FLYNN FURNEY
ENVIRONMENTAL CONSULTANTS

Natura Impact Statement

BIKE TRIAL HEAD BUILDING
COOLANEY, CO. SLIGO

By: **Flynn Furney Environmental Consultants**
For: **Coillte**
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Contents

1. Introduction

Flynn Furney Environmental Consultants have been commissioned by Coillte to provide a Natura Impact Statement (NIS) for the proposed upgrades to the Coolaney Bike Trail Head Building in Coolaney Co. Sligo

An AA Screening was completed by the current authors for the proposed Project. This report concluded that the risk of Likely Significant Effect (LSE) upon the qualifying interests of the Unshin River SAC could not be definitively ruled out at screening stage. As such, a Natura Impact Statement is required.

This stage 2 Appropriate Assessment (AA) (Natura Impact Statement (NIS)) is used to determine whether the proposed development would adversely affect the integrity of these European sites. This involves the identification of potential LSE to habitats and or species which form the qualifying interests of these European sites. This report assesses the significance of potential LSE on their conservation status. Adverse impacts on the integrity of these habitats or species will require the implementation of avoidance or mitigation measures to avoid progression to stages 3 and 4 of the Appropriate Assessment process as defined by the Planning and Development Acts 2000 to 2020.

A full description of the project and all project elements are provided inSections 1.5 and 1.6 of the Appropriate Assessment Screening Report.

2. Potential Impacts

2.1 Description of Potential Impacts and Effects

The potential for impacts on the qualifying interests of the Unshin River SAC, the Ballysadare Bay SAC and the Ballysadare Bay SPA associated with the construction and operational phases of the proposed development are discussed hereunder. There will be no works within any European sites. Therefore, there will be no direct impacts or habitat fragmentation from this project. Having established no direct impacts or habitat fragmentation, the assessment concentrates on potential indirect impacts on the QI's of the European Site.

The site is hydrologically connected to the Unshin River SAC, the Ballysadare Bay SAC and the Ballysadare Bay SPA. The downstream distance to the River Unshin SAC is 7km and to the Ballysadare Bay SAC / SPA is 16.5km. Applying the Precautionary Principle, in a worst-case scenario and in the absence of mitigation, an accidental pollution event of a sufficient magnitude during construction or operation, either alone of in-combination with other pollution sources, could potentially affect the water quality in the Halfquater river to an extent that leads to impacts upon the conservation objectives of the Unshin River SAC, the Ballysadare Bay SAC and the Ballysadare Bay SPA. A reduction in water quality locally has the potential to affect the aquatic habitats and natural conditions that are required to maintain or achieve the specific

attributes and targets of the qualifying interests and the conservation objectives that have been defined for these qualifying interests.

Only those features of the proposed project that have the potential to affect the integrity and conservation objectives of the identified European sites and protected species have been considered. The following areas were identified as sources of potential impacts from the proposed development on the European sites identified:

- Deterioration of water quality in the Half Quarter Stream arising from pollution from surface water run-off during site preparation and construction and;
- Deterioration of water quality in the Half Quarter Stream arising from arising from pollution during the operation of the sites waste water treatment system

Qualify Interests of European Sites and Potential for Impacts

In general, all European sites aim to maintain or restore the favourable conservation status of the all quality intertest within European sites.

Favourable conservation status of a habitat is achieved when:

- its natural range, and area it covers within that range, are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

3 Potential Impacts

Table 1: Potential impacts to the River Boyne and Blackwater SAC's Annex I habitats and Annex II species as a result of the proposed works

Annexed Habitat or Species	Main Threats and Pressures and Ecology	Potential impacts	Is Mitigation Required
Lutra lutra (Otter)	Otter is likely to occur within the Zone of Influence of the application site; however, no evidence was noted of its occurrence on or surroundings the site. The presence of this species is positively correlated with good water quality and deterioration of same will lead to impacts upon this species. Otters have two basic requirements – aquatic prey and safe refuges where they can rest. In freshwater areas, the diet of the otter consists of a variety of fish from sticklebacks to salmon and eels, whilst crayfish and frog availability can also be important. Impacts that reduce the quality of, or cause disturbance to, their terrestrial or aquatic habitats are likely to affect otters. The main threats to otters in Ireland are thought to be: (1) habitat destruction,	Yes - Potential impacts and subsequent effects upon this species due to a decrease in water quality in the Half Quarter Stream and subsequently in the Owenmore River. This could arise due to run-off from the site that is contaminated with silt, cement, hydrocarbons or other polluting materials during the construction and phase of the proposed development. These impacts may lead to indirect negative effects on this species and the aquatic food supply that it depends upon.	**Mitigation Required**

	including river drainage and the clearance of bank-side vegetation; (2) pollution, particularly organic pollution resulting in fish kills; (3) disturbance of habitat due to recreational activities, and (4) accidental deaths (NPWS, 2009). Records for this species exist from the Unshin Catchment (NBDC, 2020). In Ireland, the territory of female otters in mesotrophic rivers is approximately 7.5 +/- 1.5km in length (Ó Néill, L., 2008), whilst the territories of males otters in mesotrophic and oligotrophic rivers is approximately 13.2 +/- 5.3km in length, with a high degree of variability as territorial males respond quickly to social perturbation. Therefore, as records for the otter exist from within the zone of influence of the site, mitigation measures will be included as part of this assessment to protect the overall status of the otter within this SAC.		
Salmon (Salmo salar)	The river Unshin and its tributaries are an important habitat for the salmon and there are potential suitable habitats for the salmon downstream of the site. The requirements of salmon depend on their life stage but clean, unpolluted water is a	Yes - Potential impacts and subsequent effects upon this species due to a decrease in water quality in the Half Quarter Stream which is a tributary of the Owenmore River which forms part of the River Unshin SAC.	**Mitigation Required**

	requirement throughout the life cycle. They are very sensitive to changes in water quality and increases in sedimentation (<25 mg/L annual average). The main pressures and threats to this species come from agricultural intensification, run-off from agriculture, forestry and household waste waters and poaching. The presence of the salmon in the Owenmore River within the Zone of Influence of the site has been assumed and impacts upon this species must be mitigated against. The high status of the Owenmore River must be maintained.	This could arise due to run-off from the site that is contaminated with silt, cement, hydrocarbons or other polluting materials during the construction and operation phase of the proposed development. These impacts may lead to indirect negative effects on this species and the aquatic food supply that it depends upon.	
Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation	This habitat is also commonly known as floating river vegetation. Its definition is wide and Ranunculus, Callitriche, Potamogeton and Myriophyllum species are often present. Pressures on this habitat include eutrophication, overgrazing and alien species. River connectivity within the floodplain is essential for the functioning of this habitat. Suitable conditions for this habitat along the Owenmore River is within the Zone of Influence (downstream) of the site and is likely, therefore impacts upon this habitat from the proposed project are possible and	Possible indirect impacts on this habitat include the loss or decrease in the quality or area of this habitat due to pollution or a decrease in water quality arising from run-off from the construction and operation of the proposed project. Run-off may contain cement, hydrocarbons and silt which could all lead to negative impacts upon this qualifying feature. Deterioration of water quality in the Half Quarter Stream arising from pollution during the operation of the site's wastewater treatment system.	**Mitigation Required**

	in keeping precautionary principle, mitigation measures will be required. The Half Quarter stream is a steep mountain stream and could not support this habitat type.		
Alluvial forests with Alnus glutinosa and Fraxinus excelsior	This Annex I Priority habitat occurs at many locations within the River Unshin SAC (NPWS, 2021). Some of the main threats to this habitat include under-grazing and invasive species.	This habitat is not sensitive to deteriorations in water quality. No LSE upon this QI arising from the construction and operation of the proposed development will occur. Given the scale of the works, the likely impacts from the proposed works (if any) and the location of this QI habitat relative to the site of works.	**None**
6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) And 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates	The main threats to both of these habitat types are generally agricultural intensification, under-grazing and afforestation. Both of these habitat areas are known from two large tracks of lands south West of Ballygawley. These are found on the shoreline of the Unshin River and outside the ZOI of the proposed development	Neither Habitat types is sensitive of water quality impacts which are the main source of possible impacts and effects identified as a result of the proposed development	**None**

(Festuco-Brometalia) (* important orchid sites)			

3.1 Cumulative Impacts

Cumulative impacts or effects are changes in the environment that result from numerous human-induced, small-scale alterations. Cumulative impacts can be thought of as occurring through two main pathways: first; through persistent additions or losses of the same materials or resource, and second, -through the compounding effects as a result of the coming together of two or more effects (Bowers-Marriott, 1997).

The majority of the planning applications found within 5km of the site of works are for the construction, retention or alteration of private residential developments and farm infrastructure. No 2 other developments were assessed in section 2.2 of this Appropriate Assessment (Screening). Both were subject to NIS and in both instances, it was concluded that through the implementation no cumulative impacts would occur to any designated sites.

4. Mitigation Measures

Mitigation is prescribed in accordance with the EPA draft guidance on EIAR (EPA, 2017) which requires mitigation by avoidance as a first approach. Where this is not feasible, measures to prevent impacts from giving rise to adverse effects should be adopted (e.g., design of bunded storage for chemicals). Where impacts cannot be avoided e.g., generation of noise, mitigation by reduction of impact is required to limit the exposure of the receptor to an acceptable level (often achieved by interrupting the pathway between the source and receptor).

In order to prevent any deteriorations in water quality in the Half Quarter Stream and its tributaries and subsequently in the Owenmore and Unshin SAC, a number of mitigation measures must be implemented and followed. Measures have also been suggested that will help to protect the local biodiversity of the surrounding area and to ensure the protection of local wildlife. Although these are standard mitigation measures, their implementation will ensure the protection of Natura 2000 habitats and species and the local non-designated ecological receptors. The primary parties responsible for the implementation of these measures include the applicant and the construction team (site manager, and site workers).

A Construction Management Plan should be prepared for the proposed project, which takes into account the mitigation measures contained herein.

Mitigation is prescribed to address the impacts such that adverse effects on site integrity of the European site does not occur. Mitigation measures are set out in accordance with the European Commission guidance on the 'Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, (2001).

Guidelines used for the production of these mitigation measures include the following:

- IFI (2016) Guidelines on Protection of Fisheries during Construction Works in and Adjacent to Waters. Inland Fisheries Ireland, Dublin;
- CIRIA Guidelines Control of water pollution from construction sites –Guide to Good Practice (C532); and
- Control of water pollution from linear construction projects. Technical Guidance (C648).

General Pre-Construction and Construction

- Site preparation and construction must be confined to the project site only and should adhere to all standard best practice measures. Work areas shall be kept to the minimum area required to carry out the proposed works and the area should be clearly marked out in advance of the proposed works.
- Prior to the commencement of works on the site, the construction site personnel will be made aware of the sensitivity of the location and the habitats surrounding the site. The protection of water quality locally will be highlighted.
- Efficient construction practices and sequences shall be employed on site, and this will minimise soil erosion and potential pollution of local watercourses with soil and sediment. Unnecessary clearance of vegetation shall be avoided and only areas necessary for building works shall be cleared. Existing vegetated areas shall be retained where possible. The retention of these areas will also help retain any stormwater run-off from the site during construction and operation.
- In order to protect water quality in the Half Quarter Stream and its tributaries all site preparation and construction works shall conform to all guidelines within the document Inland Fisheries Ireland Requirements for the Protection of Fisheries Habitats during Construction and Development Works and River Sites (www.fisheriesireland.ie) and the updated guidelines entitled Guidelines on Protection of Fisheries During Construction Works in And Adjacent to Waters (2016). The following guidance will also be followed:

Site Specific Mitigation Measures

- Works should ensure a minimum setback of 10m from the tributary to the Half Quarter Stream and all vegetation surrounding the Half Quarter Stream should be retained.

- As part of site preparation works silt fencing should be placed around the tributary to the half water stream. Silt fencing should also be installed at the bridge that crosses the Half Quarter on the site access road.
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Protection of water courses.

- No works or storage of equipment should take place within the area protected by silt fencing.
- Signage should be erected that clearly states that works are occurring adjacent to an ecologically sensitive area.
- The silt fences will have the following design features: – the geotextile fabric must be entrenched at least 100mm into the ground with the ends upturned inward towards the works; – the fence posts will have a maximum spacing of 2m to prevent sag on the fence; and – the geotextile fabric will be anchored to the fence posts as opposed to wrapped.
- Daily inspection of silt fences will be carried out by the site management to assess the effectiveness of the measures, to carry out maintenance, and to determine if there has been any damage/breach to the control measures. The silt fences will also be inspected immediately following heavy rainfall or strong winds (equating to a yellow weather warning). Where repair is necessary, this will be carried out immediately and may require the replacement of any damaged/degraded material.
- Accumulated silt will be removed regularly from the base of silt fences and will be removed off-site. Silt will not be permitted to build up such that it reaches half the height of the fence or exceeds 15cm in height (whichever is the lesser value).
- Silt fences must remain in place until the disturbed areas within the sites have been reinstated and revegetated or capped with the finish built surface
- Silt fences must only be removed during dry weather and following approval by the project site manager

Management of Potential Polluting Materials

- Materials and equipment to implement the Spill Response & Control Plan must be available adjacent to all watercourses (for example, spill kits, booms). These should be in clearly marked response points, which can be accessed by all staff.

- Drip trays will be utilized for any stationary equipment situated within 25m of the watercourse and spill kits will be available at these locations for the duration of the contract. Any used spill kits will be disposed of using a hazardous waste disposal contractor and in accordance with all relevant EU and Irish waste management legislation;
- All hazardous substances on-site shall be controlled within an enclosed storage compound that shall be fenced off and locked when not in use to prevent theft and vandalism;
- Refuelling of plant and machinery shall take place at least 30m away from the riparian buffer zone silt fence using a mobile fuel bowser and restricted to designated areas on hard standing.
- Concrete mixing will not occur on-site and will be brought to the site by truck;
- No concrete washout should occur on the site

Residual Impacts

Residual impacts are those that occur after mitigation measures have taken effect. If the general and project-specific measures that are listed above are employed during the construction and operational phases of the proposed works, there will be no residual impacts on the habitats or species identified within this report.

Natura Impact Statement & Conclusion

This NIS has reviewed the impacts arising from the proposed project and found, following a Stage 1 Screening Assessment, that without the implementation of mitigation measures, significant effects could impact upon the integrity of the Unshin River SAC could not be definitively ruled out. These impacts have been outlined in detail in this NIS along with proposed avoidance and mitigation measures. Given the determination of no residual adverse impacts after the predicted impacts have been mitigated, it is considered that the implementation of the proposed project will not result in significant effects on the conservation objectives or integrity of this or any other European designated site

Based on the assessment of the proposed development alone and in combination with other projects and plans, including the implementation of mitigation measures, it can be concluded that no adverse effects on the site's integrity will arise, in view of the site's conservation objectives.

References

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Marnell, F., Néill, L.Ó. and LYNN, D., 2011. How to calculate range and population size for the otter? The Irish approach as a case study. In *Proceedings of XIth International Otter Colloquium, IUCN Otter Spec. Group Bull. B* (Vol. 28, pp. 15-22).

Appropriate Assessment Screening Report

BIKE TRAILHEAD BUILDING
COOLANEY, CO. SLIGO

By: **Flynn Furney Environmental Consultants**
For: **Coillte**
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1. Introduction

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

This screening exercise aims to determine whether the proposed works associated with the upgrades to the Coolaney Bike Trailhead Building in Coolaney Co. Sligo has the potential to significantly impact upon the conservation objectives and overall integrity of any Natura 2000 sites. This assessment is based on a desk study and fieldwork carried out by suitably qualified ecologists. Also included is a general assessment of the ecological status of the site and the potential impacts of the proposed works on the ecology of the surrounding area, including Designated Sites.

The Competent Authority is obliged to examine the likely significant effects individually or in combination, of the proposed development on European Designated Sites in light of their specific qualifying interests and conservation objectives. If AA screening determines that there is likely to be significant effects on one of these sites, then full AA must be carried out for the proposed works, including the compilation of a Natura Impact Statement to inform the decision-making.

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

2. Background to Screening for Appropriate Assessment

2.1. European Designated Sites

Sites designated for the conservation of nature in Ireland include:

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

SPAs and SACs form the Natura 2000 network of sites. It is these sites that are of relevance to the screening process for this Appropriate Assessment Screening. SPAs and SACs are prime wildlife conservation areas in the country, considered to be important on a European as well as Irish level. SPAs and SACs are designated under EU Habitats Directive, transposed into Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), as amended.

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

pNHA sites were published on a non-statutory basis in 1995 but have not since been statutorily proposed or designated. These sites were identified as being of significance for particular habitat types or species. While not afforded the same legislative protection as the other designations mentioned here, they are protected by the following mechanisms:

- Agri-environmental farm planning schemes such as GLAS;
- Forest Service requirement for Department approval before afforestation grants are paid out on pNHA lands, and;
- Recognition of the ecological value of pNHAs by Planning and Licensing authorities.

All European Designated Sites (henceforth simply referred to as "Designated Sites") that are connected to the proposed works were considered during the desktop study in order to assess the potential for significant effects upon their Qualifying Interests and Conservation Objectives. Where no connection was identifiable, the nearest site(s) were considered. This stage of the process is used to determine whether any of the Designated Sites (specifically SACs and SPAs) may be 'screened out'. That is, whether they can be regarded as not being relevant to the process of Appropriate Assessment of the project, having no potential to be significantly impacted.

2.2. Legislative Context

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

The assessment process is given in Articles 6[3] and 6[4] of the Habitats Directive and is commonly referred to as "Appropriate Assessment" or AA. Article 6 of the Habitats Directive sets out provisions which govern the conservation and management of Natura 2000 sites. Article 6[3] and 6[4] of the Habitats Directive set out the decision-making tests for plans and projects likely to affect Natura 2000 sites (Annex 1.1). Article 6[3] establishes the requirement for Appropriate Assessment:

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

Article 6[4] continues:

> "If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.
> It is the responsibility of the proponent of the plan or project to provide the relevant information (ecological surveys, research, analysis etc.) for submission to the 'competent national authority'. If satisfied that the information is complete and objective, the competent authority will use this information to screen the project, i.e. to determine if an AA is required and to carry out the AA, if one is deemed necessary. The competent authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned."

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

1. screening to determine if an appropriate assessment is required;
2. appropriate assessment;
3. consideration of alternative solutions, and;
4. imperative reasons of overriding public interest/derogation.

Stage 1: Screening for AA

The aim of screening is to assess firstly if the plan or project is directly connected with or necessary to the management of Designated Site(s); or in view of best scientific knowledge, if the plan or project, individually or in combination with other plans or projects, is likely to have a significant effect on a Designated Site. This is done by examining the proposed plan or project and the conservation objectives of any Designated Sites that might potentially be affected. If screening determines that there is potential for significant effects or there is uncertainty regarding the significance of effects then it will be recommended that the plan or project is brought forward to the next stage of the AA process.

Stage 2: Appropriate Assessment

The aim of stage 2 of the AA process is to identify any adverse impacts that the plan or project might have on the integrity of relevant Designated Sites. As part of the assessment, a key consideration is 'in combination' effects with other plans or projects. Where adverse impacts are identified, mitigation measures can be proposed that would avoid, reduce or remedy any such negative impacts and the plan or project should then be amended accordingly, thereby avoiding the need to progress to Stage 3.

Stage 3: Assessment of Alternative Solutions

If it is not possible during Stage 2 of the AA process to conclude that there will be no adverse effects on site integrity, Stage 3 of the process must be undertaken which is to objectively assess whether alternative solutions exist by which the objectives of the plan or project can be achieved. Explicitly, this means alternative solutions that do not have adverse impacts on the integrity of a Designated Site. It should also be noted that EU guidance on this stage of the process states that, 'other assessment criteria, such as economic criteria, cannot be seen as overruling ecological criteria' (EC, 2002). In other words, if alternative solutions exist that do not have adverse impacts on Designated Sites; they should be adopted regardless of economic considerations. This stage of the AA process should result in the identification of the least damaging options for the plan or project.

Stage 4: Imperative Reasons of Overriding Public Interest (IROPI)/Derogation

This stage of the AA process is undertaken when it has been determined that a plan or project will have adverse effects on the integrity of a Designated Site, but that no alternatives exist. At this stage of the AA process, it is the characteristics of the plan or project itself that will determine whether or not the competent authority can allow it to progress. This is the determination of 'overriding public interest'. It is important to note that in the case of Designated Sites that include in their qualifying features 'priority' habitats or species, as defined in Annex I and II of the Directive, the demonstration of 'overriding public interest' is not sufficient and it must be demonstrated that the plan or project is necessary for 'human health or safety considerations'. Where plans or projects meet these criteria, they can be allowed, provided adequate compensatory measures are proposed. Stage 4 of the process defines and describes these compensation measures.

Appropriate Assessment Screening Report

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

3. Methodology

3.1. Desk Study

A desktop study was carried out as part of this screening process. This included a review of available literature on the site and its immediate environs. Sources of information included the National Parks and Wildlife Service databases on protected sites and species data, and from the Environmental Protection Agency on watercourses.

3.2. Data Used To Carry Out The Assessment

The following sources of data were employed:

- Environmental Protection Agency (EPA) Appropriate Assessment Tool
- EPA Maps (to identify watercourses, hydrology and Natura 2000 site boundaries)
- NPWS protected species database and online mapping
- National Biodiversity Data Centre
- Inland Fisheries Ireland
- An Bord Pleanála's online database

3.3. SPR Model

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

In this instance, the most relevant receptors are any relevant Natura 2000 sites with connectivity of the proposed works. These were considered during the desktop study stage of this screening assessment in order to assess the potential for significant effects upon their Qualifying Interests (QIs), Sites of Community Importance (SCIs) and Conservation Objectives (COs). This stage of the process is used to determine whether any of the Natura sites may be 'screened out'. That is, that they can be regarded as not being relevant to the process, having no potential to be significantly affected or impacted upon.

3.4. Field Survey

The field survey was carried out on the 3rd May 2023. Baseline ecological conditions were assessed. Habitats were classified according to Fossitt (2000). Where applicable, the habitat types and species usage were recorded (Smith et al. 2011; Wyse Jackson et al. 2016). Habitats were classified and dominant plant species noted according to the guidelines given by the JNCC (2010) with reference to Smith et al. (2011).

4. Screening of Designated Sites

4.1. Site Location

The proposed works area is located at the existing Coolaney Mountain Bike Trail in Coolaney Co. Sligo. The works are found within the compound for this facility which is located within an area of Collite-owned mostly Sitka Spruce plantation woodland. The proposed works site is located on an existing forestry road and within a surrounding landscape dominated by recently felled forestry, immature mixed woodland and lands recently recolonised by scrub. The site is 1.3km northwest of Cloonaney. The Halfquarter River flows in an approximately north-south direction across the entrance to the subject site. The Halfquarter River has connectivity to the Owenmore River which it joins c.1.5km downstream to the south of the survey area. The Owenmore River is part of the Unchin River SAC (Site Code 001890).

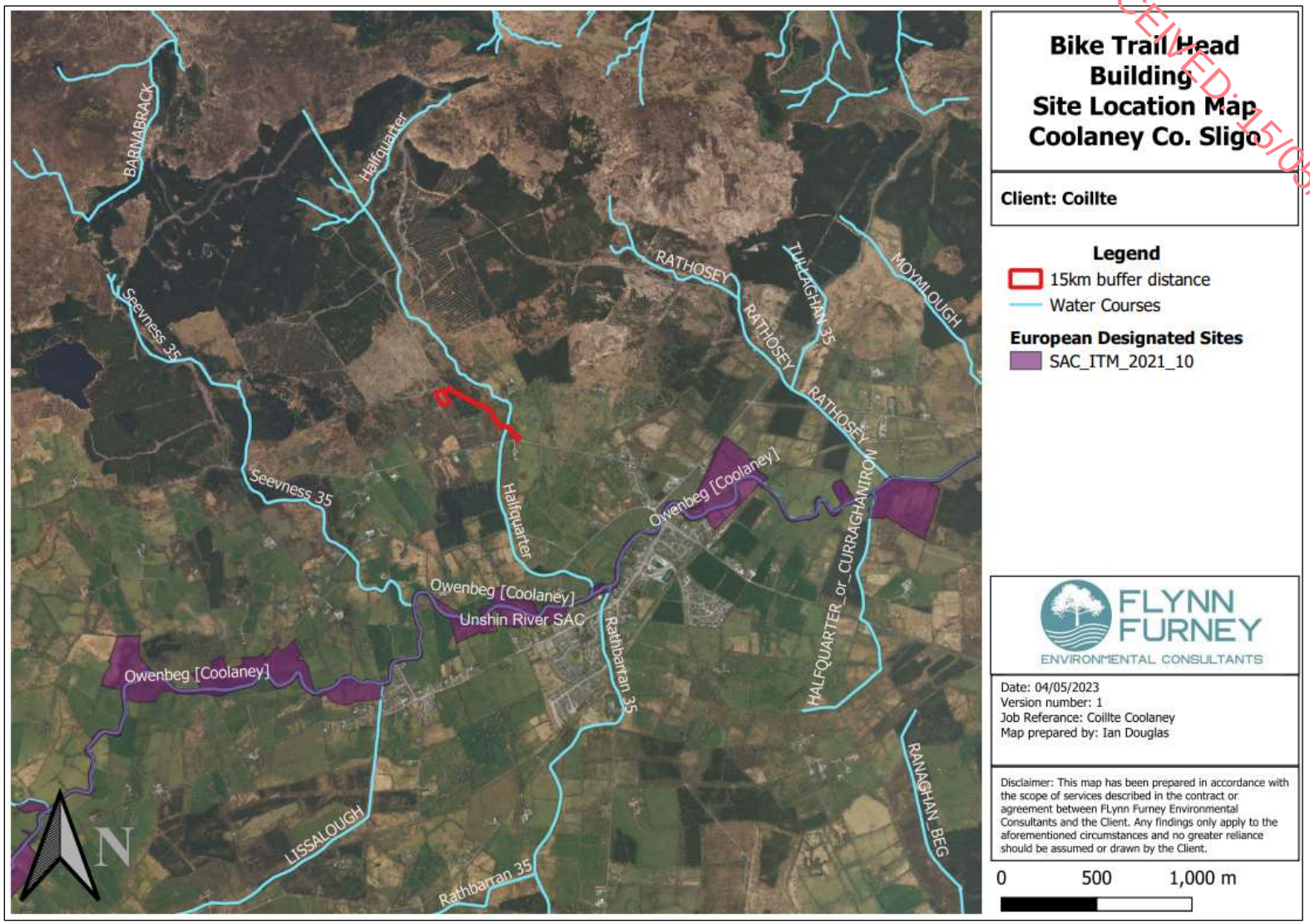

Figure 1: Overview of the works area, local water courses and the site's local context

4.2. Receiving Environment

The majority of the area proposed for work occurs on existing cleared and 'hardstanding' area within conifer plantation and on a forestry access road. This would conform to the Fossitt classification of **Buildings and artificial surfaces (BL3).** Few plant species with the exception of occasional grasses and ruderal weed species were found growing here. Adjacent to the existing hardstand are areas of **Mixed broadleaved/conifer woodland (WD2), Scrub (WS1)** and **Recently felled woodland (WS5)**. These areas were dominated by Sitka Spruce (*Picea sitchensis*), Goat Willow (*Salix caprea*), Blackthorn (*Prunus spinosa*), Ash *(Fraxinus excelsior)* and Gorse (*Ulex europaeus*). Bramble (*Rubus fruticosus agg*) and Hawthorn (*Crataegus monogyna*) were frequent throughout, forming **Scrub (WS1)**, especially in areas clear-felled. No plants listed on the Flora Protection Order (2015) or 'red-listed' species occur here.

4.2.1. Watercourses

The works area does not cross any rivers. However, the Halfquarter River is crossed by the access road to the site, approximately 300m from the site of works. The Halfquarter River has connectivity to the Unchin River SAC which is found c.1.5km downstream and to the south of the survey area. A small unnamed stream also runs parallel to the access roadway along most of its extent. This watercourse is small and narrow (c. 0.5m wide) and was less than 10cm in depth at its deepest at the time of the survey. This may be a man-made drain likely created as part of forestry works.

4.2.2. Birds

A dedicated bird survey was not carried out, all birds seen and heard were typical countryside species of this environment. No Annex I (Birds Directive) species were recorded.

4.2.4. Mammal Activity

No other mammal activity, such as holes, trails, burrows or scatt, was found during this survey, although it is likely that protected mammals such as Badger (*Meles meles*) and Pine Marten (*Martes martes*) occur here. These are not qualifying interests of any relevant SAC and no activities proposed here are likely to have any significant impacts on these species.

4.2.5. Invasive Species

The Wildlife (Amendment) Act (2000, as amended), contains a number of provisions relating to Invasive Non-Native Species (INNS). Part 1 of the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. No. 477 of 2011) and Amendment 2015 (S.I. No. 355/2015). Section 49 and 50 of Part 6 of the European Communities (Birds and Natural Habitats) Regulations, 2011 (S.I. No. 477 of 2011) outlines the legal context for the prohibition of the introduction and dispersal of certain plant and animal species. Specifically, Section 49, paragraph 2 states that any person without the required licence "who plants, disperses, allows or causes to disperse, spreads or otherwise causes to grow" any plant species listed in Part 1 of the Third Schedule within the State shall be guilty of an offence.

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

No Third Schedule invasive species were found during the course of this survey within the project area or adjacent to it.

4.3. Proposed Works

This development is planned to service the Cloonaney mountain bike trail recreational development which includes over 80km of bike trails. The proposed development will also include a new building containing changing and washing facilities, a cafe, bicycle hire facilities, the construction of parking areas, a bike wash, the installation of a wastewater treatment plant and percolation area and all associated works, water connection/supply from a public main and associated services

The works will generally consist of the following:

- Excavation of soils and subsoils
- disposal of surplus soil off-site to an authorised waste facility
- importation, placement and compaction of hardcore (crushed stone)
- building of the café and associated facilities
- Installation of the wastewater treatment system and;
- Improvements to the roads and car parking.

4.4 Zones of Influence and Potential Impacts or Effects

The proposed works have the potential to result in a number of direct and indirect effects. These are set out in Table 3.1, which identifies the “zones of influence” for each effect (i.e. the area over which effects may occur).

Table 2: Potential impacts, effects and their zone of influence

• **Potential Impact and Effect**	• **Description**	• **Zone of Influence**
• Land-take resulting in habitat loss or degradation.	• The permanent loss of the habitat present in the footprint of the works and access routes.	• Lands within the proposed footprint of works and access routes. This also includes supporting habitat types and areas.

• Changes in water quality and quantity/distribution resulting in habitat loss or degradation.	• Reduction in the quality of retained habitat or loss of habitat from surrounding areas as a result of surface water pollution.	• Changes in surface water quality, as a result of works, associated with the proposed development within any designated sites, local water bodies, wetlands or supporting habitat areas.
• Noise or vibration resulting in disturbance.	• Direct impact on feature species reducing their ability to forage or breed.	• Generally assessed within 500m of the proposed works (e.g. for wintering birds), but can be significantly lower (e.g. 150m for otter underground sites.

4.5. Source – Pathway – Receptor Assessment

All designated site within 15km and those beyond 15km that may be connected to the subject site are reviewed and assessed based on the Source – Pathway – Receptor Model

Table 2: Designated Sites near the proposed project.

Site Name Designation • **Site Code**	• **Distance**	• **Qualifying Interests**	• **Likely Zone of Impact Determination**
Unshin River SAC 1898	• **1.5Km**	**Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]** Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] **Salmo salar (Salmon) [1106]** **Lutra lutra (Otter) [1355]** •	• The proposed development is located outside the boundary of this SAC and there is no potential for direct effect. • • Potential hydrological connectivity exists via the unnamed stream and the Halfquarter River to the Owenmore River which forms part of the Unshin River SAC. Given that there is a significant buffer distance of over 1.5km no impacts to water quality are considered likely given the size and scale of the proposed development and the vegetative buffer (woodland) separating the works site from the Half Quarter River. However, there is potential for possible impact here. • • The access road to the subject site also crosses the Half Quarter River. As no major works are planned for this roadway, no impacts to water quality due to improvements to this roadway are considered likely. However, there is potential for possible impact here. • • The potential for an indirect effect on the terrestrial QIs can be ruled out due to the terrestrial nature of the habitats, the intervening distance between the development site and the SAC and the size and scale of the proposed works. •

			• Otter forms part of the conservation objectives of this site. While Otter is likely to occur within the Owenmore river. The Half Quarter river is small and unlikely to support a permanent population of Otter. As no impacts are predicted to the Half Quarter River no impacts are predicted to Otter within this SAC. • • • **Potential for possible impacts identified.** •
• Ballysadare Bay SAC 622	• 3.6km	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Humid dune slacks [2190] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Phoca vitulina (Harbour Seal) [1365]	• The proposed development is located outside the boundary of this SAC no direct effects will occur. • • While potential hydrological connectivity exists via the Half Quarter Stream and the Owenmore River given a significant buffer distance of over 11km no impacts to water quality will occur given the size and scale of the proposed development and the vegetative buffer (woodland) separating the works site from the Half Quarter River • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**
• Ballysadare Bay SPA 4129	• 3.6km	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Grey Plover (Pluvialis squatarola) [A141] Dunlin (Calidris alpina) [A149]	• The proposed development is located outside the boundary of this SPA and there is no potential for direct effect. • • There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SPA

		Bar-tailed Godwit (Limosa lapponica) [A157] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]	• • No wetland areas and open water habitats are found within or surrounding the subject site that could supporting feeding, navigation or roosting habitat for any birds associated with this SPA. • While potential hydrological connectivity exists via the Half Quarter Stream and the Owenmore River given a significant buffer distance of over 11km no impacts to water quality will occur given the size and scale of the proposed development and the vegetative buffer (woodland) separating the works site from the Half Quarter River. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**
• Cummeen Strand/Drumcliff Bay (Sligo Bay) SAC 627	• 10.9km	Estuaries [1130] Mudflats and sandflats not covered by seawater at low tide [1140] Embryonic shifting dunes [2110] Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] Juniperus communis formations on heaths or calcareous grasslands [5130] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]	• The proposed development is located outside the boundary of this SAC and there is no potential for direct effect. • • There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SAC. • • The potential for an indirect effect on the terrestrial QIs can be ruled out due to the terrestrial nature of the habitats, the intervening distance between the development site and the SAC and the absence of a source-pathway-receptor chain for a likely significant effect. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**

		Petrifying springs with tufa formation (Cratoneurion) [7220] Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Petromyzon marinus (Sea Lamprey) [1095] Lampetra fluviatilis (River Lamprey) [1099] Phoca vitulina (Harbour Seal) [1365] •	
• Templehouse and Cloonacleigha Loughs SAC 636	• 6.7km	Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation [3260]	• The proposed development is located outside the boundary of this SAC and there is no potential for direct effect. • • There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SAC. • • The potential for an indirect effect on the terrestrial QIs can be ruled out due to the terrestrial nature of the habitats, the intervening distance between the development site and the SAC and the absence of a source-pathway-receptor chain for a likely significant effect. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**
• Turloughmore (Sligo) SAC 637	• 12.9km	• Turloughs [3180]	• The proposed development is located outside the boundary of this SAC and there is no potential for direct effect. •

			• There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SAC. • • The potential for an indirect effect on the terrestrial QIs can be ruled out due to the terrestrial nature of the habitats, the intervening distance between the development site and the SAC and the absence of a source-pathway-receptor chain for a likely significant effect. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**
• Union Wood SAC 638	• 8.2km	• Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0]	• The proposed development is located outside the boundary of this SAC and there is no potential for direct effect. • • There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SAC. • • The potential for an indirect effect on the terrestrial QIs can be ruled out due to the terrestrial nature of the habitats, the intervening distance between the development site and the SAC and the absence of a source-pathway-receptor chain for a likely significant effect. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**
• Knockalongy and Knockachree Cliffs SAC 1669	• 8.2km	• Trichomanes speciosum (Killarney Fern) [1421]	• The proposed development is located outside the boundary of this SAC and there is no potential for direct effect. • • There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SAC. •

			• The potential for an indirect effect on the terrestrial QIs can be ruled out due to the terrestrial nature of the habitats, the intervening distance between the development site and the SAC and the absence of a source-pathway-receptor chain for a likely significant effect. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**
• Lough Gill SAC 1976	• 12.3km	Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation [3150] Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Lampetra fluviatilis (River Lamprey) [1099]	• The proposed development is located outside the boundary of this SAC and there is no potential for direct effect. • • There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SAC. • • The potential for an indirect effect on the terrestrial QIs can be ruled out due to the terrestrial nature of the habitats, the intervening distance between the development site and the SAC and the absence of a source-pathway-receptor chain for a likely significant effect. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**

		Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]	
• Ox Mountains Bogs SAC 2006	• 6.2km	Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae) [3110] Natural dystrophic lakes and ponds [3160] Northern Atlantic wet heaths with Erica tetralix [4010] European dry heaths [4030] Blanket bogs (* if active bog) [7130] Transition mires and quaking bogs [7140] Depressions on peat substrates of the Rhynchosporion [7150] Vertigo geyeri (Geyer's Whorl Snail) [1013] Saxifraga hirculus (Marsh Saxifrage) [1528]	• The proposed development is located outside the boundary of this SAC and there is no potential for direct effect. • • There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SAC. • • The potential for an indirect effect on the terrestrial QIs can be ruled out due to the terrestrial nature of the habitats, the intervening distance between the development site and the SAC and the absence of a source-pathway-receptor chain for a likely significant effect. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**
• River Moy SAC 2298	• 8.7km	Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis) [6510] Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120]	• The proposed development is located outside the boundary of this SAC and there is no potential for direct effect. • • There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SAC. •

		Depressions on peat substrates of the Rhynchosporion [7150] Alkaline fens [7230] Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Austropotamobius pallipes (White-clawed Crayfish) [1092] Petromyzon marinus (Sea Lamprey) [1095] Lampetra planeri (Brook Lamprey) [1096] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]	• The potential for an indirect effect on the terrestrial QIs can be ruled out due to the terrestrial nature of the habitats, the intervening distance between the development site and the SAC and the absence of a source-pathway-receptor chain for a likely significant effect. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**
• Cummeen Strand SPA 4035	• 10.9km	Light-bellied Brent Goose (Branta bernicla hrota) [A046] Oystercatcher (Haematopus ostralegus) [A130] Redshank (Tringa totanus) [A162] Wetland and Waterbirds [A999]	• The proposed development is located outside the boundary of this SPA and there is no potential for direct effect. • • There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SPA • • No wetland areas and open water habitats are found within or surrounding the subject site that could supporting feeding, navigation or roosting habitat for any birds associated with this SPA. •

			• Noise and disturbance impacts associated with the proposed development are unlikely to have any significant ex situ effects given the distance between the subject site and the SPA. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**
• Aughris Head SPA 4133	• 14.2km	• Kittiwake (Rissa tridactyla) [A188]	• The proposed development is located outside the boundary of this SPA and there is no potential for direct effect. • • There are no surface water features present within or adjacent to the development site that could provide hydrological connectivity between the subject site and this SPA • No wetland areas and open water habitats are found within or surrounding the subject site that could supporting feeding, navigation or roosting habitat for any birds associated with this SPA. • Noise and disturbance impacts associated with the proposed development are unlikely to have any significant ex situ effects given the distance between the subject site and the SPA. • • **No risk of likely significant effects were identified, either alone or in combination with other plans or projects.**

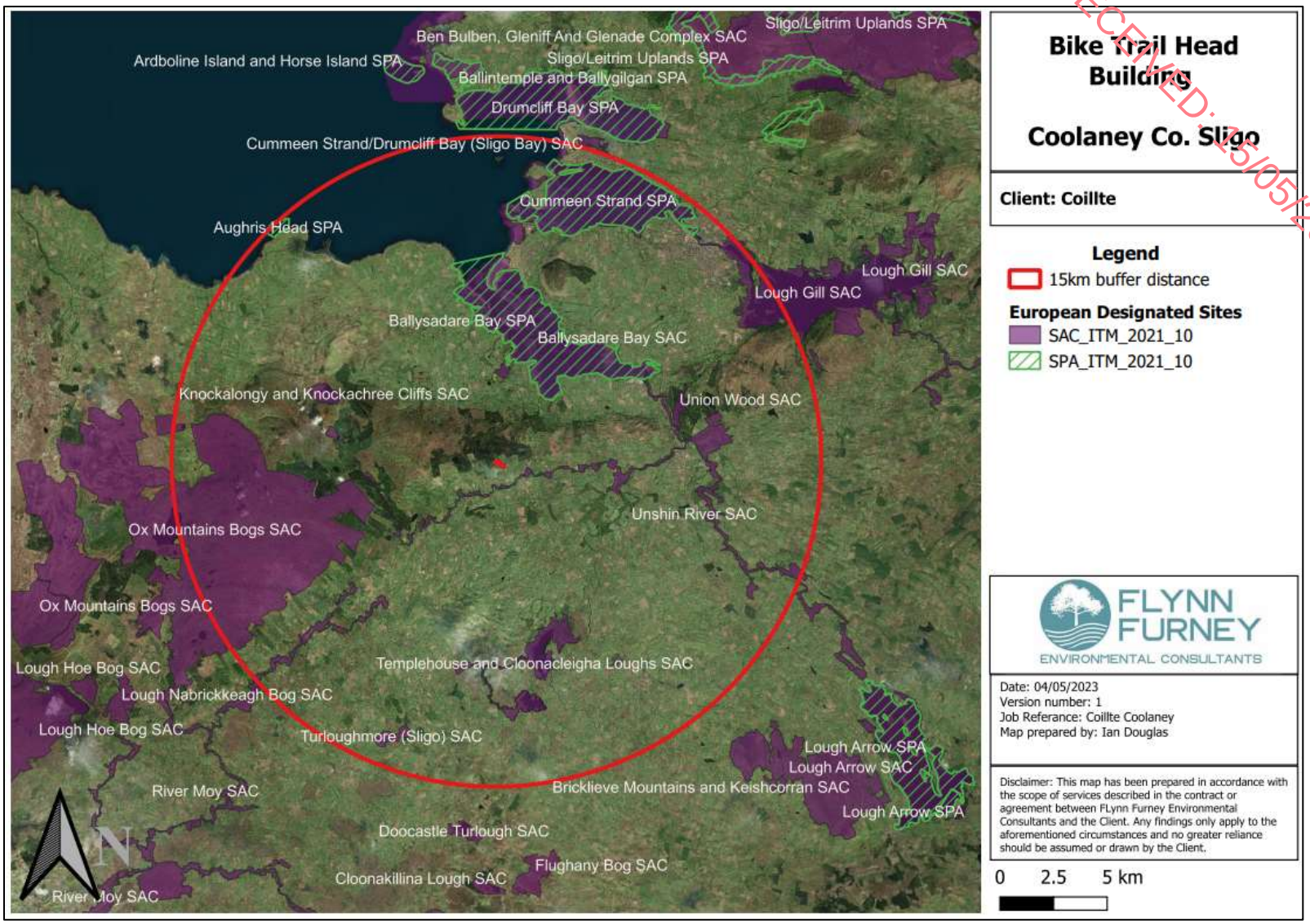

Figure 3: The nearest Designated Sites with 15km from the works area

5.3. Cumulative And In combination Impacts

A number of local planning applications were reviewed. Most are associated with the alteration to or construction of residential or commercial buildings. As no impacts or effects have been identified as a result of the proposed works upon any Designated Site. No cumulative or in combination impacts can therefore exist.

6. Screening Conclusions

The findings of this Screening Assessment are presented following the European Commission's Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites: Methodological Guidance on the provisions of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC (EC, 2001) and Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC (EC, 2018) as well as the Department of the Environment's Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (DoEHLG, 2010).

6.1. Data Collected to Carry Out Assessment

In preparation of this report, the following sources were used to gather information:

- Review of NPWS Site Synopses, Conservation Objectives and Map for the European Sites reviewed
- Review of OS maps and aerial photographs of the site of the proposed project.
- Review of the project description and an assessment of its likely effects on local ecology including European sites and;
- No.1 site visit conducted by Billy Flynn (B.Sc., MSc.) in May 2023

6.2. Overall Conclusions

In our professional opinion and view of the best scientific knowledge and view of the conservation objectives of the European sites reviewed in the screening exercise, the proposed development individually/in combination with other plans and projects (either directly or indirectly) has potential for possible significant effects on qualifying interests of a European designated site, the Unshin River SAC (Site Code 001898). **Therefore, progression to Stage 2 Appropriate Assessment is required.**

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Appendix I: Photos

Figure no.	Description	Image
1	Access road to subject site	
2	Subject site and existing 'dry' toilet.	

3	Small unnamed watercourse adjacent to the subject site	
4	Typical vegetation of Grey Willow in previously cleared area of site.