ENVIROPLAN CONSULTING LIMITED

July '25

Title

ECOLOGICAL IMPACT ASSESSMENT REPORT

Development Description

"Upgrade works of local road L3412 and ancillary development works which will provide access to the IDA Ireland land bank at Kilmurry, Slieverue and Gorteen, Belview, Co. Kilkenny. The proposal will provide an upgrade of local road L3412 from the existing eastern IDA Ireland roundabout to the new IDA Ireland land bank at Kilmurray and will tie back into the existing L3412 to the west via a new roundabout. The upgrade will be taken online on the existing road and offline on adjoining land. The works will consist of the following indicative items:

- *Widening and realignment of the existing road,*
- *Construction of cycle tracks, footpaths*
- *Construction of new roundabout*
- *Construction of a new culvert at the existing watercourse*
- *Drainage works incorporating SuDS and interceptors*
- *Landscaping including amendments to existing screening berm*
- *Disposal of roadworks material*
- *Ancillary road works including public lighting, signs, road markings*
- *Construction of a new watermain*
- *All associated site works*
- *Provision of ducting to facilitate future extension of various services"*

Location

Kilmurry, Slieverue and Gorteen, Belview, Co. Kilkenny

Applicants

Kilkenny County Council

Prepared by:

Edel Hardiman (B. Sc) in consultation with
James O' Donnell (BA, MRUP, DipAPM)

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1 INTRODUCTION

This Ecological Impact Assessment Report (EcIA) has been prepared by consultant ecologist Edel Hardiman (B. Sc) in consultation with James O'Donnell, Planning Consultant (BA, MRUP, Dip APM) on behalf of Kilkenny County Council who are applying for planning permission to Kilkenny County Council for a road development which will consist of "*Upgrade works of local road L3412 and ancillary development works which will provide access to the IDA Ireland land bank at Kilmurry, Slieverue and Gorteen, Belview, Co. Kilkenny. The proposal will provide an upgrade of local road L3412 from the existing eastern IDA Ireland roundabout to the new IDA Ireland land bank at Kilmurray and will tie back into the existing L3412 to the west via a new roundabout. The upgrade will be taken online on the existing road and offline on adjoining land.*

The works will consist of the following indicative items:

- *Widening and realignment of the existing road,*
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- *All associated site works*
- *Provision of ducting to facilitate future extension of various services*".

The assessment includes several ecological surveys and is based on field surveys conducted on the 06th of May 2025 and 13th of May 2025 by Edel Hardiman. A bat transect survey was carried out on the 06th of May 2025, while a static survey was completed from the 06th of May 2025 until the 13th of May 2025. A wildlife camera was erected on the site from the 06th of May 2025 until the 13th of May 2025. The treelines and hedgerows on the site were inspected during the site visit on the 13th of May 2025.

The proposed road realigned is along the existing L3412, which is east of Waterford city and south of the Slieverue settlement. The IDA Science & Technology Park is to the south of this road with several manufacturing companies in this area including Tirlán Ingredients and Kilkenny Cheese. The Waterford City Waste Water Treatment Plant is to the south of this area. The Luffany_010 River waterbody, which is to the west of this manufacturing area flows south into the River Suir.

This report follows a standard approach based upon the description of the current baseline conditions within the proposed site. A survey of the likely habitats and species present in the proposed site is provided, in addition to the identification of the

potential ecological impacts, resulting from the construction and operational phases of the development. An assessment of the likely significance of the identified impacts on valued ecological receptors (VERs), within the site and in close proximity to the site, was also provided. Appropriate remedial mitigation measures are provided where significant negative impacts were identified, to prevent, reduce or counteract the impact.

1.1 LEGISLATIVE BACKGROUND

1.1.1 Legislative Context

The Irish Wildlife Act 1976 and the Wildlife (Amended) Act 2000 allows for the protection of most wild animals and birds. Licenses are required for interference with protected species. This act makes it illegal to interfere with or damage the resting or breeding places of any protected wild animal.

The Flora Protection Order 1999 provides protection in Ireland to several rare plant species from being purposefully cut, picked, uprooted, or damaged. It is also illegal under this order to interfere, alter or damage the relevant habitats.

There are three main types of designation for nature conservation in Ireland: Special Areas of Conservation (SACs), Special Protection Areas (SPA) and Natural Heritage Areas (NHAs). NHAs are designated under the Irish Wildlife Act 1976 (amended 2000). A NHA is protected from damage for the presence of habitats and protected plant and animal species. As NHA are not part of the Natura 2000 network, the Appropriate Assessment process is not applicable to these sites.

SACs and SPAs are designated under European legislation, the EU Habitats Directive 92/43/EEC (transposed into Irish law in the European Union (Natural Habitats) Regulations, 1997 as amended in 1998 and 2005) and the EU Birds Directive 79/409/EEC, respectively. These European designated sites (SACs and SPAs) are also known as Natura 2000 sites. This means that they are part of the Natura 2000 Network, a network of important ecological sites across the European Union. Certain habitats, within the EU Habitats Directive, are classed as 'priority' habitats and are afforded greater protection. For example, Irish priority habitats include turloughs, heaths, blanket bogs and raised bogs. Waterbodies are also afforded protection and are designated as SACs for the presence of species such as the Harbour seal, Salmon, and Freshwater Pearl Mussel.

The Water Framework Directive (WFD) (2000/60/EC) was transposed into Irish law by the European Communities (Water Policy) Regulations 2003 (S.I. 722, 2003). The WFD aims to achieve good status in all waterbodies. It forms a framework for community involvement in the topic of water policy. The WFD updates existing legislation and provides for the management of River Basin Districts (RBDs). RBDs are administrative areas that consist of river basins (catchments) and cross-border basins assigned to an International RBD. RBD allows for a coordinated approach to water management. Currently, Ireland is in the 2nd Cycle of the WFD (2015-2021), where previous RBDs form one national RBD. The 2nd Cycle allows for greater community involvement in water management at a local level.

2 METHODOLOGY

The flora and habitats of the site were assessed using a desk study of information pertaining to the proposed and surrounding areas, ecological records and information pertaining to designations and legislation.

The assessment is based on field surveys conducted on the 06th of May 2025 and 13th of May 2025 by Edel Hardiman. A transect survey was carried out on the 06th of May 2025, while a static survey was completed from the 06th of May 2025 until the 13th of May 2025. A wildlife camera was erected on the site from the 06th of May 2025 until the 13th of May 2025. The treelines and hedgerows on the site were inspected during the site visit on the 13th of May 2025.

'*A Guide to Habitats in Ireland'* (Fossitt, 2000) was used to identify and assess habitats in and adjacent to the site, based on current vegetation composition and habitat management. The site was traversed and identified habitats were classified and sketched into field maps of the site.

The capability of the site to support certain species (particularly those of conservation importance that may have been recorded during the field survey due to their seasonal absence or cryptic/nocturnal habits) were assessed.

All habitats and species of interest were readily identifiable based on the field surveys conducted on the 06th of May 2025 and 13th of May 2025. From the information collected during the field survey, the published information on the site and its environment, it is considered that a comprehensive ecological assessment was achieved.

Figure 2.1: Approximate Indicative Location of the context of the Proposed Development

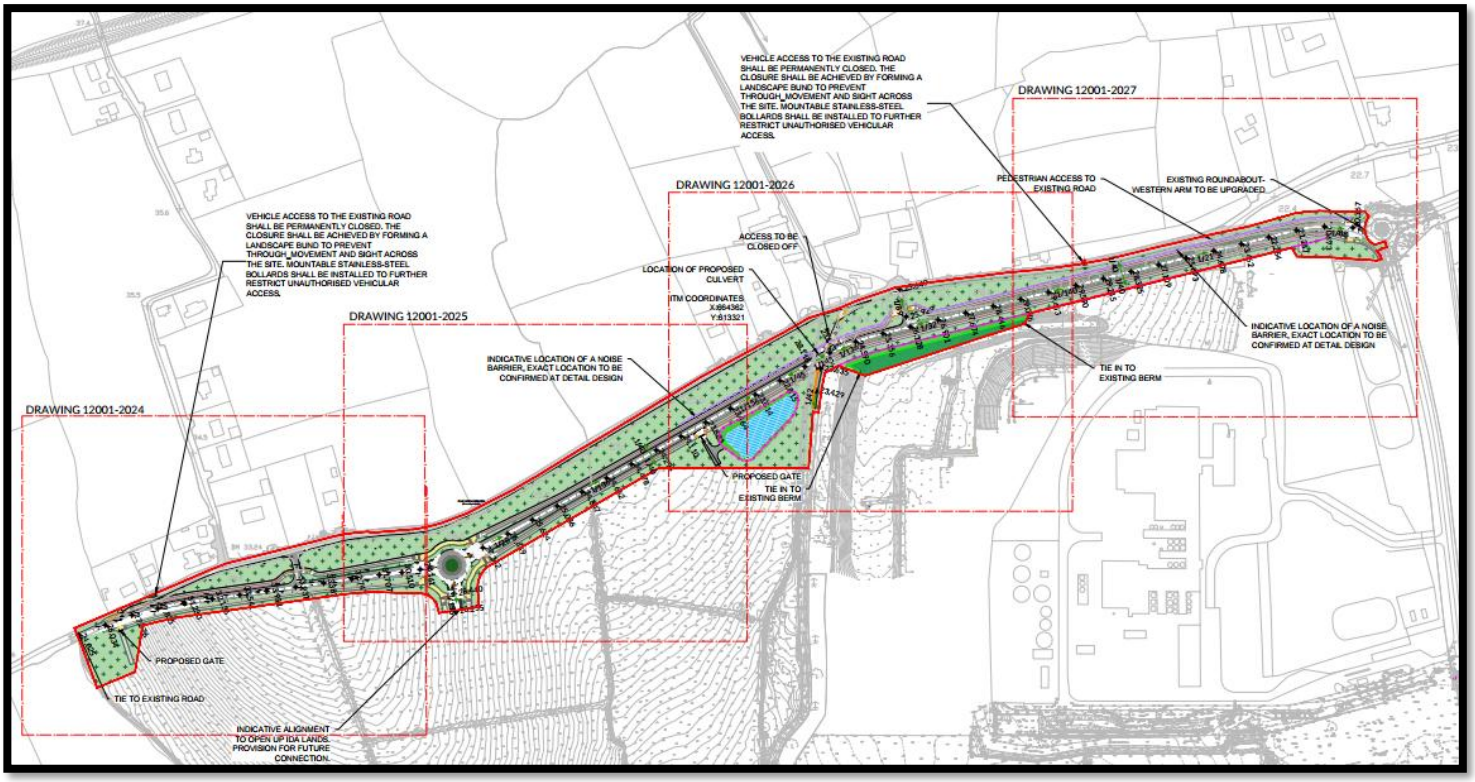

Figure 2.2: Extract of Road layout prepared by TOBIN

3 ESTABLISHING AN ECOLOGICAL BASELINE

3.1 DESK STUDY

A desk study was undertaken to review information that was available with regards to the flora and fauna of the area, including the application site. The following sections pertain to NPWS site synopses for designated conservations sites, birds and plant atlases and specialist research publications. These published sources were consulted for the completion of the Ecological Impact Assessment.

3.1.1 Designated Sites

All European and National designated sites within a 15km radius of proposed site were identified in relation to this development. Designated sites located further than 15km were also identified, however no pathways for impacts on these sites were identified due to the nature and scale of the development, in addition to the lack of hydrological connectivity. Table 3.1 indicates the proximity of designated sites to the proposed development. The locations of the Natura 2000 SAC sites in relation to the proposed site can be seen in Figure 3.1. The locations of SPA sites in relation to the proposed site can be seen in Figure 3.2.

Table 3.1 Designated sites within the 15km of the proposed development and proximity of these sites to the proposed development.

Designated Site and Site Code	Distance from Proposed Site (m/km)
SACs	
Lower River Suir SAC - Site code: 002137	1.2 km
River Barrow and River Nore SAC - Site code: 002162	2.9 km
Tramore Dunes and Backstrand SAC - Site code: 000671	10.9 km
Bannow Bay SAC - Site code: 000697	14.6 km
SPAs	
Tramore Back Strand SPA - Site code: 004027	10.9 km
NHA	
pNHA	
Barrow River Estuary- Site code: 000698	2.8 km
King's Channel - Site code: 001702	1.7 km
Kilbarry Bog - Site code: 001700	5.5 km
Grannyferry - Site code: 000833	6 km
Lough Cullin - Site code: 000406	5.1 km
Ballykelly Marsh - Site code: 000744	9.8 km
Boley Fen - Site code: 000699	13.6 km
Ballyhack - Site code: 000695	6.3 km
Waterford Harbour - Site code: 000787	6.4 km
Duncannon Sandhills - Site code: 001738	9.4 km
Bannow Bay - Site code: 000697	14.4 km
Belle Lake - Site code: 000659	8.2 km
Tramore Dunes And Backstrand - Site code: 000671	10.9 km

Dunmore East Cliffs - Site code: 000664	13.4 km
Carrickavrantry Reservoir - Site code: 000660	14.5 km
Islandtarnsey Fen – Site code: 000666	14.9 km

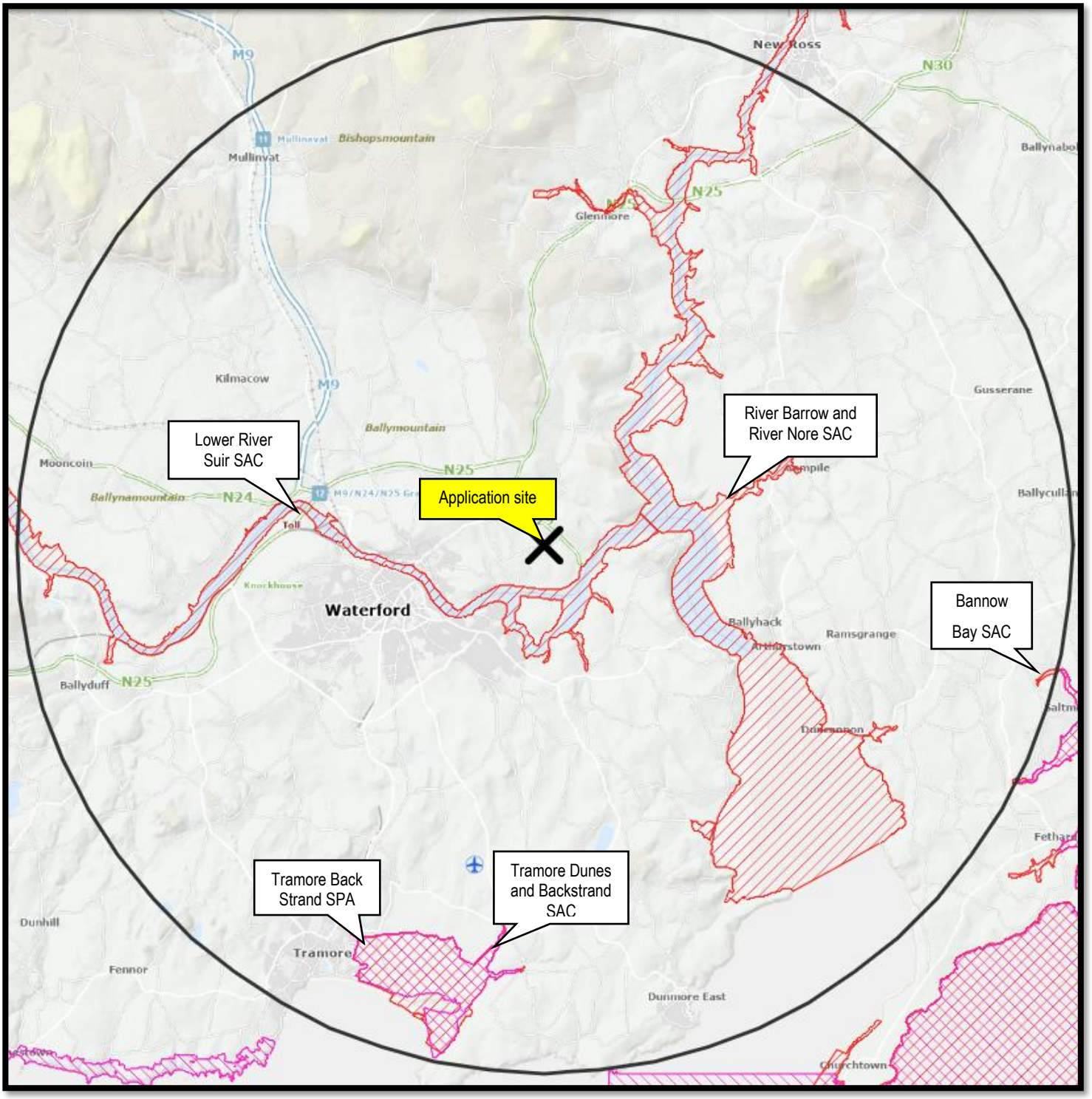

Fig 3.1: Location of the proposed site (black cross) in relation to closest SAC and SPA Sites

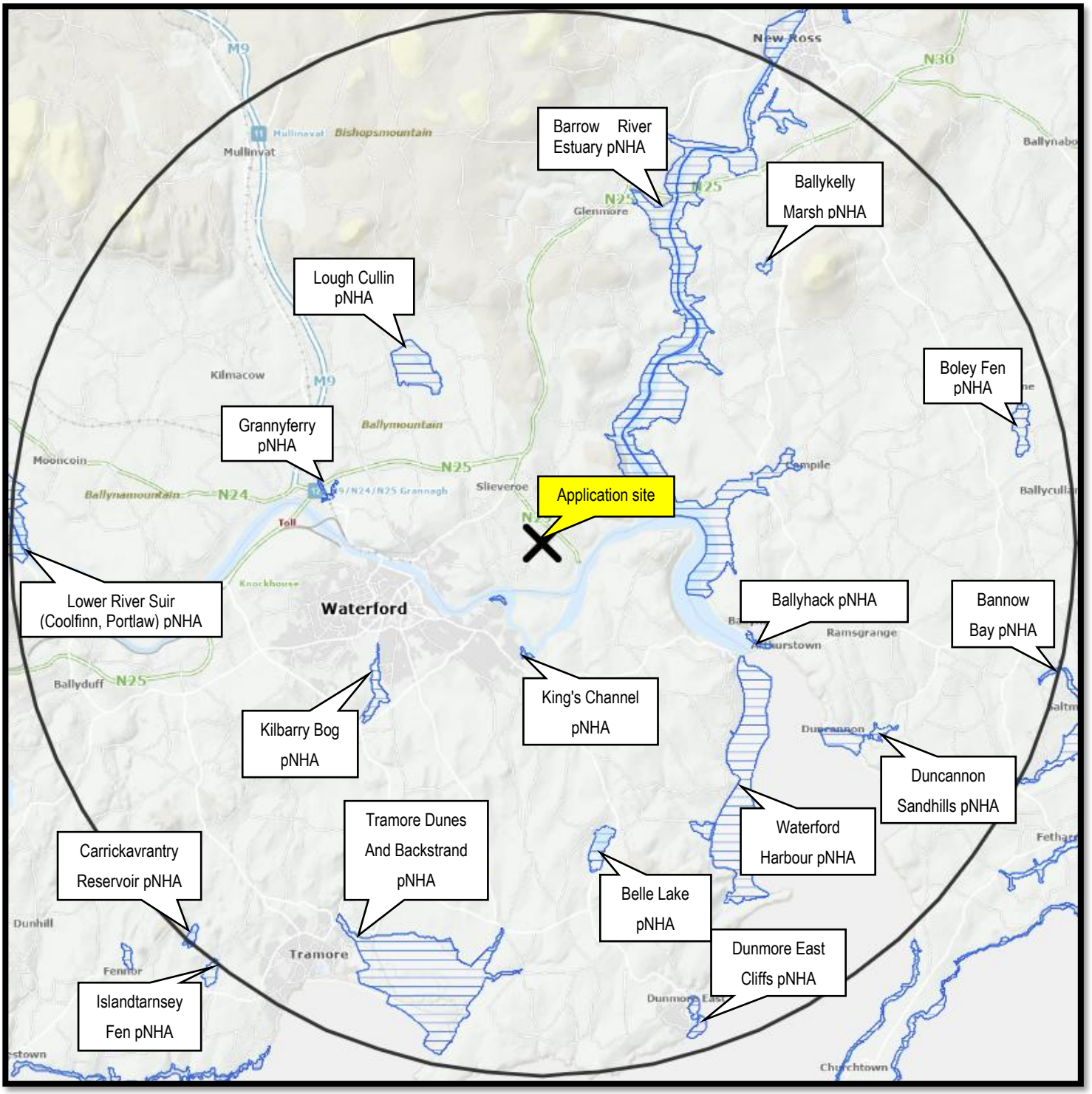

Fig 3.2: Location of the proposed site (black cross) in relation to closest NHA and pNHA Sites

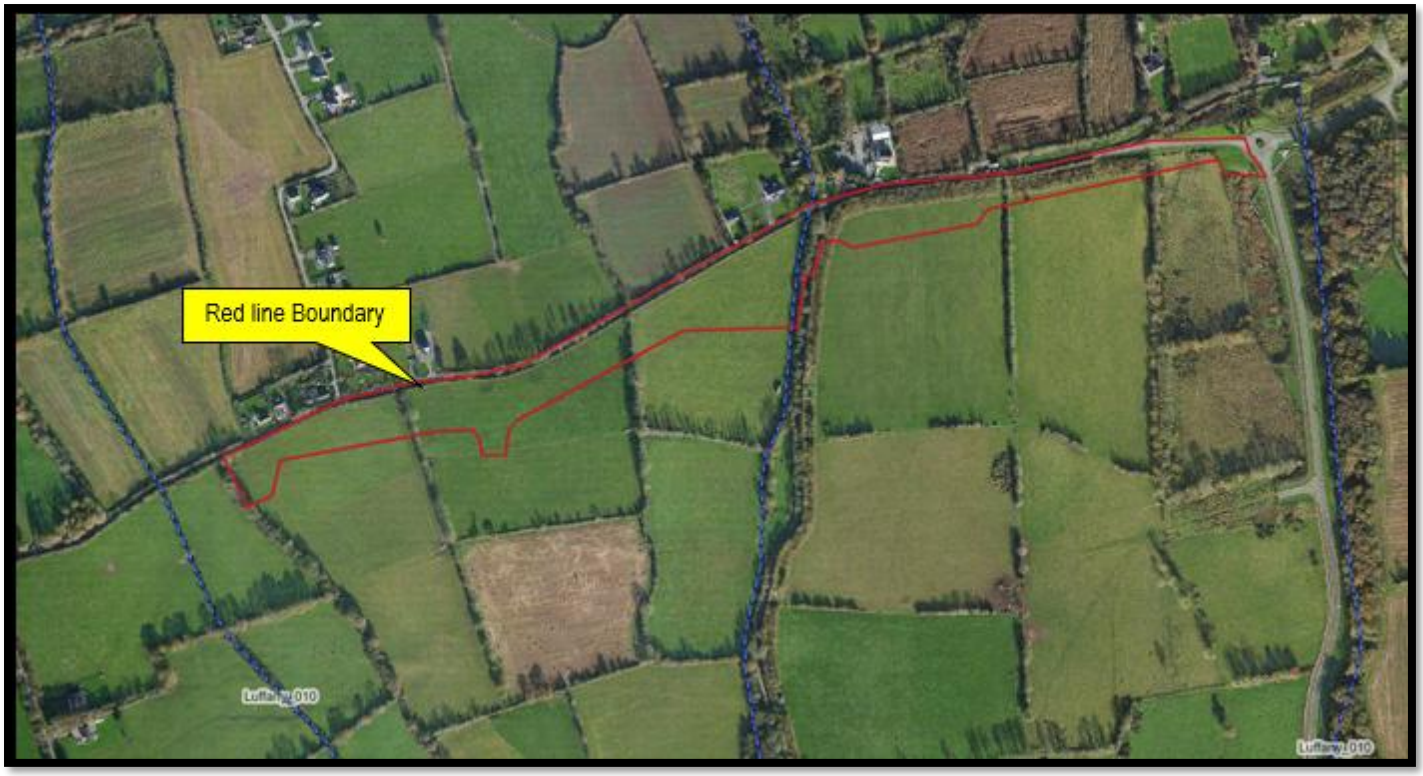

Fig 3.3: Indicative extent of the Application site (outlined in red) in relation to the Luffany_010 River waterbody.

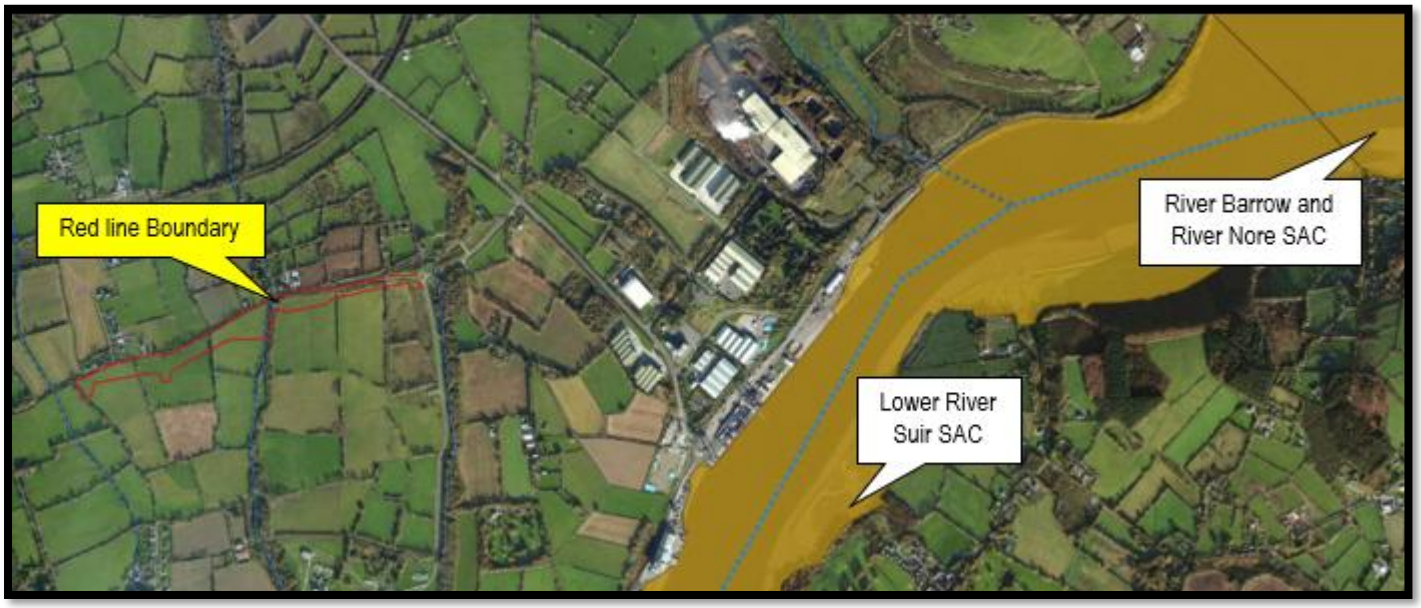

Fig 3.4: Indicative location of the application site in relation to the Lower River Suir SAC and River Barrow and River Nore SAC

4 FLORA

Species listed in Annex II of the Habitat's Directive (CEC, 1992)

No vascular plant species listed in the Annex II of the Habitat's Directive in the site in the Atlas of British and Irish flora.

Species listed in the Flora (Protection) Order:

No plant species listed in the Flora (Protection) Order were present in the site.

Species listed in 'The Irish Red Data Book.10. Vascular Plants' (Jackson, *et al*, 2016)

No plant species listed in the Irish Red Data Book.10. Vascular Plants were present on the site.

5 FAUNA

5.1 BATS

5.1.1 Desktop Research

A desktop survey was carried out on 08th of April 2025. The National Bat Database of Ireland maintains a Bat suitability index. This grades the site in terms of suitability for each bat species found in Ireland within 1km^2 of the site.

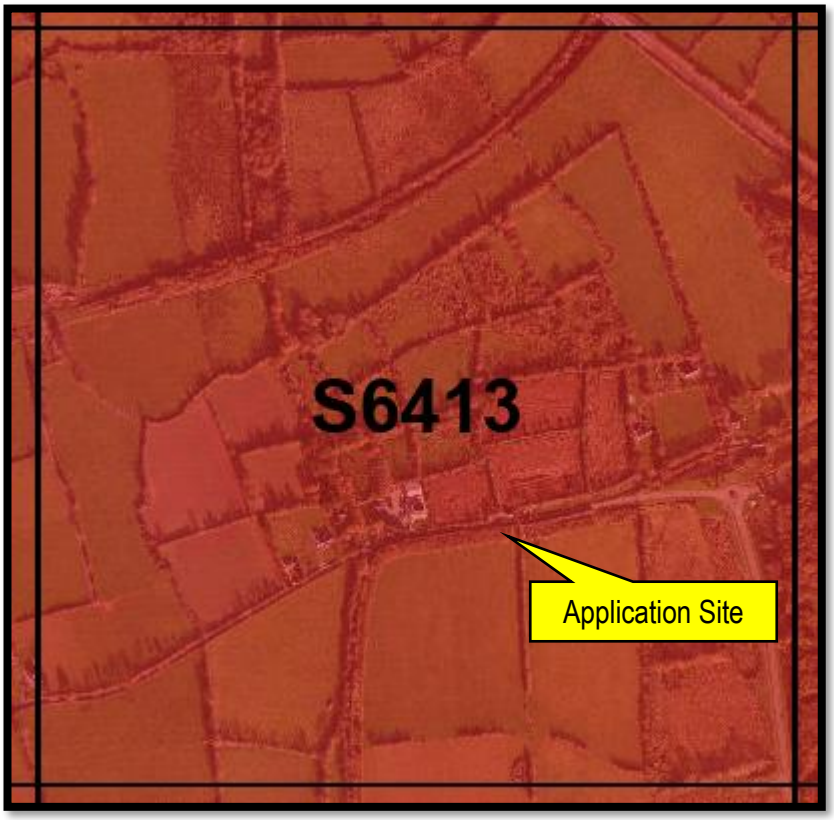

Fig 5.1: Bat Suitability Map of Grid S6413 -Source: https://maps.biodiversityireland.ie/Map

The records of the database search are provided in Table 5.1

Table 5.1 National Bat Suitability of S6413

Species Name	Scientific Name	Suitability Index[1]	Conservation Status
Soprano pipistrelle	*Pipistrellus pygmaeus*	50	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017
Brown long-eared bat	*Plecotus auritus*	63	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017
Common pipistrelle	*Pipistrellus pipistrellus*	56	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017
Lesser horseshoe bat	*Rhinolophus hipposideros*	1	EU Habitats Directive: Annex II & IV; Wildlife Acts 1976-2017
Lesser Noctule	*Nyctalus leisleri*	51	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017
Whiskered bat	*Myotis mystacinus*	52	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017
Daubenton's bat	*Myotis daubentonii*	43	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017
Nathusius' pipistrelle	*Pipistrellus nathusii*	24	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017
Natterer's bat	*Myotis nattereri*	51	EU Habitats Directive: Annex IV; Wildlife Acts 1976-2017

A desk-study of the proposed site shows that there is high suitability for all species of Irish bats within the hectad. The site is located outside the lesser horseshoe foraging ranges as shown in the SSCO maps published by the NPWS: https://www.arcgis.com/apps/mapviewer/index.html

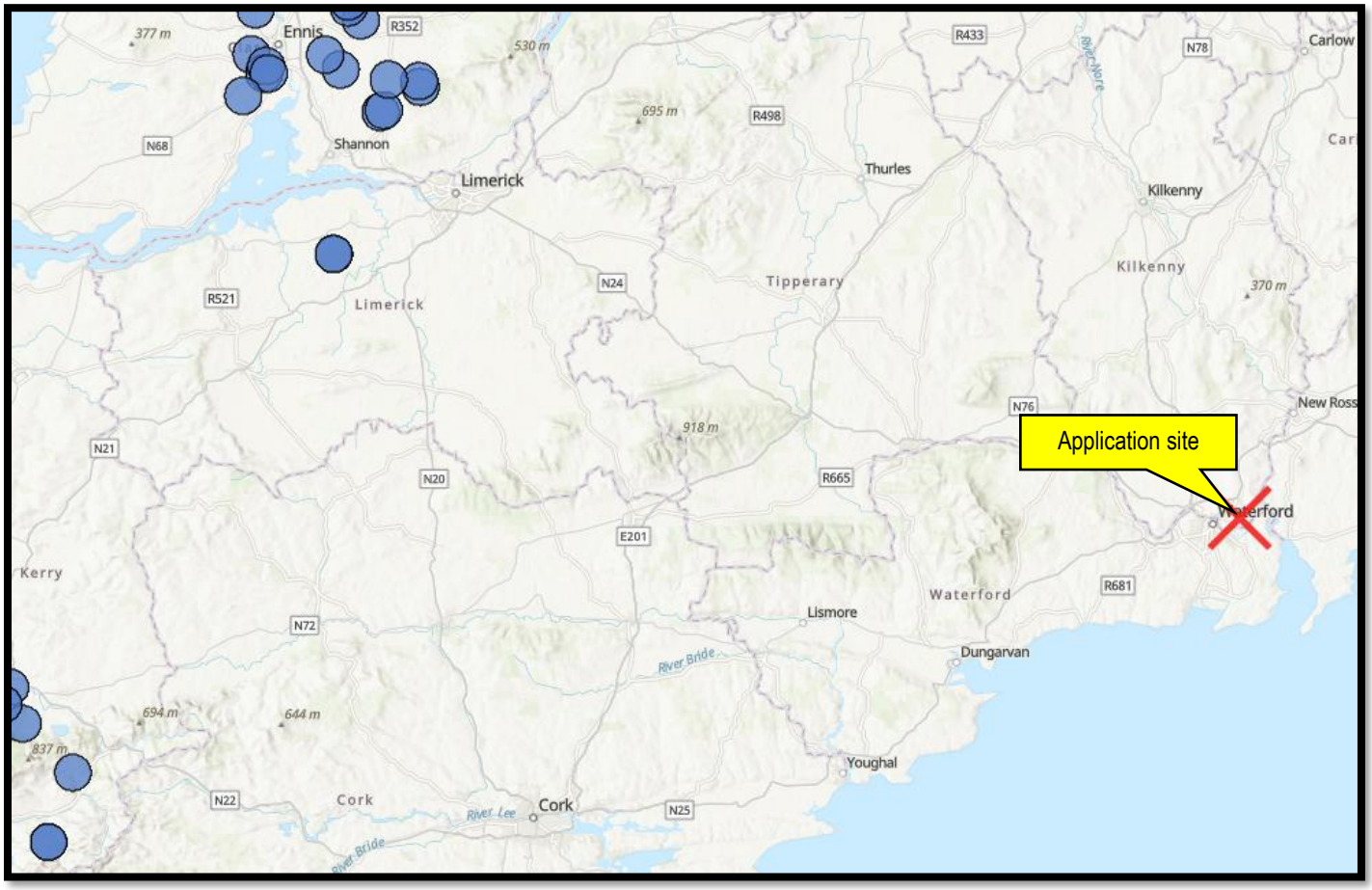

Figure 5.2 Map indicating that the application site does not lie within a Lesser Horseshoe Bat foraging range (see circles outlined in blue).

Note: The application site is located in Kilkenny. The Lesser Horseshoe Bat species is not found in the southeast of the country.

[1] The maps are a visualisation of the results of the analyses based on a 'habitat suitability' index. The index ranges from 0 to 100 with 0 being least favourable and 100 most favourable for bats. The maps are constructed using spatial units of the OSi National Grid. The index presented is for all species combined, in addition to the individual species' indices.

5.2 BAT TRANSECT RESULTS

A transect bat survey was undertaken on the 06th of May 2025.

The transect survey began at 20:32, 30 minutes before sunset which was at 21:02. The survey ended at 22:32, an hour and a half after sunset. The weather conditions during the survey were dry and warm with a slight breeze, with clear skies and no clouds visible. Temperatures at the start of the survey were 12°C and at the end they were 10°C. The surveyor walked slowly along the existing road for the duration of the survey, as shown in Figure 5.3.

Four bat species were identified in the surrounding area, these were Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), Leisler's Bat (*Nyctalus leisleri*) and Brown Long-eared Bat (*Plecotus auritus*). The first bat species recorded was a Common Pipistrelle at 21:34 the last was also a Common Pipistrelle was recorded at 22:22. The first call from a Soprano Pipistrelle was recorded at 21:34, while the first call from a Brown long eared was at 21.37.

Table 5.3 Results from transect bat survey

	Time	Species	Location
1	21.22	Leisler's Bat (*Nyctalus leisleri*)	East
2	21.25	Leisler's Bat (*Nyctalus leisleri*)	East
3	21.25	Common Pipistrelle (*Pipistrellus pipistrellus*)	East
4	21.26	Common Pipistrelle (*Pipistrellus pipistrellus*)	East
5	21.26	Soprano Pipistrelle (*Pipistrellus pygmaeus*)	East
6	21.28	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
7	21.29	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
8	21.30	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
9	21.30	Leisler's Bat (*Nyctalus leisleri*)	Centre
10	21.32	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
11	21.33	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
12	21.33	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
13	21.36	Common Pipistrelle (*Pipistrellus pipistrellus*)	West
14	21.36	Soprano Pipistrelle (*Pipistrellus pygmaeus*)	West
15	21.37	Leisler's Bat (*Nyctalus leisleri*)	West
16	21.38	Leisler's Bat (*Nyctalus leisleri*)	West
17	21.39	Leisler's Bat (*Nyctalus leisleri*)	West
18	21.39	Common Pipistrelle (*Pipistrellus pipistrellus*)	West
19	21.41	Brown Long-eared Bat (*Plecotus auritus*)	West
20	21.41	Leisler's Bat (*Nyctalus leisleri*)	West
21	21.42	Common Pipistrelle (*Pipistrellus pipistrellus*)	West
22	21.43	Leisler's Bat (*Nyctalus leisleri*)	West
23	21.44	Leisler's Bat (*Nyctalus leisleri*)	West
24	21.45	Leisler's Bat (*Nyctalus leisleri*)	West
25	21.46	Leisler's Bat (*Nyctalus leisleri*)	West
26	21.47	Leisler's Bat (*Nyctalus leisleri*)	Centre
27	21.47	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
28	21.49	Leisler's Bat (*Nyctalus leisleri*)	Centre

29	21.50	Leisler's Bat (*Nyctalus leisleri*)	Centre
30	21.51	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
31	21.55	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
32	21.56	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
33	21.57	Soprano Pipistrelle (*Pipistrellus pygmaeus*)	Centre
34	22.04	Soprano Pipistrelle (*Pipistrellus pygmaeus*)	Centre
35	22.05	Soprano Pipistrelle (*Pipistrellus pygmaeus*)	Centre
36	22.08	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
37	22.09	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
38	22.09	Common Pipistrelle (*Pipistrellus pipistrellus*)	Centre
39	22.10	Leisler's Bat (*Nyctalus leisleri*)	Centre
40	22.11	Soprano Pipistrelle (*Pipistrellus pygmaeus*)	Centre
41	22.13	Brown Long-eared Bat (*Plecotus auritus*)	West
42	22.14	Common Pipistrelle (*Pipistrellus pipistrellus*)	West
43	22.14	Common Pipistrelle (*Pipistrellus pipistrellus*)	West
44	22.16	Common Pipistrelle (*Pipistrellus pipistrellus*)	West

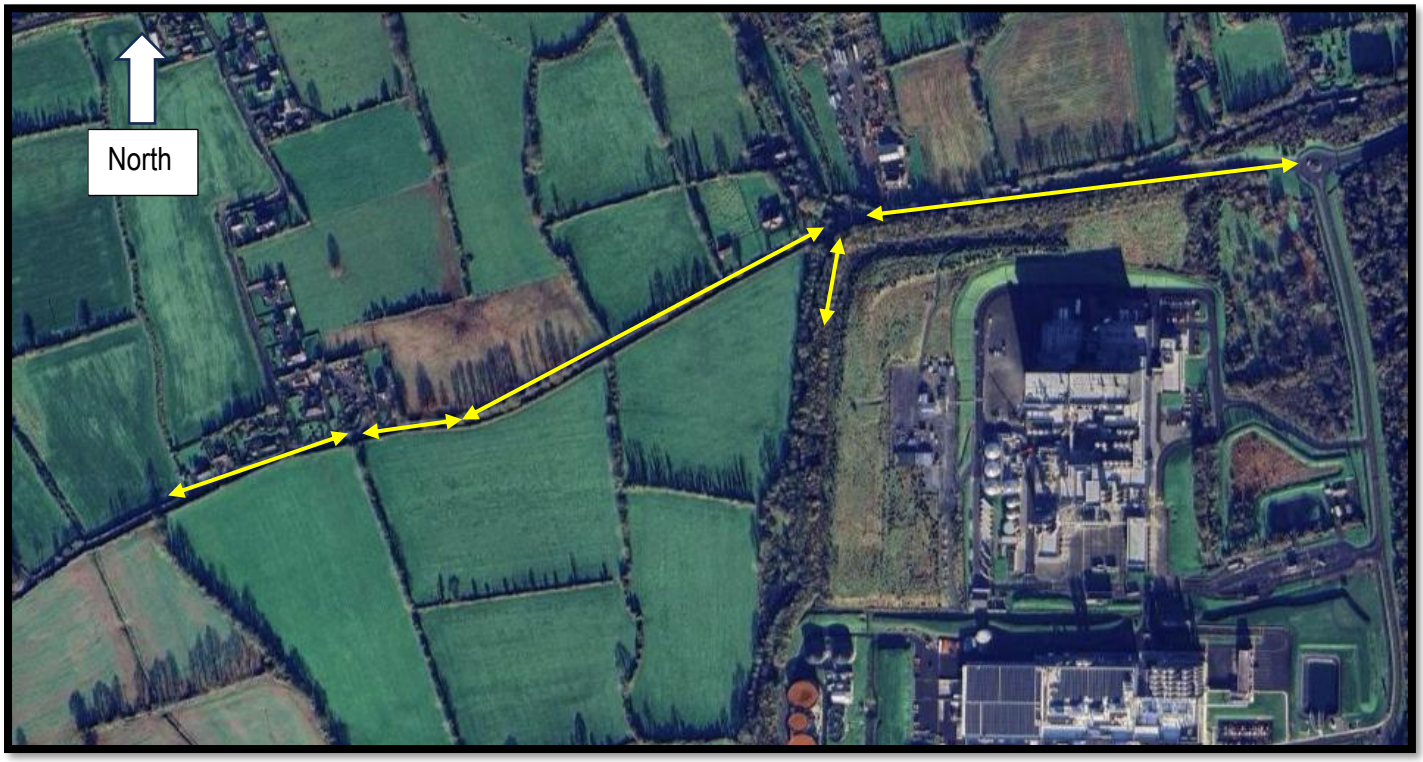

Figure 5.3 Route walked during the transect survey

5.3 Bat Static Results

A Static survey took place from the 06th of May 2025 to the 13th of May 2025. A Song Meter Mini Bat detector was used. The device was set to start recording 30 minutes before sunset and to continue until 30 minutes after sunrise each night.

Bat passes were recorded and identified to species level. A bat pass is defined by the Bat Conservation Trust as *"two or more bat calls in a continuous sequence; each sequence or pass is separated by one second or more in which no calls are recorded"* (BCT Good Practice Guidelines 2nd Ed 2012).

The song meter mini bat ultrasonic recorder was placed within the tree line along the stream within the center the application site (Grid ref: Easting: 664347.97, Northing: 613308.52). Temperatures during the static survey ranged from 5.3°C to 12.4°C. Table 5.4.4 shows the weather conditions for the week the static was deployed to give an overview of weather conditions.

Table 5.4.1 Summary of recordings for the Static bat detector

Dates	Leisler's	Brown Long- eared	Nathusius' pipistrelle	Soprano pipistrelle	Common pipistrelle	Total Passes
06th of May	14	1	0	6	64	85
07th of May	18	2	1	5	146	172
08th of May	13	2	2	23	121	161
09th of May	19	2	2	6	78	107
10th of May	17	3	2	5	95	122
11th of May	15	0	0	5	111	131
12th of May	22	5	0	13	188	228
13th of May	8	4	2	8	87	109
Total	126	19	9	71	890	1115

Table 5.4.2 First and Last calls recorded and the species for the night's static was deployed

Dates	First Call and Species	Last Call and Species
06th of May	21:04:49 - Leisler's	23:53:28 - Leisler's
07th of May	21:15:09 - Leisler's	05:08:17 - Common pipistrelle
08th of May	21:24:29 - Leisler's	05:23:37 - Leisler's
09th of May	20:45:51 - Leisler's	05:17:57 - Leisler's
10th of May	21:28:03 - Leisler's	05:12:21 - Leisler's
11th of May	21:04:20 - Common pipistrelle	05:05:42- Soprano pipistrelle
12th of May	21:33:34 - Common pipistrelle	05:21:52 - Leisler's
13th of May	00:03:08 - Common pipistrelle	05:11:08 - Leisler's

Table 5.4.3 Sunset and Sunrise times for the night's static was deployed

Dates	Sunset	Sunrise
06th of May	21:04	05:47
07th of May	21:06	05:45
08th of May	21:08	05:43
09th of May	21:09	05:42
10th of May	21:11	05:40
11th of May	21:13	05:38
12th of May	21:14	05:36
13th of May	21:16	05:35

Table 5.4.4 Local night weather conditions in the Kilkenny Area during the Static detector deployment

Dates	Rain (mm)	Temperature (°C) (Max-Min)	Wind (knots)
06th of May	0.0	13.2 – 5.3	5.5
07th of May	0.0	14.7 – 7.9	5.4
08th of May	0.0	14.9 – 9.2	5.7
09th of May	0.0	14.2 – 7.9	5.4
10th of May	0.0	16.1 – 8.5	5.0
11th of May	tr	19.0 – 8.7	8.0
12th of May	0.1	17.2 – 10.2	11.3
13th of May	2.4	18.0 – 12.4	9.9

5.4 MAMMAL SURVEY

A wildlife camera was placed on the site from 06th of May 2025 until the 13th of May 2025. The wildlife camera was placed at the stream and the banks adjacent to the stream that flows beneath the existing road to observe if any otters are commuting throughout this area and if there were any mammals within this area.

No species, including otters, badgers, hedgehogs or stoats, were observed on the wildlife camera commuting throughout this area. A mallard was observed in the water as shown in Figure 5.4 below.

The hedgerows and treelines on the site were inspected during the site visit on the 13th of May 2025 for any potential species, including badgers. No wildlife tracks/ mammal prints were observed in these areas throughout this survey.

Figure 5.4 Image from wildlife camera showing Mallard in the river

5.5 OTHER MAMMALS

A search of the National Biodiversity Data Centre website revealed two mammals were recorded within 1km^2 of the site. No wildlife tracks/ mammal prints were observed on site during the walkover surveys.

Eurasian Badger (*Meles meles*) – No impacts are predicted on this species. No badger indicators were noted throughout the site including setts, latrines and prints. No badgers were recorded on the wildlife camera. The species was recorded in 2004 on the National Biodiversity Data Centre website. Therefore, no impacts are predicted.

Irish Stoat (*Mustela erminea subsp. hibernica*) – No impacts are predicted on this species. No indicators were noted on the site including tracks and scat. This species was not seen on the wildlife camera during time of recording. Therefore, no impacts are predicted.

5.6 BIRDS

Bird species recorded on site during the site visits were European robin (*Erithacus rubecula*), Eurasian wren (*Troglodytes troglodytes*), Blackbird (*Turdus merula*), Song thrush (*Turdus philomelos*), Goldcrest (*Regulus regulus*), European greenfinch (*Chloris chloris*), and White wagtail (*Motacilla alba*).

A Mallard (*Anas platyrhynchos*) was recorded in the river on the wildlife camera.

6 DESCRIPTION OF BASELINE ENVIRONMENT

6.1 CHARACTERISTICS OF THE STUDY AREA

The application site features an existing road (BL3). There are hedgerows (WL1) and periodic treelines (WL2) bordering this road. A stream (FW2) flows through the site under an existing bridge along the road. Agricultural fields (GA1) are to the south of the site where the proposed road realignment will be constructed. A small, wooded area (WD1) is to the southeast of the site adjacent to the north of the IDA Science & Technology Park. There is a grassland area (GS2) to the west of the existing roundabout to the east of the site.

The vegetation noted throughout the hedgerows and treelines include Hawthorn (*Crataegus monogyna*), Blackthorn (*Prunus spinosa*), Brambles (*Rubus fructicosus*), Alder (*Alnus glutinosa*), Sycamore (*Acer pseudoplatanus*), Common Gorse (*Ulex europaeus*) and Scots pine (*Pinus sylvestris*).

Flora Species noted on site include Bluebells (*Hyacinthoides non-scripta*), Herb robert (*Geranium robertianum*), Common Daisy (*Bellis perennis*), Dock leaves (*Rumex Obtusifolius*), Common nettle (*Urtica dioica*), and Ivy (*Hedera hibernica*).

Habitats classified according to Fossits within the application site

- BL3 Buildings and artificial surfaces
- WL1 Hedgerows
- WL2 Treelines
- FW2 Depositing/lowland rivers
- GA1 Improved agricultural grassland
- WD1 (Mixed) broadleaved woodland
- GS2 Dry meadows and grassy verges

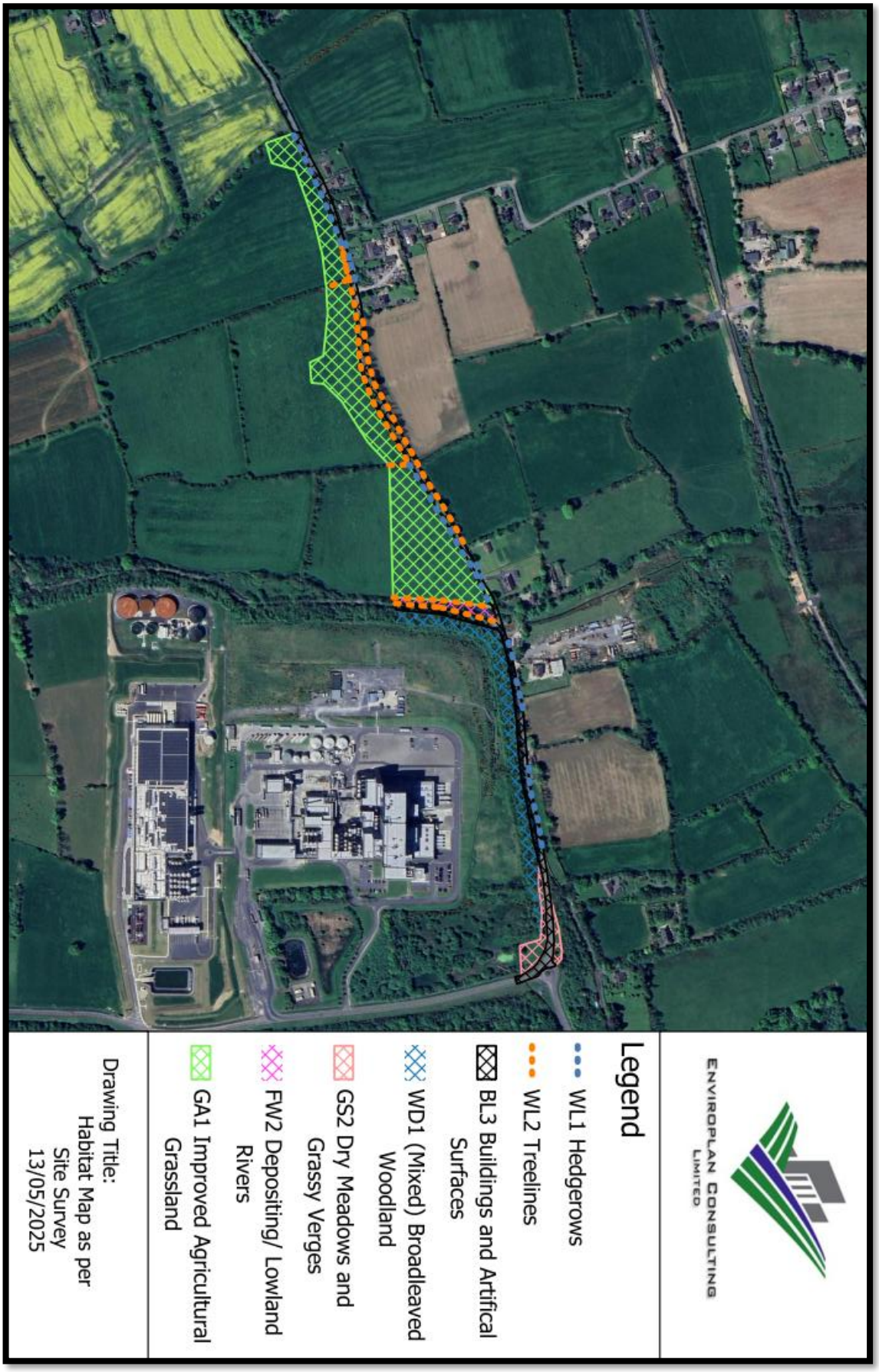

Figure 6.1 Habitat Map indicative of site surveyed

Plate 6.1 Looking south at the agricultural field by the stream

Plate 6.2 Looking east at the existing roundabout with streetlights visible in this area

Plate 6.3 Looking south at the stream from the existing road

Plate 6.4 Looking east along the existing road

Plate 6.5 Looking west along the existing road

Plate 6.6 Looking east along the existing road

Plate 6.7 Looking west along the hedgerow and grassland

Plate 6.8 Looking east at the treeline along the stream from the west of the site

Plate 6.9 Looking south at the treeline along the stream

Plate 6.10 Image of a drain adjacent to the stream to the west

7 PLANNING SEARCH

A search was carried out on Kilkenny County Council's online planning query system on the 08th of April 2025. It was ascertained that the following local planning applications have been granted within a 300m radius of the site in the past 5 years.

- **PI ref – 2360046 –** "*for the proposed erection of a Security Cabin on site comprised of Security Office, Canteen and WC together with Security Office, Canteen and WC together with Treatment Plant and associated Polishing Filter and all associated site works and ancillary services on site*"
- **PI ref – 20920 –** *"for (1) Permission for Retention of the following, (a) the erection of a concrete kerbing on site, (b) the revision of fencing layout from that previous granted under Planning reg No's P15/251 and P17/79 consisting of the removal of the palisade Fencing from the kerbing on top of the sloped sections of ground and the replacing of the Stout Timber fencing with a Palisade Security fence to provide the necessary Security on site and (c) Retention and Completion of the creation of a concrete covered compound (a part of the site which was granted Permission under Planning Reg No. 17/79) for the storage of palletised bagged fertiliser on site, and also for (2) Permission for the proposed installation of Surface Water drainage and Attenuation to cater for the new compound area on site"*

8 ECOLOGICAL IMPACT ASSESSMENT

8.1 DO NOTHING IMPACT

If the proposed development did not go ahead, it is likely that the local road would remain in use and vegetation along this would remain as it currently is. The grassland would continue to be used for agricultural purposes and the wooded area would remain as is.

8.2 IMPACTS DURING CONSTRUCTION

8.2.1 Impacts to Fauna

General Fauna

Permanent Slight Negative Impact

The proposed development works will be confined to the application site. The proposed development will be localized within the site. The proposed works would involve the removal of vegetation on site.

Best Practice Incorporated into the project design

- Confine disturbance of vegetation to a minimum and where possible stay out of area where no work is to take place.
- Care must be taken during the removal of vegetation for animals which may be using, hibernation, nesting or feeding in. If wildlife is encountered such as hedgehogs, badgers and/or foxes the area of work will be changed until the animal moves away or is relocated.
- A suitably qualified Ecological Clerk of Works will be assigned by the contractor prior to commencement of any works on this site. The Ecological Clerk of Works will oversee the works on site to ensure no impacts to fauna or the watercourse during the construction phase.

Protection of Bat/ mammal species during Construction Phase

- Prior to the removal of vegetation, a roost survey will be conducted by the Ecological Clerk of Works or a suitably qualified ecologist to ensure no impacts on any potential roosting bats in the area prior to the felling of trees. This shall be completed immediately prior to the commencement of these removal works.
- The proposed development will involve the removal of several trees throughout the site. To ensure no impacts on bat populations, tree felling will not take place during the active bat period and maternity season (May-August). Following best practice guidelines, tree felling shall take place between September to late October. This allows for any bats in the area to escape any potential impacts during the tree felling works as the species is still capable of flight during this period.

- As per best practice with tree felling, trees shall be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. Trees shall be inspected immediately prior to felling by the Ecological Clerk of Works. Felled trees will then be left insitu for a minimum of 24 hours.
- These tree felling measures required for the site shall be supervised by the Ecological Clerk of Works.
- The results from the bat surveys completed concluded that there was a low to moderate level of bat activity on site. The application site is not located within a known Lesser Horseshoe foraging range and the transect survey and the static survey, which were done during active bat season under optimal weather conditions, did not record any Lesser Horseshoe calls. Therefore, no impacts are predicted on this species during the construction phase of the development.
- All lighting during the construction phase is to be minimal where possible.
- No lighting will remain on after construction works on site have finished each day.
- No adverse impacts on local bat species in the area during the construction phase with these mitigation measures in place.
- Any trees/ vegetation that must be removed shall first be checked by the Ecological Clerk of Works or a suitably qualified ecologist to ensure no mammal resting places are discovered.
- If protected species, such as badger, hedgehogs, stoats etc., are discovered during this survey, work within this area must not commence until the Ecological Clerk of Works or a suitably qualified ecologist contacts the NPWS to assess any requirements for derogation licences, to comply with legislation that protects these species and their habitats. Exclusion zones and protective measures will be outlined by the Ecological Clerk of Works for any species identified in the area to ensure no impacts during the construction phase. The proposed measures must be made aware to every worker on the site.

Protection of Otters/ Marine Species during Construction Phase

- While no otters were observed on the wildlife camera, this species is a Qualifying Interest of the Lower River Suir SAC. The river that flows through the site is hydrologically linked to this Natura 2000 site, therefore precautionary mitigation measures are proposed.
- An otter survey will be carried out prior to the commencement of enabling works by the Ecological Clerk of Works or a suitably qualified ecologist. This survey will be conducted along the river within 150 m of the construction works area; these guidelines are recommended as per "*Guidelines for the Treatment of Otters Prior to the Construction of National Road Schemes*".
- If otter holts are found within 150 m of the construction works, works will not commence until exclusion zones have been identified and protected measures have been outlined following consultation and in agreement with the NPWS.

- The works required within the river must be carried out between July-September, during times of dry weather, as per IFI guidelines (2016). This is to ensure fish species are protected during these construction activities within the river.
- Prior to the construction phase, silt fences and sedimats will be erected along the river to ensure no sediments/ storm water runoff pollutants will enter the river. The Ecological Clerk of Works will oversee the installation of these as well as the removal once the construction works are completed.
- Direct discharging of sediments/ surface water runoff into the river is strictly prohibited.
- Drip trays must be utilized for all machinery on site and monitoring undertaking to ensure that there is no risk of overflowing and that they are adequately sized to deal with the specific element of machinery that they are protecting against.
- A spill kit with sand or earth will be kept close to storage areas. Staff will be trained on how to used spill kits correctly.
- No concrete or cleaning water shall enter soil or the adjacent waterway.
- All construction shall be carried out in line with the Inland Fisheries Ireland 2016 Guidelines.

Protection of Bird Species during Construction Phase

- The application site is not located in close proximity to any SPA, however measures protecting local bird populations have been recommended.
- Vegetation will be removed in accordance with the Wildlife act and at the appropriate times outside of the bird nesting season. Hedge cutting will not take place between the 1st of March and the 31st of August, in order to ensure minimal distribution to wildlife active during this time.
- Trees shall be inspected by the Ecological Clerk of Works or a suitably qualified ecologist to ensure no impacts on nesting birds prior to the felling of trees.
- While increased levels of background noise are unavoidable during the construction phase of any project, measures will be implemented to reduce the number of noise-generating activities occurring concurrently.
- A copy of the EPA 'Guidance Note for Noise: License Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' will be available on site for the duration of the works and will be referred to as required during the works.
- Machines must be turned off when not in use.
- Noise shall be dampened where possible.

Residual Impact

No residual significant impacts on fauna are expected. Landscaping will provide a designated area on the site for fauna following the removal of vegetation.

8.2.2 Loss of Floral Habitat

The degree of impact on floral habitat, in absence of best practice, is assessed as:

Permanent Slight Negative Impact

Given that the current use of the site is an existing road with fields used for agricultural purposes, a significant impact on floral vegetation is not predicted. Works will be confined to the application site boundaries.

Best Practice incorporated into the project design

- Confine disturbance of vegetation to a minimum and where possible stay out of areas where no work is to take place.
- Retain landscape features, such as trees, hedgerows, and green areas where possible.
- All planting and landscaping will be carried out in line with the All-Ireland Pollinator Plan.
- Care must be taken when removing vegetation for small mammals, such as hedgehogs, badgers, and foxes.
- Vegetation will be removed in accordance with the Wildlife act and at the appropriate times outside of the bird nesting season. Hedge cutting will not take place between the 1st of March and the 31st of August, in order to ensure minimal distribution to wildlife active during this time. Removal of any vegetation from the site is to be carried out between the beginning of September and the end of February.
- All cut vegetation must be removed from the watercourse to avoid de-oxygenation of the water during decay, and blockage of downstream structures.
- A detailed landscaping plan has been prepared by Austen Landscape Architects. This proposal includes the retention of several of the existing treelines and hedgerows bordering the existing road.
- It is proposed to plant several semi mature and heavy standard trees and native trees throughout the site. Additional hedgerow planting and native shrub planting as well as wildflower areas are proposed throughout the site. These proposed landscaping will enhance the planting currently in the area and will benefit local fauna.
- Implementation of mitigation measures on-site is to be supervised by the Ecological Clerk of Works.

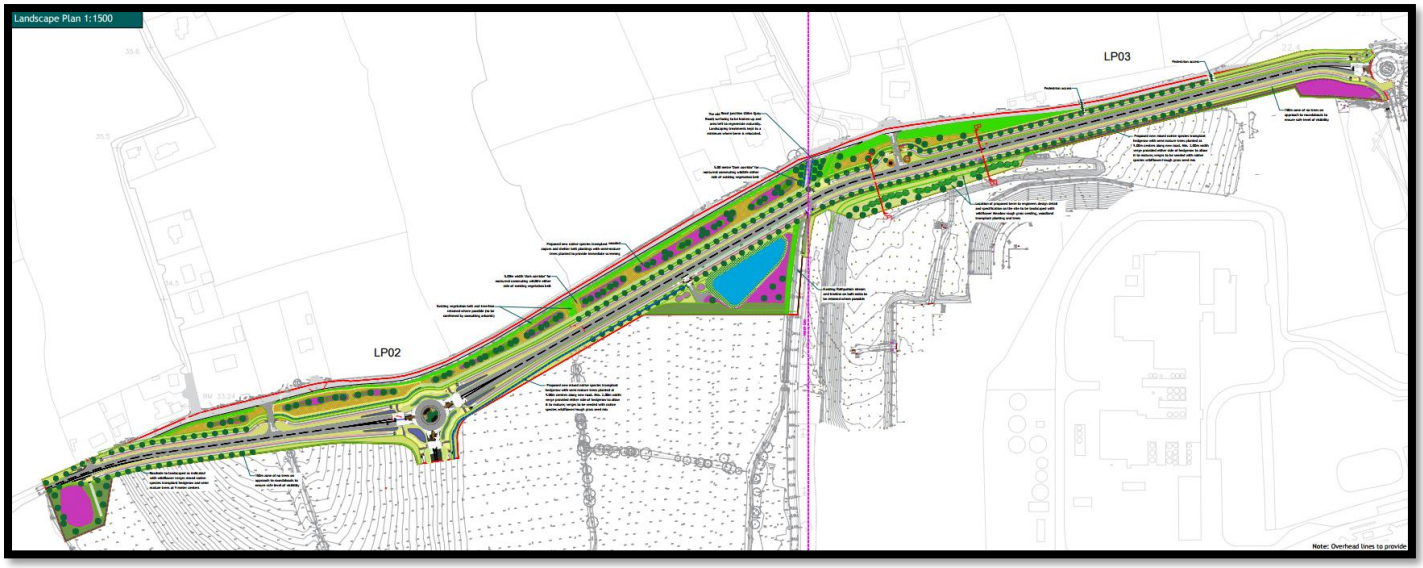

Plate 8.2 Landscaping Plan prepared by Austen Landscape Architects

Residual Impact

The proposed development will impact vegetation and the floral habitat within the proposed development site. However, considering the proposed landscaping measures throughout the site, this will benefit the overall biodiversity throughout the site. Therefore, no significant residual impacts are predicted.

8.2.3 Pollution of the Wider Area

Temporary Moderate Negative Impact

The construction phase of the proposed development will involve earth moving and levelling which create the potential for pollution in various forms to run off the site and enter the surrounding environment. Chemicals used in construction including hydrocarbons and cement-based products could potentially be washed off the site. Good construction practices will be in place to prevent any risk of pollution running off the site. Lighting during the construction phase will be minimal where possible.

The degree of impact, in the absence of best practice, is assessed as **Temporary Moderate Negative Impact.**

Best Practice incorporated into the project design

- All machinery maintenance and re-fuelling shall be carried out off-site. Spill kits for contaminants such as fuels oils and lubricants must be used.
- All petroleum products are to be bunded during the construction stage of the development.
- The works will be planned and executed in accordance with Environmental Protection Agency Guidelines.
- Wash water from on-site mixers or lorries shall be disposed of appropriately off site.
- To prevent run-off from stripped ground, banks are to be placed on the downstream side of stockpiles.
- Water from excavations shall be pumped to land and allowed to settle.
- Washing out of concrete trucks will not be permitted within the site and must be conducted in hard standing areas.

- Works with concrete shall be done during dry conditions for a period sufficient to cure the concrete (at least 48 hours).
- Concrete pours shall occur in contained areas.
- Wheel washers/judder bars to clean off vehicles will be placed at the entrance of the site prior to the commencement of works.
- Plant will be re-fuelled away from watercourses.
- All site operatives will have immediate access to spill kits when machinery is being used.
- Construct systems to collect, convey, treat and attenuate the surface water runoff generated by the proposed development.
- No lighting will remain on after construction works on site have finished each day.
- All lighting during the construction phase is to be minimal where possible.
- The works required over the river will only occur outside of the Annual Close Season during the permitted summer period of July-September inclusive. Works will adhere to the Inland Fisheries Guidelines 2016.
- A silt fence shall be erected prior to any construction, earthworks or groundworks operations on site, along the stream within the site. This silt fence shall remain in place for the entirety of the construction phase of the road.
- Silt fences will be monitored via a silt inspection log during the construction period.
- A suitably qualified Ecological Clerk of Works will be assigned by the contractor prior to commencement of any works on this site. The Ecological Clerk of Works will oversee the works on site to ensure no impacts to fauna or the watercourse during the construction phase.
- Sedimats will be placed along the existing stream as an additional precautionary measure, these sedimats are to remain in place for the entirety of the construction phase.
- No direct discharge of sediments shall occur within the river.
- All cut vegetation must be removed from the watercourse to avoid de-oxygenation of the water during decay, and blockage of downstream structures.

Residual Impact

With best practice incorporated into the design and the above mitigation in place, the potential for significant run off of pollutants from the site is greatly reduced. Lighting measures during the construction phase will ensure no adverse impact on any commuting or foraging bat species within this area in this regard. Pollution measures to control surface water runoff to protect the existing stream have been implemented. During the construction phase, mitigation measures stated above will ensure no contaminated surface water could cause contamination to the stream on site. No significant residual impacts are anticipated.

8.2.4 Spread of Invasive Species

Long Term Slight Negative Impact

The proposed development will involve the movement of soil on the site and will create disturbed ground. In the absence of suitable control measures this impact is classed as **Long Term Slight Negative Impact.**

General Good Construction Management

If any construction machines or construction materials are being brought onsite ensure that the source is free of invasive species such as Japanese Knotweed, Gunnera and Rhododendron.

Residual Impacts

With control measures in place, there is deemed to be 'No Impact' in terms of the potential for the introduction and establishment of invasive alien species.

9 IMPACTS DURING OPERATION

9.1 INCREASED HUMAN ACTIVITY

The proposed development includes an application seeking permission for the *"Upgrade works of local road L3412 and ancillary development works which will provide access to the IDA Ireland land bank at Kilmurry, Slieverue and Gorteen, Belview, Co. Kilkenny. The proposal will provide an upgrade of local road L3412 from the existing eastern IDA Ireland roundabout to the new IDA Ireland land bank at Kilmurray and will tie back into the existing L3412 to the west via a new roundabout. The upgrade will be taken online on the existing road and offline on adjoining land.*

The works will consist of the following indicative items:

- *Widening and realignment of the existing road,*
- *Construction of cycle tracks, footpaths*
- *Construction of new roundabout*
- *Construction of a new culvert at the existing watercourse*
- *Drainage works incorporating SuDS and interceptors*
- *Landscaping including amendments to existing screening berm*
- *Disposal of roadworks material*
- *Ancillary road works including public lighting, signs, road markings*
- *Construction of a new watermain*
- *All associated site works*
- *Provision of ducting to facilitate future extension of various services"*

There is an existing road network in this area. The proposed development will enhance this existing road therefore a notable significant increase in human activity at the site is not anticipated.

9.2 DISTURBANCE TO FAUNA

The site of the proposed development is of medium ecological significance. There is an existing road in use within the development site. The proposed development will therefore not change existing anthropogenic activity in the area.

- Care must be taken during the removal of vegetation for animals which may be using, hibernation, nesting or feeding in. If wildlife is encountered such as hedgehogs, badgers and/or foxes the area of work will be changed until the animal moves away or is relocated.
- Vegetation will be removed in accordance with the Wildlife act and at the appropriate times outside of the bird nesting season. Hedge cutting will not take place between the 1st of March and the 31st of August, in order to ensure minimal distribution to wildlife active during this time.
- Common Pipistrelle bat species were the most recorded species during the bat surveys conducted on site. The proposed landscaping measures ensure that commuting and foraging habitats will benefit local bat species in the area. Therefore, no significant adverse impacts are predicted for local bat species within the vicinity of the site.
- Bat boxes suitable for Common Pipistrelle bat species include Schwegler Bat Box 2F (universal) bat boxes (or similar), which is suitable for crevice roosting bats. These are to be suitably placed throughout the site along the hedgerows and treelines. The bat boxes are to be placed at least 4 m above the ground where possible and away from artificial light sources. These bat boxes are to be monitored and maintained at least once a year to ensure upkeep.
- While no wildlife tracks/ mammal prints were recorded during the site visits and throughout the wildlife camera survey, the proposed development would involve habitat fragmentation in this area, therefore mammal friendly culverts are proposed to benefit fauna in the wider vicinity of the site. Mammal underpasses are proposed. These should be located, where possible, adjacent to the stream and existing treeline in the center of the site where natural mammal pathways would likely occur. This would be a suitable location to help facilitate mammal movements throughout the area throughout the operational phase of the road. Best practice design for mammal underpasses at culverts must be considered and these tunnels shall be designed to ensure they do not fill with debris or flood. These mammal underpasses should be monitored to ensure suitable operation.
- As the proposed development involves the removal of trees, bird boxes are proposed for local bird species. These shall be placed throughout the site at appropriate heights to provide protection from predators. These bird boxes shall be maintained and monitored at least once a year to ensure upkeep.

9.3 POLLUTION OF THE ENVIRONMENT – NO IMPACT

Surface water runoff will be treated via a series PF Class 1 bypass petrol interceptors along the proposed road. These systems will treat storm water runoff to ensure no hydrocarbons could potentially impact the river waterbody. Therefore, no impacts are predicted in this regard.

Given the nature of the proposed development, foul water treatment is not required. Therefore, no impacts are predicted in this regard.

All measures set out in the in this Ecological Impact Assessment are to be adhered to, to mitigate potential pathway for pollution. All measures will be read in conjunction with the *Natura Impact Statement* prepared by Enviroplan Consulting Ltd.

10 IMPACTS ON NATIONALLY DESIGNATED SITES

No potential impacts on European sites are predicted regarding this proposed development. The site is located .2 kilometers to the north of the Lower River Suir SAC and 2.9 kilometers west of the River Barrow and River Nore SAC. The Luffany_010 River waterbody flows through the site. Therefore, indirect impacts/effects could not be ruled out during the construction phase of development due to potential silt-laden surface water run-off potentially resulting in water quality deterioration in the Lower River Suir SAC, and subsequently the River Barrow and River Nore SAC, in the absence of mitigation measures. The above mitigation measures and the measures within the Natura Impact Statement prepared by Enviroplan Consulting Ltd which has been submitted as part of this planning application ensure no impacts are predicted during the construction phase.

Surface water runoff will be treated via a series PF Class 1 bypass petrol interceptors along the proposed road. These systems will treat storm water runoff to ensure no hydrocarbons could potentially impact the river waterbody. Therefore, no impacts are predicted in this regard.

11 CONCLUSION

The development will involve the construction of a road. Given the current use on the site, as there is an existing road in this area and established anthropogenic activity in this area, no long-term impacts are predicted with regards to flora and fauna in the vicinity.

Provided that the proposed development is constructed and operated in accordance with the design, best practice and mitigation that is described within this application, significant effects on ecology are not anticipated.

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