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ATHY TRAILHEAD

Appropriate Assessment Screening Report

Prepared for:

Kildare County Council

Kildare County Council
Comhairle Condae Chill Dara

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BARROW BLUEWAY – BARROW BLUEWAY - ATHY TRAIL HEAD APPROPRIATE ASSESSMENT SCREENING REPORT

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Abstract: This document is to inform the Competent Authority in carrying out their statutory obligations relating to the Habitats Directive requirement for Appropriate Assessment for plans and projects seeking consent. Appropriate Assessment is required under Article 6 (3) of the Habitats Directive for any project or plan that may give rise to significant effects on a European (Natura 2000) site.

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1. INTRODUCTION

Fehily Timoney and Company (FT)[1] was commissioned by Kildare County Council to prepare an Appropriate Assessment Screening Report for the Athy Trailhead development.

This report presents an examination of whether the proposed development is likely to have a significant effect on a European site (either alone or in combination with other plans or projects) and is based on best available scientific knowledge. This report has been prepared to inform the competent authority in completing their statutory obligations in relation to Appropriate Assessment, as required by Article 6(3) under Council Directive 92/43/EEC (Habitats Directive).

1.1 Legislative Context

Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive) provides legal protection for habitats and species of European importance. The Directive requires that where a plan or project is likely to have a significant effect on a European Site, while not directly connected with or necessary to the nature conservation management of the site, it will be subject to 'Appropriate Assessment' to identify any implications for the European site in view of the site's Conservation Objectives. Specifically, Article 6(3) of the Habitats Directive states:

> *"6(3) Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have 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."*

The competent authority must carry out a screening for appropriate assessment to assess, in view of best scientific knowledge, if the Athy Trailhead, individually or in combination with another plan or project is likely to have a significant effect on a European site. If it cannot be excluded, on the basis of objective information, that the proposed project, individually or in combination with other plans or projects, will have a significant effect on a European site, an appropriate assessment of its implications for the European Site(s) in view of the Site's conservation objectives is required to be carried out.

The provisions of Article 6(3) do not apply where the proposed plan or project is 'connected with or necessary to the management of the site'. In this case, the proposed project is not directly connected with or necessary to the management of any European site(s).

[1] Details on the contributors to this report are provided in Appendix 1.

1.2 Methodology

1.2.1 Guidance

The assessment was conducted in accordance with the following guidance:

- 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. Commission Notice (2021) Brussels, 28.9.2021 C(2021) 6913 final (European Commission, 2021).
- Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities. National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, Dublin (2009, updated 2010) (Environment Heritage and Local Government, 2009).
- Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. European Commission (2019). Brussels, (2019/C 33/01). OJ C 33, 25.1.2019.
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management, (Office of the Planning Regulator, 2021).

1.2.2 Process

The process of determining the likelihood of significant effects from a proposed project on European sites is an iterative process centred around a Source-Pathway-Receptor model. In order for an effect to be established, all three elements of this mechanism must be in place. The absence of one of the elements of the mechanism is sufficient to conclude that a potential effect cannot occur.

- Source(s) – e.g., pollutant run-off, noise, removal of vegetation, etc.;
- Pathway(s) – functional link, or ecological pathway e.g., groundwater connecting to nearby qualifying wetland habitats; and,
- Receptor(s) – the qualifying habitats and species of European sites and ecological resources supporting those habitats/species.

In the context of this report, a source is any identifiable element of the proposed project that is known to interact with the receiving environment. A receptor is the Qualifying Interests (QI)[2] for an SAC or Special Conservation Interests (SCI)[3] for an SPA or an ecological feature that is known to be utilised by the QI/SCI. In practice, the term Qualifying Interests also applies to SCIs (and is used in this document for simplicity). A pathway is any connection or link between the source and the receptor.

[2] SACs are areas designated under the Habitats Directive to conserve habitats listed in Annex I of the Directive and plant and animal species listed in Annex II. Collectively these are referred to as the 'Qualifying Interests' or 'QIs' of the SAC.
[3] SPAs are sites classified under the Birds Directive to protect rare or vulnerable bird species listed in Annex I to the Directive as well as regularly occurring migratory species and wetlands. Wetland habitats that support internationally important populations of migratory birds may be coastal or inland. Collectively, these species and habitats are referred to as the 'Special Conservation Interests' of the SPA.

The assessment commences with a description of the project, along with a description of the receiving environment and the associated sources for impacts to the receiving environment. All elements of the project are presented including the project location and existing baseline environment. The type of impacts that are likely due to the project (Source) are identified having regard to the spatial and temporal scale of the project, resource requirements and likely emissions. These sources are then used to define the zone of influence (ZoI) of the project as detailed in Section 2.3.

The European Commission Notice (2021) on the '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', states that in identifying European sites (Natural 2000 sites), which may be affected by the project, the following should be identified:

- Any European sites geographically overlapping with any of the actions or aspects of the plan or project in any of its phases, or adjacent to them;
- Any European sites within the likely zone of influence of the plan or project. European sites located in the surroundings of the plan or project (or at some distance) that could still be indirectly affected by aspects of the project, including as regards the use of natural resources (e.g., water) and various types of waste, discharge or emissions of substances or energy;
- European sites whose connectivity or ecological continuity can be affected by the plan or project.

The zone of influence of a proposed project is therefore the geographical area over which it could affect the receiving environment in a way that could have potential effects on the Qualifying Interests of a European site. The OPR (2021) practice note states that the Zone of Influence must be established on a case-by-case basis using the Source-Pathway-Receptor (S-P-R) framework and not by arbitrary distances (such as 15 km). Section 3.2 sets out the detailed rationale for the identification of relevant European sites within the ZoI based on the sources of impacts arising from the proposed project. Subsequently, an assessment is undertaken with respect to potential connectivity (Pathways) to European Sites and their qualifying interests/special conservation interests are identified.

The potential for in-combination effects with other plans and projects is examined in Section 3.3, having regard to the identified impacts of the project along the ecological pathways identified to European sites.

In section 3.4 the likelihood of significant effects of the European Sites within the ZoI is examined having regard to the sensitivity of the site with pathways for impacts associated with the project on its own and in combination with other plans and projects.

Having regard to the European Commission Communication on the Precautionary Principle (European Commission, 2021) the:

> *"absence of scientific evidence on the significant negative effect of an action cannot be used as justification for approval of this action. When applied to Article 6(3) procedure, the precautionary principle implies that the absence of a negative effect on Natura 2000 sites has to be demonstrated before a plan or project can be authorised. In other words, if there is a lack of certainty as to whether there will be any negative effects, then the plan or project cannot be approved."*

Where significant effects are determined to be likely, or where there is uncertainty regarding the likelihood of significant effects, the project will be required under law to be subjected to Appropriate Assessment.

This AA screening is based on best scientific knowledge and has utilised ecological expertise. In addition, a detailed online review of published scientific literature was conducted. This included a detailed review of the National Parks and Wildlife Website including mapping and available reports for relevant sites and in particular sensitive qualifying interests/special conservation interests described and their conservation objectives.

2. DESCRIPTION OF THE PROJECT

2.1 Project Description

2.1.1 Project Location

The Athy Trailhead is located within a suburban setting at the town of Athy, Co. Kildare. The development lands comprise a greenfield site on the northern bank of the Grand Canal Barrow Line and is located approx. 130m from the River Barrow itself. The proposed trailhead location and the existing Barrow Blueway route are highlighted in Figure 2-1. Blueway users will utilise existing infrastructure between the proposed trailhead and the Barrow Blueway, over a distance of approx. 300m (note yellow dashed access routes below).

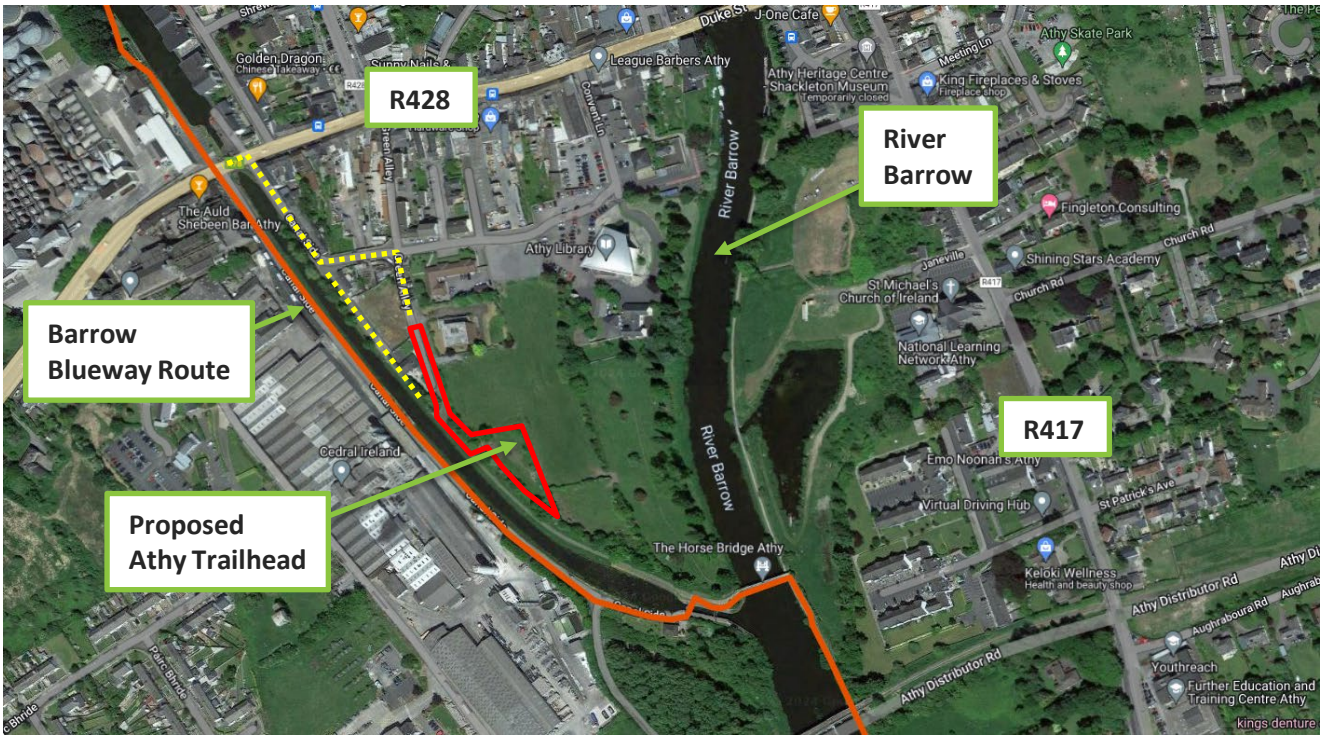

Figure 2-1: Proposed Location of Athy Trailhead

2.1.2 Existing Environment

The proposed development lands comprise improved grassland (GA1)/wet grassland (GS4) mosaic. The grassland is largely rank, nutrient rich and species poor. Species composition includes Yorkshire-fog (*Holcus lanatus*), common couch (*Elytrigia repens*), redshank (*Persicaria maculosa*), common nettle *(Urtica dioica*), docks (*Rumex spp*.), bents (*Agrostis spp*.) and occasional Russian comfrey (*Symphytum x uplandicum*). Encroaching bramble (*Rubus fructicosus agg*.) is present throughout.

The proposed development lands are bounded by Hedgerows (WL1). The hedgerows are thick and unmanaged with bramble dominating. Occasional large trees including hawthorn (*Crataegus monogyna*), elder (*Sambucus nigra*), ash (*Fraxinus excelsior*) and wych elm (*Ulmus glabra*), are present within the hedgerows. Scrub (WS1) encroachment is evident within the grassland, dominated by bramble with ash, hawthorn and grey willow (*Salix cinerea*) also present.

A shallow land drain (FW4) runs along the western field boundary, parallelling the hedgerow, which permeates to ground.

A stone wall also runs along the western and eastern field boundaries, parallelling the hedgerows.

The Grand Canal (FW3) is located c. 10m west of the red line boundary at its closest point.

The River Barrow and River Nore SAC (Site Code: 002162). is located 115m east of the proposed development boundary.

Figure 2-2: The Grand Canal - Showing low vegetated ditch and Treeline along Development Boundary

Figure 2-3: The Athy Trailhead - Showing the Improved grassland (GS1)/ Wet Grassland (GS4) mosaic and Scrub (WS1) bounded by Hedgerow (WL1) and Treeline (WL2)

Figure 2-4: The Drainage Ditch within Athy Trailhead.

Legend

Habitats

- FW3 - Canals
- FW4 - Drainage ditches
- WL1 - Hedgerows
- BL1 - Stone walls and other stonework
- GA1 - Improved agricultural grassland
- WS1 - Scrub

TITLE:	Habitat Map		
PROJECT:	Barrow Blueway		
FIGURE NO:	INFO		
CLIENT:	Kildare County Council		
SCALE:	1:1,000	**REVISION:**	0
DATE:	19/01/2026	**PAGE SIZE:**	A3

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2.1.3 Project Overview

The proposed trailhead development will provide the following, as shown on Layout Drawings P20-249-0100-CP01 and P20-249-0100-CP02:

- 15nr. standard car parking spaces;
- 2nr. accessibility car spaces;
- 14nr. standard bicycle parking spaces;
- 2nr. accessibility bicycle parking spaces;
- 3nr. bike storage lockers;
- 1nr. access point to the existing canal towpath via unbound path;
- Ancillary public amenities such as play area, benches, picnic tables, bins and route maps/signage;
- SUDs elements such as a sunken rain garden, permeable pavement/porous asphalt under car and bike parking spaces, and a drainage/storage basin;
- Retention of existing boundary hedgerows to maintain the site's biodiversity and natural habitat;
- Traffic bollards and buff tactile paving near accessibility spaces to prevent vehicle encroachment onto footways;
- Permeable footways, precast kerbs, tactile paving, and road markings to aid pedestrian navigation;
- Impermeable road surfacing to car park entrance/exit and along the proposed access road for maintenance purposes;
- A 5m wide shared space access road for car, cyclist and pedestrian traffic, with over the edge drainage to min. 0.5m wide grass verges, and a 2.1m wide drainage swale along the east side of entrance road;
- Speed control measures to access road including localised narrowing and landscaped buildouts, as well as colour contrast surfacing and road markings on approaches to shared space to highlight to all trailhead users;
- Timber post and rail fences to trailhead boundary and access control barrier at entrance; and
- Planting to all grass and landscaped areas, with any replacement planting to match existing. Full planting plan to be developed at Detailed Design stage. To enhance biodiversity, replacement planting will be pollinator friendly.

The Kildare County Development Plan 2023-2029 includes objective IN O23 to " *Require the implementation of Sustainable Urban Drainage Systems (SuDS) and other nature-based surface water drainage as an integral part of all new development proposals*". As such, the drainage strategy for the site integrates nature-based sustainable drainage solutions, such as a swale along the access road verge, a sunken rain garden to the north of the site, permeable pavement/porous asphalt to the car parking area, and a drainage basin to the south of the site. Infiltration is the intended drainage strategy for the scheme, and the proposed SuDS features, as well as the area of permeable pavement/porous asphalt, is sufficient for a 1:100-year rainfall event. It is proposed that surface water run-off from the proposed impermeable access road will collect in a drainage swale provided in the grass verge. The drainage system shall be designed to manage surface water run-off from the site in a way that mimics the existing hydrology of the site in so far as is practical.

No outfalls to nearby watercourses, i.e. the Grand Canal Barrow Line or River Barrow are proposed.

2.1.4 Construction Sequence

It is expected that the construction sequence for the proposed Trailhead will take place as follows:

- Utility Services: location, diversion and protection of existing services on site;
- Site and Vegetation Clearance;
- Earthworks: re-grade trailhead site with longitudinal fall towards proposed drainage basin/storage to south of the site. Import and compaction of acceptable fill material likely to be required;
- Drainage: installation of SuDS measures;
- Fencing & Kerbs: install precast concrete kerbs, precast dropped kerbs, tactile paving, and boundary fencing;
- Pavement: installation of 804 subbase with asphalt paving to access road, and installation of permeable pavement/porous asphalt to parking area, permeable footways to be constructed;
- Landscaping: top soiling and planting; and
- Ancillary Works: install public lighting columns at road crossings if required, road signage, access control, road markings, colour contrast surfacing, trailhead amenities (benches, bins, etc.), bollards, bike stands and bike storage lockers.

3. SCREENING FOR APPROPRIATE ASSESSMENT

3.1 Introduction

This section of the report examines if the proposed Athy Trailhead is likely to have a significant effect upon European sites, either alone or in combination with other plans or projects.

NOTE: It is of note that the SuDS features that are proposed to be constructed as part of the Proposed Development are not included within the design to avoid or reduce any potential harmful effects to any European sites, rather are included for alignment with the County Development Plan policies. This screening for appropriate assessment **does not** take SuDS into consideration in determining whether the proposed development could result in likely significant effects on European sites.

Similarly, best practice construction measures as prescribed in the OCEMP, including those to prevent runoff, have not been taken into consideration in determining whether the proposed development could result in likely significant effects on European sites.

As such, the assessment of potential for significant effects is based on an assumption of uncontrolled runoff from the proposed development from both construction and operation stage.

3.2 Identification of European Sites within the Zone of Influence of the Proposed Project

As per CIEEM guidelines (2018)[4], the study area for the proposed development has been defined having regard to the spatial and temporal scale of potential biophysical changes in the environment which might occur as a result of the development and throughout its lifetime. As such the study area extends beyond the footprint of the works and considers potential direct and indirect links to sensitive receptors of European sites. In particular, the following was considered:

- For potential for impacts on surface waters, regard is had to IFI (2020) guidelines[5] which states that "*The recommended [riparian] buffer zone width for larger river channels (>10m) is 35m to 60m and for smaller channels (<10m) is 20m or greater*".
- For groundwater dependant terrestrial ecosystems (GWDTE), regard is had to SEPA guidelines[6] which prescribes a potential hydrogeological effect zone of 250m from ground works.
- For bats, regard is had to Bat Conservation Trust guidelines[7]. However, the proposed works are located outside of the natural range for Lesser Horseshoe Bat, and as such significantly beyond the 2km core sustenance zone for this species.

[4] CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine version 1.2. Chartered Institute of Ecology and Environmental Management, Winchester
[5] Inland Fisheries Ireland (2020) A Guide to the Protection of Watercourses through the use of Buffer Zones, Sustainable Drainage Systems, Instream Rehabilitation, Climate / Flood Risk and Recreational Planning.
[6] Scottish Environment Protection Agency (2014) Land Use Planning System SEPA Guidance Note 31. Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and groundwater Dependent Terrestrial Ecosystems.
[7] BCT (2020) Core Sustenance Zones and habitats of importance for designing Biodiversity Net Gain for bats. Bat Conservation Trust, London

- The general disturbance zone for otter adopted for this assessment is 50m beyond the footprint of onsite activities having regard to Guidelines for the Treatment of Otters prior to the Construction of National Road Schemes (CC-ENV-01104) (TII, 20006 republished 2025). Note that this ZOI is extended to 150m to account for any breeding places of protected otter.
- The potential disturbance zone for birds is considered as 200m beyond the footprint of onsite activities having regard Goodship (2022)[8].

While the proposed development is located fully outside of outside any European Sites, consideration is given to the potential for lands within disturbance and impact ZoIs (as described above) to support the qualifying interests / special conservation interests of European sites. In this regard, an assessment is made as to whether there could be landscape[11] or ecological connectivity[12] to any European site.

- For SPA birds, regard was had to the SNH guidelines[13] for the core foraging ranges of SPA birds and a 15km range was adopted for consideration. That is, an assessment was made as to whether the habitats within the ZoI of the proposed development could act as foraging or roosting habitat for any birds of SPAs which are located within 15km of the project, having regard to the conservation objective backing documents for each SPA.
- For SACs, consideration was given to existing records for qualifying features in the locality of the proposed development and an assessment of the potential for mobile qualifying features of European sites to use the lands within the disturbance and impact ZoIs, as based on the findings of desktop assessment and ecological field survey.

On the basis of the above, the following is concluded:

- The habitat within the zone of impact of the proposed development include improved grassland, hedgerow and treelines. Field survey concluded that these habitats do not support any species designated for protection under the Habitats Regulations.
- The River Barrow is located c 115m from the proposed development, and as such, having regard to IFI guidelines, a sufficient riparian zone exists such that there is no pathway for effects on the River Barrow (part of the River Barrow and River Nore SAC, site code 002162). The on-site land drain permeates to ground, and as such the surrounding lands act as a natural swale between the development lands and the River Barrow, located 110m away. The Grand Canal - Barrow Line is located at its closest point c. 8m from the project. The Grand Canal is not a designated European site, however it joins the River Barrow c. 180m downstream.
- There are no SPAs located within the 200m potential disturbance zone for birds from the proposed project. Additionally, there are no SPAs located within the 15km core foraging range for birds. There are no SPAs within the potential ZoI of the project.

[8] Goodship, N.M. and Furness, R.W. (MacArthur Green) (2022) Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283.
[11] Landscape connectivity is a combined product of structural and functional connectivity, i.e. the effect of physical landscape structure and the actual species use of the landscape (Kettunen et al. 2007)
[12] Connectivity is defined as a measure of the functional availability of the habitats needed for a particular species to move through a given area. Examples include the flight lines used by bats to travel between roosts and foraging areas, or the corridors of appropriate habitat needed by some slow colonising species if they are to spread (CIEEM, 2018).
[13] Scottish Natural Heritage (2016) Guidance on Assessing Connectivity with Special Protection Areas (SPAs)

- The nearest GWDTE to the project is the marsh habitat located on the island downstream of Athy between the Grand Canal and River Barrow (located 550m south of the proposed project), and is beyond the zone of influence of the project.
- The River Barrow and River Nore SAC is located within the potential disturbance zone for breeding Otter.

On the basis of the above, the following European sites are considered further in terms of potential S-P-R connectivity and potential for significant effects (see Table 3-1):

River Barrow and River Nore SAC, site code 002162. Conservation Objectives for this site are available through the NPWS website[14].

[14] https://www.npws.ie/sites/default/files/protected-sites/conservation_objectives/CO002162.pdf

Table 3-1: Source-Pathway-Receptor Assessment

Site Code	European Site Name	List of Qualifying Features	Distance from the proposed development (km)	Source - Pathway - Receptor Assessment	Considered further in screening (Y/N)
002162	River Barrow and River Nore SAC	**Habitats** 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1170 Reefs 1310 Salicornia and other annuals colonising mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi) 3260 Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation 4030 European dry heaths 6430 Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels 7220 Petrifying springs with tufa formation (Cratoneurion)* 91A0 Old sessile oak woods with Ilex and Blechnum in the British Isles 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)*	0.13km	**Source:** The proposed development will involve clearance of improved/wet grassland and 30m Hedgerow (WL1). The majority of the hedgerow removal occurs beyond the IFI-recommended 20 m buffer from watercourses, with the exception of works north of the access-control barrier at the car park entrance, which are located approximately 8 m from the Grand Canal. The land drain, stone wall and tree lines along the boundaries of the development will not be affected by the works and will act as a natural swale to attenuate runoff, noting that the drain has no direct connection to the Canal. As such the potential pathway for runoff beyond the project boundary is limited to the works north of the access control barrier at the car park entrance, which will directly abut the existing footway along the Canal. These works comprise a new section of roadway and a bitumen footway to tie into the existing footway along the Canal. **Pathway:** The identified pathway for potential sediment run off is associated with localized regrading works at the trailhead. The development area has a longitudinal slope towards a proposed drainage basin located to the south. Consequently, any runoff generated from site clearance and construction activities will flow in a south-easterly direction, parallel to the Grand Canal rather than into the Grand Canal. **Receptors:** The aquatic fauna designated as qualifying features of the site are considered receptors which may be impacted by sediment runoff. With the exception of otter (*Lutra lutra*) and White clawed Crayfish (*Austropotamobius pallipes*), there were no records found of the qualifying feature species such as lamprey and salmon occurring within the surrounding area of the proposed works.	

Site Code	European Site Name	List of Qualifying Features	Distance from the proposed development (km)	Source - Pathway - Receptor Assessment	Considered further in screening (Y/N)
		Species 1016 Desmoulin's Whorl Snail (Vertigo moulinsiana) 1029 Freshwater Pearl Mussel (Margaritifera margaritifera) 1092 White-clawed Crayfish (Austropotamobius pallipes) 1095 Sea Lamprey (Petromyzon marinus) 1096 Brook Lamprey (Lampetra planeri) 1099 River Lamprey (Lampetra fluviatilis) 1103 Twaite Shad (Alosa fallax fallax) 1106 Salmon (Salmo salar) 1355 Otter (Lutra lutra) 1421 Killarney Fern (Trichomanes speciosum)		Furthermore, the short duration and scale of the proposed activities, coupled with the minimal amount of sediment anticipated to reach the canal, indicates any potential impact from sediment runoff on these receptors would be negligible. **Source:** Noise and human activity associated with both the construction and operational phases of the proposed development have the potential to cause disturbance to otter (*Lutra lutra*). **Pathway:** The identified pathway for noise is associated with the suitability of riparian habitat within the 150m disturbance zone of breeding otter and 50m for non-breeding. **Receptor:** An otter survey was carried out within the 150m ZoI, along the path between the Grand Canal and the proposed development. No evidence of otter was recorded in the otter survey with no holts, spraints, slides or couches recorded. The habitat surrounding the site is already highly disturbed and does not present as suitable habitat for otter. Furthermore, the River Barrow is separated from the proposed development by areas of Improved Grassland (GA1) and Hedgerows (GS1) and Treelines (GS4) and noise levels will be highest during times when otter are least active throughout the day. The combination of low habitat suitability, absence of field evidence, and temporal separation of disturbance ensures that the risk of noise impacts on otters from the proposed development is negligible. **Source:** This development includes pavement works which involve the installation of a Type 804 granular subbase, asphalt paving to the access road, permeable pavement/porous asphalt to the parking area, and bitumen-bound footways.	

Site Code	European Site Name	List of Qualifying Features	Distance from the proposed development (km)	Source - Pathway - Receptor Assessment	Considered further in screening (Y/N)
				Source for potential disturbance may arise from runoff, or residual dust and particulates. The works are beyond the IFI recommended 20m buffer from watercourses with the exception of works south of the site above the SUDs and bicycle parking at 13m distance from the canal. The land drain, stone wall and tree lines along the boundaries of the site will not be affected by the works and will act as a natural swale to attenuate runoff, noting that the drain has no direct connection to the Canal. As such the potential pathway for paving works to have an impact beyond the project boundary is limited to the works south of the site, which is separated from the canal by treelines and an existing pathway along the Canal. **Pathway:** The identified pathway for potential runoff off is associated with paving works at the trailhead and the potential for asphalt and bitumen runoff in the southern part of the site where works are undertaken 13m from the canal. The development area has a longitudinal slope towards a proposed drainage basin located to the south and regrading the site along with treeline and hedgerow being retained from this point of works allows runoff and spills to flow in a south easterly direction, parallel to the canal. **Receptors:** The aquatic fauna designated as qualifying features of the site are considered receptors which may be impacted by paving works. With the exception of otter (*Lutra lutra*) and White clawed Crayfish (*Austropotamobius pallipes*), there were no records found of the qualifying feature species such as lamprey and salmon occurring within the surrounding area of the proposed works. Furthermore, the short duration and scale of the proposed activities, indicate any potential impact from asphalt run off or bitumen on these receptors would be negligible. **Source:** The proposed development will include the installation of public lighting columns which have the potential to cause disruption to local fauna such as otter (*Lutra lutra*).	

Site Code	European Site Name	List of Qualifying Features	Distance from the proposed development (km)	Source - Pathway - Receptor Assessment	Considered further in screening (Y/N)
				Pathway: The pathway for Light spill from columns which may extend into the SAC, is the suitability of riparian corridors along the canal and SAC within 150m disturbance zone for otter. The pathway is strongest in areas where lighting is close to dark corridors or water bodies, such as the Canal. **Receptor:** An otter survey was carried out within the 150m ZoI, along the path between the Grand Canal and the proposed development. No evidence of otter was recorded in the otter survey with no holts, spraints, slides or couches recorded. The habitat surrounding the site is already highly disturbed and does not present as suitable habitat for otter. Furthermore, lighting columns will be cowled away from the canal removing the potential pathway for lighting to impact otter if they were present. Any impact on otter from lighting would be negligible.	

3.3 Consideration of in-combination Effects with other plans or projects

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".*

It is therefore required that the likely significant effects of the proposed project are considered in-combination with any other plans or projects within the zone of influence.

The consideration of in-combination effects with other plans or projects, focused on the sources of impacts identified for the proposed project in section 2.3 and ecological pathways identified in section 3.2.

3.3.1 Projects

To identify other committed development in the area, a planning search was carried out using the online planning enquiry system. The planning search focused on the sources of impacts identified for the proposed project in section 2.3 and ecological pathways identified in section 3.2. To identify projects for consideration for the in-combination effects section, the Dept of Housing, Local Government and Heritage planning database was used[15]. A review of all planning applications within the identified zone was conducted focusing on all application within the past 5 years[16] (Table 3-2).

[15] https://data-housinggovie.opendata.arcgis.com/datasets/planning-application-sites-2010-onwards; 13th June 2022
[16] planning application have a standard lifespan of 5 years as per Section 40 (3)(b) of the Planning & Development Act 2000, as amended; therefore, these are viewed the 'live' applications, all other projects are considered as part of the site context.

Table 3-2: Local planning applications within the receiving environment

Planning Refernece	Status	Overview	Environmental Assessments (AASR, NIS, EIAR, EcIA) Competent Authority Determinations (Screening for AA, AA, Planning decision)	Characteristics of the potential interactions between the identified project and the proposed project (consider sources and pathways)	Potential for in-combination effects (Y/N)
23656	Granted 12/10/2023	Large scale residential development at a site of c. 4.21ha located 350m south from Barrow Blueway car park site, 520m from the River Barrow. A total of 132 residential units and 2 vehicular entrances and 3 pedestrian entrances.	Competent authority: Kildare County Council AASR EIA EcIA	The proposed development is located within the Barrow Catchment; thus the proposed development would be hydrologically linked to the River Barrow and River Nore SAC. However, the proposed development would not be considered to impact upon the listed habitats and species of the SAC site due to deleterious effects on water quality, owing to the location of the development, the nature and duration of works and the small scale of the development. Wastewater from the proposed development will connect to the existing sewer line via a foul water drainage network. It is not anticipated that there will be a deleterious effect on water quality within the Bennetsbridge Stream or River Barrow as a result of the proposed development	No= No potential for in-combination effects
22985	Granted 22/06/2023	2 story and part 3 story detached building with a gross internal floor area of 2223sqm providing 16 no. car parking spaces, 1 vehicular entrance and 1 pedestrian entrance from Green Alley. The Grand Canal is located 2.8m from the western site boundary and 100m from our site boundary.	Competent Authority: Kildare County Council AASR NIS	The primary outlet pipe will discharge into the River Barrow and the secondary outfall pipe into the existing drainage ditch. Their SuDS measures: perimeter trench pit, bioretention tree pits, attenuation tank, permeable ground surfaces and rain garden systems.	N= No potential for in-combination effects

Planning Refernece	Status	Overview	Environmental Assessments (AASR, NIS, EIAR, EcIA) Competent Authority Determinations (Screening for AA, AA, Planning decision)	Characteristics of the potential interactions between the identified project and the proposed project (consider sources and pathways)	Potential for in-combination effects (Y/N)
18479	Granted with revised conditions 14/03/2019	New Malting Plant and demolition of a portion of an existing barely intake building & storage building.	Competent Authority: An Bord Pleanála No EIAR, NIS	Treated process effluent will be discharged to the River Barrow via pipeline and outfall. All foul sewage is discharged to the municipal sewer network for treatment in Athy WWTP.	N= No potential for in-combination effects

Source: Dept of Housing, Local Government and Heritage planning database for the period (2019-2025)

3.4 Assessment of Likely Significant Effects

3.4.1 Assessment of Likely Significant Effects

The EC (2021) Guidance notes that the significance of the effects will vary depending on factors such as the magnitude of impact, the type, extent, duration, intensity, timing, probability, in-combination effects and the vulnerability of the habitats and species concerned.

These sites are now examined for the potential for likely significant effects.

The EC (2021) outlines the following potential changes that may occur at a European site, which may result in effects on the function of the site:

- Reduction of habitat area, habitat degradation or fragmentation;
- Disturbance to species, reduction in species populations and density;
- Changes in ecological functions and/or features that are essential for the ecological requirements of habitats and species (e.g. water quality and quantity);
- Interference with the key relationships that define the structure and function of the site.

The guidance document outlines the following criteria for assessing significance, indicators of significance, in view of the site-specific conservation objectives e.g.:

- Degree of habitat loss (absolute, relative), changes in habitats structure;
- Risk of species populations' displacement, level of disturbance, reduction of species home range, feeding area, refuge areas, alteration of favourable condition for breeding;
- Importance of the habitats and species affected, e.g. representativeness, local variety;
- Importance of the site (e.g. limit of distribution area for certain habitats and species, stepping stone, important for ecological connectivity);
- Disruption or alteration of ecological functions;
- Changes to key ecological features of the site (e.g. water quality).

The potential for the proposed development to have likely significant effects on nearby Natura 2000 sites is examined in Table 3-3 on the basis of the source-pathway-receptor connectivity, and the sensitivity of the European sites qualifying interests to the effects of the impacts.

Table 3-3: Assessment of likely significant effects

Site Name (Site Code)	Criteria for assessing potential changes that may occur at a European site, which may result in effects on the function of the site:[17]	Assessment of effects on the European sites functionality	Assessment of the significance of effects either alone and in-combination with other plans or projects	Likely Significant Effect
River Barrow and River Nore SAC (Site Code: 002162)	Reduction of habitat area, habitat degradation or fragmentation.	The proposed works involve the removal of improved grassland (GA1)/wet grassland (GS4) mosaic and 30m of hedgerow (WL1). However, due to the scale of works for this development, this habitat removal will not result in any habitat reduction, degradation or fragmentation of any habitats identified as qualifying features. Sediment runoff from the removal of these habitats may enter the canal however, due to the small scale of works and minimal level of sediment, impacts will be negligible. Habitats to be removed are not used by qualifying feature species and as such the impact on qualifying features from habitat removal, degradation and fragmentation is negligible.	There are no significant effects on habitat loss, degradation or fragmentation alone nor in-combination with other plans or projects.	No Likely Significant Effect

[17] Taken from the EC (2021) Guidelines

Site Name (Site Code)	Criteria for assessing potential changes that may occur at a European site, which may result in effects on the function of the site:[17]	Assessment of effects on the European sites functionality	Assessment of the significance of effects either alone and in-combination with other plans or projects	Likely Significant Effect
	Disturbance to species, reduction in species populations and density.	The proposed works will not result in disturbance to any qualifying interest species nor species for which qualifying interest habitats rely on. There will be no reduction in protected species population or density as a result of these works. Otter and white-clawed crayfish are the only qualifying feature with pathway for effect and impacts from disturbance will be negligible. The nature, location and timeframe of proposed works along with lack of evidence of the presence of these qualifying interests ensure that no qualifying interests will be impacted from the proposed development.	There is no significant disturbance to protected species which would lead to a reduction in populations or density either alone or in-combination impacts.	No Likely Significant Effect
	Changes in ecological functions and/or features that are essential for the ecological requirements of habitats and species (e.g. water quality and quantity).	Given the nature and scale of the proposed works, there will be no changes to the ecological functions and/or features essential for the ecological requirements of habitats and species, such as water quality and quantity.	No significant impacts which would lead to alterations in essential ecological functions alone nor in-combination with other plans or projects.	No Likely Significant Effect

Site Name (Site Code)	Criteria for assessing potential changes that may occur at a European site, which may result in effects on the function of the site:[17]	Assessment of effects on the European sites functionality	Assessment of the significance of effects either alone and in-combination with other plans or projects	Likely Significant Effect
		All pathways for effect were shown to have negligible impact, removing all potential for impact to the ecological requirements of listed qualifying features of the River Barrow and River Nore SAC.		
	Interference with the key relationships that define the structure and function of the site.	There are no identified pathways for effects that would interfere with the key relationships defining the structure and function of the site. The proposed works do not impact essential processes such as nutrient cycling, water quality or habitat integrity of the qualifying features nor relationships and functions between species and habitats associated with the qualifying features such as otter and riparian habitat.	No significant impacts from the project alone or from in-combination impacts with other plans or projects, on key relationships which define the structure and function of the site.	No Likely Significant Effect

3.5 Screening Conclusion

Conclusion: No Likely Significant Effects

The results of the s-p-r modelling process identified that - given the scale and nature of the potential sources identified in Table 2.1 - there are no likely significant effects identified to any European sites. The AA screening process has considered potential effects which may arise during all phases of the proposed project. Through an assessment of the pathways for effects and an evaluation of the sources for impacts, taking account of the processes involved and the distance of separation from European sites, it has been evaluated that there are no likely significant effects on the qualifying interests, special conservation interest or the conservation objectives of any designated European site.

4. REFERENCES

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APPENDIX 1

Report Authors

Surveyor	Surveys Completed	Biography
Orla Commins	Report Author	Orla Commins is an Ecologist with Fehily Timoney and Company. She holds a first-class BSc in Ecology and Environmental Biology from University College Cork. She has prepared comprehensive Appropriate Assessments, Ecological Impact Assessments and has completed ornithological reports, field work, mapping and data management.
Rita Mansfield	Report Reviewer	Rita is a Principal Ecologist and Project Manager with 20 years' experience as a technical lead within the environmental and planning services sector. She specialises in statutory consent and environmental assessment for large scale public infrastructure projects in the energy, water (including flood relief schemes) and transport sectors. She is a qualified ecologist with experience in environmental impact assessment, planning applications (conventional and strategic infrastructure development), climate adaptation, Appropriate Assessment, foreshore licensing, Water Framework Directive, integrated catchment management, and stakeholder engagement.

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