

TOBIN

Monaghan County Council
The Old Cross Square to
Annahagh Roundabout Link
Road
Appropriate Assessment
Screening Report



Comhairle Contae Mhuineacháin
Monaghan County Council

BUILT ON KNOWLEDGE

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TABLE OF CONTENTS

1.	Introduction	3
1.1	Background and Aim of Report	3
2.	The Appropriate Assessment Process	5
2.1	Legislative Context	5
2.2	Stages Involved in the Appropriate Assessment.....	6
3.	Statement of Competence	8
4.	Methodology.....	9
4.1	Legislation and Guidance.....	9
5.	Description of the Proposed Project	11
5.1	Site Location.....	11
5.2	Overview of the Proposed Project.....	11
5.3	Description of the Existing Environment.....	12
5.4	Multidisciplinary Ecological Walkover Survey	24
6.	Sources of Potential Impacts.....	36
6.1	Habitat Loss.....	36
6.2	Habitat Degradation	36
6.3	Noise and Lighting Disturbance	37
7.	Determining the Likely Zone of Influence	38
7.1	Habitat Loss.....	38
7.2	Habitat Degradation	38
7.3	Noise and Lighting Disturbance	39
8.	European Sites Within the ZoI and Identification of Likely Significant Effects	41
8.1	Analysis of Potential Effects.....	41
8.2	Analysis of Potential In-Combination Effects	42
8.3	Screening Assessment Conclusion.....	45
9.	References	46

List of Tables

Table 5-1: River Basin Management Plan (RBMP) – Lough Neagh and Lower Bann Catchment (Code 03).....	17
Table 5-2: National Biodiversity Data Centre Records of Protected and Invasive Fauna within 2km Grid Squares Overlaying the Study Area	21
Table 5-3: Representative Habitats and Species within the Feasibility Study Area (DAFOR - Dominant; Abundant; Frequent; Occasional; Rare).....	28
Table 8-1: Assessment of Potential Impact to Slieve Beagh SPA.....	41

List of Figures

Figure 1-1: Feasibility Study Area (©OpenStreetMap).....	4
Figure 5-1: European Sites (Source NPWS Designations Viewer) Within 15km of the Project	14
Figure 5-2: Natural Heritage Area (NHA) Protected Sites (Source NPWS Designations Viewer) Within 15km of the Project	15
Figure 5-3: Proposed Natural Heritage Area (pNHA) Protected Sites (Source NPWS Designations Viewer) Within 15km of the Project.....	16
Figure 5-4: WFD Status (2016-2021) of Waterbodies in the Vicinity of the Project (Source: EPA Envision mapping https://gis.epa.ie/EPAMaps/).....	19
Figure 5-5: Habitat Map and Ecology Observations at the Feasibility Study Area.....	27
Figure 7-1: Project Boundary and Adjacent Watercourses and Direction of Flow	40

1. Introduction

1.1 Background and Aim of Report

Monaghan County Council is proposing the construction of a link road to connect the Old Cross Square Roundabout in Monaghan Town with the Annahagh Roundabout on the N2, approximately 1.3km to the east. To inform route selection for the link road the Council have commissioned a Feasibility Study and Options review. The feasibility study area under consideration for the location of the link road is shown in Figure 1-1.

This report presents a preliminary Appropriate Assessment (AA) screening for the link road project. Specifically, the aim of this report is to provide information in determining whether the construction of a link road, both alone and/or in-combination with other plans or projects, would be likely to have a significant impact on European sites, in the context of their conservation objectives and specifically on the habitats and species for which the sites have been designated. The assessment of potential impact has been undertaken based on knowledge of typical activities anticipated for the link road between the two roundabouts and takes into account the project's likely Zone of Influence (Zol) of activities.

The Birds Directive (2009/147/EC) and the Habitats Directive (92/42/EEC) put an obligation on EU Member States to establish the Natura 2000 network of sites of highest biodiversity importance for rare and threatened habitats and species across the EU. In Ireland, the Natura 2000 network of European sites comprises Special Areas of Conservation (SACs, including candidate SACs) and Special Protection Areas (SPAs, including candidate SPAs). SACs are selected for the conservation of Annex I habitats (including priority habitats) and Annex II species (other than birds), while SPAs are selected for the conservation of Annex I birds and other regularly occurring migratory birds and their habitats. Habitats and/or (non-bird) species for which an SAC or SPA is selected are referred to as Qualifying Interests (QIs) while bird species for which a SPA is selected are referred to as Special Conservation Interests (SCIs).

The Birds and Habitats Directives set out measures and obligations in relation to nature conservation of SACs and SPAs. A key protection measure is the requirement to consider the possible impact of any project or plan on the Natura 2000 network before any decision is made to allow that project or plan to proceed. Every new project or plan must not only meet this requirement but also consider its potential combined effects with other plans and projects during the AA process at any stage of approval.

The obligation to undertake AA derives from Article 6(3) and 6(4) of the Habitats Directive. Article 6(3) is concerned with the strict protection of sites, while Article 6(4) is the procedure for allowing derogation from Article 6(3) in certain circumstances. As set out in the Planning and Development Act 2000 as amended, a screening for AA of an application for consent for a proposed plan or project be carried out by the competent authority to assess, in view of best scientific knowledge, if the project, individually or in-combination with another plan or project is likely to have a significant effect on any European site.

Once a final route for the link road has been selected by the Council, and the details of the construction activities clearly defined, a full AA screening for the project will be prepared to



2. The Appropriate Assessment Process

The AA process is an assessment of the potential for likely significant effects of a project or plan, alone and/or in-combination with other projects or plans, on the conservation objectives of a European site(s). As noted, the Natura 2000 network is made up of European sites including SPAs, established under the EU Birds Directive (2009/147/EC) (more generally referred to as the 'Birds Directive') and SACs, established under the EU Habitats Directive (92/43/EEC) (more generally referred to as the 'Habitats Directive'). The Natura 2000 network helps provide for the protection and long-term survival of Europe's most valuable and threatened species and habitats.

A series of questions are asked during the Screening Stage of the AA process to determine:

- whether a project or plan can be excluded from AA requirements because it is directly connected with or necessary to the management of a European site; and
- whether the project or plan will have a potentially significant effect on a European site, either alone or in-combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential impacts.

2.1 Legislative Context

The European Communities (EC) Habitats Directive 92/43/EEC or 'the Habitats Directive' and the Council Directive 2009/147/EC on the conservation of wild birds or 'the Birds Directive' have been transposed into Irish law by EC (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011; hereafter referred to as the Birds and Habitats Regulations). The Birds Directive seeks to protect birds of special importance and their habitats by the designation of SPAs. The Habitats Directive does the same for habitats and other species groups with SACs.

The requirement for an AA is outlined in Article 6(3) and further expanded upon in Article 6(4) of the Habitats Directive. Article 6(3) of the Habitats Directive requires that:

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

This provision was transposed into Irish law by Part XAB of the Planning and Development Acts, as amended. Section 177U (4) of the said Acts provides for screening for Appropriate Assessment as follows:

- *'The competent authority shall determine that an appropriate assessment of [...] a proposed development [...] is required if it cannot be excluded, on the basis of objective information, that the [...] proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.'*

Section 177U (5) provides as follows:

- *'The competent authority shall determine that an appropriate assessment of a [...] proposed development, [...], is not required if it can be excluded, on the basis of objective information, that the [...] proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site.'*

Article 6(4) of the Habitats Directive requires that:

- *'If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.'*

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission to other imperative reasons of overriding public interest.

An AA should be based on best scientific knowledge and the competent authority should ensure that expertise such as ecological, geological, and hydrological are utilised, where relevant.

The Court of Justice of the European Union (CJEU) has made a number of rulings in relation to AA, regarding when it is required, its purpose, and the standards it should meet. Consideration has been given to the evolution in interpretation and application of directives and national legislation arising from jurisprudence of the European and Irish courts, in respect of Article 6 of the Habitats Directive.

2.2 Stages Involved in the Appropriate Assessment

There are potentially four stages in the AA process; the result of each stage determines the requirement for assessment under the next.

Stage 1: Screening / Test of Significance

This process identifies the likely significant effects upon a European site from a proposed project or plan. Its purpose is to determine, on the basis of a preliminary assessment and objective criteria, whether a project or plan or which is not directly connected with or necessary to the management of the site as a European site, individually or in-combination with other project or plan is likely to have a significant effect upon the European site, in view of its conservation objectives. A project may be 'screened-in' as requiring a Stage Two AA if there is a possibility or uncertainty of possible effects upon the European site. If there is no evidence to suggest significant effects due to the proposed project or plan the development is 'screened-out' from further assessment.

Stage 2: Appropriate Assessment

In this stage, consideration is given to ascertain whether the plan or project would adversely affect the integrity of a European site(s), either alone or in-combination with other plans or projects, with respect to the European site's structure and function and its conservation



objectives. This stage of the assessment is carried out by the consenting authority and is informed by a Natura Impact Statement (NIS). A NIS is required where there is uncertainty as to whether or not an adverse effect arises, uncertainty of the effect itself, or a potential effect has been defined which requires further procedures/mitigation to remove uncertainty of a defined impact (i.e. significant effects cannot be excluded). Where there are adverse effects, an assessment of the potential mitigation to ameliorate those effects is required. If the assessment results in a negative conclusion, i.e., adverse effects on the integrity of a site cannot be excluded (by design or mitigation) or there is uncertainty as to whether an adverse impact arises, then the process must consider alternatives (Stage 3) or proceed to Stage 4.

Stage 3: Assessment of Alternatives

This stage of the potential process arises where adverse effects on the integrity of a European site cannot be excluded and examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the European site.

Stage 4: Assessment Where Adverse Effects Remain

This is the derogation process of Article 6(4), which examines whether there are imperative reasons of overriding public interest [IROPI] for allowing a project or plan to proceed where adverse effects on the integrity of a European site have been predicted. Compensatory measures must be proposed and assessed as part of this stage and the EU Commission must be informed of the compensatory measures.

3. Statement of Competence

This report was informed by field surveys undertaken by Ecologist Sarah Nolan (B.Sc., M.Eng.Sc.), a desktop study and impact assessment undertaken by Dr. James Forde (B.Sc., M.Sc., Ph.D.) and senior reviewed by Lead Ecologist Laura Kennedy (B.Sc., M.Sc.).

Sarah Nolan is a Project Ecologist at TOBIN. Sarah has 8 years' experience in the environmental sector, with 3.5 years within the environmental consultancy sector. Sarah's experience includes Screening for Appropriate Assessment, Natura Impact Statements, Preliminary Ecological Constraints Report, Preliminary Ecological Appraisal Reports and Environmental Impact Assessment Reporting.

James Forde is a Technical Director and Senior Ecologist at TOBIN. James has almost 20 years' academic and environmental consultancy experience. He has an extensive understanding of ecology and appreciation of the objectives and mechanisms of national and international environmental legislation and policy. He has significant experience in preparing and reviewing ecological reports including Screenings for Appropriate Assessments, Natura Impact Statements and Ecological Impact Assessments. James has provided strategic technical and environmental advice for developments across a wide range of sectors, including onshore and offshore renewables, telecommunications, flood relief schemes, port and harbour developments, energy generation and transmission. James holds B.Sc. (hons) and M.Sc. degrees in marine ecology from the University of North Wales, Bangor, and a Ph.D. in ecology from the University of Galway. James is also a full member of the CIEEM.

This report was senior reviewed by Laura Kennedy (M.Sc.), TOBIN Lead Ecologist and Associate Director. Laura has over 17 years' experience in environmental sciences and environmental consulting. Laura's expertise includes Project Management, EIA, AA, terrestrial, ornithological and aquatic ecological surveying, data analysis, environmental monitoring, and preparing technical reports. Laura has a strong technical background as an aquatic ecologist and has extensive field experience in biological and chemical water quality assessment. She has also conducted bird and nest surveys, bat surveys, amphibian surveys, and carried out fish habitat assessments, which included electrofishing, minnow trapping and fish identification.

4. Methodology

4.1 Legislation and Guidance

This preliminary AA Screening report has been prepared having regard to the following legislation and guidance:

- Planning and Development Act 2000, as amended including Part XAB;¹
- European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. No. 477 of 2011);
- Communication from the Commission on the Precautionary Principle. Office for Official Publications of the European Communities, Luxembourg (European Commission, 2000)²;
- Managing Natura 2000 Sites – The Provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (European Commission, 2018)³;
- Interpretation Manual of European Union Habitats. Version EUR 28. European Commission (European Commission, 2013)⁴;
- Appropriate Assessment of Plans and Projects in Ireland, Guidance for Planning Authorities, Department of the Environment, Heritage, and Local Government (DoEHLG, 2010)⁵;
- Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission. Office for Official Publications of the European Communities, Luxembourg (European Commission, 2007)⁶;
- Assessment of Plans and Projects in Relation to Natura 2000 sites – Methodological guidance on Article 6(3) and (4) of the Habitats Directive 92/43/EEC (EC, 2021a)⁷;
- Appropriate Assessment Screening for Development Management. Office of the Planning Regulator, Practice Note - Appropriate Assessment Screening for Development Management (OPR, 2021)⁸;
- Applications for Approval for Local Authority Developments made to An Bord Pleanála under 177AE of the Planning and Development Act, 2000, as amended (Appropriate Assessment) – Guidelines for Local Authorities (An Bord Pleanála, 2013)⁹;

¹<https://revisedacts.lawreform.ie/eli/2000/act/30/revised/en/html>

²<https://op.europa.eu/en/publication-detail/-/publication/21676661-a79f-4153-b984-aeb28f07c80a/language-en>

³https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/Provisions_Art_6_nov_2018_en.pdf

⁴https://ec.europa.eu/environment/nature/legislation/habitatsdirective/docs/Int_Manual_EU28.pdf

⁵https://www.npws.ie/sites/default/files/publications/pdf/NPWS_2009_AA_Guidance.pdf

⁶https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/guidance_art6_4_en.pdf

⁷<https://www.opr.ie/wp-content/uploads/2021/03/9729-Office-of-the-Planning-Regulator-Appropriate-Assessment-Screening-booklet-15.pdf>

⁸<https://www.opr.ie/wp-content/uploads/2021/03/9729-Office-of-the-Planning-Regulator-Appropriate-Assessment-Screening-booklet-15.pdf>

⁹<https://www.pleanala.ie/getmedia/0f385f48-7e84-43e3-b405-1201e490740a/Applications-for-approval-for-LA-Developments-S177AE-EN.pdf>



- Nature and biodiversity cases: Ruling of the European Court of Justice. Office for Official Publications of the European Communities, Luxembourg (European Commission, 2006¹⁰);
- Council Directive 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora¹¹;
- Guidance Document on the Strict Protection of Animal Species of Community Interest under the Habitats Directive (EC, 2021b)¹²; and
- Fossitt (2000). A Guide to Habitats in Ireland. The Heritage Council, Kilkenny.¹³

This report has also been prepared with regard to relevant rulings by the CJEU, the High Court, and the Supreme Court. As noted, a review of Article 6 of the Habitats Directive, Rulings of the European Court Justice (Sundseth and Roth, 2014) and other relevant rulings was undertaken.

Definitions of conservation status, integrity and significance used in this assessment are defined in accordance with 'Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC' (EC, 2018):

- Favourable conservation status (FCS) can only be defined and achieved at the level of the natural range of a species or a habitat type. A broad conservation objective aiming at achieving FCS can therefore only be considered at an appropriate level, such as for example the national, biogeographical, or European level. The conservation measures have to correspond to the ecological requirements of the natural habitat types in Annex I and of the species in Annex II present on the site. The ecological requirements of those natural habitat types and species involve all the ecological needs which are deemed necessary to ensure the conservation of the habitat types and species. They can only be defined on a case-by-case basis and using scientific knowledge.
- The integrity of a European site is defined as the coherent sum of the site's ecological structure, function, and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated.
- Significant effect should be determined in relation to the specific features and environmental conditions of the protected site concerned by the plan or project, taking particular account of the site's conservation objectives and ecological characteristics.

¹⁰<https://op.europa.eu/en/publication-detail/-/publication/52ffbda7-7ca8-469f-8be2-953a20d8ab41/>

¹¹<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043>

¹²https://ec.europa.eu/environment/nature/conservation/species/guidance/index_en.htm

¹³<https://www.npws.ie/sites/default/files/publications/pdf/A%20Guide%20to%20Habitats%20in%20Ireland%20-%20Fossitt.pdf>

5. Description of the Proposed Project

5.1 Site Location

Monaghan County Council is considering the construction of a link road to connect the Old Cross Square Roundabout in Monaghan Town with the Annahagh Roundabout on the N2, approximately 1.3km to the east. The area under consideration for the link road is shown in Figure 1-1 above.

5.2 Overview of the Proposed Project

A high-level description of the anticipated activities is presented below.

5.2.1 Construction Phase Activities

The link road development will consist of works to clear vegetation, trees, and topsoil, followed by earthworks to level the ground and remove any obstructions to facilitate the construction works.

The link road will be constructed across green field areas and it is not envisaged that works will generate significant construction waste, such as hardcore stone and gravel. Every effort will be made to recycle and re-use materials on site. If waste is generated it will be disposed off-site to a licenced facility. Any disturbed areas outside of the proposed infrastructure will be reinstated following the completion of the works. During works excavated material will be stored at temporary storage areas within the project site.

Construction of the road will require land grading to create the desired road alignment and ensure proper drainage. Drainage systems to be installed for the link road will include culverts to manage stormwater. The works will likely entail the draining of water and an installation of culvert piping sections ensuring they are correctly aligned and have appropriate slope for drainage. The water discharge management system will be set up prior to water drainage taking place. This will include a silt bag system to capture water borne debris, silt and sediment. The silt bags required will depend on conditions on site and quantity of water been discharged.

For the link road a base layer of aggregate will be installed to form a foundation upon which the road surface will be constructed using asphalt (or concrete). Curbs, footpaths, road shoulders, traffic signs, lighting, and road markings will be installed.

Once the road is completed, the surrounding areas will be landscaped. This may include replanting with vegetation, with all disturbed areas restored and under compliance with regulatory requirements and environmental commitments.

5.2.2 Operation Phase Activities

The operation phase activities associated with the link road will include managing traffic flow and maintainance signage, road markings, and street lighting. Other routine maintenance will include resurfacing, pothole repairs, and maintenance of the drainage system. Vegetation alongside and adjacent to the link road will be maintained.

5.2.3 Decommissioning Phase Activities

The link road will become a permanent part of the road network in Monaghan; therefore, decommissioning is not anticipated, and associated impacts are not considered further in this report.

In the highly unlikely event that the link road is decommissioned, all infrastructure will be removed, and the area will be restored, including re-vegetation of lands and the removal and remediation of any pollution or damage caused by the road.

Prior to undertaking decommissioning, the Council will be required to apply for consent, accompanied by a full impact assessment.

5.3 Description of the Existing Environment

The description of the existing environment is based on 1) a desktop review of existing constraints, and 2) a multidisciplinary ecological walkover survey conducted to identify ecological constraints within the feasibility study area shown in Figure 1-1 above.

5.3.1 Desktop Review

A desktop review was carried out to identify, describe, and map areas of known and/or potential ecological constraints within the study area. The desktop study also considered European and Nationally designated sites within a 15km radius of the project (as an initial approach only, see Section 7). The material sources consulted as part of the desktop review included the following:

- A review of the National Parks and Wildlife Service (NPWS) natural heritage database for designated areas of ecological interest and sites of nature conservation importance within and adjacent to the study area¹⁴;
- A review of the NPWS rare and threatened species database for records of species of conservation interest within the study area¹⁵;
- A review of the Water Framework Directive (WFD) including rivers, lakes, and streams¹⁶;
- A review of the Environmental Protection Agency (EPA) mapping database¹⁷;
- Literature/data review of the protected species under the EU Habitats Directive and the Wildlife Act (as amended) to identify and collate relevant published information on both ecological aspects of the study area and relevant ecological studies conducted in other areas, including the following:
 - National Biodiversity Data Centre (NBDC) online database¹⁸;
 - Bat Conservation Ireland's website¹⁹;
 - Irish Butterflies website²⁰; and

¹⁴ <https://www.npws.ie/protected-sites>

¹⁵ <https://www.npws.ie/maps-and-data/habitat-and-species-data>

¹⁶ <https://www.catchments.ie/guide-water-framework-directive/>

¹⁷ <https://gis.epa.ie/EPAMaps/>

¹⁸ <http://maps.biodiversityireland.ie>

¹⁹ <http://www.batconservationireland.org>,

²⁰ <http://www.irishbutterflies.com>



- Inland Fisheries Ireland (IFI) research data, including a review of research studies carried out for the Habitats Directive and Red Data Book Fish species within the receiving environment²¹.

5.3.2 Designated Sites

The nearest European site to the project is Slieve Beagh SPA (site code: 004167). This site is located approximately 11km northwest of the project and is designated for hen harrier (*Circus cyaneus*) (species code: A082). The location of the site relative to the project is shown in Figure 5-1.

5.3.3 Sites of National Importance

Natural Heritage Areas (NHAs) are the basic wildlife designation in Ireland. These areas contain nationally important habitats and flora and fauna species that need protection. Under the Wildlife Act (as amended), NHAs are legally protected from damage from the date they are formally proposed for designation. Proposed Natural Heritage Areas (pNHAs) were published on a non-statutory basis in 1995 and have not since been statutorily proposed or designated.

There is one NHA site, Eshbrack Bog NHA (site code: 002364), located within a 15km radius of the project, as illustrated on Figure 5-2. This NHA is located approximately 13km from the project.

The project is within 15km of the following 18 pNHAs:

- Dromore Lakes (site code: 000001)
- Emy Lough (site code: 000558)
- Glaslough Lake (site code: 000559)
- Monmurray Grassland (site code: 000562)
- Cordoo Lough (site code: 001268)
- Drumreaske Lough (site code: 001602)
- Rafinny Lough (site code: 001606)
- Ulster Canal (Aghalisk) (site code: 001611)
- Wright's Wood (site code: 001612)
- Tassan Lough (site code: 001666)
- Lisarilly Bog (site code: 001781)
- Corcreeghy Lake And Woodland (site code: 001783)
- Rosefield Lake And Woodland (site code: 001784)
- Mullaghmore Lake (South) (site code: 001785)
- Mullaglassan Lough (site code: 001837)
- Kilcorran Lough (site code: 001838)
- Killyvilly Lough (site code: 001839)
- Lislannan Bog (site code: 001840)

The location of the project relative to the pNHA sites is shown in Figure 5-3.

21

<https://www.fisheriesireland.ie/sites/default/files/migrated/docman/Habitats%20Directive%20Report%202018.pdf>

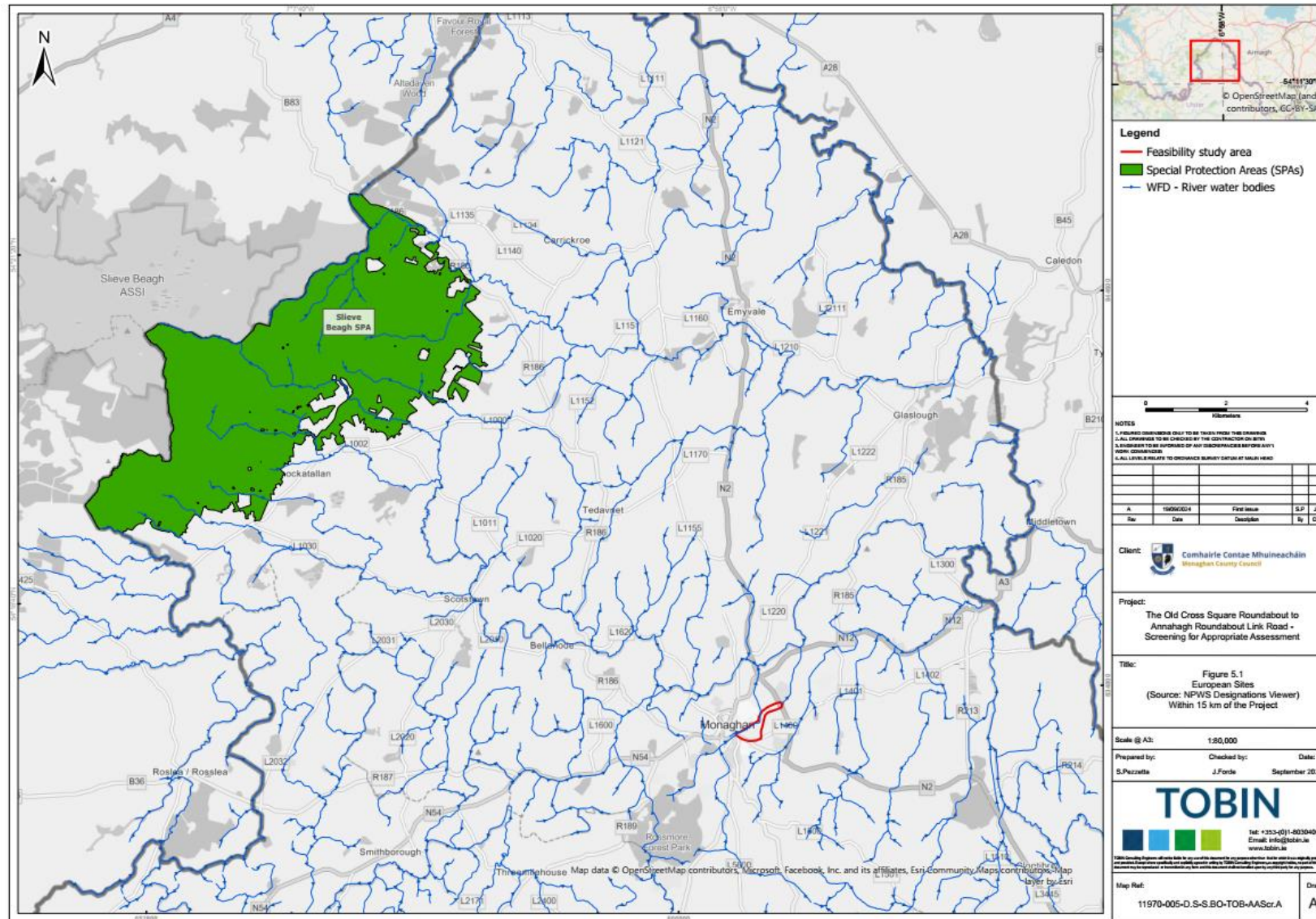


Figure 5-1: European Sites (Source NPWS Designations Viewer) Within 15km of the Project



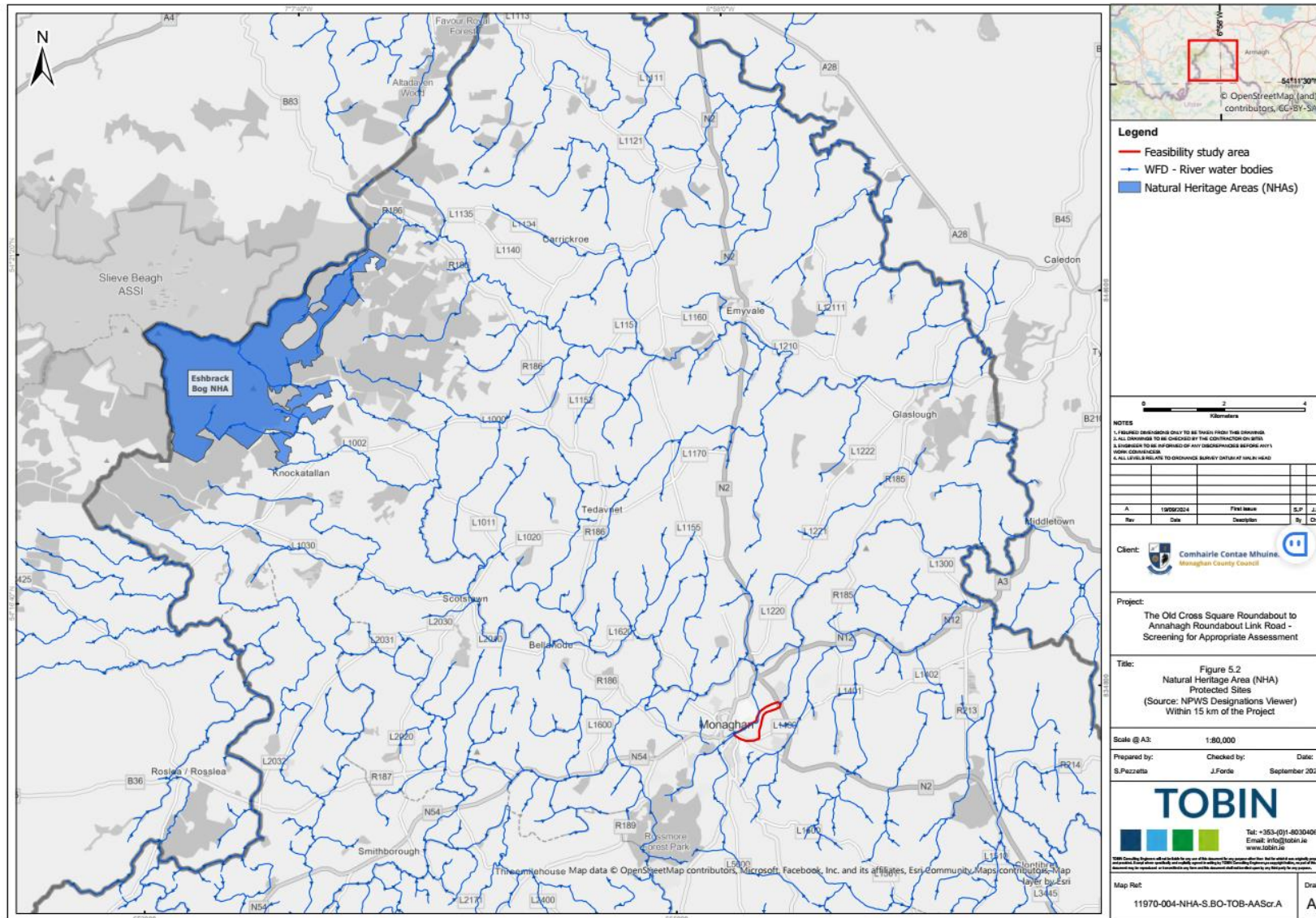


Figure 5-2: Natural Heritage Area (NHA) Protected Sites (Source NPWS Designations Viewer) Within 15km of the Project



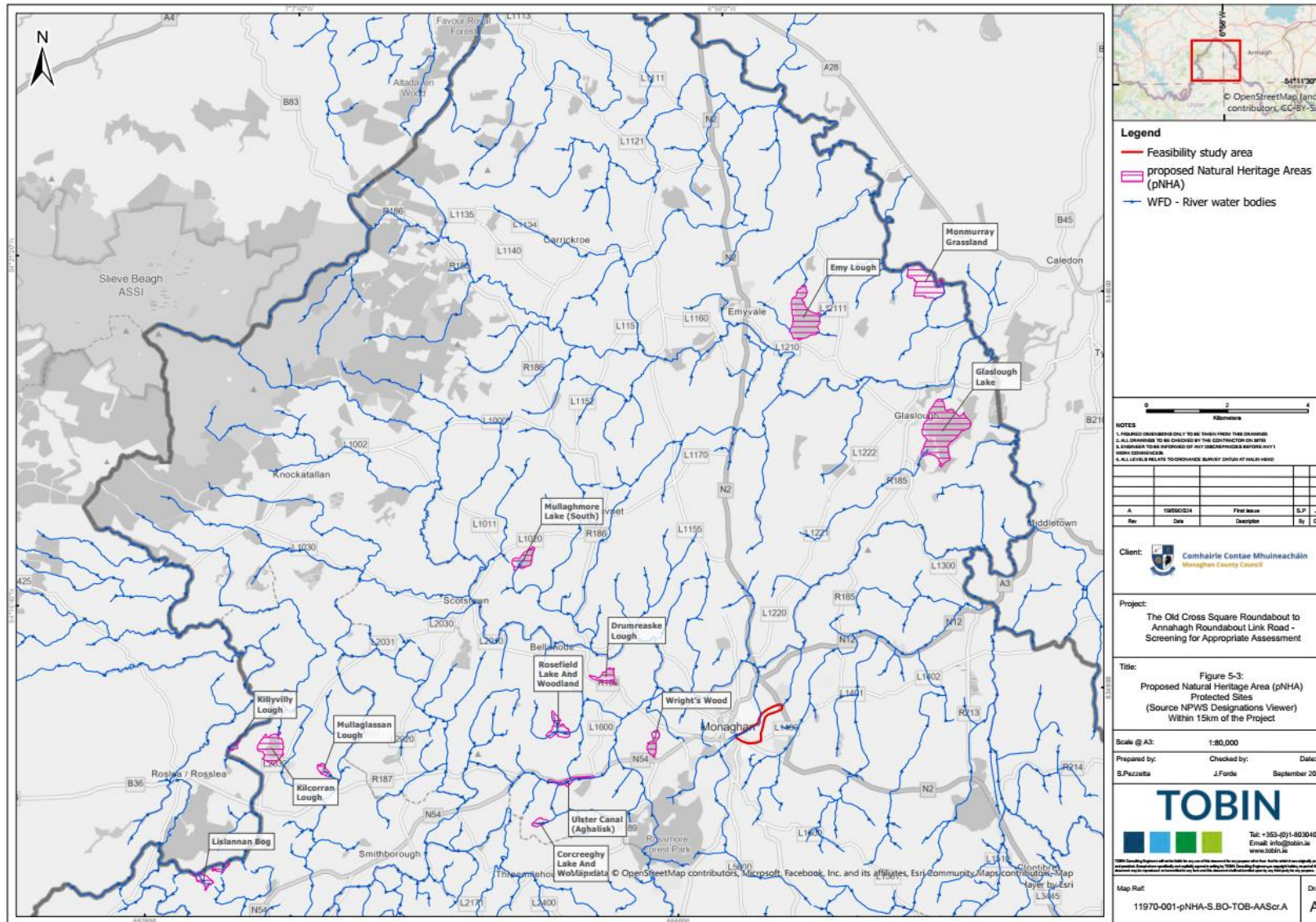


Figure 5-3: Proposed Natural Heritage Area (pNHA) Protected Sites (Source NPWS Designations Viewer) Within 15km of the Project



5.3.4 Other Sites of Conservation Interest

Other sites of nature conservation within 15km of the project are discussed hereunder:

- There are no National Parks located within 15km of the project.
- There are no Nature Reserves located within 15km of the project.
- There are no Ramsar sites within 15km of the project.

5.3.5 Water Quality

River Basin Management Plan for Ireland 2022-2027 (3rd Cycle)

The WFD sets out the environmental objectives which are required to be met through river basin planning and implementation of those plans. For surface water, groundwater and protected areas, specific objectives are set out to achieve those objectives. The River Basin Management Plan (RBMP) sets out priorities guiding its implementation. The EPA has published a draft assessment for each of Ireland’s 46 catchments providing an overview of the status of the catchment. The RBMP assesses the quality of water and presents detailed scientific characterisation of our water bodies. The characterisation process identifies water bodies that are At Risk of not meeting the objectives of the WFD and identifies the significant pressures causing this risk.

Data relating to the watercourses in the vicinity of the project are provided in Table 5-1 and the location of these shown in Figure 5-4.

Table 5-1: River Basin Management Plan (RBMP) – Lough Neagh and Lower Bann Catchment (Code 03)

<p>Overview This catchment includes the area drained by the River Bann and by all streams entering tidal water between the Barmouth and Ballyaghan Point, Co. Derry. This is a cross-border catchment with a surface area of 5,787km², 374km² of which is located within the Republic. The largest urban centre in the catchment is Monaghan town. The catchment is divided into six sub catchments and has 33 surface water bodies and 11 groundwater bodies. The project site is located within Blackwater [Monaghan]_SC_010 sub catchment. The sub catchment includes nine river water bodies, including the Shambles River which runs adjacent to the project. The sub catchment also includes one lake water body.</p> <p>Summary of Cycle 2. Four of the nine river water bodies within this sub catchment, including the Shambles which flow from adjacent to the project, are at RISK due to Poor biological status.</p>				
River Waterbody	WFD Risk	WFD Status (2016 – 2021)	Significant Pressure	Pressure category
BLACKWATER (MONAGHAN)_010	Review	Good	No	-
BLACKWATER (MONAGHAN)_020	Not at risk	Good	No	-
BLACKWATER (MONAGHAN)_030	Not at risk	Good	No	-
BLACKWATER (MONAGHAN)_040	At risk	Poor	Yes	Urban Waste Water, Urban Run Off
CONAWARY (LOWER)_010	At risk	Poor	Yes	Agriculture, Hydromorphology
CONAWARY (LOWER)_020	At risk	Poor	Yes	Agriculture, Domestic Waste Water
SHAMBLES_010	At risk	Poor	Yes	Urban Run-off



SCOTSTOWN_010	Not at risk	High	No	-
SCOTSTOWN_020	Not at risk	High	No	-
Lake Waterbody	WFD Risk	WFD Status (2016 - 2021)	Significant Pressure	Pressure category
Lambs	Review	Moderate	No	-





Figure 5-4: WFD Status (2016-2021) of Waterbodies in the Vicinity of the Project (Source: EPA Envision mapping <https://gis.epa.ie/EPAMaps/>)



5.3.6 National Biodiversity Data Centre

A review of data recorded by NBDC, within the 1km grid squares H6834, H6733, and H6833 which overlay the project, was conducted to assess the presence of protected species. The results of the data search are presented in Table 5-2.

As all bird species are protected under the Wildlife Act (as amended), only Annex I bird species protected by the EU Birds Directive or species listed as 'Red' (i.e., high conservation concern) under the Birds of Conservation Concern in Ireland (BoCCI) (Gilbert *et al.*, 2021) have been listed in Table 5-2.

A total of 11 bird species protected by Annex I of the EU Birds Directive and/or are BoCCI 'Red' listed species have been previously recorded within grid squares H6834, H6733, and H6833.

Three mammals and one amphibian were recorded in the grid squares. Of the three mammal species, one is listed under Annex IV species (i.e., bat species) under the Habitats Directive.

Additional Wildlife Act (as amended) protected species recorded included smooth newt (*Lissotriton vulgaris*), Eurasian red squirrel (*Sciurus vulgaris*), west European hedgehog (*Erinaceus europaeus*).

Table 5-2: National Biodiversity Data Centre Records of Protected and Invasive Fauna within 2km Grid Squares Overlaying the Study Area

Grid Square	Species name	Date of Last Record	Title of Dataset	Designation
Bird				
H6733	Barn Swallow (<i>Hirundo rustica</i>)	29/05/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
H6733	Black-headed Gull (<i>Larus ridibundus</i>)	14/04/2012	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List
H6733	Common Coot (<i>Fulica atra</i>)	18/05/2012	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section II Bird Species Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
H6733	Common Starling (<i>Sturnus vulgaris</i>)	29/05/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
H6733	Common Swift (<i>Apus apus</i>)	25/05/2023	Swifts of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
H6733	Common Wood Pigeon (<i>Columba palumbus</i>)	18/05/2012	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species



Grid Square	Species name	Date of Last Record	Title of Dataset	Designation
H6733	House Sparrow (<i>Passer domesticus</i>)	29/05/2023	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
H6733	Mallard (<i>Anas platyrhynchos</i>)	25/05/2023	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species Protected Species: EU Birds Directive >> Annex III, Section I Bird Species
H6733	Mute Swan (<i>Cygnus olor</i>)	10/12/2011	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
H6733	Rock Pigeon (<i>Columba livia</i>)	04/01/2018	Birds of Ireland	Protected Species: Wildlife Acts Protected Species: EU Birds Directive Protected Species: EU Birds Directive >> Annex II, Section I Bird Species
H6834	Spotted Flycatcher (<i>Muscicapa striata</i>)	18/05/2012	Birds of Ireland	Protected Species: Wildlife Acts Threatened Species: Birds of Conservation Concern Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
H6834	Daubenton's Bat (<i>Myotis daubentonii</i>)	31/07/2017	National Bat Database of Ireland	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts
Amphibian				
H6733	Smooth Newt (<i>Lissotriton vulgaris</i>)	29/06/2010	Newt Survey 2010-2014	Protected Species: Wildlife Acts
Mammal				
H6834	Daubenton's Bat (<i>Myotis daubentonii</i>)	31/07/2017	National Bat Database of Ireland	Protected Species: EU Habitats Directive Protected Species: EU Habitats Directive >> Annex IV Protected Species: Wildlife Acts



Grid Square	Species name	Date of Last Record	Title of Dataset	Designation
H6834 and H6733	Eastern Grey Squirrel (<i>Sciurus carolinensis</i>)	31/12/1981 and 31/12/2007	Mammal Recording Scheme 1970-1985 (An Foras Forbartha)	Invasive Species: Invasive Species Invasive Species: Invasive Species >> High Impact Invasive Species Invasive Species: Invasive Species >> EU Regulation No. 1143/2014 Invasive Species: Invasive Species >> Regulation S.I. 477 (Ireland)
H6833	Eurasian Red Squirrel (<i>Sciurus vulgaris</i>)	31/12/1982	Mammal Recording Scheme 1970-1985 (An Foras Forbartha)	Protected Species: Wildlife Acts
H6733	West European Hedgehog (<i>Erinaceus europaeus</i>)	23/03/2023	Hedgehogs of Ireland	Protected Species: Wildlife Acts



5.4 Multidisciplinary Ecological Walkover Survey

A multidisciplinary ecological walkover survey was carried out across the study area on the 4th of September 2024 to identify the habitats, flora and fauna present at the site.

A habitat assessment was undertaken in accordance with 'The Heritage Council's Best Practice Guidance for Habitat Survey and Mapping' (Smith *et al.*, 2011). Habitats were classified according to 'The Heritage Council's A Guide to Habitats in Ireland' (Fossitt, 2000) and following the 'EU Habitats Interpretation Manual for Annex I Habitats' (EC, 2013).

The study area was surveyed for protected flora and fauna and any evidence of Annex I habitats or Annex II species listed on the EU Habitats Directive (92/43/EEC) and any Annex I bird species listed on the EU Birds Directive (2009/147/EC).

Species protected under Flora Protection Order, 2022 (S.I. No. 235/2022) or listed under the Irish Red Data List of Irish Plants were also searched for. All semi-natural habitats encountered were surveyed, including data collection on dominant vegetation, qualitative consideration of plant species diversity, presence of protected flora, vegetation structure, topography, drainage, disturbance and management.

The study area was searched for evidence of invasive alien plant species (IAPS) listed in Part 1 of the Third Schedule of S.I No. 477/2011 – European Communities (Birds and Natural Habitats) Regulations (2011).

Buildings and trees were assessed for their bat roost potential in line with 'Best Practice Guidance for the Conservation of Bats in the Planning of National Road Schemes' (National Roads Authority [NRA], Undated) and 'Bat Surveys for Professional Ecologists: Good Practice Guidelines' (Collins, 2023).

Searches for evidence of protected species and or presence of suitable habitats were also carried out in line with methodologies outlined in the NRA Guidance: 'Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes' (NRA, 2009).

Mammal surveys were carried out within the study area, targeting potential breeding habitat and resting places in the vicinity of the watercourses, treelines and hedgerows. Key target mammal species included otter (*Lutra lutra*). Otter surveys were conducted in accordance with NRA (2008) guidelines and 'Monitoring the Otter *Lutra lutra*' (Chanin, 2003), along waterbodies within the study area to confirm otter presence. This included surveys along all drains and watercourses within accessible lands, checking for signs of otter presence and activity, such as holts (breeding and temporary), slides and territorial marking points (spraints), with each sign recorded.

Other protected mammal species were also surveyed for, such as badger (*Meles meles*), red squirrel (*Sciurus vulgaris*), Irish hare (*Lepus timidus hibernicus*).

A walkover aquatic ecological survey was also carried out at locations hydrologically connected to the study area. These locations, where feasible, were selected as being representative of the local aquatic environment, to establish the existing baseline freshwater ecology.



Following the completion of the desktop review and field survey, habitat maps of the study area were prepared according to the methodology outlined in Smith *et al.* (2011).

5.4.1 Habitats and Flora

The ecological walkover survey mapped a total area of 682,008m². The area is predominantly composed of Improved Agricultural Grassland (GA1) at 255,241.6m², followed by buildings and artificial surfaces (BL3) covering 225,286.6m², with smaller areas of Wet Grassland (GS4) at 97,370.5m², Mixed Broadleaved Woodland (WD1) at 95,708.1m², and Mixed Broadleaved/Conifer woodland (WD2) at 8,401.3 m². Walkover survey results for the habitats identified are presented in



Table 5-3.



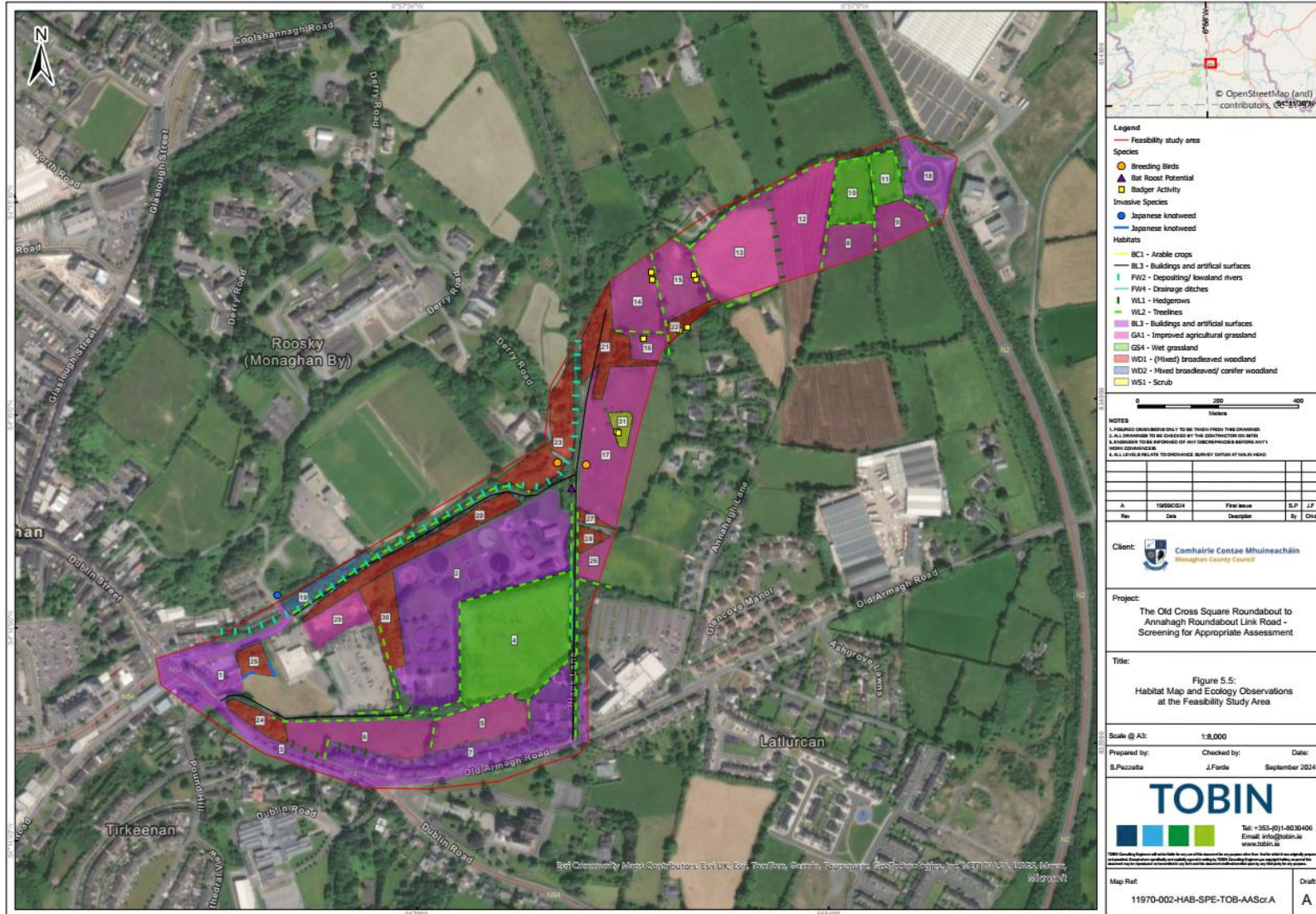


Figure 5-5: Habitat Map and Ecology Observations at the Feasibility Study Area



Table 5-3: Representative Habitats and Species within the Feasibility Study Area (DAFOR - Dominant; Abundant; Frequent; Occasional; Rare).

Habitat (Fossitt, 2000) Habitat Category	Map Label	Dominant	Abundant	Frequent	Occasional	Rare	Area m ²
BL3 - Buildings and Artificial Surfaces	1						9,399.43
BL3 - Buildings and Artificial Surfaces	2						107,986.40
BL3 - Buildings and Artificial Surfaces	3						45,843.42
GS4 - Wet Grassland	4	Perennial Ryegrass	Soft rush		Silverweed		72,191.33
GA1 - Improved Agricultural Grassland	5	Perennial Ryegrass		Broadleaf dock			21,295.56
GA1 - Improved Agricultural Grassland	6	Perennial Ryegrass		Yorkshire fog, fescue, broadleaf dock	Marsh thistle		28,527.51
BL3 - Buildings and Artificial Surfaces	7						46,943.39
GA1 - Improved Agricultural Grassland	8	Perennial Ryegrass	Ragwort, broadleaf dock		Soft rush		11,527.91
GA1 - Improved Agricultural Grassland	9	Perennial Ryegrass	Ragwort, broadleaf dock				11,290.52
GS4 - Wet Grassland	10	Perennial Ryegrass, soft rush					15,897.08



Habitat (Fossitt, 2000) Habitat Category	Map Label	Dominant	Abundant	Frequent	Occasional	Rare	Area m ²
GS4 - Wet Grassland	11	Perennial Ryegrass, soft rush					9,282.08
GA1 - Improved Agricultural Grassland	12	Perennial Ryegrass					35,118.86
GA1 - Improved Agricultural Grassland	13	Perennial Ryegrass			Soft rush, meadow buttercup	Nettle	40,513.85
GA1 - Improved Agricultural Grassland	14	Perennial Ryegrass			Soft rush, ragwort	Meadow buttercup, Yorkshire fog, marsh thistle	20,887.59
GA1 - Improved Agricultural Grassland	15	Perennial Ryegrass		Ragwort	Soft rush, meadow buttercup	Rash thistle	18,740.61
GA1 - Improved Agricultural Grassland	16	Perennial Ryegrass			Broadleaf dock, soft rush, meadow buttercup, marsh thistle	Hawk bit, Yorkshire fog	5,322.61
GA1 - Improved Agricultural Grassland	17	Perennial Ryegrass			Broadleaved dock, ragwort, soft rush		43,478.59
BL3 - Buildings and Artificial Surfaces	18						15,113.91



Habitat (Fossitt, 2000) Habitat Category	Map Label	Dominant	Abundant	Frequent	Occasional	Rare	Area m ²
WD2 - Mixed Broadleaved/ Conifer Woodland	19	Sycamore, ivy		Leydandii	Grey willow, ash, Sitka spruce	Hawthorn	8,401.28
WD1 - (Mixed) Broadleaved Woodland	20	Grey willow	Nettle, bramble, ivy	Sycamore, field maple		Hawthorn, white willow	195,62.51
WD1 - (Mixed) Broadleaved Woodland	21	Hawthorn	Ash, ivy		Bramble, blackthorn		18,708.01
WD1 - (Mixed) Broadleaved Woodland	22		Bramble, ivy	Elder, ash, blackthorn, hawthorn	Herb Robert	Sycamore	3,866.47
WD1 - (Mixed) Broadleaved Woodland	23		Grey willow, sycamore	Bramble, beech	Hawthorn, white willow, hazel, bindweed, willowherb, nettle		21,627.35
WD1 - (Mixed) Broadleaved Woodland	24	Ash	Sycamore, ivy		Elder, snowberry, butternut		6,951.28
WD1 - (Mixed) Broadleaved Woodland	25	Grey willow		Ash, hawthorn	Nettle, ivy, bramble		5,204.32
GA1 - Improved Agricultural Grassland	26	Perennial Ryegrass			Broadleaved dock, meadow buttercup		6,013.11



Habitat (Fossitt, 2000) Habitat Category	Map Label	Dominant	Abundant	Frequent	Occasional	Rare	Area m ²
WD1 - (Mixed) Broadleaved Woodland	27		Silver birch	Dog wood, bramble, bindweed	Grey willow, white willow	Field maple, hazel	1,694.37
WD1 - (Mixed) Broadleaved Woodland	28		Silver birch	Dog wood, bramble, bindweed	Grey willow, white willow	Field maple, hazel	3,144.75
GA1 - Improved Agricultural Grassland	29						12,524.91
WD1 - (Mixed) Broadleaved Woodland	30						14,949.06
WS1 - Scrub	31	Blackthorn			Hawthorn, bramble, nettle		3,640.35



5.4.2 Aquatics

The watercourse flowing in northern section of the study area can be classified as FW2 - Depositing/Lowland River. This watercourse is characterised by riparian vegetation including sycamore, grey willow, ash, bramble, nettle, and bindweed. The riparian treeline is gappy and unmanaged, with large gaps present in places, and it is fenced off from the adjacent walkway. The riverbanks are heavily vegetated, with encroachment beginning to shade the river channel. The channel itself appears to have been modified and straightened, and it flows slowly, with a section culverted under a bridge. The watercourse is assessed as having no fishery value.



Plate 5-1: FW2 - Depositing/Lowland River Watercourse at the Study Area

5.4.3 Mammals

Badger

In the northeast of the study area there was evidence of significant badger activity. Several active and non-active setts were recorded in areas of WD1 - (Mixed) Broadleaved Woodland and WS1 - Scrub and adjacent to the hedgerow/ treeline boundaries of GA1 Improved Agricultural Grassland. Mammal paths were evident leading from the setts to neighbouring fields, scrub and woodland. There are also several snuffle holes recorded at the base of trees within areas of GA1 - Improved Agricultural Grassland.



Plate 5-2: Badger Setts Recorded in WS1 - Scrub



Plate 5-3: Snuffle Holes Recorded on GA1 Improved Agricultural Grassland

Otter

No evidence of Annex II species was recorded within the project study area. No evidence of otter (*Lutra lutra*) activity, such as holts, pawprints or scat, were recorded within the study area during the survey. The watercourse was assessed as having no fishery value, and likely to be unfavourable for otter.

Bats

Potential bat roost assessment was undertaken at a derelict, abandoned house and nearby treeline northeast of the waste water treatment plant. The assessment involve an inspection of the building's features and surrounding habitats for signs of bat activity, such as droppings, staining, or the presence of bats themselves. Numerous gaps or crevices were identified as

potential roosts while the surrounding habitats, including the treeline, and adjacent agricultural land, may provide foraging areas and commuting routes for bats.



Plate 5-4: Bat Roost Potential at Abandoned Derelict House

5.4.4 Birds

No Annex I bird species listed on the EU Birds Directive (2009/147/EC) were recorded during the ecological survey.

Bird species recorded included common bird species typically found within the Irish countryside, including grey heron (*Ardea cinerea*) and yellow wagtail (*Motacilla flava*).

5.4.5 Invasive Alien Plant Species

Extensive stands of the Third Schedule invasive plant species Japanese knotweed (*Fallopia japonica*) were recorded in the treeline boundary of the WD1 - (Mixed) Broadleaved Woodland and GA1 - Improved Agricultural Grassland in the west of the site.



Plate 5-5: Extensive Japanese Knotweed in West of Study Area

6. Sources of Potential Impacts

There are several elements associated with the construction and operational phases of the link road project that may lead to direct and indirect impacts, potentially resulting in negative ecological effects either alone or in-combination with other plans and projects, and these elements, which have been considered for their potential effects, are discussed hereunder.

6.1 Habitat Loss

Earthworks and clearance of topsoil and subsoils to facilitate the construction of the link road and associated curbs, footpaths, road shoulders and drainage management system will result in habitat loss. Any loss will be confined to within the project area, and no habitats loss will occur inside any European site.

6.2 Habitat Degradation

6.2.1 Water Quality Impacts

Site clearance and earthwork activities will result in the generation of significant volumes of material. If not appropriately managed the material generated could result in an increase of suspended solids depositing in the adjacent Shambles (EPA Code: 03S01) watercourse. Increased silt loading in watercourses can stunt macrophyte growth, enhance filamentous algae growth, limit dissolved oxygen capacity and reduce the ecological quality of watercourses ultimately causing increased mortality of fish and other aquatic organisms.

Excavated material will be stored at temporary storage areas within the project site. Where suitable, excavated material will be reused on site for construction and / or landscaping. Material not utilised will be removed from the site for disposal at a licenced facility. At the temporary storage areas a silt bag system will be installed to capture water borne debris, silt and sediment, creating surface water runoff barriers.

There is also the potential for spills and leaks of oils, fuels and chemicals from plant and equipment and storage areas to impact on aquatic habitats. Entry of cement-based products to drains or other surface water features within the project represents a risk to the aquatic environment at and downstream of the release. Standard good operating practices will be followed throughout the project with spill kits and trained personnel addressing any accidental release, and designated fuelling and maintenance areas with leak containment measures (e.g. bunded storage areas for oils, fuels, and chemicals) to prevent leaks reaching aquatic habitats. Cement-based products will be prevented from entering drains/ surface waters using barriers, bunds, or sediment traps. Risk of impact will be further reduced by conducting works outside of periods of heavy rain.

6.2.2 Air Quality Impacts

Excavation activities will result in the temporary generation of dust at the works in the project area. Dust emissions associated with construction works could, in extreme circumstances, affect adjoining habitats (potentially burying sensitive habitat or plant species). Standard good working procedures to control dust include regularly spraying water on exposed soil and



excavation areas to suppress dust. Material at storage areas will be covered using tarps or geotextiles to minimise the risk of generation of windborne dust, while wheel washes will prevent dust from spreading outside the site.

Vehicle emissions generated in the area during the operational phase will include pollutants such as nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), and volatile organic compounds (VOCs). These emissions generated can contribute to poor air quality, particularly in areas with high traffic volumes. Construction plant will be kept in good working order and will observe speed limits to minimise emissions. During operation phase, other sources of pollution include dust and particulates from road surfaces, tire and brake wear.

6.2.3 Introduction of Invasive Alien Plant Species

The IAPS, Japanese knotweed, was recorded within the project study area during the ecological surveys. There is potential that the movement of construction vehicles and material to and from the site may result in the spread of the IAPS throughout the project site if not appropriately managed. The spread of IAPS has the potential to negatively impact habitats by shading and competitively excluding native plant species, providing less favourable habitats for native fauna (TII, 2020).

6.3 Noise and Lighting Disturbance

Construction works will result in an increase in noise levels during the construction phase, as well as an increase in personnel and traffic movement to and from the project area. Noise from the construction activity has the potential to cause disturbance to resting, foraging, and commuting species. Individual species will elicit differing behavioural responses to disturbance at different distances from the source of disturbance.

If required temporary construction lighting during the construction works could also deter movement of species in the area. The new lighting will result in a localised increase in artificial lighting within the immediate surrounding area. Temporary construction lighting will be directed away from sensitive habitats, such as river corridors and riparian margins, to avoid deterring species movement and reducing habitat disturbance. Lighting will be limited to the hours required for work to reduce disruption to nocturnal species. Light will be fitted louvers to minimise light spill into adjacent areas and habitats, ensuring light is focused only where necessary. Low-intensity, warm-coloured lighting (which has less impact on wildlife) will be used.



7. Determining the Likely Zone of Influence

As an initial approach, all European sites within a 15km radius were examined. It is noted that for some projects, the distance could be much less than 15km, and the project Zol must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, and the sensitivities of the ecological receptors, and the potential for in-combination effects.

For the current project, the source-pathway-receptor model (OPR, 2021) was used to identify viable pathways between the link road project and European sites which may result in likely significant effects on their QIs or SCIs. This conceptual model is a standard tool in environmental assessment. In order for an effect to occur, all three elements of this model must be in place. The absence or removal of one of the elements of the model means there is no likelihood for the effect to occur. In the context of the project, the model comprises:

- Source(s) – potential impacts from the project, e.g. loss of habitat, habitat degradation, disturbance;
- Pathway(s) – hydrological, physical, or ecological connectivity between the project and the European site(s); and
- Receptor(s) – QIs and/or SCIs of the European site(s).

In order to inform the source-pathway-receptor model, the Zol needs to be established. The Chartered Institute of Ecology and Environmental Management (CIEEM) defines the Zol of a project as the area(s) over which ecological features may be affected by the biophysical changes caused by the proposed project and associated activities (CIEEM, 2017). In order to establish the Zol of the project, the likely key biophysical changes associated with the project were determined having regard to the typical activities anticipated for the link road. A brief description of the anticipated activities is presented in Section 5 of this report, and associated potential impacts described in Section 6. The sources of impact associated with the project are 1) loss of habitats, 2) habitat quality degradation and 3) species disturbance. The Zol of the project (in the absence of any mitigation measures) is described hereunder.

7.1 Habitat Loss

The loss of habitats will be confined to within the project area. The Zol for this type of effect is defined as all lands within the feasibility study area under consideration for the location of the link road (as shown in Figure 1-1).

7.2 Habitat Degradation

7.2.1 Water Quality Impacts

With regards potential habitat degradation associated with the release of sediment and other pollutants to surface water, the Zol of the project is considered to include receiving waterbodies adjacent to, or downstream of the project site. The distance downstream is associated with the current biological condition of the accepting waterbody and its capacity to assimilate sediment and other pollutants.

Considering the sources for impacts on European sites, for the definition of the Zol for impacts associated with water pollution, hydrological connectivity will not be considered effective past the first water body of depositional nature is reached (e.g., lake water body; transitional water body).

The hydrological pathway for impacts from the project will therefore include the Shambles (EPA Code: 03S01) surface waterbody. The location of this waterway with regards to the feasibility study area is shown Figure 7-1. This waterbody flows for approximately 800m in a northwest direction within the northern part of the project area before flowing due north to join the Blackwater [Monaghan] River (EPA Code: 03B01) which flows north west and north.

Figure 7-1 also shows the nearest European site to the project area; Slieve Beagh SPA. This European site has no downstream connectivity to the project area.

7.2.2 Air Quality Impacts

The Zol for habitat degradation due to dust generation is will be localised and confined to the immediate vicinity of the project area. Given the relatively small nature of the project area and the likely works, dust emissions from construction works could only affect immediately adjacent habitats, particularly those close to excavation or material handling areas.

7.2.3 Introduction of Invasive Alien Plant Species

The risk of spreading the IAPS, Japanese knotweed, will be fully controlled by implementing strict management protocols for all construction vehicle and material movements within the site. Any material contaminated with IAPS will be securely contained and transferred according to stringent procedures to a licensed disposal facility, ensuring no risk of spread beyond the project area.

7.3 Noise and Lighting Disturbance

The Zol for noise and lighting disturbance will be localised and restricted to the immediate vicinity of the project area. The impact of noise and artificial lighting is expected to affect only habitats and species immediately adjacent to the construction site.



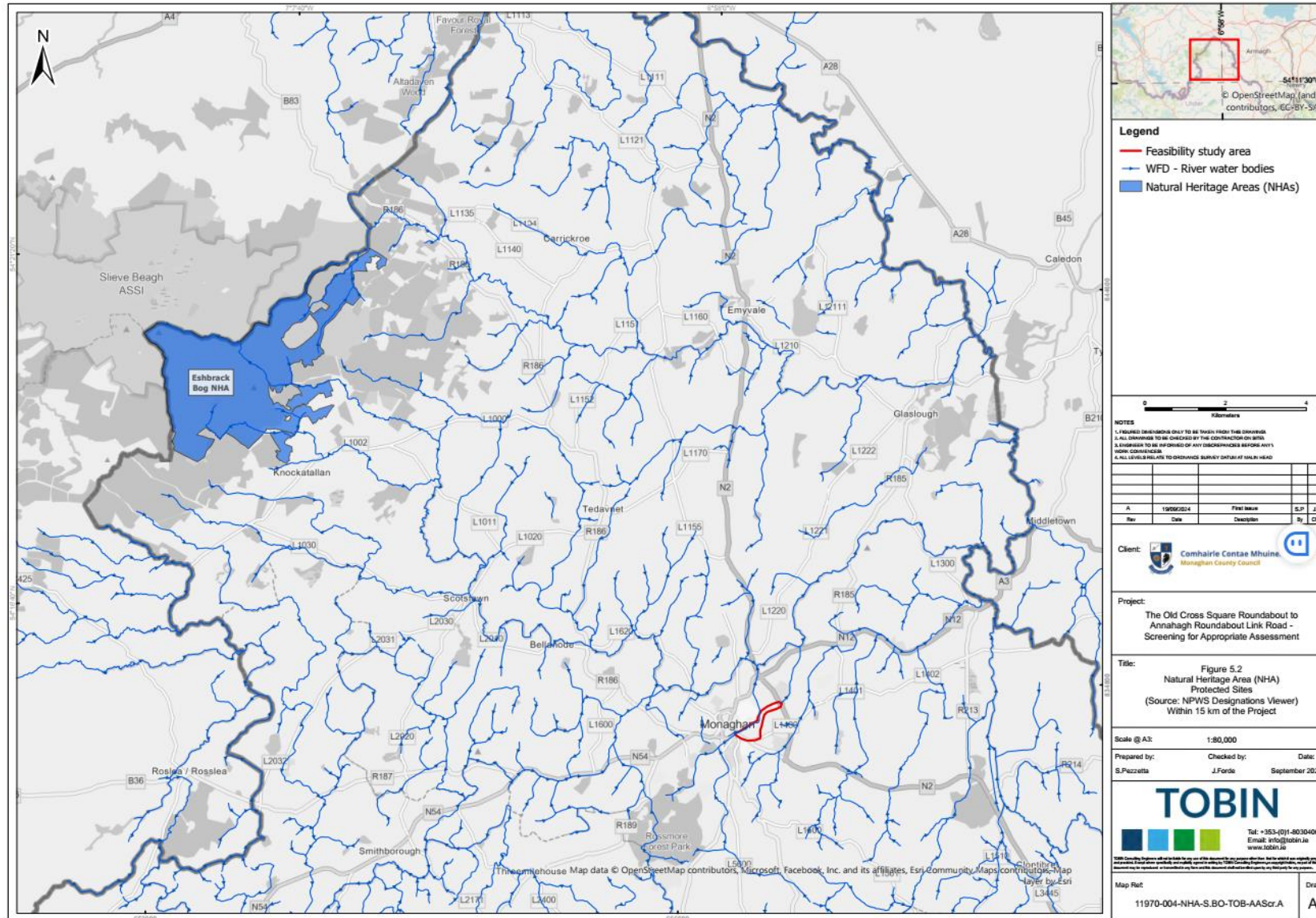


Figure 7-1: Project Boundary and Adjacent Watercourses and Direction of Flow



8. European Sites Within the Zol and Identification of Likely Significant Effects

8.1 Analysis of Potential Effects

As previously mentioned, all European sites within a 15 km radius of the project feasibility area were initially considered for the assessment of impacts. One European site was identified within this distance: Slieve Beagh SPA. This site is located approximately 11 km northwest of the project area and is designated for hen harrier (*Circus cyaneus*). The European site location relative to the project area is shown in Figure 7-1. This European site has no downstream connectivity to the project area.

Using the source-pathway-receptor conceptual model (OPR, 2021) no in-situ or ex-situ effects to Slieve Beagh SPA were identified. The source-pathway-receptor assessment is documented in Table 8-1 below.

Table 8-1: Assessment of Potential Impact to Slieve Beagh SPA

European Site	Special Conservation Interests	Source-Pathway-Receptor Link	Potential for Likely Significant Effect
Slieve Beagh SPA (004167) (NPWS, 2022)	<ul style="list-style-type: none"> Hen Harrier (<i>Circus cyaneus</i>) [A082] 	<p>The SPA is located approximately 11km northwest of the project area. In summary, given the significant distance of the SPA from the project, and the absence of downstream connectivity, no in-situ impacts from the project on the SPA are anticipated.</p> <p>Similarly, considering the distance of the SPA from the project, the fact that the SCI species has not been previously recorded in the project area or surrounds, along with the project's urban setting, and the lack of suitable habitat for the species, no ex-situ effects on the SPA from the project are anticipated.</p>	No potential for likely significant effects.

8.2 Analysis of Potential In-Combination Effects

Article 6(3) of the Habitats Directive requires that:

'Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.'

This preliminary Screening for AA therefore provides an assessment of potential impacts of the link road project in-combination with any other relevant plans or projects. Projects which have been completed, approved or which are proposed, as well as proposals within county development plans, located within the Zol of the project, have been considered in the in-combination assessment, and are discussed hereunder.

A desktop planning application search, using publicly available data from MyPlan.ie's National Planning Application database²², Monaghan County Council planning portal²³, Local Government Online Planning portal²⁴ and the EIA portal²⁵ was therefore undertaken, and relevant projects and plans are discussed hereunder.

8.2.1 Projects

A search of the Monaghan County Council planning portal was undertaken to identify projects in the Zol of the project that were granted planning permissions that may have likely significant effects on European sites, and for which an ecological assessment was carried out.

A number of small-scale residential developments were noted, e.g. residential one-off housing developments and housing upgrades, construction of health care units and community resource centres, commercial building extensions and sporting facility upgrades. These works are minor in nature and restricted to existing site boundaries with no potential for significant in-combination effects to European sites.

Applications for larger-scale projects within and around the Zol of the link road project include two Irish Water (now Uisce Éireann) projects. A summary of these applications, along with an assessment of the potential for in-combination effects with the link road project.

- Uisce Éireann:
 - Application (ref: 16367) submitted on 08/09/2016 for works at the wastewater treatment plant (WwTP) at Tirkeenan Monaghan immediately adjacent to the link road project. This application related to the construction of a new sludge import reception tank, upgrade of existing inlet works and grit trap, upgrade of existing leachate reception tank, installation of additional associated pipework, services and all associated site works at the existing WwTP.
 - Application for consent for the installation of grounded mounted photovoltaic solar panels with a maximum square meterage of 347 m² distributed over a grass

²² <https://www.myplan.ie/national-planning-application-map-viewer/>

²³ <https://monaghan.ie/planning/online-planning-tools/>

²⁴ <https://planning.localgov.ie/en/local-government-ireland-planning-system>

²⁵

<https://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1>



area at Tirkeenan with associated ancillary works at the neighbouring WwTP. Application was submitted on 14/06/2021 and awarded consent on 08/09/2021.

The planning authority considered that for the Uisce Éireann developments above there were no likely significant effects on European sites and, therefore, ecological reports (e.g. AA screening, NIS) were not considered necessary for the planning applications. Thus, considering that there are no potential for likely significant effects on European sites associated with the UÉ or the link road project, there is no potential for any in-combination effects.

Applications for development consent under Part VIII submitted by Monaghan County Council and Monaghan Town Council were also considered. The developments are:

- Monaghan County Council
 - Part VIII (Application no: PT8MN83) application for the development of new Civic Offices located at the Rooskey Lands in Monaghan Town. The purpose of the development is to consolidate and improve Monaghan County Council's civic facilities and office accommodation. The application for consent was submitted on 04/04/2013.
 - Part VIII (ref: 1330801) application for the development of the Ulster Canal Greenway. The application for consent was submitted on 04/04/2013 has yet to be determined. The proposed Canal Greenway comprises construction of paths for cycling and walking, installation of lighting columns, installation of traffic calming measures erection of timber post and rail fencing, and widening of existing towpath. The application for consent was submitted on 04/04/2013.
- Monaghan Town Council
 - Part VIII (ref: 0730801) application for extension and additional facilities within the existing machinery yard to provide garage facility for mechanical duties, additional office space, additional parking provision for large plant and small vehicles, silo storage for loose materials, compound facility for specialised plant. The application was submitted on 16/11/2011.

Although summaries for the above developments are available on the Monaghan County Council planning and Local Government Online Planning portals, no additional supporting information on the developments is provided. However, considering that the the closest European site to the link road project and the Part VII projects is Slieve Beagh SPA which is located 11km away, and does not have downstream connectivity, it can be concluded that there is no potential for any in-combination effects to the European site.

8.2.2 Plans

8.2.2.1 Monaghan County Development Plan 2019-2025

The Monaghan County Development Plan 2019-2025²⁶ sets out the policies, objectives, and the overall strategy for the development of the county, over the plan period 2019-2025. The Plan

²⁶ Monaghan County Development Plan 2019-2025. [Monaghan County Development Plan 2019-2025 - Planning](#)



outlines policies and objectives which are proactive in promoting the protection of European sites.

No specific plans or projects have been identified within the Plan which have the potential for likely significant in-combination with the project.

8.2.2.2 River Basin Management Plan 2022-2027

Currently the third cycle RBMP 2022-2027²⁷ sets out the actions that Ireland will take to improve water quality and achieve 'good' ecological status in waterbodies is underway and identifies changes in the significant pressures impacting our waters such as;

- Agricultural pressures
- Hydromorphological pressures (physical alterations)
- Pressures from Forestry
- Pressures from Urban Waste Water
- Urban Surface Water Run-off
- Pressures from Peat and Industry
- Pressures from Domestic Waste Water Treatment Systems

The RBMP identifies the following key measures that are required to address pressures;

- Reduce the loss of fertilisers and soil from farmland into water
- Reduce the physical impacts on water bodies – caused by the drainage of lands and rivers and the presence of barriers (weirs, dams, etc.)
- Ensure continued investment in urban and rural water services
- Protect water bodies from future deterioration

Actions that may arise as a result of the RBMP will not have a likely significant negative in-combination effect with the project.

8.2.2.3 National Biodiversity Action Plan 2023-2030

Ireland's 4th National Biodiversity Action Plan sets the national biodiversity agenda for the period 2023-2030 and aims to deliver the transformative changes required to the ways in which we value and protect nature. The objectives the plan include the enhancement and conservation of biodiversity. Although such issues would be dealt with at local or site level, the plan has regard to these objectives and promotes such objectives where possible.

Potential effects on European sites from the project in-combination with the plans listed above were identified and assessed. Considering the environmental protection policies included within these plans, and that alone the project will not significantly affect the integrity of any European sites, these plans pose no identifiable risk of resulting in likely significant effects on the integrity of any European sites in-combination with the project.

²⁷ [Eastern River Basin District River Basin Management Plan 2009-2015 - Catchments.ie - Catchments.ie](https://catchments.ie)



8.3 Screening Assessment Conclusion

TOBIN has prepared this report to inform a preliminary Screening for AA to appraise whether for the link road project, individually or in-combination with other plans or projects, and in view of best scientific knowledge, is likely to give rise to likely significant effects on any European site.

The potential impacts of the project have been considered in the context of the European sites potentially affected, their QIs and/or SCIs, and their conservation objectives. Using best scientific knowledge through an assessment of the source-pathway-receptor model, which considered the Zol of effects from the project, and the potential in-combination effects with other plans or projects (either directly or indirectly), it is the considered the opinion of TOBIN that the possibility for likely significant effects of the project on European sites can be excluded.



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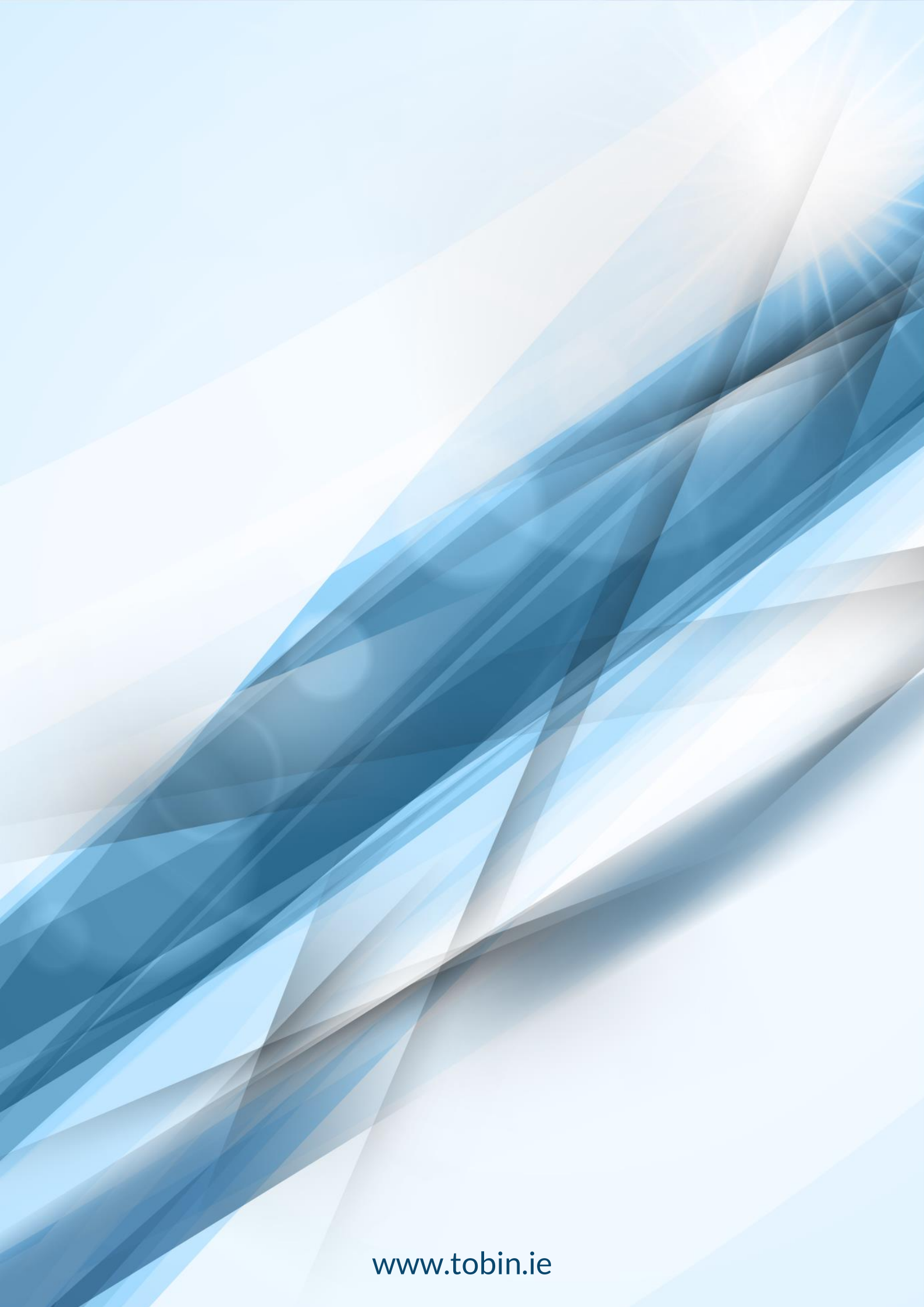
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