Caoife D'Arcy. Caoife D'Arcy is an environmental scientist with a BSc in Spatial Planning and Environmental Management with 5 years environmental consultancy experience. Caoife has worked on several EIAs for large scale infrastructure projects including roads, flood relief schemes, wind farms and residential developments.

2 DESCRIPTION OF THE PROPOSED SCHEME

These works are being carried out in anticipation of the new GAA grounds to be developed at (GPS 52.965168, -6.032396) by St. Patrick's GAA Club, Wicklow Town. The relocation of the GAA club to this site will result in increased traffic flows along the L-5103 to the club. At existing L-5103 road is approximately 5.0 metres wide. It will be necessary to widen the road by 0.5m in order to cater for the increased traffic flows. In addition to this installation of a footpath which has a width of approximately 1.8 metres wide. This requires a setback of existing eastern (southbound) boundaries, by approximately 2.3 to 2.5m to facilitate the widened road, footpath and possible public lighting.

2.1 SITE LOCATION

The proposed scheme is located on the L-5103, Wicklow Town, Co. Wicklow. The works will start at the end of the existing footpath on the L-5103 (GPS 52.969614, -6.034986) and will terminate at the proposed site for the new Wicklow GAA ground which will be located about 550m further south (GPS 52.965168, -6.032396). The proposed site is of linear form and extends over 550m. The extent of the proposed scheme is illustrated in **Figure 2-1**.

Figure 2-1 Site Location



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2.2 PROJECT DESCRIPTION

Wicklow County Council intends to undertake the construction of circa 550m footpath which includes 550m of road widening, slip form kerb, drainage and associated accommodation works on the L-5103 at Ballyguilemore, Wicklow Town, Co. Wicklow. It will be necessary to widen the road by 0.5m in order to cater for the increased traffic flows. In addition to this installation of a footpath which has a width of approximately 1.8 m wide. This requires a setback of existing eastern boundaries by approximately 2.3m - 2.5m to facilitate the widened road, footpath and possible public lighting. The existing and proposed cross section of the L-5103 is outlined in Table 2-1.

Cross section elements	Existing (m)	Proposed Scheme (m)
Carriageway	5	5.5
Southbound Footpath	0	1.8 – 2.0
Total	5	7.3 – 2.0

 Table 2-1 Existing and Proposed Cross-Section of the L-5103

It is proposed to excavate the southbound (eastern) verge to accommodate the proposed scheme, including that of private land, subject to landowner agreement. Underground utilities are to be retained where possible but may need to be diverted if impacted by the proposed scheme. The drainage system will be over edge drainage. There may be a requirement for gullies along the eastern verge across the scheme length. Detailed drainage design has not yet been undertaken. The drainage design will ensure no direct discharge to surface water from any element of the works without appropriate attenuation and treatment such that there will be no significant increased pollution or rate of run off of water to surface watercourses.

A site survey was undertaken in May 2022 by Deborah D'Arcy Ecology. There are no private domestic residences or commercial properties, or other significant public infrastructure directly within the proposed scheme. However, there are boundary walls, front gardens and agricultural lands. The entire road corridor is bordered on both sides by mature treelines and hedgerows. In order to facilitate the proposed scheme, it will be necessary to remove the existing hedgerow and treeline in the eastern road verge. Wicklow County Council (WCC) propose to retain as much of the existing hedgerow and tree line as possible and only remove where necessary. Areas for subsequent replacement hedgerow and tree planting have been identified on the eastern verge.

At the start of the proposed scheme, over 350m, the private agricultural land is approximately 1m-2m below the existing road level, and as a result it will be necessary to import fill onto these lands in order to facilitate the proposed road widening and footpath. It is proposed to import this material from the abandoned housing development to the west of the proposed scheme, as there is unused fill material present. Wicklow County Council have obtained approval in principle and have lodged an Article 27 declaration to the EPA. The proposal is currently awaiting a response. A schematic of the proposed scheme and the infill requirements of private lands on the L-5103 is presented in **Figure 2.2**.

Figure 2-2 Proposed Scheme



2.3 CONSTRUCTION METHODOLOGY

This project is not due to commence until after 1st September 2022. It is expected that works will take approximately 3-4 months to complete, subject to weather conditions and will be completed in Q4 2022 or Q1 2023. Access to the work site will be via the existing road corridor L-5103. No additional access requirements are identified. The proposed scheme will be restricted to normal working hours as follows:

- 07:00 to 18:00 from Monday to Friday; and
- No allowance for weekend works.

The proposed site compound will be located on the existing ghost estate located adjacent to the works (GPS 52.969835, -6.035717) to minimise disturbance and utilise an existing hardstanding area. It will also mean that the haulage of material to/from the compound to the site is minimised. The proposed scheme will comprise the following:

- Signed off method statement and SSWP to be always kept on site;
- All safety documentation to be always kept on site;
- All staff to wear appropriate PPE;
- Set up the traffic management and warning signage including measures to control pedestrians;
- Set up site compounds complete with welfare unit, canteen, toilet etc. ;
- Area of works to be made safe for site personnel and the public by a trained SLG card holder in accordance with the roads traffic manual. (Appropriate fencing/barriers and signage to be used);

- Carry out all necessary tree pruning works and verge clearance, on a piecemeal basis trying to maintain compliance with Section 40 of The Wildlife Act 1976, where possible;
- Area of works to be CAT scanned prior to any excavation by trained personnel;
- If underground services are present, hand dig around the services to locate them;
- Commence excavation of existing road verge at the Wicklow end of the works. All of the excavated verge material will be reused as fill material on the agricultural lands;
- Subject to EPA approval, commence the importation of fill material from the abandoned residential development mentioned above to raise the ground levels on the agricultural lands;
- Carry out necessary works to maintain existing road side drainage. At some locations additional drainage may be required. If this is the case then it is likely that gulley's will be constructed and piped into existing drainage channels in adjoining agricultural lands with the approval of the individual landowners. Excavation works will progress southwards;
- Ducting and sleeves will be installed along the footpath route to facilitate the **possible** future public lighting of the scheme. The columns will be installed at 30m intervals;
- Set out guide pins with tape indicating the top level of the kerb will be placed an offset behind the kerb face. A second guide pin will be placed behind this pin holding a guide line in clamps steering the footpath mould to line and level. The kerbing machine will be placed alongside the guideline with sensors attached to it;
- The macadam surface will be placed on 150mm of sub base to Cl 804 installed and compacted to Series 800 specification;
- Following completion of the footpath, remove traffic management and warning signs.

2.4 OPERATION PHASE

The operational phase will coincide with the end of construction and the commissioning of the road widening and pedestrian footpath. Maintenance will be undertaken as required by Wicklow County Council, and would likely include path cleaning, gully clear out and landscaping etc.

3 LEGISLATIVE CONTEXT

EIA requirements derive from EU Directive 85/337/EEC (as amended by Directives 97/11/EC 2003/35/EC and 2009/31/EC, 2011/92/EU) as well as 2014/52/EU on the assessment of the effects of certain public and private projects on the environment. The primary objective of the EIA Directive is to ensure that projects which are likely to have 'significant effects' on the environment are subject to an assessment of their likely impacts. In the context of planning, the EIA Directive is given effect in Ireland through the Planning and Development Act 2000 (as amended).

Ireland transposed Directive 2014/52/EU into Irish law, the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, came into operation on 1st September 2018. A strengthened screening procedure was one of the key changes introduced by the 2014 Directive. It sets out new information requirements for the developer (Annex IIA) and new selection criteria to be used by the competent authority in making their screening determination (Annex III).

The following sections outline the current planning and development legislative requirements in Ireland regarding EIA screening and the key changes introduced by Directive 2014/52/EU.

3.1 PLANNING AND DEVELOPMENT REGULATIONS

The legislation relating to the requirement for an EIA for several types of developments is the Planning and Development Act 2000, as amended, and the Planning and Development Regulations 2001, as amended.

Wicklow County Council has obligations under Article 129 the Planning and Development Act 2000, as amended to undertake mandatory EIA for specified classes of development and AA and EIA screening for sub-threshold development for local authority own development.

Where there is a possibility that the development may significantly affect the environment, Wicklow County Council must prepare information on the development specified under Annex II and Annex III of the EIA Directive and transposed into Irish legislation under schedule 7A of the Planning and Development Regulations which is the appropriate information necessary to undertake an EIA Screening. This is the information which would typically be presented in a Report to Inform EIA Screening.

3.1.1 Mandatory

Schedule 5 Part 1 of the Planning and Development Regulations sets out a number of classes and scales of development that require EIA. No development types listed in Schedule 5 Part 1 would apply to this current proposed scheme. Accordingly, a mandatory EIA under Schedule 5 Part 1 is not required.

3.1.2 Sub-Threshold

Schedule 5 Part 2 of the Regulations identifies where EIA must be carried out where such development would equal or exceed, as the case may be, any relevant quantity, area or other limit specified or, where no quantity, area or other limit is specified in the Part in respect of the development concerned. No development types listed in Schedule 5 Part 2 apply to this current proposed scheme. Accordingly, an EIA under Schedule 5 Part 2 is not required.

3.2 ROAD TRAFFIC ACT, 1994

The proposed scheme in Ballyguilemore, Wicklow Town, Co. Wicklow, provides traffic calming measures which facilitate the safe use of pedestrians on the L-5103 as defined by section 38(9) Road Traffic Act 1994.

A Road Authority, in this case, Wicklow County Council, may in the interests of safety and convenience of road users; provide such "traffic calming measures" as they consider desirable; in respect of public roads in their charge. "Traffic calming measures" defined in section 38(9) Road Traffic Act 1994: "*measures which—*

- a) enhance the provision of public bus services, including measures which restrict or control access to all or part of a public road by mechanically propelled vehicles (whether generally or of a particular class) for the purpose of enhancing public bus services, or
- b) restrict or control the speed or movement of, or which prevent, restrict or control access to a public road or roads by, mechanically propelled vehicles (whether generally or of a particular class) <u>and measures</u> which facilitate the safe use of public roads by different classes of traffic (including pedestrians and <u>cyclists)</u>.

and includes for the purposes of the above the provision of traffic signs, road markings, bollards, posts, poles, chicanes, rumble areas, raised, lowered or modified road surfaces, ramps, speed cushions, speed tables or other similar works or devices, islands or central reservations, roundabouts, modified junctions, works to reduce or modify the width of the roadway and landscaping, planting or other similar works.

3.2.1 Conclusion

The proposed scheme is not a type of development listed in Schedule 5 of the Planning and Development Regulations 2001, as amended. Wicklow County Council, under section 38 of the Road Traffic Act 1994 and the Planning and Development Regulations, in considering local authority own development, must have regard to whether or not such a development is likely to have a significant effect on the environment. While the section 38 procedures under the Road Traffic Act 1994 does not include procedural requirements in respect of EIA and AA screening, a local authority has obligations under other statute to satisfy itself that EIA / AA is not required.

As such, the purpose of this report is to assist Wicklow County Council in determining whether, the project is likely to have a significant effect on the environment by addressing the criteria and information set out in Annex III and IIA of the EIA Directive and Schedules 7 and 7A of the Planning and Development Regulations 2001 - 2021, as amended.

3.3 SCREENING METHODOLOGY

This Screening Report provides an assessment of whether the development would or would not be likely to have significant effects on the environment by addressing the criteria and information set out in Annex III and IIA of the EIA Directive and Schedules 7 and 7A of the Planning and Development Regulations 2001 (as amended).

The information set out in Schedule 7A is equivalent to the information specified in Annex IIA of the EIA Directive. The Criteria as set out in Schedule 7 are grouped under three headings and in **Table 4-1** to **Table 4-3** as follows which are comparable with the criteria set out in Annex III of the EIA Directive:

3.4 EIA GUIDELINES

- Guidelines on the Information to be contained in Environmental Impact Assessment Report, EPA, 2022;
- Environmental Impact Assessment Screening OPR Practice Note PN02, Office of the Planning Regulator, 2021;
- Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment, Department of Housing, Planning and Local Government, 2018;
- Advice Notes on Current Practice in the Preparation of Environmental Impact Statements; EPA, 2003; and
- Guidance on EIA Screening, European Commission, 2001.

Baseline information to inform the screening exercise is primarily from desk studies and supplemented by site visits undertaken by a terrestrial ecologist in May 2022 and a Preliminary Ecological Appraisal (Appendix 1). The desk study component of the EIA Screening has drawn information from the following sources:

- Deborah D'Arcy, (2022) Appropriate Assessment Screening Pedestrian Scheme Balllyguilemore, Co. Wicklow);
- Department of Housing, Planning and Local Government EIA Portal <u>https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecb</u> <u>b206e7e5f84b71f1;</u>
- Environmental Protection Agency (EPA) online interactive mapping tools (<u>https://gis.epa.ie/EPAMaps</u>) and (https://www.catchments.ie/maps/) for water quality data including surface and ground water quality status and river catchment boundaries;
- Geohive online Environmental Sensitivity Mapping tool (<u>https://airomaps.geohive.ie/ESM</u>);
- Geological Survey Ireland (GSI) Public Data Viewer (<u>https://www.gsi.ie/en-ie/Pages/default.aspx</u>);
- Health Safety Authority (HSA) List of Notified Seveso establishments;
- Wicklow County Council planning search function and general planning homepage;
- Mapping of European Site boundaries and Conservation Objectives for relevant sites in Co. Wicklow and beyond, as relevant, available online from the NPWS (https://www.npws.ie/protected-sites);
- National Inventory of Architectural Heritage (NIAH); and
- National Monument Service Historic Environment Viewer (Department of Housing, Local Government and Heritage) (<u>https://www.archaeology.ie/</u>).

3.4.1 Supporting Assessment

A Report to Inform the Appropriate Assessment Screening (Deborah D'Arcy Ecology, 2022) has been prepared to determine whether, in view of best scientific knowledge and applying the precautionary principle, the project, either individually or in combination with other plans or projects, is likely to have a significant effect on any European site(s). This screening assessment is used to inform the relevant consideration criteria of this EIA Screening. The AA Screening concluded that there are no likely potential impacts, whether direct, indirect or cumulative/in-combination, which could give rise to significant effects on the qualifying interests or the conservation objectives of any designated European site. Consequently, the proposed scheme does not require stage 2 Appropriate Assessment and can be screened out.

4 SCREENING EVALUATION

Based on the legislative basis and guidance documents set out in Section 3.1 and 3.2 the approach for undertaking this screening assessment is to present information on the proposed scheme, the location of the scheme and the type and characteristics of potential environmental impacts of the proposed scheme with reference to the three headings of Annex III of the EIA Directive. In presenting this information, regard has also been given to the closely aligned assessment criteria of Annex IIA of the Directive.

4.1 CHARACTERISTICS OF PROPOSED SCHEME

The guidelines describe the information to be considered under this heading as: 'the size of the proposed scheme, the cumulation with other proposed scheme, the use of natural resources, the production of waste, pollution and nuisances, the risk of accidents and having regard to substances or technologies used.'

Characteristics of proposed scheme	
The size and design of the whole of the proposed scheme	The approximate length of the proposed scheme is c. 550m of road widening and footpath on the L-5103 Ballyguilemore, Wicklow Town, Co. Wicklow. It is proposed to extend the existing cross section of the road corridor from 5m to 7.3m-7.5m across the scheme length to accommodate the proposed layout. The scale / design of the road does not warrant the provision of cycle infrastructure due to the narrow road corridor.
The cumulation with other existing development and/or	A search has been conducted of planning applications within the vicinity of the proposed scheme. This has been done using the Wicklow County Council Web Portal map and the Department of Housing, Planning and Local Government EIA portal. There are a number of other permitted and proposed projects in the area however, none of these have potential to contribute to significant effects within the meaning of the Directive when considered in-combination with the effects
development subject of a consent for proposed scheme	of the proposed footpath. The proposed scheme will form part of the larger active travel network of Co. Wicklow. It is anticipated that once complete, the road improvement scheme will have long term positive impact to the area.
	The proposed scheme will form part and interact with the wider transport network of Co. Wicklow. It is subject to ongoing management, monitoring and review by Wicklow County Council.
The nature of any associated	The demolition works associated with the proposed scheme is limited as much of the proposed scheme is located within the existing road corridor.
demolition works	If disposal offsite is required, the material shall be disposed at an appropriate permitted or licensed waste management facility in accordance with the Waste Management Act.
The use of natural resources, in particular land, soil, water and biodiversity	Land: The proposed scheme has a very limited footprint in terms of effects relating to land use as the proposal is linear and much of the development is taking place on made ground within the existing road corridor. There are two areas of land take required outside the existing road corridor, where lands lie within the red line boundary of the proposed scheme. The road surface area is artificial surfaces with little or no biodiversity value and minimal ecological significance.
	The proposed scheme will involve the excavation of made grade and subsoil within the roadside verge to accommodate the new layout. Exact quantities of material for excavation, infill and construction have not yet been determined at

Table 4-1 Characteristics of proposed scheme

Characteristics of proposed scheme	
	this point, however, it is considered that if suitable, clean material will be stored onside and potentially reused as fill.
	Water: There is unlikely to be the requirement for any substantial water use, which would be for standard construction activities and water misting for dust minimisation. The Wiclow_010 (EPA code: 10D14) is a minor first order watercourse, which rises directly west of the L-5103 in Ballyguilemore and crosses the road corridor of the works area
	Biodiversity: The proposed scheme is not located in any European or national designated area. The proposed scheme is largely within the footprint of the L-5103. The edges of the road are characterised according to Fossitt by mature treelines (WL2) and hedgerows (WL1) ¹ . There will be a requirement for the removal of trees and approximately 350m of hedgerow in affected areas to accommodate the new layout. Ash <i>Fraxinus excelsior</i> , Sessile oak <i>Quercus petraea</i> and sycamore <i>Acer pseudoplatanus</i> dominate treeline sections along the route, with a well-developed beech <i>Fagus sylvatica</i> treeline on the western verge. It was noted that the majority of ash trees along the route were affected by the highly infectious 'ash dieback' disease. The hedgerow habitat within the works area is dominated by hawthorn (<i>Crataegus monogyna</i>), with elder (<i>Sambucus nigra</i>), willow (<i>Salix</i> spp)., bramble (<i>Rubus fruiticosus</i> spp. agg.), male and buckler fern species (<i>Dryopteris</i> spp.), angelica (<i>Angelica sylvestris</i>), bush vetch (<i>Vica sepium</i>), hogweed (<i>Heracleum sphondylium</i>), greater stitchwort (<i>Stellaria holostea</i>), and herb robert (<i>Geranium robertianum</i>). There are a number of non-native ornamental species planted within the road verge of the L-5103, however, these do not correspond to listed invasive species listed on the Third Schedule of the Birds and Natural Habitats Regulations, 2011
	There will be loss of hedgerow/treeline habitat as a result of the works. This will be avoided/minimised where possible and result in a moderate local impact at the higher scale. However, the retaining of other trees and hedgerow where appropriate in addition to replacement native planting will assist in the mitigation of impacts on biodiversity, particularly as native species are selected, allowed to grow and are suitably managed.
	Mature trees within the hedgerow have low to moderate potential to support bat roosts
	The hedgerow provides suitable nesting habitat for passerine bird species. Soil: Where required, the road verge will be excavated to accommodate the proposed footpath. Material will be temporarily stockpiled for reuse within the existing site compound. It is anticipated that it will be reused as fill material. In the unlikely event of surplus, material will be removed offsite to a licensed/permitted facility in line with the Waste Management Act 1996. Quantities of soil have not yet been determined but given the scale and nature
	of the proposed scheme, it is not considered significant. The use of soils associated with the proposed scheme would not cause significant or adverse effects.
	Standard road project type waste is anticipated. gullies, concrete and surround shall be removed and classified. No large-scale waste is expected to be generated. All waste shall be removed from the site at the earliest safe location.
The production of waste	In relation to waste and materials reuse management, only approved waste collection permit holders will be contracted for the collection of waste during the construction of the footpath on the proposed road improvement scheme.
	Any material requiring disposal off site will be disposed at an appropriate permitted or licensed facility in accordance with the Waste Management Act 1996, as amended.

¹ Guide to Habitats in Ireland (Fossitt, J, October 2000)

Characteristics of proposed scheme	
	There is potential that the construction phase of the proposed scheme will give rise to nuisances to the residents and road users.
	Traffic management will be in place for the duration of the construction phase to minimise the effects on residences, businesses and road users.
	Emissions to air from construction activities may include dust, noise and pollutants from construction equipment and activities. These will be localised, temporary and not significant.
	Sediment Runoff:
	There is potential, albeit low, for accidental release of pollutants into the surrounding environment including the surface water environment. Potential sources of sediment and runoff during the construction phase include:
Pollution and nuisances	Soil stockpiles with significant side slopes can create a source of sediment laden runoff;
	Construction traffic such as excavators or trucks travelling into and out of earthworks locations soil may become attached to wheels and then tracked.
	Employing good practice construction methodologies will mitigate the risk of sediment runoff to the surface water network. These measures are addressed further in the evaluation of this report.
	Odour is not anticipated from the construction of the proposed scheme.
	The operational phase will not result in significant pollution or nuisances.
	Provision of traffic calming measures, which includes measures for improved facilities for pedestrians, can result in a reduction of traffic noise due to the reduction in traffic speeds.
	The project is not of a nature which will result in it generating a risk of major accidents and/or disasters.
	The proposed scheme will be designed, constructed and operated in accordance with the following health and safety regulations and guidelines (or as updated):
	• Safety, Health & Welfare at Work (Construction) Regulations 2006 to 2013;
The risk of major accidents, and	• Safety, Health and Welfare at Work (Construction) (Amendment) Regulations 2019 (S.I. No. 129 of 2019);
/or disasters which are relevant	• Safety, Health & Welfare at Work Act 2005; and
to the project concerned, including those caused by	• Safety, Health & Welfare at Work (General Application) Regulations 2007 to 2016.
climate change, in accordance with scientific knowledge	A construction method statement is set out in Section 2 . The construction method would be considered standard, with no novel construction methodologies and not particularly complex. Therefore, the risk of accidents occurring during construction are considered low.
	The road is to remain open to the public users during the works. A traffic management plan will be put in place for maintaining traffic flow and minimising the risk of works causing accidents and ensuring safe temporary measures for pedestrians, cyclists, and motorists.
	The proposal will provide improved and separated facilities for pedestrians and is likely to reduce the risk of road accidents in the area.
Risks to Human Health	It is expected that the proposed scheme may have short-term impacts due to the noise and air quality from construction activity. Traffic management measures will be put in place to ensure safety during the construction stage. These are temporary and not considered significant.
	Overall, the proposed scheme will have a positive impact on human beings in terms widening of the road to accommodate the projected increased traffic as well as providing separated facilities for pedestrians.

4.2 LOCATION OF THE PROPOSED SCHEME

Table 4-2 Location of the proposed scheme

Location of the proposed scheme	
The environmental sensitivity of geographical areas likely to be affected by the proposed scheme, with regard to-	
	The proposed scheme is located on the L-5103 Ballyguilemore, Wicklow Town, Co. Wicklow. The area is sparsely populated. The proposed scheme is designed to accommodate the projected traffic flows and increased pedestrians to the future GAA fields located south of the proposed scheme. The proposed scheme is a road improvement scheme that widens the road and provides pedestrian facilities in accordance with the Wicklow CDP and DMURS. The proposed scheme supports Strategic County Outcome (SCO5) Sustainable Mobility of the Wicklow County Development Plan (CDP) 2022-2028 through the integration of land use planning and transportation planning, in order to support sustainable mobility and encourage a shift away from the private car to active travel (walking) that will deliver improvements in terms of quality of life and climate change.
a) The existing and approved land use	 Other relevant CDP objectives include: CPO 12.11 To improve existing or provide new pedestrian and cycling infrastructure of the highest standards on existing public roads, as funding and site constraints allow. CPO 12.12 To require all new or improved roads to include pedestrian facilities, cycle lanes (unless the scale / design of the road does not warrant such infrastructure having regard to the guidance set out in the National Cycle Manual and DMURS) and public lighting as deemed appropriate by the Local Authority. CPO 17.23 To require the retention, wherever possible, of hedgerows and other distinctive boundary treatment in the County. Where removal of a hedgerow, stone wall or other distinctive boundary will be required of similar length and set back within the site in advance of the commencement of construction works on the site (unless otherwise agreed by the Planning Authority).
 b) The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and underground 	 Soil/Land: CORINE Landcover 2018, as outlined in Figure 4-1 indicates the predominant land use to be Artificial Surfaces (Code: 112) to the north and Pastures (Code 231) to the south across the proposed scheme length. According to GSI Bedrock geology mapping the proposed scheme, the proposed scheme is underlain by the Wicklow Head Formation –outlined in Figure 4-2. Quaternary sediments include Bedrock outcrop or subcrop (Rck) and an area of till derived from Lower Palaezoic sandstones and shales (TLPSsS) at the centre of the site. Quaternary sediments are outlined in Figure 4-3. Soil types at the site and outlined in Figure 4-4 include: AminDW - Deep well-drained mineral soil, Derived from mainly acidic parent material

Location of the proposed scheme	
	 AminSW – Shallow well drained mineral soil, derived from mainly non- calcareous parent materials. Lithosols and regosols are included in this category.
	• Clonroche (1100a) well drained, fine loamy drift with siliceous stones.
	The proposed scheme requires a small amount of excavation and infill along the verge to accommodate the new layout. The hydrogeological setting is described as 'Man Made' ground.
	Biodiversity: A field survey including a phase 1 habitat survey (Fossitt, 2000) and fauna survey of the proposed pedestrian scheme and road widening works, including nearby surrounding areas, was carried out in May 2022. The entire corridor of the scheme is bordered by mature treelines (WL2) and hedgerows (WL1). There are trees and mature hedgerow required for removal along the eastern verge to allow for the widening of the road and pedestrian accommodation. Ash <i>Fraxinus excelsior</i> , Sessile oak <i>Quercus petraea</i> and sycamore <i>Acer pseudoplatanus</i> dominate treeline sections along the route, with a well-developed beech <i>Fagus sylvatica</i> treeline on the western verge. It was noted that the majority of ash trees along the route were badly affected by the highly infectious 'ash dieback' disease. The hedgerow habitat within the works area is dominated by hawthorn <i>Crataegus monogyna</i> , with elder <i>Sambucus nigra</i> , willow <i>Salix</i> spp., bramble <i>Rubus fruiticosus</i> spp. agg., male and buckler fern species <i>Dryopteris</i> spp., angelica <i>Angelica sylvestris</i> , bush vetch <i>Vica sepium</i> , hogweed <i>Heracleum sphondylium</i> , greater stitchwort <i>Stellaria holostea</i> , and herb robert <i>Geranium robertianum</i>
	Mature trees and the hedgerow corridors along the route on both sides of the road, including the open fields which are delineated with hedgerow boundaries means the study area is of local importance for bat species. No signs of other mammal dwellings were noted from the hedgerows on either side of the road verge; however, mature trees were evaluated as being of low to moderate bat roost potential within the proposed works area.
	The Dunbur Lower Stream (EPA code: 10D14) is a minor first order watercourse shown on EPA mapping (www.gis.epa.ie/EPAmaps), which rises directly west of the L-5103 in Ballyguilemore and crosses the road corridor of the works area. This watercourse flows due east to meet the sea within the Wicklow Golf Course. The confluence of this watercourse with the Irish Sea is directly adjacent to the Wicklow Head SPA (site code: 004127). This watercourse channel was found to be dry during the survey undertaken in May, 2022. The location of the works in the upper headwaters means this is a temporary watercourse at this location, with no fisheries value at this location. However, the potential hydrological pathway downstream to the coast is noted.
	The ecological sensitivities within the works area are evaluated as being of local importance, higher value; with cognisance of the presence of mature native trees and their potential to support wildlife, including Annex IV listed bat species which are also protected under the Wildlife Acts (amendment, 2000). No known invasive species issues have been identified. No species listed on the Third Schedule of the Birds and Natural Habitats Regulations, 2011 were recorded. There are no Natura 2000 (SAC or SPA) sites within the immediate vicinity of the proposed scheme. There are no NHAs or pNHAs within the immediate vicinity of the proposed works. The nearest Natura site is the Wickow Head SPA (Site code: 004127) and Wicklow Head pNHA (Site code: 004127) c 1.2km downstream via the Wicklow_010 stream. Works at his watercourse comprise a hydrological pathway to the SPA and pNHA. The AA Screening Report undertaken by Deborah D'Arcy Ecology concluded that the potential for connectivity of impacts from the works area to this designation are evaluated as

Location of the proposed	
scheme	low. Furthermore the potential for indirect impacts with regard to water quality are evaluated as being flow potential for indirect effects on the Wicklow Head SPA, taking account of the short term duration of the works, the size and scale of the footpath works, and the dilution capacity within the Irish Sea at the confluence of the stream. Any potential operational impacts relating to drainage and potential local hydrological impacts will be addressed by appropriate drainage design. It is considered that the same conclusion can be drawn for the Wicklow Head pNHA. Designated sites are outlined in Figure 4.5 . National sites comprise Natural Heritage Areas (NHAs) and proposed Natural Heritage Areas (pNHAs). NHAs are protected under the Wildlife Amendment Act 2000 (as amended), many of which overlap with European Sites. The pNHAs were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated, however they do have some protection under schemes such as Rural Environment Protection Scheme (REPS), Agri-Environmental Options Scheme (AEOS) and County Development Plans. The Wicklow Reef SAC (site Code: 002274) is c. 2.9 km east of the proposed scheme, beyond the boundaries of the Wicklow Head SPA, in the Irish Sea. There are no pathways or potential connectivity for impacts identified between the proposed works and this designated site. Water: The proposed scheme is in the Ovoca-Vartry catchment (Catchment: 10) and the Redcross_SC_010 sub-catchment. The Wicklow_010 (Code: IE_EA_100W08080) is a minor first order watercourse shown on EPA mapping (www.gis.epa.ie/EPAmaps), which rises directly west of the L-5103 in Ballyguilemore and transects the road corrido towards the middle of the proposed scheme. This watercourse flows due east to meet the sea within the Wicklow Golf Course. The confluence of this watercourse with the Southwestern Irish Sea. Fillenby 2022. The location of the works in the upper headwaters means this is a temporary watercourse at this location, with no fish
Absorptive capacity of the Natural Environment	With respect to the absorption capacity of the natural environment, it is noted that the linear nature of the proposed scheme is to be carried out primarily on artificial surfaces of the road corridor, which is a relatively robust environment.
i) Wetland, riparian areas, river mouths	The Wicklow_010 (Code: IE_EA_10W080880) is a minor first order watercourse shown on EPA mapping (www.gis.epa.ie/EPAmaps), which rises directly west of the L-5103 in Ballyguilemore and transects the road corridor towards the middle of the proposed scheme.
ii) Coastal zones and the marine environment	The Wicklow_010 which transects the proposed scheme flows due east to meet the sea within the Wicklow Golf Course. The confluence of this watercourse is

	Location of the proposed scheme		
		with the Southwestern Irish Sea – Killiney Bay (HA10) approximately 1.2km downstream.	
iii)	Mountain and forest areas	There are no mountain or forest areas in the immediate vicinity of the proposed scheme.	
iv)	Nature reserves and parks	There are no Nature Reserves in the immediate vicinity of the proposed scheme.	
v)	Areas classified or protected under legislation, including Natura 20000 areas designated pursuant to the Habitats Directive and the Birds Directive	The screening for Appropriate Assessment process identified three SAC and two SPA within a 5km radius to the proposed scheme. The proposed scheme does not lie within nor is it adjoining the boundaries of any European site, therefore no directs impacts are likely to occur through land take or fragmentation of habitats. The proposed scheme is not necessary for the management of any European Site. The Wicklow_010 that transects the site, is a hydrological pathway to the Wicklow Head SPA. Given the hydrological distance, dilution effects of coastal waters and the qualifying interests of the SPA – Kittiwake, no significant negative effects on the Conservation Objectives are identified to arise from the proposed scheme. Through an assessment of potential impacts, it was concluded that the proposed scheme is not likely to have significant effect on European sites, either alone or in-combination with other plans or projects and that a Stage II – Natura Impact Statement (NIS) is not required.	
vi)	Areas in which there has already been a failure to meet the environmental quality standards laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure	There are no areas failing to meet environmental quality standards of the EU.	
vii)	Densely populated areas	The proposed scheme is located on the L-5103 south of Wicklow Town.	
viii)	Landscapes and sites of historical, cultural or archaeological significance	The proposed scheme is to be carried out on artificial surfaces and confined to the existing road boundary with a section of the roadside verge required to accommodate the proposed scheme. There are no features of historical, cultural or archaeological significance such as archaeological monuments or Record of Monuments & Places (RMP) sites that will be impacted directly by the proposed traffic development. There are no features listed on the National Inventory of Architectural Heritage (NIAH) in the immediate vicinity as is evident from Figure 4.9 . It is therefore unlikely that the proposed works will impact any features of archaeological or architectural interest. Given the scale and nature of the proposed scheme, it is unlikely that there will	

Figure 4-1 CORINE Land Cover



Figure 4-2 Bedrock Geology



Figure 4-3 Quaternary Sediments



Figure 4-4 Soil Types



Figure 4-5 Designated Ecological Sites



Figure 4-6 Water



Figure 4-7 Groundwater Body



Figure 4-8 Groundwater Vulnerability



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Figure 4-9 Cultural Heritage



4.3 TYPE AND CHARACTERISTICS OF THE POTENTIAL IMPACTS

The proposed scheme is considered in the context of potential impacts with reference to Section 171A of the Planning and Development Act 2000, as amended. Table 4-3 outlines the topic areas that may be impacted on to be addressed within the EIA Screening.

TypeandCharacteristics of thePotential Impacts	
(a) the magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected)	The human population affected by the proposed scheme is small due to the nature of the receiving environment. The area is populated with arable agricultural land to the east. The magnitude and spatial extent of impacts is limited to the existing road boundary, its immediate vicinity and road users in the area. The approximate length of the proposed scheme is 550m.
(b) the nature of the impact	 In accordance with Directive 2014/52/EC, the nature of the impact has been assessed on the following factors: a) population and human health. b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC. c) land, soil, water, air and climate. d) material assets, cultural heritage and the landscape

minor local positive of a temporary nature.

Table 4-3	Type and	Characteristics	of the	Potential Im	nacts
	I ypc and	Character istics	or the	I otomulai Im	paces

Construction Phase	
Construction works are to be carried out by Wicklow County Council. The construction	
phase will give rise to a temporary positive indirect effect on ancillary support services	
at a local and regional level in the building supply and technical professions. It is also	
anticipated that the increase in Wicklow County Council construction workers will have	
the potential to impact positively on businesses within the general local area or in a	
similar manner to that of the ancillary construction support services. This is considered	

The proposed scheme comprises of c.550m of road widening and footpath. The predominant land cover is artificial surfaces, taking place within the existing road

Impacts associated with the construction of the L-5103 may entail short term intermittent traffic management measures due to construction related traffic which may result in **temporary** impacts on residents, local businesses and road users.

Population and Human Health Construction works may result in impacts relating to the generation of noise and dust. In terms of noise, the construction phase may lead to a temporary increase in background noise levels through operation of plant machinery. There will be an increase in HGV movements in the vicinity of the works. Given the scale of the proposed scheme, these impacts are considered localised, temporary and not significant.

Best practice and implementation of a traffic management measures will be required to ensure no risks to the population working on the site or road users during construction.

Operational Phase

corridor.

On completion, improved road infrastructure is likely to have positive implications for the population through widening of the carriageway and separated pedestrian facilities and reduced traffic speeds in line with the Wicklow CDP. The proposed scheme will facilitate additional safety and security of the road infrastructure that reduces the risk to the population. Therefore, no significant impact on population and human health is anticipated.

Mitigation:

Tumo	
Type and Characteristics of the Potential Impacts	
	 Health and safety measures are required to ensure works are carried out in a safe manner and no risks to the population working on site or working adjacent to the site during construction. Implementation of a Traffic Management Plan. Implementation of Safe Systems of Work Operating Procedures.
	With the inclusion of the above mitigation impacts are temporary and no significant effects are anticipated on population and human health from construction or operation of the proposed scheme.
Biodiversity	A description of the biodiversity at the site is provided in Section 4.1 and 4.2. The Appropriate Assessment Screening (Deborah D'Arcy Ecology) provides further details on the ecological baseline and value. The bulk of the earthworks are linear taking place on made ground within the existing road corridor. Impacts within the site boundary may be considerable in the construction stage due to changes in the vegetation composition, notable hedgerow (WL1) and verge vegetation and the loss of mature trees (WL2), some of which are diseased to accommodate the required alignment of the proposed scheme. The ecological sensitivities of the eastern verge are evaluated as being of local importance (higher value) with cognisance of the presence of mature native trees and hedgerows and their potential to support wildlife including bats. There are permanent moderate impacts to biodiversity arising from verge clearance and excavations. There is not considered to be an appreciable loss of habitat due to the scale and nature of the proposed scheme. The impacts are reversible depending on the planting regime. Removal of hedgerows on site in addition to the planting, or replacement will assist in mitigation impacts on biodiversity, particularly if native species are selected, allowed to grow to their full potential and appropriately managed. The retention of hedgerows and trees where possible is in accordance with the Wicklow CDP. Additional lighting is not proposed but may be introduced in the future. Lighting has potential to impacts on bats or nocturnal animals. In the absence of mitigation, the impacts to bats and nocturnal species are considered moderate. The proposed scheme is not located within the vicinity of a designated site, European or National. The proposed projects, alone or in combination, is not likely to have significant
	effects on these sites. With the inclusion of the below mitigation, significant effects are not anticipated on biodiversity from the construction or operation of the proposed scheme. Mitigation
	 Works should be undertaken in accordance with 'Guidelines for the protection and preservation of trees, hedgerows and scrub, prior to, during the construction of National Road Schemes.'(NRA 2006). A pre-construction survey by an ecologist of the trees to be removed is required to survey for potential bat roosts and precautionary felling methodology devised to avoid injury of harm to bat species. Vegetation clearance no matter how limited, must be planned and carried out outside of bird breeding season which occurs from the 1st March to 31st August. If an active nest is found which is likely to be disturbed by the works the works will be postponed until the young have fledged. Where removal of trees and hedgerow is unavoidable, provision of the same type of boundary will be required of similar length and set back within the site. Planting should consist of native tree and hedgerow species to enhance biodiversity potential. A Landscape Plan should be prepared which includes semi-mature native trees and hedgerow planted under the supervision of a landscape design consultant,

Type and		
Characteristics of the Potential Impacts		
Potential Impacts	 who should be retained for a five year period to oversee their protection and, in the event of failure, their replacement. The lighting design should be bat friendly having regard for the following: Features important for such as hedgerows, treelines, watercourses and riparian areas are all important ecological corridors, and these features should be maintained in darkness or near darkness. All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability. A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component. Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats Column heights should always be mounted on the horizontal, i.e., no upward tilt. As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed. Dimming or part night lighting should be considered. A control management system can be used to dim (typically to 25% or less) or turn off groups of lights when not in use. 	
• Land & Soil,	 With the inclusion of the above mitigation, no significant ecological impacts would be foreseen. Land The existing use of the lands where the development is to be carried out comprises of artificial surfaces. From a 'land' perspective, the proposed works is relatively minor. Discreet areas of the roadside verge are required to accommodate the new layout. Private land take is required. This is subject to landowner agreement. Therefore, there is not considered to be a significant impact on land. Soil The proposed scheme takes place within the existing road corridor largely within made ground. A discreet area of the verge will require excavation. Any effects on soils and geology would be localised and contained within the existing road boundary, with limited exceptions. It is proposed to import soil and stone material for infill on the agricultural lands on the eastern verge. This will be done in accordance with Article 27 of the EC (waste Directive) Regulations 2011. EPA approval will be obtained prior to moving material as a by-product. Small amounts of waste will be generated during works. Given the scale and nature of the project, this is not considered significant. Any material requiring offsite disposal will be disposed of in accordance with the Waste Management Acts 1996, as amended. Therefore, with the mitigation proposed, it is considered there will be managed and disposed at a suitably licensed or permitted facility in accordance with the Waste Management Act 1996. • All waste leaving the site will be recorded and copies of relevant documentation maintained. • Fuelling of plant is to be in a designated fuelling area within the site compound.	

Type and	
Characteristics of the Potential Impacts	
	With the inclusion of the above mitigation, significant effects are not anticipated on land and soils from construction or operation of the proposed scheme.
	Construction Phase
	 Impacts of the proposed scheme on watercourses have been considered. There are no in stream works. With the removal of the hedgerow from along the eastern side of the verge, surface water runoff has potential to escalate which has potential to discharge to the Wicklow_010 stream. The potential impacts during the construction phase include: Mobilisation of sediments and harmful substances. Increase pollutants and nutrient input due to an increase in surface run off.
	• Accidental spills of harmful substance such as petrol or oil during the delivery and storage of harmful substances or by leakages from construction machinery.
	These impacts can be minimised by applying sound design principles and following good works practices which will avoid a likelihood for significant effects. Given the scale and nature of the construction activity, these are predicted to give rise to minor negative and temporary localised impacts during the construction stage. It is considered during the operation that impacts are minor, not significant and over a temporary duration.
	Operational Phase
	Detailed drainage design has not yet been undertaken. The drainage design will ensure no direct discharge to surface water from any element of the works without appropriate attenuation and treatment such that there will be no significant increased pollution or rate of run off of water to surface watercourses. The operation of storm water drainage system is related to environmental management, insofar as drainage systems can result in negative impact on the natural receiving environment with respect to both quality and quantity. Surface water runoff can become contaminated with substances. This polluted runoff could enter the surface water system. This impact would be considered moderate
Water	and localised in the absence of a suitably designed capture system in drainage design. Mitigation
	 The Contractor will be required to implement industry best practice pollution prevention measures in accordance with guidance documents. All parts of the surface water drainage system must be maintained in good
	working order and repair steps must be taken to ensure that matter liable to block or obstruct the drainage system is prevented.
	 Surface water control measures will be implemented to ensure that silt laden or contaminated surface water runoff from the proposed scheme does not discharge directly to the waterbodies. Control of sediment, hydrocarbon and liquid concrete loss by implementing
	 Control of sedment, hydrocarbon and inquit concrete loss by implementing best practice such as including the requirement for no direct discharge to surface water from any element of the works without suitable attenuation and treatment. All hazardous material must be stored in appropriate container, must be indelibly and legibly labelled to identify the contents, hazards and precautions required.
	• Appropriate management and storage of fuel and fuelling activity near the watercourses will be avoided.
	 All spoil heaps will be located, protected and stabilised in a way that will avoid the risk of contamination of drainage systems and local watercourses. Hazardous materials on site must be stored in a bunded area.
	• Plant and wheel washing should be undertaken in designated area of hardstanding at least 10m from any watercourse.

Type and Characteristics of the	
Potential Impacts	
	Conclusion
	With the inclusion of the above mitigation impacts no significant effects are anticipated on Water from construction or operation of the proposed scheme.
	During construction there may be adverse effects on air quality, including generation of dust as a result of construction related machinery. Effects are anticipated to be localised, slight and temporary in nature. There will be no resultant emissions to air from the operation of the proposed works. No significant impact is anticipated to air and climate as traffic levels are not predicted to increase significantly due to the proposed traffic calming works.
Air/Climate	Noise: In terms of noise, the construction phase may lead to a temporary increase in background noise levels through operation of plant machinery. The Contractor shall employ the best practical means to minimise noise produced by his activities and shall comply with the contents and recommendations of BS 5228: Code of Practice for Noise Control on Construction and Open Sites and European Communities (Construction Plant and Equipment) Permissible Noise Regulations 1988. Therefore, no significant impact on noise is anticipated.
	Mitigation measures
	 Public roads shall be regularly inspected for cleanliness and cleaned as necessary. Measure will include limiting construction to daytime periods between 08:00-19:00 Monday to Friday and Saturday 08:00-16:00. No work shall be planned
	outside these hours including Public Holidays.
	Conclusion
	With the inclusion of the above mitigation impacts from the construction stage are temporary and no significant effects are anticipated on Air/Climate and Noise from construction or operation of the proposed scheme.
	Construction Phase
	The main areas of the proposed layout are set out in Section 2. From a land perspective, the proposed site is relatively minor with the proposed scheme taking place within the road corridor of the L-5103. Parcels of land on the eastern verge are required for construction and operation and will be in agreement with the landowners. The result on private land is considered localised , permanent and not significant.
	These will be localised and temporary impacts from traffic for the duration of the construction stage. In the long term, the active travel improvements will have a positive impact in terms of safety. This is a positive impact for material assets.
	Given the scale and nature of the proposed scheme, it is unlikely that there will be impacts to features of archaeological or architectural interest.
Material assets, cultural heritage	Much of the expected disturbance to services and the existing networks will be of a temporary nature during the construction phase and can be mitigated through the provision of adequate notice to service providers.
	Operational Phase
	The proposed scheme is a road safety improvement scheme on the L-5103 and therefore not considered to impact residential or commercial sites during operation.
	Mitigation
	Mitigation measures
	• The contractor will maintain good communication with landowners at all time particularly in relation to access issues.
	• Where part of the curtilage of a property is to be acquired a boundary wall fence or feature will be provided as replacement, in agreement with the landowner.

Type and	
Characteristics of the	
Potential Impacts	 Where access to a property is disrupted due to works associated with the proposed scheme, the Contractor will be obliged to give notice to the affected party in advance of work commencing in the area. Temporary fencing will be erected as required to delineate the site boundary and to minimise disturbance to adjacent lands. With the inclusion of the above mitigation, there are considered no significant impacts on material assets or features of cultural heritage from the construction or operation of the proposed scheme.
Landscape and Visual Amenity	 The proposed scheme is located on the L-5103. The removal of trees and hedgerow will result in changes to the visual baseline. This is a discreet section of the L-5103 on a local road. The impacts from the removal are considered moderate, but not significant. With the inclusion of replacement planting, these impacts are reversible. Mitigation measures In the interest of visual amenity, all planting shall be adequately protected from damage until established. Any plants that dies, are removed or become damaged
visual Amenity	 damage until established. Any plants that dies, are removed or become damaged or diseased within 5 years, should be replaced. Conclusion With the inclusion of the above mitigation, impacts are temporary, and no significant impacts are anticipated on Landscape and Visual Amenity from construction or operation of the proposed scheme.
(c) Transboundary Impacts	No transboundary impacts are likely as a result of the proposed scheme.
(d) the intensity and complexity of the impact Construction impacts will be temporary and of low intensity and complexity.	The nature of the impact has been detailed in Table 4.3 . There will be construction impacts which will be temporary and of low intensity and complexity.
(e) the probability of the impact	Temporary impacts will occur. These are not likely to be significant, within the meaning of the Directive.
(f) the expected onset, duration, frequency and reversibility of the impact	Impacts will be temporary in nature coinciding with the construction phase of the project.
 (g) 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 	There are a number of other permitted and proposed projects in the area however, none of these have potential to contribute to significant effects within the meaning of the Directive when considered in-combination with the effects of the proposed scheme. The proposed scheme will form part of the larger active travel network of Co. Wicklow. It is anticipated that once complete, the proposed scheme will have long term positive impact to the area.

TypeandCharacteristics of thePotential Impacts	
(h) the possibility of effectively reducing the impact	During operation of the scheme, its benefits and impacts will be monitored and managed by Wicklow County Council Transportation and Environment section in accordance with their normal remit to manage Wicklow Road network and traffic efficiently and sustainably.

4.3.1 Mitigation Measures

The following mitigation have been identified to be included into the construction methodology to minimise the impacts to the local environment.

- Health and safety measures are required to ensure works are carried out in a safe manner and no risks to the population working on site or working adjacent to the site during construction.
- Implementation of a Traffic Management Plan.
- Implementation of Safe Systems of Work Operating Procedures.
- Implementation of a Waste Disposal Plan to ensure waste is disposed at a suitably licensed or permitted facility.
- Works should be undertaken in accordance with 'Guidelines for the protection and preservation of trees, hedgerows and scrub, prior to, during the construction of National Road Schemes.'
- Vegetation clearance must be planned and carried out outside of bird breeding season which occurs from the 1st March to 31st August.
- If an active nest is found which is likely to be disturbed by the works, the works will be postponed until the young have fledged.
- A pre-construction survey by an ecologist of the trees to be removed is required to survey for potential bat roosts and precautionary felling methodology devised to avoid injury of harm to bat species.
- Where removal of trees and hedgerow is unavoidable, provision of the same type of boundary will be required of similar length and set back within the site.
- Planting should consist of native tree and hedgerow species to enhance biodiversity potential.
- A Landscape Plan should be prepared which includes semi-mature native trees and hedgerow planted under the supervision of a landscape design consultant, who should be retained for a five year period to oversee their protection and, in the event of failure, their replacement.
- Planting should consist of native tree and hedgerow species to enhance biodiversity potential.
- The Contractor will be required to implement industry best practice pollution prevention measures in accordance with guidance documents.
- All parts of the surface water drainage system must be maintained in good working order and repair steps must be taken to ensure that matter liable to block or obstruct the drainage system is prevented.
- Surface water control measures will be implemented to ensure that silt laden or contaminated surface water runoff from the proposed scheme does not discharge directly to the waterbodies.
- Control of sediment, hydrocarbon and liquid concrete loss by implementing best practice such as including the requirement for no direct discharge to surface water from any element of the works without suitable attenuation and treatment.
- All hazardous material must be stored in appropriate container, must be indelibly and legibly labelled to identify the contents, hazards and precautions required.
- Appropriate management and storage of fuel and fuelling activity near the watercourses will be avoided.

- All spoil heaps will be located, protected and stabilised in a way that will avoid the risk of contamination of drainage systems and local watercourses.
- Hazardous materials on site must be stored in a bunded area.
- Plant and wheel washing should be undertaken in designated area of hardstanding at least 10m from any watercourse.
- Fuelling of plant is anticipated to be in a designated fuelling area within the site compound.
- Control of sediment, hydrocarbon and liquid concrete loss by implementing best practice such as including the requirement for no direct discharge to surface water from any element of the works without suitable attenuation and treatment.
- All hazardous material must be stored in appropriate container, must be indelibly and legibly labelled to identify the contents, hazards and precautions required.
- All spoil heaps will be located, protected and stabilised in a way that will avoid the risk of contamination of drainage systems and local watercourses.
- Hazardous materials on site must be stored in a bunded area.
- Public roads shall be regularly inspected for cleanliness and cleaned as necessary.
- Measure will include limiting construction to daytime periods between 08:00-19:00 Monday to Friday and Saturday 08:00-16:00. No work shall be planned outside these hours including Public Holidays.
- In the interest of visual amenity, all planting shall be adequately protected from damage until established. Any plant that dies, are removed or become damaged or diseased within 5 years, should be replaced.
- The contractor will maintain good communication with landowners at all time particularly in relation to access issues.
- Where part of the curtilage of a property is to be acquired a boundary wall fence or feature will be provided as replacement, in agreement with the landowner.
- Where access to a property is disrupted due to works associated with the proposed scheme, the Contractor will be obliged to give notice to the affected party in advance of work commencing in the area.
- Temporary fencing will be erected as required to delineate the site boundary and to minimise disturbance to adjacent lands.

Lighting Mitigation for Bats

Lighting should be minimised to that required for health and safety. Avoid lighting where it is not required. Lighting should be directional and only illuminate the surface where it is needed and avoid light trespass onto landscape features used by bats i.e., hedgerows, treelines, watercourses and riparian vegetation, scrub areas and any identified roosts.

The following luminaire specifications are advised by the BCT and ILP (2018) to reduce the impact of lighting on bat species. These specifications should be considered for the proposed three new lighting columns and any future upgrade of lighting along the road.

- Features important for such as hedgerows, treelines, watercourses and riparian areas are all important ecological corridors, and these features should be maintained in darkness or near darkness.
- All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used
- LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component.
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats

- Column heights should be carefully considered to minimise light spill.
- Only luminaires with an upward light ratio of 0% and with good optical control should be used
- Luminaires should always be mounted on the horizontal, i.e., no upward tilt.
- As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed.
- Dimming or part night lighting should be considered. A control management system can be used to dim (typically to 25% or less) or turn off groups of lights when not in use.

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5 CONCLUSIONS

The EIA Screening Report has been prepared in accordance with the criteria set out in Schedule 7 of the EIA Regulations. The purpose of this EIA Screening report is to provide Wicklow County Council with the information to allow a determination to be made on whether the proposed scheme is likely to have significant effects on the environment or not. For the following reasons, it is considered that the proposed scheme will not have likely significant effects on the environment:

- The nature and scale of the proposed scheme, which is not a development listed in Schedule 5 Part 1 or 2.
- The site is not located in a European Site or national designated site.
- The AA Screening Report concluded that the proposed scheme either alone or in combination with other plans and/or projects, does not have the potential to significantly affect any European Site, considering their conservation objectives.
- The design of the proposed scheme is to be incorporated into the existing L-5103.
- The types and characteristics of the potential impacts are such that no significant effects are predicted.
- Appropriate mitigation is proposed.

Therefore, this EIA Screening Report concludes that the proposed scheme will not result in potential for significant impacts on the environment and that an EIAR is not required.

6 REFERNCES

Bat Conservation Trust and Institute of Lighting Professionals (2018) Guidance Note 08/18 Bats and artificial lighting in the UK.

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