



An
Bord
Pleanála

Inspector's Report

ABP-301220-18

ABP-301223-18

ABP-301245-18

Development

Development of a multi-use shared leisure route (Blueway), on the existing navigation towpath of the Barrow line of Grand Canal and the River Barrow, which is a National Waymarked Way. The route runs from Lowtown in Co. Kildare to St Mullins in Co. Kilkenny.

Location

The Barrow Navigation (Grand Canal - Barrow Line) commencing in Lowtown, (near Robertstown) and running south via Rathangan, Monasterevin, Athy, Carlow, Leighlinbridge, Bagenalstown, Goresbridge, Graiguenamanagh and St. Mullins. The total length of the route from Lowtown to St Mullins is approximately 115.7 km. The length of the section within Co. Kildare comprises c.47km, that within Co. Carlow comprises c.52km and c.16km is within Co. Laois.

Planning Authorities	Kildare, Carlow and Laois County Councils.
Planning Authority Reg. Ref. Nos.	Kildare (Ref.17/81), Carlow (Ref. 17/18) and Laois (Ref. 17/37).
Applicant(s)	Waterways Ireland
Type of Applications	Permission
Planning Authority Decisions	Kildare Co. Co. - Grant permission subject to conditions; Laois Co. Co. – Split decision; Carlow Co. Co. – Refuse Permission.
Type of Appeals	First and Third Party
Appellants	Waterways Ireland (First party) Rosalind Murray (Kildare Co. Co.) Cyclist.ie; c/o Colm Ryder (Kildare Co. Co.) Save the Barrow Line (Kildare, Carlow and Laois Co. Cos.) Mary White (Carlow Co. Co.) Paul O’Connell (Laois Co. Co.) Art Mooney (Laois Co. Co.)
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Date of Site Inspection

21st July, 2018; 27th July, 2018, 27-28
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2018.

Inspector

Stephen Kay

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1.0 Site Location and Description

- 1.1. The location of the proposed development comprises the Barrow Navigation along the existing national waymarked trail. This route covers a distance of approximately 115km running from Lowtown in County Kildare to St Mullins in County Carlow. The Barrow has the second longest main river channel in Ireland. It runs for 192 kms from source to sea. The river was made navigable between Athy and St. Mullins, some 68 kms, by the development of the Barrow Navigation comprising a total of 23 locks, including the sea lock at St. Mullins. The Barrow Line connects the Barrow with the Grand Canal between Lowtown and Athy. Running westwards and eastwards from Lowtown is the main line of the Grand Canal, which can be cruised to the Shannon/Erne Waterway and Dublin respectively.
- 1.2. The River Barrow rises in the Slieve Bloom Mountains in County Laois and runs to the east across the north of the County before turning south at Monasterevin. The Barrow Branch of the Grand Canal links the main line with the south east. It starts at Lowtown, near Robertstown in County Kildare and runs in a southerly direction passing through Monasterevin and over the River Barrow by aqua duct. The Barrow line then runs for a section of c.15km through County Laois where it runs close to the line of the River Barrow. The line crosses back into County Kildare to the north of Athy. To the south of Athy, the line connects with the River Barrow at lock 28 a short distance to the south of Athy town centre. Essentially therefore the proposed blueway route follows the Barrow Branch of the Grand Canal as far south as Athy, beyond which the route follows the River Barrow itself.
- 1.3. Of the 115.7 km total length, approximately 109km comprises the existing canal towpath or river bank trackway, with the 6km balance comprising public road. Within County Kildare the line of the proposed route runs from Lowtown in the north to Killinure to the south west of Monasterevin. A second section in County Kildare runs from Crohanree townland, south through Athy to the boundary with County Carlow at a point to the south of Maganey. The total length of the route within County Kildare is 47.9 km.

- 1.4.** Within County Laois, the route comprises two distinct sections. The first commences at Killinure approximately 1.5km to the south west of Monasterevin. This section of the route then runs to the south crossing under the M7 at Killaglish, through Vicarstown and re-entering County Kildare in the vicinity of Crohanree townland. The second part of the route within County Laois starts immediately to the south of Carlow Town and comprises a short section of c.3km in length that runs from south of Maganey Lough to Clogrenan Bridge. The total length in County Laois is 16 km.
- 1.5.** Within County Carlow there are also two sections, the first that runs from just south of Maganey, Co. Kildare to Mortarstown Upper located to the south of Carlow Town. There is then a short break of c.3km where the line runs through County Laois and the route then continues in County Carlow running through Leighlinbridge, Bagenalstown, Goresbridge, Graiguenamanagh and terminating in St. Mullin's.
- 1.6.** The development runs through a number of existing settlements including Rathangan, Monasterevin, Vicarstown, Athy, Carlow, Leighlinbridge and Graiguenamanagh. The majority of the route is however located in rural areas outside of any settlement. The majority of the route within County Kildare as far as Athy is located in an area that is characterised by relatively flat topography. Further to the south, the topography is more undulating.
- 1.7.** The existing waymarked trail comprises a mixture of surfaces. The majority of the route comprises a grassed surface on a compacted reinforced ground adjoining the river / canal. In certain locations localised surface replacement / reinforcement has been undertaken and these comprise a mixture of unbound gravel surfaces and bound surfaces. Unbound surfaces are common in the vicinity of locks and for access to lockkeeper's cottages and houses along the route. In the northern section of the route within Co. Kildare, significant extents of the towpaths are accessible to vehicular traffic and are characterised by gravel or bound surfaces. Bound surfaces are also frequently encountered in the vicinity of towns and villages on the southern sections of the route within County Carlow. Views of the existing route surface are indicated in the photographs attached with this report and also in Chapter 10 of the revised EIS submitted by the applicant. The submitted drawings also contain photographs of the relevant section of the route.

1.8. The existing waymarked trail is served by a number of dedicated car parking areas located along the route. These existing locations are indicated on the revised planning application drawings submitted in response to the further information request issued by the Planning Authorities. The existing parking areas which are located within the identified boundary of the subject applications comprise 4 no. sites in Co. Kildare, 1 no. in Co. Laois and 6 no. in County Carlow. In addition, two new car parks are proposed, one at Rathangan and a second near the M7 to the south of Monasterevin. The full list of parking areas is provided at paragraph 3.2.12 of the revised EIS.

2.0 Proposed Development

2.1. The proposed development comprises the development of a multi use shared leisure route described as a 'Blueway', over a section of the Barrow Navigation comprising the Grand Canal Barrow Line and running from Lowtown in the north to St Mullins in County Carlow.

2.2. As set out at section 1.0 above, the existing route forms part of a national waymarked trail that runs for an overall length of c.115.7 km through three counties. A blueway is defined in the application documentation as comprising '*a network of approved and branded multi-activity recreational trails and sites, based on or closely with the water, together with providers and events facilitating access to activities and experiences*'. The application states that it is envisaged that the blueway would support a range of recreational activities and would assist in the growth and development of businesses along its length. No specific new recreational or commercial developments are proposed as part of the subject applications.

2.3. Of the ***total length*** of the route of c.116km the breakdown of the length of route by county is c.48 km in County Kildare, c.16 km in County Laois and c.53 km in County Carlow. Along the length of the proposed blueway a total of four separate surface materials were initially proposed to be used. This was revised on foot of the first party appeal to provide for a potential fifth option in the event that the Type A surface was deemed not to be acceptable by the Board. Typical details in the form of cross section of the proposed surface types are given in drawing booklets submitted with

the applications, e.g. Drg.T01/EBN/AA309/P/C54. The following is an overview of the five potential surface options:

- Type A; Compacted Stone and Dust (Unbound).
- Type B; Bitmac, Asphalt (Bound).
- Type C; Surface Dressing (Bound).
- Type D; Concrete (Bound).
- Type E; Tar and Chipped (Bound)

The detail of these five proposed surfaces can be summarised as follows:

2.4. The ***Type A material*** is proposed to be used on the majority of the route comprising c.96km out of the 116km total. The stated rationale for the use of this unbound surface relates to protecting the sense of the environment and visual amenity in the generally rural locations where the material would be used as well as reasons based on cost and ease of repair. Details of the proposed construction of the Type A surface is presented at 3.4.3.1 of the revised EIS and includes details of the excavation of a 2.8 metre wide strip for the base, excavation of base layer to sub soil and to a maximum depth of 100mm, compaction of sub base layer and top dust layer, construction with camber or cross fall to provide for drainage and reinstatement of stripped bare earth at the side of the constructed path. The illustration of the surface (Figure 3.5 of EIS) indicates the top surfaces being supported by timber on either side. The overall height of the top surface above existing ground level would depend on the depth of Clause 804 to be used which is stated to be 150-300mm depending on ground conditions with a 25mm top layer. Allowing for initial excavation the path level would appear to be c.75 - 220mm above existing ground level.

2.5. Details of the ***Type B material*** construction is provided at 3.4.3.2 of the revised EIS. This surface is to be used along the urban sections of the route and approaches to road crossings. Construction comprises a geotextile layer with clause 804 or similar compacted sub base and 60mm base layer of bitumen with 40mm hot rolled asphalt wearing course. Similar to the Type A surface, an excavated sub base of 2.8 metres

within and depth of 100mm is proposed with excavated material to be used to construct shoulders to the path.

- 2.6.** The **Type C** construction comprises a tack coat to the existing surface, base layer of Clause 907 material to fill holes and surface irregularities and a surface layer of 3mm chippings applied on top. Details are provided at 3.4.3.3 of the revised EIS.
- 2.7.** **Type D** construction comprises a polythene membrane with clause 804 sub base material and a surface layer of 200mm of concrete. This finish is proposed in locations where flooding of significant velocity is considered likely such as would make an unbound surface prone to erosion.
- 2.8.** A **Type E material** is put forward by the first party as a potential alternative to the Type A unbound surface and would be used in the same areas within the section of the route liable to flooding. . This material is proposed to comprise a geotextile, a sub base layer comprising granular clause 804 material or similar topped with crushed gravel of 6mm diameter and then a binding surface layer comprising two bitumen layers of 14mm and 6mm diameter respectively. It should be noted that the use of this material is put forward by the first party as an alternative to Type A without prejudice and should not be taken as implying that the first party considers that the originally proposed Type A material is unsuitable. An assessment of the environmental impact of the alternative Type E material is presented in Section 4.0 of the first party appeal submissions on the three appeal files.
- 2.9.** The distance of each surface type in each of the local authority areas along the route is illustrated in Table 3.1 of the revised EIS and is summarised in the table below:

	Type A / E	Type B	Type C	Type D	Total per County
Kildare	36,000	5,100	5,800	0	47,900 metres
Laois	15,100	400	500	0	16,000 metres
Carlow	45,300	4,300	100	3,100	52,800 metres
Total per Surface	96,400	9,800	6,400	3,100	115,700 metres (115.7km)

- 2.10.** The typical design **width of the route** is c. 2.5 metres along the majority of the line and follows the existing way marked trail in the majority of the route. A buffer zone of generally 1 metre in width is proposed either side of the track and a total of 2.1 km of local road is proposed to be upgraded as part of the development. The rationale for the selection of the 2.5 metre wide path width is set out at 3.2.2 of the revised EIS and is based on safety, operational, economic and environmental considerations. It is further justified on the basis that the blueway is based on ‘*a slow tourism concept*’ and ‘*is targeted at providing easy participation, broad appeal, soft adventure and family fun in a safe natural environment*, (Revised EIS 3.2.1.2)’. It is stated that sections where the path width will be less than 2.5 metres will be minimised.
- 2.11.** With regard to the **volume of materials**, section 3 of the revised EIS contains an estimate of the volume of construction materials required in cubic metres. The total volume estimated is 81,064 m³ comprising c. 30,000 metres cubed in County Kildare, 10,000 metres cubed in County Laois, and 40,000 metres cubed in County Carlow.
- 2.12.** A number of localised **road widenings** are proposed. These are all located within County Kildare and comprise 6 no. locations as listed at 3.2.2 of the revised EIS. In addition to local road widening works, the proposed development includes proposals for the provision of crossings at a number of roads where the route of the blueway crosses public road. These locations are primarily at bridge crossing points but also include locations within towns where crossings of the public road are required. Where crossings of a roadway are proposed a joint pedestrian and cycle crossing is proposed. These crossings are generally proposed to be uncontrolled and vehicular traffic would have priority, however in locations of higher traffic volumes and speeds controlled crossings are proposed. The form of crossing comprise warning signage and a change in road surface material as well as toucan crossings, zebra crossings and raised tables. The locations where the route crosses the public road and where crossings are proposed are listed at section 3.2.3 of the revised EIS and details of these locations are contained on the submitted drawings. As can be seen from section 3.2.3, the majority of the 27 no. identified crossings are located in County Kildare (20 no.) with 3 no. in County Laois and 4 no. in County Carlow.

- 2.13.** As part of the development it is proposed that blueway **route signage** would be provided at locations along the length of the trail and these locations are identified on the submitted drawings. Marker / distance posts are also proposed. Details of both are indicated on the submitted drawings.
- 2.14.** Two **new footbridges** are proposed to be installed as part of the development with these being at Athy and Rathangan. In Athy, a new footbridge crossing of the canal is proposed to be located downstream of Augustus Bridge. The purpose of this bridge is stated to be to avoid the existing heavily trafficked Augustus Bridge and to provide access to the east bank of the canal via the existing Horse Bridge. The existing Augustus Bridge is not considered capable of accommodating the proposed cycleway safely due to inadequate width and heavy traffic volumes.
- 2.15.** A second new footbridge is proposed at Rathangan in Co. Kildare to be located to the south west of the existing Spencer Bridge. These new bridges are proposed to have a span of c.16 metres and to be accessed by way of two ramps of c. 35 metres in length. Details of the proposed new bridges are given in Drgs. T01/EBN/AA309/P/K49.1, 49.2 Rathangan) and T01/EBN/AA309/P/K62, 62.1 (Athy).
- 2.16.** In Monasterevin, canal **bank widening works** are proposed to be undertaken in the vicinity of Clogheen Bridge. These works are one of six locations on the overall route where bank repairs / widening is proposed, including three separate short sections of bank repair works at Milford. Details of these proposed works are indicated on drawings T01/EBN/AA309/P/K26 and K57.
- 2.17.** **Car parking** is proposed to be provided at a number of locations along the route and as part of the proposed development existing car parking sites at 11 no. locations along the route are proposed to be resurfaced and to be fitted with bicycle storage racking. The existing car parking locations along the route are indicated on the revised planning application drawings submitted in response to the further information request issued by the Planning Authorities. These existing parking area which are located within the identified boundary of the subject applications comprise 4 no. sites in Co. Kildare, 1 no. in Co. Laois and 6 no, in County Carlow. In addition, two new car parks are proposed, one at Rathangan and a second near the M7 to the south of Monasterevin. The full list of parking areas is provided at 3.2.12 of the revised EIS.

- 2.18.** The development also provides for the replacement of a number of existing **gates and railings** along the route. Existing gates on the route are proposed to be replaced with pedestrian or cycle accessible gates similar to the example contained at Figure 3.9 of the revised EIS. In addition, **timber fencing and sections of railings** are proposed to be installed in locations where edge protection to the canal / river is required where there is limited separation between the path and the waterbody. Railings are proposed where the separation between the path and the waterbody would be 0.25 metres or less as well as where there is ramped access to the trail from existing roads and locations where there is a risk of falling on steep slopes. It should be noted that the range of railings and protective barriers has been further amended in the further information response from that proposed in the initial application documentation. The location of railings and edge protection is set out in the preliminary design report.
- 2.19.** The **construction period** is estimated in section 3.4.3 of the EIS to be undertaken over a 24 month period. The construction operations are proposed to be undertaken concurrently on a number of sections of the overall route, and the EIS indicates that each crew would have a complement of 4-5 people and cover approximately 50 metres per day. Access to the construction areas is proposed to be via existing access points and roads, and a total of 57 no. points over the total length of the route are identified in the application documentation. Construction compounds are proposed to be provided along the route to facilitate construction and 57 no. are indicated along the entire route. It should be noted that as part of the response to further information submitted by the first party details in the form of an outline construction and Environmental Management Plan (CEMP) was submitted.
- 2.20.** The application is accompanied by an EIS and by an NIS. It should be noted that as the scoping process for the environmental assessment was commenced prior to the coming into effect of EIA Directive on 16th May, 2017 the application was accompanied by an EIS in compliance with the provisions of the 2011 EIA Directive and not an EIAR. Following the request for further information, a revised EIS was submitted. Compliance with the requirements of the EIA Directive is discussed under the heading of EIA in section 7.9 of this report, however the revised EIS has had regard to the content of the 2014 Directive.

3.0 Planning Authority Decision

3.1. Request for Further Information

Prior to the issuing of a Notification of Decision, all three Planning Authorities requested further information and there is a significant degree of overlap between the issues included in the three further information requests. The following is a summary of the issues raised by the three Planning Authorities in the FI requests issued:

3.1.1. Kildare County Council (Ref. 17/81)

FI requested on a total of 66 no. issues which can be summarised under the following headings:

- Issues relating to the **EIS** including issues relating to project need, CEMP proposals, hydrology, air climate and noise, landscape and visual, cultural heritage and archaeology.
- Issues relating to the submitted **NIS**,
- Issues relating to **general transportation issues** including traffic volume / use, path width, gradients, crossing points, compatibility with standards, pavement type and road safety audit.
- **Site specific transportation issues** relating to specific bridges / crossing points. A total of 28 specific locations are identified.
- **Other issues** relating to the development in County Kildare including consultation with Irish Rail, the relationship of the proposal to permitted developments along the route, the proposed footbridge in Athy, projected usage of this section of the route, the impact on architectural heritage and response to third party submissions received.

3.1.2. Laois County Council (Ref. 17/37)

Further information requested under three headings that can be summarised as follows:

Trail usage and width. Issues include the submission of user counter data, projected future usage and compliance with TII standards. Invited to reconsider the usage of the unbound Type A surface. Further details required in relation to separation to the watercourse and a design strategy for railings / barriers where clearances of less than 1 metre or other hazards occur. Clarification of issues relating to construction management including access points and treatment of bare soil.

Road Design. Options for the redesign of route in vicinity of Ballintogher / Killaglish near the M7 including potential routing of the blueway along the L-39321. A statement of car parking needs is requested. A topographical survey is requested to address apparent anomalies and to assist the assessment of visibility at a number of locations particularly bridges.

Appropriate Assessment. Further details of the project required to enable appropriate assessment to be undertaken. Further rationale for the use of the Type A unbound surface in ecological and maintenance terms required. Details of the length / location and method of construction for the proposed fencing. Details of mitigation including construction fencing, riparian zone / natural mitigation and the submission of a CEMP. Further details of survey methodologies, results and why particular species were targeted for survey requested. Habitat mapping required and further details regarding the implications of the development on otter and Desmoulin's whorl snail. Use of a catchment based approach to the consideration of in combination effects should be undertaken and further plans / projects to be considered in the assessment are identified.

Environmental Impact Assessment. Further details on alternatives including surfaces and widths requested and an outline CEMP required. Habitat mapping required and noted that the Blackthorn Ecology report 2014 referenced in the EIS is not provided with the application. Shading impacts of the proposed bridge at Athy require further consideration and clarification required as to whether the Annex I habitat (*Hydrophyllum* tall herb fringe) is present upstream of Graiguenamanagh.

Details of crayfish survey methods are required and further basis to conclude that freshwater pearl mussel is not present is also required. Further details relating to otter including loss of habitat, measures in event of otter being encountered and further details relating to impacts of disturbance on otter and Kingfisher required. Cumulative impacts in relation to noise, flora and fauna and landscape / visual are not adequately addressed.

3.1.3. **Carlow County Council (Ref. 17/18)**

20 issues under the heading of EIS, 30 no. issues under the heading of Appropriate Assessment, and a further 25 no. issues under the heading of Engineering considerations and 3 no. issues under the heading of other requirements.

EIS issues include need for scheme / project, submission of a CEMP, habitat mapping and impacts on specific species including pearl mussel, otter and Kingfisher, clarification regarding flood impacts and the implications for the Type A surface material, clarification of the location and visual impacts of railings, cumulative impact in areas of noise and landscape and visual and further details regarding the methodology for cultural heritage and archaeology and also impact on residential amenity and availability of parking.

AA issues relate to the provision of further detail of the development to enable an assessment of impacts to be undertaken details of mitigation measures proposed and further details on survey methodologies, habitat mapping and specific implications for otter and Desmoulin's whorl snail required. In combination effects require further assessment.

Under the heading of **Engineering Considerations**, issues of traffic volumes / user numbers, path width, path gradients, relaxations and departures from standards, clearances to waterways and hazards, passing bays, aqueducts, road crossings, issues relating to the durability and suitability of the Type A surface, parking, construction management, landscape reinstatement and road safety audit recommendations are identified. Specific locations of concern / lack of clarity along the route are also identified.

3.2. Responses to Further Information Requests

The response to further information was accompanied by a number of documents including the following:

- Revised A1 and A3 drawings showing the route including proposed alterations to design.
- Supporting information document, Version 2.0,
- Preliminary design report, Version 1.0,
- Revised EIS,
- Revised NIS
- Summary of responses to FI (separate document submitted to each planning authority and Appendix A1.1 of revised EIS)
- Letter from CIE Group regarding legal interest,
- Letter from Waterways Ireland Property and Legal Section regarding planning application site on the route.

The information contained in the responses to further information provided in respect of the three applications include the following:

General Project Wide Issues

- That alternative trail widths and surfaces were considered and referenced with the relevant TII guidance. A wider trail with a bound surface would increase visual impacts and impact on vegetation on both sides of the path. Alternatives are addressed at sections 2.5.2 – 2.5.5 of the revised EIS.
- That the redevelopment of the route to a National Cycleway Standard would have implications for visual impacts and would impact on vegetation on both sides of the trail.
- That WI have undertaken recording of visitor numbers at 23 no. locations along the route. These results were validated by physical counts undertaken. The results of these surveys are presented in Appendices 3.3 Preliminary Design Report and 3.5 Current and Projected Usage report. It is confirmed

that current usage of the route falls well below the low volume threshold of 1500 users. Projected usage figures for the busiest section show that it will also remain within the low volume threshold.

- That the proposed bank works will not have any impact on hydro morphology. The method of banks works has been revised however and no longer proposes the use of rock armouring. Soft engineering methods are now proposed as detailed at Chapter 3, the application drawings and section 2.4.2 of the Outline CEMP.
- That the path will require to be accessible for channel maintenance and the passage of machinery. It is considered that the Type A path is suitable in terms of maintenance. This material has been used successfully on other WI sites and that the unbound path would be easier and less expensive to reinstate than a bound surface.
- In response to an invitation from Carlow County Council to submit potential alternatives to the Type A material, no alterations to the proposed surface mix were presented.
- That an outline Construction and Environmental Management Plan (CEMP) has been prepared and is contained at Appendix 3.2 of the EIS.
- That the Outline CEMP includes consideration of the impact on adverse weather conditions during the construction period. The CEMP also sets out details of the
- That the estimated volumes of waste material has been undertaken and shown at 6.4.3.4 of the revised EIS and section 3.5 of the CEMP.
- That in operation the route would operate under a 'leave no trace' basis and there would not be waste collection facilities provided.
- That only one short section of Annex I habitat (6210 grassland) will be impacted and this site is outside of the SAC. All other areas of potential Annex I have been avoided. Drawings of habitats are contained in Appendix 5.2 of the EIS at a scale of 1:1250 with potential Annex I habitat areas shown hatched.

- Habitat mapping of the entire route, including the locations of potential Annex I habitat areas is provided in Appendix 5.2 of the revised EIS. A precautionary approach to the identification and protection of Annex I habitats has been undertaken.
- The information from the Blackthorn Ecology report relating to habitat mapping and invasive species have been incorporated into the Figures provided at Chapter 5 and Appendix 5 of the EIS.
- Regarding the predicted frequency of repairs to the surface, Chapter 7 of the revised EIS sets out the PFRA and CFRAM mapping and identifies the areas at risk of flooding. Section 7.3.6 specifically addresses the flood risk specifically related to the Type A surface and 7.4.4.5 sets out the impacts of sediment run off. Details of maintenance are set out at 5.2.1 of the revised EIS.
- Stated that no habitats of greater than local importance were recorded in the vicinity of the proposed new footbridge at Athy and the bridge has been designed to minimise shading. The ecological impact of shading is addressed at 5.4.4 of the EIS.
- That the proposed development would not be contrary to the EU Green Infrastructure Strategy and this is set out at 5.5.3.2.1 of the revised EIS.
- That where tree roots are present along the route they shall be protected in accordance with the mitigation set out at 5.6.2.4 of the EIS.
- That no alterations / maintenance of back drains are proposed along the Barrow Navigation as part of the proposed development.
- That the construction methodology is outlined in Chapter 3 of the EIS.
- That the proposed pathway would be held in place with timber edging. The path material has a gravimetric weight, is not a silt and the design is such that there is no significant potential for damage from flooding. The flat local terrain, low velocity of the River Barrow and lack of preferential flow paths are also noted.

- That PFRA and CFRAM mapping included in appendices of Chapter 7 (A 7.1 and 7.2). Section 7.3.5.5 includes areas prone to flooding and 7.3.6 addresses the flood risk specifically from unbound surfaces.
- It is assumed, based on the precautionary principle, that white clawed crayfish are present at the proposed in stream works locations. The nature and scale of the works is such that there will be no loss of habitat and as a precaution pre and post construction surveys will be undertaken. That the known River Nore Mussel populations in the SAC occur only in the River Nore. The Freshwater mussel populations in the Barrow occur outside of the main channels and on tributaries located in Carlow. The species have been included as KERs on a precautionary basis and impacts assessed in 5.5 and mitigation in 5.6 of the EIS.
- Details of pre construction surveys and proposed exclusion strategies are provided in 5.5.4, 5.6.2.7 and Table 5.21 of the EIS.
- No breeding sites for Kingfisher were recorded and works will comply with IFI best practice.
- Otter survey results are indicated at 3.2.1.14 of the NIS and mapping of otter signs is at Appendix 5.2 of the EIS.
- The potential for bats to be supported was assessed during the walkover surveys. The Leyland Cypress to be felled were subject to bat roost suitability surveys in August 2017.
- That there is no potential supporting habitat for Desmoulin's Whorl Snail within or outside of the SAC or at the proposed instream works locations. Regarding impacts on fisheries, the works will be undertaken in accordance with IFI best practice guidance (2016) and mitigation measures and contents of the CEMP. Measures to be agreed with IFI relate to the implementation of the guidance.
- An outline invasive species management plan submitted and included at appendix 5.3 of the EIS.
- That cumulative impacts relating to flora and fauna are addressed at 5.5 of the revised EIS and cumulative impacts relating to noise at 8.3.4.4.

- That details of the maintenance of the Type A path are provided at section 2.2 of the NIS and section 2.4 and Appendix 3.2 of the EIS (CEMP).
- Clarified that the bare soil adjoining the path will be left to re vegetate naturally.
- CEMP clarifies that silt fencing will be used along all construction areas and that the riparian zone will not be the buffer.
- Additional survey and user data presented and is shown in Appendix 3.3 and 3.5 of the EIS and Appendix D of the Design Report.
- Regarding Air Quality, stated that Chapter 8 of the revised EIS uses 2005 air quality data from Mountrath which is the most recent data available for a Zone D area.
- Cumulative landscape and visual impacts were assessed in the original EIS and are included at 9.2.2.2 and 9.2.2.4 of the revised EIS.
- Section 11.2.6.1 and 11.2.6.2 of the revised EIS sets out the impact of the proposed development on residential amenities.
- That there is no need for any detailed ground investigations or archaeological testing along the route.
- Stated that the TII standards relate only to national road schemes and that departures from standards systems relates only to such schemes. TII have confirmed that the works on the towpath do not require the approval of TII or the Roads Authority (letter submitted). Waterways Ireland have therefore determined application of the design standards.
- Proposals for ramps and steep gradients along the route are presented at Appendix 3.1 of the EIS and the Preliminary Design Report. Maximum gradients of 10% with barriers and use of Type B surface proposed.
- Road crossings / locations where relaxations may be required identified in Design Report.
- Proposals for passing bays have been submitted. These to be located where there are shared use with vehicular traffic and where the path narrows on the approach to existing bridges or underpasses.

- That a full independent safety audit of the entire route will be undertaken at detailed design stage. Guard rails / barriers are now shown on the drawings.
- Detailed requirements for road crossings specified in FI included in design. Barriers proposed at approaches to aqueducts.
- A topographical survey has been undertaken and submitted.
- A traffic speed survey was undertaken and submitted at Appendix B of the preliminary design report.
- That an assessment of parking shows that existing car parks and on street parking in the vicinity are currently underutilised. WI committed to working with the councils and meeting any future car parking needs.
- Existing car parks will be resurfaced and lined and a new car park provided at Rathangan and adjacent to the M7 crossing point.
- 23 no. construction compounds are proposed of which 13 no. are in County Kildare. Access to be obtained via existing access points from local, regional and national road. The CEMP shall detail measures to keep access to private dwellings during construction.
- Changes have been made to the design in the vicinity of a number of bridges as per the FI request issued. These are detailed on the revised drawings and have been subject of Stage 1 Road Safety Audit.

Kildare County Council

- That the comments of IFI regarding the proposed widening of the path into the canal in the vicinity of Clogheen Bridge to the south of Monasterevin are noted and it is now proposed that the non-native trees in this location would be removed and that in stream works at this location are not now proposed.
- A revised proposal for the footbridge in Athy is submitted and for an additional footbridge located to the south of Spencer Bridge, the design of which takes account of the proximity to the ACA.

Laois County Council

- The issues raised in Ballintogher are noted in the vicinity of L39321 and revised proposals to provide a shared path 2.5 metres in width along the verge where there is sufficient space. Where insufficient space, the path will run adjacent to the local road. The proposed parking in this area has been omitted and additional parking close to the M7 underpass proposed. These revisions were designed following consultation with the Road Authority and further consultations will be undertaken at detailed design stage.
- Car parking areas at Vicarstown and at the M7 underpass area are proposed to be resurfaced and lined.

Carlow County Council

- Surveys in 2017 confirmed that the potential Annex I tall herb fringe communities located upstream of Graiguenamanagh are located outside of the development footprint and no direct impacts will arise. The potential indirect effects are addressed in Chapter 5.
- Details of the proposed works at Wellington Bridge and the potential impact on Annex I habitats are set out at 3.5.7 and Appendix 3.2 of the revised EIS.
- Details of the drainage of specific car parking areas within the section of the route and car parks at Milford, Bagenalstown, Ballytiglea, Graiguenamanagh, Clashganny and St Mullins provided at section 4.2.4.2 of the NIS and how water will be collected in gullies and collection tanks with petrol / oil interceptors before discharge to the River Barrow.
- Revisions requested at certain road crossing points / bridges have been undertaken and are indicated on the revised drawings contained at Appendix 3.1 of the EIS.
- In relation to the request that a ramp be provided connecting the N80 to the Barrow line and to accompany the existing steps in this location, the applicant states that this difference in levels is 5.6 metres and it is not feasible to provide the required c.70 metre ramp in this location within the

lands available. Similarly, at Royal Oak Bridge at the R742 and there is also insufficient space to accommodate the proposed ramped access.

- Clarified that there will not be any delineated path through Carlow Town Park (no surface markings) and the route will be indicated with appropriate shared use and directional signage. Revised drawings are submitted.
- In order to address concerns raised by the Local Authority alterations have been undertaken at the following locations:
 - Maryborough Street and Wellington Road Bridge Carlow – new signage, surfacing and build outs.
 - Castleview Quay Carlow,- signage, parapet railing and requirement that cyclists travelling north will dismount.
 - Milford Bridge and Milford Lock environs – Ramped access between the car park and the trail to be provided. Safety railings on approach to lock to be installed and car parking area to be lined.
 - In Leighlinbridge in the vicinity of the R448, a ramped access to the blueway route is proposed. Alternative crossing points in Leighlinbridge were investigated however no satisfactory alternative identified.
 - Alterations in the Dunleckney / Moneybeg / Bagenalstown area where investigations indicate that the requested widening of the route / footpath is not feasible. Signage and passing bays proposed.

Independent Consultant Inputs on Further Information

In the assessment of the further information responses the Planning Authority engaged the services of:

- RPS consultants to look at issues relating to Appropriate Assessment and the submitted NIS;
- Arup were commissioned by the Council to undertake a review of the submitted EIS.

- Ms Veronica Lyons, Consultant Civil Engineer who looked at some of the site specific transportation / junction issues.

Reports from these consultants relating to the further information responses are contained on the appeal files.

3.3. Notifications of Decision

3.3.1. Kildare County Council (Ref. 17/81)

The Planning Authority issued a Notification of Decision to Grant Permission subject to 16 no. conditions. The most notable of these conditions are considered to be as follows:

Condition No.2 requires that all mitigation measures set out in the submitted EIS and NIS as amended by submitted further information shall be incorporated in the development. It is also required that a project ecologist be retained for the entire construction period and that detailed method statements for the construction phase of each section of the route would be prepared following consultation with the NPWS.

Condition No.3 requires that no works shall be undertaken to the south of chainage CH46,350 which is immediately to the south of Horse Bridge in Athy with the reason of preventing works within the floodplain of the River Barrow which would have the potential to impact negatively on the integrity of the River Barrow and River Nore SAC site. The effect of this condition is that the southernmost c.13.15km of the route within County Kildare would be omitted from the development.

Condition No.4 relates to archaeology and requires the employment of an archaeologist and the recording and removal of any appropriate material.

Condition No.5 requires that works to bridges or other structures of interest on the route shall be supervised by a conservation architect.

Condition No.6 requires the submission of details of all new and upgraded cycle tracks for written agreement and requires that the design for bound surface shall be in accordance with Series 900 of the Specification for Roadworks (TII).

Condition No.7 requires the submission of detailed design of all new and existing controlled and uncontrolled crossing points on public roads along the route.

Condition No.9 requires the submission of details of surface water drainage at all car parks.

Condition No.10 requires the submission of a detailed design for the public road between CH 22250 and CH23150 to include construction details and details of new cycleways, footpaths, road widening, drainage and lighting.

Conditions No.11 and12 require the submission of stage 2 and 3 road safety audits.

Condition No.16 requires the ongoing monitoring of parking and trail head facilities and the submission of the information to the PA.

3.3.2. **Laos County Council (Ref. 17/37)**

The Planning Authority issued a split decision as follows:

Schedule 1 - Grant permission for the proposed multi – use shared leisure route (blueway) on the Grand Canal between Killinure and Bawn. This permission was granted subject to 25 no. conditions the most significant of which are as follows:

Condition No.1 clarifies the extent of the permission and states that the section from Crossneen to Clogrenan is excluded from the permission.

Condition No.2 requires that the mitigation measures set out in the EIS, NIS and CEMP shall be implemented in full.

Condition No.4 requires that a construction management plan shall be submitted for agreement prior to the commencement of development.

Condition No.6 requires the submission of landscaping proposals and that these shall specifically include proposals for the re vegetation of disturbed grass verges.

Condition No.9 requires the submission of a detailed waste management plan.

Condition No.11 relates to roads and engineering and requires, inter alia, the submission of detailed design for all surfaces and details of a maintenance schedule for the Blueway.

Condition No.12 requires the omission of the public road crossing point at Courtwood Bridge with all traffic directed under the bridge and not permitted to cross the public road.

Condition No.14 requires the submission of details of all uncontrolled crossing points along the route (Fisherstown Bridge and Vicarstown Bridge).

Condition No.16 requires the submission of the written consent of the landowner at Vicarstown to works at the existing car parking area.

Condition No.18 requires the submission of Stage 2 and 3 road safety audits.

Condition No.24 relates to parking and requires, inter alia, for the applicant to submit proposals for the monitoring of car parking demand and trail head facilities and that these proposals would be updated following the first and subsequent summer seasons.

Schedule 2 – Refuse permission for the proposed multi use shared leisure route (Blueway) on the existing navigation towpath which is a national waymarked trail through Crossneen, Ballyhide, Clongrennan, County Laois for two reasons that can be summarised as follows:

1. That based on the information contained in the EIS and NIS, the Planning Authority is not satisfied that the proposed development incorporating the provision of an unbound surface of compacted stone and dust (Type A) would not significantly affect the River barrow and River Nore SAC and its conservation objectives. The Planning Authority is not therefore satisfied beyond reasonable scientific doubt that the proposed development would not adversely affect the integrity of the River Barrow and River Nore SAC.
2. That having regard to the concerns regarding the potential impact of the proposed development on the integrity of the River barrow and River Nore SAC site, that the proposed development would be contrary to Policy NH8 of the Laois County Development Plan, 2017-2023 which relates to the screening of plans and projects for AA and that such plans / projects would only be permitted when it can be concluded that they would not give rise to any significant adverse effect on the integrity of any European site or that there are no alternative solutions and that the project must be undertaken for IROPI reasons.

3.3.3. Carlow County Council (Ref. 17/18)

The Planning Authority issued a Notification of Decision to Refuse Permission for 2 no. reasons that can be summarised as follows:

1. That based on the information contained in the EIS and NIS, the Planning Authority is not satisfied that the proposed development incorporating the provision of an unbound surface of compacted stone and dust (Type A) would not significantly affect the River barrow and River Nore SAC and its conservation objectives. The Planning Authority is not therefore satisfied beyond reasonable scientific doubt that the proposed development would not adversely affect the integrity of the River Barrow and River Nore SAC.
2. That the proposed development is located within the River barrow and River Nore SAC where it is an objective of the Council under Heritage Objective 5 of the Carlow County Development Plan, 2015-2021 to support the protection of habitats and species covered in the Habitats Directive and to only authorise development that after the consenting authority has ascertained based on scientific evidence that the proposed plan / project would not have an adverse affect on the integrity of the any European site. Based on the information presented, the Planning Authority is not satisfied that the proposed development would not significantly effect the River Barrow and River Nore SAC site and its conservation objectives. The proposed development therefore contravene materially Heritage Objective 5 and Heritage Policy 2 of the Carlow County Development Plan, 2015-2021 and would be contrary to the proper planning and sustainable development of the area.

It should be noted that Reason for Refusal No.2 makes reference to the proposed development being a material contravention of the *Carlow County Development Plan, 2015-2021*. The provisions of s.37 of the Planning and Development Act, 2000 as amended are therefore applicable in this case.

3.4. Planning Authority Reports

3.4.1. Kildare County Council (Ref. 17/81)

3.4.1.1 Planning Reports

The initial report of the Planning Officer notes the content of internal reports and the external consultants retained by the Council to report on the proposal. A significant number of items of further information are identified relating to EIA, AA, general roads / transportation issues and specific road issues relating to specific crossing points. Report concludes that the proposed development is acceptable in principle having regard to the policies of the Kildare County Development Plan and relevant LAPs but that further information is required on a wide range of issues including those relating to EIA, AA and traffic as raised in the report of outside consultants. Following the submission of further information the second Planning Officer Report notes and agrees with the conclusions of the report received from RPS relating to appropriate assessment and that received from ARUP relating to EIA. A grant of permission subject to conditions is recommended which is consistent with the Notification of Decision to Grant Permission which issued.

3.4.1.2 Other Technical Reports

Water Services – No objection.

Transportation – Initial report notes a number of issues relating to crossings of public roads and recommends further information be requested. Subsequent report stated that no objections subject to conditions with specific conditions relating to a number of bridges along the route.

National Road Design Office – No objection.

Environment Section – No objections subject to conditions.

Environmental Health Officer – Recommends further information.

Fire Officer – No objection.

Conservation Officer – Recommends further information as per the report of ARUP on the submitted EIS.

Area Engineer – Report subsequent to submission of FI sets out a number of conditions recommended relating to the section from Lowtown to McCartney's bridge (chainage 21000).

3.4.2. Laois County Council (Ref. 17/37)

3.4.2.1 Planning Reports

The initial report of the Planning Officer notes the nature of the project, objections received and inter and external reports. The recommendations of the retained consultants relating to EIA and AA are specifically noted and the concerns raised regarding the level of survey information submitted.

A second Planning Officer report subsequent to the submission of the response to further information identifies that the principle of the proposed development is acceptable. The recommendations of Arup relating the EIA and RPS relating to Appropriate Assessment are however noted and a split decision granting permission for the section of the route from Killinure to Bawn and refusal of permission for the balance of the route within County Laois comprising Crossneen, Ballyhide, and Clongrennan.

3.4.2.2 Other Technical Reports

Area Engineer – Notes the limited width relative to standards and the varying width between path and river edge. Issues relating to gradients and visibility at a number of junctions also noted. Issues regarding visibility at proposed new parking location at Chainage 26,450 noted as is requirement for passing bays on L39321 off the R445. Specific issues at 3 no. bridge crossing points are identified and a table setting out the FI requirements included. The FI issues identified comprise general issues at Nos. 1-14 and site specific issue relating to the route in County Laois at Nos. 15-20. Content and recommendations contained in the reports by RPS, ARUP and Ronnie Lyons are noted. Third party submissions in favour and against the development are noted. Further information consistent with the notification of decision issued is recommended.

3.4.3. **Carlow County Council (Ref. 17/18)**

3.4.3.1 Planning Reports

The initial report of the planning officer notes the nature of the project, submissions received, plan and other relevant policy and the content of internal and external technical reports. The report raises concerns regarding a number of ecological issues including relating to Hydrophilous tall herb communities, details of in stream works impact on crayfish, further justification for the statement that there is no suitable habitat for freshwater pearl mussel and further details regarding potential impact on otter. A CEMP is considered necessary and further detail regarding the potential impacts of flooding on the proposed Type A surface and the flood depths should be provided. Further details relating to visual impacts, particularly on historic features and landscapes raised and that impacts on material assets including residential amenity. Results of the specialist reports commissioned by the three local authorities are noted. Further information consistent with the Notification of Decision issued is recommended. A second report sets out the response to further information and considers the following:

- That adequate information regarding alternatives has been submitted and rationale for design set out.
- That no assessment of the significance of the environmental impacts associated with the upgrading of the path to a national cycleway standard has been submitted.
- That further breakdown of the earthworks balance would have been useful.
- That the ARUP report on FI still notes some inconsistencies in the references to impacts on Annex I habitats.
- That in the event of a grant of permission a detailed methodology regarding tree roots would be required.
- That the significant additional information relating to white clawed crayfish, and freshwater pearl mussel with a precautionary approach being taken in the identification of these species as KERs. In the event of a grant of permission recommendations contained in the CEMP and EIS to be implemented.

- Noted that section 5.5 of the revised EIS and the NIS contains information relating to the disturbance impact on otters. In event of grant of permission mitigations to be implemented.
- Similarly all mitigation measures relating to Kingfisher set out in EIS and NIS to be implemented.
- Invasive species plan noted. Plan would need to be strengthened
- Cumulative impacts relating to air climate noise and landscape and visual have been adequately addressed.
- The contents of the expert report on the submitted AA is noted and the concerns relating to the Type A surface. Specifically noted that one of the conservation objectives for the River Barrow and River Nore site states that the concentration of suspended solids in the water column should be sufficiently low to prevent excessive deposition of fine sediment.
- Noted that all in stream works areas are located on the canalised sections of the route however there are no assessment provided as to whether these instream works will result in modification of the hydrographical functioning of the SAC.
- Response relating to user volumes are noted.
- Noted that on completion of the detailed design an independent safety audit will be undertaken additional to the committed Stage 1 and 2 Road Safety Audits required by the Roads Authorities.
- Noted that the response in relating to verge widths / barriers and resting / passing bays are acceptable to the transportation section.
- That the proposed surfaces are considered appropriate from a transport (not necessarily environmental) perspective.
- The site specific works proposed at a number of locations along the route as identified in the FI request are deemed acceptable to the Transportation Department.

Report notes and accepts the findings of the RPS report on AA and recommends refusal of permission for reasons that are consistent with the Notification of Decision issued.

3.4.3.2 Other Technical Reports

Roads – Notes and agrees with the recommendation of area engineers report that a sealed surface to the track would be a more durable solution. Report also questions the means of access to the track from the ‘new bridge’ at Leighlinbridge.

A second Transportation Section report that incorporates the comments of the area engineers, concludes that the proposed development is acceptable subject to conditions.

A Transportation report dated 12th February, 2018 and states, inter alia, that:

- the response regarding path widths and compliance with TII standards is acceptable,
- that Waterways Ireland are the competent authority with regard to implementation of TII standards,
- That it is likely that the number of users will be closer to 1500 / day at weekends / peak times and that the proposed passing bays at the St Mullins end of the route will provide for additional movements at busy periods.
- That the TII standards are desirable minimums and not absolute. Similar the 2.5 metre width is a relaxation and is still within standard. The 2.5 metre width is considered appropriate to the slow tourism concept.
- Proposals for ramping and bridge crossings noted and considered to be acceptable.
- Acceptable justification for the use of the Type A unbound surface on basis of maintenance, visual impacts and user experience.
- That the proposed Type A surface would be consistent with the slow tourism concept. That the proposals for car parking areas are generally acceptable including clarification regarding cycle parking and picnic facilities in these locations. Stated that the lining of parking areas will increase their capacity

and the merit of avoiding the over provision of parking also noted. Conditions relating to parking recommended.

- Issue of reinstatement of flood damaged soft landscaping that hasn't re vegetated is not addressed.
- Proposals at a number of specific sites in County Carlow considered acceptable.

Area Engineer – recommends further information on a range of issues including design, relaxation of standards, clearance to banks / hazards, resting / passing areas, surface treatment where a bound surface is considered preferable from a maintenance and erosion perspective, parking provision clarification, reinstatement and landscaping clarity, details of maintenance regime, construction management, and specific comments relating to a number of locations along the route including Milford, Leighlinbridge and Graiguenamanagh and Tinnahinch.

Environment – Recommends further information regarding measures to ensure that accidental fuel spillages during the construction phase would be cleaned and relating to content of EIS and NIS. Second report recommends a grant of permission subject to conditions.

AA / EIA External Consultants Reports – Decision Makers Written Statement – A decision makers statement on EIA states that it is concluded that it cannot be concluded beyond reasonable scientific doubt that the sections of the route with the unbound surface would not have an adverse effect on the integrity of the SAC. The EIA assessment is adopted as the assessment of the Planning authority of Carlow County Council.

3.5 Prescribed Bodies

The following Prescribed Bodies made submissions to the relevant planning authority on the three applications:

Inland Fisheries Ireland – The initial submission requests further information on a number of issues. Second submission subsequent to the submission of further information states that the further information response addresses adequately the issues raised in initial submission and that subject to conditions set out in submission that IFI has no objection to the proposed development.

Development Applications Unit – A submission was made prior to the submission of further information by the applicant. States that as the Department has not been able to review all documents in depth that the comments should not be taken as comprehensive. Stated that further information is likely to be required and that the ecological and hydrological expertise would likely be required in order to undertake the AA and EIA. A number of issues requiring consideration are identified as follows:

- Impact on path verges,
- Any permanent loss of annex I habitat to be considered consistently,
- That cumulative impacts for the whole river / SAC be considered. A catchment based assessment is required.
- Impact of bank widening and rock armour require special consideration.
- That the submitted survey information indicates that there may be some temporary and permanent loss of Annex I habitat Hydrophilous tall herb fringe communities. This requires clarification.
- Potential for impact on Vertigo species of snail and white clawed crayfish are also noted.
- Potential for disturbance to arising from increased towpath use including on Kingfisher and otter.
- Noted that no CMP has been included with the application and that that complete project details including CMP need to be included.
- Monitoring and further details on proposals for control of invasive species required.
- Unclear whether bare ground would be left to regenerate or planted and details are required.

A second submission dated 7th February, 2018 notes the fact the slow tourism nature of the proposed development, that there would not be a loss of boundary trees / hedgerows and riparian vegetation and that this would result in the area retaining its function as an ecological corridor. Stated that the main concerns relate to reduction in water quality, loss of habitats and disturbance of species. Noted that the FI request included for details of survey methodologies and states that it is not clear that this has been met and that the local authorities will have to satisfy themselves in this regard. Stated that likely to be no impacts on bats. Some remaining inconsistencies regarding location of Annex I habitats are noted. Given the risk of water pollution during construction it is recommended that a defined minimum verge width would be set and that silt trap fencing would be used. Local authorities should satisfy themselves that the level of detail in the Outline CEMP submitted is sufficient to enable EIA and AA to be undertaken.

OPW – Submission made to Laois County Council post receipt of FI response states that any proposed alteration to the hydraulic regime of the existing watercourse crossings may require consent and any changes must not exacerbate flooding risk.

TII – submission to Kildare County Council stating that TII have no observations to make on the proposal. Submission to Carlow County Council requests that the Planning Authority has regard to the TII policy document, Spatial Planning and National Roads. Submission made to Laois County Council prior to the submission of FI states that the Authority is of the opinion that insufficient data has been submitted to demonstrate that the proposed development will not have a detrimental impact on the carrying capacity or safety of the national road network. Second report to Laois County Council post the submission of a response to FI recommends that the proposed development would be undertaken in accordance with the recommendations of the Transport Assessment and Road Safety Audit submitted.

Iarnroid Eireann – Notes requirement to ensure that works don't increase the risk to the railway and the subject that parts of the proposed alignment are under the ownership of IE. The agreement of IE is required.

An Taisce – issues raised with regard to the restricted path widths and compliance with standards, the safety implications require assessment, noted that the river is part of the River Barrow and River Nore SAC and the ecological corridor function

provided. Impact in terms of loss and fragmentation of corridor require assessment. Considered that this assessment is inadequate and that inadequate information relating to the conclusion of no adverse effects is provided. Noted that the site is important for Kingfisher.

Reports from An Taisce on file subsequent to the further information response, state that it is not accepted that the proposed development will not impact on the linear ecological feature (as stated in 5.5.3.2 of revised EIS), that the statement in the EIS (Table 4.12) that for the most part the embankment is elevated and such that it does not provide valuable foraging, resting or breeding habitat is not conclusive and that doubt remains as to whether the Habitats Directive requirements will be met. Stated that potential soil erosion will not be mitigated such that it will impact on the freshwater pearl mussel which is a qualifying interest. Submitted that given the recorded presence of crayfish in spraint observed, it is not considered that the general habitat survey undertaken is sufficient. The proposed pre and post construction survey for crayfish is contrary to article 6(3). Submitted that the detail regarding in combination effects remains inadequate and that the project would have adverse impacts on non qualifying interest species including bats and Kingfisher. Stated that the applicant should comply with TII guidance and that the unbound surface will have an unacceptable impact on the river bed and water quality due to changes in PH.

Irish Water – Submissions on file stating that there is no objection to the proposed development.

Kilkenny County Council – Submission to Carlow County Council welcomes the proposed development and states that it would be consistent with section 7.3.3 of the County Development Plan.

3.6 Third Party Observations

A very large number of third party submissions, in excess of 700 across the three applications, were received by the three local authorities. The main issues raised in the submissions received by the Planning Authorities can be summarised as follows:

- Reduction in amenity of the facility with introduction of bicycles. Maintenance following flooding events.
- Substandard width and standards.
- Conflicts between pedestrian and cyclists and issues regarding safety.
- Negative impacts on the conservation objectives of the SAC arising from the use of the proposed Type A surface material.
- Inappropriate surface materials.
- Contrary to County Plan including promotion of tourism.
- Limited economic benefits of the proposed development.
- Issues regarding anti social behaviour.
- Issues relating to location and quality of car parking.
- Issue of shared use of the trail with public roads and access to agricultural lands. (In vicinity of M7 at Ballybrittas, County Laois.).
- Negative impacts on flora and fauna from removal of vegetation.
- Inadequate EIS,
- Contrary to the EU Green Infrastructure Strategy
- Concerns regarding invasive species.
- Visual assessment provided in the EIS not representative of finished design.
- Potential negative impacts on residential amenity,
- Inadequate car parking along route to cater for development.
- Increase in volumes of traffic.
- Impact on Clongrennan Entrance Arch.

- Adverse impact on the conservation objectives of the River Barrow and River Nore SAC site primarily as a result of the potential for the deposition of material into the Barrow during flood events.
- Concerns regarding construction impacts.
- Inadequate flora and fauna surveys meaning that it is not possible to come to a conclusion regarding the likely significant effects on the European site.

3.7 External Consultant Reports

In conjunction with Carlow and Laois County Councils, the Planning Authority commissioned reports from consultants on the following areas:

- ARUP Consultants – EIS Review.
- RPS Consultants – Assessment of Submitted NIS / Appropriate Assessment.
- Veronica Lyons Consultant Civil Engineer – Assessment of traffic related issues.

The following is a summary of the main content and conclusions contained in the above external consultants reports:

3.7.1 ARUP (EIS Review) – Initial report concludes that further information is required in order that facilitate a full EIA of the proposed development. The recommended further information can be summarised under the following headings:

- Need for scheme and consideration of alternatives.
- Construction strategy including waste volumes and an outline CEMP.
- Flora and fauna including mapping of Annex I habitats, further consideration of sediment discharge, clarification regarding certain habitats along route and potential impact on species including crayfish, freshwater pearl mussel, fisheries impacts, otter, kingfisher, bats, butterfly and non native species.
- Hydrology including consideration of the impact of flooding and sediment mobilisation.
- Cumulative impacts relating to noise require further assessment.

- Landscape impacts relating to historic structures and cumulative landscape impacts.
- Further details regarding methodology and impacts relating to cultural heritage and archaeology.
- Details of the impact on residential amenities and adequacy of car parking under the heading of material assets.

In the event of a grant of permission following the submission of further information conditions are recommended. These include:

- An uninterrupted grass width of at least 1.5 – 2.0 metres shall be retained between the river and the proposed tow path and the design should seek to maximise the width of this buffer.
- No works to take place within 20 metres of known otter holts and resting places.
- Further survey for otter to be undertaken prior to the commencement of any development.
- Dust and noise limit values are set.

A second report subsequent to the further information response states that in general the response to the further information together with the revised EIS, outline CEMP and design report adequately address the issues raised under the heading of EIA. Table 2 of the report sets out recommended conditions / areas to be the subject of conditions in the event of a grant of permission. The report does make some comment regarding the potential impact of the development on the River Barrow and River Nore SAC however these comments only apply to the river section of the route and not the canal which are outside of the 1 in 100 year flood zone.

3.7.2 RPS (Review of NIS) – Initial report highlights a number of issues with regard to the submitted NIS which it is stated require further information. These include the following:

- Lack of an outline of the survey methods relating to the aquatic ecology at locations of in channel works or justification for the survey for certain QI species.
- Inadequate description of the project such as to enable an accurate assessment of likely significant effects arising. These include the rationale for the use of the Type A surface material, maintenance of path, management of surface water drainage during construction, issues relating to the installation of timber safety fencing, compounds and proposals for regeneration of areas of bare earth.
- Identified that if the riparian 2 metre zone is proposed to be used as mitigation it is necessary that the extent to which this width is available is detailed and alternative proposals made where it is not.
- That a CEMP must be provided to include all potential impacts and mitigation to facilitate a complete assessment of impacts.
- Survey methodologies for aquatic habitats and species are required along with rationale as to why species were surveyed.
- Clarification as to the extent of Annex I habitat loss is required due to contradictions in the application.
- Further information on the potential direct and indirect impacts on otter is required.
- Further assessment of potential impact on Desmoulins whorl snail is required.
- Mapping of invasive species locations is required.
- That assessment of in combination effects should be undertaken using a catchment based approach.

A second report subsequent to the further information response concludes that the project as a whole insufficient information has been presented such that it cannot be concluded beyond reasonable scientific doubt that the proposed development, specifically those sections with the type A unbound surface, would not have an adverse effect on the integrity of the River Barrow and River Nore SAC site having regard to its conservation objectives.

3.7.3 Report of Ms Veronica Lyons on traffic and transportation related issues. An initial report dated 20th March, 2017 states that further information is required and the suggested FI can be summarised under the following headings:

- Clarification of low / high volume design standard selection,
- Clarification regarding path width and justification for departures and relaxations of TII standards.
- Design approach for steep gradients to and from the blueway,
- Design report detailing relaxations and departures from standards (TII),
- Proposals for areas of restricted clearance to water (proposals for barriers / railing),
- Proposals for passing bays,
- Proposals for aqua duct crossing points,
- Proposals for the achievement of visibility at crossing points. Additional measures required with survey of design speeds and topographical survey of crossings.
- Proposals for an alternative surface to Type A (unbound surface) that will not have damage, maintenance, flood damage and ecological impacts.
- Further details on parking including an assessment of needs, measures where parking could be expanded in future if required and proposals for waste disposal and collection.
- Further clarification regarding construction management including location of and access to construction compounds.
- A topographical survey is required.
- Additional issues are raised regarding site specific issues relating to bridge crossings along the route.

Following the submission of further information a second report from Ms Veronica Lyons. This report discusses the issues raised in the further information request in turn and generally accepts the responses received. The case made regarding traffic volumes and the fact that the application of TII standards is an issue for the applicant as the development is not located on a public road is noted. The report also states that the response submitted regarding the proposed use of unbound compacted finish is appropriate. It is noted in this regard that the response to FI identifies locations where a concrete finish is now proposed to prevent scouring. In the event of a grant of permission conditions are recommended.

4.0 Planning History

There is no planning history which specifically relates to the proposed development. The following planning history relates to permission(s) along the route that may be impacted by the proposed development:

Kildare County Council Ref. 13/1002 – Permission granted in January 2009 for the construction of a bungalow, garage and septic tank on a site at Lowtown, Robertstown, Co. Kildare. Permission was granted by the Planning Authority for an extension of duration of this permission up to February, 2019.

Laois County Council

No planning history relevant to the proposed development is identified in the reports of the Planning Officer or other information on file.

Carlow County Council

The report of the Planning Officer states that there is no recent relevant planning history.

5.0 Policy Context

5.1. National Policy

5.1.1. National Planning Framework

The National Planning Framework (NPF) sets out a number of national strategic outcomes which includes Enhanced Amenities and Heritage. It notes that this will ensure that our cities, towns and villages are attractive and can offer a good quality of life. It includes amenities in rural areas such as activity based tourism and trails including greenways, blueways and peatways. The NPF states that the development of such greenways offers a unique alternative means for tourists and visitors to access and enjoy rural Ireland. It states:

“The development of a strategic national network of these trails is a priority and will support the development of rural communities and job creation in the rural economy, as well as the protection and promotion of natural assets and biodiversity. “

National Policy Objective 22 states:

“Facilitate tourism development and in particular a National Greenways, Blueways and Peatways Strategy, which prioritises projects on the basis of achieving maximum impact and connectivity at national and regional level.”

The identified key future priorities for the southern region include *‘Building on the progress made in developing an integrated network of greenways, blueways and peatways that will support the diversification of rural and regional economies and promote more sustainable forms of travel and activity based recreation utilising canal and other routes.’*

The priorities for the southern region also provide for the development of *“a more integrated network of greenways, blueways and peatways to support the diversification of rural and regional economies and promote more sustainable forms of travel and activity based recreation.”*

5.1.2. **The National Cycle Policy Framework 2009-2020**

The principal policy objectives of this document is to promote a strong cycling culture in Ireland and to encourage recreational cycling. The vision statement is that all cities, towns and village in rural areas will be bicycle friendly. The framework identifies three main benefits of increased participation in cycling, namely an improved quality of life, a stronger economy and an enhanced environment. Relevant objectives include:

“Objective 3: Provide designated rural cycle networks especially for visitors and recreational cycling.”

5.1.3. **Get Ireland Walking Strategy and Action Plan 2017-2020**

The ‘Get Ireland Walking’ initiative was established in 2013 and its vision is to “empower and support people to choose to walk more often for recreation, transport and health as part of their daily life”. A number of actions are set out including the creation of opportunities for improved access to lands for recreational walking and to develop and market recreational walking infrastructure.

5.1.4. **Smarter Travel: A Sustainable Transport Future 2009-2020**

This policy document identifies certain key goals and objectives to be met in order to introduce a national sustainable transport network. It notes that pedestrian and cycle facilities will be most successful where they form a coherent network and that cycling and walking will be pivotal to achieving some of the goals in national health policies to promote physical activity. It further details that “the cycling culture will also enhance our tourism industry by attracting many visitors to cycle in Ireland.”

5.1.5. **National Cycle Policy Framework**

The National Cycle Policy Framework has a specific objective relating to the development of the National Cycle Network to include rural recreational routes around urban areas and connecting with major urban areas. The Minister for Transport approved the commissioning of the NRA to undertake a study in this

regard and the establishment an interdepartmental/interagency advisory group to assist this work. The National Roads Authority was tasked with leading this study and an advisory group representing other relevant stakeholders including CIE, Failte Ireland, local authorities, the NTA, OPW and Waterways Ireland. The vision agreed between the stakeholders makes reference to the development of *‘a National Cycle Network that will allow users to cycle between the main urban areas throughout the country. The network will be built to best practice standard, follow routes that maximise the number of potential users and its attractiveness to users, facilitate access for all, and ensure that short and long trips can be engaged in. The National Cycle Network Scoping Study routes will, where possible, avail of existing routes and State-owned lands, share use with walking and form the basis for linkages to more comprehensive rural and urban local networks.’* The terms of reference included mention that *‘Special attention should be given to the opportunities of using both the disused rail network and canal / river tow-path networks as cycling / walking routes’* and that *‘It should ensure that routes are provided in a manner that will allow cycling to develop as a viable mode for people’s transport and commuter needs, as well as ensuring development of recreational / leisure and tourist cycling.’*

This study commenced in August 2009, and the completed study identifies a series of routes that connect the main urban centres of 10,000 population and above. It is specifically noted that one of the identified routes runs from Celbridge to Naas, Newbridge, Kildare, Athy and on to Carlow. The section from Athy to Carlow could follow the alignment of the Barrow Way, however the corridors indicated in the study are indicative and the Athy to Carlow section could follow the R.417. From the information available therefore the extent to which the Barrow Way overlaps with the identified National Cycle network is, at most, limited.

5.1.6. **Get Ireland Active (The National Physical Activity Plan for Ireland) 2016**

One of the key objectives of this plan is to increase the number of persons taking regular exercise by 1% a year over 10 years. A number of actions are set out to achieve this target including:

- *“Develop and promote walking and cycling strategies in each Local Authority Area.*
- *Ensure that planning, development and design of towns and cities promotes cycling and walking with the aim of developing a network of cycle paths and footpaths.*
- *Prioritise the planning and development of walking and cycling and general recreational/physical activity infrastructure.*
- *Explore opportunities to maximise physical activity and recreational amenities in the natural environment”.*

5.1.7. **Rural Cycleway Design (Offline), TII, 2017**

This document produced by Transport Infrastructure Ireland outlines the technical design standards and factors that need to be considered when providing cycling facilities in rural areas. Design standards are given under the headings of scheme layout, sight distances, geometric alignment, crossings and construction details. The main principles guiding the design are identified in section 2.2 as coherence, convergence, directness, safety, comfort, attractiveness, and access. Canal towpaths and river banks are specifically referenced at 3.2.2 of the design guidance and states that *‘...the key issues associated with the canal system include, access control measures, available width through deep cuttings, the provision of edge protection and suitability of existing embankments to accommodate cycleways’.*

Section 4 of the document sets out standards for the width of cycle paths and notes that the desirable minimum width of two way, low volume cycle facilities with shared use with pedestrians is 3 metres with the one step below minimum desirable being 2.0 metres. It also recommends that if a wall or fence is located immediately adjacent to the cycleway, it is necessary to provide a buffer with a width of 1 metre to avoid limiting the effective capacity of the cycle facility. Low volume facilities are

those considered to attract less than 1,500 users per day. The desirable minimum width for high volume facilities (attracting greater than 1,500 users per day) is 5 metres. Section 1.3 of the Guide relates to relaxations and departures from standards and states that in most cases designs can be achieved that do not utilise the lowest level of design standard, however these standards may not be justifiable in all circumstances for reasons of economics, environmental factors / environmental damage, cost or demand projections. In such circumstances the guidelines state that *'sufficient advantages might justify either a relaxation within the standards or, in more constrained locations, a departure from the standards'*. The guide goes on to state that *'...standards are not therefore to be regarded as sacrosanct in all circumstances. Relaxations and departures should be assessed in terms of their effects on the economic worth of the scheme, the environment and the safety of the user.'*

In DN-GEO-03031 TII *Rural Road Link Design* departure and relaxations are defined as follows:

Departure: A design parameter which does not comply with the requirements of this design standard.

Relaxation: A design parameter which complies with this standard but does not meet the Desirable Minimum standards.

5.1.8. **Strategy for the Future Development of National and Regional Greenways**

The strategy was published by the Department of Tourism, Transport and Sport in July, 2018. It sets out the potential benefits that can accrue from greenway developments from a tourism, health and economic perspective. National routes, are defined as those of at least 100km in length and so would encompass projects such as the current proposal. The strategy sets out a process including consultation for the development of greenways, issues relating to the potential impact on agriculture, rural areas and the environment and post construction maintenance and economic development areas. It is noted that the strategy specifically references the TII Rural Cycleway design standard and that it is recognised that the most appropriate surface may be a loose surface may be justified on environmental or

visual amenity grounds. A call for projects to be funded under the strategy is anticipated in 2019.

5.1.9. Classification and Grading of Recreational Trails, Irish Sports Council 2008

The National Trails Office was established in 2007 by the Irish Sports Council to coordinate and drive the implementation of an Irish Trails Strategy and to promote the use of recreational trails in Ireland. 'Recreational trails' are defined in the Irish Trails Strategy as being "a corridor, route or pathway, generally land or water based, primarily intended for recreational purposes, including walking, hiking, cycling, canoeing and horse-riding". They set out standards for Irish Trails and promote good practice for recreational trail development. Section 8 of this document sets out standards for greenways noting that the desirable width for such is 2,500 mm.

5.1.10. A Guide to Planning and Developing Recreational Trails in Ireland, The National Trails Office, 2012

This document sets out advice and guidance regarding the development of trails including matters such as landownership and access, consultation, impact on national heritage, environmental considerations, liability, maintenance, funding etc. The document sets out a number of benefits of developing trails including:

They provide a wide variety of ways for people to be physically active.

They make it easier for people to visit areas, be active and provide a safe place to walk and cycle.

Improving access to places for physical activity is strongly linked to increasing activity in individuals and communities.

The development of trails have significant economic benefits and are an integral part of the walking tourism product in Ireland.

Developing recreational trails is a very effective way of managing recreational activity in the outdoors and protecting the natural environment.

5.1.11. **A Strategy for the Development of Irish Cycle Tourism, Failte Ireland, 2007**

The strategy notes the need to create some world class traffic free routes to cater particularly for touring cyclists leaving the cities to discover the countryside. It notes that strategic greenways will become tourist attractions in their own right.

5.2. **Regional Policy**

5.2.1. The alignment of the proposed development along the Barrow Navigation is located within two of the three regional Assembly areas as created in 2015. Specifically, the section of the route within Counties Kildare and Laois is located within the area of the Eastern and Midlands Regional Assembly while County Carlow is located within the Southern Regional Assembly area. A Draft Regional Spatial and Economic Strategy for the Eastern and Midland Region was published on 5th November, 2018. Pending the adoption of a final plan for the three regional assembly areas, the relevant plans covering the route of the proposed development are as follows:

- County Kildare – Regional Planning Guidelines for the Greater Dublin Area (Mid East Regional Authority).
- County Laois – Midlands Regional Planning Guidelines (Midlands Regional Authority).
- County Carlow - South East Regional Planning Guidelines (South East Regional Authority).

5.2.2. The following provisions of the ***Regional Planning Guidelines for the Greater Dublin Area, 2010-2022*** are noted and relate specifically to the section of the route within County Kildare:

Policy ER6 Support the development of economic clusters and sectoral opportunities around the RPG strategic growth towns and core economic areas and support policies which facilitate opportunities for clustering activities which have a tangible locational requirement outside these centres including those relating to green economy projects such as renewable energies – e.g. wind energy and bio fuel crop production; innovation and eco parks; food production and agri-business; horticulture and rural based tourism.

Policy ER15 Promote sustainable tourism practices and leisure activities at appropriate locations and the delivery of a high quality built environment to support the attractiveness of the region for commerce.

Paragraph 6.3.6 relates to cycling and walking and states that Walking and cycling tourism also has the potential to benefit from improvements to the cycle and footpath networks within the GDA.

Strategic Recommendation GIR9 Seek protection, enhancement and sensitive integration/re-use, as may be appropriate, of heritage transport corridors, including rail, road and water corridors, to ensure their long term future and their role in relation to access provision, tourism development, biodiversity space and development buffers.

Key Regional Assets – walking and cycling provisions in the countryside. The provision of new walking and cycling routes and improvement of existing routes in the countryside can enhance people’s experience of nature and provide a greater appreciation of our natural heritage. These ‘green routes’ also have particular appeal to specialist groups such as rambling and cycling groups and can aid in the development of tourism and other outdoor recreational pursuits. On the other hand, there is a paramount need to preserve fragile ecosystems, sensitive landscapes and sites with special designation under EU and national legislation. This, in turn, may affect and shape access and route selection choices.

- 5.2.3. The following provisions of **the Midlands Regional Planning Guidelines 2010-2022** are noted and relate to the section of the route within County Laois:

The plan contains a number of strategic planning and development issues facing the region including **Goal 7** which seeks the expansion of the tourism sector and ‘*the development of the midlands region as a unique visitor destination...*’.

There are a number of specific objectives contained in the plan that are of relevance to the proposed development, specifically relating to walking and cycling and inland waterways. The following are particularly noted:

- 5.2.4. **TIP4** local authorities should support, through policies and design provisions, the development and promotion of cycling and walking facilities in the region.

- 5.2.5. **TIP5** states that local authorities should support the development of regional cycling routes in addition to the to the cycling routes identified in the National Cycle Policy Framework and Failte Irelands strategy for the Development of Irish Cycle Tourism.
- 5.2.6. **TP4** states that local authorities should build on the amenity potential of the inland waterways throughout the region.
- 5.2.7. **TP5** Protect access to and support proposals for upgrading inland waterways and associated facilities for recreational use in accordance with relevant management strategies and in cooperation with Waterways Ireland.
- 5.2.8. The following provisions of the **South East Regional Planning Guidelines 2010-2022** are noted and relate to the section of the route within County Carlow:

Section 5.1.9 of the Guidelines relates to Cycling and walking and are promoted in the guidelines. It is stated that *‘the Regional Authority supports the development of dedicated walkways and cycleways such as ‘Slí na Sláinte’ and ‘Greenways’ in urban and rural areas, e.g. along the trackbeds of former railway lines.’*

Objective PPO5.8 includes the following:

- To promote and facilitate the sustainable development of cycling and walking facilities in the region, including development of ‘Slí na Sláinte’ and ‘Greenways’ in urban and rural areas;
- To promote the development of cycling by the construction and improvement of cycle links within the region. Where cycle links are proposed adjacent to designated Natura 2000 sites, Appropriate Assessment Screening will be required in accordance with Article 6 of the Habitats Directive;

Objective PPO8.18 states that local authorities should include policies in the development plans to, inter alia, *‘Promote the development of ‘Greenways’ along former railway alignments and along canals and rivers where environmentally appropriate.’*

The significant potential of tourism to both the urban and rural areas is recognised in policies to support the development of diverse tourist and visitor facilities and attractions.

5.3. Local Policy - Development Plans / LAPs

The relevant county development plans are as follows:

- *Kildare County Development Plan, 2017-2023.*
- *Monasterevin LAP, 2015-2021*
- *Athy LAP, 2012-2018*
- *Laois County Development Plan, 2017-2023*
- *Graiguecullen LAP, 2012-2018*
- *Carlow County Development Plan, 2015-2021*

The policies / objectives contained in these plans that are considered of relevance include the following:

5.3.1. ***Kildare County Development Plan, 2017-2023***

Policy ECD28 seeks to promote, protect, improve, encourage and facilitate the development of tourism throughout the county as an important contributor to job creation in accordance with the proper planning and sustainable development of the area.

Policy ECD30 Maintain a clean and attractive environment, to protect tourism amenities within the county from insensitive or inappropriate development, particularly any development that threatens the tourism resources and tourism employment in the county.

Policy ECD33 seeks to facilitate the development of tourism infrastructure such as accommodation, restaurants, car and coach parking, and toilet facilities in the designated hubs throughout the county.

Objective EO49 seeks to work with the national transport authority, Kildare Failte, Failte Ireland, Waterways Ireland and all stakeholders to develop a co-ordinated approach to the selection, delivery and servicing of future blueways, greenways, trails and routes throughout the county.

Objective E052 seeks to promote and develop the towpaths along the Grand Canal, Royal Canal, the Barrow Line and the Corbally Line as cycleways in co-operation with Waterways Ireland and neighbouring local authorities.

Policy WC5 seeks to promote the amenity, ecological and educational value of the canals and rivers within the county while at the same time ensuring the conservation of their flora and fauna and protection of the quantity and quality of the water supply.

Policy CR5 seeks to investigate the possibility of developing long distance walking routes within the lifetime of the Plan, along disused sections of railway lines and canals in the county.

Policy CR7 seeks to facilitate, where appropriate, the provision of cycle-ways or walkway along the extent of the canals and watercourses in the county in co-operation with landowners, Waterways Ireland, Government Departments and other local authorities.

Policy CR11 seeks to support and promote public access to uplands areas, rivers lakes and other natural amenities which do not endanger the conservation of such natural amenities.

Policy RAO13 seeks 'to develop long distance walking routes throughout the county including along the Royal Canal, the Grand Canal and The River Barrow.

Policy E057 seeks to develop in conjunction with the relevant authorities, berthing and other ancillary infrastructure at key locations along the canal system, particularly in areas where tourism is under developed at present.

Policy NH1 seeks to Facilitate, maintain and enhance as far as is practicable the natural heritage and amenity of the county by seeking to encourage the preservation and retention of woodlands, hedgerows, stonewalls, rivers, streams and wetlands. Where the removal of such features is unavoidable, appropriate measures to replace like with like should be considered, subject to safety considerations.

Policy GI 7 seeks to promote a network of paths and cycle tracks to enhance accessibility to the Green Infrastructure network, while ensuring that the design and operation of the routes respect and where possible enhances the ecological potential of each site.

Policy GI 18 Contribute towards the protection of and manage the natural, historical and amenity value of, the county's waterways and to strengthen a network of waterways at a regional level.

Policy GI 19 Require the submission of an Ecological Impact Assessment where deemed necessary by the planning authority (and where necessary an Appropriate Assessment in relation to Natura 2000 sites) including bat and otter surveys for developments along river, stream and canal corridors.

Policy GI 20 Maintain a biodiversity zone of not less than 10 metres from the top of the bank of all watercourses in the county, with the full extent of the protection zone to be determined on a case by case basis by the Council, based on site specific characteristics and sensitivities. Strategic Green Routes / Blueways / Trails will be open for consideration within the biodiversity protection zone, subject to appropriate safeguards and assessments, as these routes increase the accessibility of the Green Infrastructure Network.

The county development plan identifies a number of Architectural Conservation Areas (ACAs), including one for Rathangan. The line of the proposed development through Rathangan does not impact directly on this ACA.

In addition to the county Development Plan, the proposed development within County Kildare passes through areas covered by a number of Local Area Plans as follows:

5.3.2. **Monasterevin LAP, 2016-2022**

Section 5.1 of the LAP promotes the development of the economy of Monasterevin and states that:

The plan focuses on the need to develop Monasterevin as a tourism destination not only for boating and angling but also for the wider community. The development of walking and cycling routes will be encouraged.

A key objective of the plan is to facilitate the delivery of an integrated walking and cycle network along the banks of the Grand Canal and River Barrow (The Barrow Blueway) as a recreational and tourism initiative led by Waterways Ireland., (section 5.1(vi)).

There is an identified ACA for Monasterevin, defined in the Kildare County Development Plan, however the proposed development is not located within the ACA boundary and does not directly impact on this ACA.

5.3.3. ***Athy Town Development Plan, 2012-2018***

Section 3.12.2 of the Plan relates to tourism initiatives and to the importance of trails and water based resources. Objectives TS01, ST07 and RA05 support the provision of access to canal banks and towpaths, the provision of leisure routes and support for the development of a linear walkway along the banks of the Grand Canal and River Barrow.

There is an ACA for an area in the centre of Athy town. The western side of this identified ACA overlaps with the line of the proposed development and the proposed new footbridge that crosses the canal c.300 metres to the south of Augustus Bridge is located within this ACA.

Laois County Development Plan, 2017-2023

The relevant plan is the *Laois County Development Plan 2017-2023*. There are a number of policies and objectives contained within the plan that relate to tourism and specifically to the development of the blueway. These include the following:

RA6 / P05 – recognises the role of natural amenities and seeks to support and promote public access to outdoor amenities that have traditionally been used for recreation subject to compliance with the habitats directive.

EC7/OD7 – seeks to protect landscapes, archaeological, built and natural heritage which have an economic value in attracting visitors.

OBJ 4 - Use the Landscape Character Assessment (LCA) to protect parts of the Laois landscape that are of scenic importance and sensitive to change;

OBJ6 – explore the potential for rural recreational tourism in conjunction with tourism bodies, waterways Ireland, Failte Ireland, National Trails Office and NPWS to diversify the range of tourist experience and extend the tourist season.

OBJ13 – Investigate the feasibility, subject to compliance with the Habitats and Birds Directives of a River Barrow Blueway development.

LS19 - Preserve river side historic features and their landscape settings. Conserve valuable habitats focused on and around river corridors and estuaries including European and national designations;

TM8 – seeks to co-operate with Failte Ireland, Waterways Ireland and other relevant bodies and agencies in promoting the waterways product of the County.

TM8; P19 – seeks to maximise the use of canals and other waterways as tourism amenities. The council will co-operate with waterways Ireland, NPWS and community groups to develop the infrastructure, quality and amenities of these waterways.

TM 10 – seeks to promote and facilitate the development of rural tourism; where these are not detrimental to the character, scenic value and rural amenity of the surrounding area, including protecting and maintaining biodiversity, wildlife habitats, water quality, rural landscape character, scenic amenities and nature conservation. Proposals will be required to demonstrate a need to locate in a particular area and demonstrate compliance with the Development Management Standards set out in Section 8;

TM22 – Promote and investigate the feasibility, subject to compliance with the Birds and habitats Directives of sustainably developing and improving of facilities and infrastructure supporting water based tourism activities, including shore side interpretive centres and jetties. Development proposals outside settlements will be required to demonstrate a need to locate in the area and will be required to ensure that the ecological integrity and water quality of the river or lake, including lakeshore and riparian habitats, is not adversely affected by the developments.

TM23 – Support in principle and investigate the feasibility subject to compliance with the Birds and Habitats Directives, developing and marketing the Barrow Blueway by Waterways Ireland and if consented facilitate related commercial opportunities in Vicarstown, Portarlinton, Graiguecullen and Portlaoise as well as opportunities to link the Barrow Blueway with Portarlinton or Portlaoise.

TM25 – Seek to maintain existing walking and cycling trails as well as facilities associated with angling and examine the feasibility of setting up additional walking / cycling trails or canoe / bridle trails and support the development and funding for general enhancements along trails and in collaboration with the National Trails Office, provide up to date information on trails and routes.

TRANS44 – Designate and promote the Barrow Navigation as an activity hub.

TRANS45 – Designate on road cycling trails to link the Barrow Navigation with Portlaoise, Stradbally and Portarlinton and to link the Barrow Navigation with the Killeshin Plateau....

5.3.4. **Carlow County Development Plan, 2015-2021**

The relevant plan is the *Carlow County Development Plan 2015-2021*. There are a number of policies and objectives contained within the plan that relate to tourism and specifically to the development of the blueway. These include the following:

Trans Policy 8 – to consider the development of off-road routes such as disused railway lines and bridle paths for both walking and cycling to improve access to rural tourist attractions and support the development of the ‘Barrow Corridor’ in County Carlow in connection with the adjoining local authorities.

Tourism – Objective 1 seeks to promote, encourage and facilitate the development of sustainable tourism through the conservation, protection and enhancement of the built and natural heritage, the protection of sensitive landscapes and cultural and community environments in order to maximise upon the economic benefits arising from the industry.

Tourism Policy 2 seeks to, inter alia, Protect and conserve those natural, built and cultural heritage features which form the basis of the county’s tourism attraction and to seek to restrict development which would be detrimental to scenic and identified natural and cultural heritage assets

Section 8.10.5 of the plans refers specifically to the River Barrow and notes the very significant potential for linear open space and to form part of a network of walking and cycling routes.

Section 8.11.2 refers to outdoor recreation and states that such uses will normally be permitted subject to a number of criteria including the protection of nature conservation, it would not harm the appearance or character of the local landscape and that the amenity of persons living nearby or the enjoyment of other countryside users is not adversely affected by the development.

Section 8.11.8 states that it is the policy of the local authority to promote the natural amenity potential of the River Barrow and other watercourses to facilitate the development of amenity, recreational, ecological and tourism benefits for the county and region.

Heritage – Policy 1 states that it is the policy of Carlow County Council to, inter alia, Protect, manage and enhance the natural heritage, biodiversity, landscape and environment of County Carlow in recognition of its importance as a non-renewable resource, unique identifier and character of the county and as a natural resource asset.

Heritage Policy 2 relates to the habitats directive and appropriate assessment and states that it is the policy of the council to, inter alia, strive for and maintain the favourable conservation status and conservation value of all natural heritage sites and designated sites under the Habitats Directive and only to permit a plan or project after the competent authority has ascertained, based on best scientific evidence that the plan or project will not have significant adverse effects on the integrity of any European sites. It is also stated that it is the policy of the council to ensure the recommendations of the Landscape Character Assessment contained within Appendix 6 of this plan be adhered to at all times during the lifetime of this plan

Heritage Objective 5 states that it is an objective of the council to *‘support the protection of habitats and species listed in the Annexes to and / or covered by the EU Habitats Directive, Birds Directive....’*.

5.4. Natural Heritage Designations

The *River Barrow and Nore SAC* site comprises the freshwater sections of the River Barrow and River Nore as far upstream as the Slieve Bloom Mountains. It also includes the tidal elements of the estuary as far downstream as Creadun Head in Waterford. The site is designed as a SAC on the basis of a number of habitats and species including, of particular note, Freshwater Pearl Mussel, White Clawed Crayfish, Lamprey (sea, river and brook) Atlantic salmon, otter and the Nore Pearl Mussel. The full list of habitats and species in respect of which the site is designated as a SAC is as follows:

Habitats

- Estuaries
- Mudflats and sandflats not covered by seawater at low tide
- Reefs
- Salicornia and other annuals colonising mud and sand
- Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)
- Mediterranean salt meadows (*Juncetalia maritimi*)
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation
- European dry heaths
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels.
- Petrifying springs with tufa formation (*Cratoneurion*)
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

Species

- *Vertigo moulinsiana* (Desmoulin's Whorl Snail)
- *Margaritifera margaritifera* (Freshwater Pearl Mussel)

- *Austropotamobius pallipes* (White-clawed Crayfish)
- *Petromyzon marinus* (Sea Lamprey)
- *Lampetra planeri* (Brook Lamprey)
- *Lampetra fluviatilis* (River Lamprey)
- *Alosa fallax fallax* (Twaite Shad)
- *Salmo salar* (Salmon)
- *Lutra lutra* (Otter)
- *Trichomanes speciosum* (Killarney Fern)
- *Margaritifera durrovensis* (Nore Pearl Mussel)

Overlap of the SAC Boundary and Each Local Authority Administrative Area

Kildare County Council Section

The site is located such that, from the north of the route, the development is not located within or close to any European site from the northern end of the route at Lowtown, through Rathangan and south to the outskirts of Monasterevin. At Monasterevin the proposed route crosses the line of the River Barrow and River Nore SAC (site code 002162). To the south of Monasterevin, the route of the blueway runs approximately parallel to and to the west of the River Barrow and River Nore SAC. With the exception of a point to the south of Vicarstown where the canal crosses the SAC and a point at Kilberry to the south east of Vicarstown where the blueway route comes within c.30 metres of the SAC, the proposed development is not in close proximity to the SAC until it reaches Athy.

To the south of Athy, the proposed blueway route is located either within or immediately adjoining the River Barrow and River Nore SAC site for the distance south to the boundary with County Carlow in the general vicinity of Jerusalem townland.

Laois County Council Section

The section of the route in County Laois is located such that the majority of it is wholly or partially within the boundary of the River Barrow and River Nore SAC. There are a number of short sections of the route where the identified site boundary lies outside of the SAC, however the configuration in these sections is such that the site mostly adjoins the SAC boundary.

Carlow County Council Section

The section of the route from Shrule at the boundary with County Kildare south as far as Carlow Town is located entirely within the area of the River Barrow and River Nore SAC site which is centred on the river channel. The section within County Carlow to the south of Carlow Town is such that, with the exception of a short section to the immediate north of Bagenalstown and a short section within Graiguenamanagh, the entirety of the route is located either wholly or partially within the boundary of the SAC.

6.0 The Appeal

6.1. First Party Appeal (Kildare, Laois and Carlow County Councils)

The following is a summary of the main issues raised in the first party appeal:

- That the proposed development is necessary as the existing route is not fit for purpose as a National Waymarked Trail. In its current form it does not provide a suitable consistent surface for walkers and uninterrupted access for cyclists.
- That the omission of sections of the route in the decisions issued by the Planning Authorities effectively restrict access to the waterway from being enjoyed equally by all members of the public.
- That the grant of permission for the majority of the route indicates that the clear acceptance of the principle of the recreational trail and this is welcomed.

- That the submitted EIS and NIS have demonstrated that the proposed development can be undertaken without adverse impacts on the environment or on the River Barrow and River Nore SAC.
- That the decision of the Planning Authorities regarding the adverse impact on the SAC is refuted and in this regard the first party has retained Michael Gill of Hydro Environmental Services Limited to undertake a review of the submitted documentation and the reports prepared by and on behalf of the Planning Authorities. This review concludes that flood events are characterised by reductions in water quality that are not accounted for in the NIS and also that while there is potential for erosion of the unbound material (Type A) the impacts arising are an order of magnitude less than those put forward in the RPS AA worst case scenario.
- That in the event that the Board is of the opinion that the proposed Type A surface would have a potentially effect on the integrity of the SAC then the Board is invited to consider an option of an bound tar and chip (Type E) finish. Details of this are provided with the appeal and the environmental impact of this proposed alternative design addressed at section 4 of the appeal under the headings contained in the EIS. It is stressed that this alternative is presented as a means of potentially ensuring the integrity of the project is maintained and that it be permitted in its entirety and that it is absolutely not the design that is preferred or considered optimal by Waterways Ireland.
- That the site is located entirely within hydrometric area 14 of the South East River Basin District and the CFRAM study identifies the River Barrow as a low slope, low energy meandering system.
- The flat nature of the blueway route and surrounding lands are such that there are no fast flowing preferential flow paths across the proposed track to surface waters (river or canal) that could potentially act as a pathway to these receptors.
- That the proposed route enters the 1 in 100 year flood zone at multiple locations along the route.

- That 46km of the route is not at risk of flooding as it comprises an artificial canal waterbody and a further 1.6 km of the route at Rathlin Lough Bagenalstown is not located in a flood zone. The balance, comprising approximately 67 km of the route has the potential to flood having regard to indicative PFRA and CFRAMS although erosive flooding is limited to two locations.
- That instances of flooding would lead to crossflow where water would flow from the overtopped trackway into the back drain. There is no evidence from the photos and video submitted by third parties to be high energy or erosive.
- That the proposed blueway is a form of development that is a water compatible development being an amenity open space and such that is appropriate in areas identified as Flood Zone A.
- That the areas at risk of potentially high levels of erosive flooding have been provided with a bound surface. These areas comprise St Mullins Lock which is subject to tidal influences and another area to the north of Leighlinbridge. Submitted that other areas while at risk of flooding are subject to deposition with rising flood waters pushing any debris away from the main channel and the retreating waters depositing on the floodplain.
- That the design of the proposed unbound surface is such that the clause 804 material and surface limestone layer are held in place with wooden strips on either side.
- That the proposed clause 804 material and crushed limestone have a gravimetric weight and are not a silt, that is to say they are not such that they would become suspended in water.
- That the South East CFRAM study identifies the River Barrow as a low slope, low energy meandering system. The definition of lowland meandering notes that sediment deposition is a likely feature and that such systems are not conducive to high levels of sediment erosion and transport through the river network.

- That the design of the Type A unbound surface is such that during periods of heavy rainfall water would infiltrate into the pathway to ground and potential for runoff from the path is limited by the design and by the flat topography. The potential pathway to the receptor (river / canal) is limited by the use of timber laths bounding the pathway and the proposed grass verges.
- In response to the conclusion of the RPS Report reviewing the submitted NIS that there is an element of uncertainty with regard to the suitability of the proposed Type A surface and the location of this surface within the flood zone of a European site.
- That the project team are satisfied that the Type A surface is suitable and durable under the type of flood conditions that occur along most of the route. Waterways Ireland maintenance staff do not encounter significant erosion along most of the existing track with minimal maintenance required after flood events.
- That the nature of the River Barrow in the lower reaches in the vicinity of the proposed development is a depositing river and the river substrate in much of this area is naturally dominated by soft sediments. Where they are not dominated by navigation infrastructure, the banks and islands are alluvial in nature.
- That the RPS appropriate assessment report assumes that the entire path construction could be washed into the River Barrow during a flood event. On the basis of past maintenance experience and the design of the Type A track there is no scientific evidence or justification to support this opinion.
- It should be noted that as a depositing river, the Barrow carries extremely large volumes of sediment from the upper reaches and deposits it in the lower sections. There are also naturally occurring eroding banks within the river channel. In the highly unlikely event that parts of the path could be eroded during a flood then the material could only represent a tiny percentage of the overall sediment load within the river and would be wholly insignificant in terms of the potential for adverse effects on the SAC.

- Section 2.2 of the submitted NIS describes the nature of the Type A surface proposed, the review undertaken by Waterways Ireland in respect of areas that are potentially susceptible to flood and the minor ongoing maintenance envisaged as being required.
- That based on the above and the findings of the hydrological assessment it is reasonable to conclude that there will be no adverse effects on the aquatic habitats and species within the River Barrow.
- The submission received from the NPWS raised a number of questions with regard to the ecological surveys and whether all the necessary details were submitted. The following points are raised in this regard:
 - That all surveys were undertaken by experienced and qualified personnel and undertaken between 2012 and 2015.
 - That the surveys were undertaken at an appropriate time of the year. Habitat surveys were undertaken during the summer months between 2012 and 2016. 2017 surveys were undertaken in August and September which is still within the appropriate period for flowering species.
 - Details of all survey dates are in Appendix 5.1 of the EIS. Details of the methodologies are provided in Appendix 5.1 and section 5.5.
 - With regard to otter, numerous signs of otter were recorded over the length of the route. The blueway is located on an existing waymarked trail that in many locations is the subject of significant levels of use and the bankside vegetation is maintained and does not therefore provide a significant level of cover for otter. No holts were recorded during the survey however it is likely that there are breeding otter and that they use the back drain and islands along the route. Otters are primarily active at night and there is no proposal to light the trackway at night time. It is not anticipated that there would be any impact on otter.
 - That there are a significant number of publications that support the conclusion that disturbance by recreation is unlikely to have a significant effect on otter.

- With regard to the identified potential inconsistency between sections 5.4.3.1.19 and 5.4.3.1.22 of the EIS it is clarified that the section in question passes through a section of Annex I grassland habitat. It was initially thought that this would result in a small loss of habitat however the design has been amended such that it would not impact directly on the Annex I habitat at this location.
- That the outline construction and environmental management plan submitted sets out robust measures to ensure that there would be no significant environmental effects arising from the construction or operation of the blueway.
- That Hydro Environmental Services (HES) Ltd. review of the hydrological aspects of the development and the divergence between the conclusions of the EIS and the report prepared by RPS is such that in general HES agree with the conclusions of the EIS that the flow away from as opposed to towards the main channel during major storm events and that extreme storm events that are identified as concern in the RPS report, are associated with a marked decrease in water quality.
- The assessment undertaken by Hydro Environmental Services determines that while there is the potential for an impact from the unbound material, the magnitude of the impact is the primary consideration and that this impact is likely to be a minor and not necessarily adverse impact on the SAC.
- Section 4 of the first party appeal sets out an environmental assessment of the potential use of a tar and chip based surface in sections of the route where flooding is recorded. This material (Type E) would replace the previously proposed Type A. The assessment is undertaken under the headings relating to the environmental factors contained in the EIS and the main impacts identified can be summarised as follows:
 - That the visual impact of the proposed changed material is minimal as the visible layer is the limestone chippings rather than the bitumen under layer. The type A material is considered more informal and appropriate to a rural setting.

- Revised photomontages for the viewpoints where the proposed Type E material is to be used are submitted.
- The effect on landscape is stated to be imperceptible to slight.
- The revised material would have no changes to construction phase traffic.

6.2. Third Party Appeals

The following is a summary of the main issues raised in the third party grounds of appeal received:

6.2.1. Cyclist.ie (Kildare County Council)

- That the planning authority do not appear in their decision to reference the National Road Safety Strategy, the National Cycling Policy Framework, Climate change and the governments National Mitigation Plan.
- That the proposed design is not in accordance with either Irish standards or best international practice.
- The Classification and Grading of National Trails was published in 2008 and is not relevant to the design of the proposed project.
- The Rural Cycleway Design (TII) states that a cycleway caters users '*in a recreational environment*'. The European Greenway Association has a wider definition which makes reference to recreational purposes and / or necessary daily trips (works study etc.).
- The application does not justify the reduction in width to 2.5 metres below the recommended minimum. There is no detailed assessment of the environmental constraints that lead to this decision or why a general width of 3.0 metres could not be proposed.
- That the TII document states that relaxations and departures should be assessed in terms of their economic worth of the scheme, the environment and safety of the user. No such assessment was undertaken.

- That inadequate widths lead to conflicts between pedestrians and cyclists elsewhere and will do so here.
- That the council did not have due regard to the potential of the scheme and the successes and failures of similar schemes abroad.
- That the design of the scheme is such that it will attract only a segment of cyclists (in this case recreational) will result in others remaining on the public roads and vulnerable to accidents.
- That the inadequate width and unbound surface proposed will result in a scheme that is not used as intensively as might otherwise be the case and will fall short in achieving the targets in the national cycling Policy Framework of 10 percent of commuter travel and all trips being by bicycle by 2020. There is an onus on the council to ensure the development caters for the highest volumes of cyclists possible.
- That there are alternative parallel routes to the proposed line between Monasterevin and Athy which offer a higher level of service, are more attractive to cyclists and best practice internationally. This road is 6 metres in width and follows the Barrow route for 12 of the 21km between these two towns.
- That the design is aimed at catering for existing low levels of cycling rather than the high levels required to impact on decarbonisation.
- That the council should have specified appropriate standards and decided what organisation decides on relaxations from standards.
- That the proposed development fails to maximise the economic benefits of the proposed development due to a failure to attract sufficient usage and the failure to design the scheme for utility cyclists.
- That the NRA (now TII) was asked to identify a number of inter urban corridors that would utilise rivers and canals amongst other possible routes to link major towns. The River Barrow was identified as one such route that could form part of the National Cycle Network to serve both recreational and utility cycling. The current proposal is contrary to this aim.

- That the proposed unbound surface suppresses the demand for cycling and does not encourage people to change to active modes of transport. The fact that the type of surface will influence the attractiveness of the facility to cyclists is recognised in the Rural Cycleway Design Standard document (TII, 2017).
- That there is evidence from the UK that a dust surface path is more expensive to maintain than a bound surface (Sustrans.org).
- That an alternative bound surface should be used to address the issues raised regarding Natura 2000 sites and the requirements of Condition No.3. Alternatively, Waterways Ireland could raise the level of the towpath. This was done in the vicinity of Ardclough.
- That the lifetime cost of the proposed unbound surface is at least 50% more expensive than a bound surface.
- That the UK Sustrans publication Cycle Path Surface Options recommends a bound surface as the default option. The EuroVelo guidance states that in an exceptional circumstances such as a nature reserve loose material may be used.
- That the barrow Feasibility report does not clarify what are the environmental concerns that lead to a recommendation for an unbound surface.
- The unbound surface proposed has implications for dust and dirt.
- That the application reduces the general width of the trail from 3 metres to 2.5 metres with no clear justification provided.
- That the attitude of Waterways Ireland is to discourage the utility cyclist and the general attitude to cycling on existing routes is unsympathetic.

6.2.2. Save the Barrow Line (Kildare, Laois and Carlow County Councils)

- That adequate need for the project has not been demonstrated. The do nothing scenario is not elaborated on in any detail.
- That the development is located within the Grand Canal pNHA and River Barrow and River Nore SAC. These sites have significant value as linear

habitats. The proposed development would have a detrimental effect on the linear integrity of the sites and their overall coherence and connectivity.

- That the application is accompanied by inadequate survey information. The absence of otter holts is particularly noted. The impact on species such as otter, kingfisher, marsh fritillary, and whorl snail is therefore significantly uncertain.
- Dr Evelyn Moorkeens is of the opinion that there are vast areas of the towpaths that have not been surveyed for *V.Moulinsiana* and that it is likely that there are patches of populations to be found.
- That the report of RPS on the appropriate assessment has ignored the issues raised in the Save the Barrow Line submission.
- That the proposed development will enable speed and lead to conflicts. This view is supported by Mr Gerry Dornan engineer with Kildare County Council. The proximity of the path to the waterway will exacerbate these conflicts.
- The development fails to meet the minimum widths set out by TII being the minimum width which should be implemented to provide a reasonable quality of service.
- The design was also highlighted by the submission from Cyclist.ie which noted that the proposed low standards are such that the development will fall short of achieving its stated objectives of economic regeneration and attracting significant volumes of cyclists and that the proposal falls far short of the vision for the National Cycle Network.
- That the Designers Safety Audit of the Proposed Route identifies a number of locations where the proposed 2.5 metre path width is not achievable and other locations where edge protection is required. Also notes the fact that there are 41 no. locations on the route where cyclists are required to dismount.
- That the proposal is in contravention of the EU Green Infrastructure Strategy as it removes green infrastructure and replaces it with built infrastructure.
- That the public notices only list the areas impacted by the proposed development in that county rather than all areas along the route impacted.

This amounts to project splitting and the application should be invalid as a result.

- That the proposed development would be contrary to the Kildare County Development Plan and particularly Policy ECD30, Objective EO49, Policy NH1, NH5, NH11, NH12, Policy GI5, GI7, GI16 and GI18
- That the decisions of the three councils should be consistent and treat the project as a whole to account for the cumulative impacts under the habitats directive.
- That the user numbers produced by Waterways Ireland shows the viability of the site as green infrastructure rather than the proposed built infrastructure.
- That the line should be developed as a camino / way.

Rosalind Murray (Kildare and Carlow County Councils)

- That the decision on this case will have significant future implications for other developments in the country and interpretations of both the Habitats Directive and the European Landscape Directive.
- That the public notices for the development are misleading and should refer to the full extent of the development along the whole route.
- That the decisions of the councils should be consistent and the inconsistent decisions promote project splitting and a failure to adequately consider cumulative impacts.
- That surveys for the River Barrow SAC are incomplete and there are no surveys for the Grand Canal in Counties Laois and Kildare the habitats directive appropriate assessment cannot be considered to be complete. Reasonable scientific doubt remains.
- No methodology provided otter survey undertaken. It is unclear by who or how the survey was undertaken. The zone of 10 metres from the river is not adequate.
- Contrary to the EIS and NIS, the Blackthorn Ecology report noted the presence of a number of otter holts including in the vicinity of Courtwood

Bridge, Milltown Bridge and Ballymanus Bridge as well as other locations. It is not clear why these locations were not the subject of more detailed survey.

- While otters do acclimatise to disturbance this is overstated in the EIS / NIS.
- No aquatic surveys were undertaken. EirEco's surveys were over 2 days and no samples were taken. No surveys for the QI's white clawed crayfish or lamprey undertaken.
- That there is a lack of consideration of habitats and species that are not listed in the Birds or Habitats Directives.
- That the Council did not publish a proper AA determination with precise findings.
- That the council does not recognise the hydrological and ecological interconnections between the Grand Canal Barrow line and the River Barrow SAC. Run off will continue to enter the canal and will change the PH of the water impacting on the SAC.
- Ignoring TII standards means that the safety of the whole trail is compromised.
- That section 4.2.3.2 of the EIS states that the riparian 1 metres strip along the route will not be impacted by the development but this is contradicted by the construction sequencing at 2.4.2.2.2 of the outline construction and environmental management plan.
- No details regarding planting or landscaping provided according to the RPS report. Stated that it is therefore not possible to state if the development is consistent with the Landscape Directive or the Green Infrastructure Strategy.
- That the main interest for Waterways Ireland is to provide access for mechanical maintenance and ignores public interests.
- That the scheme has not been designed from first principles and the integration of users has not been addressed. No alternatives have been explored in detail.
- There is inadequate detail in the further information response regarding construction methodology for tree roots.

- Concerns regarding management and maintenance remain.
- Concerns regarding the impact of the project on the ecology of the back drains.
- Cumulative impacts and impacts of noise, climate change have not been assessed.
- Lack of survey and reference to swan mussel and duck mussel despite shells being observed on the route.
- No bat surveys undertaken despite potential for disturbance.
- No formal bird survey including no dedicated survey for the Annex I species, Kingfisher. It is highly unlikely that there are no Kingfisher breeding sites along the route.

It is not appropriate that the above species would be addressed by way of pre construction surveys.

6.2.3. Mary White (Carlow County Council)

- That the width is inadequate, doesn't meet national trails office standards and will result in safety issues.
- That the proposal is not a blueway as this relates to water based activities.
- That the route is unique and is the only remaining long distance path on grass in Ireland.
- That the proposed development would negatively impact on the South Leinster Way which follows the Barrow between Ballytiglea Bridge north of Borris and Graiguenamanagh.
- That the needs of one recreational sector (cycling) should not compromise the other recreational users.
- That the council should have referenced the impact that the proposed development would have on the Freshwater Pearl Mussel in its decision.

- From the OPW assessment of the impact of arterial drainage works on the River Barrow on mussel populations - that the loss of riparian habitat would have a negative impact on fresh water pearl mussel.
- That ongoing climate change is going to lead to increased incidences of flooding. This was not addressed by the council.
- That RPS, the consultants engaged by Waterways Ireland, did not adequately survey the river.
- That the proposed installation of barriers, chicanes and railings is indicative of greed and self interest by Waterways Ireland and disregards the beauty of the river. By proposing the installation of such infrastructure it is admitted that there is a potential safety issue.
- That a hard surface (crushed limestone) would impact negatively on the beauty of the line and impacted on wildlife and biodiversity.
- That strategic marketing of the existing amenity would inject new life into the towns and centres along the route.

6.2.4. Mr Paul O'Connell (Laois County Council)

- That the development in the townland of Killaglish is problematic as it will conflict with the operation of a large farm business in this area the access to which is at the end of a long, c.2km cul de sac public road.
- That the blueway must be relocated to the north bank of the river between Woodenbridge to Fisherstown Bridge.
- That a car park cannot be developed at this location due to anti social activity.
- A copy of the submission made to Laois County Council is included with the submission. This sets out the busy nature of the farm operation, concerns regarding conflicts with users of the track and farm activity, and distractions resulting from the noise of the M7 motorway that crosses the cul de sac.

Mr Art Mooney

- That the project is fundamentally flawed. The engineering feat of the Grand Canal deserves to be respected.
- That the public notices of the project are deficient.
- That the decision of the Planning Authority amounts to project splitting.
- That the surveys of protected species were inadequate and mean that the impacts on species could not be understood. No proper AA determination was issued by the Planning Authority.
- That a need for mechanical maintenance is the main driver of the project.
- Not designed from first principles. Inadequate consideration of alternatives.
- That there is a conflict of interest as the councils have been working on the project
- There are issues of maintenance, funding, habitat fragmentation, noise and visual impact that remain outstanding.

6.3. Applicant Response

The following is a summary of the main issues raised in the first party response to the grounds of appeal:

- That the 'do nothing' scenario has been fully addressed at section 2.5.2 of the submitted EIS. In the do nothing scenario the existing paths would continue to be maintained, however this is not considered to be a viable option due to the varied standards. Submitted that this does not represent a sustainable use of the location and the amenity.
- That the concerns regarding the planning process or acceptability of the application documentation are not accepted.
- That the pre application consultations and process are part of the normal process of making a planning application for this type / scale of development.
- That contrary to the assertions of the appellants, the proposal is fully consistent with the provisions of the development plan. The Councils have accepted the principle of the proposed development and this is reflected in the

grant of permission for part of the proposed route in the cases of County Kildare and Laois.

- Regarding project splitting, the application is accompanied by a full EIS and NIS and therefore there has not been any attempt to avoid these assessments by the sub division of the proposed development.
- That the timing of the applications was undertaken so that a co-ordinated cumulative assessment could be undertaken by all three planning authorities.
- Regarding the overall concept, Waterways Ireland have sought to open up accessibility of the River Barrow and Barrow Line while maintaining a balance between augmenting this regional tourism amenity and protecting the existing character and environment.
- Given the importance of the corridor in recreational and amenity terms the existing National Waymarked Trail is not fit for purpose. Specifically, it does not facilitate uninterrupted access for cyclists and does not cater for a variety of walkers by the provision of a consistent finish. There is restricted visibility at certain locations and inadequate signage. It does not conform to any established or recognised standard.
- That the proposed blueway would address the above issues. Blueways are based on a 'slow tourism' concept and are targeted at providing easy participation and broad appeal in a safe environment.
- That the proposed Blueway is a standard to which all paths on the navigations could be maintained by Waterways Ireland.
- That the request that the path be brought to the standard of a national cycleway is not desirable for reasons of high cost, environmental and visual impacts and adverse impacts for other users. It would be contrary to the concept of the blueway as a slow tourism product.
- That the designer's safety audit of the route provides details of pinch points along the route. This is not an issue as the proposed trail is a shared use slow tourism facility.
- With regard to the standards, reference is made to sections 1.0 and 6.0 and Appendix A of the Preliminary Design Report and chapters 2 and 3 of the EIS.

- That the 2.5 metre width has been selected on the basis of striking a balance between accessibility while respecting the character of the area. There will be pinch points however these are kept to an absolute minimum. The 2.5 metre width has been used in other Waterways Ireland developments on the River Erne Canal, the North Shannon and the Royal Canal.
- That the width is one step below standard for a low volume traffic scenario.
- That research indicates that current and anticipated future use of the trail over the next 10 years will fall within the low volume category (less than 1500). Waterways Ireland will undertake to collect visitor numbers in the future. Amarach research validated the original figures submitted with the application using survey information from 2017. Projections indicate a maximum of 892 average daily users on the busiest section in the vicinity of St Mullins. . The weekend survey data from 2017 showed an average of 410 per day which if extrapolated using the 264% increase would 1492 figure would still not exceed the low volume standard.
- That the Type A surface proposed over the majority of the route will meet the requirements of both the TII standard and the NTO Guidance / standards for recreational trails.
- That WI already undertake routine maintenance and this will continue with the proposed development. The unbound path will be easier and have less maintenance requirement.
- That the submitted photographs of potholed sections relate to sections in County Kildare where there is constant traffic and where the specification is inadequate. The proposed spec is more robust and heavily trafficked sections will use a bound surface.
- Regarding ecology and an ecological corridor, the proposed path will follow the existing track and there will be no significant loss of linear or riparian habitat. Features such as treelines, hedgerows and watercourses will not be disturbed.

- That the surveys produced are appropriate and include a full walkover survey of the route with dedicated otter badger and invasive species surveys in August, 2017. Details of the type and timings of surveys are set out in Section 5.3.2 of the EIS.
- That a detailed otter survey is provided in 5.4.3.2.1 of the EIS. Many otter were observed however a reasoning why holts were not observed is that the path provides a sub optimal habitat whereas the islands provide a better habitat.
- That Kingfisher were likewise observed during the 2017 survey however no breeding locations were observed. It is similarly likely that the breeding locations are on parts of the river bank that is not directly impacted by the proposed development.
- That the habitat for the marsh fritillary was identified in the walkover survey and this habitat was deliberately avoided in the design of the proposed development. The records for this species are set out at 5.4.3.2.1 of the EIS and measures to ensure that the species is not directly or indirectly impacted are detailed at 5.6.2.6 of the EIS.
- Instream surveys were undertaken at two sections of the route where minor instream works are proposed. It is not considered that they are necessary in other parts of the route as no instream or bank works are proposed. Given this and the proposals contained in the EIS and CEMP to ensure the protection of water quality. Surveys for pearl mussel, lamprey swan and duck mussel, crayfish and other species were not therefore considered necessary.
- That the impact on bats was addressed at 5.4.3.2.1 of the EIS. While the route provides a good habitat for bats, the nature of the development is such that it will not result in the loss of vegetation and no lighting. Surveys were not therefore considered to be necessary.
- That the development has been designed to avoid any impact on Annex I habitats. Measures to ensure the protection of such habitats are set out in section 5.6.2.6 of the EIS and included in the CEMP.

- That the proposed development has been designed to minimise the impact on tree roots by minimising the requirement for excavation and to provide a porous surface in line with relevant BS.
- That habitat mapping for the entire route is provided in Appendix 5.2 of the EIS. Potential Annex I habitats are indicated on these maps. The EIS and FI response provide all required plans to enable assessment of the proposed development.
- That all existing parking, both dedicated car parks and on street parking in are generally underutilised and have sufficient capacity to cater for existing and projected future parking demand. Waterways Ireland will monitor the usage of parking facilities and will work with the local authorities to meet any additional demands.

6.4. Planning Authority Responses

The following is a summary of the main issues raised in the response of the Planning Authorities to the grounds of appeal:

Kildare County Council

- That the planning authority consider that the imposition of Condition No.3 is justified for the reasons set out in the decision.
- That the planning authority note the proposal that the Type A unbound surface be replaced with a new Type E bound surface over the sections south of Athy. The Planning Authority is satisfied that this surface would mitigate the concerns relating to ecology and would have no objection to the proposed amendment.
- With regard to other issues raised, the Planning authority is satisfied that the development between Lowtown and Athy would support the relevant policies and objectives in the County Development Plan, would not seriously injure the amenities of the area, would not interfere unduly with existing land uses in the area, would comprise a sustainable form of tourism infrastructure in accordance with national, regional and local policy and would be acceptable in terms of traffic safety and convenience.

Laois County Council

No record of a response on file.

Carlow County Council

Response stating that the Planning Authority refer the Board to the detailed planning assessments conducted and on file including the environmental reports prepared by ARUP and RPS consultants. It is also acknowledged by the Council that an alternative bound 'tar and chip' surface is proposed by the first party to address concerns regarding potential impacts on the SAC.

6.5. Observations

The following observations on the appeals submitted against the Notifications of Decision issued by the Planning Authorities have been received:

6.5.1. Kildare County Council

- Jerry and Mary Carbery
- Olivia and Roger Goodwillie

The following is a summary of the main issues raised in these submissions with a focus on new issues not raised in the appeal submissions:

- That the towpath in the vicinity of their property floods almost every year contrary to the statement of Waterways Ireland that these concerns are grossly exaggerated.
- That the alternative tar and chip surface now proposed was never mentioned in consultations. This surface would be alien to the landscape of the SAC and the rural landscape. It would be contrary to EU Green Infrastructure strategy as it results in the removal of green infrastructure and replaces it with built infrastructure.
- That Waterways Ireland has not demonstrated the need for the project.
- That the 2015-2016 visitor numbers for the existing route show numbers are close to twice those being achieved on the Waterford Greenway. Visitors

have increased since the controversy about the current proposal and what is required is better publicity.

- That permission should also have been refused on the basis of the impact of the negative impact of the development on linear habitats and the function it serves in connecting Natura sites and other important ecological locations.
- The proposal contravenes Kildare County Council Policies ECD30, Objective EO49, Policy NH1, NH5, NH11, NH12 Policy GI5, GI7, GI16 and GI18.
- That the precedent of the permission for the canal section of the route in county Kildare may persuade counties further down the route to permit the development in the future.
- The Grand Canal section should not dictate the future land use of the whole valley.
- That cyclists would come to pose a significant disturbance for walkers and wildlife on the river towpath and that the historical use of the path should be retained.
- That the proposed development on the river towpath would result in a requirement for a high level of upkeep and maintenance which may suffer when resources are tight.
- That the area is a SAC and while the banks have no qualifying habitat they are integral to the rivers ecology for otters and insect food for all aquatic life. The ecology of the banks will be grossly modified by the proposed development.

6.5.2. Laois County Council

- Dominic Coyle

The following is a summary of the main issues raised in this submission with a focus on new issues not raised in the appeal submissions:

- That the blueway is located within the Grand Canal pNHA and its importance lies in the diversity of species it supports in a linear habitat. The EU policy framework stresses the importance of coherence and connectivity across both

Natura and non natura areas. The proposed development would have a negative impact on the biodiversity resilience both of the pNHA and connections to the River Barrow and River Nore SAC.

- Inadequacy of survey information relating to species within the SAC.
- That Dr. Evelyn Moorkens, the national expert on Desmoulins Whorl Snail has noted the lack of survey data regarding the species over significant sections of the route.
- That the surface will lead to increased speeds, conflicts between users and health and safety issues. The dangers are exacerbated by the proximity of the development to the water.
- That the proposal is contrary to the core vision set out in the Laois County Development Plan, which states that County Laois will be a cohesive and sustainable communitywhere the natural environment is protected...'. The proposal is also contrary to Core Strategy 5 which relates to important elements of the rural character.
- That the proposed alternative bound surface was not mentioned prior to the submission of the application and should not be accepted as valid now. This surface would in any event be alien to the landscape of the SAC. The implications of such an impermeable surface on the ecology of the SAC have not in any event been adequately considered.

6.5.3. Carlow County Council

- Olivia Muldoon
- Ger Lawlor
- Laurence and Kathleen Butler
- Tim Dunne
- Blaise Smith
- Cllr. Malcolm Noonan
- Art O'Leary

- David Keenahan
- Eveleen Horan
- Lindy Little
- Dilly Little
- Niall Sheehan
- Gerard Lister and Ailish Dore
- Conor Mulligan
- Clare Mulligan
- Eveleen Coyle
- Catherine McBrinn
- River Barrow Piscatorial Society
- Donald William Passmore
- County Carlow Chamber
- Brian Byrne
- Carlow Regional Game Council
- Robbie and Rebecca Smith
- Turlough O' Brien
- Phyl O'Leary
- Nancy Tiernan
- Brigid Tiernan
- Gerard Barnard
- Dr Liam Lysagh
- Cliona Hickey
- Declan Tiernan
- Anne Cody

- Peter Morrogh
- Martin and Emer O'Brien

The following is a summary of the main issues raised in these submissions with a focus on new issues not raised in the appeal submissions:

- That the grounds of refusal are excessively narrow and do not address the issues of cost, maintenance and health and safety issues.
- That there are width restrictions and blind corners that will result in safety issues.
- That the proposal would have significant benefits for the area.
- The development would allow for the use of the path all year round and would enable a mix of users of all ages.
- The existing path is in a poor state of repair and needs works.
- The development would provide a major attraction for tourists and provide employment in the vicinity.
- That the towpath sections that remain in their original unspoilt state should be retained. The proposed surfacing would be to the permanent detriment of our environmental and industrial heritage.
- That many aspects of the proposed development such as signage and improved access to the route are to be welcomed.
- That the poor standard of maintenance and repair of the existing facility does not give confidence that the proposed development would be maintained to a high standard.
- That the worst damage to the existing tow path is being caused by Waterways Irelands heavy plant and machinery.
- That no architectural assessment of the protected structure at Carriglead Lough has been undertaken. Such an assessment should have been undertaken given the potential impact on this property and lack of clarity as to how close it will extend to the house. .

- That the application should have been declared invalid as it did not list the lough itself at Carriglead which is on the RPS.
- Unclear how construction would be undertaken without impacting on the existing right of way along the canal / river bank.
- That the hard surface will attract motorbikes and quadbikes and there is no indication as to how this would be managed.
- That the section of the route in County Carlow is located in a flood plain and the section from Rathellan Lock to the swimming pool in Bagenalstown can be flooded for 3 months of the year.
- That the proposed 2.5 metre width is unworkable in several locations. Specific reference to Minch Norton at Dunleckny where the path width is 1 metre with no proposals for widening and at the bridge in Leighlinbridge.
- That the proposed development is essentially for cyclists. The existing grassed surface is perfectly suitable for a 'slow tourism' concept.
- That the proposed alternative surface set out in the first party appeal is entirely different to that which the public were invited to comment on and needs and entirely different application, public consultation and EIA. It would not be a valid decision if this alternative proposal was accepted.
- That the existing grassed surface is more appropriate for walkers, particularly the older walker.
- That a cycleway on the disused railway from Bagenalstown through Borris to Wexford would complement the development of the Barrow as a camino style route.
- That there are thousands of kilometres of disused railway in Ireland that can be used for cycleways without re developing the Barrow.
- That the engineering / hydrology report of Mr Michael Gill is not 'independent' as stated. The report was commissioned by the applicant.
- That the areas of flooding are more extensive than what is indicated in the application documentation by Waterways Ireland.

- That the discharge of tar and limestone to the river can only have a negative impact on the river.
- That the existing riparian way has been removed over significant sections of the river. This needs to be allowed to regenerate and is vital to the local habitat.
- That the back drain is not included for any works in the proposal. The restoration of this drain is required to help provide food for small fish species that in turn feed Kingfisher and herons.
- That the growth in recreational tourism in recent years and the proposed development is very important to the future of tourism in the region.
- That to comply with the classification and Grading of Recreational Trails document then the trail should comprise an even consistent sealed surface.
- That other examples of the use of the unbound Type A surface is adjacent to canals and locations that do not flood.
- That the assessment undertaken for the first party by Hydro Environmental Services (HES) states at page 5 that the unbound surface does contain silt and that it has the potential to be transported.
- Does the project have the required authorisations from the minister for notifiable actions relevant to otter which include creation of new paths or tracks with SAC's.
- That the angling resource of the river is not currently being utilised. Better access and facilities are required.
- That there is currently very little promotion of the Barrow Track and yet there are c.400,000 persons using it last year.
- That the route is suitable for cycling as it is but the issue is maintenance and the surface.
- That the proposed change to a bound surface will further increase the maintenance requirements. The proposed surface is not sustainable.

- The proposal is contrary to section 8.1, 8.3 and 8.4 of the County Development Plan that seeks to protect long distance amenities such as the Barrow line.
- Example cited of installation of limestone surfacing to a section of the route north of Carlow Town between the William Duggan Bridge and the Sugar Factory. Flooding soon after this section was laid resulted in it all being washed into the river.

6.6. Further Responses

The following responses to the first party appeal were received by the Board:

- Rosalind Murray and Art Mooney (Kildare and Carlow County Councils)
- Save the Barrow Line (Kildare, Laois and Carlow County Councils)
- Art Mooney (Laois County Council)

The following is a summary of the main new issues contained in these submissions:

6.6.1. Rosalind Murray and Art Mooney / Art Mooney

- That contrary to the statement of Waterways Ireland, public survey responses relating to the proposed surface show that the majority of respondents have an adverse opinion.
- That the canal and river sections of the route / development cannot be separated. They are interconnected systems. The decision of Kildare County Council to grant permission above Athy should be revoked.
- That the original design of the canal towpath was to take account of flooding and was designed with a 12" deep spit sod surface that is hardwearing and resilient to flooding.
- That the analysis by Scott Cawley Ecology indicates that the regeneration of vegetation on the spoil on either side of the track. The amount of this side spoil material is estimated at 27,860 cubic metres.

- That the information presented with the application does not give a clear indication of how much of the route will be at 2.5 metres width. As previously highlighted in the response to the FI submission, of the 11km route from Carlow to Athy only 1km is capable of accommodating a 2.5 metre wide track.
- That even if the bound surface material is used as proposed in the first party appeal the spoil material either side of the path would be washed out in flood events, certainly until it was bound by planting which would likely take 2 years growth. It is calculated that this would equate to c.18,500 cubic metres of spoil.
- That the width of this spoil area at 1,200mm has not been taken into account in how the trail width will be accommodated.
- That post flood event there is a layer of silt left over that soaks into the existing sod but does not soak into the constructed track.
- That the proposed Type E material put forward in the first party appeal is a fundamental change to the design and the public should have been given an opportunity to comment of this aspect of the development. There is no detail of how it would be laid, mixed or handled, what would happen if a flood event occurred during construction and the EU classification of the material in terms of toxicity is unclear.
- It remains unclear how tree roots will be protected. How can an excavator be used and protect roots ?
- It remains unclear how the pathway will be able to cope with the load of construction equipment once the surface is broken for construction.
- That the existing section of track surface laid to the north of Carlow town is of poor standard that leads to the pooling of water and a water saturated bank. This section of route is only 1 year old and shown in photos 1.47-1.58 attached with submission. The sections where clause 804 has recently been used near Carlow Town and Levitstown do not drain properly and are already potholing.

- That the area in which the development is proposed has a generally high landscape sensitivity, yet despite this the council continue to propose a design that is urban / suburban in character and which cannot be considered to have a neutral or imperceptible effect as set out by Waterways Ireland. Considered that either the Type A or Type E material would be contrary to the national landscape strategy and the European Landscape Convention and Directive. It would be contrary to sections 14.8.1 and 14.10 of the Kildare County Development Plan.
- That research indicates that the existing car parks are already at capacity.
- That the existing trail could easily reach Grade 3 of the national Trail's Standard. The Grade 2 standard which the proposed Type A surface seeks to meet is not suitable for bikes with stabilisers or child seats (National Trails Office UK).
- That a blueway does not have any identified clear standard or specifications unlike a greenway.
- That it is clear that the impetus for the proposed project is based around cycling and so favours one user group (cyclists) over another (walkers) and tourists over local users.
- That there are inconsistencies in the mapping of the route. For example Map 9 where the width at the crossing of the Lir Bridge scales to 10 metres but is actually 6 metres. Photographs illustrated on the maps do not match reality and there is no representation for the back drains.
- That the design fails to respect the Great Trackway that is the Barrow towpath and the engineering feet of William Chapman.
- That the construction method for the type A material is stated to be based on existing maintenance techniques. It is noted however that Carlow County Council have raised concerns regarding the methods proposed and weight limits on the towpath. The large mechanical digger used currently are not suitable and are causing significant damage.

- That the signage as displayed in Plates 3.5 and 3.6 of the application are standard off the shelf designs and are not suitable for those in wheelchairs or visually impaired.
- That access for mobility impaired persons will result in motorcycles being able to access the route. Further access will also open up the route to increased fly tipping.
- That there is inadequate details provided regarding the nature or location of the proposed instream works.
- That the proposed development has the risk of actually reducing the health benefits of the Barrow amenity by reducing the current 430,000 persons who visit the river per annum (2016).
- Neither the north Shannon nor Royal canal blueway trails cited by the first party are similar to the subject proposal as they are not the subject of volume or velocity of flooding as the Barrow.
- Photographs 3.1 – 3.30 illustrate the damage done to existing modified towpath surfaces and the level of maintenance that would be required with the proposed Type A surface.
- That the otter survey work was inadequate and no clear methodology is presented. The stated 'multi disciplinary' team implies that species specific survey was not undertaken. No days / timings were presented and not clear that islands and other banks were surveyed. The 10 metre zone is inadequate and where species are observed it is standard to then search up to 50 metres. In Ireland you require a derogation licence to undertake construction within 150 metres of a holt. Potential holts were recorded in the Blackthorn Ecology report.
- No bat, crayfish or lamprey species surveys. No swan or duck mussel surveys. No bat surveys and no formal bird surveys including Kingfisher undertaken. Pre construction surveys for these species are not acceptable.

- Contained within the submission is a copy of a report prepared by Mr Gerry Dorgan, Engineer at Kildare County Council titled Response to the Feasibility and Technical Specification Report on the River Barrow Cycling Trail, prepared by Kieran Boyle on behalf of Carlow County Council. This response argues that the model proposed offers a sub standard and low quality facility for cyclists, will not promote mass cycling or attract international tourists and will create conflicts with pedestrians as a result of inadequate space for cyclists.
- Contained within the response submission is also an independent appraisal of the application by Scott Cawley Ecological consultants. The following is a summary of the main issues raised in this submission:
 - That the survey data remains inadequate. Annex I habitats not clearly described, timing of otter surveys not clear, some key faunal groups ignored completely (lepidoptera, odonatan), and data lacking on key ecological receptors including bats, molluscs and birds. Given these limitations the conclusions reached cannot be relied upon.
 - There is a reliance on old data such as the Blackthorn Ecology report.
 - That the loss of grassland along the tow path will undoubtedly result in the loss of couch sites.
 - It remains the case that the applicant has not addressed the concerns regarding the lack of a detailed and dedicated survey of how the development may impact on otter territories and holts. No clear dates for the survey work have been provided.
 - That otter holts are very hard to identify and research indicates that fewer than 10% of sites can be found without radio tracking. It is therefore highly likely that sites have been missed. The conclusions of the assessment relating to otters is therefore likely incorrect.
 - That there is an over reliance on the concept of otter becoming habituated to disturbance. It can also be argued however that there is more disturbance than thought as the pre existing otter population is likely under reported.

- The impact on otter during construction is likely to be localised but intense. Loss of couch sites and disturbance and the loss of cover vegetation may force otters to move to less optimum resting sites that could impact on breeding success. Disturbance during the operational phase could result in the species moving outside of the SAC and failing to meet the site objectives.
- That there is a fundamental flaw in the NIS and EIS not flagged by the councils or the consultants / reviewers. Section 4.2 of the NIS states that one of the preventative measures to avoid impacts is to carry out pre construction surveys so that unidentified otter holts can be identified. It is then proposed to carry out exclusion procedures prior to removing the holt. Thus holts are proposed for removal as a preventative measure however the site specific conservation objectives for the site are that there be no significant decline in couching sites or holts. The Board must be assured that no otter holts or couching sites will be lost prior to giving consent. Submitted that the survey information presented is not of sufficient detail to enable this assurance to be reached.
- That the statements in the EIS regarding the no significant impact on bat species cannot be made without an assessment of bat activity along the route. Potential impacts arise from construction disturbance (e.g. vibration) to roosts in bridges, walls and other structures, interference with back channels and riparian vegetation impacting on foraging habitat and insect prey availability and some uncertainty regarding illumination, e.g. construction compounds.
- That there is a lack of survey information relating to kingfisher. The river Nore SPA is 7km from the site however as an Annex I it deserves additional weighting.
- There is uncertainty with regard to the impact of the development on white clawed crayfish. The EirEco report states that no evidence for this species was found but the methodology is unclear. At the instream works locations it is proposed to trap and relocate specimens upstream however the conservation objectives include the maintenance of populations at

baseline levels however this cannot be assessed if the baseline is not known.

- That other habitat and flora survey data is from previous studies. References to 'potential' Annex I habitats is noted however there should be no doubt remaining regarding these habitats.
- That the survey data available for invertebrates is inadequate. For example the Marsh Fritillary. Impacts cannot be determined.
- In the absence of a phase 1 survey for freshwater pearl mussel and Nore pearl mussel it cannot be concluded that there are none present. The Board cannot use the current application data to carry out their assessments as the data is incomplete and inaccurate.
- That there are a significant number of aspects of the scheme that have not been properly / adequately described. These include habitats present in construction compound areas, habitats loss (trees / hedgerows) beyond the path.
- That the assumption that there will not be any impact on the 1 metre riparian strip along the bank is unrealistic. There will be bare soil of 150mm either side that will not easily regenerate.
- Under heading of in combination effects there is no consideration of ongoing maintenance, dredging, bankside maintenance etc. or projects outside of the site boundary.
- Passing bays referenced in the outline CEMP should be identified and mapped.
- Measure 25 in CEMP references the use of topsoil on tree roots. This issue is not developed in enough detail and it is not realistic that the path would undulate over the tree roots.
- Wash out areas referenced in measure 29 of the outline CEMP should be identified.
- Impacts of silt fencing need consideration.

- The submission is also accompanied by a significant number of good quality photographs that detail areas along the route.

6.6.2. Save the Barrow Line

The following is a summary of the main additional points raised in this submission:

- That contrary to the statement of Waterways Ireland that the existing track is not fit for purpose, it is significantly used by cyclists.
- From the road safety audit it is clear that the proposed Blueway is not fit for purpose.
- That the experience of the areas where a hard surface has been laid (including the Devils Eyebrow in Graiguenamanagh) show that the lessons have not been learnt. The unbound surface at Devils Eyebrow was completely washed away in Storm Frank.
- That contrary to the way it is portrayed by the first party, the report of RPS does not state that the entirety of the track would have to be washed into the river to have an adverse impact on the SAC.
- That the minimum width required for the 2.5 path plus 1 metre verge is not available over very significant sections of the route including for instance that between Ballykeenan and Graiguenamanagh.
- That RPG policies in support of tourism state that tourism should proceed in a sustainable manner.
- That the proposed development would alienate the largest market segment as recognised in the application supporting documentation which is walkers.
- Stated that the apparent softening of the position of the NPWS on the project is concerning and noted that Waterways Ireland and the NPWS come under the control of the same government department. The pre application scoping response makes reference to a 10 metre buffer from the waterway to protect otter habitat.
- That the section below Athy should have been refused permission rather than omitted by way of condition as the requirements of the Habitats Directive are

such that permission must be refused where there is uncertainty regarding the adverse effects on the integrity of a site.

- That the proposed development is inconsistent with the Irish Trails Office strategy as it is not supported by the local community.
- That Waterways Ireland has not taken into account the changes to water quantity and velocity resulting from the proposed development. The increased track elevation will mean that at times of flood less water will be able to overflow the bank and that flow quantities in the river channel would increase. Specialist investigation and modelling of these impacts is required. Appendix A of the submission includes a hydrology report by SM Bennett and Co. that addresses this issue. It is estimated that an additional annual 155,000 cubic metres of water would be directed into the waterway due to the surfacing and the camber. This issue it is contended is not addressed in the EIS even under the heading of heavy rainfall events.
- That the design appears to be at odds with the original design of the waterway with infiltration into ground allowed and surface water directed to the main channel rather than the backdrain.
- That waterways Ireland statement that the only sections of the route where there is a velocity of flow which is capable of erosion being at St Mullins and north of Leighlinbridge does not tally with the information regarding flood maintenance obtained under FOI and detailed at Appendix C. Noted that the locations appear to coincide with areas where hard surfacing has been undertaken and that the original grass bank is more resilient.
- Submitted video link shows high velocity flooding at Ballykeenan lock.
- Significant instances illustrated of erosion along the route.
- That the definition of the development as '*water compatible*' and therefore appropriate for Flood Zone A is misguided and a precautionary approach should be followed.
- That the use of wooden strips at the sides of the path is not appropriate for a development that would be submerged for significant periods.

- That the Save the Barrow Line ecological consultant Faith Wilson concludes in her most recent report that based on the evidence from Dr Long and Dr Moorkens concludes that there is not sufficient evidence that there would not be significant impacts on the Nore Mussel and that it is not clear that the various surveys have been conducted in the appropriate seasons.
- That it is not accurate to state that the visual impact of the blacktop surface (proposed Type E) is equivalent to the unbound surface. The landscape would be completely spoilt by a surface more appropriate to a suburban location.
- That the photomontages submitted of the Type E surface are not representative of the impact and it is noted that only 2 out of 20 show a rural section of the route.
- The tar and chip proposal would be contrary to the Kildare County Plan, LA2 as it would not protect and enhance the existing landscape.
- In Kildare, the site is located in landscape class 4 which has special sensitivity and a low capacity to accommodate significant uses.
- The development would be contrary to policies WV1, 2 and 3 of the Kildare County Development Plan.
- That photographic evidence indicates that the proposed tar and chip Type E material is not suitable for locations where the path could be inundated with water for significant periods. The tar would lift. The toxicity of the product is unknown and the procedures for handling it not specified.
- That reliance on future mitigation measures is not appropriate and one of the mitigations proposed by ARUPs (pg. 8 of the report on FI response) recommends the appointment of a clerk of works to oversee works and ensure that the impacts on biodiversity are minimised is not acceptable.
- That the project would be contrary to the EU Green Infrastructure Strategy. This is recognised by the DAU in their scoping submission where it is stated that care should be taken that green infrastructure involves the greening of existing infrastructure rather than the adding new built infrastructure to existing biodiversity corridors. There is an obligation to protect the Barrow towpath as a significant piece of green infrastructure.

- Regarding car parking, it is incredible that the applicant's response to a request for parking details is that it is too difficult to estimate.
- That all in combination effects haven't been considered. Section 5.5.5 of the EIS does not make reference to other potential greenways including the Kilbeggan link connecting the Royal Canal Greenway, the Old Rail Trail in Westmeath the proposed Dublin to Galway 'Euro Velo' route and the Grand Canal Greenway.
- That there has been significant works carried out to the route without permission. This was confirmed by a letter from the Waterways Ireland CEO stating that c.50% of the existing trackway has been upgraded to hard surface over the years to facilitate maintenance works to the Barrow. Contended that permission cannot be granted for works that have already been undertaken.
- That the use of a geotextile will reduce but not eliminate the potential for weeds so details of the long term methodology for weed control should have been submitted.
- The submission on behalf of save the Barrow Line is accompanied by copies of reports prepared by Faith Wilson Ecologist. These reports were submitted to the Planning Authority but were not included in the original Save The Barrow Line appeal submission. The main issues raised in these new report appended can be summarised as follows:
 - That neither the Waterways Ireland appeal or the RPS review report have considered the issues that were raised during the application process.
 - That there is a known population of Desmoulins Whorl Snail in a fen adjoining Ballytiglea Bridge (also known as Borris Bridge). This species is a QI of the SAC. Habitat for the snail will not be directly impacted however no detailed assessment of all potential impacts has been provided. Potential changes in the hydrology of the site from the natural flooding regime of the river and subsequent impact on the snail population have not been addressed.
 - That these concerns are not addressed either by the first party or the RPS report.

- That Ms Evelyn Moorkens has stated that the level of information provided is insufficient as there are vast areas of the pathway that have not been surveyed for the Nore Pearl Mussel (*Vertigo Moulinsianna*). This view was supported by Dr Maria Long who also concluded that potential significant impacts could not be fully assessed due to a lack of information regarding location, hydrology, vulnerability of species and a lack of recognition of the importance of the back drain.
- There is potential that changing the seepage function of the towpath could impact on unknown sites.
- On the basis of the evidence presented by these two experts it is recommended that the Board rejects the NIS.
- In addition there is no further information presented that the field surveys have been conducted in the appropriate seasons particular in relation to otter.
- That no adequate assessment of the impact of the proposed alternative Type E surface material on *Vertigo Moulinsianna* has been undertaken.

6.7. Further Circulations

In view of the content of the third party submissions relating to the first party grounds of appeal, and specifically the inclusion in these submissions of specialist consultant reports relating to Ecology (Scott Cawley) and Hydrology (Hydro Environmental Services), the third party response submissions received were further circulated to the parties for comment. The following is a summary of the main issues contained in the submissions received on foot of this further circulation, with an emphasis on new issues / points and on the content of the above reports.

Waterways Ireland

- Restates the need for the project and the concept behind the design as a 'slow tourism' route.
- Restated that Waterways Ireland are committed to maintaining the sections of the proposed blueway that would be within their control and ownership.

- That the concept relating to car parking is to maximise the use of the existing infrastructure and to work with the relevant councils to meet changing demands in the future.
- Regarding the Desmoulin's Whorl Snail, the submissions support the conclusion that no potential supporting habitat occurs within the works corridor, and that no direct effects therefore arise. Noted that specimens where they have been observed have generally been in shallow ditch vegetation parallel to the towpath / backdrain. The proposed development involves surface works only and will not have a potential impact on groundwater movement or seepage through the towpath and will not impact on the snail habitat. Therefore concluded that on the basis of best scientific knowledge that the proposed development will not adversely affect the snail population.
- That the proposed development will not directly affect any supporting habitat for pearl mussel. Sites of in channel works were surveyed and no evidence of suitable habitat was recorded. Instream works are confined to canalised / modified sections of the route. Protection measures for construction and operation are set out in the CEMP and EIS / NIS.
- Regarding the Marsh Fritillary and the level and adequacy of surveys, stated that suitable habitat comprises areas of moderate to high coverage of *Succisa pratensis* (more than 3 plants per m²) in a low growing sward of height 10-25cm and low cover of invasive scrub (NPWS, 2013). Stated that this habitat was only recorded at one location within the red line boundary (at Kiltaghan South to the south of Wilson's Bridge). The proposed development will be located on the towpath in this location. The potential impact was fully assessed in 5.5.4 of the EIS and mitigation is prescribed in 5.6.2.6 of the EIS.
- Regarding Kingfisher and concerns regarding disturbance to breeding and foraging, the surveys set out in the EIS record Kingfisher at various locations along the route. The species prefers slow moving fish rich waters where the bird can hunt by diving for fish. No suitable nesting habitat occurs along the works corridor. No suitable banks for breeding were observed. No potential

for significant disturbance related impact identified and the path is already subject to disturbance from human activity.

- That contrary to the submissions, the desk study contained in 5.4.2 of the EIS provides a comprehensive baseline for bat activity in the area. The study area offers very good quality bat habitat, however with the exception of 9 no. Leylandii trees to the south of Clogheen Bridge which do not have bat roosting potential, there will be no loss of trees, scrub or potential roosts. No lighting is proposed.
- Regarding otter, and concerns regarding the validity and timing of surveys, the NRA Guidance (2009) states that it is appropriate to survey at any time of the year. Numerous signs of activity were recorded, and the route is highly used by otter. The existing bankside vegetation is maintained for most of the route and does not provide high levels of cover. The survey was undertaken by foot and boat and no evidence of holts were recorded. It is likely that these occur in the densely vegetated islands and back channels. The track is already used by humans and otter are primarily active at night. No fencing or lighting is proposed as part of the development and no excessively heavy machinery will be used during construction. Disturbance by recreation is unlikely to have a significant effect and reference is made to 10 no. publications in support of this conclusion. Pre construction otter surveys to ensure that new holts haven't been established are proposed as per 5.5.3.3.1 of the EIS.
- That an outline invasive species plan is provided at Appendix 5.3 of the EIS. This is outline as a pre construction survey is proposed to ensure there has not been a spread of such species.
- Regarding hydrology, the hydrology elements of the circulated documents were reviewed by Mr Michael Gill of Hydro Environmental Services Limited, (HES Limited). The main points raised in this review are as follows:
 - That minor changes in ground level along the edge of the river will have negligible effect on the hydrodynamics of the river in flood. The main flow will continue to be in the main river channel and the floodplain and track will be inundated with a much lower velocity. There

would be a very minor reduction in flood storage volume that would have an imperceptible impact on flood levels across the flooded river.

- That the concept of removing recharge over a 2.5 metre wide strip of path with the development in place is not credible. Water from the path will run to the side and be available for recharge or more likely flow into the river.
- That previous submission regarding water quality still stands. The volume of material in a flood scenario is very limited.
- That there is limestone bedrock underlying much of the River Barrow catchment north of Goresbridge and much of the glacial till and sub soils in the catchment comprise limestone material derived from the underlying bedrock material.
- That his submission (Michael Gill) is the only one to date that tries to quantify potential sediment impact. RPS merely state that the amount of sediment discharge is unquantifiable. Even with the most adverse assumptions, it has been demonstrated that the potential sediment related impact is imperceptible relative to natural flood conditions.
- That the permeability differences are irrelevant. Even if the bound material was to end up in the river it is not clear how this would have an effect on water quality or on aquatic qualifying interests of species.
- It is submitted that the conceptual model presented in the HES report is more than adequate to enable an assessment to be made.

Kildare County Council

- That having reviewed the submissions, the planning authority is satisfied that Condition No.3 (omission of works to the south of Athy) is appropriate.
- That the Planning Authority is satisfied that the amendment to the surface (Type E) would mitigate the ecological concerns of the planning authority and there is no objection to the amendment.

- That the Planning authority is satisfied that the works proposed would support the relevant policies and objectives of the Plan.

Rosalind Murray

- Noted that the report of Mr Bennett (Hydro Environmental Services) indicates that '*hydrodynamics would inevitably be impacted*'.
- Note the comments regarding the bank construction and equilibrium and specifically that significant change in the water level or the water table will result in an imbalance in the equilibrium.
- That the comments of Faith Wilson (Ecologist) prepared for the Save the Barrow Line campaign supports the comments contained in the Scott Cawley Report.
- Notes the time taken to repair section of path in vicinity of Carlow Town. The time and cost of undertaking these repairs during flood events shows the implications for upkeep of the proposed development.
- That the concerns expressed by Save the Barrow Line regarding works undertaken without permission reflect issues previously raised by R.Murray.
- That the maintenance works are not considered under the heading of 'in combination impacts' in the NIS.

Save the Barrow Line

- That since the previous submission to the Board, Save the Barrow Line have received further information that indicates that the baseline user numbers cannot be relied upon. The sub-standard information is such that Waterways Ireland have failed to demonstrate a need for the project.
- That documents received since the last submission relating to works to the surface undertaken indicate that AA screenings undertaken do not relate to hard surfacing works. It has been indicated by the CEO of Waterways Ireland that c.50% of the Barrow Navigation has been upgraded to hard surface to facilitate maintenance. This appears to have been undertaken without the benefit of AA screening.

- That dredging works have been undertaken without the benefit of AA Screening. Container boxes have also been erected at Clashganny without AA being undertaken.
- The credentials of Paul Scott of Scott Cawley Ecologists are noted as is the fact that he agrees with the conclusions of Faith Wilson Ecologist.
- The conclusion of Mr Scott that there are fundamental flaws in the NIS and EIS are noted and agreed with.
- Given the lacunae in the ecological inputs and having regard to the precautionary principle it is submitted that permission must be refused.
- The statement of Ms Murray that neither the Type A or Type E alternative surface can reasonably be concluded to be a 'neutral' or 'imperceptible' impact is noted and agreed with.
- The proposal is in contravention of multiple development plan policies and the Type E surface has not been the subject of any public consultation.
- The evidence submitted by Mr Mooney regarding flooding effects on the area to the north of that focussed and recorded by Save the Barrow Line is noted and supports the contentions of Save the Barrow Line.
- That Waterways Ireland operational records which were released recently under freedom of information document the build-up of silt in the river following flood events.

Mary White

- That there has not been a partnership approach to the proposed development unlike the case with the River Nore.
- Agrees with the statement in the Murray submission that '*there are fundamental deficiencies in baseline data and errors in the assessment which mean that the Board cannot complete their assessment under the EIA and AA regulations*'.
- Agree that otter surveys inadequate and that it has not been demonstrated that there would not be an impact on bat roosts due to disturbance.

- The conclusions and comment in the Paul Scott report regarding inadequate survey information is supported.

7.0 Assessment

7.1. The following are considered to be the main issues in the assessment of this appeal:

- Legal Issues, Project Splitting, Consistency of Decisions and Precedent. (7.2)
- Principle of Development and Compatibility with National, Regional and Local Policy (7.3)
- Need, Form of Development Proposed and Alternatives (7.4)
- Impact on Visual Amenity and Character (7.5)
- Path Design, Safety and Traffic Issues (7.6)
- General Ecology (7.7)
- Other Issues (7.8)
- Appropriate Assessment (7.9)
- EIA (7.10)

7.2. Legal Issues, Project Splitting, Consistency of Decisions and Precedent.

7.2.1. I note that the appellants raise issues relating to the ***description of development*** contained in the ***public notices*** and the fact that the application is split between three separate applications. It is contended that this has resulted in project splitting and that the applications should have been declared invalid by the Planning Authority.

7.2.2. Firstly, with regard to the ***splitting of the applications*** into three, the nature of the proposed development is such that it does not come within the scope of development under the provisions of the Strategic Infrastructure Act and, therefore, requires that it be submitted for consideration by the relevant planning authorities under s.34 of the Planning and Development Act. Given that the proposed

development crosses a number of county boundaries, and runs within the administrative boundary of three separate local authorities, three separate planning applications were required which has generated three separate decisions and a requirement for planning appeals in each case. I also note the fact that each application is accompanied by an EIS which addresses the environmental impacts of the entire development and that the individual applications was not used as a means of avoiding the preparation and submission of environmental impact statements. In view of these facts, I would not accept the case put forward by the appellants that project splitting has occurred.

- 7.2.3. What does however arise in the circumstances of this project is an onus on the competent authority for both environmental Impact assessment (EIA) and appropriate assessment (AA) to ensure that the cumulative environmental impacts (in the case of EIA) and in combination effects (in the case of AA) are considered and taken into account in the relevant assessments. Consideration of the project under the headings of EIA and AA is set out in sections below. It is noted that the EIS and revised EIS documents submitted both assess the environmental impacts for the entire project.
- 7.2.4. With regard to the **public notices**, the Save the Barrow Line appeal amongst other submissions note that the public notices only list the areas impacted by the proposed development in that county rather than all areas along the route impacted. It is contended that this amounts to project splitting and that the applications should be invalidated as a result. I note the concerns expressed on this issue, however the format of the public notifications is dictated by the requirements of the Planning and Development Regulations which require that the location of the development within that particular local authority area would be specified in the relevant notice. I note that in each case the public notices set out how the application forms part of a larger development of c.116 km in length and indicates the start and end point of the route and the Counties through which it passes. I do not therefore consider that the form of the public notices are such that it could be said to be misleading or constitute project splitting.

7.2.5. A number of parties have raised the issue that the ***decisions of the councils should be consistent***, that the decisions issued by the three planning authorities are inconsistent and that this promotes project splitting and a failure to adequately consider cumulative impacts. I note the three Notifications of Decisions issued which are a grant of permission subject to conditions in the subject case within Kildare, a split decision with part grant and part refusal of permission in Co. Laois and refusal of permission for that part of the overall project located within Co. Carlow. While the notification of decisions issued would appear to be contradictory, it is apparent that the reasoning for the omission of parts of the proposed alignment, either by way of refusal of permission or omission by condition, relates to concerns regarding the impact of those sections of the project on the integrity of the River Barrow and River Nore SAC. For this reason I would not agree with the third parties that the decisions issued by the three Planning Authorities are inconsistent. In fact, I would highlight that the decisions have been directly influenced by the content of the specialist reports commissioned on behalf of the three authorities, most notably that prepared by RPS Group relating to an assessment of the Natura Impact Statement. The approach taken by the Planning Authorities through the commissioning of independent specialist consultant reports covering the issues of EIA, appropriate assessment and transportation issues has been focussed on getting a consistency of approach to the main issues related to the project.

7.2.6. I note the reference in third party submissions to the contention that the main interest for Waterways Ireland in the blueway project is to provide access for mechanical maintenance of the waterway, and that this motive for the development is greater than the creation of a public amenity. I do not see any strong evidence that this is the case with the submitted design. The development of an loose bound surface to the proposed track together with its relatively restricted width of 2.5 metres means that it will not in my opinion be of clear benefit in facilitating access for mechanical maintenance of parts of the system that are currently not served by a surfaced or compacted towpath structure. In any event, as set out by Waterways Ireland in submissions on file, there is an ongoing requirement for there to be access to the Barrow Navigation for maintenance purposes and some degree of access is therefore required. I note that some third party submissions raise concerns

regarding the damage done to the embankment by access for maintenance purposes and this issue is addressed in subsequent sections of this report.

7.2.7. Similarly, I note the references and photographic information contained in third party submissions that relate to **works undertaken by Waterways Ireland** on sections of the existing river and canal bank. It is contended that these works have been undertaken by Waterways Ireland without the correct authorisation and that in specific circumstances works have been undertaken in locations where appropriate assessment is required without the necessary consents being obtained. I note the response of Waterways Ireland on these issues which is that works on the towpath and for the maintenance of the navigation are undertaken under other enactments rather than being subject of a requirement for permission under the Planning and Development legislation. In any event, where there are issues regarding enforcement or alleged breaches of the planning and development legislation, the relevant enforcement authority is the Planning Authority for that area and not the Board. It is noted in this regard that a number of submissions make reference to the fact that works undertaken have been brought to the attention of the relevant Planning Authority. From the information presented it is noted that a significant number of locations on the route have been the subject of resurfacing works undertaken by Waterways Ireland. The undertaking of these works and the basis under which they were or were not authorised is a matter for the relevant Planning Authority and is not in my opinion a material consideration for the Board in the assessment of the current appeals.

7.2.8. Finally, I note that the submission of observers raises concerns that the granting of permission for the canal section of the route in county Kildare may act as a **precedent** for other sections of the route further downstream and may persuade counties further down the route to permit the development in the future. As set out above, from an analysis of the decisions issued by the three planning authorities, it is apparent that the granting or refusal of permission was based on an assessment of the issues relevant to that part of the route, including consideration of the conclusions of the specialist reports commissioned on behalf of the three Planning Authorities, and that the decision of Kildare and Laois County Councils to permit the development from Lowtown as far as Athy did not impact on the decision reached by Carlow County Council to refuse permission for the southern end of the route.

- 7.2.9. In note the fact that as part of the first party appeal submission, **significant alterations** to the development are proposed, (see s.4.0 of first party appeal). These alterations are submitted by the first party on a without prejudice basis in the event that the Board is minded to agree with the Notification of Decisions issued by the Planning Authorities to refuse all or part of the development on the basis of a likely significant adverse impact on the integrity of the River Barrow and River Nore SAC. Significant concerns are expressed in third party submissions both regarding the nature and impact of these proposed alterations, and also the manner in which they are being introduced which, it is contended, should have been made available for general public comment during the application process. A number of the third party submissions contend that any development incorporating these amendments should be the subject of a revised application for permission.
- 7.2.10. On this issue, I consider that it is open to the first party to suggest possible alterations to the scheme as part of their submissions to the Board, however the nature of any such proposals would need to be assessed in terms of their materiality in planning terms and whether they are such as could be considered by the Board without being the subject of revised public notices and inviting revised submissions. Even in the event that the alterations are considered to be material and require further public consultation it would also be appropriate for this assessment to give some consideration as to the acceptability of the proposed alterations in planning and environmental terms. This has been undertaken in the following assessment, notably under the headings of appropriate assessment (7.9), general ecology (7.7), path design and traffic safety (7.6) and landscape and visual impact (7.5).
- 7.2.11. On the issue of whether the proposed alterations are material in planning terms and such as would require the publication of revised notices, I note that it is proposed that all of the Type A unbound surface would be replaced with a tar and chip finish and that this equates to c.83 percent of the overall route and between 72 and 94 percent of the route within each of the individual local authority areas. The extent of the area covered by the proposed alteration is therefore the majority of the overall route. The following specific impacts are particularly noted with regard to the proposed revisions to the surface material:
- The change in the visual appearance of the development and the impact on the landscape character and visual amenity of the route.

- The change in surface would result in a general increase in cyclist speed and resulting change in the relationship between walkers and cyclists that would have implications for safety and path standards.
- The change in surface would lead to a potential reduction in the attractiveness of the route for walkers.
- Implications of the changed surface for drainage.
- Implications for path maintenance and sustainability.
- Implications for ecology including impacts arising from increased severance due to the use of a bound surface.

7.2.12. In view of the above, it is my opinion that the nature of proposed alterations as submitted by the first party in their appeal to the Board are such that, in my opinion they would have significant and material planning implications such as would require new public notifications were they to be considered further by the Board. This is an issue on which the Board will have to make its own determination should it be minded to consider a grant of permission incorporating the proposed alterations. To assist the Board in its consideration of the merits of the proposed alterations and an assessment of the likely planning and environmental impacts arising, the merits of the proposed alternative Type E surface submitted with the first party appeal are discussed under the relevant headings in the assessment below.

7.2.13. The information presented regarding the likely significant effects on the environment of the proposed amendments to the surface comprises a separate section to the appeal submission (Section 4.0) which details the construction methodology, mitigation measures proposed and an assessment of the likely significant effects arising under the headings relating to each of the factors of the environment. The appropriateness of the information presented regarding the likely significant environmental impact of the proposed alterations and an assessment of the environmental impact arising is considered in more detail under the heading of EIA below.

7.3. Principle of Development and Compatibility with National, Regional and Local Policy

National Level

- 7.3.1. The **National Planning Framework** contains a number of statements and objectives that are supportive of the principle of the proposed development. At the strategic level, one of the National Strategic Outcomes envisaged in section 1.3 of the NPF is an enhancement of heritage and amenities. Greenways, blueways and peatways are specifically mentioned in this context, (NPF, pg.15). Key future planning and development policies for the Eastern Region includes reference to the further development of a network of blueways that *'will support the diversification of rural and regional economies and promote more sustainable forms of travel and activity based recreation utilising canal and former rail and other routes.'* (pg.35). The development of greenways, blueways and peatways is noted as a unique alternative means for tourists and visitors to access and enjoy rural Ireland and it is stated that *'the development of a national strategic network of these trails is a priority and will support the development of rural communities and job creation in the rural economy as well as the protection and promotion of natural assets and biodiversity'*. National Policy Objective 22 states that it is an objective *'to facilitate tourism development and in particular a National Greenways, Blueways and Peatways strategy which prioritises projects on the basis of achieving maximum impact and connectivity at national and regional level'*.
- 7.3.2. The first issue of note is that the NPF makes specific reference to blueways as a form of development. The principle of such development is clearly encouraged with the potential for the development along such routes to have significant benefits in terms of tourist offer, and the promotion of the rural economy. The form of development proposed is therefore considered to be of a type that is identified and promoted by the NPF and, in principle, to be clearly consistent with the objectives of the plan. In addition to the NPF there are a number of other national level policy documents that are of relevance to the proposed development.

- 7.3.3. The ***National Cycle Policy Framework, 2009-2020*** sets out the national high level policy objectives for cycling in Ireland. The principal policy objective is to promote a strong cycling culture and to encourage recreational cycling. A target of 10 percent of all commuting and other trips being by bicycle by 2020 is referenced in the policy. The provision of an improved and more readily accessible route along the Barrow Way for recreational cycling and the accommodation of cyclists of a range of abilities is, in my opinion, consistent with the high level objective of promoting cycling and the encouragement of recreational cycling. Objective 3 of the policy framework states that it is an objective to *'provide designated rural signed cycle networks providing especially for visitors and recreational cycling'* and the format of the proposed development based around a slow tourism blueway concept is in my opinion clearly consistent with this objective.
- 7.3.4. I note the fact that third party submissions on these cases, notably that submitted by Cyclist.ie on the Kildare County Council section of the proposed development, question the appropriateness of the design approach taken, contending that its design should be such as to cater for commuting / sports cyclists as well as recreational users. Reference is made to the fact that the definition of recreational cycling is excessively restrictive in Irish policy and that other organisations, notably the European Greenway Association has a wider definition which makes reference to recreational purposes and / or necessary daily trips (works study etc.). The detailed design of the track proposed is the subject of more detailed discussion at sections 7.4 and 7.6 of this report below relating to Need and Traffic and Safety issues and this section contains discussion regarding compliance with standards, considerations of safety and potential conflicts between users. At a basic level however, the expansion of the purpose of the scheme beyond recreational cycling would represent a very significant change in the concept of the proposed development as presented in the application, which is for a 'slow tourism' format where there is an attempt to accommodate both walkers and cyclists. The points raised in the submission of Cyclist.ie regarding the promotion of cycling as a mode of transport and commuting and the importance of a shift to cycling if greenhouse gas targets are to be met are noted. The achievement of these objectives and the approach proposed by Cyclist.ie would, however require the hard surfacing of the route and a likely increase in width. Not only would such an approach be contrary to the *'slow tourism'* concept

behind the development of a blueway, it would, in my opinion inevitably lead to higher cyclist speeds and increased safety issues for both cyclists and particularly walkers. The widening of the path to accommodate a wider range of cycling users including sports and commuter cyclists is promoted by Cyclist.ie and, as is discussed in more detail at sections 7.4 and 7.6 of this report below, I would question the ability to accommodate a wider path width along significant sections of the route. The approach advocated by Cyclist.ie would also have potentially significant additional visual and ecological impacts arising from the bound surface and the additional numbers and speeds of cyclists as well as significantly reducing the amenity value of the route for walkers. On balance therefore, while the submission of Cyclist.ie raises important points with regard to sustainability and the promotion of cycling as a mode of transport, the expansion of the scope of the project to cater primarily for cycling and specifically the inter urban sports or commuting cyclist would not, in my opinion, be appropriate.

7.3.5. In terms of walking policy, the ***Get Ireland Walking Strategy and Action Plan 2017-2020*** includes actions that promote improved access to lands for recreational walking and to develop and market recreational walking infrastructure. While I note the content of appeals relating to the negative impact on the character and walking environment that would result from the proposed development, it is my opinion that the project would be consistent with the objectives of the Get Ireland Walking initiative by virtue of improvements to parking, access to the route and improved promotion and marketing. The merits of the proposed unbound surface are discussed in more detail in the sections below, however it is my opinion that the creation of an unbound surface over the majority of the route is not inconsistent with the promotion of the route as a recreational walking route. In any event, the choice of surface material has to be assessed in the context of the overall aims of the project which is the creation of a slow tourism mixed use facility that caters for walking and cycling.

7.3.6. Also at a national level, the ***Get Ireland Active Strategy (The National Physical Activity Plan for Ireland) 2016*** seeks to increase the number of people taking regular exercise by 1% per year over 10 years. A number of actions to facilitate this aim are set out in the strategy including opportunities to maximise physical activities and recreational amenities in the natural environment and the prioritisation of the

planning and development of walking and cycling infrastructure. The proposed development incorporating the improved access to the Barrow route and the provision of a surface that facilitates access by a wider range of users than is currently the case is, in my opinion, consistent with the overall aim of the strategy.

7.3.7. **Smarter Travel: A Sustainable Transport Future 2009-2020** sets out a series of measures and funding to encourage greater use of sustainable modes of transport and a switch to cycling and walking in particular. With regard to cycling, as part of Smarter Travel, a National Cycle Network Scoping Study was undertaken. This study commenced in August 2009 and was co-ordinated by the National Roads Authority. The completed study identifies a series of routes that connect the main urban centres of 10,000 population and above. It is specifically noted that one of the identified routes runs from Celbridge to Naas, Newbridge, Kildare, Athy and on to Carlow. The section from Athy to Carlow could follow the alignment of the Barrow Way, however the corridors indicated in the study are indicative and the Athy to Carlow section could also follow the R.417. From the information available therefore the extent to which the Barrow Way overlaps with the identified National Cycle network is at most limited.

7.3.8. The apparently limited extent to which the proposed development overlaps with a national cycle network has, in my opinion, relevance to the assertions of Cyclist.ie in their appeal submission and specifically the contention that the Barrow Way should cater for a wider range of cyclists including sports cycling and commuters. The submission from Cyclist.ie notes that the NRA (now TII) was asked to identify a number of inter urban corridors that would utilise rivers and canals amongst other possible routes to link major towns, and goes on to state that the River Barrow was identified as one such route that could form part of the National Cycle Network to serve both recreational and utility cycling. It is contended that the current proposal is contrary to this aim. From my reading of Smarter Travel and the National Cycle Network Scoping Study, however I do not see that any significant part of the Barrow route is part of any national cycle network. Furthermore, it is not clear from the information available that it was ever considered for inclusion in such a network or if it was so considered, the reasoning for it not being included in the final network. I do not therefore consider that it is appropriate that the route would take account of such

a national cycle network function or that the development should be designed having regard to such a function.

7.3.9. In terms of national policy it is my opinion that the proposed development is consistent with the provisions of the NPF. I also note the fact that the form of development proposed called a blueway, while not the subject of a clear definition in other available policy documents and literature, is specifically referred to in the NPF and identified as a form of development to be encouraged. National Policy Objective 22 states that it is an objective “*Facilitate tourism development and in particular a National Greenways, Blueways and Peatways Strategy, which prioritises projects on the basis of achieving maximum impact and connectivity at national and regional level.*”....’ This strategy document has been published by the Department of Tourism, Transport and Sport (*Strategy for the Future Development of National and Regional Greenways, July 2018*) and, while no specific projects are identified in the strategy, the proposed development would comprise a national route being of greater than 100 km. The proposed development would also in my opinion be consistent with national cycling policy and with regard to the form of development proposed, I note that with the exception of a small section, the route does not comprise part of the identified national cycle network. In addition, it is my opinion that while the merits of the proposed development in terms of the balance between walkers and cyclists, impacts on ecology and safety can be questioned, the proposal would potentially result in a significant intensification in use of the route such as would meet national objectives to increase recreational activity such as those set out in the *Get Ireland Walking Strategy and Action Plan 2017-2020* and *Get Ireland Active*.

Regional Policy

7.3.10. As set out at section 5.3 above, the route of the proposed development is located such that it comes within the area covered by three separate extant regional planning guidelines these being the *Greater Dublin Area Regional Planning Guidelines, 2010-2022* (section in County Kildare), the *Midlands Regional Planning Guidelines, 2010-2022* (the section of the route in County Laois) and the *South East Regional Planning Guidelines, 2010-2022* which covers the section located within

County Carlow. It is noted that the Regional Spatial and Economic Strategy (RSES) for the Eastern and Midland Region is currently in draft form, however it has not been adopted as at the date of writing this report. No draft RSES for the other two regional assembly areas have been produced to date.

- 7.3.11. The policies of all three regional guidance documents are supportive of the concept of sustainable tourism developments and the provision of new and improved walking and cycling routes. Such policies are however subject to the protection of the natural environment and specifically sites that are the subject of European designation.
- 7.3.12. In the case of the ***Regional Planning Guidance for the Greater Dublin Area, 2010-2022*** covering the section of the route in County Kildare, walking and cycling routes are recognised as key regional assets and it is recognised that green routes can aid in the development of tourism and outdoor recreational pursuits. It is specifically noted that *Strategic Recommendation GIR9* seeks the protection and enhancement and sensitive re-use / integration of heritage transportation corridors including water corridors to ensure their long term future and their role in relation to access provision and tourism development.
- 7.3.13. The ***Midlands Regional Planning Guidelines, 2010-2022*** cover the section of the route contained within County Laois. The guidance contains a number of specific policies and objectives that relate to walking and cycling. Specifically, Objectives TIP 4 and TIP 5 states that local authorities should support the development of cycling and walking facilities in the region and national cycling routes in addition to the routes identified in the National Cycle Policy Framework. Objectives TP4 and 5 specifically relate to waterways, and promote the amenity potential of the waterways and support for proposals that facilitate recreational use. I note that objectors to the proposed development contend that the proposed development would not result in improved facilities for all users of the existing Barrow line, specifically walkers, however, on balance, it is my opinion that the principle of the proposed development is consistent with the improvement of existing cycling and walking facilities and the facilitation of the more intensive use of the route as a recreational amenity. For these reasons, it is my opinion that the proposed development is generally consistent with the above referenced objectives.

- 7.3.14. The **South East Regional Planning Guidelines, 2010-2022** which covers the part of the route located within County Carlow, contains specific support for the development of dedicated walkways and cycleways. I specifically note the provisions of Objective PP08.18 which states that local authorities should include policies in their plans to, inter alia, *'promote the development of 'greenways' along former railway alignments and along canals and rivers where environmentally appropriate'*.
- 7.3.15. The **Draft Regional Spatial and Economic Strategy for the Eastern and Midlands Region** to cover the period 2019-2031 is currently on public display. This document makes specific reference to greenways, blueways and peatways, and *Objective RPO7.24* states it is an objective to support local authorities and state agencies in the delivery of sustainable strategic greenways, blueway and peatways projects in the region under the Strategy for the Future Development of National and Regional Greenways. The Barrow Way is specifically referenced in the list of significant opportunities for future development, however it is noted that this is subject to a requirement for *'careful routing and design....to ensure that greenways do not impact negatively on agriculture, natural heritage or the biodiversity value of natural ecological corridors such as rivers and canals...'*.
- 7.3.16. In addition to the above regional planning guidance documents, the **Barrow Navigation Tourism, Recreation and Commercial Product Identification Study** was prepared by URS Scott Wilson and Judith A Annett Countryside Consultancy for Waterways Ireland and Fáilte Ireland in conjunction with Carlow County Development Partnership, Kilkenny LEADER Partnership and Carlow, Kildare, Kilkenny, Laois, Wexford County Councils. The terms of reference and vision for the future of the area including a higher visibility for the Barrow Valley and navigations within tourism in Ireland, as a special area with a very strong heritage. The declining number of users (measured in lock passages) over the years leading up to the study date of 2010 is noted and it is proposed that the river should become a busier waterway with more people enjoying its benefits in a sustainable way and the towns, villages and businesses of the area should benefit from this. Recommendations contained at Chapter 5 include raising the profile of the area for tourism, creating linkages to local food outlets and more proactive approach to marketing as well as the development of map and accommodation guides and itineraries. The study does

not however contain any recommendations for alterations to the existing towpath of the form proposed in the current project the subject of appeal.

- 7.3.17. Overall therefore, it is my opinion that regional planning policy is supportive of improved recreational and amenity facilities and the principle of the utilisation of existing linear infrastructure including the canal network for recreational purposes. The development of the Barrow line as a recreational amenity and long distance walking and cycling route is not specifically referenced in the regional guidance documents, however it is included in the Draft RSES for the Eastern and Midlands region.

Local Policy

- 7.3.18. At a local level there are a significant number of policies and objectives contained within the county development plans for Kildare, Laois and Carlow that support the development of tourism projects that contribute positively to the local economy. Policy ECD10 in Kildare and OBJ6 in the Laois plan are examples of policies and objectives that are supportive of tourism based developments in principle. The proposed development would result in the attraction of additional users and visitors to the route and would, in my opinion, have an overall positive impact on tourism and economic development along the route and as such is consistent with the relevant policies in the county development plans.
- 7.3.19. The county development plans also contain a number of policies and objectives that are supportive of the principle of the development of long distance walking and cycle routes and the development of existing amenities. In the case of the ***Kildare County Development Plan, 2017-2023***, the plan includes an objective (Objective EO49) that seeks to work with the stakeholders including Waterways Ireland to develop a coordinated approach to the selection, delivery and servicing of future blueways, greenways, trails and routes throughout the county. Objective EO52 seeks to promote and develop the towpaths along the Grand Canal, Royal Canal, the Barrow Line and the Corbally Line as cycleways in co-operation with Waterways Ireland and neighbouring local authorities. Policy CR5 seeks to investigate the possibility of developing long distance walking routes within the lifetime of the Plan, along disused sections of railway lines and canals in the county. In addition to the

above there are other policies and objectives which the proposed development would, in my opinion be consistent with. These include Policy EO57 regarding the development of berthing and other ancillary infrastructure on the canal system, and Policy RAO13 which seeks the development of long distance walking routes including along the River Barrow. It is noted that the above policies have to be set against a significant number of policies and objectives which stress the importance of environmental protection and the conservation of species and habitats of importance. These plan provisions include Policy WC5, Policy GI 19 which requires the submission of ecological assessment and, where necessary, AA including bat and otter surveys for developments along river, stream and canal corridors and Policy GI 20 which requires the maintenance of a biodiversity zone of not less than 10 metres from the top of the bank of all watercourses in the county, with Blueways considered within this zone.

7.3.20. Overall, subject to an assessment of the ecological impact of the proposed development being acceptable, it is my opinion that the proposed development is consistent with the policies and objectives contained in the Kildare County Development Plan relating to the promotion of walking and cycling routes including along the Barrow line. Similarly, it is my opinion that the proposed development is consistent with the contents of the *Monasterevin LAP, 2015-2021* and the *Athy LAP 2012-2018* which support the delivery of an integrated walking and cycle network along the banks of the Grand Canal and River Barrow (The Barrow Blueway).

7.3.21. The ***Laois County Development Plan 2017-2023*** contains a number of policies and objectives that relate to tourism and specifically to the development of the blueway. These include RA6 / P05 which seeks to support and promote public access to outdoor amenities that have traditionally been used for recreation subject to compliance with the habitats directive, TM8; P19 which seek to maximise the use of canals and other waterways as tourism amenities and TRANS44, to designate and promote the Barrow Navigation as an activity hub. The proposed development is, in my opinion consistent with all these policies. EC7/OD7 seeks the protection of landscapes, archaeological, built and natural heritage which have an economic value in attracting visitors. A number of additional policies relate specifically to the development of the Barrow Blueway and it is noted that these are subject to compliance with the Birds and Habitats Directives. These include OBJ13, to

investigate the feasibility, subject to compliance with the Habitats and Birds Directives, of a River Barrow Blueway development and TM23 which states that the local authority ‘.. *will support in principle and investigate the feasibility subject to compliance with the Birds and Habitats Directives, developing and marketing the Barrow Blueway by Waterways Ireland*’. Like the situation in County Kildare, subject to an assessment of the ecological impact of the proposed development being acceptable, it is my opinion that the proposed development is consistent with the main policies and objectives contained in the Laois County Plan relating to the project and that there is significant policy support in the plan for the principle of the development proposed.

7.3.22. The **Carlow County Development Plan 2015-2021** contains a number of policies that are supportive of the principle of the Barrow Blueway. These include Trans Policy 8 which commits to consider the development of off-road routes for both walking and cycling and support the development of the ‘Barrow Corridor’ in County Carlow and Section 8.10.5 of the plan which notes the very significant potential of the Barrow for linear open space and to form part of a network of walking and cycling routes. Like the situation in the other counties, policies promoting the development of the Barrow as an amenity and cycle / walking route are subject to and have to be set against others related to nature conservation and appropriate assessment, including Tourism Objective 1 which seeks to promote walking and cycling subject to appropriate assessment requirements and Section 8.11.2 which highlights the protection of nature conservation and the appearance or character of the local landscape and that the amenity of persons living nearby or the enjoyment of other countryside users is not adversely affected by the development. Overall, it is my opinion that the Carlow County Development Plan is supportive of the principle of the proposed development subject to the protection of the environment and the visual amenity and amenity of existing users of the Barrow.

7.4. Need, Form of Development Proposed and Alternatives

- 7.4.1. A number of submissions have questioned the need for the development and raised concerns that the scheme has not been designed from first principles and that the integration of users has not been properly addressed. The form of the proposed development in terms of width and surface finish have been questioned. It is also submitted by third parties that no alternatives to the predominately unbound surface finish and 'slow tourism' concept have been explored in detail. These issues are considered in the sections below.
- 7.4.2. With regard to **need**, the appellants contend that a clear need for the project has not been demonstrated and that the existing waymarked trail comprising predominately of a grassed finish is fit for purpose. The basic rationale for the proposed development put forward by the first party relates to the fact that the existing trail does not comply with any recognised standard and that the existing surface is not fit for purpose in that it does not allow for uninterrupted access for cyclists, or for walkers of varying abilities. It is also stated that the proposed development is required so that route access and car parking are improved.
- 7.4.3. The fact that the current trail does not meet a recognised standard is agreed, but is not, in my opinion, in itself a basis for granting permission. The existing predominately grassed surface is capable of accommodating the existing variable level of pedestrian and low level of cyclist usage. From my observations of the existing route and experience of its use, however I would agree that there are sections that are not suitable for general use by cyclists or where the quality of the trail could be significantly improved such as would encourage significantly increased use by cyclists. It is not however clear to me that the provision of a consistent surface, in other words a path as proposed, would be beneficial in terms of the overall walking environment. A consistent surface would clearly assist in making the route accessible to walkers who are infirm or who require some degree of support, however it is not clear that the proposed development would be of any benefit to more able bodied walkers and indeed a case could be made that walking on the existing sad bank grassed surface is easier and more pleasant for walkers than would be the case with the proposed finishes. Overall, on balance and on the basis of the information presented and my observations I am however satisfied that the proposed development to create a surface that is of a consistent finish and which

would be capable of accommodating walking and particularly cycle use over a full range of conditions and seasons has merit in principle. This, however, is a judgement call in that the proposed development is clearly such that it makes the route more attractive to cyclists and the overall impact of the development on the attractiveness to walkers may be negative. In addition, the acceptance of the principle of the development from an accessibility and user perspective has to be set against other potential negative impacts that may arise, in particular in terms of visual amenity and character, pedestrian and user safety and ecology each of which are the subject of more detailed consideration in following sections of this report.

7.4.4. The proposed development, and the likely resulting increase in overall usage of the route would also assist in meeting the aims of the blueway which is stated by the applicants to comprise the creation of a network of approved multi activity recreational trails and sites, based on or closely with the water. The application does not provide details as to what these other recreational activities are, however experience with the greenway network would suggest that there is potential for significant spinoff economic activity to be generated by the proposed development in the areas of hospitality with additional potential for water related activities. No specific economic assessment of the predicted impact of the proposed development has been undertaken, although the applicants did undertake surveys of business owners in the vicinity of the proposed route which indicated that it was likely that tourists would be drawn to the area as a result of the development. Comparison is also made with the Great Western Greenway (4.3.4 of revised EIS) which has been estimated to generate c.7.2 million euro revenue per annum (2011) for the local economy. Economic comparisons with other developments such as the Western Greenway are, however, difficult to make and not in my opinion particularly relevant given the differences in location, length, likely user numbers and attractions along the route and the fact that the Barrow Line is an existing route proposed for upgrading rather than a new development. It is however in my opinion likely that proposed development, and additional visitors generated, would have the potential to have significant local economic benefits.

7.4.5. In terms of need it is also noted that the application documentation is light on the issue of existing and anticipated future visitor numbers or an assessment of the likely numbers that could be safely accommodated on the route. The issue is considered

in more detail in section 7.6 of this report (Traffic, Safety and Design Issues) under the heading of compliance with design standards. The available information suggests that the user numbers have increased relatively significantly over recent years and the estimated current usage as per the information submitted to the Planning Authorities as part of the further information response indicates that the currently most intensively used section is in the vicinity of St Mullins where there are an average of 245 trips per day. On the basis of the analysis undertaken by the first party, usage of the Barrow Blueway in 2026 at the highest volume location (St. Mullins) is estimated to increase from the current 245 (227 walkers and 18 cyclists) to between 686 and 931 average daily users. As detailed in section 7.6 below, this estimate is not based on a very robust methodology, relying on comparisons with usage data from other greenways such as the Waterford Greenway. It is not clear to me that the predicted user figures are particularly robust in the case of a development such as the Barrow where there is an existing amenity proposed to be re developed rather than a situation where a new amenity route is being created.

- 7.4.6. Similarly, it is not clear what the capacity of the existing route with the current surface treatment would be were the proposed ancillary works such as signage, route access and car parking upgrades to be undertaken. Several third party submissions have made the point that the existing Barrow line has long suffered from a lack of publicity and has been poorly marketed as a regional amenity. The *Barrow Corridor Recreational, Tourism and Commercial Product Identification Study* identified a number of recommendations under the heading of *Raising the Tourism Profile of the River Barrow Area*, (Programme 4 of identified actions) and, while these recommendations do not appear to have been implemented, there is evidence of some increase in user numbers in recent years which, it is contended by third parties, is attributable to publicity of the existing Barrow Way in national media in recent years. A number of submissions make the point that the ancillary parts of the proposed development comprising parking improvements, signage and access onto the route, together with a programme of marketing and publicising the route would likely result in significant increase in usage and serve to meet many of the policy objectives highlighted at 7.3 above relating to access to recreational facilities and the promotion of walking and cycling. It is likely that these elements of the development

would indeed increase usage, however the degree to which this would be the case is very difficult to estimate.

7.4.7. As set out in section 7.3 above under the heading of National Policy, the vast majority of the 115.7 km route clearly does not form part of any national cycling network. The need for the proposed development does not therefore originate in a desire to serve a national cycle route purpose. In any event, as discussed in section 7.3 above, having regard to the visual and ecological sensitivities of the Barrow line and width restrictions along the route, I do not consider that there is justification for a bound surface and path of a width that would be required to cater for the likely volume of users that would be attracted were the route to be designed to attract a wider range of cycling users, specifically the sports and commuter cyclist, which would be the case were it part of a national network. In stating this, I note that the National Cycling Policy Framework identified the development of a national network of cycle routes as a specific objective and that this network was aimed at encouraging cycling for transport, leisure, recreation and tourism and to assist in meeting the aim of the National Cycling Policy that by 2020 10% of all trips would be by bicycle. I would therefore be in agreement with the first party who state that the request that the path be brought to the standard of a national cycleway is not desirable for reasons of high cost, environmental and visual impacts and adverse impacts for other users and that it would be contrary to the concept of the blueway as a slow tourism product.

7.4.8. With regard to background studies, I do not see a clear policy basis that underpins the proposed development or the undertaking of studies that clearly set out the background to and rationale for the proposed development. In this regard, the *Feasibility and Technical Specification Report* undertaken by Kieran Boyle Consulting on behalf of Carlow Development Partnership is considered to be of limited relevance. The purpose of the study was to review the feasibility and technical specification for the development of a Class 2 cycling trail (as per the National Trails Office classification) on the River Barrow over a 90km section between Monasterevin in County Kildare and St Mullins in County Carlow. The study does not, however, set out the background to the decision to commission the study or provide any clear assessment of need or options considered to meet an identified need.

7.4.9. Overall therefore with regard to need, I would agree with the basic case made by the first party that the existing route lacks a clear construction standard. I would also agree on the basis of my own experiences and observations that the existing surface finish is such that there are significant sections of the route that are not readily accessible to certain sections of user, in particular younger or weaker cyclists and walkers that have mobility issues. Having said this, the application is in my opinion light on detail regarding the projected increased numbers that could be accommodated by the proposed development and on the scope for increased usage of the existing route that may be possible from improved marketing and publicity. The existing level of usage is clearly low along significant sections of the Barrow line, particularly the northern sections in County Kildare and Laois and there would appear to be significant initiatives that could be undertaken to improve the usage of the route without the provision of a new path or surface. Limited information relating to the economic impact of the proposed development is provided and while logic would indicate that additional users would generate additional economic activity, this is not quantified. These factors make it difficult to make a clear assessment of the need for the proposed development, in particular the proposed new surface treatment. It is also recognised that while there is a case that can be made for the creation of a trail that meets a consistent standard, the merits of this approach have to be set against the potential negative impacts, particularly in terms of visual amenity and character, ecology, safety and the potential for the overall experience of existing users, particularly walkers to be reduced as a result of the proposed development.

Form of Development

7.4.10. The proposed development comprises the construction of a multi-use trail along the existing tow path of the River Barrow and Barrow branch of the Grand Canal. The design of the proposed development in terms of its width and surfacing is stated by the first party to be directly impacted by the identification of the route as part of the National Waymarked Trails network and the use of the route as a leisure related trail. This identified purpose is stated in the EIS to be part of the rationale for the proposed use of an unbound surface over the majority of the route and for the maximum width of 2.5 metres. Detailed consideration of the merits of the proposed

surface and the width of the route relating to traffic and safety issues and compliance with TII standards are set out in are set out in the section 7.6 below under the heading of Traffic, Safety and Design Issues, however the basic form of development proposed in terms of the choice of surface finish and material have been questioned by third parties under a number of headings. These include the feasibility of achieving the proposed width along significant sections of the route, the implications of the proposed surfaces from a maintenance perspective and overall financial cost, the impact of the path design on the mix of users and the impact on towpath stability. These issues are considered in the sections below.

- 7.4.11. It should also be noted that identification of the route as a National Waymarked Trail indicates that its primary purpose is as a walking route. Trails are identified at www.irishtrails.ie and it is stated that National Waymarked Trails comprise medium and long distance walking trails. Since 2007 Sport Ireland have the role of maintaining a register of national trails.

Viability of the Proposed Path Width

- 7.4.12. A significant number of third party submissions received raise concerns regarding the viability of the construction of the proposed path to the designed width of 2.5 metres and the potential implications of construction along sections of bank of reduced width in terms of loss of vegetation, riparian habitat and safety. The impact of the proposed development on safety and ecology is considered in more detail in other sections of this report, however I note the concerns expressed by the third parties with regard to the level of clarity provided regarding the extent of the route which can accommodate the design width of 2.5 metres. The issue of path width was covered in the request for further information issued by the Planning Authorities. The response from the first party states that the 2.5 metre width is the general dimension of path proposed and that this will require some reduction in certain locations where there is not sufficient width for it to be accommodated. Waterways Ireland state, however that such pinch points will be kept to a minimum and refer to the Designers Safety Audit submitted as part of the response to further information and to the fact that there will be a total of 41 no. pinch points along the route where it is anticipated that cyclists will need to dismount for reasons of safety due to restricted width of the path and or gradients. A significant number of these locations are at or in the vicinity of bridges / road crossings and loughs where the path

narrows to accommodate lough gate equipment and there is a change in levels and steep gradients.

7.4.13. One issue of note with regard to the ability of the proposed 2.5 metre wide path to be accommodated is the fact that in the case of path Types A, B, D and E there will be a notable raising of the level of the path above existing ground level. The extent to which this is the case will vary depending on ground conditions, however in the case of the Type A surface that is proposed over c.96km of the c.115.7 km total (c.83%), the increase in level above existing ground would likely be between 75 and 220mm. To accommodate this change in levels, the design of the path design is such that there is proposed to be a verge on each side with the indicative width illustrated in the cross sections being 600mm on the land side and c.1 metre on the river / canal side of the path. Indeed, on the indicative sections submitted the distance on the water side between the path edge and the verge tapering back to ground level is c.1.5 metres. It is acknowledged that the verge widths referenced above will not be present over the entire route, however a verge of 500-600mm would appear to be a reasonable average figure resulting in the overall width of the path extending from 2.5 to c.3.5 -3.7 metres.

7.4.14. The first party state that the Designers Safety Audit of the Proposed Route identifies a number of locations where the proposed 2.5 metre path width is not achievable and other locations where edge protection is required. The Designer's Safety Audit is contained at Section 7.0 and Table 5 of the Preliminary Design report contained at Appendix 3.3 of the revised EIS submitted as part of the response to further information. The information submitted as part of the response to further information including the contents of Table 5 of the Safety Audit, do not detail the length of sections where the proposed path width inclusive of verges would not be capable of being accommodated and where the path width and / or verge width would have to be reduced. The first party contend that the sections of route where the width would be restricted are not significant and in any event the format of the blueway being based on a slow tourism concept, is such that the restricted sections would not have an adverse impact on the safety or experience of users. This is however hard to verify when the information provided is such that it is not possible to clearly identify and quantify the extent of the route where such restrictions on width would occur. The information provided in the Designers Safety Audit and specifically Table 5 is in

the form of a description of the Risks / Issues referenced by their chainage / location along the route. Reference is given to the appropriate drawing, however it is difficult to ascertain from these drawings the extent to which the path width is reduced and / that the verge width is impacted by vegetation or other obstructions. It is not clearly event from the information in the Designers Safety Audit that the accommodation of the path takes account of the verge width or the variation in verge width that would arise from variations in the level of the finished path. On the width issue I also note the fact that page 7 of the submitted Designers Safety Audit states that the assessment of verge widths and the locations where safety barriers / railings / fences were required and a reduction in path width on the basis of '*a desk top audit of the proposed blueway....*'. This statement would lead me to question the accuracy of the assessment contained in the Designers Safety Audit regarding the accommodation of the path width proposed, including consideration of the verge and the localised vegetation on both sides of the proposed path and explain the lack of clarity with regard to the extent of such sections.

7.4.15. Having regard to the above issues, I note the content of a number of third party submissions which contend that the proposed 2.5 metre width is unworkable in several locations. Specific reference is made in third party submissions to the following sections of the route which relate to areas that are away from loughs or road crossings:

- Minch Norton at Dunleckny (to the north of Bagenalstown) in County Carlow where the path width is 1 metre with no proposals for widening,
- The 11km route from Carlow to Athy in County Kildare where it is contended that only 1km is capable of accommodating a 2.5 metre wide track.
- The section of the route between Ballykeenan and Graiguenamanagh to the south in County Carlow.

7.4.16. The above locations were examined as part of my inspection of the site and I would agree that there are issues arising in the accommodation of the proposed path width and verges in these locations. Similar issues were observed at a number of other locations along the route, in particular on the southern sections along the River Barrow. In such cases it is difficult to be definitive regarding the path width that can

be accommodated given the variations in verges and the uncertainty regarding vegetation.

7.4.17. Overall, however, it is my opinion that the level of information provided with regard to restricted path and verge widths along the route is limited and such that it is difficult to get a good impression of the extent of such impacts on the route. This lack of clarity is, in my opinion particularly significant given that the 2.5 metre width is itself a step below the recommended minimum width as set out in the TII guidance document DN-GEO-03047 Rural Cycleway Design (Offline) and the lack of certainty regarding likely future user numbers. I note the comments of the first party with regard to the 'slow tourism' nature of the proposed development, however the comments of the third parties as well as my own observations would indicate that there are significant sections of the route, particularly on the River Barrow section of the route, where it does not appear feasible to accommodate a path of the normal design width of 2.5 metres. It would be useful to the overall assessment of the adequacy of the route to accommodate the potential volume of users and to an assessment of the likely overall user experience and user safety for more detailed information on this issue to be available.

7.4.18. Maintenance Implications of the Form of Development

7.4.19. A number of third party submissions raise concerns with regard to the maintenance implications of the proposed path surface, in particular the proposed Type A unbound surface material. The appropriateness of this material from a maintenance perspective was also raised in a number of the internal report on the planning files, notably the Roads Report in Carlow states that a sealed surface would be more durable. The potential impact of the erosion of the type A surface along the river sections are significant with 3,461 cubic metres of crushed limestone (estimated by HES and appearing to relate to just the top dust layer), and a figure of 27,800 cubic metres of material in the verges (as per the Scott Cawley submission on behalf of Rosalind Murray and Art Mooney).

7.4.20. On the issue of maintenance, the first party states that the project team are satisfied that the Type A surface is suitable and durable under the type of flood conditions that occur along most of the route. The use of a bound or concrete surface in areas where there is an identified erosion issue is outlined, and it is stated that the areas

where a Type D concrete surface are proposed was identified on the basis of an empirical review of previous flooding incidents along the river sections of the proposed route of the proposed blueway, (section 11.0 of Preliminary Design Report submitted as part of further information). This study is stated to have identified locations where flooding had a velocity of flow that would result in the scouring / erosion of the existing path. The locations identified where a Type D concrete surface are considered necessary are both located in County Carlow and comprise the tidal section of the river at St.Mullins Lough (c.1.1 km) and a c.2 km section of the route in the vicinity of the M9 motorway in County Carlow. The first party submissions also state that Waterways Ireland maintenance staff do not encounter significant erosion along most of the existing track with minimal maintenance required after flood events. Furthermore, it is stated that the North Shannon and Royal Canal blueway trails use similar unbound surfaces to the proposed Type A material and that this material has worked satisfactorily in these projects.

7.4.21. The extent of the sections where a concrete surface will be required on the basis of the flow of flood water and resulting erosion are disputed in a number of third party submissions. Notably, the submission received from Rosalind Murray and Art Mooney include a significant number of photographs indicating the damage done to existing modified towpath surfaces and the level of maintenance that would be required with the proposed Type A surface, (see Photographs 3.1 – 3.30). Similarly, the Save the Barrow Line submission to the Board under further appeal responses states that the sections identified as prone to erosion and where a Type D material is proposed do not tally with the information regarding flood maintenance obtained under FOI and detailed at Appendix C. Rather, it is noted that the locations appear to coincide with areas where hard surfacing has been undertaken and that the original grass bank is more resilient. I also note the content of the video submitted by Save the Barrow Line which shows high velocity flooding at Ballykeenan lock north of Graiguenamanagh. Other examples of damage to sections of path which have been the subject of resurfacing works raised in third party submissions include the following:

- A section of track surface laid to the north of Carlow town is of poor standard that leads to the pooling of water and potholing of the surface. This section of

route is only 1 year old and shown in photos 1.47-1.58 attached with the submission received from Rosalind Murray.

- The installation of limestone surfacing to a section of the route north of Carlow Town between the William Duggan Bridge and the Sugar Factory where flooding soon after the section was laid resulted in it all being washed into the river.
- The section of path near Graiguenamanagh including the Devils Eyebrow in where the unbound surface laid was washed away in Storm Frank.

7.4.22. The information presented raises what I consider are a number of significant questions regarding the extent of the proposed Type D concrete surface finish and by extension the appropriateness of the proposed Type A unbound surface proposed. I note the comments made by the first party with regard to the use of a similar surface to the Type A on the North Shannon and Royal Canal blueways, however the circumstances of these projects would appear to me to be materially different with regard to their potential for scouring and erosion. In particular the Royal Canal blueway is not subject to flooding and it is not evident that the velocity of any flooding that occurs on the North Shannon is of the same impact as that on the River Barrow sections of the proposed route.

7.4.23. The first party state that the areas prone to erosive flooding have been identified by a review of flooding events undertaken by Waterways Ireland and that this review also looked at the nature of this flooding and the velocities. This review is stated to have identified the two areas where a Type D surface is proposed, namely at St Mullins lock and an area approximately 2km to the north of Leighlinbridge. Reference to the review undertaken by Waterways Ireland is contained at section 7.3.5.5 of the revised EIS, however there is no detailed methodology or further details of the assessment undertaken provided either in the main EIS document or in the appendices.

7.4.24. I note the contents of the EIS which identifies previous flood events via the OPW indicative flood risk mapping and available CFRAMS data. The first party have also in Chapter 7 of the revised EIS set out the extent of the overall route which is susceptible to flooding, and that c.46km of the proposed route is not at any risk of flooding as it is located on the canal and is an artificial waterbody. A total of c.67km

of the route is identified in the analysis as having the potential to flood and essentially the whole of the southern section of the route south of Athy is within the 1 in 100 year flood zone. Chapter 7 of the EIS also notes the characteristics of the River Barrow along the route of the proposed development which is stated to be a gentle gradient with a generally low velocity, (see revised EIS paragraph 7.4.4.5). Similarly, the first party appeal submitted by Waterways Ireland notes that the site is located entirely within hydrometric area 14 of the South East River Basin District and the CFRAM study identifies the River Barrow as a low slope, low energy meandering system. The first party appeal also contends that the flat nature of the blueway route and surrounding lands are such that there are no fast flowing preferential flow paths across the proposed track to surface waters (river or canal) that could potentially act as a pathway to these receptors and that instances of flooding would lead to crossflow where water would flow from the overtopped trackway into the back drain. It is stated that there is no evidence from the photos and video submitted by third parties of flows being high energy or erosive.

7.4.25. I would agree with the first party that the available data including that from CFRAMS, indicates that the River Barrow in the vicinity of the proposed route is not a particularly high energy river system. Against this however, there is a significant body of information presented by third parties indicating damage that has occurred to sections of the riverbank which have been the subject of surfacing works by Waterways Ireland. The information presented is, in my opinion indicative of a relatively high level of flow and erosive force and / or a surface design and construction that is not capable of withstanding the forces being exerted. There is therefore in my opinion a significant degree of uncertainty with regard to the ability of in particular the proposed Type A unbound surface to withstand the flooding events to which it will be exposed. This uncertainty has not, in my opinion been adequately addressed in the submissions of the first party to the Board or in the application material. I specifically note in this regard the lack of information presented with regard to the review which led to the identification of what are considered to be erosive locations and to the lack of any specific response to the specific instances and locations of erosion cited in the third party submissions. On balance therefore it is my opinion that the first party has not adequately demonstrated that in principle the proposed Type A unbound surface is a suitable design for areas that are located

within flood zones. This issue is returned to under the heading of Appropriate Assessment and 'Flood Impacts of Type A Surface'.

Cost of Path Maintenance

- 7.4.26. The issues discussed above relating to erosion and the long term suitability of an unbound surface lead to concerns regarding the implications for maintenance and the overall cost of the maintenance of the proposed route. I note that one of the justifications put forward by the first party for the use of the Type A unbound surface over a majority of the route related to ease of maintenance and lower maintenance costs. Such an assessment of costs is, however, presumed to be based on the case made in relation to erosion and that there would be limited significant damage to the unbound surface arising from flood events. As set out in the sections above, on the basis of the information presented and the information on file, I am not convinced that the instances of significant flood related damage to the proposed Type A unbound surface within the flood prone sections adjoining the River barrow would be limited in frequency or extent.
- 7.4.27. The Cyclist.ie submission makes reference to evidence from the UK that a dust surface path is more expensive to maintain than a bound surface (Sustrans.org) and contend that the lifetime cost of the proposed unbound surface is at least 50% more expensive than a bound surface. It is also noted that the UK Sustrans publication *Cycle Path Surface Options* recommends a bound surface as the default option and that the EuroVelo guidance states that in an exceptional circumstances such as a nature reserve loose material may be used. The Sustrans ***Cycle Path Surface Options*** publication (January, 2012) provides at Appendix B a whole life cost comparison for paths, and it is assumed that it is this comparison which is being referenced in the Cyclist.ie submission. Cost comparisons are presented for Rural Paths and Urban Fringe and for Urban Paths. For Rural paths it is stated that Sustrans initially used unbound limestone or granite dust surfaces which were considered at the time to be most economic and environmentally friendly at the time however *'experience over the last 15-20 years or so has shown that already significant path sections have suffered erosion, ponding or other damage that make these paths very unattractive and unusable in very wet weather conditions.'* The conclusion is that *'Based on a whole life comparison (50 year life cycle), unbound surfaces are at least 50% more expensive than bound surfaces. However, there are*

many factors that can accelerate the rate of wear on an unbound path, which would make the cost difference even greater. I would assume that one such factor would be erosion resulting from periodic inundation with flood waters such as in the case of the River barrow section of the proposed blueway.

- 7.4.28. I acknowledge that there are environmental and landscape / visual amenity considerations which would likely make the choice of an unbound surface more preferable in the case of a river / canal side location adjoining a SAC, such as are the circumstances of the proposed development. It is, however, interesting to note the conclusions of Sustrans in the UK who have extensive experience of rural cycle path provision and maintenance in the UK and their conclusions regarding relative costs. When these conclusions are taken in conjunction with riverside location of a significant part of the proposed route (67km) which is located within a 1 in 100 year flood zone and the evidence of surface erosion on sections of the route that have been finished with an unbound surface, it is difficult to agree with the statements of the first party that the proposed Type A unbound path will be easier and have a lower maintenance requirement.
- 7.4.29. Under the heading of path maintenance and costs a number of third party submissions make reference to the poor standard of maintenance and repair of the existing facility and contend that it does not give confidence that the proposed development would be maintained to a high standard. On the basis of the submissions received, and from my observations of sections of the route, I consider that the general standard of the existing Barrow Way has to be classified as good. There are a number of sections where the surface is poor, and there are clearly past instances where significant damage was done during storm or flood events which took a significant period to repair, however, on the basis of the information available to me, I do not consider that the issues of maintenance are such as to impact on the decision as to whether it is appropriate to grant permission. In stating this, I refer back to the assessment of the cost implications of the proposed Type A surface above and the particular issues that are likely to arise in circumstances such as the proposed development where the path will be the subject of regular flooding. If a Type A surface is proposed over the sections which are liable to flood then the available evidence would suggest that the maintenance requirements will be significant and the cost accordingly high. The submitted EIS and other application

documentation does not provide information regarding an assessment of the cost of ongoing maintenance of the development or the ongoing availability of funding for such purposes.

Path Integrity

7.4.30. The submission of Art Mooney and Rosalind Murray note how the original design of the towpath was undertaken to take account of flooding and was designed with a 12" deep spit sod surface that is hardwearing and resilient to flooding. The design is contended to be the optimal in terms of a durable hard wearing finish that can accommodate significant surface traffic while coping with periodic inundation with river water. Concerns are raised regarding the impact of path construction, and the excavation required to provide the path bases, on the integrity of this sod surface and its ability to accommodate heavy maintenance traffic once the integrity of the original bank has been disturbed. This third party submission notes the fact that the impact on maintenance traffic used by Waterways Ireland has been an ongoing issue and that Carlow County Council had expressed concerns with regard to impact of construction equipment on the integrity of the towpath.

7.4.31. There is no record on file of actions undertaken by Carlow County Council with regard to the impact of maintenance activity on the towpath. The issue raised in the Mooney and Murray submission regarding the potential impact of the breach of the original canal towpath construction is, however noted. The construction of the Type A path will require an excavation of the existing sod bank surface by a variable depth depending on surface conditions. Where such excavations are at the deeper end of the range there may be the potential for the integrity of the existing bank construction to be compromised. With the typical path construction as detailed in the application drawings the depth of excavation below the existing surface level to accommodate the sub base would be c.100-225mm and normally at the lower end of this range. Such an excavation would appear unlikely to have a significant impact on bank stability in normal circumstances however in locations where the separation of the path to the river / canal bank is low there may be the potential for towpath damage to arise. No detailed assessment of the potential for such impacts is presented in the application documentation or an assessment of the ability of path construction at varying separations to the river / canal bank to take specific equipment loadings undertaken.

Design Alternatives

- 7.4.32. With regard to alternatives, section 2.5 of the revised EIS submitted as part of the response to further information sets out the alternatives considered under the headings of alternative land uses, alternative routes, alternative materials and construction methods and alternative path widths. As is set out in section 7.9 of this report under the heading of EIA, the application was accompanied by an EIS in accordance with the requirements of Directive 2011/92/EU as the application was lodged in January, 2017 and therefore prior to the coming into effect of Directive 2014/52/EU. What is required under Directive 2011/92/EU is '*an outline of the main alternatives considered*' in the application. Section 7.9 sets out the consideration of alternatives for the purposes of EIA as per Directive 2011/92/EU. The following section considers the issue of alternatives as raised in the third party submissions in more detail.
- 7.4.33. Under the heading of **alternative land uses**, section 2.5.2 of the revised EIS sets out how a '**do nothing**' scenario would result in the retention of the existing national waymarked trail and the associated variations in surface quality and standards. It is submitted that this is not considered a viable option in light of the limitations on public access which arise from the existing surface material. Objectors to the proposed development contend that the applicants have not clearly justified how the retention of the existing route is not viable in terms of public accessibility and increased usage and, as discussed at 7.4.5 – 7.4.9 above, I would agree that the application does not contain significant information in this regard. The applicants have, however in my opinion set out the objectives of the proposed blueway in that it would facilitate access by cycles and pedestrians and facilitate a range of users in terms of age and ability. The merits for the retention of the existing grassed surface in terms of character, visual amenity and pedestrian accessibility amongst others are recognised and will be addressed in other parts of this assessment. The fact is however, from my experience of cycling the existing route, significant sections are not such that it would be easy for younger or less able cyclists to travel significant distances along the route. Alternatives comprising the blueway as currently proposed in the subject applications and an option of the development of the route to a National Cycleway standard are also set out at 2.5.2 of the revised EIS.

7.4.34. Under the heading **of alternative routes**, the applicants have, at 2.5.3 of the revised EIS set out the rationale for the use of the alignment of the existing national waymarked trail. This revolves around a desire to minimise the number of crossings of the waterway and local roads and to make maximum use of the existing resource. On the basis of these criteria I consider that a strong case has been presented for the proposed alignment. I note the fact that third party submissions include reference to potential alternative long distance cycle routes that could provide an alternative cycle route while the existing surface on the Barrow Way was retained. These alternatives specifically include the disused railway from Bagenalstown through Borris to Wexford. The retention of the existing unsurfaced Barrow line and promotion of this alternative is not specifically referred to in the first party response. As set out previously in this report however, the purpose on which the application is based is a shared surface slow tourism concept based around the existing Barrow Way comprising the Barrow branch of the Grand Canal and the River Barrow. Also as previously discussed in this report, the alignment along the existing Barrow Way is not identified as part of any national cycling network. The provision of an alternative connection between Bagenalstown and Borris and on to Wexford could be considered as a future addition to the greenway network, however I do not consider that its omission from the current proposal is a significant issue in the overall assessment of the project.

7.4.35. Similarly, I note a proposal contained in the third party submission from Cyclist.ie that there are alternative parallel routes to the proposed line between Monasterevin and Athy which offer a higher level of service and which would be more attractive to cyclists and best practice internationally. It is stated that this route follows the Barrow route for 12 of the 21km between these two towns. As with the proposed route from Bagenalstown to Borris, the suggested alternative route would not comprise part of any identified national cycle route and would not form a complete connection between the two towns. Similarly, it is not clear from the information available how connections on and off the blueway onto this alternative route would operate. For these reasons it is not considered that the suggested route represents a viable alternative that would meet the objectives of the project.

7.4.36. Consideration of **alternative materials** is discussed below in more detail under the headings of Visual impact and character (section 7.5), AA (7.8) and EIA (7.9).

Section 2.5.4 of the revised EIS sets out the basis for the choice of surface materials and construction methodology and, specifically with regard to the proposed Type A material, the applicants detail how this material was chosen as an appropriate response to the development of a slow tourism route that meets the requirements of cyclists and walkers while at the same time being respectful of the visual amenities and character of the area. Similarly, justification for the surface Types B, C and D is also provided and a rationale set out for not using a reinforced grass material. Alternatives in terms of path width and compatibility with design standards is also addressed by the applicant under the heading of alternatives and will be discussed in more detail in section 7.6 below relating to Path Design, Safety and Traffic Issues. The rationale for the 2.5 metre pathway in terms of meeting the objectives of the project, pedestrian and cyclist safety, cost and environmental and visual impacts has been set out by the applicants in the EIS and in the response to further information.

- 7.4.37. Overall, it is my opinion that the issue of alternatives has been adequately addressed by the applicants in this case and a clear rationale for the proposed development on the basis of the slow tourism concept presented.

7.5. Impact on Visual Amenity and Character

- 7.5.1. The impact of the proposed development on the visual amenity and character of the route is a very significant issue contained in the third party submissions received. Issues raised under this heading relate to an erosion of character of the route which is considered to be unique, loss of the unspoilt natural character of the route, wider visual amenity impacts and contravention of the European Landscape Convention.
- 7.5.2. In terms of policy, there is no national landscape character assessment that covers the area and, as the proposed development runs through three separate council areas, the development is covered by three separate sets of landscape and visual policies and three separate landscape character assessments. An overall assessment would be assisted by a National LCA, however, while such an assessment is proposed, to date it has not been completed in Ireland. The existing landscape character areas for the three counties are mapped at Figures 9.2 of the revised EIS.

Background Policy - Kildare County Council

7.5.3. In the case of County Kildare, there are a number of general landscape policies and objectives that are set out at section 9.3.1.1 of the revised EIS. None of these general policies and objectives relate specifically to waterways. The landscape character assessment (LCA) of County Kildare was undertaken in 2004 and carried through to the current 2017-2023 development Plan. The Kildare LCA identifies a total of 14 LCAs of which the proposed development is located within or adjacent to three. The sensitivity of each LCA to development is ranked on a five level scale of low, medium, high, special and unique. The LCAs impacted by the proposed development within County Kildare are as follows:

- LCA6 – Southern Lowlands. Two short sections of the route pass through this LCA as identified on Figure 9.1 of the revised EIS. LCA6 is identified as having a low sensitivity to development, being robust and tolerant to change and being generally flat with the water corridors generally enclosed though with many views available from local roads and local viewing points on bridges.
- LCA12 – River Barrow LCA. The route runs through this LCA at Monasterevin and in a section to the south of Athy. The terrain is stated to be generally even with some long distance views. Sensitivity to development is classified as special (Class 4) and it is considered to have a low capacity to accommodate uses without having significant effects on the appearance or character of the area.
- LCA13 – Grand Canal LCA. Gentle topography with some long distance views. High sensitivity to development and change with resulting low capacity for development.

7.5.4. The Kildare County Development Plan also identifies areas of high amenity and two of these, the River Liffey and River Barrow Valleys and the Grand and Royal Canal Corridors are impacted by the proposed development. In addition, there are Architectural Conservation Areas in Rathangan, Monasterevin and Athy, however the proposed development would only directly impact on the Athy ACA.

7.5.5. Scenic routes and protected views are set out at Table 14.2 and Map 14.3 of the development plan. These designations are set out at Figure 9.3 of the revised EIS. Of most significance to the assessment of the current proposal are views to and from a number of identified bridges along the route. Policies specifically relating to these views are as follows:

WV1 – curtail any further development along the canal and river banks that could cumulatively affect the quality of a designated view,

WV2 – preserve and enhance the scenic amenity of the river valleys and canal corridors and the qualities of the vistas available from designated views,

WV3 – Prevent inappropriate development alongcanal and river banks and to preserve these areas in the interests of biodiversity, built and natural heritage and amenity by creating or maintaining buffer zones will be avoided.

Background Policy - Laois County Council

7.5.6. The plan includes at Appendix 6 a landscape character assessment (LCA) which identifies 7 no. separate LCAs. The route of the proposed development is located within the River Corridors and Lakes LCA. A number of policies relating to this LCA are set out at section 7.19 and other sections of the plan, the most notable of which are:

- *LS17 – Recognise the importance of river corridors for scenic value, ecology, history, culture, and for recreational purposes such as walking, cycling, and various on water activities.’*
- *LS28- In partnership with the NPWS, Waterways Ireland and other relevant stakeholders facilitate public access to waterway corridors. Maintain and enhance the natural characteristics of lakes, rivers and canals and facilitate walking, cycling and other non-noise generating recreational activities’.*
- *TELE 9 Adopt a presumption against the location of structures in vulnerable landscapes as identified in the Landscape Character Assessment (Appendix 6) and in areas where views are to be preserved and in areas adjacent to national monuments, sites of archaeological heritage or protected structures;*
- *OBJ 4 Use the Landscape Character Assessment (LCA) to protect parts of the Laois landscape that are of scenic importance and sensitive to change;*

7.5.7. There are no views or prospects listed in the plan that impact on or are impacted by the proposed development.

Background Policy - Carlow County Council

7.5.8. A landscape Character Assessment for County Carlow has been prepared which identifies four main LCAs, two of which are impacted by the proposed development. These are:

- Central Lowlands LCA. The route passes through this LCA in the vicinity of Carlow Town and between Goresbridge and St Mullins. The topography in this area is described as gently rolling or undulating and recommends that tourism infrastructure should be carefully sited and in sympathy with the character of the landscape.
- Central Lowlands Killeshin Hills LCA – the lands in the vicinity of the Barrow are gently undulating rising sharply in the Kilkenny direction. The sensitivity of the area to development is categorised as between 4 (increasingly sensitive) and 5 (most sensitive).

7.5.9. Figure 4 of the LCA identifies the Landscape Sensitivities on a scale of 1-5 with 5 the most sensitive and with the lowest capacity to accommodate development. Figure 4 indicates that the route from a point a short distance to the south of Borris as far as St Mullins is sensitivity 5, with the areas to the north within County Carlow varying with sections of 2-3 sensitivity and others of sensitivity 4.

7.5.10. The plan identifies a number of protected views that are located close to the study area. These include views at Leighlinbridge, Milford, Muine Bheag, Clashganny Locks and St. Mullins. The views are shown on Figures 9.3 of the revised EIS.

Existing Landscape Character

7.5.11. In terms of landscape character I consider that the route can be divided in two basic sections, each of which have their own character as noted in the EIS. This distinction essentially relates to the canal section of the route and the River Barrow section with the dividing line being where the canal meets the River Barrow in the vicinity of lock 28 a short distance to the south of Athy.

7.5.12. The character of the northern section between Lowtown and Athy is of a flat topography with gentle slopes along the watercourse and in the surrounding

landscape. The width of the waterway, being a manmade canal feature, is relatively consistent and not excessively wide. Roads often follow the line of the route with canal towpaths being local roads in many places, and roads frequently being present on both sides of the water. Hedgerows are common, though there are open views in many areas and combined with the significant local changes in level at bridge crossings means that there are significant local views available. Rathangan, Monasterevin, Vicarstown and Athy are the main settlements on this section.

7.5.13. To the south of Athy, the section between Lock 28 at the convergence of the River Barrow and Barrow Branch of the canal and the end of the route at St Mullins has a character that is significantly different to that of the canal, though within this section there are a number of variations. In general, this section displays more characteristics of a river rather than canal system with a steeper fall along the watercourse and the river being located within a valley. The localised topography is generally relatively flat however there are sections, particularly towards the southern end of the route between Graiguenamanagh and St Mullins where the topography surrounding the route steepens significantly. Generally this section of the route has a more natural unspoilt character with greater separation to roads or houses along the route than is the case between Lowtown and Athy. The waterbody is wider and more variable in width and horizontal alignment than is the case in the northern section and there is more vegetation in close proximity to the route. This vegetation and the relative lack of roads in close proximity to the route, mean that visibility into and out of the immediate towpath area is not as significant as was the case in the northern section. The section to the south of Goresbridge is particularly natural and unspoilt in character with limited visibility into and out of the route, and trees being a particularly important feature. The percentage of grassed surface increases to the south of this point resulting in a more rural and wild character to the area. These characteristics are particularly notable in the section between Graiguenamanagh and St Mullins where the predominately grassed trackway runs through a steep river valley which is extensively covered in trees. The main urban areas along this section of the route are Carlow town, where the route runs through the urban park, and the smaller settlements of Leighlinbridge, Goresbridge and Graiguenamanagh.

7.5.14. In assessing the landscape impact of the proposed development, an assessment of landscape value is required. This assessment is provided at Paragraph 9.4.3 of the revised EIS and uses the UK Guidelines on Landscape and Visual Impact Assessment 2013 (GLVIA). The relevant features of landscape value as per the GLVIA, and what I consider to be their applicability to the proposed development, are as follows:

Landscape Designations. As set out above, there are sections of the route that are identified as having high and special landscape sensitivity. In addition, the route is impacted by a significant number of designated views, particularly under the Kildare County Development Plan.

Landscape Condition. The condition of the existing landscape is generally very good especially in the southern sections of the route on the River Barrow and especially south of Goresbridge where the character of the area is more natural unspoilt in character with lower levels of human intervention in the landscape and more enclosure.

Aesthetic Qualities. The bulk of the route exhibits significant visual and aesthetic quality. The nature of this varies with the northern canal section having a particular character. The section south of Athy and particularly south of Goresbridge exhibits a particularly high aesthetic quality due to its enclosure and simplicity.

Wildness / Naturalness. The canal section is less natural in character than the river sections to the south, however the canal does display some of these qualities in the extensive sections between settlements where there is limited development and expansive rural views. The southern river section, and particularly the section to the south of Goresbridge, does display a natural unspoilt character.

Rarity. The landscape of the canal sections are not of particular rarity value given the expanse of canals across the country. The river sections, and particularly the southern part of the route where the River Barrow runs in a steeper valley, does have a certain rarity value given the broadleaved woodland character and sense of remoteness within this landscape.

Cultural Meaning. The length of the proposed development contains many features that have cultural meaning and are of cultural significance. These include the canal and associated locks, buildings, bridges and other structures and features of note such as mills and quays in the towns along the route.

Recreational Value. The route of the proposed development is an existing way marked trail with a high recreational value for walking, cycling, angling and boating.

7.5.15. There are a number of aspects of the **methodology** used in the assessment of landscape character undertaken in the revised EIS that I find problematic. Firstly, while section 9.3 of the EIS identifies the landscape policy context, and identifies the landscape character assessments existing for the three counties and the designations relevant to the character areas identified, the designation of landscape character areas and the sensitivities is not clearly carried over into the assessment of landscape character at 9.4 and the predicted impacts at 9.7. Paragraph 3.16 of the GLVIA (2013) states that landscape character assessment is sufficient at a county level for site selection but that at project EIA stage a more comprehensive baseline may be required. As different counties have different LCA criteria with different landscape ratings, it would in my opinion have been appropriate for a site specific LCA to have been undertaken that covers the full extent of the route with a consistent assessment methodology applied. While section 9.4.1 of the revised EIS identifies various sections of the route under the heading of Landscape Cover, no assessment of landscape sensitivity for each of these sections is put forward. As it is, the landscape baseline is not in my opinion consistent in its identification. In addition, the sensitivities as identified in the county specific LCAs do not appear to be carried through to the assessment of landscape impact. Without an assessment of landscape sensitivity, and the identification of specific parts of the route to which it relates, it is in my opinion difficult to understand how the conclusions on landscape character impact are derived. Specifically, paragraph 9.7.2.2.3 of the revised EIS states that the landscape effects of the proposed development once operational / complete will range from slight negative to neutral. It is not however clear to me how these impacts were derived and how they relate back to the landscape sensitivities identified in the county specific LCAs. Paragraph 9.7.2.2.3 clearly identifies that there is a difference in existing landscape character between the canal and river Barrow sections of the route, however no sensitivities resulting from these variations

in character are identified and the conclusions on landscape impact do not differentiate where along the route the slight to imperceptible and neutral to negative impacts are predicted to arise.

7.5.16. Similarly, with regard to susceptibility to change in the landscape as set out at Table 9.3 of the EIS, the route is identified as being at Medium susceptibility to change. Like with landscape character and sensitivity, this broad assessment does not take account of the variations in the landscape through which the route passes from townscapes to canal sections to natural river areas.

7.5.17. With regard to the **landscape effects during construction**, paragraph 9.7.2.1 of the revised EIS states that the movement of machinery into and out of the study area will have a localised imperceptible short term negative effect on landscape character. Given the proposed construction sequencing and the nature of the project I would agree that the likely landscape effects during construction would be short term and localised. I would not, however, agree that they would be imperceptible, notwithstanding this short term and localised impact. In my opinion a distinction needs to be made between the different sections of the route and the variations in landscape characteristics and sensitivity. In particular I consider that the sensitivity of the existing environment on the southern part of the route between Goresbridge and St Mullins is medium to high and the impact of construction activity medium. As per the impact significance table given at Figure 3.5 of the *Revised Guidelines On The Information To Be Contained In Environmental Impact Statements, Draft, September 2015*, the overall level of significance would be moderate. To achieve the imperceptible impact as per the EIS both the level of impact and the significance would need to be negligible which is not in my opinion a realistic assessment for the sections of the proposed route outside of the towns and villages. In any event, as detailed above, I do not consider it appropriate that the same level of impact and impact significance is applicable across the entire length of the proposed development.

7.5.18. In addition, under the heading of construction impacts, the **visual impact of the verge areas** prior to the re colonisation is an aspect that requires consideration and which is not referenced in the EIS. The length of time which it will take for bare surfaces to be re colonised will likely vary depending on the specific location and the time when the works are undertaken, however it is to be expected that the verge

areas will display a bare appearance for a significant period post the completion of the track. The extent to which this would have an impact on landscape and visual character would vary depending on the extent of the verge and its location along the route, however in the more visually sensitive locations along the Barrow corridor, it is my opinion that the short to medium term impacts arising could be appreciable and worth recognising.

7.5.19. The **assessment of operational phase landscape effects**, set out at paragraph 9.7.2.2.3 of the revised EIS, notes that the proposed development passes through a number of different landscape character areas and that the overall study area is considered to be a high quality landscape. The landscape is considered to have a distinctive character. Reference is made to the classification of magnitude of landscape effects as per the GLVIA (2013) which is detailed at Table 9.3 of the Revised EIS. The EIS quotes the GLVIA where the magnitude of effect on landscape character is low. Reference is specifically made to this including *'...landscapes where there is a loss of or change to landscape features of limited extent and where these changes do not have an effect on the overall landscape character and does not affect key characteristics. Changes to the overall landscape are low. Changes to the landscape are more evident at a local level and not over a wide geographical area.'* Paragraph 9.7.2.2.3 of the EIS states that the change that results from the path resurfacing can be described as changes of a limited extent, and that the impact on the aesthetics of the overall landscape is low. The overall effect on the landscape character is stated to range from imperceptible to slight negative in terms of landscape effects with imperceptible neutral effects primarily in urban areas where the works do not have a significant effect on the urban landscape or townscape.

7.5.20. The impact on the landscape character of the sections of the route located outside of any settlements is, in my opinion potentially of more significance than that set out by the first party in section 9.7 of the revised EIS. The basis of the overall assessment of landscape impact as imperceptible to slight appears to be based on the path resurfacing comprising changes of a limited extent, where the impact on the aesthetics of the overall landscape is low. The visual extent of any impact from an individual position along the route may indeed be limited, however it should be noted that the entire route is potentially impacted in this manner. I therefore find it difficult

to accept that the overall effect on a user of the trail would be limited. Rather, it would appear to me that any impact would be across the whole experience of the route. In terms of the overall landscape impact, the sensitivity of the route is, in my opinion medium to high as per the criteria set out at Table 9.2 of the revised EIS with the highest susceptibility to change occurring on the southern river sections of the route where the sense of natural environment, remoteness and absence of human impact and man-made materials is highest. Similarly, the value to be attached to these landscapes as per the Table 9.2 criteria, is in my opinion medium to high depending on location along the route and reflecting the criteria set out at 7.5.13 of this report above and their applicability to the route of the proposed development.

7.5.21. My assessment of the overall landscape effects arising from the development as originally proposed in the application is that firstly it is not appropriate that the assessment would be based on the same level of impact significance / sensitivity given the differences in landscape character along the route as recognised in the EIS. This issue should, in my opinion have been the subject of more detailed LCA assessment in the revised EIS. It is also not apparent to me where the conclusion contained in paragraph 9.7.2.2.3 of the revised EIS that the overall study area is considered to be a high quality landscape and that the landscape is considered to have a distinctive character was arrived at. Notwithstanding this, if these uniform categorisations of landscape quality and character are taken as given, I do not see how they can be reconciled with an overall effect on the landscape character that ranges from imperceptible to slight negative as concluded in 9.7.2.2.3, especially as the whole route is uniformly classified as of high landscape value and the magnitude of landscape change across the whole route is identified as low. Applying Figure 3.5 of the *Revised Guidelines on the Information to be Contained in EIS, Draft, 2015*, prepared by the EPA, the overall degree of impact would appear to range from slight to profound and not slight to low as stated in paragraph 9.7.2.2.3 of the revised EIS.

7.5.22. Given the issues raised above, I propose to undertake an assessment of the impact of the development on landscape character using four categorisations, the environment within towns and villages through which the route passes, the northern canal section of the route, the river Barrow section from south of Athy to Goresbridge and then from Goresbridge to St Mullins. The following sections use the table of impacts as set out in the 2017 Draft EPA Guidelines. The assessment of the

significance / sensitivity of the existing environment and the impacts for each section are based on the Existing Landscape Character section above, the LCAs and associated designations prepared for each local authority area and my own observations of the route of the proposed development.

7.5.23. In the case of **the towns and villages**, the significance / sensitivity of effects on landscape character is in my opinion negligible to low given the existing built context in which development would be undertaken. The impact of the path development proposed is considered to be negligible given the existing urban environment and hard surfaces into which this development would be introduced and the overall landscape effect is therefore considered to generally be **Imperceptible**. In a number of locations, notably Carlow Town park where new and or extended paths are proposed across amenity spaces, and in the case of the proposed new bridges at Athy and Rathangan and the proposed c.38 metre long cantilevered section at Bagenalstown, the contrast with the existing baseline environment would be potentially greater. The design of these structures is not considered inconsistent with their urban settings and the impact on visual character is considered to be negligible to low resulting in the overall effect on landscape being **Not Significant**. (See views 3, 4, 7, 8, 10 and 12 in paragraph 9.6.4.1 of Revised EIS for photomontages of before and after development on this section of route). I specifically note that the proposed development would have a direct impact on the architectural conservation areas identified for Carlow Town, in the vicinity of Maryborough Street, and Athy where the new pedestrian bridge is proposed to cross the canal at the western side of the ACA. The form and design of development in these locations is considered to be such as not to have a significant negative impact on the character of either ACA or be contrary to development plan policies relating to these designations.

7.5.24. In the case of the **canal section from Lowtown to Athy**, the significance / sensitivity of the existing environment is in my opinion low to medium. This sensitivity is reflective of the more linear form of the man-made canal, the fact that significant sections of the route have already been surfaced and in some places comprise local roads and the generally more open landscape environment with generally level topography. The impact of the path development proposed is also in my opinion low to medium given the extent of significant surface change proposed

and the degree of contrast with the existing baseline context. The impact on the character of the area is generally considered to be low as are the consequences of impacts. The overall landscape effect of the proposed development on this section of the route is therefore considered to be **Slight**. (See Views 1-2 and 5-6 in paragraph 9.6.4.1 of Revised EIS for photomontages of before and after development on this section of route).

7.5.25. The **River Barrow section from Athy to Goresbridge** is characterised by a more natural visual context than the canal sections and the introduction of a river valley with a higher degree of visual enclosure and more extensive vegetation. The sensitivity / significance of the existing landscape is in my opinion medium in this section. The landscape impacts of the proposed path are in my opinion greater than in the canal section with a greater percentage of change in the existing surface and a greater degree of contrast with the existing baseline context which displays a more natural and enclosed character. Landscape impact is therefore considered to be moderate, and the overall landscape effect of the proposed development on this section of the route is therefore considered to be **Moderate**. (See Views 9, 11, 13-14 in paragraph 9.6.4.1 of Revised EIS for photomontages of before and after development on this section of route).

7.5.26. The lower **River Barrow section from Goresbridge to St. Mullins** is characterised by a relatively significant extent of an altered grassed surface to the towpath and a significant sense of enclosure arising from the contours of surrounding river valley that prevents significant distance views out of the route. The character is of a natural environment with significant vegetation contained within the valley. The overall effect is to focus the attention of the user onto the existing immediate pathway. The overall character is of a remote rural location with a significant absence of man-made materials or unnatural features within the view of the user. Due to these factors, the sensitivity / significance of the existing landscape is considered to be Medium to High. The landscape impacts of the proposed unbound pathway are impacted by the sense of enclosure and simplicity of landscape (woodlands, river and pathway) focusing of the attention of the user on the immediate path and the significant contrast that would be created with the existing natural baseline environment particularly on the significant sections where the grassed tow path is existing. Landscape impacts are therefore considered to be Medium to High and the overall

landscape effect of the proposed development incorporating the Type A surface is therefore considered to be **Significant**. (See Views 14-18 in paragraph 9.6.4.1 of Revised EIS for photomontages of before and after development on this section of route).

Landscape Impacts Arising From Alternative Type E Bound Surface

7.5.27. I note the fact that the Type A unbound surface has been chosen in part to minimise its visual impact and the impact on landscape character. The design of the proposed Type A surface is such that it would, in my opinion, be the preferable option in rural areas along the bulk of the route as it would have a softer visual appearance than a bound surface. As part of the first party appeal (Section 4.2), an alternative surface type and construction (Type E), is put forward on a without prejudice basis in the event that the Board consider that the Type A unbound surface would have an adverse effect on the integrity of the River Barrow and River Nore SAC site. This alternative Type E surface would be used along the river sections of the proposed route where there is a potential for flooding and erosion. The proposed alternative Type E surface is considered in sections 7.7 and 7.9 of this report under the headings of General Ecology and Appropriate Assessment, however to inform the overall assessment and decision it is necessary to undertake an assessment of the impact of this alternative surface on landscape and visual impact. Details of the proposed alternative Type E surface are given at section 4.2 of the first party appeal submission and a typical cross section is also provided in section 4.2. The **Type E surface construction** can be summarised as follows:

- It is described as a bound 'tar and chipped' finish,
- Geotextile base layer,
- Sub base layer comprising of Clause 8.4 material with 6mm diameter crushed gravel on top, (stated that c.750m³ of cl 804 material to be used per km)
- Surface is proposed to consist of two binding layers, the first 14mm diameter chippings and the top 6mm diameter chippings.
- Width would remain at a general standard of 2.5 metres reducing where there are restrictions as per the Type A surface,

- 7.5.28. The first party appeal submission contains a number of photomontages of the proposed alternative Type E surface. These images present the surface as having a grey appearance and also appear to show a surface that gives the appearance of not being completely smooth. There is no additional detail or discussion provided in the first party appeal regarding colour, however from some research undertaken online it would appear that it is possible that a tar and chip bound surface such as proposed would not necessarily have a dark surface finish. Surface finish would have a rough texture and colour and surface finish is therefore such that it has a more natural appearance than regular asphalt.
- 7.5.29. The alternative Type E surface is proposed to be a potential option on two of the four character areas I identified in the above assessment, namely the River Barrow section between Athy and Goresbridge and the Lower River Barrow Section between Goresbridge and St Mullins. My assessment of the impact of an alternative Type E 'tar and chip' bound surface on the landscape of these sections is as follows:
- 7.5.30. The ***River Barrow section from Athy to Goresbridge (Type E surface)*** is characterised by a more natural visual context than the canal sections and the introduction of a river valley with a higher degree of visual enclosure and more extensive vegetation. The sensitivity / significance of the existing landscape is in my opinion medium in this section. The landscape impacts of the a Type E 'tar and chip' bound path are in my opinion greater than in the canal section with a greater percentage of change in the existing surface and a greater degree of contrast with the existing baseline context which displays a more natural and enclosed character. The Type E surface finish, while not being the same as regular asphalt, would in my opinion be more out of character with the generally more natural environment of this section of the route and such that the landscape impact is considered to rise from the medium with a Type A surface to medium – High with the Type E surface. The overall landscape effect of the proposed development on this section of the route with a Type E alternative surface is therefore considered to be ***Significant***.
- 7.5.31. The ***lower River Barrow section from Goresbridge to St. Mullins (Type E surface)*** is characterised by a relatively significant extent of unaltered grassed surface to the towpath and a significant sense of enclosure arising from the contours of surrounding river valley that prevents significant distance views out of the route. The character is of a natural environment with significant vegetation contained within

the valley and the overall effect is to focus the attention of the user onto the existing immediate pathway. The overall character is of a remote rural location with a significant absence of man-made materials or unnatural features within the view of the user. Due to these factors, the sensitivity / significance of the existing landscape is considered to be Medium to High. The landscape impacts of the proposed alternative Type E bound pathway are impacted by the sense of enclosure and simplicity of landscape (woodlands, river and pathway), focusing of the attention of the user on the immediate path and the significant contrast that would be created with the existing natural baseline environment particularly on the significant sections with grassed tow path. Landscape impacts of the Type E surface are therefore considered to be High and to have increased from the Medium – High with the Type A surface on account of the increased contrast with the existing natural baseline environment. The result of this impact assessment is that the overall landscape effect of the proposed development incorporating the Type E surface is considered to be **Very Significant**.

7.5.32. The following Table summarises my assessment of landscape impact of the proposed development and of the proposed Alternative Type E ‘tar and chip’ bound surface on the relevant sections:

Area / LCAs Identified	Surface Type	Landscape Significance / Sensitivity	Landscape Impact	Overall Impact on Landscape
Towns and Villages on Route	Type A	Negligible - Low	Negligible	Imperceptible – Not Significant
Canal Section Lowntown to Lock 28 south of Athy	Type A	Low - Medium	Low - Medium	Slight
Northern River Barrow Section – Athy to Goresbridge	Type A	Medium	Medium	Moderate
	Type E	Medium	Medium - High	Significant
Southern River Barrow Section – Goresbridge to St. Mullins	Type A	Medium - High	Medium - High	Significant
	Type E	Medium - High	High	Very Significant

Views and Visual Impact

- 7.5.33. The second component of the landscape and visual impact assessment relates to views and visual impact. The proposed route of the blueway is covered by a number of designations and identified views and these are set out in the initial paragraphs of this section above. In particular, Kildare County Council area has a significant number of identified views.
- 7.5.34. The methodology used in the visual assessment is set out at 9.6.2 of the revised EIS, and the categories for visual receptor sensitivity and the assessment of the magnitude of visual effects are set out at Table 9.4 of the same document. In the case of susceptibility of the receptor to change, the value attached to the view and the magnitude of change, a three category, low – medium – high rating is proposed.
- 7.5.35. A total of 20 photomontages are presented and the location of these is detailed in Table 9.6 and Figures 9.4 of the revised EIS. A description of each location is also provided. Figures 9.4 also indicates the location of the protected views in County Kildare. Figures 9.3 of the revised EIS indicate the locations of the protected views along and in the vicinity of the route as identified in the Carlow County Development Plan. A comparison of the location of the protected views (Kildare and Carlow) with the photomontage locations does not show a particularly high degree of alignment, particularly in the case of the identified protected views in County Kildare. It is obviously open to the experts preparing the LVIA section of the EIS to identify the viewpoints used obtaining a best representation of impacts along the route, however it is not clear from the methodology why a significant number of the identified Kildare County Council protected views were omitted from the photomontage locations. Similarly, it is not apparent from the methodology whether the viewpoints used were the subject of any discussion and agreement with the relevant planning authorities during prior to the submission of the application. In particular, I note the fact that there are no viewpoints used at the northern end of the scheme from Lowtown as far south as Rathangan despite there being a significant number of protected viewpoints in this section (see Figure 9.4a or revised EIS).

- 7.5.36. For each of the viewpoints a text is provided that sets out a brief description of the existing view, a brief description of the proposed view and an assessment of the visual effect arising. Under visual effect, a visual sensitivity rating is provided which is stated at 9.6.2 to be dependent on *'...the occupation or activity of people, as well as the extent to which the attention is focussed on views.'* An assessment of the value of the view is presented, also using a high - medium – low rating also set out in Table 9.4. Similarly, an assessment of the magnitude of change (high – medium – low) is provided using the criteria set out at Table 9.5. An overall visual effect is then presented which is presumably based on the description provided at Table 9.5.
- 7.5.37. Sensitivity of the view is clearly an assessment to be made on a case by case basis for each view. There are some aspects of the methodology used and the visual effect for each view as presented in paragraph 9.4.6.1 of the revised EIS that are not, in my opinion particularly clear. For example, View 1a states under Visual Effect that the visual receptors at this location (proposed footbridge at Rathangan) are High Sensitivity, that the value of the view is High and that the magnitude of the change is Medium to High. The overall visual effect is however identified as Slight Negative to Neutral. Similar issues arise in the Visual Effect sections for a significant number of the identified viewpoints including 3, 4 and 14. In addition, in a significant number of the assessments under the heading of Visual Effect, reference to magnitude of change is dropped entirely.
- 7.5.38. From a review of the description of the impact on the viewpoints presented in 9.6.4.1, I would note a number of issues. I would agree with the assessment undertaken at paragraph 9.6.4.1 of the revised EIS, and referenced at paragraph 9.6.2, that the general susceptibility of the visual receptors will be High as the people / groups of people are primarily users of the recreational amenity and are there for the enjoyment of the surroundings and natural environment. Similarly, I would agree with the general assessment of the value of the environment being, in most cases categorised as High. A common issue that I would not, however, be in agreement with is the description of the magnitude of change, where, when included, the assessment undertaken generally identifies this as Low or Low to Medium. In this regard I would particularly highlight the assessment of the magnitude of change for Viewpoints Nos. 15-18 which are all located at the southern end of the route and contained within what I identified in the landscape assessment above as the

Southern River Barrow Section. In Nos.15, 16 and 17 the view indicates a section of grassed towpath which is proposed to be replaced with a Type A surface. In the case of Viewpoint No.18 it is a loose surfaced path to be replaced with a Type D concrete path. All of Views Nos. 15-18 are stated in the assessment provided at paragraph 9.6.4.1 to have a low magnitude of change. As per the descriptions of low magnitude of change provided at Table 9.5 of the revised EIS, such a low designation '*...includes viewpoints where the proposed development results in a low level of change in the view and its composition and a low degree of contrast. This includes viewpoints where the development is partially or barely visible over a small extent and includes viewpoints at a distance from the proposed development*'. The changes illustrated in these Viewpoints illustrate the replacement of an existing grassed riverside path with a Type A loose surface. The character of the section of the route where these viewpoints are located is natural and unspoilt in character with limited visibility into and out of the route and trees being a particularly important feature. The percentage of grassed surface is high and the limited views mean that the main visual features for a viewer are the trackway, the river and the immediate vegetation to the river. The introduction of a significant change to one of these three elements, such as would arise with the introduction of a Type A surface to an existing grassed section, would in my opinion clearly result in a magnitude of change that is greater than the Low level assigned in the assessment contained at 9.6.4.1 of the revised EIS.

Impacts of the Potential Alternative Type E surface on Views.

- 7.5.39. The use of the alternative Type E surface described previously in this section of the assessment would in my opinion have a potentially more significant impact on views and visual impact than the Type A loose bound surface originally proposed. In particular, it is my opinion that in the assessment of visual impact and impact on specific views, the Type E 'tar and chip' surface would be more out of keeping with the existing natural environment along the River Barrow section of the route and particularly the southern part of this River Barrow Section which is characterised by a natural unspoilt character and an absence of human intervention and man-made features. The nature and character of the bound surface would, in my opinion therefore result in an increased magnitude of change to the visual environment such that the overall negative visual impact would be further increased.

7.5.40. In ***conclusion, under the heading of Views***, it is my opinion that the analysis presented in the revised EIS is not particularly easy to follow and the identification of viewpoints used in the analysis is not very logical. In my opinion, the analysis contained in the revised EIS under represents the impact that would arise on views along the route, and particularly the impact on views in the southern section of the route along the River Barrow. This under representation derives particularly from what I consider to be an under representation of the magnitude of the change that are likely to arise on foot of the proposed Type A surface over the majority of the route. The alternative of using a Type E bound 'tar and chip' surface along the southern part of the route along the River Barrow would, in my opinion result in a further increase in the overall negative visual impact of the development due to a further increase in the magnitude of change relative to the existing environment.

Other Landscape and Visual Issues Arising

7.5.41. A number of the third party submissions received by the Board make reference to the fact that the proposed Type A (or alternative Type E) material would be contrary to the European Landscape Convention and Directive. It is contended that the loss of existing green infrastructure and its replacement with built infrastructure would be contrary to these EU policies. It is not however apparent to me that any replacement of existing soft landscaping is such that a breach of the convention could be reasonably deemed to have occurred.

7.5.42. Third party submissions also contend that no details regarding planting or landscaping are provided and that this issue is identified in the RPS report. The RPS reports on file do reference a lack of detail with regard to the re vegetation of the verge area to the path, however this is in the context of appropriate assessment and soil stability rather than landscape and visual impacts. It has been clarified during the course of the processing of the applications that it is proposed that the verge areas would be allowed to re vegetate naturally.

7.5.43. Regarding specific policies contained in the development plans, submissions make reference to specific landscape policies and objectives contained in the development plans which it is submitted are not complied with in the development. There are a number of policies contained in the three county plans that relate to the protection of the natural resource and visual quality of waterways, however they are generally in

the context of amenity or leisure developments. One submission does make specific reference to the development being contrary to sections 14.8.1 and 14.10 of the *Kildare County Development Plan, 2017-2023*. Section 14.8.1 relates to General Landscape and includes Policy LA2 which seeks to protect and enhance the county's landscape by ensuring the development where necessary enhances the appearance and character of the existing landscape. The landscape and visual impact of the proposed development on the sections of the route in County Kildare are not in my opinion such that they would be clearly contrary to this policy, and not when considered against the other beneficial impacts of the proposed development. Similarly, there are a number of policies contained in section 14.8.5 of the Plan and objectives contained in section 14.10 that seek to protect the visual amenity of waterbodies and canals in areas of high amenity, however I do not consider that the impact of the proposed development on the sections of the route in County Kildare is such as to be clearly contrary to these policies and objectives.

- 7.5.44. A number of submissions make reference to the potential for the use of a more natural looking finish. I note the fact that there are sections of the route where the towpath has been reinforced with gravel or stone and, over time, the section of the route in the centre has re vegetated with grass cover. The end result is two narrow strips of compacted stone finish with a large strip of grass down the middle. It could be argued that this is a more natural looking surface finish than what is proposed in the subject application. Such a finish does not, however, meet with any recognised construction standard in terms of surface or width and is not therefore in my opinion appropriate to meet the purpose of the proposed project. Similarly, the use of a plastic reinforced mesh surface that would allow grass to be retained, but with a more durable finish is referenced in the submitted EIS. Such a surface is discounted by the first party on the basis that it would not be easy to maintain and that experience in other locations indicates that grass does not establish across the whole route. No clear evidence has been presented by any party to the case indicating that such a reinforced surface is a viable alternative in locations such as the proposed Barrow blueway and particularly the sections of the route liable to flooding.

Landscape and Visual Impact Assessment - Conclusions

- 7.5.45. In conclusion, there are aspects of the methodology used in the landscape and visual impact assessment presented in the revised EIS that I find it difficult to follow and which do not in my opinion result in an accurate assessment of the likely impact of the proposed development on either landscape character or the visual impact of the development. On the landscape, the methodology does not in my opinion clearly distinguish between the various sections / parts of the route which are acknowledged in chapter 9 of the EIS to have differing characters. While LCAs are available for the individual county areas, there is no clear attempt to bring these together and develop a set of landscape sensitivities for the various sections of the route. Rather, the route seems to be treated in a uniform way and no clear sensitivity rating is presented. In the concluding paragraph 9.7.2.2.3 of the revised EIS, the overall study area is considered to be a high quality landscape and that the landscape is considered to have a distinctive character, however the overall effect on landscape character is concluded to range from imperceptible to slight negative. As set out above, my assessment of the overall impact of the construction phase of the proposed development on landscape character is that it would range from slight in the canal section of the route to moderate in the upper parts of the Barrow section and significant in the lower Barrow section between Goresbridge and St Mullins. With the alternative Type E bound surface material, the landscape impacts on the southern sections would in my opinion, increase to significant for the northern section and very significant for the southern section.
- 7.5.46. Under the heading of Views, it is my opinion that the analysis presented in the revised EIS under represents the impact that would arise on views along the route, and particularly the impact on views in the southern section of the route along the River Barrow. This under representation derives particularly from what I consider to be an under representation of the magnitude of the change that are likely to arise on foot of the proposed Type A surface over the majority of the route. The alternative of using a Type E bound 'tar and chip' surface along the southern part of the route along the River Barrow would, in my opinion, result in a further increase in the overall negative visual impact of the development due to a further increase in the magnitude of change relative to the existing environment.

7.6. Path Design, Safety and Traffic Issues

7.6.1. There are a number of issues which arise under the heading of path design, safety and traffic. In my opinion these are as follows:

- Strategic purpose of the route,
- Projected usage, path design and compliance with standards.
- Path and user safety and potential user conflicts,
- Car parking provision and access to route,
- Road safety issues relating to junctions along route

7.6.2. Strategic Purpose of the Route,

7.6.2.2 As set out in previous sections of this report, the NRA was the lead agency in a study of potential links in a National Cycle Network that would connect the main towns of greater than 10,000 population in the country. The resulting National Cycle Network Scoping Study was published in August 2010 and, as discussed at section 7.3 above under the heading of National Policy, the vast majority of the 116km Barrow Blueway route clearly does not form part of any national cycling network. The need for the proposed development does not therefore originate in a desire to serve a national cycle route purpose.

7.6.3. Projected Usage, Path Design and Compliance with Standards.

7.6.3.1 The design of the proposed path has been the subject of significant comment in the third party submissions received. Specifically, the width of 2.5 metres is contended by many parties to be too narrow and not to be in accordance with the design standards for rural cycleways. The appropriateness of the majority of the proposed route being in Type A unbound surface is questioned. Closely connected to path design is the issue of projected usage.

7.6.3.2 The *Classification and Grading of Recreational Trails* was published by the National Trails Office in 2008 and has been referenced by a number of parties to the appeal as being an appropriate standard for an upgrading of an existing route such as the Barrow Way. The document sets out a classification system and trail grading

(difficulty rating) for trails. Guidance is provided for different proposed users comprising walking trails, off road cycling and horse riding. What is proposed in the Barrow Blueway development is not however solely for one use category or a trail as envisaged in the Recreational Trails document.

7.6.3.3 The Blueway is proposed as a multi-use shared surface based on a slow tourism concept. The development of the route as a shared surface suitable for walkers and cyclists means that the applicable design standard is the Rural Cycleway Design (Offline) published by Transport Infrastructure Ireland (TII) in April 2017. This document specifically references the development of cycleways along canal towpaths and river banks at section 3.2.2 and section 4.1, relating to cross section width, recognises that generally cycleways will also provide for pedestrians as well as cyclists. The required cross section width as per the TII guidance is set out at Table 4.1 of the guidance document. This table indicates that the desirable minimum width for *‘the provision of a reasonable quality of service and that would satisfy the core design principles’*. One and two step below desirable minimum standards are also indicated in Table 4.1 and the Table is as follows:

		Desirable Minimum (m)	One Step Below Min. (m)	Two Steps Below Min. (m)
Cycleways	Low Volume (<1,500)	3.0	2.0	1.75
	High Volume (>1,500)	5.0	3.0	2.5

7.6.3.4 The differentiation between low and high volume is that the low volume are those facilities that are considered to attract less than 1,500 users per day with high volume standards applying to greater than 1,500 per day. It is also stated in section 4.1 of the Guidelines that on shared facilities that cater for high pedestrian and cycle flows, the segregation of the pedestrian and cycleway is preferred.

Body Responsible for Application of Standard

7.6.3.5 With regard to the application of the standards set out within the TII guidance, there is disagreement between the parties to the appeal as to from whom, if anyone, consent for departures or relaxations from standards should be obtained. This is relevant as is acknowledged by the first party that the design of the proposed development does not meet with all of the requirements of the guidance. Specifically, the 2.5 metre design width is one step below standard and the case made by the appellants is that the departures from standard proposed have not been sanctioned by either TII or the relevant Roads Authority. The need to obtain such approval for departures or relaxations from standards is refuted by the first party on the basis that, with the exception of very limited sections, the proposed development is not located on the public road and do not therefore come within the remit of either the relevant Roads Authority or TII. Rather, it is stated that the applicants, as the owners of the lands along the route can use the TII document as a guidance for design purposes and can interpret it as they see fit without the need to go through the normal process of approval. The first party have submitted a letter from the head of research and standards in TII which clarifies that the TII guidance documents are written specifically for use on national road schemes and that the system of relaxations and departures from standards applies only to national road schemes. The TII correspondence further states that in the case of cycle trails and shared use trails on canal towpaths and river banks such as those under the control of Waterways Ireland, application of the standard requires the approval of Waterways Ireland and that as such there is no mechanism for waterways Ireland to apply for a departure from standard through TII. The correspondence from TII is contained as Appendix A to the Preliminary Design Report submitted at Appendix 3.3 of the revised EIS submitted as part of the response to further information. On the basis of the information submitted I am satisfied that there is no external oversight of the implementation of the TII standards and that it is open to the first party and the Board to interpret them as considered appropriate.

User Number Figures

7.6.3.6 The proposed development has been designed on the basis of being a low volume route (less than 1,500 users per day) and the issue of the anticipated volume of users was the subject of clarification by way of further information with the results presented at Appendices 3.4 and 3.5 of the revised EIS. Initial estimates of likely

users of the blueway route, as set out in the initial application documentation, were based on comparison with the Great Western Greenway (GWG) route and the results of a study done by Fitzpatrick Associates on behalf of Failte Ireland in 2011. Given the similar length of the GWG to the northern and southern sections of the Barrow Blueway, known use figures for the GWG were extrapolated to reflect the relative population levels in the catchment of the Barrow blueway route. On the basis of trip levels of c.144,000 on the GWG equating to c.80,000 visitors, it was estimated that total visitors to the northern section (Kildare and Laois) would be c.58,500 per annum and to the southern section (County Carlow and Kilkenny) would be c.76,000 per annum. These figures equate to an average of 160 and 208 no. visitors per day respectively. On these sections of the route, there are however in my opinion a significant number of questions regarding these estimates as they are not based on any survey data from the existing Blueway route and also refer to visitor numbers rather than trips along the route. It is likely that the number of trips would be significantly higher than the number of visitors given that a large percentage of visitors would undertake a return or round journey along the route. Having regard to these concerns, further clarification regarding existing and likely future trips on the route was the subject of a request for further information with the results presented at Appendix 3.5 of the revised EIS.

7.6.3.7 As part of the response to further information a total of 23 no. automated counters were installed along the existing Barrow line route and covering the full length of the route from Robertstown to St Mullins. The automated count data was verified by the use of manual counts in July and August, 2017. Existing average daily usage figures were calculated using a 9 day period in July / August 2017 with the number of average daily users varying between 9 at Vicarstown to a high of 245 at St Mullins. Projected usage was calculated using a number of methods including a 10 year estimate for walking / cycling and hiking activity based on Failte Ireland surveys of such activities between 2012 and 2016, and also using observed increases in usage at other Waterways Ireland sites including the GWG. Using these methods, the estimated usage of the Barrow Blueway in 2026 at the highest volume location (St. Mullins) would increase from the current 245 to between 686 and 931 average daily users. As noted by the first party, the average number of daily users is therefore projected to be significantly below the 1,500 threshold for low and high volume

cycleways. I would however highlight a number of issues of relevance to this observation.

7.6.3.8 Firstly, the projection is based on the busiest recorded section of the existing Barrow line. As can be seen from the survey figures at Tables 4.2 and 5.1 of Appendix 3.5 of the revised EIS, the existing levels of usage vary significantly with the southern sections around Graiguenamanagh and St Mullins showing levels of usage that are several multiples of locations further north in Kildare and Laois. The predicted levels of usage therefore relate to the currently most utilised and popular section of the Barrow line with these likely to remain the most popular, and other sections showing significantly lower usage levels. Against this however, there are a number of issues that could indicate that the usage projections for the busiest sections of the route are an underestimate.

7.6.3.10 It should be noted that the recorded existing usage figures as recorded using the 23 no. automated counters are an average over a nine day period. It is not clear therefore what the maximum daily usage levels are, despite the fact that it is the maximum usage figures that are critical in terms of the design. It may well be that the projected maximum of 931 average users, as per the information submitted with the further information response, would be significantly exceeded in peak periods. In addition, it is worth noting that the methods used for extrapolating the existing usage figures are based on tourism growth projections for the walking / cycling market or increases in usage on the existing greenways. Neither of these methods would however appear to account for an increase in usage that would be generated by the development itself, that is the creation of the new track surface which it would seem likely would lead to a significant increase in usage by cyclists. Overall therefore, while it would appear likely that large sections of the route would continue to exhibit usage that would be classified as low volume for the purposes of the TII guidance, it is not clear to me that the already more popular sections of the Barrow trail at the southern end would remain within the 1,500 trips per day threshold at peak periods post development.

7.6.3.11 The proposed 2.5 metre overall path width represents a width that is midpoint between the desirable minimum standard and one step below desirable minimum as

per Table 4.1 of the TII Guidance. It should be noted that due to the fact that the development is not on a public road or national route no consent from the Roads Authority or TII is required for a relaxation or departure from standard, and therefore no assessment of the proposed 2.5 metre width has been undertaken by TII. It should be noted that the reduction in the width to 2.5 metres as proposed is a relaxation of the relevant TII standard but not a departure from standard. For the bulk of the route, and for the busier sections of the route for the vast majority of the time, this width is in my opinion likely to be satisfactory and in accordance with the TII standard. In making this assessment I also note the fact that the revised design submitted as part of the response to further information issued by the Planning Authorities introduces a number of passing points to be located at points along the route. The location of these passing points are set out in Table 5 of the Preliminary Design Report submitted as part of the further information response and focussed on the locations where the trail narrows on the approaches to locks and bridges. The concept of the blueway development being a '*slow tourism*' concept is also noted in terms of the applicability of a relaxation in the normal standard. Were the route to be designed with a greater focus on sports or utility cycling then it is my opinion that the proposed relaxation may not be acceptable. The proposed surface is also in my opinion a factor in the appropriateness of a relaxation in the width standard. The proposed use of an unbound surface over c.83 percent of the overall route would have the effect of reducing cycle speeds relative to what would be expected on a bound surface. In addition, the vertical alignment of the route with a generally very flat topography between locks means that there are not significant gradients where bicycles could build up significant speed. Issues regarding speed and gradients at locks and river crossings are considered in the sections below, and the gradients and proposed safety measures proposed for these locations will force cyclists to dismount which will further reduce the potential for excessive cycle speeds and make the proposed one step relaxation in the standard 3.0 metre width acceptable over the majority of the route.

7.6.3.12 With regard to the busier southern sections of the route, namely from Goresbridge south and particularly between Graiguenamanagh and St Mullins, as set out in the paragraphs above, I would have some concerns that the 1,500 users a day threshold

specified in the TII Guidance separating low and high volume could be exceeded at peak periods. As set out in section 7.5 above relating to landscape impacts, these sections of the route have a wildness and natural quality which is of significant landscape sensitivity. The nature of these sections of the route are such that there are already significant numbers of walkers and there is potential for a loss of user amenity and erosion of user experience to occur.

7.6.3.13 Another factor of note with regard to the acceptability of the proposed general 2.5 metre path width is the extent to which the provision of this width is feasible along the route. As noted in paragraphs 7.4.12 - 7.4.17 of this report above, a number of third party submissions have questioned the ability to accommodate a 2.5 metre path plus verges along significant sections of the proposed route, and I consider that the level of information provided with regard to restricted path and verge widths along the route is limited and such that it is difficult to get a good impression of the extent of such impacts on the route. As set out in 7.4, based on the third party submissions and my observations, the restricted in width are particularly notable on the River Barrow section of the route, where it does not appear feasible to accommodate a path of the normal design width of 2.5 metres over significant sections. In addition to the general comments contained in the Designers Safety Audit of the route contained in the Preliminary Design Report, it would have been useful to the overall assessment of the adequacy of the route to accommodate the potential volume of users for more detailed information to be presented by the first party.

7.6.4. Path and User Safety and Potential User Conflicts,

7.6.4.1 Closely related to the issue of path design and width are considerations of path and user safety and potential user conflicts. Concerns regarding the impact of the project on the safety of users were raised by a significant number of third party submissions received. There are, in my opinion, a number of aspects to consider of these issues. Firstly, there is the impact on safety of the use of the path on the sections where the design width of 2.5 metres is available. Secondly, there are safety considerations on the sections where the width is required to be reduced along the pathway between road crossings and other restrictions and thirdly

there are issues arising where there is restricted width at locks. Issues relating to safety at points where the path crosses public roads are addressed at 7.6.6 below.

7.6.4.3 As discussed at 7.6.3 of this report above, there appear to be significant extents of the proposed route between locks and road crossings where the design width of 2.5 metre pathway is not achievable. Notwithstanding the information submitted as part of the Designers Safety Audit of the Route as part of the Preliminary Design Report, the detail submitted regarding the extent of such sections is not such as to enable an accurate assessment of the extent of such sections. On the bulk of the route where projected usage levels are low, and significantly below the 1,500 users per day threshold, the restriction of path width to 2.0 metres, which would represent a two step relaxation within the standard rather than departure from standard, when taken with the slow tourism concept of the route and the proposed Type A surface would, in my opinion, likely not result in significant impacts on the safety of the route. A restriction in width on other busier sections may, however, result in safety issues arising, and I particularly note the potential for congestion and resulting safety issues to arise at the southern end of the route. Again, the extent of such sections of restricted width is not well detailed in the information submitted with the application. As an example of potential areas of restricted width and resulting safety issues in the busier southern part of the route, I note the section of the route between Ballykeenan and Graiguenamanagh, (referenced at 7.4.15 of this report above,) where the information provided by third party submissions and my own observations indicate that a path width of 2.5 metres plus verges as proposed is not achievable over the bulk of this c.3km long section. The designers Safety Audit for this location contained at Table 5 of the Preliminary Design Report states that '*No issues identified – existing grass surface*' and mitigation is described as '*Provision of a 2.5 metre wide unbound surface (well compacted)*', (see pg.50 of Preliminary Design Report and also see photographs along this section of the route contain on Drgs. T01/EBN/AA309/P/C42 and C43). It is also noted that the safety audit contained at Table 5 of the Preliminary Design Report is stated at page 7 of the report to be a '*desk top audit*'. The uncertainties with regard to the path width that can be accommodated in locations such as this together with the uncertainties with regard to future usage, are such that in my opinion, on the basis of the information currently

available, it is difficult to state definitively that the proposed development would not result in potential user conflicts and safety issues.

7.6.4.4 The other area where potential user conflicts arise is in the vicinity of locks and other features where there are restrictions on path width and there are steep slopes that create the potential for increased cyclist speeds and conflicts with pedestrians and other cyclists. The risk presented by steep slopes was identified as an issue in the request for further information issued by the Planning Authorities and is particularly an issue at a number of bridge crossings in Counties Kildare and Laois where there are very steep gradients in the vicinity of bridges over the canal. The response of the first party is set out in Section 6 of the Preliminary Design Report at Section 6, Pages 9-11. A number of design measures are proposed to address issues arising at these locations and the measures proposed include the following:

- Use of a bound surface on the trail approaches for a distance of approximately 15 metres either side of the crossing point,
- Re graded approaches to crossing points to ensure that there is a maximum gradient of 10 percent. It is noted that a majority of the steeper existing up and over crossings have the option of an alternative route via the relatively level bridge underpasses.
- The provision of safety guard / railings / barriers and fencing as required.
- The provision of locked speed reducing chicane barriers to be provided where possible. Details of the proposed barriers are given in the revised drawings submitted as part of the responses to the further information requests.
- Section 4.0 of the Design report also states that safety barriers / railings will be provided at locations where there is a ramped approach to up and over road crossings where there is a risk of falling on a steep incline or bank.

7.6.4.5 The request for further information issued by the three Planning Authorities also requested further details in relation to the location of the path relative to the canal / river edge and to the backdrain. The issues raised previously in this report relating to the accommodation of the standard path width of 2.5 metres are relevant in this regard and it is not clear from the information initially submitted how the proposed verge areas would be accommodated along the route in locations where the width is

restricted, including at pinch points arising at locks and road crossing points. As part of the request for further information, the first party was requested by the local authorities to undertake the following:

- An audit of the route to be undertaken to identify sections requiring safety railings to protect against the risk of users entering the water,
- A design strategy for the provision of railings or other proposed barriers to mitigate the risk of proximity to water,
- Revise drawings to reflect the proposed changes.

In response, the first party has indicated in Table 5 of the Preliminary Design Report, the locations along the route where additional edge protection is proposed. The assessment is therefore a 'desk top audit' as stated at Page 7 of the Design Report and accordingly must be considered to be open to some level of inaccuracy.

Paragraph 4.2 of the TII Guidance document on Rural Cycleway Design states that the desirable minimum verge is such that the lateral clearance to a vertical feature such as a wall or fence is 1.0 metres, with a one step down standard of 0.5 metre and a two step down standard of 0.25 metre. Section 4.0 of the submitted Design Report states that generally the verge widths along the scheme between the path and the river / canal and backdrain are not less than 1.0 metre. The standard applied to the design approach is that safety / guard railings or barriers or barriers will be provided at:

- All narrow approaches to existing bridges and underpasses,
- Areas where the verge will be less than 0.25 metres,
- Ramped access to / from existing roads or car parks to the route, and
- Ramped approaches to up and over road crossings where there is a risk of falling on a steep incline.

7.6.4.6 The measures set out at section 6.0 of the Design Report are in my opinion generally acceptable in meeting the risks associated with steep slopes in the vicinity of locks

and bridge crossings on the Barrow pathway. I note however that while the locations of proposed works are indicated on the submitted drawings, the extent of such works required is not indicated making it difficult to assess other impacts that might arise in reducing the slope.

7.6.4.7 With regard to the proposals for the siting of barriers and other forms of protection on slopes and where there is limited separation to watercourses and other hazard, some detail is provided in Table 5 of the Preliminary Design Report. The detail provided is however based on a desk top audit, and it is stated that Waterways Ireland will conduct a full independent safety audit of the entire route at detailed design stage in order to confirm the locations where such barriers and edge protection will be provided. There therefore remains a degree of uncertainty with regard to the extent of such barriers / edge protection in the vicinity of locks and bridges. In general, however, I consider that the proposals presented are acceptable in terms of safety.

7.6.4.8 The proposed use of edge protection in circumstances where a minimum clearance of 0.25 metres from the path cannot be achieved raises the issue as to the potential treatment of sections of the route away from locks and bridges or other significant obstructions where there is significant uncertainty with regard to the ability to accommodate the proposed 2.5 metre design width. In such locations it may be proposed at detailed design stage that the path width would be maximised by reducing the verge to the minimum of 0.25 metre resulting in significant sections of railing or barrier. Such an approach would clearly have potentially significant implications for the landscape and visual amenity impacts of the project as well as ecology arising from the erection of railings / barriers so close to the watercourse.

Other Third Party Issues

7.6.4.9 One issue related to safety raised by third party appellants is that the proposed project would facilitate access by bicycles and a change in the split of users of the trail from the current dominance by walkers to a greater percentage of cyclists. It is contended that such a change will introduce the potential for additional conflicts between walkers and cyclists. I would accept that the nature of the proposed development is such that, in addition to an increase in the overall number of users it will likely result in a shift in favour of cyclists over walkers in percentage terms. I

would not, however agree that this shift in the relative percentage of users would in itself result in an increased risk of accidents or potential conflict between users and specifically note the fact that the TII Rural Cycleway standard to which the project is designed is for shared pedestrian and cycle routes. As set out in the sections above, in general I consider that the proposed project is consistent with the standards set out in the TII Guidance and that significant conflicts between walkers and cyclists should not arise. In stating this, I would retain some concerns that the uncertainty with regard to likely user numbers and the ability to accommodate the 2.5 metre design path with would lead to congestion on the most heavily used sections at the southern end of the route during peak periods leading to potential negative impacts on user safety.

7.6.4.10 On the issue of user safety and adequacy of the proposed path width, the submission from Save the Barrow Line makes specific reference to the comments of Mr Gerry Dornan, an Engineer employed by Kildare County Council who has reported that the proposed development will facilitate speed and lead to conflicts between users. It is also contended that the proposals comprise a sub-standard and low quality facility for cyclists, would not promote mass cycling or attract international tourists and would create conflicts with pedestrians as a result of inadequate space for cyclists. I note, however, that the report of Mr Dornan was prepared in relation to the Feasibility and Technical Specification Report on the River Barrow Cycling Trail, prepared by Kieran Boyle on behalf of Carlow County Council. It does not therefore relate to the project as currently before the Board. The view expressed in this report regarding the role of the route in terms of catering for mass cycling and fulfilling a role as part of a national cycling network has been discussed previously in section 7.4 of this report under the heading of Need, Form of Development Proposed and Alternatives. As concluded in this section, the River Barrow route is not identified as part of any national cycle network and the project is based on a slow tourism concept reflective of the character of the route and restrictions in terms of width. For these reasons and having regard to the assessment above regarding compatibility with the TII Rural Cycleway Design Standard, I do not consider that the case against development made in the report of Mr Dorgan is clearly applicable to the project as proposed.

Safety Implications of Alternative Type E Bound Surface

7.6.4.11 As part of the first party appeal submission it is proposed that should the Board be of the opinion that the proposed Type A surface would have a potentially negative effect on the integrity of the SAC then the Board is invited to consider an option of an bound tar and chip (Type E) finish. Details of this are provided with the appeal and the environmental impact of this proposed alternative design addressed at section 4 of the appeal under the headings contained in the EIS. The proposed use of a bound surface would, in my opinion have a potential impact on user conflicts and safety in that the bound surface would likely facilitate higher speeds for cyclists resulting in a greater risk of conflicts with walkers. I have reviewed the content of the first party appeal, including specifically under the headings of Human Beings, Population and Human Health (4.3 of first party appeal) and Traffic and Transport (4.10 of first party appeal) and there is no clear acknowledgement or discussion of the of this issue. I note for example that the TII Rural Cycleway Design Guidance gives minimum horizontal radius dimensions based on different design speeds. In my opinion, the use of a bound surface would appear likely to result in some increase in design speed that would have implications for route design including path width and for the potential generation of conflicts with walkers and associated safety issues. In the absence of some detailed consideration of the safety implications of the use of the bound surface, it is not in my opinion appropriate that the proposed Type E surface would be considered.

7.6.5. Car Parking Provision and Access to Route,

7.6.5.1 The availability of car parking to serve the proposed project was an issue that was raised by a number of third parties to the appeal and was the subject of the request for further information issued by the Planning Authority. The proposed treatment of the existing car parks (11 no.) is for them to be resurfaced and lined, and it is contended by the first party that this would result in a significant increase in capacity. Two additional car park are also proposed, both located in County Kildare, one at Rathangan and a second close to the M7 underpass near Monasterevin. The revised EIS submitted by the first party also sets out at 3.2.12 how the utilisation of existing parking within towns and villages along the route is considered important

and central to the concept of the Blueway as it would help local employment and support local enterprise and employment in the local economy.

- 7.6.5.2 The further information requests issued included a quantitative assessment of future parking needs, proposals as to how parking provision could be increased in future to meet any increased demand, the identification of potential future parking sites and proposals for the provision of waste facilities at the end of the trail.
- 7.6.5.3 As part of the development the car parking areas were proposed to be provided with cycle racks, seats / picnic areas and information signage. Details of these features are provided on the submitted drawings and are considered to be acceptable. In terms of quantum of parking spaces, the level of underutilised on street parking in towns and villages, in the existing dedicated parking areas and the additional parking that could be provided in the existing parking areas is not detailed in the response to further information submitted. The first party state that it is difficult to undertake a quantitative assessment of the future parking needs of the project, however the further information responses do indicate the parking facilities in each county that could be available to users of the project. As highlighted in the report of Ms Veronica Lyons on file relating to transportation issues, there are a number of additional parking areas that would be available to users of the proposed project. These include on street parking facilities in the town square and Main Street of Rathangan and Monasterevin as well as the potential for the provision of additional parking spaces in Vicarstown.
- 7.6.5.4 In principal, I accept the case made by the first party that it is not appropriate that significant additional dedicated car parking would be provided and that to do so would create other issues related to significant underuse of such facilities other than at peak periods. I also note and agree with the points raised by the first party regarding the promotion of use of parking capacity within existing towns and villages and the importance of attracting visitors to the Blueway into these centres to provide an economic benefit to the local area. I note the concerns of the third parties with regard to the lack of a quantitative assessment and some additional detail regarding existing surplus capacity could perhaps have been provided as part of the first party response to further information. On balance however, it is my opinion that the first party has demonstrated that there is significant underutilised parking capacity along the route and that it is appropriate that efforts are made to utilise this capacity before

additional dedicated car parking is provided. The works to the existing car parking areas and provision of the two additional car parks are noted, and it is my opinion that the improved facilities proposed in these locations are a significant improvement on the existing situation and would add significantly to the amenity of the blueway route.

7.6.5.5 In response to the issues raised regarding the lack of car parking provision in the future, the first party have committed to monitoring the usage of the development and to work with the relevant local authorities to ensure that the level of car parking meets future needs. While not a definitive response to the issue of future parking provision, it is my opinion that this approach is appropriate for the reasons set out above relating to usage of existing underutilised parking, the encouragement of visitors to visit the towns and villages along the route and generate the maximum economic benefit for these centres and the avoidance of underutilised new parking areas. In the event of a grant(s) of permission by the Board it is therefore recommended that a condition would be attached requiring firstly the submission of proposals for the monitoring of the usage of the existing parking facilities along the route for agreement and secondly, the submission of an annual report detailing usage of parking areas, instances of nuisance parking arising, measures to prevent such nuisance parking and the identification of locations requiring additional parking.

7.6.5.6 A specific issue relating to car parking raised in the third party submissions relates to the proposed location of the parking area and signage to be located close to the M7 underpass and the use of an existing public road L39321 between CH26400 and CH27600 in the townlands of Ballintogher and Killaglish. The third party contend that the proposals for a parking area in this location is problematic as it will conflict with the operation of a large farm business in this area that uses large farm machinery, the access to which is at the end of a long, c.2km cul de sac public road and would generate anti-social activity. It is proposed by the third party that the blueway must be relocated to the north bank of the river between Woodenbridge to Fisherstown Bridge. This issue is not specifically addressed in the Notification of Decision issued by Laois County Council. Condition No.14 attached to this Notification of Decision requires that the developer would submit details of all uncontrolled crossing points of the public road and works along the public road that are part of the proposed blueway. Uncontrolled crossing points are identified as

Fisherstown Bridge and Vicarstown Bridge and works along the public road are identified at the L39321 between Ch26,425 and CH27,550 and on the approaches to Fisherstown Bridge and Vicarstown Bridge.

- 7.6.5.7 The issues arising in the vicinity of the L39321 and O'Connell's Farm were the subject of a specific request for further information issued by Laois County Council (Item 2.1 under the heading of Road Design). In response to the request for further information and the concerns raised by P O'Connell Farms, the first party has undertaken a number of revisions to the proposed design as it impacts on the L39321. Firstly, the proposed parking area at the northern end of this section is proposed to be removed with an alternative parking location now indicated at the southern end of this section of local road and immediately to the north of the M7 overpass. Secondly, the blueway route is no longer proposed to be on the local road. Instead, it is now proposed that a 2.5 metre wide path would be provided to the east of the road between the road and the canal. This path would be located in the existing grassed verge in this location and, where the width of the verge is restricted, the path would immediately adjoining the local road. The path would partially use the ramps of the existing accommodation trail at this location and this 2.5 metre width continues south along the L39321 and beyond the entrance to the O'Connell Farm lands. The revised arrangement is illustrated in Drg. Nos. T01/EBN/AA309/P/L22.1-22.4 and L23 submitted as part of the response to further information.
- 7.6.5.8 The proposed alternative layout provides for the L39321 to remain unobstructed for the passage of farm machinery and equipment. I recognise that this local road is narrow and photographs included with the O'Connell Farms submission indicate some very large machinery being driven along this section of the road. The proposed layout would however, result in the blueway being completely off the local road and such that it minimises the potential for conflicts with agricultural traffic. The alternative re-routing of the blueway as suggested by the third party would result in two additional canal crossing points and is not in my opinion a preferable solution. The relocation of the car parking area will potentially lead to the reduction in potential conflicts with agricultural traffic, however there may be implications for access to agricultural lands arising from the proposed location. There are however alternative locations along this section of local road where parking could be provided. In the

event of a grant of permission, it is recommended that the detailed layout of all uncontrolled crossing points of the public road as requested by the roads section of the council would be required. This would cover Fisherstown Bridge and Vicarstown Bridge. In addition, it is recommended that details of all works proposed along the L39321 detailing the use of the existing wooden bridge, as well as the proposed parking area would be submitted for the agreement of the local authority.

7.6.6. Road Safety Issues Relating to Junctions and Other Locations Along Route *Kildare County Council Application*

7.6.6.1 The request for further information identified a number of issues at specific locations within County Kildare. The nature of the route within County Kildare is such that the blueway has significantly more road crossing points than is the case in other counties with a total of 31 no. specific road crossing points are detailed in the application drawings submitted. As noted in the report of Ms Ronnie Lyons on the further information response submission, dated 19th February, 2018, a number of general design and safety issues were raised. These issues relate to the impact of the project on the public road and are separate to the general safety issues relating to the blueway route itself as identified and discussed at 7.6.4 of this report above. The general design and safety issues raised in the further information request included the following:

- Further consideration of the design of road crossings,
- Safety and traffic calming measures to be implemented at road crossing points,
- Consideration of the signalisation of two crossing points, these being at Herberton Bridge and Spencer Bridge,
- The provision of shuttle signals at Railway Bridge Monasterevin and a signalised crossing at Clogheen Bridge Monasterevin,
- Consideration of revisions to the route in Rathangan between the two railway bridges with the route running to the north of the canal rather than the south,

The revisions proposed on foot of the request for further information have been implemented in full and have been the subject of a Stage 1 Road Safety Audit. The revised layout at the above locations are detailed in the revised drawings submitted as part of the response to further information. These details are considered satisfactory from a roads and traffic safety perspective by the Transportation section of the council and by the council's area engineer and I also consider that the proposals at the identified locations are acceptable in principle. In the event of a grant of permission it is recommended that the detailed design of the relevant road crossings would be submitted for the written agreement of the Planning Authority and that the finalised designs would be the subject of a Stage 2 Road Safety Audit and a Stage 3 audit post construction.

Works at Harbour Road Monasterevin

As part of the proposed development the route passes along a section of local road close to the harbour in Monasterevin. This section measures c.1km running between Shephard's Bridge and the junction with the R424 and is illustrated on Drgs. T01/EBN/AA309//P/K25 and K26. In this section of the route, it is also proposed that c.550 metres of new footpath would be provided. As noted in the report on file from Ms Ronnie Lyons dated 19th February, 2018, this section of road is in a poor condition with poor surface quality and no or sub standard footpaths. Reference is made in the Lyons report to potential developments along this section of the route which would result in improvements to the public realm however there is no certainty regarding the delivery of same. It is suggested that a scheme be developed by the council for this section of road and that financial contributions towards the cost of implementation be sought from the relevant developers and Waterways Ireland. No cost or apportionment of cost is however identified in the reports on file from Kildare County Council and I do not therefore consider it appropriate that any special contribution would be sought from the first party for works in this area.

Clogheen Bridge in Monasterevin

The project includes a road crossing at Clogheen Bridge on the R445. This location is shown on Road Crossing Detail 19 of 31 indicated on Drg.

No.T01/EBN/AA309/P/K57 submitted as part of the further information response. I note the concerns expressed in the report of Ms. Ronnie Lyons regarding the fact that the speed limit of 50km/hr at this location was very significantly exceeded in the results of the speed survey undertaken. A number of works are proposed at this location including a new toucan crossing, build out of the existing footpaths and anti-skid road surfacing, and these works are considered appropriate. The report of Ms Ronnie Lyons identifies the potential for additional traffic calming measures on the R445 on the approach to Monasterevin and how there could be potential for the provision of a cycle lanes between this crossing point and the town centre that would serve a dual purpose of narrowing the road and providing a connection between the proposed blueway and the town centre. While not a part of the current plans, this would appear to be a sensible proposal that would improve both safety and connectivity to the town centre.

Laois County Council Application

7.6.6.2 A number of specific issues relating to road crossings and the public roads in County Laois were raised in the further information request issued by Laois County Council. These included the following:

- The location of the parking bay and the proposal for shared use of the existing public road at L39321 between approximately chainage 26,400 and 27,600 in the townlands of Ballintogher and Killaglish. The merits of the revised layout proposed for this section has been discussed at 7.6.5 of this report above.
- The undertaking of speed surveys at Vicarstown, Fisherstown and Courttown bridges. The results of the speed survey for these locations are presented in Appendix B of the Preliminary Design Report. The Stage 1 Road Safety Audit contained at Appendix C of the same report does not identify any significant issues arising at these locations. In the case of Vicarstown and Fisherstown the Stage 1 RSA states that ‘no location specific safety issues were identified at this location’. In the case of Courtwood Bridge, changes to the location of the crossing ahead warning signage are proposed. It is also noted that at these locations an alternative route under the bridge is indicated on the submitted drawings. I note that these underpasses are only c.1.5 metres in

width and would result in a potential pinch point at these locations. The decision issued by Laois County Council to grant permission on the northern section of the route within County Laois includes Condition No.12 which requires that the public road crossing at Courtwood Bridge would be omitted with the route passing underneath. Given the restriction on the width of the underpass and the lack of any issues identified in the Stage 1 road safety audit submitted it is in my opinion preferable that in the event of a grant of permission, the on road works proposed at the three bridges (Courtwood, Vicarstown and Fisherstown) would be undertaken. In the event that the Stage 2 audit considers that these road crossings are not safe then they could be omitted with the alternative route under the bridges available.

Carlow County Council Application

7.6.6.3 The following design and road safety issues relating to the route within County Carlow were identified in the request for further information issued:

- Examination of the potential for the provision of a ramped access from the canal bank to the N80 in Carlow Town,
- Further consideration of the design at Wellington Road Bridge in Carlow Town and the route along Castlevue Quay to the south of the bridge on the western side,
- The potential for the widening of the route at CH 81875 to CH 82,000 (Dunleckny on the northern approaches to Bagenalstown), and revised proposals for the road in Dunleckny / Moneybeg / Bagenalstown.
- Potential for a ramped connection from the Blueway to the R724 at Royal Oak Bridge.

7.6.6.4 The response provided to these specific requests is deemed to be acceptable by both the report of Ms Ronnie Lyons and by the Transportation section of the council. The proposals for bridge connections to the route at the N80 in Carlow Town and at

the R724 were the subject of investigations by the first party, however there is insufficient space currently available to undertake this work. These constraints are noted and I would agree with the report of Ms Ronnie Lyons that these connections would be desirable in the future were it possible to assemble the lands required.

7.6.6.5 In the case of Bagenalstown, the bulk of the suggested revisions are now incorporated into the final design as indicated in the revised drawings. The section between CH 81,875 and CH 82,000 has not been altered as it is stated that to do so would have required works outside of the original design envelope and the preparation of new habitat surveys that could not be completed within the timescale available. As per Drg. T01/EBN/AA309/P/C24, is now proposed that a c.125 metre long section at this location would be the subject of cyclist dismount signage. This does not appear to be an ideal solution particularly in a urban part of the route, however there is no clear alternative presented in the application documentation.

7.6.6.6 The works at Wellington Road Bridge in Carlow Town and the route along Castlevew Quay are detailed on Drg. T01/EBN/AA309/P/C50 and include an advisory cycle path on the section of the route to the south of the bridge. A new toucan crossing is proposed on the western side of the bridge and warning signage provision on the bridge and on Marlborough Street to the north. These proposals are considered to be acceptable.

7.6.7. **Other Traffic Related Issues**

7.6.7.1 Further details regarding construction access and construction related traffic were requested as part of the further information requests issued. This included additional details regarding the location and design of **construction compounds**. The revised EIS lists the locations of the proposed 23 no. construction compounds and the drawing numbers where these compounds are located is cited in the summary of the response to further information document submitted. The location of the temporary construction compounds are identified at 3.2.11 of the revised EIS. It is stated that the temporary construction compounds will consist of a towable site hut, portaloo and space for the storage of 4-6 lorry loads of construction material. A number of the identified site compounds are stated to be larger and to have capacity to accommodate site offices and additional construction materials (10 load capacity)

and parking for up to 4 no. cars. These locations include Lowtown, Vicarstown, Maganey, Fenniscourt and Graiguenamanagh.

7.6.7.2 Construction access to the compounds and the work areas is discussed in section 3.4.2 of the revised EIS, and details of the construction and environmental management of the compounds is detailed in the outline construction and environmental management plan submitted as part of the response to further information. Section 3.4.2 states that access to all construction compounds shall be via the existing national, regional and local road network. Section 3.4.2 identifies the specific roads that will be used to access the construction compounds and it is stated that a Traffic Management Plan will be prepared by the contractor for each location for site access. A '*Temporary Traffic Management Plan Design*' is proposed to be prepared by the first party to inform the appointed contractor(s). Section 11.1.8.4 of the revised EIS estimates that the construction traffic volumes will be low, with HGV traffic per day ranging between 0.5 and 5.2 average per day (see Table 11.1 of revised EIS) plus 4-5 employee trips per works location. Notwithstanding this, in the event of a grant of permission it is recommended that pre and post construction road condition surveys would be required with a requirement that any cost of repairs or reinstatement would be borne by the developer. Overall the proposals with regard to construction access to the route of the proposed development are considered to be acceptable from the traffic perspective.

7.6.7.3 The issue of the cost of future maintenance of the blueway route has been discussed above under the heading of 'Need, Form of Development Proposed and Alternatives'. Maintenance of the public road where it would potentially be impacted by the blueway project is a potential issue and, in addition to the issues referenced above relating to construction phase impacts there are issues arising regarding the maintenance of the works proposed to be undertaken to public roads at crossing points over the Blueway route. These features requiring maintenance would include anti-skid surfacing, signage and road markings. The further information response submitted by the first party does not commit to payment towards the cost of these features and states that it is envisaged that the sections of the route on the public road would be taken in charge. In the event of a grant of permission it is recommended that a condition requiring the submission of proposals for the ongoing maintenance of these features would be submitted for the agreement of the relevant

local authorities, that a consistent approach would be taken to the proposal put to each local authority and that in the event of a lack of agreement that the issue would be referred to the Board for a decision.

- 7.6.7.4 There are a number of other design, safety and traffic issues raised in third party submissions that have been addressed in previous sections of this report. These include the type of cyclist for which the route has been designed, that the design of the scheme is such that it will attract only a segment of cyclists (in this case recreational) will result in others remaining on the public roads and vulnerable to accidents, the impact of the surface choice on the attractiveness of the route for cycling, the lifetime cost of the proposed surface choice and that the approach of Waterways Ireland is to discourage the utility cyclist and the general attitude to cycling on existing routes is unsympathetic. On these issues, I refer to discussion at 7.4 of this report above relating to the form of development and alternatives.

7.7. General Ecology

- 7.7.1. Issues relating to Biodiversity, Flora and Fauna are addressed at Chapter 5 and Appendices 5.1 (Ecological Survey Reports), 5.2 (Habitat Mapping) and 5.3 (Outline Invasive Species Management Plan) of the revised EIS submitted by the first party. The northern section of the proposed project is located within the Grand Canal pNHA and the southern section, to the south of Lock 28, is located within the River Barrow and River Nore SAC. Section 7.9 of this report assess the potential impact of the project on the identified conservation objectives for the River Barrow and River Nore SAC site. This section of the report relates to general ecology, covering the canal section of the route and the species and habitats located on the section of the route to the south of Lock 28 which are not identified as qualifying interests of the SAC. In addition to the Grand Canal pNHA, there are a number of other pNHAs and NHAs located in the general vicinity of the proposed project. These are detailed at Table 5.4 of the revised EIS and illustrated on Figures 5.2a - 5.2c of the same document. I note, and would generally agree with the assessment contained in Table 5.4 that the nature of the proposed project and the lack of clear pathways are such that the proposed project would not have any potential impacts on these identified pNHAs and NHAs other than the Grand Canal pNHA.

7.7.2. A number of third party submissions make reference to the degree of survey material submitted with the application and contend that the level of survey information submitted is inadequate and deficient in terms of the detail regarding dates and methodologies used. These issues are assessed in more detail in section 7.9.3 of this report below, which sets out details of the survey information presented. Details of the surveys undertaken that inform the revised EIS and NIS documents is provided at Appendix 5.1 of the Revised EIS. Essentially, there are four main elements to the survey work undertaken as follows:

- Ecological Assessment of the Milltown Feeder undertaken by Roughan and O'Donovan in 2015. This survey covered the 13km section of canal between Lowtown and Pollardstown and is stated to have been undertaken in August and September, 2015.
- Ecological Survey of the Barrow Navigation between Athy and St Mullins, (c.65kms) undertaken in 2012 by MKOS Planning and Environment. This survey was undertaken between 8-12 August, 2012 with a further survey by boat on 13-14 September, 2012.
- Ecological Survey of the Grand Canal Barrow Line undertaken in December, 2014 by Blackthorn Ecology. This covered a c.48.8 km length between Lowtown and the junction with the River Barrow to the south of Athy.
- Barrow Blueway Ecological Surveys undertaken by Eir Eco in 2015. The survey was undertaken on 13-14 August, 2015 and targeted the 6 no. bankside repair locations that were proposed at that time.

7.7.3. I note that there is also reference in the first party response to the grounds of appeal and in section 5.3.2 of the revised EIS to a full walkover survey of the route with dedicated otter, badger and invasive species surveys in August, 2017. While some comment on the results of this survey is given in Chapter 5 of the EIS, the survey report from the 2017 surveys do not appear to be contained within the appendices at Appendix 5. Overall, it is my opinion that the level of survey information presented is sufficient to enable an assessment of the main potential general ecological impacts of the proposed project to be undertaken.

7.7.4. The baseline context for the route is that it is currently the subject of active maintenance by Waterways Ireland and is part of a national waymarked trail. The

route is not therefore an unmodified natural habitat, and is the subject of significant usage by walkers, cyclists and anglers, all of which result in an existing level of disturbance. The potential impact of the proposed project has therefore to be assessed in the context of this existing character and usage.

- 7.7.5. With regard to flora, the route of the proposed project has been the subject of Habitat mapping which is detailed at Appendix 5.2 of the revised EIS and is also indicated in a separate A3 sized booklet. A list of the habitats along the route within the identified red line boundary is given at Table 5.13 of the revised EIS. Potential Annex I habitats are provided at Appendix 5.2 and are identified as hatched areas on the habitat mapping figures contained in the EIS. On foot of a request for further information, it has been clarified that the project will not have any direct impact on any identified Annex I habitat and the design of the project has been undertaken to avoid all such habitats. Measures to ensure the protection of such habitats are set out in section 5.6.2.6 of the EIS and included in the CEMP. On the basis of the information presented, I am satisfied that there would not be any likely significant effects on any Annex I habitats arising.
- 7.7.6. Surveys of the proposed route identified a total of 11 no. species of mammal, including badger, and otter. Other species encountered during the desk and site surveys include bats, crayfish, Marsh fritillary, whorl snail, pearl mussel, small reptiles and amphibians, and birds including Kingfisher.
- 7.7.7. There is good **bat** habitat along the majority of the route with extensive lines of trees and other tall vegetation for shelter along the back side of the path. No specific bat survey was undertaken on the route of the project, however it is recognised in the EIS (pg.5-62) that the area supports a significant bat population including common pipistrelle, soprano pipistrelle, Leislars bat and Daubenton's Bat. No significant extent of tree / hedge line is proposed to be removed to facilitate the project with the exception of a short section of Leylandii trees (9 no.) to the south of Clogheen Bridge. These trees have been examined and were found not to present potential bat roosting sites. The nature of the project is such that there would not be any lighting during the operational phase. No buildings or other structures are proposed for demolition that have the potential to act as bat roosting sites. During the construction phase, the outline CEMP submitted states at mitigation measure no.28 that *'reduced illumination of the site will be used where possible to prevent*

disturbance to local fauna that may potentially occur in the wider area'. There is therefore the potential for some slight short term negative impacts to arise from the illumination of works areas and storage areas. It is considered that any such impacts would be short term and limited in extent. I note the fact that the report of Scott Cawley Ecology on behalf of Art Mooney and Rosalind Murray contends that the statements in the EIS regarding the no significant impact on bat species cannot be made without an assessment of bat activity along the route. Potential impacts arise from construction disturbance (e.g. vibration) to roosts in bridges, walls and other structures, interference with back channels and riparian vegetation impacting on foraging habitat and insect prey availability and some uncertainty regarding illumination, e.g. construction compounds are all raised as issues potentially impacting on bat species. On the basis of the information submitted, including the fact that existing foraging lines of vegetation will not be impacted, I do not consider it likely that the proposed development will have a significant negative impact on any bat species.

- 7.7.8. The issue of the potential impact of the proposed development on **tree roots** and the resulting loss of linear vegetation along the line of the project was raised by the Planning Authorities as part of the further information requests issued. The response of the first party sets out that tree roots will be avoided and mitigation measures Nos. 23 -26 contained in Table 6.1 (Mitigation Measures) of the Outline CEMP relate to the proposals for the protection of trees roots. These measures include the avoidance of roots as far as possible (No.23), the use of topsoil / spoil recovered on site to cover exposed roots (No.24), and the avoidance of laying the path directly on top of tree roots. These measures are all noted and agreed with. Given the significant number of locations where tree roots are exposed along the route, the absence of a detailed methodology as part of the further information response submitted, as well as the fact that the standard cross section for the proposed paths involve a degree of excavation below the existing ground level, it is appropriate that more detail on tree root protection would be provided prior to any development and that in the event of a grant of permission there would be a requirement for the submission of a detailed methodology for construction in locations where there are significant extents of tree roots encountered. Such a methodology should include a requirement for hand rather than mechanical

excavation in such instances and should be submitted for the written agreement of the relevant planning authority.

- 7.7.9. Evidence of **badger** is present in the survey information throughout the project study area and instances are recorded in Table 5.15 of the revised EIS and mapped in Appendix 5.2 of the same document. The nature of the proposed development is such that it should not have significant impacts on any setts located within the study area. Construction will result in potential temporary disturbance and relocation however such impacts are not long term. Construction phase mitigation including the limited extent of works areas and the use of relatively modest equipment together with the proposed path design are considered to result in the overall impact of the proposed project on badger being at worst slight negative during construction and not significant during the operational phase.
- 7.7.10. The extent of survey undertaken for **otter** is the subject of significant comment in the third party submissions received and many of the submissions contend that inadequate survey information has been collected given the clear evidence of otter within the study area of the project and the potential for disturbance of otter holts and other sites. The potential impact on otter is discussed in detail in section 7.9 of this report under the heading of 'Appropriate Assessment – Stage 2' and this discussion concludes that the potential for adverse affects on the integrity of the River Barrow and River Nore SAC site cannot be ruled out having regard to the recognised difficulties in identifying otter holts and the fact that pre construction surveys to undertake a detailed survey for potential holts is proposed to be undertaken. In the absence of a more comprehensive otter survey that identifies holts along the route of the proposed development, the extent to which the removal of existing holts would be required at construction phase is unclear. The conclusion regarding potential adverse affects on the integrity of the European site relate to the section of the proposed route to the south of Lock 28 to the south of Athy as far as the southern extent of the route at St Mullins. In the case of the route to the north of Lock 28 on the canalised section, similar issues relating to the level of survey information presented arise, however the test in terms of impact on the species is different as this section is not located within the River Barrow and River Nore SAC site. Notwithstanding the fact that surveys for holts and couch sites have been undertaken, during construction there is potential for disturbance of any existing holts

located along the bank adjacent to the proposed pathway. The level of disturbance will be mitigated by the design and construction methodology employed, and the rate of development is such that any disturbance impacts arising should be short term in nature. In this regard, it is noted that the anticipated construction process would result in c.50 metres of path being constructed per day in each of the works locations along the route. Construction phase impacts are not anticipated to result in the direct loss of any holt sites and it is not considered likely that any couch sites would be lost due to the construction of the path. In conclusion therefore, while construction phase disturbance to otter cannot be ruled out it is considered that subject to construction and design mitigation such impacts should not be such as to have a significant negative impact on the species. During the operational phase, given the lack of lighting and the fact that the route is used as an existing waymarked trail with walkers, cyclists and anglers, significant negative impacts from disturbance are not considered likely to arise.

7.7.11. The **marsh fritillary** is present within the environs of the study area however suitable habitat requires the presence of its food plant Devil's-bit Scabious, *Succisa pratensis* in areas of moderate to high coverage (more than 3 plants per m²) in a low growing sward of height 10-25cm and low cover of invasive scrub (NPWS, 2013). This habitat was only recorded at one location within the red line boundary (at Kiltaghan South to the south of Wilson's Bridge). In this location, the identified habitat is not proposed to be directly impacted by the construction of the path. With regard to the avoidance of potential areas of Annex I habitat that might be located in close proximity to the route, section 5.6.2.6 of the revised EIS sets out the potential impacts arising on this species and identifies a number of mitigation measures to ensure that there is no encroachment of works personnel or equipment into such areas. These mitigation measures include the clear identification of works areas, signage and the use of fencing. These measures are considered to be acceptable and such that significant impacts on this species are not considered likely to arise. .

7.7.12. There are a number of **aquatic species** of interest that may be potentially impacted by the proposed project. These species include pearl mussel species, crayfish and lamprey species. The potential impact on **freshwater pearl mussel** and lamprey is discussed in more detail in section 7.9 of this report under the heading of appropriate assessment as these are qualifying interests of the River Barrow and River Nore

SAC site. There is no recent record of freshwater pearl mussel being present in the River Barrow or the Grand Canal, and the most recent evidence indicates that the species, if still present, is most likely to be located in tributaries of the Barrow rather than in the main river channel. Subject to the construction practices set out in the Outline Construction and Environment Management Plan (CEMP) (Appendix 3.2 of revised EIS) and the implementation of the mitigation measures set out at Table 6.1 of the outline CEMP, I do not consider that there is any likely negative impacts on freshwater pearl mussel during the construction phase. The most notable proposed mitigation measures as set out in Table 6.1 of the CEMP comprise the following:

- the retention of a project ecologist and scientist / environmental engineer,
- the use of silt fencing,
- use of ready mix concrete and other appropriate materials,
- strict practices regarding fuel storage, refuelling and equipment maintenance on site.
- Regard to weather information in determining the works programme,
- No discharges directly to any watercourse,
- Control of material stockpiling and management.

7.7.13. With regard to **lamprey**, these are also qualifying interests of the River Barrow and River Nore SAC and discussed in more detail in section 7.9 of this report under the heading of appropriate assessment. For the same reasons as discussed above relating to freshwater pearl mussel, subject to good construction practices and the implementation of the mitigation measures set out in the application documentation, including specifically those set out in the outline CEMP, I do not consider it likely that the construction phase of the project would have a significant negative impact on lamprey species. I also note that no instream works are proposed on the river section of the route of the project and all works that require instream works are located on the canalised section of the waterway. In summary the locations of these proposed works, as revised per the FI response, are as follows:

- Bank repair works at 3 no. separate closely connected locations at Milford and having a total of 55 metres in length.
- Cantilevered section of walkway at Bagenalstown. The length of this section is 38 metres.

7.7.14. Surveys undertaken of the river in the vicinity of the in channel works listed above did not indicate the presence of conditions suitable for lamprey. For the above reasons it is not considered likely that there would be an impact on lamprey species during the construction phase of the project. As is the case with freshwater pearl mussel however, during the operational phase there is potential for the mobilisation of sediment from the flooding of sections of the banks of the River Barrow where the proposed unbound pathway is proposed. It is considered unlikely that the resulting impact on lamprey species would be significantly negative however there is a degree of uncertainty with regard to the likely impact and that is considered further in Stage 2 appropriate assessment.

7.7.15. The lack of survey and reference to **swan mussel and duck mussel** in the application documentation, despite shells being observed on the route, is highlighted in third party submissions. This approach without dedicated survey is justified by the first party on the basis that there are limited in stream works proposed, that no such species were identified at the proposed in stream works locations and that the construction mitigation measures set out in the application documentation, including the outline CEMP, would ensure that there would be no negative impacts on these species. I would agree that subject to the proposed mitigation measures being implemented in full that impacts on these species arising from a negative impact on water quality are unlikely.

7.7.16. The potential for impacts on **fish** species is considered in the revised EIS, however no specific fish surveys were undertaken as part of the application. The proposed project was the subject of assessment by Inland Fisheries Ireland (IFI) with reports submitted on the three planning applications. The conclusion of IFI is that subject to conditions including the implementation of the mitigation measures contained in the EIS, NIS and the submitted outline CEMP, as well as a number of specifically identified mitigation conditions relating to materials storage and construction

practice, there would not be any objection to the proposed project. I would agree with the assessment contained in chapter 5 of the revised EIS and the comments of IFI that subject to the implementation of the construction mitigation set out in the application documents, including the outline CEMP, that there should not be a significant risk to fish species arising from the construction phase of the project. In particular, mitigation measures around the use and storage of concrete and concrete products and materials are noted in this regard.

- 7.7.17. With regard to **birds**, no specific bird surveys were undertaken to inform the application. As noted previously however, the existing tree and hedge line at the back side of the path is proposed to be retained and existing bankside vegetation is proposed to be retained as far as practicable with a 1 metre riparian strip proposed to be retained over the majority of the alignment of the project where feasible. Existing bird nesting and foraging habitat should not be significantly impacted by the project and no significant negative impacts on the majority of bird species are therefore considered likely to arise.
- 7.7.18. Of particular significance is the **Kingfisher** which is known to be present in significant numbers across the study area of the proposed project. The species is an Annex I species under the Birds Directive, though it is not specifically identified as a qualifying interest of the River Barrow and River Nore SAC. The surveys undertaken by the first party to inform the applications did not record any breeding sites, however given the number of the species observed it is considered likely that breeding sites are present within the study area. The potential impact of the proposed development on the species comprise disturbance from construction activity and the potential for direct loss of breeding sites. Disturbance is also a potential issue during the operational phase of the project. The potential for direct loss of breeding sites is considered to be low given the fact that no sites were recorded as part of the surveys undertaken and that the proposed development will not encroach onto the existing bank side where breeding sites are located. Other indirect impacts relate to the potential for emissions to water to have an indirect effect on water quality that would impact on the feeding habitat of the species. Subject to the implementation of construction phase mitigation set out in the application documentation and outline CEMP to protect water quality it is not

considered that significant negative impacts on Kingfisher due to water pollution are likely to arise.

7.7.19. With regard to ***disturbance impacts on Kingfisher***, the first party note the fact that Kingfisher were observed during the 2017 survey, however no breeding locations were observed during the course of this survey. The first party state that it is likely that the breeding locations are on parts of the river bank that is not directly impacted by the proposed development. It is also contended by the first party that the species prefers slow moving fish rich waters where the bird can hunt by diving for fish, and that no suitable nesting habitat occurs along the works corridor. The alternative breeding locations at other locations outside the works area are in my opinion possible, however without observations of any breeding locations, it is difficult to draw conclusions regarding the likely range of breeding sites. Given the number of Kingfisher species identified in the surveys undertaken for the project and supported by previous research including the '*Assessment of the Distribution and Abundance of Kingfisher and Other Riparian Birds on Six SAC River Systems in Ireland*', (NPWS and Birdwatch Ireland, 2010), it is in my opinion very likely that there are breeding sites located in the bank along the alignment of the proposed project.

Notwithstanding the relatively lightweight equipment proposed to be used, given the proximity of the potential sites to the proposed pathway, the uncertainty regarding the breeding site locations and the degree of uncertainty with regard to the set back of the path from the river / canal bank as discussed in section 7.4 of this report above (under the heading of *Viability of the Proposed Path Width*), there is in my opinion a short term low to moderate risk of negative impacts arising on this species due to construction disturbance impacts. This assessment is consistent with the short term slight to moderate negative impact stated in Table 5.24 of the revised EIS. The potential for disturbance impacts on Kingfisher during the operation phase of the proposed project are, in my opinion not materially different to the current situation given the fact that the canal / river path is already a national waymarked trail with a significant level of existing usage. The assessment in Table 5.24 of the revised EIS of a Slight to Imperceptible long term negative impact is considered reasonable.

7.7.20. ***Desmoulins Whorl snail*** is a qualifying interest of the River Barrow and River Nore SAC and the potential impact on this species is considered in detail in section 7.9 of this report under the heading of Appropriate Assessment. This assessment

concludes that there is no likely direct impact on whorl snail populations and that indirect effects are also unlikely as there will not be any significant impacts on the hydrology of the back drains or shallow ditch vegetation that run parallel to the back drains and which are known to be a supporting habitat for the whorl snail. Evidence of the presence of the snail was not identified on the canal section of the proposed route, i.e. outside of the SAC, and there is no specific survey or other information that suggests that populations of whorl snail are present at any particular location along this part of the route outside of the SAC. There is potential for habitat to support the species to be present in the back drains and other wet areas adjoining the route however like the situation within the SAC, I do not consider that any direct impacts are likely to arise and indirect impacts in terms of changes in hydrology and water levels such as would impact on the habitat such as to have a significant impact on population numbers are also considered unlikely.

- 7.7.21. The impact of the **loss of grassland habitat** and the potential impact of this on insects and the availability of food sources for animal species has been raised in a number of third party submissions received. The bulk of the habitats that would be lost with the development comprise dry meadows and grassed verges / scrubs that are identified as being of local ecological importance. These habitats are also such that they are common in a local context and do not provide particularly notable floral or faunal habitat. A summary of the type of habitat that would be the subject of direct loss to facilitate the proposed development is provided at section 5.5.3.1 of the EIS.
- 7.7.22. Other third party submissions highlight the importance of the canal and river towpath that forms the Barrow Way as an **ecological corridor**. The proposed path will follow the existing track and there will be no significant loss of linear or riparian habitat. Features such as treelines, hedgerows and watercourses will not be disturbed. The most significant linear features comprising riparian vegetation, the tree / hedgerow line and the back drain will remain unaltered by the proposed project. While the proposed path will therefore reduce the extent of linear canal / river side habitat it will not, in my opinion, act to sever the linear corridor formed by the existing canal towpath. A number of submissions contend that the proposed development of the path will limit the extent to which species will move across the canal bank, however no detail in terms of exact species impacts is provided. Given the design of the proposed path it is not in my opinion likely that any such impacts would be significant

or act to have a significant negative impact on species that currently occupy the study area. I note the fact that the second report submitted by the NPWS on the applications states that the ecological function of the barrow corridor would remain intact post development.

Impacts of Alternative Type E Surface on General Ecology

7.7.23. There are a number of considerations regarding the potential impact on general ecology arising the use of the alternative Type E tar and chip path design on the sections adjoining the River Barrow where the Type A was initially proposed. The basic design of the path in terms of width and construction methodology would remain the same. It is not therefore considered that the impacts on ecology arising from disturbance would likely be materially different to the situation described above. The use of the tarred surface would give rise to potential issues of the management of the storage of bitumen and construction of the surface using bitumen. Bitumen material would have the potential to be released to the river and result in contamination with resulting negative impacts on aquatic species. I particularly note the fact that bitumen is proposed to be sprayed. The existing submitted outline CEMP does not specifically address the storage and use of the Type E path materials, however it is considered that many of the mitigation measures proposed would remain appropriate to the construction of such a path design. Details of mitigation specific to the Type E surface are set out at 4.6.1 of the first party appeal and includes a statement that the spraying of bitumen during heavy rainfall events would be avoided. In addition, were the Board considering a grant of permission subject to the alternative Type E surface, the outline CEMP could be revised prior to permission being granted to account of materials and construction methods involved.

7.7.24. During the operational phase, the use of the alternative Type E surface would give rise to potential issues of being impacted by flooding and it is not clear how the alternative surface would react to prolonged inundation by flood waters, including the impact of potential damage to the verges during flood events. In addition, there

would be considerations of the impact of the bound surface on ecology moving across the path and whether this surface would act to inhibit the movement of species in any way.

- 7.7.25. On balance, subject to additional construction measures being proposed it is my opinion that significant additional impacts on ecology to those set out above are not likely to arise. It would however be beneficial if more detailed consideration of these potential impacts had been addressed in the first party appeal or further revisions to the EIS. The impact of the proposed alternative Type E surface on ecology is further considered at section 7.9 of this report under the heading of appropriate assessment and measured against the tests relevant to appropriate assessment.

7.8. Other Issues

Material Contravention of Development Plan

- 7.8.1. It is noted that Reason for Refusal No.2 cited in the Notification of Decision to Refuse Permission Issued by Carlow County Council makes reference to the fact that the proposed development is considered to 'contravene materially' Heritage Objective 5 and Heritage Policy 2 of the *Carlow County Development Plan, 2015-2021*. The provisions of s.37(2)(b) of the *Planning and Development Act, 2000* (as amended) are therefore considered to be applicable to the decision of Carlow County Council and the Board is therefore potentially restricted in the circumstances under which it can overturn the refusal of permission and grant permission.
- 7.8.2. **Heritage Policy 2** of the Plan states that it is the policy of the council to, inter alia, strive and maintain the favourable conservation status and conservation value of all natural heritage sites designated or proposed for designation in accordance with European and National legislation, and to only permit a plan or project after the competent authority (Carlow County Council) has ascertained, based on scientific evidence and appropriate assessment that the plan or project will not have significant adverse effects on the integrity of any European site.
- 7.8.3. Heritage Objective 5 states that it is an objective of the council to '*support the protection of habitats and species listed in the annexes to and / or covered by the EU Habitats Directive, Birds Directive...*'.

7.8.4. As set out at section 7.9 of this report below, it is my conclusion, based on the information contained in the EIS and NIS and the submissions on file, that it is not possible to conclude beyond reasonable scientific doubt that the proposed development incorporating the provision of an unbound surface of compacted stone and dust (Type A) would not have an adverse effect on the integrity of the River Barrow and River Nore SAC having regard to its conservation objectives. This conclusion accords with reason for refusal 1 included in the decision issued by Carlow County Council. It is also my opinion that on the basis of the information presented, it is not possible to determine that the proposed development would not have an adverse impact on the integrity of the SAC in light of the conservation objectives for the site relating to otter. Given this conclusion, it is my reading of the provisions of Heritage Objective 5 and particularly Heritage Policy 2 that it is reasonable to conclude that the proposed development is contrary to these provisions of the development plan. Given the conclusion of the Planning Authority that this contravention of plan policy is material, the following is an assessment of the proposed project in the context of the criteria set out at s.37(2)(b) of the Act.

Proposed Development is of Strategic or National Importance. The proposed development is supported in a general sense in national, and local planning policy. Such policies are, however, clear in that any permission granted must have regard to and comply with, all relevant environmental legislation, including the Habitats Directive, (see specifically National Policy Objective 52 of National Planning Framework). The development comprises the improvement of an existing recreational trail that is a regional recreational attraction and is not in my opinion of a type or extent of user catchment such that it would be of clear strategic or national importance.

Conflicting Objectives in the Development Plan. Sections 8.10.5 and 8.11.8 of the Carlow County Development Plan refers specifically to the River Barrow, notes the very significant potential for linear open space to form part of a network of walking and cycling routes, and that it is the policy of the local authority to promote the natural amenity potential of the River Barrow and other watercourses to facilitate the development of amenity, recreational, ecological and tourism benefits for the county and region. Such policy support is, however, clearly subject to compliance with the relevant environmental standards, including as set out in Heritage Objective 5 and

Heritage Policy 2 of the Plan. It is therefore not considered that there are conflicting or unclear objectives in the plan that relate to the specific merits of the form of development proposed.

Permission Should be Granted Having Regard to Regional Planning Guidelines, s.28 Guidance or other Relevant Policy. I do not consider that there is any clear provision contained in the existing *South East Regional Planning Guidelines 2010-2022*, or other relevant policies that support the proposed form of development.

Pattern of Development and Permissions Granted in the Area. There are no other similar developments granted in the vicinity of the site the subject of the appeal against the decision of Carlow County Council. I note the fact that Waterways Ireland have undertaken developments of a similar form to that currently proposed on the North Erne and on the Royal Canal. These locations are however, not within the same area as the current proposed development within County Carlow and are not comparable to the current proposed development in terms of the potential for flooding.

7.8.5. Having regard to the above, it is my opinion that the wording of the reason for refusal issued by Carlow County Council is such that it is not open to the Board to grant permission for the development within the administrative area of County Carlow on account of the adverse effects of this form of development on the integrity of the River Barrow and River Nore SAC. The decision issued by Carlow County Council relates to a development incorporating the Type A unbound surface. In the event that the Board is considering a grant of permission subject to the use of the alternative Type E surface as proposed in the first party grounds of appeal it is not considered that there is any restriction under s.37 of the Act to a decision to issue a grant of permission.

7.8.6. The impact of the proposed development on **hydrology and hydrogeology** is addressed in detail in section 7.10 of this report below relating to EIA. The issue of flood risk is addressed in Chapter 7 of the revised EIS which sets out the PFRA and CFRAM mapping and identifies the areas at risk of flooding. I note that the appeal submission received from the Save the Barrow Line group contests the definition of the development as 'water compatible' and therefore appropriate for Flood Zone A is misguided. The principle of a recreational path is in my opinion water compatible

development, and such that it is appropriate in principle for siting within an area identified as flood zone A. In this regard it is noted that the existing Barrow Way is partially located within an identified flood risk area (Zone A as per the Flood Risk Assessment Guidelines for Planning Authorities). The issue in this case relates more to the potential for the design of path (the Type A surface) to be inappropriate for the location proposed and I consider that this is more of an issue for consideration under the headings of appropriate assessment, general ecology and path design / maintenance rather than the flood risk assessment.

- 7.8.7. Considerations relating to ***air and noise impacts*** arising from the project are similarly discussed in more detail in section 7.10 below relating to EIA. The issue of cumulative noise impacts was included in the issues covered by the request for additional information, and noise issues are addressed at Chapter 8 of the revised EIS. The principle impacts arising with regard to noise relate to short term construction phase impacts and, while no specific modelling is undertaken, the available information relating to the proposed construction techniques and equipment to be used together with the relative quick construction period means that noise impacts on individual receptors are predicted to be short term in nature and not to exceed NRA noise limits.
- 7.8.8. The nature of the proposed development involving limited extent of excavation and the use of a permeable surface over the majority of the route (c.96.4km out of 115.7km total) are such that significant effects on soils or geology are not considered likely to arise. The main potential impacts relating to soils involves their storage and management during the construction process and this has been addressed in the mitigation measures submitted in the revised EIS, NIS and outline CEMP. Further discussion relating to soils and geology is contained in section 7.10 below relating to EIA.
- 7.8.9. Issues relating to cultural heritage and archaeology are similarly addressed in more detail in section 7.10.

Impacts of Alternative Type E Surface on Hydrology and Hydrogeology

- 7.8.10. The proposed use of an alternative bound tar and chip surface to replace the originally proposed Type A unbound surface over the sections of the route that are

liable to flooding would have a number of potential impacts under the heading of hydrology and flooding. The construction phase would lead to potential issues of spillages and contamination of watercourses. Section 4.6.1 of the first party appeal sets out a number of mitigation measures proposed to address such potential contamination of surface and ground waters, some of which are new and some of which are previously stated in the submitted Outline CEMP. Subject to the implementation of these measures it is not considered likely that issues of surface or ground water pollution would arise from the use of the Type E surface.

7.8.11. During the operational phase of the project, the proposed Type E surface would not be permeable as is the case with the Type A and the volume of hard surfaces within the overall river catchment would therefore be potentially increased. As per the submissions of the first party on file it is estimated that the originally proposed development would increase the overall extent of hard surface within the Barrow Catchment by c.38,000 square metres (7.4.4.3 of revised EIS) which is insignificant in the context of the overall size of catchment. Notwithstanding the proximity of the path to the main river channel I would agree with the assessment of the first party in this regard. The replacement of the Type A surface with impermeable Type E surface on the river sections would result in an additional c.54km or 160,000 sq. metres of impermeable surface. Given the extent over which this area would be spread, the presence of a verge between the path and the watercourse and the insignificant percentage of the overall catchment area that is involved, I do not consider it likely that the hydrological impact of the Type E surface would likely be significant. I would not therefore be in agreement with the assessment of significance of the Type E surface as set out in the Hydrological Report prepared by SM Bennett and Co. on behalf of Save the Barrow Line which appears to be based on an assessment of potential runoff from the entire 115.7km of the route, including both canal and river sections and all surface materials and also includes verge widths.

7.8.12. Third party submissions have also raised concerns regarding the potential impact of the alternative path surface on groundwater recharge. On this issue I would also agree with the first party that the concept of the bound surface having any material impact on recharge is very unlikely as water would flow to the side of the path and be

available for recharge. With regard to the potential impacts on flooding and flood risk, I similarly do not consider that the proposed alternative Type E surface would have any material impact on flood risk or extent.

7.9. Appropriate Assessment

7.9.1. Development the Subject of Assessment

7.9.1.1 The subject appeal relates to a section of the proposed development of a blueway multi purpose leisure route running along the alignment of the Barrow Branch of the Grand Canal and the River Barrow and over a distance of c.116km from Lowtown in County Kildare to the north to St Mullins in County Carlow to the south.

7.9.1.2 The proposed development is detailed in section 3 of the submitted Revised EIS and over the full length of the scheme from Lowtown to St.Mullins includes the following elements:

- Upgrading and resurfacing of the existing Barrow Way towpath to a multi surface leisure trail along the Grand Canal (Barrow Line) and the River Barrow (Barrow Navigation). The proposed surface comprises a mixture of finishes as follows:
 - Type A – compacted stone and dust (unbound)
 - Type B – Bitmac / asphalt (bound)
 - Type C – Surface dressing (bound)
 - Type D – concrete (bound)
- Localised road widening over a distance of approximately 1.5 km.
- The provision of 26 no. road crossings for pedestrians and cyclists across public roads.
- Provision of signage and information boards.
- Construction of new pedestrian footbridges at Athy and Rathangan.
- Construction of cantilevered path at Bagenalstown.
- Replacement of railings and gates at selected locations along route,

- Construction of fencing,
- Replacement of timber mooring posts,
- Bank repair and edge protection works at 3 no. locations at Milford.
- Resurfacing of car parking areas at 11 no. locations and the construction of 2 no. new car parking areas.

The application is accompanied by an EIS and NIS. These documents were revised on foot of requests for further information issued by the Planning Authorities and the relevant documents to inform the appropriate assessment are therefore the revised documents submitted to the Planning Authorities in December, 2017.

7.9.2. Screening for Appropriate Assessment

7.9.2.1 There are a number of European sites that are located within 15 km of the route as it runs from Lowtown to St Mullins. It is considered appropriate that all sites along the entire route of the proposed greenway would be considered in this screening assessment. The relevant sites are as follows:

- Mouds Bog SAC (site code 002331).
- Pollardstown Fen SAC (site code 000396).
- River Barrow and River Nore SAC (site code 002162).
- River Nore SPA (site code 004233).
- Blackstairs Mountains SAC (site code 000770).

7.9.2.2 The **Mouds Bog SAC** is located c.5km from the alignment of the proposed blueway at the closest point and is located approximately 6km to the south of Robertstown and 9km to the east of Rathangan. The qualifying interests of the Mouds Bog SAC site are two bog habitats being degraded raised bogs still capable of natural regeneration, and depressions on peat substrates of the Rhynchosporion. There is no significant effect on the qualifying interests and associated conservation objectives of the Mouds Bog site that are considered likely to arise by virtue of the nature of the works proposed, the absence of a pathway to the Mouds Bog site for

emissions to the Barrow branch of the Grand Canal or the River Barrow and the separation distance to the SAC site. The proposed development is not therefore likely to have significant effects on the Mouds Bog SAC site in light of its conservation objectives.

7.9.2.3 The **Pollardstown Fen SAC** is located c.7km from the alignment of the proposed blueway at the closest point and is located approximately 10km to the east of Rathangan at the northern end of the blueway route. The qualifying interests of the Pollardstown Fen SAC are Cladium Fens*, Petrifying Springs*, Alkaline Fens, Geyer's Whorl Snail, Narrow-mouthed Whorl Snail (*Vertigo angustior*) and Desmoulin's Whorl Snail (*Vertigo moulinsiana*). The potential for the proposed development to impact on the River Nore SAC site relates to potential runoff and contamination or sedimentation of the watercourse. The Pollardstown Fen SAC is, however, located such that there is no hydrological connection from the appeal site to the European site and the separation distance is such that no issues of disturbance would arise. The proposed development is not therefore likely to have significant effects on the Pollardstown Fen SAC site in light of its conservation objectives.

7.9.2.4 The **River Barrow and River Nore SAC** site is located such that, from the north of the route, the development is not located within or close to the proposed blueway route from the northern end of the route at Lowtown, through Rathangan and south to the outskirts of Monasterevin. At Monasterevin the proposed blueway route crosses the line of the River Barrow and River Nore SAC at Bell Harbour. To the south of Monasterevin, the route of the blueway runs approximately parallel to and to the west of the River Barrow and River Nore SAC. With the exception of a point to the south of Vicarstown, where the canal crosses the SAC, and a point at Kilberry to the south east of Vicarstown where the blueway route comes within c.30 metres of the SAC, the proposed development is not in close proximity to the SAC until it reaches Athy. To the south of Athy, the proposed blueway route is located either within or immediately adjoining the River Barrow and River Nore SAC site for the distance south to the boundary with County Carlow in the general vicinity of Jerusalem townland. The section of the route in County Laois is located such that the majority of it is wholly or partially within the boundary of the River Barrow and River Nore SAC. There are a number of short sections of the route where the

identified site boundary lies outside of the SAC, however the configuration in these sections is such that the site mostly adjoins the SAC boundary. The section of the route from Shrulle at the boundary with County Kildare south as far as Carlow Town is located entirely within the area of the River Barrow and River Nore SAC site which is centred on the river channel. The section within County Carlow to the south of Carlow Town is such that, with the exception of a short section to the immediate north of Bagenalstown and a short section within Graiguenamanagh, the entirety of the route is located either wholly or partially within the boundary of the SAC.

7.9.2.5 The qualifying interests of the River Barrow and River Nore SAC site comprise a number of species of note including lamprey, salmon, otter, Nore Pearl Mussel, Freshwater pearl mussel and whorl snail. The full list of the qualifying interests of the site is as follows:

- Estuaries
- Mudflats and sandflats not covered by seawater at low tide
- Reefs
- Salicornia and other annuals colonising mud and sand
- Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)
- Mediterranean salt meadows (*Juncetalia maritimi*)
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation
- European dry heaths
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- Petrifying springs with tufa formation
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- *Vertigo moulinsiana* (Desmoulin's Whorl Snail)
- *Margaritifera margaritifera* (Freshwater Pearl Mussel)

- *Austropotamobius pallipes* (White-clawed Crayfish)
- *Petromyzon marinus* (Sea Lamprey)
- *Lampetra planeri* (Brook Lamprey)
- *Lampetra fluviatilis* (River Lamprey)
- *Alosa fallax fallax* (Twaité Shad)
- *Salmo salar* (Salmon)
- *Lutra lutra* (Otter)
- *Trichomanes speciosum* (Killarney Fern)
- *Margaritifera durrovensis* (Nore Pearl Mussel)

7.9.2.6 Of the above listed qualifying interests, the following are identified in the submitted NIS and from my observations as being located within the zone of influence of the proposed project and where there is a potential pathway between the project and the location of the qualifying interest:

- Estuaries. The estuary of the River Barrow extends to the weir that is located immediately to the north of St. Mullins in County Carlow.
- Water courses of plain to montane levels with the *Ranunculus fluitans* and *Callitriche-Batrachium* vegetation. There are potential pathways of surface water pollution from the project to locations where this qualifying interest is present.
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels. Habitat recorded in Co. Carlow with potential pathways to the project site.
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, *Alnus incanae*, *Salix alba*). No direct impact on recorded locations of this habitat, however, there are potential impacts identified arising from pollution of surface waters that require further consideration.

- White Clawed crayfish, Sea Lamprey, River Lamprey, Brook Lamprey. Not recorded in surveys undertaken within the study area, however these species are known to occur at riparian edges of the Barrow catchment. There are potential pathways for water pollution generated by the construction and operational phases of the proposed project to impact on these species.
- Desmoulin's Whorl Snail. There is a known population located at Borris Bridge in Carlow and within the zone of influence of the proposed project.
- Lutra Lutra (Otter). Evidence of otter recorded throughout the study area and the proposed project generates potential habitat loss, disturbance and water pollution impacts.
- Freshwater Pearl Mussel. The study area includes the identified sensitive area for the species. There are however no known populations of mussel in the River barrow and populations that lead to the inclusion of the qualifying interest are located in tributaries rather than main channel.

7.9.2.7 The nature of the proposed development is such that there is a risk of sediment being generated arising from construction activities and from the proposed in stream bank repair works that are proposed at selected locations along the route. This sedimentation would have potential significant effects on the identified conservation objectives of the following qualifying interests:

- Estuaries
- Water courses of plain to montaine levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation.
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels. .
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae).
- White Clawed crayfish,
- Sea Lamprey,

- River Lamprey,
- Brook Lamprey.
- Desmoulin's Whorl Snail.
- Lutra Lutra (Otter).
- Freshwater Pearl Mussel.

7.9.2.8 The potential for impacts to arise of ***Vertigo Moulinsiana (Desmoulin's Whorl Snail)*** is raised in third party submissions which consider that inadequate surveying has been undertaken to identify potential populations. The submitted appropriate assessment identifies how the habitat for this species is damp or wet habitats and that this species is under threat in Ireland due to land reclamation, infilling of ditches and drains, and dredging. The assessment submitted by the first party does not identify any potential pathway between the proposed works and the snail habitat, however there are two known sites of whorl snail population along the route at Borris Bridge and Boston Bridge. Given the potential for this species to be potentially impacted by emissions and water quality during the construction and operational phase it is considered appropriate that significant effects on the integrity of the site cannot be ruled out having regard to the conservation objectives of the site.

7.9.2.9 The nature of the proposed development also has the potential to impact on the conservation objectives by resulting in disturbance to otter arising from construction works being undertaken in close proximity to identified holts and couches. In this regard, I note that while the information presented with the application indicates that otter are present along the route, however no holts or resting places were specifically identified during site investigations and survey. The clear evidence of the presence of the species in the form of spraints indicates that there are vulnerable locations present along the route.

7.9.2.10 The proximity of the proposed development to the SAC site to the south of Athy means that there is also the potential for ***invasive species*** that are present at a number of locations along the route to be introduced to the watercourse. There is also the potential that the construction activity could result in the introduction of

invasive species from outside of the immediate site of the project. Construction mitigation should enable the spread of invasive species and impacts on conservation objectives to be avoided.

7.9.2.11 During the operational phase, there is potential for the unbound Path A surface material to be eroded during periods when the section of the route that follows the alignment of the River Barrow is inundated at times of storm flow. This sediment release has the potential to impact negatively on the conservation objectives for a number of aquatic species and habitats which are identified as conservation objectives for the River Barrow and River Nore SAC site, specifically and most notably pearl mussel, lamprey species, salmon habitat and the habitats identified above, Estuaries, Water courses of plain to montaine levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation, Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels and Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (Alno-Padion, Alnion incanae, Salicion albae).

7.9.2.12 The first party has submitted a report by a hydrologist (Hydro Environmental Services Ltd.), and an outline assessment of the potential impact of discharges of material to the river channel. It is contended in this analysis that any such impacts would be imperceptible in the context of the sediment loading of the river during times of storm events and associated flooding. The first party also note that past flood events have been studied and areas of erosive flooding identified and these locations are proposed to be surfaced with a concrete finish. Information has been presented by third parties that indicates that erosive flooding may occur at other locations on the route and it is my opinion that the likelihood of erosive flood events and the potential impacts on the conservation objectives of the European site requires further assessment in the form of a Stage 2 appropriate assessment.

7.9.2.13 Having regard to the above, it is my opinion that in the absence of mitigation, and on the basis of the development as proposed including the use of a Type A unbound surface finish over the majority of the route that the proposed development has the potential to have likely significant effects on the River Barrow and River Nore

SAC site in the light of the conservation objectives of the site. There are also issues of disturbance of otter both during the construction and operational phases that require further consideration due to the potential impact on the conservation objectives for this species and the potential for significant effects of the Desmoulins Whorl Snail. It is therefore considered that a Stage 2 appropriate assessment of the potential impact of the development on the integrity of the River Barrow and River Nore SAC site is required. This is contained at section 7.9.3 of this report below.

7.9.2.14 The **River Nore SPA** is located at the southern end of the proposed blueway route and is located c.10km from the site at the closest point which is to the west of St Mullins. The qualifying interest for the site is a single species, the Kingfisher. The potential for the proposed development to impact on the River Nore SAC site would relate to potential runoff and contamination or sedimentation of the watercourse or the potential for disturbance to the Kingfisher. The River Nore SPA site is however located such that there is no hydrological connection from the appeal site to the European site and the separation distance is such that no issues of disturbance would arise. The proposed development is not therefore likely to have significant effects on the River Nore SPA site in light of its conservation objectives.

7.9.2.15 The **Blackstairs Mountains SAC** site is located close to the southern end of the proposed blueway route and is c.3km to the east of St Mullins at the closest point to the route. The qualifying interests for the site are wet heath and dry heath. The potential for the proposed development to impact on the Blackstairs Mountains SAC site would relate to potential runoff and contamination or sedimentation of the watercourse. The Blackstairs Mountains SAC site is, however located such that there is no hydrological connection from the appeal site to the European site and the separation distance is such that no issues of disturbance would arise. The proposed development is not therefore likely to have significant effects on the Blackstairs Mountains SAC site in light of its conservation objectives.

7.9.3 Stage 2 – Appropriate Assessment

7.9.3.1 The River Barrow and River Nore SAC site is located such that, from the north of the route, the development is not located within or close to the proposed blueway route from the northern end of the route at Lowtown, through Rathangan and south to the

outskirts of Monasterevin. At Monasterevin the proposed blueway route crosses the line of the River Barrow and River Nore SAC (site code 002162) at Bell Harbour. To the south of Monasterevin, the route of the blueway runs approximately parallel to and to the west of the River Barrow and River Nore SAC. With the exception of a point c.1km to the south of Vicarstown, where the canal crosses the SAC, and a point at Kilberry to the south east of Vicarstown where the blueway route comes within c.30 metres of the SAC, the proposed development is not in close proximity to the SAC until it reaches Athy. To the south of Athy, the proposed blueway route is located either within or immediately adjoining the River Barrow and River Nore SAC site for the distance south to the boundary with County Carlow in the general vicinity of Jerusalem townland.

Laois County Council Section

The section of the route in County Laois is located such that the majority of it is wholly or partially within the boundary of the River Barrow and River Nore SAC. There are a number of short sections of the route where the identified site boundary lies outside of the SAC, however the configuration in these sections is such that the site mostly adjoins the SAC boundary.

Carlow County Council Section

The section of the route from Shrule at the boundary with County Kildare south as far as Carlow Town is located entirely within the area of the River Barrow and River Nore SAC site which is centred on the river channel. The section within County Carlow to the south of Carlow Town is such that, with the exception of a short section to the immediate north of Bagenalstown and a short section within Graiguenamanagh, the entirety of the route is located either wholly or partially within the boundary of the River barrow and River Nore SAC.

7.9.3.2 The qualifying interests of the River Barrow and River Nore SAC site comprise a number of species of note including lamprey, otter, Freshwater pearl mussel and whorl snail. In addition, as set out in the screening assessment above, there are a number of habitats that are within the zone of influence of the proposed project that

have the potential to be impacted by sedimentation and any deterioration in water quality. The full list of the qualifying interests of the site is as follows:

- Estuaries
- Mudflats and sandflats not covered by seawater at low tide
- Reefs
- Salicornia and other annuals colonising mud and sand
- Atlantic salt meadows (*Glauco-Puccinellietalia maritima*)
- Mediterranean salt meadows (*Juncetalia maritimi*)
- Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation
- European dry heaths
- Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels
- Petrifying springs with tufa formation
- Old sessile oak woods with *Ilex* and *Blechnum* in the British Isles
- Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)
- *Vertigo moulinsiana* (Desmoulin's Whorl Snail)
- *Margaritifera margaritifera* (Freshwater Pearl Mussel)
- *Austropotamobius pallipes* (White-clawed Crayfish)
- *Petromyzon marinus* (Sea Lamprey)
- *Lampetra planeri* (Brook Lamprey)
- *Lampetra fluviatilis* (River Lamprey)
- *Alosa fallax fallax* (Twite Shad)
- *Salmo salar* (Salmon)
- *Lutra lutra* (Otter)

- *Trichomanes speciosum* (Killarney Fern)
- *Margaritifera durrovensis* (Nore Pearl Mussel)

7.9.3.3 As per the screening assessment undertaken above, the following are considered to be the potential likely significant effects (direct and indirect) of the proposed project on the conservation objectives of the River Barrow and River Nore SAC site:

- Disturbance effects during construction on otter and potential impact of in stream construction activities on crayfish and lamprey species, Desmoulin's Whorl Snail, and freshwater pearl mussel.
- Operational phase impacts arising from disturbance on otter.
- Operational phase impacts arising from flood events impacting on the proposed Type A unbound surface and resulting in the mobilisation of crushed limestone used in the top layer of the Type A surface. Potential impacts arising on lamprey, pearl mussel, salmon, crayfish and aquatic habitats.

In addition, a number of third party submissions raise concerns with regard to the adequacy of the surveys undertaken which inform the conclusions in the submitted NIS. Potential impacts on the conservation objectives of a number of qualifying interests of the River Barrow and River Nore SAC site are highlighted which, it is alleged, mean that the survey information is inadequate to enable the competent authority to conclude beyond reasonable scientific doubt that adverse impacts on the integrity of the SAC would not arise.

Survey Information / Methodology

7.9.3.4 With regard to the survey information presented, details of the surveys undertaken that inform the revised EIS and NIS documents is provided at Appendix 5.1 of the

Revised EIS. Essentially, there are four main elements to the survey work undertaken as follows:

- Firstly, there was an ***Ecological Assessment of the Milltown Feeder*** undertaken by Roughan and O'Donovan in 2015. This survey covered the 13km section of canal between Lowtown and Pollardstown and is stated to have been undertaken in August and September by '*suitably qualified ecological surveyors*'. The survey used the Fossitt classification for habitats and methods set out in the 2011 Heritage Council Guidelines. Stated that signs of mammals were assessed, recorded and mapped, including badger.
- Secondly, there was an ***Ecological Survey of the Barrow Navigation between Athy and St Mullins***, (c.65kms) undertaken in 2012 by MKOS Planning and Environment. This survey was undertaken between 8-12 August, 2012 with a further survey by boat on 13-14 September, 2012. This survey is stated to have used the 2011 Heritage Council 'Methodology for Habitat Surveys and Mapping in Ireland'. A habitat survey of the full route was undertaken and aquatic surveys of each of 18 no. sections of the route undertaken. It is stated that '*species present along the route were identified and a species inventory was compiled*'. Stated that many Kingfisher were sighted, however no nests recorded. Otter are stated to have been recorded abundantly throughout the study area with spraints and one sighting. No dedicated survey for fish or invertebrates undertaken (Pg.61 of A5.1) and no survey for lamprey, freshwater pearl mussel, white clawed crayfish or Desmoulin's Whorl Snail.
- Thirdly, there was an ***Ecological Survey of the Grand Canal Barrow Line*** undertaken in December, 2014 by Blackthorn Ecology. This covered a c.48.8 km length between Lowtown and the junction with the River Barrow to the south of Athy. For survey purposes the route was divided into 30 no. sections and habitat and flora surveys were undertaken in July and August, 2014 using the Fossitt classification for habitats. Mammal surveys were undertaken in April and June, 2014 and otter holt and resting sites were identified. Additional mammal surveying is stated to have occurred during the habitat and floral surveys. Dedicated bird surveys are stated to have been undertaken 8-16 April, 2014 and 9-13 June, 2014 and an assessment of the

habitat suitability for Kingfisher undertaken using the methods set out in Cummins et al (2010).

- The fourth survey referred to in the EIS is the **Barrow Blueway Ecological Surveys** undertaken by Eir Eco in 2015. The survey was undertaken on 13-14 August, 2015 and targeted the 6 no. bankside repair locations that were proposed at that time. Habitats were recorded as per the Fossitt classification system and the banks were assessed for their suitability for bird species including Kingfisher. No dedicated bat survey was undertaken. Evidence of otter, mink and badger were recorded. The river and canal banks in the vicinity of the 6 no. sites were assessed for their potential to support lamprey annocoetes in silt beds, however no sampling was undertaken.

7.9.3.5 Regarding survey periods, the information provided at Appendix 5.1 sets out in some detail the dates and methodologies used in the surveys. While a number of the parties to the appeal contend that survey methodologies and dates are not appropriate, no specific surveys have been identified as lacking in this regard. Date ranges are provided in the Eir Eco, MKOS and Roughan O'Donovan survey reports and the relevant months in the case of the Blackthorn Ecology Report. In all cases the relevant personnel are identified. I note however that the level of information provided regarding the 2017 multi-disciplinary walkover surveys is limited. While some comment on the results of this survey is given in Chapter 5 of the EIS, the survey report from the 2017 surveys do not appear to be contained within the appendices at Appendix 5. It is also noted that the submissions received from the NPWS, do not raise any specific issues regarding the level of survey information provided however the second report received from the NPWS does note the fact that the FI request included for details of survey methodologies and that it is not clear that this has been met and that the local authorities will have to satisfy themselves in this regard.

7.9.3.6 It is contended by some third parties that all Annex I habitats are not clearly identified, however the submitted EIS contains a survey of all habitats that in my opinion is extensive. One specific issue highlighted by the NPWS relates to a

degree of inconsistency between sections 5.4.3.1.19 and 5.4.3.1.22 of the EIS regarding the potential impact of the development on an Annex I grassland habitat. It is clarified in the further information submission submitted by the first party to the Planning Authorities that the design has been amended such that it would not impact directly on the Annex I habitat at this location.

7.9.3.7 A number of concerns regarding the level of survey information submitted with regard to specific species (notably otter and desmoulin's whorl snail) are raised in the third party submissions received. These submissions include specialist ecological comment by Paul Scott of Scott Cawley Ecologists (on behalf of Rosalind Murray and Art Mooney) and Ms Faith Wilson ecologist on behalf of Save the Barrow Line. The potential impact on otter is discussed in detail in the section below, and the following paragraphs relate to other species that are qualifying interests of the SAC.

7.9.3.8 Dr Evelyn Moorkeens is cited in the submission on behalf of Save the Barrow Line as stating that there are vast areas of the towpaths that have not been surveyed for *V.Mouliniana* (***Desmoulin's Whorl Snail***) and that it is likely that there are patches of populations to be found. The submission of Ms Faith Wilson also highlights the potential impact on the Whorl Snail and states that there is a known population of in a fen adjoining Ballytiglia Bridge (also known as Borris Bridge) and that this species is a QI of the SAC. It is stated that the habitat for the snail will not be directly impacted, however no detailed assessment of all potential impacts has been provided, including potential changes in the hydrology of the site from the natural flooding regime of the river and subsequent impact on the snail population have not been addressed. It is noted that these concerns are not addressed either by the first party or the RPS report. The first party state that there is no indication of potential supporting habitat occurs within the works corridor and that no direct effects therefore arise. Noted that specimens where they have been observed have generally been in shallow ditch vegetation parallel to the towpath / backdrain, and that as the proposed development involves surface works only and will not have a potential impact on groundwater movement or seepage through the towpath, there is no likely impact on these specimens. I would be in general agreement with this

statement, and also do not see from the assessment of likely hydrological impacts of the project, that there would be an adverse effect on the population at Borris Bridge. In view of this I would agree with the first party that on the basis of best scientific knowledge that the proposed development will not adversely affect the integrity of the European site in the light of the conservation objectives set for the Desmoulins Whorl snail.

7.9.3.9 With regard to ***crayfish and lamprey species***, the third parties highlight how no aquatic surveys were undertaken by Eir Eco or other consultants on behalf of the first party. The report prepared by Scott Cawley on behalf of Art Mooney and Rosalind Murray highlights how the methodology user in the Eir Eco study is unclear and questions the proposed trapping and upstream relocation of specimens, on the basis that the conservation objectives for the site include a requirement for the maintenance of populations at baseline levels. It is stated in these submissions that the impact on these species relative to the baseline cannot be assessed if the baseline is not known. The first party response states that in stream surveys were undertaken by at two sections of the route where minor instream works are proposed. From the description of methodology contained in the Eir Eco report, it is stated that the river or canal banks at each of the 6 no. locations surveyed were assessed for their suitability and potential to support lamprey ammocoetes in marginal silt beds. The results indicate that no lamprey ammocoetes were identified at any of the sites examined although it is noted that there may be potentially suitable habitat two of the sites (Wellington Bridge in Carlow and Bagenalstown). No reference to the presence of crayfish is made in the results of the survey other than that none were present at Milford Bridge. It is not completely clear from the methodology described in the Eir Eco report whether the conclusions are solely based on observations of the habitat or if surveys were undertaken. I note however that the inspection of the habitat indicates that there are no suitable habitat for lamprey or crayfish species and / or that no such species were observed at the relevant sites. On this basis, and having regard to the limited extent of in stream works proposed and to the mitigation measures proposed to be employed at these

sites as set out in the outline CEMP and revised EIS, that it can be concluded that the proposed project would not have adverse effects on the integrity of the River Barrow and River Nore SAC site in light of the conservation objectives for white clawed crayfish and lamprey species.

7.9.3.10 With regard to the **Freshwater Pearl Mussel**, the report prepared by Scott Cawley on behalf of Rosalind Murray and Art Mooney contends that in the absence of a phase 1 survey for freshwater pearl mussel and Nore pearl mussel it cannot be concluded that there are none present. It is further contended that the Board cannot use the current application data to carry out their assessments as the data is incomplete and inaccurate. In response, the first party note that the proposed development will not directly affect any supporting habitat for pearl mussel, that sites of in channel works were surveyed and no evidence of mussel habitat recorded and that instream works are confined to canalised / modified sections of the route. I note, however that the description of the methodology given in section 2.0 of the Eir Eco report does not make any reference to examinations looking or surveying for freshwater or Nore pearl mussel. While the available evidence indicates that the Nore Pearl Mussel has never been present in the main channel of the River Barrow and is only in the River Nore, the situation with regard to the Freshwater Pearl Mussel is not so clear. As set out in Table 2.2 of the Barrow Blueway - Appropriate Assessment Report prepared by RPS and dated 19th February, 2018, the project study area is located within the pearl mussel sensitive area and the River Barrow is a catchment with previous records of pearl mussel, though the current status of the species is unknown. There are no known recent recordings of populations, and populations within the SAC occur in tributaries of the Barrow rather than the main channel. As noted in the RPS report there is currently no conservation objective specified for the Freshwater Pearl Mussel and the published Conservation Objectives document for the site states that '*the status of the species as a qualifying species is under review*'. Pending the outcome of this review it is my opinion that there remains a general obligation under the provisions of the European Communities (Birds and Natural Habitats) Regulations 2011 to ensure that this

species is retained at favourable conservation status meaning that there would not be any decline in the population of the species arising from the plan or project. I note the proposals for construction phase mitigation as set out in the submitted outline construction and environmental management plan included at Appendix 3.2 of the revised EIS. Mitigation measures are detailed at Table 6.1 of this document and the following are considered specifically applicable to protection of any potential impact on any Freshwater Pearl Mussel or lamprey species that may be present:

- the retention of a project ecologist and scientist / environmental engineer,
- the use of silt fencing,
- use of ready mix concrete and other appropriate materials,
- strict practices regarding fuel storage, refuelling and equipment maintenance on site.
- Regard to weather information in determining the works programme,
- No discharges directly to any watercourse,
- Control of material stockpiling and management.

Having regard to the nature of the proposed development and construction works, subject to the implementation of these mitigation measures I do not consider that the construction aspects of the proposed development is likely to have a significant adverse affect on the freshwater pearl mussel or lamprey qualifying interest of the River Barrow and River Nore SAC site. The potential impact on these qualifying interests arising from the operational phase and specifically the potential impact of flooding on the Type A surface is considered in the sections below under the heading of Flood Impacts on Type A Surface.

Impact on Otter

7.9.3.11 The third party submissions question the fact that no otter holts or likely couch sites were identified during the course of the otter survey undertaken on the route of

the proposed project given the obvious signs of otter activity on the route. The validity of the survey findings are therefore questioned. The ability of otter to habituate to noise and disturbance generated during both the construction and operational phases of the project is also questioned in third party submissions, and these impacts are considered to be understated in the NIS submitted by the first party.

7.9.3.12 With regard to the potential for the loss of couch and holt sites, the submission from Scott Cawley on behalf of Rosalind Murray and Art Mooney states that the loss of grassland along the tow path will undoubtedly result in the loss of couch sites. In my opinion, this would appear to be unlikely however given the general separation distance between the path and the river / canal bank and couch sites are unlikely to be located on the existing towpath which is currently used as a waymarked trail. Similarly with regard to holt sites, the potential for direct loss of holts to arise as a result of the proposed development is considered limited, notwithstanding the fact that no such sites were identified during the course of the survey undertaken as the proposed project does not propose any works to existing river banks on the River Barrow.

7.9.3.13 The explanation given by the first party for the lack of any identified holts or couch sites relates to the fact that the towpath / way marked trail is already the subject of significant levels of use and the bankside vegetation is maintained and does not therefore provide a significant level of cover for otter. While no holts were recorded during the survey, it is considered likely that there are breeding otter and that they use the back drain and islands along the route. In my opinion it would appear feasible that a significant amount of otter activity occurs on islands or parts of the canal / river bank away from the proposed blueway route, however it does in my opinion appear likely that there are no existing holt or couch sites at all along the river bank adjacent to the route. In this regard I note the contents of the Blackthorn Ecology Report which identified potential otter holts in the vicinity of Ballymanus Bridge (see pg.150 of Blackthorn Ecology Report) and at Courttown (pg.130 of Blackthorn Ecology Report) on the canal section of the route.

7.9.3.14 With regard to disturbance, there is the potential for the project to impact negatively on the conservation objectives for otter due to disturbance arising both during the construction and operational phases of the project. As discussed above, the species is clearly present along the route and there are therefore likely to be vulnerable locations along the route where there are holts located in the river bank adjacent to the route.

7.9.3.15 While I note the concerns raised in the third party submissions regarding the extent of otter survey undertaken and the level of detail provided, I consider that the information presented in Appendix 5.1 and section 5.4.3.2.1 of the Revised EIS set out in sufficient detail the methodology, dates and personnel involved in the survey work undertaken. I note and accept the statements in the Scott Cawley submission with regard to the difficulties of identifying otter holts and the fact that research indicates that fewer than 10% of sites can be found without radio tracking. Given this fact, the clear presence of otter along the route and the length of route and consequent issues in surveying, it is therefore possible indeed likely that holt sites have been missed. Without a more detailed level of survey detail it is accepted that there is a risk that the submitted survey information underestimates the level of otter activity on the alignment of the proposed blueway. While I do not consider this likely to have a significant effect in terms of direct loss of holt or couch sites, sites located in close proximity to the route will be liable to be impacted by disturbance from construction works and during operation.

7.9.3.16 While otters do acclimatise to disturbance a number of the third party submissions contend that the degree to which this is the case is overstated in the EIS / NIS. Specifically, the Scott Cawley report submitted by Rosalind Murray and Art Mooney, states that there is an over reliance on the concept of otter becoming habituated to disturbance. The impact on otter during construction is likely to be localised but intense and the loss of couch sites and disturbance and the loss of cover vegetation may force otters to move to less optimum resting sites that could impact on breeding success. Disturbance during the operational phase could result in the species moving outside of the SAC and failing to meet the site objectives.

7.9.3.17 In response to the concerns raised regarding disturbance, the first party note that there are a significant number of publications that support the conclusion that disturbance by recreation is unlikely to have a significant effect on otter. The first party submission notes that the track is already used by humans and otter are primarily active at night. No fencing or lighting is proposed as part of the development and no excessively heavy machinery will be used during construction. Disturbance by recreation is unlikely to have a significant effect and reference is made to 10 no. publications in support. On the basis of the information presented in the first party submissions on file and the articles referred to as well as the design of the proposed development with a general verge proposed of 1 metre and the relatively lightweight equipment proposed to be used it is considered unlikely that the proposed development would have a significant adverse effect on the conservation objectives for otter. As noted in section 7.6.4 of this report above, however, the submitted information raised significant questions regarding the ability of the proposed path width to be accommodated over large sections of the route of the proposed development. In the absence of a more detailed otter survey that clearly identifies the locations of potential otter holts and couches in close proximity to the alignment of the project it is in my opinion not possible to be definitive that there would not be adverse effects on the integrity of the site due to disturbance during construction activity.

7.9.3.18 Disturbance impacts during the operational phase of the project are not in my opinion likely to be such as to have a significant impact on the integrity of the site. The existing alignment of the project is already a way marked trail that is used to a relatively high degree of intensity and which is the subject of management and maintenance. No artificial lighting or other illumination will be introduced during the operational phase. It is therefore my opinion that notwithstanding the issues referred to above regarding the lack of clarity surrounding the accommodation of the proposed path width, that significant impacts on otter are not likely to arise.

7.9.3.19 I note the fact that the first party proposes that pre construction otter surveys would be undertaken to ensure that new holts haven't been established are proposed (see

5.5.3.3.1 of the Revised EIS). This mitigation is also referenced in section 4.2 of the NIS which states that one of the preventative measures to avoid impacts on otter is to carry out pre construction surveys so that unidentified otter holts can be identified. It is then proposed to carry out exclusion procedures prior to removing the holt. As noted in the report prepared by Scott Cawley Ecologists, this removal of holts as a preventative measure would be contrary to the site specific conservation objectives relating to otter within the River Barrow and River Nore SAC site which is that there be no significant decline in couching sites or holts. In the absence of a more comprehensive otter survey that identifies holts along the route of the proposed development, the extent to which the removal of existing holts would be required at construction phase is unclear. I would therefore be in agreement with the Scott Cawley report that the available information is not of sufficient detail to enable the Board to determine that the proposed project would not result in a significant adverse effect on the integrity of the SAC site. The extent of these impacts covers the section of the River Barrow from lock 28 to the immediate south of Athy which is the location where the route of the proposed project intersects with the SAC and extends from that point to the south as far as St. Mullins. The issues raised relating to the impact of the project on the integrity of the European site as it relates to otter as a conservation objective therefore relate to the section of the route in County Kildare to the south of Lock 28 Athy, the southern section of the route in County Laois and the entirety of the route as it passes through County Carlow. The impact of the project on badger on the northern section of the route where it adjoins the Barrow branch of the canal in counties Laois and Kildare is considered in section 7.7 of this report above relating to General Ecology.

Flood Impacts on Type A Surface

7.9.3.20 As noted in section 7.4 of this report, the risk of erosion of the Type A path surface along the river sections of the route prone to flooding is raised in third party submissions and forms the basis for the refusal of permission / omission of sections

of the route in the decisions issued by the Planning Authorities. The potential impact of the erosion of the type A surface along the river sections are significant with an estimated 3,461 cubic metres of crushed limestone (estimated by HES and appearing to relate to just the top dust layer), and 27,800 cubic metres of material in the verges (as per the Scott Cawley submission on behalf of Rosalind Murray and Art Mooney).

7.9.3.21 In response to the decision of the Planning Authorities that the proposed development would have an adverse impact on the integrity of the SAC by virtue of contamination of the River Barrow by crushed limestone released from the proposed Type A unbound path during periods of flooding, the first party retained Mr Michael Gill of Hydro Environmental Services Limited to undertake a review of the submitted documentation and the reports prepared by and on behalf of the Planning Authorities. This review concludes that flood events are characterised by general reductions in water quality that are not accounted for in the NIS and that, while there is potential for erosion of the unbound material (Type A), the impacts arising are an order of magnitude less than those put forward in the RPS AA worst case scenario and not such as to have an impact on the integrity of the European site in light of its conservation objectives.

7.9.3.22 The Hydro Environmental Services (HES) Ltd. review of the hydrological aspects of the development is in general agreement with the conclusions of the EIS that during flood events the general water flow is away from as opposed to towards the main channel and that extreme storm events identified as a concern in the RPS report, are associated with a marked decrease in water quality in the river channel. The assessment undertaken by HES also determines that while there is the potential for an impact from the unbound material, the magnitude of the impact is the primary consideration and that this impact is likely to be a minor and not necessarily adverse impact on the SAC. The report also identifies that the RPS appropriate assessment report assumes that the entire path construction could be washed into the River Barrow during a flood event. It is contended that on the basis of past maintenance experience and the design of the Type A track there is no scientific evidence or justification to support this opinion.

- 7.9.3.23 The HES report included with the first party appeal identifies that the site is located entirely within hydrometric area 14 of the South East River Basin District and the CFRAM study identifies the River Barrow as a low slope, low energy meandering system. It is stated that the flat nature of the blueway route and surrounding lands are such that there are no fast flowing preferential flow paths across the proposed track to surface waters (river or canal) that could potentially act as a pathway to these receptors. The HES report also notes that the areas identified as being at risk of potentially high levels of erosive flooding have been provided with a bound surface. These areas comprise St Mullins Lock which is subject to tidal influences and another area to the north of Leighlinbridge.
- 7.9.3.24 What is presented in the HES report is stated to be a conceptual model of likely impact of flood events on the River Barrow. This conceptual model sets out how areas other than those where the Type D concrete surface is proposed, while at risk of flooding are subject to deposition, with rising flood waters pushing any debris away from the main channel and the retreating waters depositing on the floodplain. It With regard to sedimentation impacts from flood events, the HES assessment notes the very extensive amount of silt and debris that would be mobilised in the river during flood conditions and contends that potential sediment related impact arising from the proposed Type A path would be imperceptible relative to natural flood conditions. It is submitted that the conceptual model presented by HES is the only one that tries to quantify potential sediment impact and that the assessment undertaken by RPS merely states that the amount of sediment discharge is unquantifiable.
- 7.9.3.25 With regard to the potential impact of flooding on the proposed type A unbound surface and the potential impact on the SAC there are a number of issues that I consider relevant. Firstly, as discussed in section 7.4 of this report under the heading of *Maintenance Implications of the Form of Development*, I have concerns relating to the identification and justification of the locations where erosive flooding is considered likely to occur and where an alternative Type D concrete surface is proposed. No significant detail of this analysis is provided in the EIS or NIS. Against

this, the information presented by third parties clearly indicates instances of flood damage and flood events of significant force that have occurred outside of the identified locations where the first party identify erosive effects as being potentially an issue. As set out in section 7.4 of this report therefore it is not in my opinion clear that the extent of erosive flooding is restricted to the areas identified by the first party.

7.9.3.26 With regard to the contention of the first party that the proposed 804 material and the limestone have a gravimetric weight and are not a silt, that is to say they are not such that they would become suspended in water, I would accept that this would be relevant where the flow of flood water is low and the direction of flood water overtopping the river bank is as set out in the conceptual model submitted by the first party. As set out above and at section 7.4 however, on the basis of my observations and the information presented by the third parties on file, I do not consider that this is clearly the case. Rather there is a significant volume of evidence that the extent of erosive and high velocity flood waters is significantly more extensive than what has been indicated by the first party and would extend over significant sections of the route where the Type A unbound surface is proposed to be used. In such circumstances the fact that the Clause 804 material and the limestone top layer does not have a gravimetric weight will not alter the fact that it is liable to be washed into the river channel and would have a potential impact on habitats of a number of qualifying interests of the River Barrow and River Nore SAC site, including crayfish, lamprey species, freshwater pearl mussel, salmon and a number of habitats identified as being at risk in the screening assessment undertaken. .

7.9.3.27 The first party contend that the model put forward in their submission is the only attempt to quantify the potential impact of erosion of the Type A path and that the volume of material would be limited relative to the significant volume of material carried in the River Barrow during flood events. The river topography, the fact it is a depositing river and the presence of naturally occurring eroding banks within the river channel are highlighted by the first party in support of this view. The fact remains however that I consider there is the potential for significant additional

volumes of material to be deposited to the river during flood conditions on account of the Type A path design. The first party states that even if such erosion of the Type A path was to occur, that the material eroded could only represent a tiny percentage of the overall sediment load within the river and would be wholly insignificant in terms of the potential for adverse effects on the SAC. I would agree that it is likely that the volume of any such material would comprise a relatively low percentage of the overall sediment load in the river, however for the purposes of appropriate assessment I do not consider that this is the appropriate test. Rather it needs to be demonstrated that any additional deposition of material into the river during the course of flood events arising from the use of the proposed Type A surface would not have an adverse impact on the integrity of the River Barrow and River Nore SAC. In my opinion the conceptual model and analysis presented by the first party does not clearly indicate on the basis of best scientific information that this would be the case and it is therefore my opinion that this analysis does not mean that significant additional impacts on the aquatic qualifying interests of the River Barrow and River Nore SAC site can be ruled out.

Overall Conclusion of Appropriate Assessment

- 7.9.3.28 Having regard to the above, it is my opinion that there is significant uncertainty with regard to the suitability of the proposed Type A surface within the flood zone of the European site arising from the path design and the extent and nature of flooding events along the river section of the route. While the first party has attempted to model the risks arising, I do not consider that the conceptual model presented is robust enough to address the issues raised above regarding the potential for erosive flooding at other locations outside of those identified by the first party. It is therefore my opinion that notwithstanding the information presented by the first party, it cannot be concluded beyond reasonable scientific doubt that sections of the proposed development proposed to be developed with an unbound surface within an identified flood zone, individually or in combination with other plans or projects would not have an adverse effect on the integrity of the River Barrow and River Nore SAC having

regard to the conservation objectives of the site. As set out above, it is also my opinion that having regard to the clear evidence of otter activity in the vicinity of the proposed development, to the lack of survey information identifying holt sites and the proposed removal of holts as a preventative measure if encountered during construction, that it is not possible to conclude beyond reasonable scientific doubt that the proposed development would not have an adverse effect on the conservation objectives for otter as set out in the River Barrow and River Nore SAC including the target that there would be no significant decline in the number of couching sites and holts.

Implications of Alternative Type E Bound Surface for Appropriate Assessment

7.9.3.29 There are a number of considerations regarding the potential impact on general ecology arising the use of the alternative Type E tar and chip path design on the sections adjoining the River Barrow where the Type A was initially proposed. The basic design of the path in terms of width and construction methodology would remain the same. It is not therefore considered that the impacts on ecology arising from disturbance would likely be materially different to the situation described above. The use of the tarred surface would give rise to potential issues of the management of the storage of bitumen and construction of the surface using bitumen. Bitumen material would have the potential to be released to the river and result in contamination with resulting negative impacts on aquatic species. I particularly note the fact that bitumen is proposed to be sprayed. The existing submitted outline CEMP does not specifically address the storage and use of the Type E path materials, however it is considered that many of the mitigation measures proposed would remain appropriate to the construction of such a path design. Details of mitigation specific to the Type E surface are set out at 4.6.1 of the first party appeal and includes a statement that the spraying of bitumen during heavy rainfall events would be avoided and that refilling of bitumen would be undertaken at the storage compound or access from the public road and therefore at a remove from the river channel.. On the basis of the information presented, including the additional

mitigation set out in section 4.6.1 of the first party appeal, I am satisfied that the construction phase of the project would not have an adverse affect on the integrity of the European site having regard to the conservation objectives of the site.

7.9.3.30 During the operational phase, the use of the alternative Type E surface would give rise to potential issues of being impacted by flooding, and it is not clear how the alternative surface would react to prolonged inundation by flood waters, including the impact of potential damage to the verges during flood events. There is also the potential impact on ecology from the erosion of the side spoil / verge material, estimated in the submission received from Scott Cawley Ecologists at 27,860 cubic metres of material. In addition, there would be considerations of the impact of the bound surface on ecology moving across the path and whether this surface would act to inhibit the movement of species in any way. No detailed consideration of these potential impacts had been addressed in the first party appeal or further revisions to the EIS or NIS undertaken and, in the event that the Board was to give further consideration to this alternative Type E surface, it may also consider it appropriate to request revisions to the NIS to reflect the proposed alterations.

7.9.3.31 As discussed under the heading of hydrology, I do not consider that the impact of a bound surface is such as to have a material impact on flooding or on recharge. Specifically, I do not consider it likely that the surfacing of the path as proposed would have an impact on the habitat for otter, whorl snail or other aquatic species such as would have an adverse affect on the integrity of the SAC site. The issue of potential damage to the bound surface from flooding, and the potential for damaged sections to result in pollution of the aquatic environment, is difficult to assess in detail on the basis information available. Subject to ongoing repair and reinstatement of path verges, I do not consider it likely that the proposed development would have an adverse affect on the integrity of the River Barrow and River Nore SAC site having regard to the conservation objectives of the site, however it is considered necessary that further details regarding these potential impacts in the form of a revised NIS would be provided prior to a determination of no adverse affect being reached. .

7.10. EIA

7.10.1 Introduction

7.10.1.1 The initial applications for the proposed development was submitted to the relevant planning authorities in January, 2017 and were accompanied by an EIS that covered the entire project. This EIS was the subject of a scoping process undertaken by the first party prior to the submission of the application. As the scoping process for the environmental assessment and the date of the submission of the original EIS submitted with the application predate the coming into effect of **EIA Directive 2014/52/EU** on 16th May, 2017 the application was accompanied by an EIS in compliance with the provisions of the **2011 EIA Directive (Directive 2011/92/EU)** and not an EIAR. Following the request for further information, a revised EIS was submitted to the Planning Authorities in December, 2017. As the process relating to the consideration of the applications had commenced prior to the coming into effect of the 2014 Directive on 16th May, 2017 and having regard to the content of Circular Letter 1/2017 regarding the implementation of the 2014 Directive by Planning Authorities and An Bord Pleanala, it is considered that the provisions of the 2011 Directive remain applicable in the assessment of the content and scope of the submitted revised EIS.

7.10.1.2 It is noted that as the revised EIS was submitted after the coming into effect of the 2014 EIA Directive and the publication of the Draft Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (EPA; August, 2017), the revised EIS submitted has been prepared having regard to these documents. It remains the fact however that the relevant directive under which the applications require to be considered is the EIA Directive 2011/92/EU. The following assessment is therefore based on compliance with the 2011 Directive and focusses on the revised EIS submitted to the Planning Authorities in December, 2017 and which was the basis for the decisions taken by the Planning Authorities.

7.10.1.3 It is also noted that as part of the first party appeal, an **alternative Type E bound surface** is presented as an alternative to the Type A unbound surface that is proposed to be used over the majority of the route. Section 4.0 of the first party appeal submissions on the three applications includes consideration of the

environmental implications of the proposed alternative Type E surface under the same headings as contained in the revised EIS and consistent with the factors of the environment set out in the 2014 directive. As set out at 7.5, 7.6 and 7.9 of this report above, I do not consider that the use of a bound surface such as the proposed Type E surface is appropriate on the basis of the impacts relating to landscape and visual, user safety and conflicts and a lack of information to enable a definitive conclusion regarding the likely impacts on European sites. It is not therefore recommended that permission would be granted based on this alternative path design. Should the Board consider that a grant of permission subject to the Type E surface is appropriate it will need to undertake EIA of the project having regard to the additional information on the environment presented in section 4.0 of the first party appeal. Given that the alternative surface would result in a material change in the nature of the project, a case could be made that the nature of the project has fundamentally changed such that it constitutes a new project which would need to comply with the requirements of the 2014 EIA Directive. In such circumstances the Board would need to satisfy itself that the information submitted comprising the revised EIS and information contained in the first party appeal meet the detailed requirements of the 2014 Directive regarding structure and content of an EIAR.

- 7.10.1.4 The submitted EIS and revised EIS do not indicate the basis on which the documents have been prepared and how the project may meet the classes and thresholds set out in Schedule 5 of the Planning and Development Regulations, 2001 (as amended). From my assessment of the project, and the provisions of Schedule 5 of the Regulations, I do not consider that the proposed development comprises a class of development set out in Schedule 5 of the Regulations where the preparation of an EIS / EIAR is required and an EIA to be undertaken.
- 7.10.1.5 I have undertaken an examination of the information presented by the applicant, including the submitted EIS and revised EIS, NIS and revised NIS as well as the submissions made during the course of the application, including the specialist consultant reports commissioned by the three planning authorities.
- 7.10.1.6 As the submitted EIS falls to be assessed under the provisions of the 2011 Directive what is required is an outline of the main **alternatives** considered in the project. Alternatives are set out at section 2.5 of the EIS and have been the subject of detailed comment in section 7.4 of this assessment under the heading of Need,

Form of Development Proposed and Alternatives. Section 2.5 sets out the **alternative land uses** that could be undertaken for the project including specific reference to the do nothing scenario of retaining the waymarked trail in its existing form. The retention of the existing form is not considered viable on the basis that it does not conform to any identified standard. Similarly, a national cycleway standard is not considered appropriate on the basis of environmental Impacts and higher cost. **Alternative materials** are discussed at 2.5.4 with the rationale for the four proposed surfaces provided and brief consideration of a reinforced grass surface. **Alternative routes** are discussed in section 2.5.3 and identifies the rationale for the detailed route along the Barrow Way proposed. More fundamental alternative route options, including those set out in a number of third party submissions are not specifically addressed. The rationale for the **alternative path width** is set out at 2.5.5 and refers to the Preliminary Design Report included at Appendix 3.3 of the revised EIS. Overall it is considered that the alternatives examined and discussed in the EIS are consistent with the requirements of the 2011 Directive.

7.10.1.7 With regard to **impacts**, the EIS submitted examines the potential impact of the proposed development under a grouped format approach with each of the areas set out in Article 3 of the 2011 EIA Directive being addressed individually for potential impacts and proposed mitigation measures. Under the heading of mitigation it is noted that no consolidated schedule of mitigation measures or environmental commitments is included as part of the EIS or other application documentation. In the event of a grant of permission, it is considered appropriate that the submission of such a schedule would be required by way of condition. The EIS submitted, in my opinion, addresses the main likely significant direct and indirect effects that the proposed development may have on the environment and is in compliance with the relevant legislative provisions as set out in Art.94 of the Planning and Development Regulations, 2001 (as amended). I note the provisions of Paragraph 1.10 of the revised EIS which relates to the Project Team and consider that the information submitted indicates that the submitted EIS has been prepared by persons with significant expertise and competence in their respective areas.

7.10.2 Assessment of Potential Direct and Indirect Effects

7.10.2.1 The following sections contain an assessment of the project under each of the individual factors of the environment. In undertaking this assessment the revised factors of the environment included in the 2014 EIA Directive are used as these reflect the headings contained in the revised EIS submitted by the applicant.

Human Beings, Population and Human Health

7.10.2.2 The proposed development comprises the development of an engineered path along the length of the existing Barrow Way extending 116km from Lowtown in County Kildare to St Mullins in Co. Carlow. The impacts of the project on population, human beings and human health comprise positive economic impacts during construction works, and particularly during the operational phase where there is potential for economic activity in towns and villages along the route. The project also have potential positive impacts on overall human health arising from increased activity.

7.10.2.3 The positive economic benefits of the proposed development are not quantified in the revised EIS and there is no economic analysis of the potential positive economic benefits arising. Projections for increased usage of the route do, however indicate a likely significant increase in usage with figures at the highest volume location (St. Mullins) estimated to increase from the current 245 to between 686 and 931 average daily users. As detailed in section 7.6 of this report, this estimate is not based on a very robust methodology, relying on comparisons with usage data from other greenways such as the Waterford Greenway. It is, however clear that there would be potentially significant additional users of the route who which will likely generate significant additional economic benefits for service providers in towns and villages along the route as well as opening up the potential for new commercial activities.

7.10.2.4 The additional usage of the route will also clearly give rise to general public health benefits through the attraction of more persons to the outdoors and to engage in physical activity. The fact that the project is designed around a 'slow tourism' concept with the aim of attracting families and a range of users would, in my opinion, likely mean that positive impacts on human health should be maximised. Given the uncertainty regarding the exact future usage numbers the level of benefit to human

health is difficult to quantify, however based on the submitted projections that indicate an approximate tripling of usage at the busiest locations, it is considered that the positive benefits are likely to be significant.

7.10.2.5 I note the fact that a number of third party submissions contend that the attractiveness of the path for walkers will be reduced on foot of the proposed development and also raise concerns with regard to the impacts of the additional volume for user safety. As discussed in section 7.4 of this report, I accept that the proposed project may reduce the attractiveness of the route for some walkers due to increased user numbers, the loss of the grassed surface and potential conflicts with other users, notably cyclists. The overall impact of the project on user numbers and the range of user types will, however, in my opinion be clearly positive and there will therefore be an overall positive impact on user numbers and the range of user types catered for. With regard to safety, the first party has submitted a detailed justification for the path design including width proposed and this is the subject of detailed discussion in section 7.6 of this report. The submitted information is in my opinion deficient with regard to the identification of the exact locations where widths below the design standard of 2.5 metres will be feasible and based on my observations and the third party submissions, it would appear that the extent of such sections of restricted width are significant, including in the southern sections of the route where user numbers are projected to be higher. The uncertainties with regard to the path width that can be accommodated in locations such as this, together with the uncertainties with regard to future usage, are such that in my opinion, on the basis of the information currently available, it is difficult to state definitively that the proposed development would not result in potential user conflicts and safety, particularly on the southern sections of the route.

Biodiversity, Flora and Fauna

7.10.2.6 The alignment of the proposed project follows the Barrow Branch of the Grand Canal and the River Barrow south of Athy. The Grand Canal is identified as a pNHA and the section to the south of Lock 28 on the River Barrow a SAC. The potential impacts on biodiversity, flora and fauna are influenced by the fact that the alignment

of the proposed blueway essentially follows the existing national waymarked trail and is on an existing towpath of the canal / river. The existing environment along the route has therefore already been significantly modified from its natural state, is the subject of a maintenance regime by Waterways Ireland and, in the case of the towpath of the canal, comprises a man made feature. The fact that the existing path is used by significant numbers of walkers, cyclists and anglers also has a significant impact on the context for assessment of the likely significant effects on biodiversity, flora and fauna. The habitat surveys undertaken indicate that the majority of the route is characterised by habitats of low ecological significance.

7.10.2.7 The proposed project has potential to impact on biodiversity and ecology due to direct habitat loss from the construction of the proposed pathway. There are also potential indirect effects arising from disturbance, both during the construction phase of the development and in operation with additional usage of the route by walkers and cyclists in particular. Given the proximity of the alignment of the proposed path to watercourses, the construction phase has the potential to result in the release of contaminants into these waters with resulting impacts on aquatic species and habitats. The proposed in stream works locations, while limited in extent, are particular sources of potential contamination of waters and ecological impacts. The route of the proposed path is a linear ecological corridor and there is some potential for the proposed project to result in severance along this corridor that would restrict its function as a linear ecological corridor.

7.10.2.8 While there will be a general loss of grassland and other habitat from the path construction, given the proposed path design I do not consider that such a loss is likely to have a significant ecological impact or impact in a significantly negative way on species along the route. Similarly, the fact that the existing linear vegetation along the back channel is proposed to be retained and that the riparian vegetation is also to be largely retained means that the basic role of the route as an ecological corridor will not, in my opinion, be significantly negatively impacted by the proposed development.

7.10.2.9 Section 7.9 of this report comprises an **appropriate assessment** of the proposed development and concludes that given the clear presence of otter along the route,

the lack of clear identification of otter holts and the potential for construction phase disturbance impacts, that the proposed development would have a potential adverse effect on the integrity of the River Barrow and River Nore SAC site having regard to the conservation objective for otter. Similarly, it is considered that the proposed use of an unbound Type A path surface over significant parts of the route adjacent to the River Barrow and in areas that are prone to flooding, would result in a risk of unbound path material being washed into the river channel and having an adverse effect on the integrity of the River Barrow and River Nore SAC site having regard to the conservation objectives for the site which include a number of aquatic species and habitats that could be potentially impacted by such discharges to the river.

7.10.2.10 A number of third party submissions received contend that the **level of survey information** submitted is inadequate to enable an accurate assessment of the likely significant impacts on species and habitats to be undertaken. In the case of species identified as qualifying interests of the River Barrow and River Nore SAC site and the undertaking of Stage 2 appropriate assessment, I consider that the provision of detailed survey information is particularly important. Surveys undertaken by the applicant have provided some assessment of the presence of terrestrial species along the route, including otter, badger, kingfisher and bats. In the case of such species their presence is acknowledged and, while relevant nesting or breeding sites have not been clearly identified in the survey work undertaken, the assessment of potential impacts arising is stated to have been undertaken on the basis that relevant sensitive breeding or other sites are present within the study area. Detailed mitigation in the form of construction practice, site access and storage of materials are presented in the revised EIS, NIS and the outline CEMP. It is contended by the first party that having regard to the nature of the proposed works and equipment and construction practices to be employed that these measures are adequate to ensure that no significant negative impacts on habitats or species along the route will arise.

7.10.2.11 In general I would agree with this approach, however, in the case of species identified as qualifying interests of the River Barrow and River Nore SAC site a higher standard is required in order that the competent authority is assured that the

proposed development would not have an adverse impact on the conservation objectives of the site. In the case of **otter**, given the lack of any identified holt sites, the clear presence of the species within the study area and consequent likelihood of holt sites being present adjacent to the works area and the previously referred to uncertainty with regard to the accommodation of the design path width of 2.5 metres and separation between the path and river channel, it is not considered possible to clearly determine that the construction phase of the project would not have an adverse effect on the integrity of the SAC. In locations outside of the SAC, it is considered that the likely impact on otter species is low negative due to construction phase disturbance.

7.10.2.12 With regard to other species, the potential for negative impacts on **bats** is highlighted in third party submissions. By virtue of the fact that linear foraging tree and hedgerows will be retained, structures that could be potential roosts will not be demolished and that the path will not be lit I do not consider that any adverse impacts arising on bat species are likely to be significant. **Badger** are known to be present within the study area. There will not be any likely significant direct habitat loss for this species, however there is potential for some temporary short term negative impacts during construction.

7.10.2.13 The **marsh fritillary** is present within the study area and a number of submissions contend that inadequate survey work to identify this species has been undertaken. Information presented indicates that suitable habitat comprises areas of moderate to high coverage of *Succisa Pratensis* (more than 3 plants per m²) in a low growing sward of height 10-25cm and low cover of invasive scrub (NPWS, 2013) and this habitat was only recorded at one location within the red line boundary (at Kiltaghan South to the south of Wilson's Bridge). In this location the identified habitat is not proposed to be directly impacted by the construction of the path, and measures to ensure that works personnel and equipment do not encroach on such areas are included at 5.6.2.6 of the Revised EIS. No significant adverse impacts on this species are therefore considered likely.

7.10.2.14 With regard to **birds**, no specific bird surveys were undertaken, however, the existing tree and hedge line at the back side of the path is proposed to be retained and existing bankside vegetation is proposed to be retained as far as practicable with a 1 metre riparian strip proposed to be retained over the majority of the alignment of the project where feasible. Existing bird nesting and foraging habitat should not be significantly impacted by the project and no significant negative impacts on the majority of bird species are therefore considered likely to arise. The **Kingfisher** is known to be present in significant numbers across the study area of the proposed project and a number of third parties contend that the surveys for this Annex I species are inadequate to rule out potentially significant adverse impacts. The potential impact of the proposed development on the species comprise disturbance from construction activity and operation of the blueway and the potential for direct loss of breeding sites. The potential for direct loss of breeding sites is considered to be low given the fact that no sites were recorded as part of the surveys undertaken and that the proposed development will not encroach onto the existing bank side where breeding sites are located. With regard to indirect impacts, there is potential for breeding sites to be located outside of the study area on other banks or islands, however given the uncertainty regarding the breeding site locations and the degree of uncertainty with regard to the set back of the path from the river / canal bank as discussed in section 7.4 of this report above (under the heading of Viability of the Proposed Path Width), there is in my opinion a short term low to moderate risk of negative impacts arising on this species due to construction disturbance impacts. Operation disturbance impacts are not considered likely to be significantly different to the current situation.

7.10.2.15 **White Clawed Crayfish** and **lamprey** species (brook, river and sea) are all listed as qualifying interests of the River Barrow and River Nore SAC and are potentially present within the study area. Surveys of the 6 no. locations where in channel works are proposed is contained at Appendix 5.1 of the revised EIS (EirEco, 2015) and indicates that there are no such species present and that there is limited suitable

habitat at these 6 no. locations. On the basis of these survey results, and having regard to the construction mitigation measures proposed including as contained in the outline CEMP, and the limited extent of in channel works proposed it is not considered likely that any significant negative impacts on these species would arise.

7.10.2.16 Third party submissions also contend that the project would impact negatively on the ***Desmoulin's Whorl Snail*** which is a qualifying interest of the SAC and that inadequate surveys for this species were undertaken. I note the fact that there is no evidence of suitable habitat for this species along the alignment of the proposed path and that the main suitable habitat is in the vicinity of the back drain. The hydrology and habitat of these drains will not be significantly altered by the proposed development and I do not therefore consider it likely that significant adverse impacts on this species are likely to arise.

7.10.2.17 The path alignment has been the subject of a detailed survey for ***invasive species***, and this together with an Invasive Species management Plan is presented at Appendix 5.3 of the revised EIS. Subject to the construction practices and measures set out in this plan and the outline CEMP I do not consider that there are any likely significant negative impacts arising in terms of the spread of invasive species.

Land, Soils and Geology

7.10.2.18 The geology within the alignment of the proposed project comprises mainly limestone bedrock overlain by limestone till and alluvial sub soils. Soil types along the route are variable on account of the significant length and geographic variation involved.

7.10.2.19 The proposed path construction is such that there would likely be no or very limited direct impact on bedrock. Soils that are excavated to enable construction are to be stored and reused in the construction of the verges for the paths. The design of the bulk of the proposed path is Type A permeable unbound surface (c.96.4km out of total 115.7km). The path designs include a slight cross fall for drainage, however the type A path surface would be permeable. The impact of the project on soils and geology is therefore considered to be negligible.

7.10.2.20 Under the heading of Land, the proposed project will not result in any land take with all lands along the line of the path being either within the control of the local authority in the case of crossings or use of public roads or under the direct control of Waterways Ireland. No significant impacts are therefore predicted.

Hydrology and Hydrogeology

7.10.2.21 The entire site of the proposed project is located within the River Barrow catchment with a number of sub catchments along the route. The application sets out data sourced from the OPW flood mapping (floodmaps.ie) and also the results of the CFRAM study for the area. These indicate that the bulk of the route located adjacent to the River Barrow are located within the 1 in 100 year flood zone. A total of 67km or c.58 percent of the overall alignment is predicted to be within the 1 in 100 year flood zone and the following assessment of the breakdown of the areas within the flood zone by county is given in the RPS report on the application.

	Outside 1:100 Year Flood Zone	Inside 1:100 Year Flood Zone	Total
Kildare	32.9 km	14 km	46.9 km
Laois	14.2 km	1.8 km	16 km
Carlow	1.6 km	51.2 km	52.8 km
Total	48.7 km	67 km	115.7 km

In terms of the impact of flooding on the type A surface, the RPS report estimates that a total of 55.4 km out of the total 67 km of track located within flood zone A (1:100 year) is proposed to have the Type A unbound surface.

7.10.2.22 The potential impacts of the project under the heading of hydrology and hydrogeology comprise construction phase impacts generating pollutants that enter the watercourse of the river Barrow or canal. The construction of the proposed path will for all path construction types involve the excavation of a shallow level of existing ground for the sub base. The depth of this layer will depend on ground conditions however it will generally be c.100mm in depth. Other minor excavations for signs and markers are also proposed. The application sets out details of the proposed construction methodology comprising on site storage of materials and proposals to

ensure that materials do not enter watercourses. These methods include the proposed use of silt fencing along the line of the construction and protocols for the storage of materials and equipment and are detailed in the revised EIS and in the outline CEMP submitted by way of further information. Subject to the implementation of the mitigation measures as set out in the application documentation it is not considered likely that significant environmental impacts on surface waters will arise.

7.10.2.23 The construction phase also has the potential to impact on groundwaters by the release of contaminants and spillages from construction equipment that would be released into the ground. The application documentation including the CEMP set out detailed measures in the form of construction practice that are considered satisfactory to avoid such impacts.

7.10.2.24 During the construction phase a number of instream works are proposed. The extent of these instream works has been revised following the request for further information, and is now restricted to three short sections of bank reinforcement at Milford and the development of a cantilevered section of path at Bagenalstown. The extent of in stream / channel works proposed is limited, and specific mitigation measures to address the risk of surface water contamination arising from such works are set out in the revised EIS and Table 6.1 of the outline CEMP. These measures include the use of pre cast concrete materials and measures for the storage of equipment and materials so as to minimise the risk of surface water contamination. The proposed measures are considered appropriate to mitigate the risk of significant environmental effects arising.

7.10.2.25 During the operational phase there are potential negative impacts arising from the changes to the path surface and infiltration, the potential for altered runoff and impact on flood risk and works to car parking areas. With regard to car parking, the proposed surfacing and lining of parking areas will be accompanied by the installation of interceptors for oil and the resulting discharges from such areas are not considered likely to result in a significant environmental impacts. The proposed revised path surfaces will increase the extent of impermeable surface, however the bulk of the proposed new path is proposed to be the unbound Type A surface that is

permeable. As set out at 7.4.4.3 of the revised EIS, the extent of new impermeable Type B and D surfaces is estimated to be 12.9 km which equates to a surface area of c.38,000 sq metres. This surface is considered to be insignificant in the context of an overall catchment size of 3 billion sq. metres. In addition, while a small camber is proposed to the new surfaces, design of the Type A unbound surface is such that during periods of heavy rainfall water would infiltrate into the pathway to ground and potential for runoff from the path is limited by the design, the flat topography and the use of timber laths bounding the pathway and the proposed grass verges.

7.10.2.26 The submission of submission from Save the Barrow Line contends that Waterways Ireland has not taken into account the changes to water quantity and velocity resulting from the proposed development. It is contended that the increased track elevation will mean that at times of flood less water will be able to overflow the bank and that flow quantities in the river channel would increase and that specialist investigation and modelling of these impacts is required. Appendix A of the Save the Barrow Line submission includes a hydrology report by SM Bennett and Co. that addresses this issue and which estimates that an additional annual 155,000 cubic metres of water would be directed into the waterway due to the surfacing and the camber. It is contended that this issue is not addressed in the EIS even under the heading of heavy rainfall events. In response, the submission of Mr Michael Gill of HES Ltd. on behalf of the first party contends that minor changes in ground level along the edge of the river will have negligible effect on the hydrodynamics of the river in flood. The main flow will continue to be in the main river channel and the floodplain and track will be inundated with a much lower velocity. There would be a very minor reduction in flood storage volume that would have an imperceptible impact on flood levels across the flooded river. I would agree that the potential impact of the raising of the level of the path has not been modelled in detail in the application documentation. The level of such increase is, however, minor and will not result in a uniform increase in bank height along the sections of the route liable to flooding. While there would in theory be potential for additional water to be diverted into the river channel, in practice, during flood events, it would appear to me that the assessment provided by HES Ltd. on behalf of the first party is a more realistic assessment of the likely situation that would arise with the main flow being in the main river channel and the path construction not having any significant impact on the

ability of flood waters to overtop the bank and inundate surrounding lands including the back drain. For this reason I do not consider that the construction of the proposed path is such that it can reasonably be considered likely to have a significant negative impact on the hydrology of the area adjoining the route or on the extent of floodplain available to the river.

Air, Climate and Noise

- 7.10.2.27 The proposed project has limited potential for impacts on ***air and climate***. The construction phase of the development has some potential for emissions to air in the form of dust and emissions from equipment, however there are no considered likely to be significant. Mitigation measures for dust in the form of dust suppression is set out in the application documentation and no significant issue in this regard are anticipated.
- 7.10.2.28 The impacts of the proposed project on air and climate during the operational phase are considered to be negligible. The attraction of visitors to the project by private modes of transport could generate additional air emissions and greenhouse gas emissions, however the impact of the active use of the development would not have any material impacts on air quality or climate.
- 7.10.2.29 The project would have potential impacts in terms of ***noise and vibration*** particularly during the construction phase of the project. The nature of the construction of the paths is however such that significant earthworks and the use of heavy machinery is not required. The assessment undertaken in Chapter 8 of the revised EIS assumes the presence of noise sensitive locations within 100 metres of the proposed works areas and uses NRA noise limits in the assessment. The noise levels predicted to be associated with plant to be used on site is set out at Table 8.13 of the revised EIS and best practice measures to limit noise impacts are set out at 3.3 of the revised EIS. These include the monitoring of noise levels during construction and limitations on the hours of construction. Based on the noise levels of the proposed plant to be used it would appear that NRA noise limits can readily be met during construction. It is also noted that the phasing of construction is such that the general period of construction noise impact would not be likely to last longer than 2-3 days. Given these factors, noise emissions from the construction phase of the

project are not considered likely to have a significant effect on the environment. In the event of permission being granted it is recommended that a requirement for the agreement of noise limits and a schedule for noise monitoring would be required.

Landscape and Visual

7.10.2.30 The project has a number of potential impacts on the landscape character of the area and in terms of visual impact. The landscape and visual impact impacts of the project are covered at Chapter 9 of the revised EIS. Potential impacts arising from the proposed development comprise construction related impacts from the operation and presence of construction equipment and personnel. Such impacts, while having a potentially significant adverse impact on the landscape character of the route and a negative impact on views, are however likely to be short term in duration. The construction of the new bridge structures in Athy and Monasterevin have the potential to result in more long term visual impacts, however the context of these locations in an urban environment are not as potentially sensitive as construction in a rural area. Operational phase landscape and visual impacts comprise a change in the perception of the landscape from the addition of an engineered path feature that would combine with the general high level of landscape significance along the rural sections of the route to result in a potentially significant negative overall landscape impact. With regard to views, there are a number of protected views identified in the three County Development Plans, and the proposed development has the potential to negatively impact on these and other visually sensitive locations along the route.

7.10.2.31 ***Operational phase landscape impacts*** arising comprise a change in the character of the area arising from the proposed path. As set out in section 7.5 of this report, it is my opinion that the landscape significance assessment contained in the EIS does not vary to reflect the variations in landscape character along the route that are acknowledged in the assessment (see EIS 9.7.2.2.3). As set out in section 7.5, I consider that some sub division of the route in terms of its landscape significance / sensitivity is appropriate given the different character it exhibits. In my opinion, a more significant issue in the overall assessment of landscape character undertaken in the EIS is the significant under representation of the landscape impact of the

proposed project which, when combined with the 'high' landscape significance / sensitivity leads to an overall significant under estimation of the likely overall landscape impacts likely to arise from the operational phase of the development.

7.10.2.32 Based on my assessment detailed at section 7.5 of this report, it is my opinion that it is appropriate that the route be sub divided into four main areas for the purposes of assessment of the impact on landscape character and that the results of my assessment indicate that the overall landscape impact range from imperceptible – not significant in the case of locations within existing urban areas to significant in the case of the southern River Barrow Section between Goresbridge and St Mullins. The conclusions of chapter 9 that overall landscape effects for the proposed development are long term, imperceptible to slight are not, in my opinion a reflection of the actual likely landscape effects arising and are not clearly justified in the methodology or analysis contained in Chapter 9 of the EIS.

7.10.2.33 With regard to **operational phase visual effects**, paragraph 9.6.4.1 of the revised EIS states that the general sensitivity of the visual receptors along the route is high and that the value of the environment is also generally categorised as being high. Both of these assessments were, in my opinion appropriate. Under the heading of magnitude of change, the assessment in the EIS generally categorises this as low or lot to medium. Such a categorisation is not however, in my opinion reflective of the likely impact of the project on a significant number of identified views along the route or with the definition of a low magnitude of change as defined in Table 9.5 of the revised EIS.

7.10.2.34 The potential adverse landscape and visual impact of the proposed project and its impact on the character of the Barrow Way is a central concern raised in a significant percentage of the third party submissions received. These submissions identify issues surrounding a loss of the existing unspoilt character of the route and the visual intrusiveness of the path designs proposed. As set out above, and at section 7.5 of this report, I consider that the analysis undertaken by the first party and presented at Chapter 9 of the revised EIS significantly underestimates the likely negative visual impacts of the development and the impact on landscape character. In addition, as set out at section 7.5 of this report, I consider that there are a number of issues relating to the methodology used in the assessment undertaken by the first party that are unclear, do not adequately account for the variations in landscape

character along the route and which appear to be inconsistent in the conclusions reached.

7.10.2.35 Overall, I am in significant agreement with the concerns expressed by third parties relating to the negative impact on landscape character and visual impact. In particular, I consider that the likely impacts arising on the southern river section of the route, and particularly the section from Goresbridge to St. Mullins, have been underestimated by the first party and are such that they would have an overall significant negative impact on landscape character in these sections.

Material Assets and Cultural Heritage

7.10.2.36 There are a number of potential impacts generated by the proposed project under the heading of Material Assets and Cultural Heritage. The main potential impacts arising under these headings are considered to be the impact on traffic and parking, archaeology and structures of significance along the route. The impact on landscape and landscape character (that is related to architectural heritage) has been considered separately above.

7.10.2.37 No specific *archaeological investigations* were undertaken as part of the proposed project, however a record of all known investigations is provided at Appendix 10.2 of the revised EIS. The potential for the proposed project to have a significant impact on archaeology is considered to be limited given the design and shallow nature of the foundations of the proposed path. There are no extant archaeological sites located within or in close proximity to the area of the proposed works. There are two known recorded sites that are impacted by the alignment of the proposed path. These are located at Ballymanus Castle in County Laois (RMP-LA014-036) and a moated site at Vicarstown, also in County Laois (RMP LA014-007). An additional 43 no. sites are identified in Table 10.1 of the revised EIS where mitigation in the form of pre development testing or monitoring is proposed. Mitigation proposes that an archaeologist will be present for the excavation works at these locations and that report will be prepared for the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs should any material be found. Subject to this mitigation it is not considered that there are any likely adverse impacts on archaeology arising from the project.

7.10.2.38 The proposed project has a potential impact on two identified **Architectural Conservation Areas** along the route, at Maryborough Street in Carlow Town, at Athy and in Monasterevin and Rathangan. Of these locations, the route only has a potential direct impact on the ACAs in Athy and Carlow Town and particularly in Athy where a new pedestrian bridge is proposed across the canal within the ACA boundary. An assessment of the architectural effect of the proposed development in these areas, including the proposed new bridge crossing in Athy that directly impacts on the ACA has been undertaken at 10.8.4 of the revised EIS. Given the nature of the works proposed, the existing context and the overall impact on the Athy ACA in particular, I do not consider that any significant negative impacts on the character or setting of these ACAs are likely to arise on foot of the proposed development. There are also potential impacts on **structures** of note along the line of the project, including locks, lock keepers cottages and industrial building such as mills and warehouses that remain along the route. Direct effects on Horse Bridge, Athy a protected structure, in the form of changes to the surface and the ACA in Athy would arise on foot of the project. Subject to mitigation in the form of the proposed site specific method statement for works in these areas Revised EIS pg.10-54) I do not consider that the impact on these structures or locations would be significantly negative. The proposed project will also have potential indirect effects on a number of other protected structures along the route as set out at Table 10.3 of the revised EIS. I would agree with the assessment contained in Table 10.3 of the Revised EIS that the residual effects in these locations would vary from low to imperceptible.

7.10.2.39 In terms of **traffic and parking**, the development has the potential to generate additional traffic during the construction phase with negative impact on local road condition and congestion. The construction traffic impacts are assessed at 11.1.8.4 of the revised EIS and, as set out at Table 11.1, the predicted construction phase traffic per day is low, ranging from 0.5 HGVs to 5.2 HGVs average depending on material / path type. Pre and post construction local road surveys are proposed and the overall impact of construction traffic is not considered to be significant. During the operational phase, the project will have potential impacts in terms of the attraction of visits and car trips to the study area and the use of car parking spaces. The additional trips generated will be spread along the existing parking and access

locations along the route and it is proposed by the first party that parking usage and provision would be kept under review once the project is operational. Subject to such as review it is not considered that operational phase traffic impacts would be such as to have significant environmental impacts.

Interactions

7.10.2.40 Chapter 12 of the revised EIS sets out the predicted interactions between the factors of the environment examined. The following is my assessment of the main areas of potential negative interactions between factors:

7.10.2.41 There are potential negative impacts on population and human health arising from the interaction with hydrology (flooding), noise from the construction phase of the project, the impact of the project on changing of landscapes and landscape character and the potential negative impacts on material assets. These include the impacts of construction activity and traffic on persons within the study area.

7.10.2.42 There are also potential negative impacts on flora and fauna arising from the interaction with hydrology, in particular the potential for flooding and erosion of material along the path, noise and disturbance generated during the operational and particularly the construction phases of the project.

7.10.2.43 Soils and geology have the potential to interact with water quality due to the impact of the excavation required for path foundations increasing the risk of contamination of surface waters and the generation of potential for dust.

7.10.2.44 I have reviewed these potential significant interactions and consider that the mitigation measures set out in the revised EIS and which have been discussed in the relevant sections of this EIA and preceding planning assessment are such as to reduce or remove the potential environmental effects arising.

7.10.3 EIA Conclusion

7.10.3.1 In conclusion, notwithstanding the proposed design and mitigation measures, there are a number of environmental impacts arising from the proposed project that are in my opinion likely to arise from the construction and operational phases. In particular, the proposed Type A unbound surface is in my opinion such that its use in

areas that are located within identified flood zones is likely to lead to issues of erosion that have potential negative impacts for ecology, particularly aquatic ecology, and for the condition and ongoing maintenance requirements of the path.

7.10.3.2 Notwithstanding the proposed use of the unbound Type A surface, it is my opinion that the design of the proposed path is such that it would have a significant negative impact on the landscape character and visual amenity of sections of the proposed route. In particular, the existing character and sensitivity of the sections of the route along the River Barrow, notably the southern sections of this part of the route, are such that the development would have a particularly significant impact in terms of the loss of a significant component of the existing landscape character of this part of the route. The use of an alternative Type E bound surface in place of the proposed Type A surface would, in my opinion exacerbate such negative impacts.

7.10.3.3 The predicted increases in user numbers, and the uncertainty with regard to the estimation of these future user numbers, combine with a degree of uncertainty regarding the accommodation of the proposed general path with of 2.5 metres which in itself is a relaxation of the normal design standard of 3.0 metres to result in significant potential for congestion at busy periods on the most intensively used sections of the route and conflicts between users, in particular walkers and cyclists. Notwithstanding the design concept of the development as a slow tourism concept and mitigation in the form of protective barriers and passing areas, it is considered that the development as proposed has the potential to result in significant negative impacts on population and human health arising from potential conflicts between users. The use of an alternative Type E bound surface in place of the proposed Type A surface would, in my opinion exacerbate such negative impacts.

7.11. Assessment Overview and Conclusions

7.11.1. There is significant policy support for the principle of the development proposed. The proposed 'blueway' is a form of development that is recognised in the National Planning Framework and is specifically referenced in National Policy Objective 22 which seeks to facilitate tourism development and in particular a national greenways, blueways and peatways strategy. The form of development proposed is clearly such that it would have positive impacts in terms of encouraging active recreation and be

consistent with national policy in the form of the Get Ireland Walking and Get Ireland Active strategies. There is also significant policy support at local for the development of the Barrow Way as a multi use trail with specific policies promoting the development of the existing route contained in the County Development Plans for Kildare, Laois and Carlow.

- 7.11.2. The existing condition of significant sections of the Barrow Way, and the fact that there are significant extents of the route that are not capable of accommodating a wide range of users, in particularly cyclists is also noted and accepted. The design concept of the blueway as a slow tourism concept is noted, and the principle of the approach considered acceptable in principle and appropriate to the canal / river side environment and physical constraints of the route. The basic design proposed comprising a shared use path with the majority of the route comprising an unbound surface is, in my opinion an appropriate design response to the visually and ecologically sensitive canal and river context. The use of a bound surface would not in my opinion be the preferable design approach having regard to these landscape, visual and ecological sensitivities as well as the safe accommodation of a range of users. The fact that the route is not identified as part of a national cycle network is noted.
- 7.11.3. There are a number of issues relating to the detailed design that are however not clear and, while I acknowledge the issues arising in the detailed design of a project of the extent proposed, in my opinion there remain concerns arising from the level of detail submitted with the application. Specifically, the lack of clarity regarding the ability to accommodate the general design path width of 2.5 metres plus verges is noted. In my opinion, there also remains a significant degree of uncertainty with regard to the numbers of likely future users of the route which, when combined with the issues relating to path width, raise significant concerns regarding the ability of the design to safely accommodate potential future usage, particularly on the predicted more heavily used southern sections of the route.
- 7.11.4. It is my opinion that the landscape and visual impact assessment undertaken and contained at Chapter 9 of the revised EIS, does not give sufficient regard to the clear differences in landscape type, character and sensitivity along the route or accurately reflect the landscape impact generated by the proposed development. In particular, I consider that the River Barrow section of the route is very different in character to the

canal section, and that the landscape to the south of Goresbridge has a sense of remoteness and a natural undeveloped character and sense of visual enclosure such that even with the use of the unbound Type A surface, the overall impact on landscape character would be significantly negative.

7.11.5. With regard to appropriate assessment, as set out in 7.9 above, it is my opinion that the level of detail and analysis presented by the parties to the appeal, including the evidence of path erosion and flooding outside of the areas identified by the first party as susceptible to erosion, is such that it is not possible to determine that the proposed development would not have an adverse effect on the integrity of the River Barrow and River Nore SAC having regard to the conservation objectives of the site. In particular, while the content of the conceptual hydrological model submitted by the first party is noted, it is not in my opinion possible to conclude beyond reasonable scientific doubt that adverse effects on the European site would not arise from the flooding of the river sections of the proposed path where the unbound Type A surface is proposed and the deposition of material into the river channel with resulting adverse impacts on qualifying interests of the site. Under the heading of appropriate assessment, it is also noted that the decision of Carlow County Council to refuse permission includes a reason that cites material contravention of the development plan relating to policies requiring the protection of European habitats and the satisfactory conclusion of appropriate assessment of plans and projects. Having regard to the inclusion of this reason by the Planning Authority, to the wording of the relevant policy and objective and to the criteria set out in s.37(2) of the Act, it is my opinion that the Board is restricted from issuing a grant of permission for the part of the project located within County Carlow.

7.11.6. The attention of the Board is drawn to the option of a Type E bound surface that is presented in first party appeal as an alternative to the originally proposed Type A and as a solution to the refusal of permission / omission of sections of the project by the planning authorities due to concerns regarding the potential impact on the River Barrow and River Nore SAC. Should the Board wish to pursue this option, it in my opinion, would constitute a material change in the nature of the proposed development, and would raise issues relating to public notification and also around compliance with the detailed requirements of the 2014 EIA Directive (Directive 2014/52/EU).

7.11.7. Should these issues regarding the alternative Type E surface be resolved by the Board, I consider that while it is unlikely that this surface in itself would result in significant negative ecological impacts arising, an additional level information is required before a conclusion could be reached that the surface would not have an adverse effect on the integrity of the River Barrow and River Nore SAC site in light of its conservation objectives. In addition, the concerns highlighted above regarding the potential impacts on otter and resulting impacts on the integrity of the SAC would remain outstanding. I would also highlight the conclusions of the Impact on Visual Amenity and Character section of this report (7.5), in particular paragraph 7.5.32, which concludes that the use of a Type E bound surface would have a significant negative impact on visual character between Athy and Goresbridge and a very significant negative impact on the visual character of the section between Goresbridge and St. Mullin's. The use of the alternative Type E surface would also, in my opinion, lead to issues of increased user speeds that are not adequately addressed in the documentation on file and which combine with the concerns regarding the accommodation of the design width to give rise to potentially significant user conflicts and safety issues. For these reasons, notwithstanding the outcome of the Board's determination regarding the implications of the Type E surface for public notification and EIA, I consider that on the basis of the information available, that the proposed Type E surface is not appropriate on the grounds of a negative impact on user safety, landscape character and overall user experience.

8.0 Recommendation

Having regard to the above, it is recommended as follows:

Kildare County Council - An Bord Pleanála Ref. ABP-301220-18 (Kildare County Council Planning Ref. 17/81)

That permission is granted for the section of the route within County Kildare between CH 00,000 (Lowtown as indicated on Drg.T01/EBN/AA309/P/K09) and CH 46,350 (immediately to the south east of Horse Bridge in Athy as indicated on Drg.T01/EBN/AA309/P/K34) for the reasons set out at Reasons and Considerations (1) and subject to the attached conditions set out at Conditions (1) of Schedule A below, and that permission is refused for the section of the route to the south of CH

46,350 (immediately to the south east of Horse Bridge, Athy) for the reasons set out at Reasons and Considerations (2) in Schedule A below.

Laois County Council – An Bord Pleanála Ref. ABP-301223-18 (Laois County Council Planning Ref.17/18).

That permission is granted for the section of the route within County Laois between CH 25,310 (Killinure to the south east of Monasterevin as indicated on Drg.T01/EBN/AA309/P/L09) and CH 38,265 (Bawn to the south of Vicarstown) as indicated on Drg.T01/EBN/AA309/P/L18) for the reasons set out at Reasons and Considerations (1) and subject to the attached conditions set out at Conditions (1) of Schedule B below, and that permission is refused for the section of the route within County Laois between CH 66,130 (Crossneen to the south of Carlow Town as indicated on Drg.T01/EBN/AA309/P/L19) and CH 69,180 (Mortarstown Lower as indicated on Drg.T01/EBN/AA309/P/L21) for the reasons set out at Reasons and Considerations (2) in Schedule B below.

Carlow County Council - An Bord Pleanála Ref. ABP-301245-18 (Carlow County Council Ref. 17/37).

That permission be refused for the sections of the route within County Carlow based on the reasons and considerations in Schedule C below.

9.0 Reasons and Considerations

Schedule A - Kildare County Council

Reasons and Considerations (1)

Having regard to:

- (a) The nature and extent of the proposed development and the existence of a National Waymarked Trail, The Barrow Way, along the alignment of the route,
- (b) The provisions of the *Project Ireland 2040 National Planning Framework* which promotes the development of an integrated network of blueways, the

promotion of a sustainable form of travel and activity based tourism and the diversification of rural and regional economies, and particularly the provisions of National Policy Objective 22 which seeks to facilitate tourism development and in particular a national greenways, blueways and peatways strategy, and the development of an integrated network of such routes,

- (c) National policies aimed at promoting cycling, walking and physical activity, including the *National Cycle Policy Framework, 2009-2020*, the *Get Ireland Walking Strategy and Action Plan, 2017-2020*, and *Get Ireland Active, 2016*.
- (d) The provisions of the *Regional Planning Guidelines for the Greater Dublin Area, 2010-2022* and specifically Strategic Recommendation GIR9 which seeks the enhancement of heritage transportation routes including water corridors,
- (e) The provisions of the *Kildare County Development Plan, 2017-2023*, including town, village and local area plans that are constituent parts of the County Plan which support the principle of the development of the Barrow Blueway as a walking and cycling resource, including specifically Objectives EO49, EO52 and Policies CR7, CR11 and RAO13.
- (f) The potential economic benefits arising from the proposed development,
- (g) The proposals for improved car parking, route access and signage along the existing Barrow Way,
- (h) The nature, design and layout of the proposed development which involves a limited amount of intervention in the existing environment and the use of an unbound surface over the majority of this section of the route that is appropriate to a rural area and not such as to have a high landscape impact,
- (i) the existing landscape and visual character of this section of the route of the proposed development which is not such as to have a high landscape sensitivity,
- (j) the provisions of the Environmental Impact Statement and Natura Impact Statement submitted, and
- (k) the submissions on file,

it is considered that, subject to compliance with conditions set out at Schedule A of section 10.0 below, the proposed development

- (i) would not seriously injure the visual amenities or character of the area or be such to have a significant negative impact on residential amenity,
- (ii) would not result in significant impacts on water quality, hydrology or flooding,
- (iii) would not have a negative impact on ecology or be such as to have an adverse affect on the integrity of any European site,
- (iv) would not be prejudicial to public health, and
- (v) would be acceptable in terms of user and traffic safety.

The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Reasons and Considerations (2)

1. Article 6(3) of the EU Habitats Directive requires that the competent authority shall only agree to a plan or project if it determines that it would not adversely affect the integrity of any European site having regard to the conservation objectives of the site. Having regard to the information submitted by the parties in this case, including the revised Environmental Impact Statement and Natura Impact Statement, the submissions received from third parties and the first party response to the appeals, the Board is not satisfied that the first party has satisfactorily demonstrated that the proposed development incorporating the use of an unbound surface of compacted stone and dust (Surface Type A) within an identified flood zone along the River Barrow would not significantly impact on the conservation objectives of the River Barrow and

River Nore SAC (site code 002162). The Board is also not satisfied that the proposed development would not impact negatively on otter, an Annex I species under the Habitats Directive and a qualifying interest of the River Barrow and River Nore SAC by virtue of the uncertainty regarding the location of otter holts, the potential loss of holts and the proposed removal of any holts encountered during the development. In view of this, and in accordance with the requirements of Article 6(3) of the Habitats Directive, the Board is not satisfied, beyond reasonable scientific doubt, that the proposed development, either individually or in combination with other plans and projects, would not adversely affect the integrity of the River Barrow and River Nore SAC (site code 002162), in the light of its conservation objectives.

Schedule B - Laois County Council

Reasons and Considerations (1)

Having regard to:

- (a) The nature and extent of the proposed development and the existence of a National Waymarked Trail, The Barrow Way, along the alignment of the route,
- (b) The provisions of the *Project Ireland 2040 -National Planning Framework* which promotes the development of an integrated network of blueways, the promotion of a sustainable form of travel and activity based tourism and the diversification of rural and regional economies, and particularly the provisions of National Policy Objective 22 which seeks to facilitate tourism development

and in particular a national greenways, blueways and peatways strategy, and the development of an integrated network of such routes,

- (c) National policies aimed at promoting cycling, walking and physical activity, including the *National Cycle Policy Framework, 2009-2020*, the *Get Ireland Walking Strategy and Action Plan, 2017-2020*, and *Get Ireland Active, 2016*.
- (d) The provisions of the Regional Planning Guidelines for the Midland Region, 2010-2022 and specifically Objectives TIP4, TIP5, TP4 and TP5 which development of walking and cycling facilities and routes and the upgrading and development of the amenity potential of inland waterways,
- (e) The provisions of the *Laois County Development Plan, 2017-2023*, which support the principle of the development of the Barrow Blueway as a walking and cycling resource, including specifically Policies RA06, TM8, TM22, TM23, TM25 and Objective 13.
- (f) The potential economic benefits arising from the proposed development,
- (g) The proposals for improved car parking, route access and signage along the existing Barrow Way,
- (h) The nature, design and layout of the proposed development which involves a limited amount of intervention in the existing environment and the use of an unbound surface over the majority of this section of the route that is appropriate to a rural area and not such as to have a high landscape impact,
- (i) the existing landscape and visual character of this section of the route of the proposed development which is not such as to have a high landscape sensitivity,
- (j) the provisions of the Environmental Impact Statement and Natura Impact Statement submitted, and
- (k) the submissions on file,

it is considered that, subject to compliance with conditions set out at Schedule B at Section 10.0 below, the proposed development

- (i) would not seriously injure the visual amenities or character of the area or be such to have a significant negative impact on residential amenity,
- (ii) would not result in significant impacts on water quality, hydrology or flooding,
- (iii) would not have a negative impact on ecology or be such as to have an adverse affect on the integrity of any European site,
- (iv) would not be prejudicial to public health, and
- (v) would be acceptable in terms of user and traffic safety.

The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Reasons and Considerations (2)

1. Article 6(3) of the EU Habitats Directive requires that the competent authority shall only agree to a plan or project if it determines that it would not adversely affect the integrity of any European site having regard to the conservation objectives of the site. Having regard to the information submitted by the parties in this case, including the revised Environmental Impact Statement and Natura Impact Statement, the submissions received from third parties and the first party response to the appeals, the Board is not satisfied that the first party has satisfactorily demonstrated that the proposed development incorporating the use of an unbound surface of compacted stone and dust (Surface Type A) within an identified flood zone along the River Barrow would not significantly impact on the conservation objectives of the River Barrow and River Nore SAC (site code 002162). The Board is also not satisfied that the proposed development would not impact negatively on otter, an Annex I species under the Habitats Directive and a qualifying interest of the River Barrow and River Nore SAC by virtue of the uncertainty regarding the location of otter holts, the potential loss of holts and the proposed removal of any holts encountered during the development. In view of this, and in accordance with the requirements of Article 6(3) of the Habitats Directive, the Board is not satisfied, beyond reasonable scientific doubt, that the proposed development, either individually or in combination with other plans and projects, would not

adversely affect the integrity of the River Barrow and River Nore SAC (site code 002162), in the light of its conservation objectives.

2. The River Barrow section of the proposed route within County Laois is characterised by a natural landscape of medium landscape sensitivity and views of high value and sensitivity, reflective of the location within a natural river channel with a degree of visual enclosure and general absence of physical interventions. This high landscape sensitivity and the importance of river corridors for scenic value is recognised in the Landscape Character Assessment undertaken for County Laois contained at Appendix 6 of the Plan, and Policy TM10 seek the promotion of rural tourism that is not detrimental to the character, scenic value and rural amenity of the surrounding area, including the protection and maintenance of rural landscape character. The Board do not agree with the conclusions of the EIS that the nature of the proposed development is such that the landscape impact and magnitude of change on views are imperceptible to slight, and it is considered that the overall landscape and visual impacts arising would be such as to interfere with the character of the existing landscape. The proposed development would therefore be contrary to the policies of the *Laois County Development Plan, 2017-2023* relating to the protection of landscapes and landscape character and would be contrary to the proper planning and sustainable development of the area.

Schedule C - Carlow County Council

Reasons and Considerations

1. Article 6(3) of the EU Habitats Directive requires that the competent authority shall only agree to a plan or project if it determines that it would not adversely affect the integrity of any European site having regard to the conservation objectives of the site. Having regard to the information submitted by the parties

in this case, including the revised Environmental Impact Statement and Natura Impact Statement, the submissions received from third parties and the first party response to the appeals, the Board is not satisfied that the first party has satisfactorily demonstrated that the proposed development incorporating the use of an unbound surface of compacted stone and dust (Surface Type A) within an identified flood zone along the River Barrow would not significantly impact on the conservation objectives of the River Barrow and River Nore SAC (site code 002162). The Board is also not satisfied that the proposed development would not impact negatively on otter, an Annex I species under the Habitats Directive and a qualifying interest of the River Barrow and River Nore SAC by virtue of the uncertainty regarding the location of otter holts, the potential loss of holts and the proposed removal of any holts encountered during the development. In view of this, and in accordance with the requirements of Article 6(3) of the Habitats Directive, the Board is not satisfied, beyond reasonable scientific doubt, that the proposed development, either individually or in combination with other plans and projects, would not adversely affect the integrity of the River Barrow and River Nore SAC (site code 002162), in the light of its conservation objectives.

2. The proposed development is located within the River Barrow and River Nore Special Area of Conservation (SAC Site Code 002162) and where it is an objective of the Council under Heritage Objective 5 of the Carlow County Development Plan, 2015-2021 '*to support the protection of habitats and species covered by the Habitats Directive ...*'.and policy '*to only authorise development after the competent authority has ascertained, based on scientific evidence, that the plan or project will not give rise to significant adverse direct, indirect or secondary effects on the integrity of any European site*' (Heritage Policy 2). On the basis of the information available on file, the Board is not

satisfied that it has been adequately demonstrated that the proposed development would not give rise to negative ecological impacts and would not have an adverse affect on the integrity of the River Barrow and River Nore Special Area of Conservation (Site Code 002162) in the light of its conservation objectives. It is therefore considered that the proposed development would materially contravene Heritage Objective 5 and Heritage Policy 2 of the *Carlow County Development Plan, 2015-2022* and would therefore be contrary to the proper planning and sustainable development of the area.

3. The Board notes the submissions on file regarding existing restrictions on path width along the route, and in particular along the southern sections of the route within County Carlow. Notwithstanding the information submitted as part of the Designers Safety Audit of the Route, included as part of the Preliminary Design Report, the Board considers that the detail level of detail submitted regarding the capacity of the route to accommodate the design width of 2.5 metres plus verges is not such as to enable an accurate assessment of the extent of restricted widths along the route. The Board also has concerns with regard to the methodology and projection of likely user numbers and note that there is potential for the 1,500 users per day threshold between a high and low volume cycleway as per the TII Rural Cycleway Design Standard document to be exceeded at peak periods on the busiest sections of the route. These issues relating to restricted widths and user volumes combine to give rise to concerns relating to potential users conflicts such that it is not possible to state that significant issues of user safety would not arise. On the basis of the information available the proposed development is therefore considered likely to endanger public safety by reason of likely user conflicts, to lead to the creation of a potentially hazardous and low quality experience for users of the development and to be contrary to the proper planning and sustainable development of the area.

4. The River Barrow section of the proposed route within County Carlow is characterised by a natural landscape of medium to high landscape sensitivity and views of high value and sensitivity, particularly to the south of Goresbridge where there is a sense of enclosure, remoteness and simplicity to the existing landscape. This high landscape sensitivity is recognised in the Landscape Character Assessment for County Carlow and the *Carlow County Development Plan, 2015-2021* includes Policies that promote the protection of sensitive landscapes (Tourism Objective 1 and Heritage Policy 1) and the restriction of development that would be detrimental to scenic assets, (Tourism Policy 2). It is considered that the nature of the proposed development is such that the landscape impact and magnitude of change on views is more significant than that presented in the revised EIS, and such that the overall landscape and visual impacts arising are significant negative particularly in the southern sections of the route within County Carlow. The proposed development would therefore interfere with the character of the existing landscape, would be contrary to the policies of the *Carlow County Development Plan, 2015-2021* relating to the protection of sensitive landscapes and scenic assets and would be contrary to the proper planning and sustainable development of the area.

10.0 Conditions

Schedule A – Kildare County Council

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars submitted on the 13th day of December 2017, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. (a) The mitigation measures identified in the Environmental Impact Statement and Natura Impact Statement and Outline Construction and Environmental Management Plan submitted to the Planning Authority on 13th December, 2017 shall be complied with in full by the developer, except where conditions hereunder specify otherwise.

(b) Prior to the commencement of development, the developer shall submit a schedule of environmental commitments to the Planning Authority setting out all mitigation measures as contained in the EIS, NIS and Construction and Environment Management Plan.

Reason: In the interests of clarity and to ensure the satisfactory mitigation of potential environmental impacts.

3. The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard, the developer shall:

(a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and

(b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues:

(i) the nature and location of archaeological material on the site, and

(ii) the impact of the proposed development on such archaeological material.

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further

archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

4. All works impacting on any protected structure along the route shall be supervised by a suitably qualified Conservation architect.

Reason: In order to protect the architectural heritage of protected structures along the route.

5. Works in the vicinity of watercourses shall comply with the requirements of '*Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters*', Inland Fisheries Ireland, 2016.

Reason: To ensure the protection of fish habitat during construction.

6. Prior to the commencement of development, the developer shall consult with, and achieve the agreement of Iarnród Éireann, for the following:

(a) any wayleave agreements required to facilitate works in the vicinity of the railway,

(b) licences required to undertake works, including the erection of signage, on lands that are in the ownership of CIE.

Reason: in the interests of proper planning and sustainable development of the area and in recognition of the proposed undertaking of works on CIE lands.

7. Prior to the commencement of development, the developer shall submit the following for the written agreement of the Planning Authority:

- (a) A detailed design for all new and existing controlled and uncontrolled crossing points (as identified at paragraph 11.1.4 of the revised EIS received by the Planning Authority on 13th December, 2017) and traffic signals on public roads. Such detailed design shall include, but not be limited to details of shared pedestrian and cycle paths and new and amended footways; raised crossing points; traffic calming measures; guard rails and barriers; road markings; signage; materials; kerbing; tactile paving; anti skid surfacing; lighting and traffic signals. The cost of the design, supervision, implementation, and site supervision of these works shall be borne solely by the developer.
- (b) Proposals for the ongoing maintenance and financing of maintenance works on the public road, the costs of which shall be shared between the developer and the local authority.
- (c) Details of the location and design of proposed passing bays along the route of the blueway.
- (d) Pre and post construction road condition surveys shall be undertaken of all areas in the vicinity of construction site accesses. The scope of such surveys shall be agreed in advance with the Planning authority and the costs of any repairs or reinstatement works identified as being required shall be borne by the developer.
- (e) Details of all works in the vicinity of Rathangan waste water treatment works and measures to ensure uninterrupted access to the treatment works for the duration of the construction period.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In the interests of pedestrian, cycle and traffic safety.

- 8. Drainage works at all surface car parks as identified at paragraph 11.1.6 of the revised EIS received by the Planning Authority on 13th December, 2017 shall be submitted for the written agreement of the Planning Authority prior to the commencement of development.

Reason: In the interests of traffic safety, public health and protection of ground and surface waters.

9. Prior to the commencement of development, the developer shall submit for the written agreement of the Planning Authority a detailed design for the section of public road between CH,22,250 at Sheppard's Bridge (High Bridge) and CH,23,150 at the lifting bridge on the R424. The detailed design submitted shall include, but not be limited to, details of the following:

(a) new cycleways; new and amended footpaths; any widening of the existing road; pavement repair and overlay where necessary; additional traffic calming measure; guardrails / barriers; road markings; signage; materials; provision for new services; diversions of existing services as required; drainage; kerbing; tactile paving; anti skid surfacing; surface water drainage and public lighting.

(b) Shuttle traffic signals at the railway bridge, including details of the phasing and control of the signals.

Reason: In the interest of pedestrian, cyclist and traffic safety.

10.(a) Prior to the commencement of development, the developer shall submit a Stage 2 Road Safety Audit, undertaken by an independent, approved and certified author, on the public roads directly affected by the proposed development. The recommendations of the audit shall be incorporated into the design and submitted for the written agreement of the Planning Authority prior to the commencement of development.

(b) On completion of the development, and in advance of the taking in charge of all public roads infrastructure, the developer shall complete a Stage 3 Road Safety Audit to be carried out by an independent approved and certified auditor. Any recommendations contained in the safety audit and agreed actions shall be subject to the approval of the Roads Authority.

Reason: In the interest of pedestrian, cyclist and vehicular safety.

11.(a) Prior to the commencement of development, the developer shall submit a Stage 2 Road Safety Audit, undertaken by an independent, approved and certified author on the parts of the development located on lands within the control of Waterways Ireland. The recommendations of the safety audit shall be considered by Waterways Ireland for incorporation into the design and decisions made on this issue documented and recorded and made available for inspection by the planning authority on request.

(b) Upon completion of the development, the developer shall complete a Stage 3 Road Safety Audit undertaken by an independent, approved and certified author on the parts of the development located on lands that are within the control of Waterways Ireland. The recommendations of the Safety Audit shall be considered by Waterways Ireland for incorporation into the design and decisions made on this issue documented and recorded and made available for inspection by the planning authority on request.

Reason: In the interest of pedestrian, cyclist and vehicular safety.

12.A dedicated resident engineer shall be appointed and funded by the developer to supervise all proposed road works and to liaise with the local authority, adjacent land owners and all other relevant stakeholders.

Reason: In the interest of pedestrian, cyclist and vehicular safety.

13.The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, traffic management, phasing and programming of works, hours of working, noise management measures, details of construction compounds including hording / fencing, measures to ensure the protection of the public

road in the vicinity of construction compounds and off-site disposal of construction/demolition waste.

Reason: In the interests of public safety and residential amenity.

14. Prior to the commencement of development, the developer shall submit proposals for the monitoring of noise and dust in the vicinity of the works area for the written agreement of the Planning Authority. Details to be submitted shall include proposals for monitoring locations, methodology for measurement and reporting of results to the Planning authority.

Reason: In the interests of amenity, protection of the rural environment and minimising the impact of construction on ecology.

15. Prior to the commencement of development, the developer shall submit details of a maintenance schedule for the blueway for the written agreement of the Planning Authority. This schedule shall include details of the proposed ongoing measures for the maintenance of the unbound surface, signage and verges and shall provide for proposals for the review of the maintenance schedule based on experience of the operation of the route.

Reason: In the interest of pedestrian and cyclist safety and the protection of ecology and habitats.

16. Prior to the commencement of development, the developer shall submit a finalised Invasive Species Management Plan for the written agreement of the Planning Authority. This plan shall include updated details of invasive species surveys, the location of such species, and the proposed method of managing

these species during the construction and operational phase of the development.

Reason: To ensure that the spread of invasive species is minimised.

17. Prior to the commencement of development, the developer shall submit details of the following for the written agreement of the Planning Authority:

- (a) A planting plan for the re-vegetation of exposed or bare verges and grassed area in the vicinity of the proposed path.
- (b) Proposals for the identification and agreement of areas where there are exposed tree roots or roots are encountered within the area to be excavated and a detailed methodology for construction in these locations. Such a methodology should include a requirement for hand rather than mechanical excavation in such instance. .

Reason: In the interests of visual amenity, the protection of existing trees adjoining the route and minimisation of the ecological impacts of the development.

18. Prior to the commencement of development, the developer shall submit proposals for the ongoing monitoring and operation of parking and facilities along the route for the written agreement of the Planning authority. By the end of the first October following completion of the proposed works, and again at the end of October after the second summer of operation of the Blueway the developer shall submit an updated parking and trailhead facilities report to the Planning Authority. This report shall include the following:

- (a) The results of parking surveys and trail user questionnaires,
- (b) Record of observations and complaints in relation to nuisance parking,
- (c) Identification of measures to address any issues of nuisance parking arising,
- (d) Identification of proposed improvements to trail head facilities and timeline for implementation,

(e) Identification of locations requiring additional parking and potential areas to meet identified need and timescale for implementation of proposals,

(f) Updates on ongoing development of new parking / trailhead facilities.

Reason: In the interest of proper planning and sustainable development and pedestrian, cycle and vehicular safety.

Schedule B – Laois County Council

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars submitted on the 13th day of December 2017, except as may otherwise be required in order to comply with the following conditions.

Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. (a) The mitigation measures identified in the Environmental Impact Statement and Natura Impact Statement and Outline Construction and Environmental

Management Plan submitted to the Planning Authority on 13th December, 2017 shall be complied with in full by the developer, except where conditions hereunder specify otherwise.

(b) Prior to the commencement of development, the developer shall submit a schedule of environmental commitments to the Planning Authority setting out all mitigation measures as contained in the EIS, NIS and Construction and Environment Management Plan.

Reason: In the interests of clarity and to ensure the satisfactory mitigation of potential environmental impacts.

3. The developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard, the developer shall:

(a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and

(b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues:

(i) the nature and location of archaeological material on the site, and

(ii) the impact of the proposed development on such archaeological material.

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

4. All works impacting on any protected structure along the route shall be supervised by a suitably qualified Conservation architect.

Reason: In order to protect the architectural heritage of protected structures along the route.

5. Works in the vicinity of watercourses shall comply with the requirements of '*Guidelines on Protection of Fisheries During Construction Works in and Adjacent to Waters*', Inland Fisheries Ireland, 2016.

Reason: To ensure the protection of fish habitat during construction.

6. Prior to the commencement of development, the developer shall submit the following for the written agreement of the Planning Authority:

(a) A detailed design for all new and existing controlled and uncontrolled crossing points (as identified at paragraph 11.1.4 of the revised EIS received by the Planning Authority on 13th December, 2017) and traffic signals on public roads. Such detailed design shall include, but not be limited to details of shared pedestrian and cycle paths and new and amended footways; raised crossing points; traffic calming measures; guard rails and barriers; road markings; signage; materials; kerbing; tactile paving; anti skid surfacing; lighting and traffic signals. The cost of the design, supervision, implementation, and site supervision of these works shall be borne solely by the developer.

(b) Proposals for the ongoing maintenance and financing of maintenance works on the public road, the costs of which shall be shared between the developer and the local authority.

(c) Details of the location and design of proposed passing bays along the route of the blueway.

(d) Pre and post construction road condition surveys shall be undertaken of all areas in the vicinity of construction site accesses. The costs of any repairs or reinstatement works identified as being required shall be borne by the developer.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In the interests of pedestrian, cycle and traffic safety.

7. Drainage works at all surface car parks as identified at paragraph 11.1.6 of the revised EIS received by the Planning Authority on 13th December, 2017 shall be submitted for the written agreement of the Planning Authority prior to the commencement of development.

Reason: In the interests of traffic safety, public health and protection of ground and surface waters.

9. Prior to the commencement of development, the developer shall submit details of the following relating to development in the vicinity of the L39321-0 / M7 crossing for the written agreement of the Planning Authority:

(a) Detailed design for the proposed works at the location of the proposed works in the vicinity of the wooden accommodation bridge adjacent to local road L39321-0.

(b) The location of the parking area at Killaghlish,

Reason: In the interest of pedestrian, cyclist and traffic safety.

10. (a) Prior to the commencement of development, the developer shall submit a Stage 2 Road Safety Audit, undertaken by an independent, approved and certified author, on the public roads directly affected by the proposed development. The recommendations shall be incorporated into the design and

submitted for the written agreement of the Planning Authority prior to the commencement of development.

(b) On completion of the development, and in advance of the taking in charge of all public roads infrastructure, the developer shall complete a Stage 3 Road Safety Audit to be carried out by an independent approved and certified auditor. Any recommendations contained in the safety audit and agreed actions shall be subject to the approval of the Roads Authority.

Reason: In the interest of pedestrian, cyclist and vehicular safety.

11. (a) Prior to the commencement of development, the developer shall submit a Stage 2 Road Safety Audit, undertaken by an independent, approved and certified author on the parts of the development located on lands within the control of Waterways Ireland. The recommendations of the safety audit shall be considered by Waterways Ireland for incorporation into the design and decisions made on this issue documented and recorded and made available for inspection by the planning authority on request.

(b) Upon completion of the development, the developer shall complete a Stage 3 Road Safety Audit undertaken by an independent, approved and certified author on the parts of the development located on lands that are within the control of Waterways Ireland. The recommendations of the Safety Audit shall be considered by Waterways Ireland for incorporation into the design and decisions made on this issue documented and recorded and made available for inspection by the planning authority on request. .

Reason: In the interest of pedestrian, cyclist and vehicular safety.

12. A dedicated resident engineer shall be appointed and funded by the developer to supervise all proposed road works and to liaise with the local authority, adjacent land owners and all other relevant stakeholders.

Reason: In the interest of pedestrian, cyclist and vehicular safety.

13. The construction of the development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, traffic management, phasing and programming of works, hours of working, noise management measures, details of construction compounds including hording / fencing, measures to ensure the protection of the public road in the vicinity of construction compounds and off-site disposal of construction/demolition waste.

Reason: In the interests of public safety and residential amenity.

14. Prior to the commencement of development, the developer shall submit proposals for the monitoring of noise and dust in the vicinity of the works area for the written agreement of the Planning Authority. Details to be submitted shall include proposals for monitoring locations, methodology for measurement and reporting of results to the Planning authority.

Reason: In the interests of amenity, protection of the rural environment and minimising the impact of construction on ecology.

15. Prior to the commencement of development, the developer shall submit details of a maintenance schedule for the blueway for the written agreement of the Planning Authority. This schedule shall include details of the proposed ongoing measures for the maintenance of the unbound surface, signage and verges and shall provide for proposals for the review of the maintenance schedule based on experience of the operation of the route.

Reason: In the interest of pedestrian and cyclist safety and the protection of ecology and habitats.

16. Prior to the commencement of development, the developer shall submit a finalised Invasive Species Management Plan for the written agreement of the Planning Authority. This plan shall include updated details of invasive species

surveys, the location of such species, and the proposed method of managing these species during the construction and operational phase of the development.

Reason: To ensure that the spread of invasive species is minimised.

17. Prior to the commencement of development, the developer shall submit details of the following for the written agreement of the Planning Authority:

(a) A planting plan for the re vegetation of exposed or bare verges and grassed area in the vicinity of the proposed path.

(b) Proposals for the identification and agreement of areas where there are exposed tree roots or roots are encountered within the area to be excavated and a detailed methodology for construction in these locations. Such a methodology should include a requirement for hand rather than mechanical excavation in such instance. .

Reason: In the interests of visual amenity, the protection of existing trees adjoining the route and minimisation of the ecological impacts of the development.

18. Prior to the commencement of development, the developer shall submit proposals for the ongoing monitoring and operation of parking and facilities along the route for the written agreement of the Planning authority. By the end of the first October following completion of the proposed works, and again at the end of October after the second summer of operation of the Blueway the developer shall submit an updated parking and trailhead facilities report to the Planning Authority. This report shall include the following:

(a) The results of parking surveys and trail user questionnaires,

(b) Record of observations and complaints in relation to nuisance parking,

(c) Identification of measures to address any issues of nuisance parking arising,

(d) Identification of proposed improvements to trail head facilities and timeline for implementation,

(e) Identification of locations requiring additional parking and potential areas to meet identified need and timescale for implementation of proposals,

(f) Updates on ongoing development of new parking / trailhead facilities.

Reason: In the interest of proper planning and sustainable development and pedestrian, cycle and vehicular safety.

Draft Note to Applicant for Inclusion on Decisions issued to All Three Planning Authorities

The Board noted the proposal submitted by the first party as part of the First Party Grounds of Appeal for the provision of an alternative Type E ‘tar and chip’ bound surface in place of the originally proposed Type A unbound surface. The Board note the contents of section 4.0 of the first party appeal and the assessment contained therein regarding the potential impacts arising from the proposed alternative Type E surface on the environment. Notwithstanding the content of the first party appeal, the Board considered that the introduction of such an alternative surface would result in additional adverse impacts in terms of landscape and visual impact and would give rise to increased cyclist speeds that, combined with the concerns regarding the level of detail provided regarding projected usage and accommodation of the design path width of 2.5 metres, could potentially increase conflicts between users. It is not

considered that these concerns have been adequately addressed in the information submitted. The Board is also not satisfied that, on the basis of the information presented, it can be concluded beyond reasonable scientific doubt, that the proposed alternative Type E surface would not have an adverse affect on the River Barrow and River Nore SAC, having regard to the conservation objectives of the site. Further information is considered required before the Board could reach such a conclusion. In view of these concerns it was decided not to further consider the alternative Type E surface and not to request that the development would be the subject of revised public notices.

Stephen Kay
Planning Inspector

12th February, 2019.