



**Document:**

Appropriate Assessment Screening Report Rev 02

**Project:**

Revised Route and Pedestrian Bridge at Lowtown for the Grand Canal  
Greenway Co Kildare

**Prepared for:**

Fehily Timoney and Company

**Prepared by:**

Ecology Research and Solutions Ltd

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## Statement of Competence

Rory Dalton is an independent ecologist with a decade of experience across a range of disciplines including aquatic ecology, habitats, mammals, and birds. He also carries out a range of species-specific and research-based studies. He graduated from University College Cork with a BSc. Hons in Environmental and Earth Science, after which he spent three years working with a leading ecological consultancy in Limerick. He then set up his own company and has been running it since. Sectors he works in include, conservation, solar farms, wind farms, roads and bridges, grid connections, housing, greenways, instream civil works, drinking water etc. The projects he is involved with range in size from small bridge surveys to the largest wind energy project in the country and the largest water quality project in Europe. He carries out work for a number of State Bodies, Semi-State Bodies, Engineering Consultants, Ecology Consultants, Environmental Consultants and Laboratories.

## 1. Introduction

Ecology Research and Solutions were appointed by Fehily Timoney and Company to prepare a document for the appropriate assessment process with respect to proposed revisions to the greenway route from Robertstown to Lowtown, along with a proposed new pedestrian bridge at Lowtown.

The route proposed during the original Part VIII process (Ref No. P82018.012) enters the east side of Robertstown on the southern bank, crosses the canal at Binns bridge in Robertstown and follows the north bank along a public road for 1.2km into Lowtown. Due to the volume of vehicles and in particular the volume of HGVs crossing the Binn's bridge it is suggested that the use of this bridge for greenway pedestrians and cyclists in addition to vehicular traffic would be unsafe. Immediately west of Binn's bridge on the north bank the consented greenway route shares an 85m long section of the L7073 with road users and due to the width and traffic volumes this section of roadway is also considered unsafe for additional greenway traffic. Hence it is now proposed that the greenway route will follow the southern bank of the canal instead, isolating the greenway users from road traffic. A pedestrian bridge at the canal junction between the Grand Canal and the Barrow Blue way, would be required to connect this section of greenway to the originally consented route.

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 Appropriate Assessment Process

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 development, individually or in combination with another plan or project is likely to have a significant effect on the European site. If it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site, 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).

## 1.2 Methodology

Documents associated with the proposed project and relevant ecology databases were consulted as part of this assessment, with a site walkover also undertaken. Furthermore, the following guidelines were used in the completion of this assessment;

- Assessment of Plans and Projects Significantly Affecting Natura 2000 Sites – European Commission Methodical Guidance on the provisions of Article 6(3) and 6(4) of the ‘Habitats’ Directive 92/43/EEC (European Commission 2001)
- Integrated Biodiversity Impact Assessment – Streamlining AA, SEA and EIA Processes: Practitioner’s Manual (EPA 2013)
- Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities (DoEHLG 2009)
- European Commission (2018). Managing Natura 2000 sites. The provisions of Article 6 of the Habitats Directive 92/43/EEC. Brussels, 2019
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management 2021
- Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (2021/C 437/01)

The Screening Stage of Appropriate Assessment is used to identify whether the Plan, either alone or in combination with other plans or projects, is likely to have a significant effect on a Natura 2000 site. This report follows OPR Practice Note (2021) guidance which recommends that screening should follow a 3 step process as outlined below:

1. : Description of proposed development and site characteristics
2. : Identification of relevant European sites
3. : Assessment of likely significant effects

In stage 2 the potential impacts to conservation interests of the Natura site are looked at in depth and mitigations are put forward to avert these impacts. Each impact is assessed with reference to the conservation interest to which it applies in a case-specific manner. Mitigations are then tailored to each specific situation

## 2. Description of the Site and Proposed works

### 2.1 Description and Location of the Site

The site of the proposed works is located between Robertstown village, along the banks of the Grand canal to Lowtown. Robertstown village was a planned village, developed to cater for the high volumes of tourists using the canal in the early 1800s. It is located approximately 35 km west of Dublin city and 10 km north of newbridge. The village is predominantly located on the southern bank of the canal with a number of businesses such as shops, a post office, an old hotel, a bakery and a pub facing the canal across Main Street. The majority of the section of the proposed works within the village setting is zoned GZT Zone: G1 - Open space, park. A portion of the works will take place adjacent to land zoned GZT Zone:M2 - City/Town/village Centre, central area and GZT Zone: R2 - Existing residential.

In order to facilitate a safer experience for pedestrians and cyclists using the greenway a revised greenway route and new pedestrian bridge have been proposed . The proposed route would follow the south bank from Robertstown along the public road. An existing footway west of Robertstown would be upgraded to a mixed-use pedestrian and cycle lane for the greenway. Approximately 250m west of Binn's Bridge at an existing public car park on the south bank the proposed greenway would divert off the public road and would become a segregated space free of road traffic. The route would then follow the southern bank for 950m. At the canal junction between the Grand Canal and the Barrow Blue way an additional pedestrian bridge would be installed to allow greenway users to cross the barrow and continue onward across the existing Fenton Bridge at the 19th lock in Lowtown village before connecting back with the originally consented route in Lowtown. The original and revised greenway routes are shown on Figure 2-1 and Figure 2-2 overleaf together with the location of the proposed pedestrian bridge.



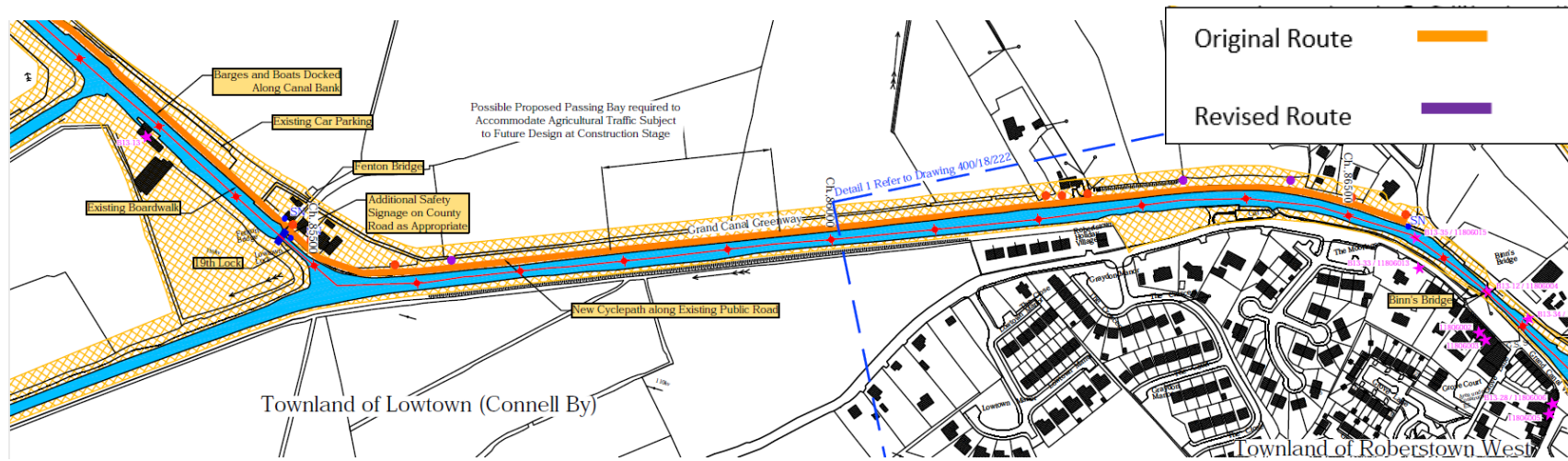


Figure 2-1 Original Greenway Route

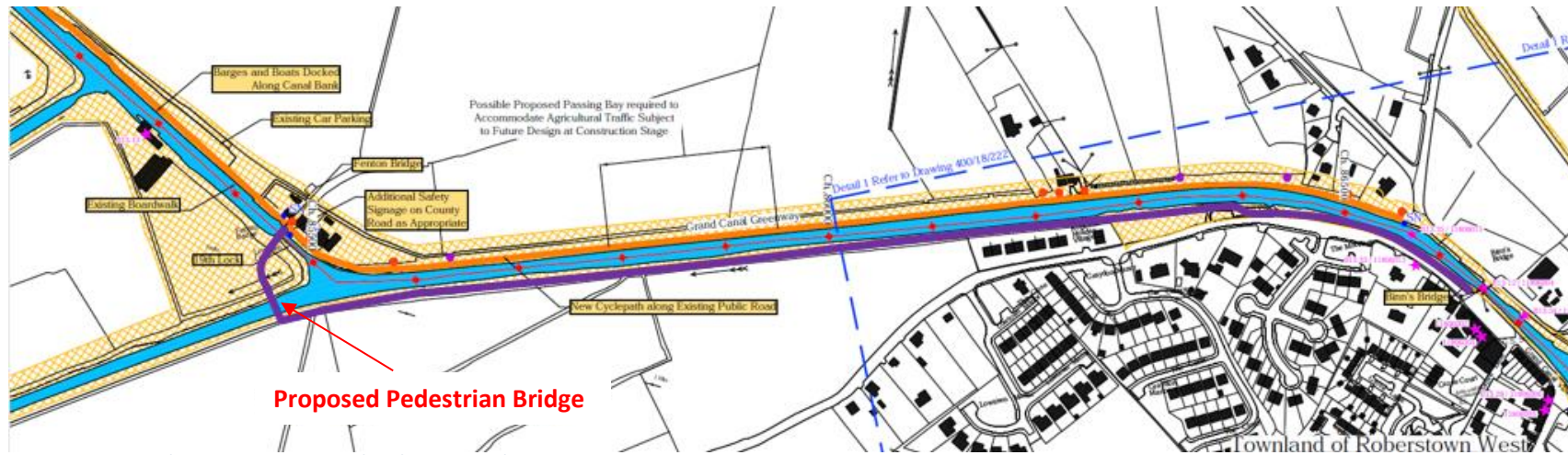


Figure 2-2 Revised Greenway Route and Pedestrian Bridge

## 2.2 Proposed works

- To facilitate the works vegetation clearance on northern and southern bank in the area of the new pedestrian bridge and ramps will be undertaken using hand tools and light machinery. Site clearance will be limited to the area necessary to undertake the works only.
- On the southern bank the existing topsoil will be excavated and placed to one side, before a layer of granular stone is laid on the canal bank to create a solid formation level for the greenway and to act as a temporary access track for construction equipment. A geotextile separation layer will be used to provide separation between the cohesive soil and the granular material for the greenway.
- At the bridge site an exclusion zone will be set up underneath the high voltage electricity lines which traverse the site.
- The existing drain running parallel to the canal on the southern bank will be piped over a length of circa 60m to allow additional space for construction.
- The reinforced concrete foundation for the proposed pedestrian bridge will be excavated down to a suitable formation level and constructed on site. The bridge abutments and foundation will be set back from the canal. No instream work will be required. Subject to further ground investigation works it is assumed that piles will be needed to support the bridge foundation.
- The bridge steel work will be fabricated off site. Upon completion of the bridge foundations and substructure the bridge will be transported to site and lifted into position. Due to the limited width of approach roads the bridge may be fabricated in sections and assembled site.
- The bridge will be lifted into position over a short period of 1-2 days. The canal will need to be closed to marine traffic during this period. It is expected that the bridge will be lifted into position from the northwest side. No lifting equipment will be allowed to operate within, or within falling distance of the hazard zone associated the electricity lines.
- Once the bridge has been installed earthworks will be completed on southern bank to create the bridge approach ramps. The ramps will be circa 25m in length and raise bank level by circa 3m. A green reinforced earth system with a grassed finished will be used.
- Earthworks will also be completed on northern bank to create the bridge approach ramps. The ramps will be circa 40m in length and raise bank level by circa 3m. A green reinforced earth system with a grassed finished will be used.
- A small section of earthworks ramps will be constructed below the electricity lines. The construction of this section will be completed using restricted height equipment to ensure that no equipment encroaches into the exclusion zone around the electricity cables.
- As noted on the drawings the area adjacent to the northern bank will be landscaped for further use as a trial head or recreational area.
- On the northern bank additional earthworks will be required to create a maintenance access track for future Waterways Ireland use and to reduce the gradients to existing access tracks and trails.
- Minor improvement works will be undertaken at Fentons bridge to improve the surfacing and reduce the current gradient.
- The new bridge deck and ramp surface will receive a high friction bridgemaster or similar approved surfacing.



- Bridge parapets will be installed over the new pedestrian bridge and on the approach ramps to provide edge protection to greenway users.
- Upon completion of the bridge the revised greenway route on the southern bank will be completed. A quarry dust surface finish will be applied over the granular subbase.
- The excavated topsoil shall be used to dress the sides of the greenway. The existing seed bed will be reused and allowed to regenerate. The canal verge will be preserved with a typical buffer zone of 1m allowed between the edge of greenway and the canal.
- On approach to the Robertstown the existing footway will be widened and changed to a shared use cycle and pedestrian facility.
- The existing car park on the west side of Robertstown will be modified. The eastern entrance will be closed to allow for improved greenway user access and a segregated cycle track will be provided on the canal side.
- Chicane Gates, colour contrast surfacing, road signage, road markings and other finishes shall be applied to complete the works.

### 3. Natura 2000 Sites and Proposal

#### 3.1 Sources, Pathways and Receptors

Source	Pathway	Receptor
<b>Construction Phase</b>		
<p>Earthworks can cause the input of silt / fine sediment to a watercourse and pose the risk of introducing hydrocarbons should an incident arise. During the course of the works silts and sediment will be produced during the clearing of the site and construction of the greenway. During these works suspended solids could become incident in the surface water runoff from the site. This is particularly possible during times of heavy precipitation.</p>	<p>The closest hydrological connection from the site is the Grand Canal which will run adjacent to the proposed works. The canal however has no current or flow and so any incidents of suspended solids entering this water course should remain localised and not impact additional water courses or Natura 2000 sites. The site of the proposed greenway route also has vegetated boundaries. These vegetated boundaries will help to filter and settle out surface water that is produced before it can become incident on a watercourse. The closest hydrological connection from the site of the proposed works to a Natura 2000 site exists 2.4 km to the east where the Ballynafagh Lake SAC meets the grand canal. Due to this distance and what is for all practical purposes an absence of current within the canal system any sediment that could possibly enter the canal will have dispersed and settled before reaching this SAC.</p> <p>In relation to the installation of the bridge, reinforced concrete abutments will be created on the banks, and then steel beams will be craned in to create the deck. The abutments and pad foundation will be set back from the canal to avoid instream works and reduce the chance of silt or sediment entering the canal.</p>	<p>Typically Aquatic species, but due to absence of pathways arising from this project there are no receptors within any Natura 2000</p>
<p>Physical disturbance can arise from noise associated with construction; mainly by machinery and to a lesser degree power tools and hammering</p>	<p>Due to the scale of the works and the location of the proposed works, noise disturbance from machinery and power tools during the development will be slightly elevated above normal levels of the Village of Robertstown. However due to the distance from the site of the proposed works to the surrounding Natura Sites no significant pathway for disturbance exists.</p>	<p>Typically birds and mammals, but due to absence of pathways arising from this project there are no receptors within any Natura 2000</p>
<p>Destruction of habitat</p>	<p>The small amount of habitat to be removed in order to install the newly proposed section of greenway will be minimal and is not a qualifying interests of surrounding Natura Sites. Some amenity grassland, grassy verges and scrub will be affected. One tree will</p>	<p>Typically Habitats and the species which depend upon them but due to absence of</p>

	also have to be removed to construct the greenway. This tree is an immature willow, which would be considered of low ecological value providing no nesting value and has no crevices suitable for bat roosts. The majority of the works to be undertaken will take place on the canal verge that is already maintained by Waterways Ireland. Therefore there will be no significant destruction of habitat which is considered to be of high ecological value connected to SACs or SPAs. This project does not have the capacity or pathway for habitat destruction in any of the nearby Natura 2000 sites.	pathways arising from this project there are no receptors within any Natura 2000
<b>Operational Phase</b>		
Disruption to the hydrology of a catchment can arise from creating new hard stands. New hard stands can have the potential to collect rainwater and channel it into waterways rather than letting it disperse into the ground.	The nature of the works will not present any significant alterations to the hydrology of a catchment. The scale of the works will not present any significant alterations to the hydrology of the catchment within which the project lies. Any sections of new hard stand will be adjacent to the canal and will be relatively small in nature and not of such significance to alter the hydrology of a catchment. Water from the greenway surface will percolate to ground along the verges of the greenway, particularly given the flat nature of the greenway	Typically Aquatic and riparian species and habitats but due to absence of pathways arising from this project there are no receptors within any Natura 2000
Physical disturbance can arise from noise associated with habitation	During the operational phase of the development the amount of disturbance or noise pollution will not be significantly increased. The increase in traffic volume will be limited and certainly not enough to disturb the conservation interests of the local Natura 2000 sites.	Typically Habitats and the species which depend upon them but due to absence of pathways arising from this project there are no receptors within any Natura 2000

### 3.2 Cumulative Impacts

Given the absence of pathways for the sources identified in Section 3.1 above, combined with the nature and scale of the works, it can be said with reasonable confidence that there will be no cumulative impact to any of the conservation interests of Ballynafagh Bog SAC, Ballynafagh Lake SAC, Mouds Bog SAC, Pollardstown Fen SAC, or any other Natura 2000 site arising from this proposal.

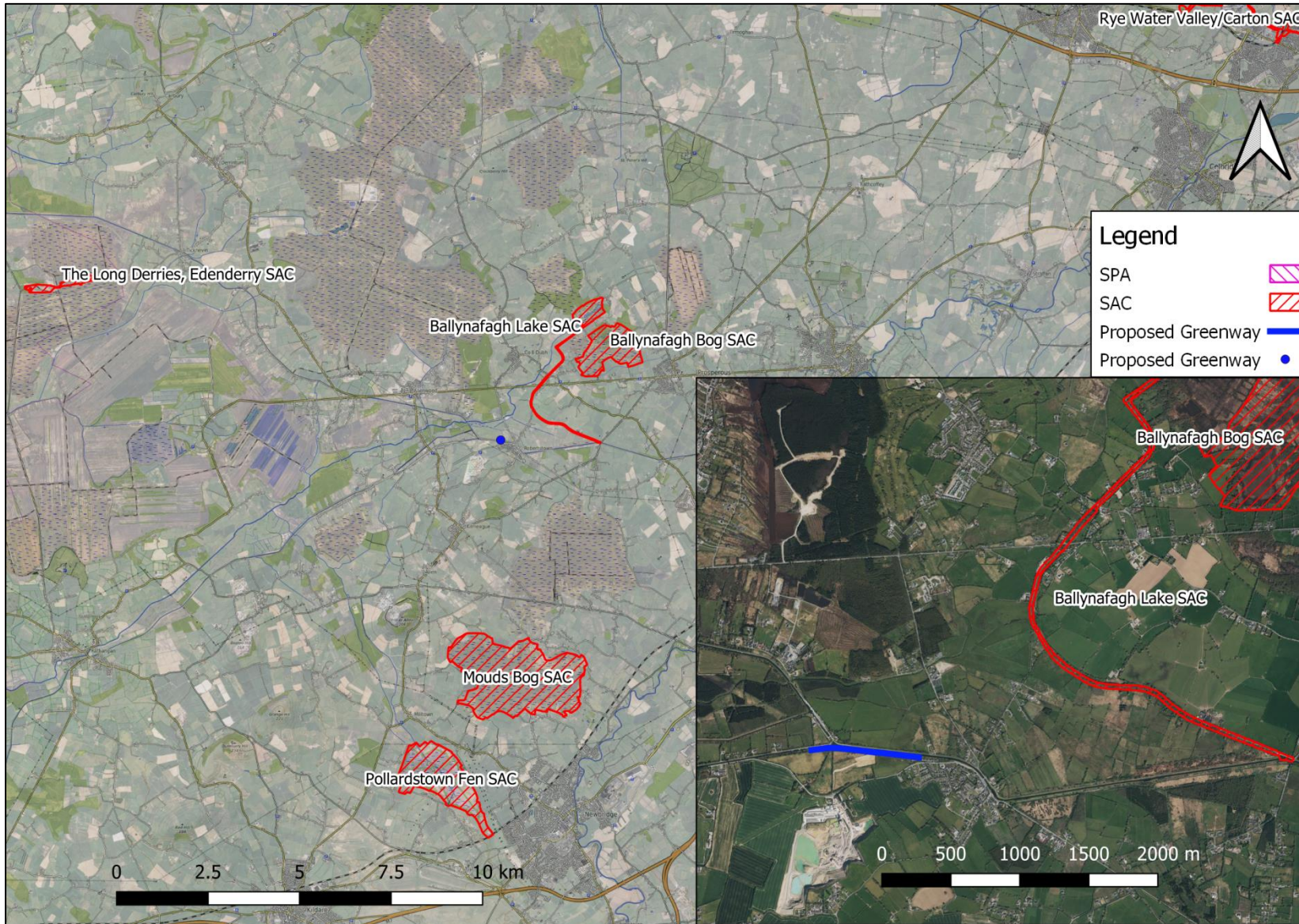
### 3.3 Identification of relevant Natura Sites using Source-Pathway-Receptor and compilation of relevant information

Natura Site	Designations	Distance	Connections (Source - Pathway - Receptor)	Considered further in screening Y/N
<b>Ballynafagh Lake (001387)</b>	Alkaline fens [7230] Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016] Euphydryas aurinia (Marsh Fritillary) [1065]	970 m east, at the far side of the Grand Canal	There are no hydrological pathways as this Natura site is at the opposite side of the Grand Canal. There are no other connections. As such, no likely significant effects are envisaged	No
<b>Ballynafagh Bog (000391)</b>	Active raised bogs [7110] Degraded raised bogs still capable of natural regen [7120] Depressions on peat substrates of the Rhynchosporion [7150]	4 Km east, at the far side of the Grand Canal	There are no hydrological pathways as this Natura site is at the opposite side of the Grand Canal and the distance is large considering the scale of the works and the flat land. There are no other connections. As such, no likely significant effects are envisaged	No
<b>Mouds Bog SAC (002331)</b>	Active raised bogs [7110] Degraded raised bogs still capable of natural regen [7120] Depressions on peat substrates of the Rhynchosporion [7150]	5.2 Km South, past Hanlons Concrete Quarry	There are no hydrological pathways as this Natura site as the distance is large considering the scale of the works and the flat land. There are no other connections. As such, no likely significant effects are envisaged	No
<b>Pollardstown Fen SAC</b>	Calcareous fens [7210], Alkaline fens [7230], Petrifying springs with tufa formation (Cratoneurion) [7220] Vertigo geyeri (Geyer's Whorl Snail) [1013], Vertigo angustior (Narrow-mouthed Whorl Snail) [1014] Vertigo moulinsiana (Desmoulin's Whorl Snail) [1016]	8.4 Km South, past Hanlons Concrete Quarry and Mouds Bog	There are no hydrological pathways as this Natura site as the distance is large considering the scale of the works and the flat land. There are no other connections. As such, no likely significant effects are envisaged	No

<b>The Long Derries, Edenderry SAC</b>	Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]	11.2 Km NW on the other side of the canal	There are no hydrological pathways as this Natura site as the distance is large considering the scale of the works and the flat land. There are no other connections. As such, no likely significant effects are envisaged	No
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### 3.4 Map of Natura 2000 Sites



## 4. Conclusion

In conclusion the construction of the proposed pedestrian bridge at Lowtown and the revised greenway route between Robertstown and Lowtown will not cause likely significant effects on the conservation objectives of any Natura 2000 Site .

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