Project

Boyne Greenway

Drogheda to Mornington

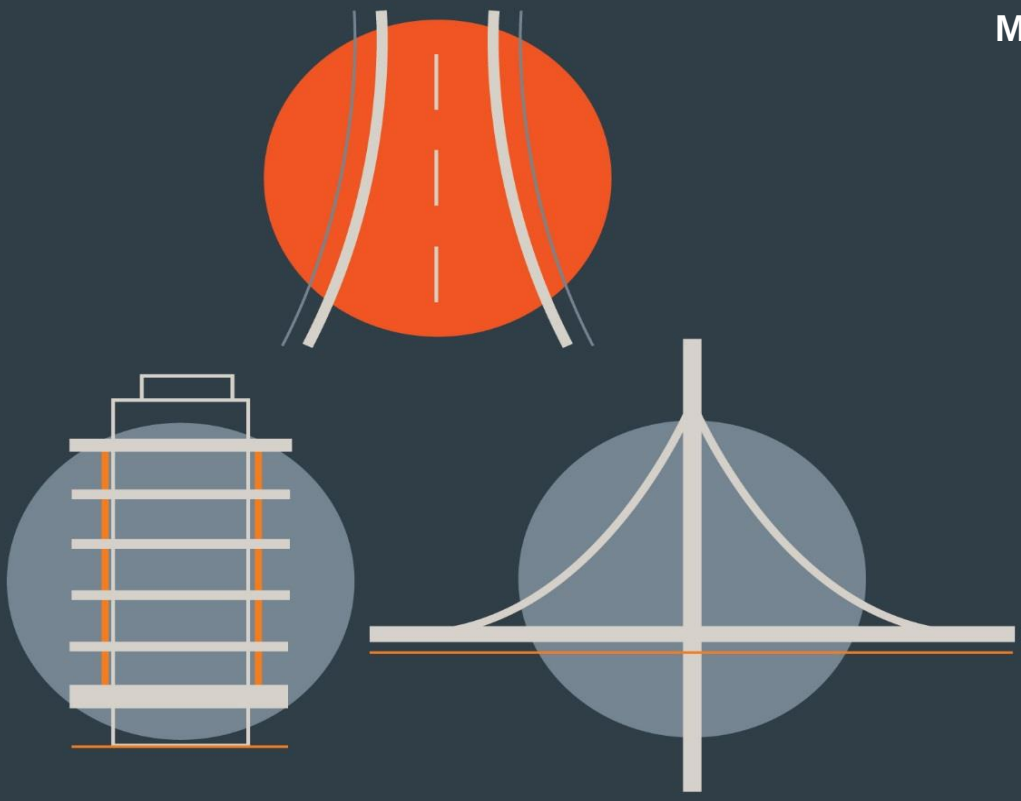
Report Title

Request for Further Information Report

Date

March 2022

TRANSPORTATION



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TECHNICAL NOTE 170029/005

Subject:	Request for Further Information	**Produced by:**	MPK
Project:	Boyne Greenway – Drogheda to Mornington	**Checked by:**	RJK
Client:	Meath County Council		
Job No:	170029	**Date:**	03rd March 2022

1.0 INTRODUCTION

1.1.1 On 13th November 2020, An Bord Pleanála (ABP) issued a letter to Meath County Council (MCC) Requesting Further Information (RFI) on the Boyne Greenway – Drogheda to Mornington.

1.1.2 This technical note examines the items relevant to the request for further information from An Bord Pleanála (ABP) for the subject planning application (Reg. Ref: ABP-307652-20) for the Boyne Greenway – Drogheda to Mornington.

1.1.3 The Boyne Greenway is a project of significant and strategic importance to the East Meath Region. The opportunity for positive social impact from the proposed scheme, if approved, cannot be overstated.

2.0 SCOPE

2.1.1 The structure of this technical note addresses the various RFI items:

- **Section 3** gives an overview of the correspondence between MCC and ABP.
- **Section 4** provides the additional information requested in regard to Mapping (Item 1).

- **Section 5** provides the additional information requested in terms of Roads/Traffic (Item 2).
- **Section 6** provides the additional information requested in terms of Construction issues (Item 3).
- **Section 7** provides the additional information requested in terms of Visual Impact (Item 4).
- **Section 8** provides the additional information requested in terms of Flood Risk (Item 5).
- **Section 9** provides the additional information requested in terms of Arboricultural Impact and Mitigation (Item 6).
- **Section 10** provides the additional information requested in terms of Biodiversity – Ecological Impact Assessment (Item 7).
- **Section 11** provides the additional information requested in regard to Other Issues, such as Lighting/noise, Amenities/facilities and Connectivity (Item 8).
- **Section 12** provides the additional information requested in regard to Impact on European Sites (Item 9).

2.1.2 As no specific numbering was provided for the RFI items, a numbering system has been assigned for the RFI categories and headings as outlined above.

3.0 RELEVANT CORRESPONDENCE BETWEEN MCC AND ABP

3.1.1 On 13th November 2020, An Bord Pleanála (ABP) issued a letter requesting Further Information on the proposed Boyne Greenway – Drogheda to Mornington scheme.

3.1.2 On 2nd December 2020, MCC requested an extension of time in relation to the Board's further information request in order to undertake the additional bird surveys requested as part of the RFI.

3.1.3 On 7th December 2020, ABP granted the requested extension of time in relation to the Board's further information request. The revised target date for receipt of the further information is the 4th March 2022.

3.1.4 MCC issued a letter to ABP on 15th April 2021, seeking clarifications in respect to certain items within the RFI.

3.1.5 On 7th May 2021, ABP issued a response to MCC clarification letter issued on the 15th April 2021.

3.1.6 Copies of all correspondence outlined above are provided in **Appendix A**.

4.0 ITEM 1 - MAPPING

4.1.1 In Item 1(i) of the RFI, ABP raises the following concern in regard to the Mapping:

"While detailed larger scale maps have been submitted, showing the engineering details along the route, there is a need for Additional mapping and drawings to scale (A2 suggested) showing the route of the proposed Greenway from Drogheda to Mornington with Clarity in a more compact easy to use format. This should include a drawing with a key showing the route in total."

4.1.2 MCC sought clarification on 15th April 2021 as follows:

"The Route Alignment Drawings issued for the Planning Application were 1:250@A1 scale (40 No. drawings), as per standard practice for planning applications. From the above text/request we assume that An Bord Pleanála require the Route Alignment drawings at the same scale, albeit on the smaller A2 sheet size (approx. 80 No. drawings would therefore be necessary if the same scale was retained). In order to reduce the number of drawings, a scale of say 1/500 (smaller detail on the drawings) could be used and this would reduce the number of drawings to 40."

4.1.3 ABP responded to MCC clarification on 7th May 2021 as follows:

"Having regard to the applicant's response, it is suggested that a scale of 1:5000 @ A1 is provided. This would result in approximately 10 drawings which should each be provided with a 'Key Plan'. Each drawing should have greater clarity showing the route colour coded to the development type (e.g. Boardwalk). This should include an outline of areas of the Natura 2000 sites (SACs and SPAs)."

RFI Response:

4.1.4 The Route Alignment Drawings have been rescaled to 1:1000@A1 scale. This results in 9 drawings each with a 'Key Plan'. Each drawing has the route colour coded to the development type (e.g. Boardwalk, Bituminous etc). The outlined of the Natura 2000 sites (SACs and SPAs) have been included in the drawings. See drawings **170029-2300 to 170029-2309** within **Appendix B**.

4.1.5 In Item 1(ii) of the RFI, ABP required the following:

> *"A Map to include the proposed route of the Greenway in the context of the Natura 2000 sites. It should be shown where the proposed route would overlap or encroach into the designated sites."*

RFI Response:

4.1.6 The Natura 2000 sites, River Boyne and River Blackwater SAC (002299) and the Boyne Estuary SPA (004080) have been included in the Route Alignment drawings. The scheme extent has been reduced on the eastern extent at Tower Road to prevent any works within the within the SAC. See drawings **170029-2300 to 170029-2309** within **Appendix B**.

4.1.7 To note, Figures 4.7 to 4.11 in the Natura Impact Statement (NIS) report, issued as part of the planning package, illustrates the habitats within a 50m buffer of the proposed Greenway, which includes the SACs & SPA.

4.1.8 In Item 1(iii) of the RFI, ABP requested:

> *"Clarification as to the overall length of the route (there is some confusion in the documents submitted) and as to how much of the route is to be constructed directly alongside the Regional Road, and off-road (including the boardwalk area)."*

RFI Response:

Overall length of the route

4.1.9 As indicated in the Route Options Assessment Report on page 98, *"The preferred route for the Boyne Greenway is approximately 5.9km in length with approximately 4.1 km of the route directly alongside the Regional Road and approximately 1.8km slightly away from the route of the road"*, and page 18 of the Constraints & Preliminary Design Report. The route alignment drawing 170029-2238 (Sheet 38) outlines the Boyne greenway (4m wide shared pedestrian/cycle route) will terminate at Mornington Road (R151) / Tower Road (Ch. 5650) junction. The greenway will link with future proposed pedestrian/cycle facilities along Mornington Road to Bettystown (Route P2), as per the 'Laytown and Bettystown Walking and Cycling Study'. A footpath (1.8m) will be provided on Tower Road from at Mornington Road (R151) / Tower Road (Ch. 5650)

junction to Tower Road / Crook Road (Ch.5840) junction. This is to enable safe connectivity onto the greenway from Tower Road. It is intended that the strategic greenway will follow the R151 as it proceeds south to Bettystown.

4.1.10 The SPA and SAC areas extent to the R150/151 regional road at a number of locations, therefore, there approximately 2.4km of the proposed greenway within the SPA/SAC areas, as outlined in the NIS and ECIA reports, issued as part of the planning package. This is illustrated in the drawings/mapping provided for Item 1 (ii), see **Appendix B**.

RFI Response:

How much of the route is to be constructed directly alongside the Regional Road

4.1.11 The Route Alignment drawings (170029-2200 to 170029-2240), issued as part of the planning package, illustrates where the greenway is adjacent or away from the Regional Road, along with notes and colour coded hatching of the greenway route (see Figure 1 below).

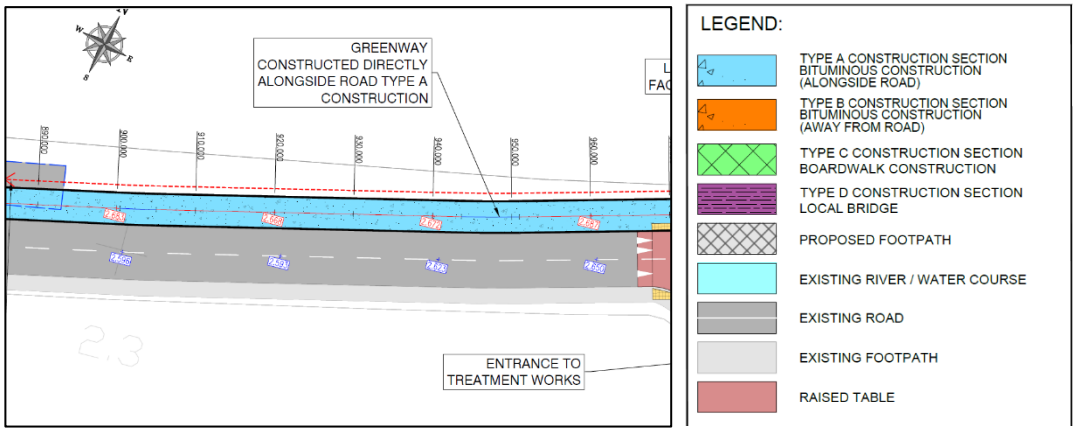

Figure 1: Route Alignment drawing – Notes & Legend

4.1.12 Also, Appendix A of the 'Outline Construction Methodology Report', issued as part of the planning package, includes a breakdown of the sections of the proposed greenway route adjacent to the Regional Road or away from the road (please see table below – Figure 2).

CHAINAGE		INTERTIDAL	FLOOD	SAC	SPA	ROUTE POSITION	CONSTRUCTION
START	END	ZONE	ZONE A				TYPE
0	90	NO	YES	NO	NO	ALONGSIDE ROAD	BITUMINOUS
90	340	NO	NO	NO	NO	ALONGSIDE ROAD	BITUMINOUS
340	1470	NO	YES	NO	NO	ALONGSIDE ROAD	BITUMINOUS
1470	2000	NO	NO	NO	NO	ALONGSIDE ROAD	BITUMINOUS
2000	2100	YES	YES	YES	YES	ALONGSIDE ROAD	BOARDWALK
2100	2160	NO	YES	NO	NO	ALONGSIDE ROAD	BOARDWALK
2160	2260	NO	NO	NO	NO	ALONGSIDE ROAD	BITUMINOUS
2260	2360	NO	NO	YES	YES	ALONGSIDE ROAD	BITUMINOUS
2360	2380	NO	NO	YES	YES	AWAY FROM ROAD	BOARDWALK
2380	2550	YES	NO	YES	YES	AWAY FROM ROAD	BOARDWALK
2550	2900	NO	NO	YES	YES	AWAY FROM ROAD	BOARDWALK
2900	3030	NO	NO	NO	YES	AWAY FROM ROAD	BITUMINOUS
3030	3110	NO	NO	YES	YES	AWAY FROM ROAD	BITUMINOUS
3110	3280	NO	NO	YES	YES	AWAY FROM ROAD	BOARDWALK
3280	3320	NO	NO	NO	NO	AWAY FROM ROAD	BOARDWALK
3320	3700	NO	NO	YES	YES	AWAY FROM ROAD	BOARDWALK
3700	3720	NO	NO	YES	YES	ALONGSIDE ROAD	BRIDGE
3720	3730	YES	NO	YES	YES	ALONGSIDE ROAD	BRIDGE
3730	3750	YES	NO	YES	YES	ALONGSIDE ROAD	BOARDWALK
3750	3830	NO	YES	YES	YES	ALONGSIDE ROAD	BOARDWALK
3830	3880	YES	YES	YES	YES	ALONGSIDE ROAD	BOARDWALK
3880	4090	NO	YES	YES	YES	ALONGSIDE ROAD	BOARDWALK
4090	4330	YES	YES	YES	YES	ALONGSIDE ROAD	BOARDWALK
4330	4350	NO	YES	YES	YES	ALONGSIDE ROAD	BOARDWALK
4350	4430	NO	NO	YES	YES	ALONGSIDE ROAD	BOARDWALK
4430	4620	NO	NO	NO	NO	AWAY FROM ROAD	BITUMINOUS
4620	4640	NO	NO	YES	YES	AWAY FROM ROAD	BITUMINOUS
4640	4720	NO	YES	YES	YES	AWAY FROM ROAD	BITUMINOUS
4720	4730	NO	YES	YES	YES	AWAY FROM ROAD	BRIDGE
4730	4740	YES	YES	YES	YES	AWAY FROM ROAD	BRIDGE
4740	4750	NO	YES	YES	YES	AWAY FROM ROAD	BRIDGE
4750	4860	NO	YES	NO	NO	ALONGSIDE ROAD	BITUMINOUS
4860	5500	NO	NO	NO	NO	ALONGSIDE ROAD	BITUMINOUS
5500	5660	NO	YES	NO	NO	ALONGSIDE ROAD	BITUMINOUS
5660	5840	NO	YES	NO	NO	ALONGSIDE ROAD	EXISTING

Figure 2: Outline Construction Methodology – Appendix A

4.1.13 There is approximately 4.1km of the proposed greenway to be constructed alongside the road or very close to the road edge.

5.0 ITEM 2 - ROADS/TRAFFIC

5.1.1 In Item 2 (i) of the RFI, ABP requested:

> *"Provide a Traffic Impact Assessment to include current usage of the local road network and the impact of the proposed Greenway on all modes of Transport. This should include road safety issues during construction and operation of the Greenway along the side of the R150/151. Account needs to be taken of the cumulative traffic implications of recent permissions for housing developments alongside the route on the local road network."*

RFI Response:

5.1.2 As part of the planning application submission, it is MCC's view that the Boyne Greenway scheme did not require/warrant a Traffic Impact Assessment as it does not meet the criteria/thresholds outlined in the Traffic and Transport Assessment Guidelines (TII Publications PE-PDV-02045, May 2014).

5.1.3 It is therefore proposed to consider and address the potential traffic impacts during construction stage in a revised Outline Construction Methodology Report, see **Appendix D**.

5.1.4 There is no car parking provided and it is envisaged most users will come by train, bus or from Drogheda (or Mornington & Laytown) to use the facility. The road safety issues during the construction stage will be outlined in the Construction Methodology Report.

5.1.5 A Road Safety Audit was carried out by an independent engineering consultancy (Bruton Consulting Engineers) in December 2018, which outlined any road safety issues during the operation of the Greenway along the R150/151. This report has been updated in 2022 to incorporate any changes in the scheme design since 2018 and is included in **Appendix C**. The updates required are minor in nature, such as provision of uncontrolled crossing and tactile paving etc. These will be updated at Detailed design Stage.

5.1.6 In Item 2 (ii) of the RFI, ABP requested:

> *"Details should include the predicted nos. of people using the greenway per day. It should be assessed as to seasonal impact and as to whether the proposed width of the Greenway (4m) is adequate to cope with the number using the route."*

RFI Response:

5.1.7 MCC have calculated the predicted number of greenway users, based on data collected from similar pedestrian/cycle schemes in Ireland, along with professional experience.

5.1.8 Pedestrian and cyclist counts recorded along four similar walking/cycling facilities in Ireland were used as references to estimate the average daily trips for the proposed Boyne Greenway **(Table 4.3)**.

5.1.9 Two of the walking/cycling facilities are located in Dun Laoghaire Rathdown County Council (DLRCC), The *Metals Greenway* and *Wyattville Road* scheme (*source: Open Data Dublin website*).

5.1.10 The total number of pedestrian and cycle users for the *Waterford Greenway scheme* was obtained from Waterford City and County Council (WCCC). The visitor trip figures were obtained from pedestrian/cycle counters and data from the WCCC report "Waterford Greenway Intercept Survey 2017" compiled by AECOM which was used to extrapolate or estimate a figure for the total users per year.

5.1.11 The total annual users and average daily trips on the *Baldoyle to Portmarnock Greenway* was also obtained and referenced (*source: National Transport Authority*).

5.1.12 An overview of the following similar pedestrian/cycle schemes are outlined below.

1. *The Metals Walkway pedestrian and cycle route, Glenageary Dart Station, Station Rd, Glenageary, Co. Dublin* - The Metals cycle and pedestrian route runs between Dalkey and Dun Laoghaire. The route is 3.3km long, and it's a recreational route and commuting route. The counter is located at Glenageary Dart Station (53°16'52.9"N 6°07'23.2"W). It is a recreational route and commuting route. Data obtained from this route is in hourly counts for 2019 and 2021 by Dun Laoghaire Rathdown County Council.

2. *Wyattville Rd, Glenageary, Co. Dublin* - This is part of a cycle and pedestrian route along Kilbogget Park and Loughlinstown Linear Park. It is approximately 3km long, and it's mainly a recreational route. There is a counter at the gates of Kilbogget Park (53°15'05.3"N 6°07'59.1"W). Data obtained from this route is in hourly counts for 2019 by Dun Laoghaire Rathdown County Council.

3. *Waterford Greenway* - This is an off-road walking and cycling trail between Waterford City and Dungarvan, predominantly using the alignment of a disused

rail line. The route is 46km long, and it is a recreational route and commuting route. Data obtained from this route was sourced from the "Waterford Greenway Intercept Survey 2017" compiled by AECOM. The intercept survey extrapolated/estimated the average daily trips from all the counters along the scheme.

4. *Baldoyle to Portmarnock Greenway* - This is an off-road walking and cycling greenway of 1.8km length parallel, to the R106 road between these Baldoyle and Portmarnock. It is a recreational route and commuting route. Data obtained from a user counter north of Moyne Road (53°24'36.6"N 6°08'13.4"W) between January and February 2021, this was used to calculate an estimated total annual users and average daily trips.

5.1.13 The Trips recorded along the aforementioned similar pedestrian/cycle routes are outlined in **Table 1** below.

Location	No.	Period	Annual Users			Average Daily Trips			Peak Season Daily Trips		
			Pedestrians	Cyclists	Total	Pedestrians	Cyclists	Total	Pedestrians	Cyclists	Total
Wyattville Rd	1	**2021**	316,787	34,261	351,048	878	95	964	1,193	134	1,314
Wyattville Rd		**2019**	270,879	20,889	291,768	742	57	799	959	86	1,042
The Metals Walkway	**2**	**2019**	118,450	77,067	195,517	325	211	536	397	318	685
Waterford Greenway	**3**	**2019**	138,447	145,567	284,014	379	399	778	*493**	*518**	*1,012**
Baldoyle - Portmarnock Greenway	**4**	**2021**	-	-	*596,839**	-	-	*1,635**	-	-	*2,126**

Table 1: Trips Recorded along Similar Pedestrian and Cyclist Routes
(These figures are estimated*)**

5.1.14 The Average Daily Trips and Peak Season Daily Trips (June, July and August) are highlighted in **Table 2** below. Peak Season daily trips were obtained calculating the 90th percentile of all daily trips through the year from the Wyattville Rd and The Metals counters. This means that 90% of the daily trips through the year are equal to or lower than this value.

5.1.15 The 90th percentile calculation could not be carried out for Waterford Greenway or the Baldoyle to Portmarnock Greenway, as day by day user numbers were not available. Assessment of the Wyattville Road and The Metals Walkway schemes indicates that there is an approx. increase of 30% between the Average Daily Trips and the Peak

Season Daily Trips in these schemes. To calculate the Peak Season Daily Trips for the Waterford Greenway and the Baldoyle to Portmarnock Greenway, an adjustment factor/uplift of 30% it is considered appropriate.

Location	No.	Period	Average Daily Trips Total (Ped & cyclists)	Peak Season Daily Trips Total (Ped & cyclists)
Wyattville Rd	1	2021	964	1,314
Wyattville Rd		2019	799	1,042
The Metals Walkway	2	2019	536	685
Waterford Greenway	3	2019	778	1,012
Baldoyle - Portmarnock Greenway	4	2021	1,635	2,126
Average			943	1,236

Table 2: Average Daily Trips and Peak Season Daily Trips for routes assessed

5.1.16 These figures are illustrated in **Figure 3**.

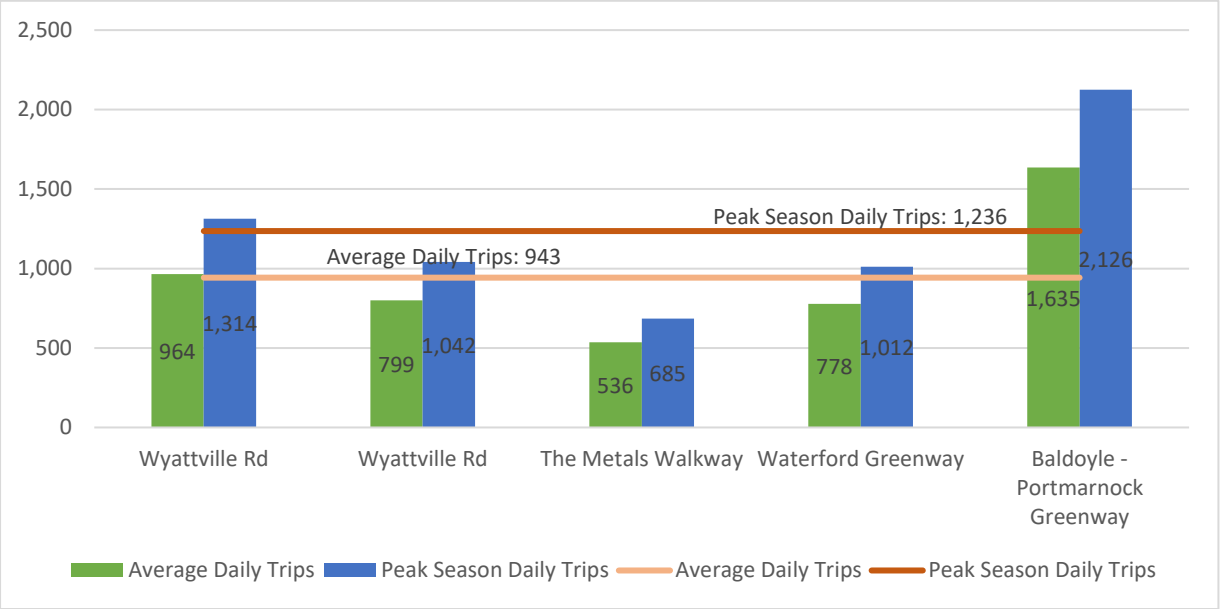

Figure 3: Average Daily Trips and Peak Season Daily Trips for routes assessed

5.1.17 Assessing the above similar schemes, it seems reasonable to expect Average Daily Trips of between 900-1,000 users a day, while in Peak Season for the Boyne Greenway, this number could go up to 1,200-1,300 users a day.

5.1.18 The proposed Boyne Greenway will be 4m in width for the entire scheme. Transport Infrastructure Ireland's greenway design standard (TII Publication "Rural Cycleway Design (Offline)", April 2017, ref no. DN-GEO-03047) recommends for a low volume route (i.e. <1,500 daily users), a minimum standard of 3m width is desirable, dropping 2m width one step below desirable, and 1.75m a two-step relaxation. For High Volume

routes (i.e. >1,500 daily users), the minimum desirable width is 5m, dropping to 3m with a one-step relaxation, and 2.5m with two step relaxation, see **Table 3** below.

Cycleways	Desirable min (m)	One Step Below Desirable Min (m)	Two Steps Below Desirable Min (m)
Low Volume (less than 1,500 users/day)	3.00	2.00	1.75
High Volume (more than 1,500 users/day)	5.00	3.00	2.50

Table 3: Required Cross Sectional Widths (Source: TII Publication "Rural Cycleway Design (Offline)", April 2017, ref no. DN-GEO-03047)

5.1.19 As mentioned above, the average daily trips expected is between 900-1,000, with 1,200-1,300 potential daily users in peak season.

5.1.20 The 4m width is considered to meet/exceed the minimum desirable width of 3m for low volume routes (i.e. 1,500 daily users).

5.1.21 The popularity for greenway schemes has increased significantly & the appetite for outdoor recreation has grown following the construction of quality infrastructure. The 4m width is considered to meet/exceed the standard of 3m width for a one-step relaxation for a high-volume route, the Standard states that "Relaxations are considered to conform to standards".

5.1.22 The proposed development therefore meets national greenway design standards.

5.1.23 In Item 2 (iii) of the RFI, ABP requested:

"Account needs to be taken of the cumulative traffic implications of recent permissions for housing developments alongside the route on the local road network."

RFI Response:

5.1.24 Please refer to Item 2(i) above – MCC does not consider that vehicular traffic envisaged as part of the operational phase of the greenway would trigger a threshold for a Traffic Impact Assessment.

5.1.25 In Item 2 (iv) (a) of the RFI, ABP requested:

'Details are requested of the demarcation and/or safety barriers etc. proposed between the greenway and the public road.'

RFI Response:

5.1.26 As part of this Boyne Greenway scheme, it is proposed to reduce the speed limit of the R150 and R151 to 50km/hr, in addition to providing a number of traffic calming features such as table-top ramps to reduce vehicle speeds. This would therefore reduce the potential requirement for safety barriers between the vehicular traffic and the vulnerable road users, in accordance with TII Publications, 'Design of Road Restraint Systems for Constrained Locations (Online Improvements, Retrofitting and Urban Settings, May 2019)', Section 9 which includes the design process when considering vehicle restraint systems (e.g. safety barriers) for minor works schemes with reduced speed limits.

5.1.27 As part of the proposed scheme, there is no vehicle restraint systems proposed in the design. Following the completion of a Road Safety Audit by an independent engineering consultancy (Bruton Consulting Engineers), it was deemed that vehicular restraint systems were not required for this scheme, see Stage 1 Road Safety Audit within **Appendix C**.

5.1.28 In Item 2 (iv) (b) of the RFI, ABP requested:

'Details of universal accessibility Greenway for all and for the emergency services.'

RFI Response:

5.1.29 An Accessibility and Mobility Audit will be carried out during the detailed design stage. The scheme is designed with consideration for potential wheelchair users, with gradients designed to a maximum of 1/20. The greenway is away from the R150 regional road from Ch.2260–3690 and Ch.4430-4760. Emergency Access is available at Ch. 2610 and Ch. 2960 for the section of greenway route away from the Regional Road (R150). The maximum travel distance along the greenway route between an emergency access will be approximately 720 metres.

5.1.30 In Item 2 (v) of the RFI, ABP requested:

'Further details relative to pedestrian crossings to be provided from the Greenway to Le Cheile and Drogheda Grammar Schools to facilitate pedestrians and cyclists.'

RFI Response:

5.1.31 We confirm the pedestrian crossings have been designed as per the Pedestrian Crossing Specification and Guidance (TII/NRA), the National Cycle Manual (NTA) and the Traffic Signs Manual (DoT). As part of the Detailed Design Stage, further details of pedestrian crossings such as the traffic signals Phasing Diagrams etc. would be outlined.

5.1.32 In Item 2 (vi) of the RFI, ABP requested:

'Details on safety measures to be provided for access to local businesses and properties who have vehicular access along the proposed route, including properties on Tower Road, Mornington.'

RFI Response:

5.1.33 Meath County Council have prepared Accommodation Works/Local Access drawings which have been to provide adequate sightline distances, meeting the requirements of the Rural Cycleway Design (TII Publication (DN-GEO-03047)) and DMURS, as per the typical entrance details issued as part of the planning package (Dwg No. 170029-2700 & 170029-2701). These drawings were included in the recent updated RSA and the independent Road Safety Auditors had no safety concerns regarding the access to local businesses and residential properties. The Accommodation Works - Local Access drawings (170029-2400 – 170029-2408) are submitted within **Appendix M**.

5.1.34 In Item 2 (vii) (a) of the RFI, ABP requested:

'Details of provision for parking facilities at either end of the proposed Greenway and in particular on the dunes as well as access, to the dunes and beach at Mornington.'

RFI Response:

5.1.35 It is not proposed to provide parking at the Dunes, as it is not intended to encourage greenway users into the dunes/Natura 2000 Site. The scheme extent has been reduced on the eastern extent at Tower Road to prevent any works within the within the SAC, see drawings 170029-2300 to 170029-2309 within **Appendix B**. The greenway will link with future proposed cycle schemes along Mornington Road (R151), which are outlined/illustrated in the 'Laytown and Bettystown Walking and Cycling Study'. A copy of this Study can be viewed in **Appendix I**.

5.1.36 In Item 2 (vii) (b) of the RFI, ABP requested:

'Also, please confirm that there is capacity and agreement for Greenway users to park in Irish Rail's Marsh Road carpark at the Drogheda end. Provide details with respect to cycle parking provision.'

RFI Response:

5.1.37 The Irish Rail carpark is currently pay & display, greenway users may use the car park complying to the pay & display protocols. There is no agreement in place nor is it intended to enter into any such agreement.

5.1.38 In Item 2 (viii) of the RFI, ABP requested:

'Details on impact on existing roads and traffic including public transport, bus stops and loss of bus laybys along the route, in particular, at the junction of the R151 with Tower Road Mornington.'

RFI Response:

5.1.39 The proposed 'in-line' bus stops at Ch.235 and Ch.5455 are similar to the bus stop layout proposed for the Golf Links Road south of Mornington Village to Bettystown, which are suitable for a 50kph urban zone.

5.1.40 In Item 2 (ix) of the RFI, ABP requested:

'A Stage 1 Road Safety Audit should be submitted.'

RFI Response:

5.1.41 A Road Safety Audit (RSA) was carried out by an independent engineering consultancy in December 2018. This Audit was carried out in accordance with the relevant sections of the Transport Infrastructure Ireland guidance (TII) GE-STY- 01024 December 2017 for Road Safety Audits. This RSA report has been updated in 2022 to incorporate any changes in the scheme design since 2018 and is submitted as part of the RFI response, see **Appendix C**.

6.0 ITEM 3 - CONSTRUCTION ISSUES

6.1.1 In Item 3 (i) of the RFI, ABP requested:

> *'Further details should be submitted relative to the Outline Construction Methodology Report, to include the location of compound areas for construction works, construction traffic/parking areas, construction methodology relative to the bridges including impact on the Protected Structure Mornington Bridge, also the relative impact on the schools along the route. Further details on construction monitoring and mitigation measures should be submitted.'*

RFI Response:

6.1.2 Potential compound locations have not been identified in the planning application as it is considered that existing Local Authority controlled materials storage yards in the locality, currently used for the storage of inert materials, will be utilised during the construction phase to store similarly inert materials for incorporation in proposed scheme. Materials will be brought to site on a daily basis as required.

6.1.3 Construction traffic/parking areas, construction methodology relative to the bridges including impact on the Protected Structure Mornington Bridge, has been included in an updated Construction Methodology Report, see **Appendix D**.

7.0 ITEM 4 - VISUAL IMPACT

7.1.1 In Item 4 (i) of the RFI, ABP requested:

'Visual Impact Assessment to include photomontages of the Greenway showing sections of the route alongside the public road including the area infront of Flogas, the schools, the boardwalk, bridges including Mornington Bridge and road junction with Church Road, the stretch through the former golf driving range, Tower Road junction with the R151, the start point of the Greenway at the monuments at 'Lady's Finger' Mornington and parking areas.'

RFI Response:

7.1.2 A Landscape and Visual Impact Assessment (LVIA) has been undertaken which includes photomontages of the above aforementioned locations, see **Appendix E**.

8.0 ITEM 5 – FLOOD RISK

8.1.1 In Item 5 (i) of the RFI, ABP requested:

'Further details need to be provided on flood risk mitigation measures and construction methods in Flood Zone A, relative to the different sections of the greenway including the boardwalk.'

8.1.2 MCC sought clarification on 15th April 2021 as follows:

"Can ABP please confirm that the further information required in response to this request relates to further detail on the resilient construction specification of the greenway in respect of bituminous pavements and the recycled plastic boardwalk?"

"Also, is ABP seeking further direction on what measures would be employed in the event of a potential flood occurring, such as road closures and diversions or warning systems?"

8.1.3 ABP responded to MCC clarification on 7th May 2021 as follows:

"The application's response is noted relative to the construction of the proposed Greenway particularly in Flood Zone A areas. In relation to your request for clarification, details on the resilient construction specification of the proposed Greenway in respect of bituminous pavements and the recycled plastic boardwalk should be submitted as part of the Construction Methodology Report. Also details on measures to be employed in the event of a potential flood occurring, such as road closures and diversions or warning systems should be submitted."

RFI Response:

8.1.4 The flood risk assessment report highlighted the fact that the greenway would only be in Flood Zone A when alongside the road, and therefore constrained by existing road infrastructure. It was also noted in the conclusions that raising the greenway significantly (as much as 1.2 metres above road level in places) would be impractical, commercially restrictive, and visually obtrusive. Therefore, this would not be in keeping with the existing topography at the location and would likely have a negative impact on the aesthetics of the local environment. Furthermore, it would be a reasonable

expectation that when the main road based infrastructure is raised above the flood level, or further mitigating flood defences are provided for same as part of a larger construction plan in future, the greenway in these locations would also be raised to match the new road level or benefit from any flood defences.

8.1.5 In terms of mitigating the risk posed where the greenway is in Flood Zone A, it is noted that the greenway in these locations is alongside the road and the construction forms will be robust and resilient and easily maintained by local road maintenance operatives from Meath County Council following any impacting flood event. The construction forms are noted in the report as being bituminous construction in accordance with TII design guidance and where a boardwalk is employed, this is to be constructed from recycled plastic elements.

8.1.6 Details on the resilient construction specification of the proposed Greenway in respect of bituminous pavements and the recycled plastic boardwalk has been included into the updated Construction Methodology Report, see **Appendix D**.

8.1.7 Details on measures to be employed in the event of a potential flood occurring, such as road closures and diversions or warning systems has been included into the updated Flood Assessment Report, see **Appendix F**.

9.0 ITEM 6 – ARBORICULTURAL IMPACT AND MITIGATION

9.1.1 In Item 6 (i) (a) of the RFI, ABP requested:

"A drawing showing tree protection details and locations is referred to in Section 2.2 Mitigation of the Report. For clarity please submit large scale A2 of the arboricultural drawings."

9.1.2 MCC sought clarification on 15th April 2021 as follows:

"Can ABP confirm the preferred scale of drawings?"

9.1.3 ABP responded to MCC clarification on 7th May 2021 as follows:

"The application's response is noted – it is requested that the drawings be submitted at a scale so as to enable trees and landscaping along various sections of the proposed route to be viewed clearly."

RFI Response:

9.1.4 Tree protection details and locations were shown on drawings TBOY003 111-115 prepared by CMK Horticulture & Arboriculture Ltd, which were issued as part of the planning package. The drawings were issued at a scale of 1:2000 @A0.

9.1.5 As per the above RFI, the aboricultural drawings have been rescaled to 1:250@A2. This results in 20 sheets per drawing set. The Aboricultural Assessment drawing TBOY001 100 to 119 RevA, Arboricultural Impact drawings TBOY001 120 to 140 RevA and the Tree protection details and locations are shown on drawings TBOY001 141 to 161 RevA. All rescaled arboricultural drawings are provided within **Appendix G**.

9.1.6 In Item 6 (i) (b) of the RFI, ABP requested:

"Details should be submitted relative to landscaping of the greenway and replacement planting to replace biodiversity lost."

9.1.7 As part of Item 4(i) a Landscape and Visual Impact Assessment (LVIA) was undertaken. A Landscape Plan has also been included with the RFI response, which outlines the proposed replacement planting along the scheme, with a net overall increase to be provided, see **Appendix H.** The updated NIS and EcIA reports are included in **Appendix K & L**.

10.0 ITEM 7 – BIODIVERSITY – ECOLOGICAL IMPACT ASSESSMENT

10.1.1 In Item 7 (i) of the RFI, ABP outlined:

> *"There is significant overlap of assessments between the Ecological Impact Assessment Report and the Natura Impact Statement (NIS)."*

RFI Response:

10.1.2 The EcIA and NIS reports have been updated throughout to reduce duplication of information and to provide clarity on the purposes and recommendations of both reports. This includes significant changes to the Methods, Results and Assessment sections of both reports. For bespoke bird surveys undertaken by Inís Environmental Consultants between 2018 and 2021 specifically in relation to European sites, the methods, results and subsequent evaluation for these surveys are provided in full within the NIS report (and are referred to within the EcIA report only as necessary). Note that some reference to European sites is still required within the EcIA report, and a level of duplication between the two reports is necessary; however, this is kept to a minimum within the updated reports.

10.1.3 In Item 7 (ii) of the RFI, ABP outlined:

> *"There should be a clear distinction between the assessments with implications for European Sites in view of their conservation objectives to be addressed comprehensively in the NIS."*

RFI Response:

10.1.4 See 10.1.2 above. As such, assessments with implications for European sites are now provided solely and comprehensively in the NIS report (within Sections 5, 6 and 7 of the NIS).

10.1.5 In Item 7 (iii) of the RFI, ABP requested:

> *"The provision of the proposed greenway would appear to result in an overall net loss of biodiversity, e.g. the removal of 160m of hedgerows and 291m of treeline with an overall estimated removal of 14% of exiting vegetation along the route. While some reference to screening planting is made in the Ecological Impact*

Assessment Report (Section 1.2.2) this has not been quantified or included in any assessment of residual effects for these habitats."

RFI Response:

10.1.6 Further details of screening planting (including quantification of screening planting extent, and assessment of residual effects) are provided within Sections 5 and 6 of the EcIA report. The landscape design for the proposed development will result in an overall increase in vegetation extent and an overall increase in biodiversity value.

10.1.7 In Item 7 (iv) of the RFI, ABP requested:

"Provide details of this screening planting."

RFI Response:

10.1.8 A Landscape Plan has been provided with our RFI response, which outlines the replacement planting along the scheme, with a net or overall increase provided, see **Appendix H**.

10.1.9 In Item 7 (v) of the RFI, ABP requested:

"Provide details of how the provisions of Objective 1 of the National Biodiversity Action Plan 2017-2021 as they relate to biodiversity loss in particular are addressed".

RFI Response:

10.1.10 Specific reference to the provisions of Objective 1 of the national Biodiversity Action Plan 2017-2021 (particularly in relation to biodiversity loss) and how the demands of Objective 1 are to be met are made in the updated EcIA report (notably within Section 5 of the EcIA report). The predicted habitat losses that would result from the proposed development would be offset by providing replacement landscape planting, including native tree planting, native woodland planting, native low-medium shrub and ornamental shrub planting and formal hedge planting. This would result in an overall net gain for biodiversity. Further details of the proposed planting are provided in **Appendix H**.

11.0 ITEM 8 – OTHER ISSUES

11.1.1 In Item 8 (i) of the RFI, ABP requested:

> *"Lighting/noise issues - further details are needed to establish that the proposal will not have a negative impact on the designated sites.'*

RFI Response:

Lighting

11.1.2 As per Section 4.5 in the 'Constraints & Preliminary Design Report':

> *'No lighting is proposed for the Greenway as a whole, as it will likely be used during daylight hours in the main. Existing lighting associated with the road corridor and existing amenity lands will be maintained. At locations where, additional operational lighting is required for security and safety, it is proposed to install LED lights to avoid emission of UV light with cowlings directed away from estuarine habitats. ……..'*

11.1.3 For safety reasons, public lighting is required at the controlled crossings (zebra and toucan crossings) along the scheme on the public road. These will be located at Ch. 40, 2215, 2610 and between Ch.3730-3760 (Church Road/R151 junction). These will be LED based (to avoid emission of UV light) and will be 'cowled' away from estuarine habitats with no light spillage, in line with best practice for bats and birds. A lighting design, including drawing(s) has been submitted as part of the RFI response, see **Appendix J**. This has been assessed against the conservation objectives for relevant European sites in the NIS report (see **Appendix K**), which concludes that the potential effects on those sites from lighting impacts would not be significant.

RFI Response:

Noise

11.1.4 As per the 'Ecological Impact Assessment (EcIA) Report':

> *'To counteract impact from dogs particularly and avoid noise transfer to birds and other species which may occur on the outward side of the Greenway route, the boardwalk barrier will be screened to full height (~1400 mm) in particularly sensitive locations. The screening will be provided by fixing boardwalk running boards to the fence posts. Mitigation will also be provided by the proposed landscape planting, which will further screen the Greenway route from on the*

outward side. In particularly sensitive locations where landscape planting is proposed, this will be supplemented by half-height screening on the boardwalk sections to mitigate noise transfer to birds, whilst minimising the shading effect the screening would have on the proposed planting'.

11.1.5 In Item 8 (ii) of the RFI, ABP requested:

"Details as to whether any amenities/facilities are to be provided along the route or at either end of the route."

RFI Response:

11.1.6 Dedicated amenities/facilities are not proposed along the route, nor at either end of the scheme. There is an existing café in Mornington Town and shops, restaurants and other amenities in Drogheda Town which greenway users can avail of. Pedestrians can also continue towards Bettystown and Laytown along the existing footpath, while experienced cyclist can continue on-road along the R151.

11.1.7 In Item 8 (iii) of the RFI, ABP requested:

"Further details of connectivity with other Greenway proposals or cycle routes in proximity or in the wider area."

RFI Response:

11.1.8 A Study, the 'Laytown and Bettystown Walking and Cycling Study' which outlines/illustrates all the cycle routes/greenway proposals within the wider area of the scheme, was prepared by ARUP in October 2021 and has been included in **Appendix I**. The potential tie-in points/connectivity to the proposed schemes outlined in the 'Laytown and Bettystown Walking and Cycling Study' are shown in the updated Route Alignment drawings, see **Appendix B**. The opportunity for positive social impact from the proposed scheme, if approved, cannot be overstated.

12.0 ITEM 9 – Impact on European Sites

12.1.1 In Item 9 (a) of the RFI, ABP requested:

> *"The submission received from the Department of Culture Heritage and Gaeltacht (11th Sept 2020) raises significant concerns in relation to bird survey data and the assessment of that data relied upon to exclude adverse effects on this European Site (Table 6.4 NIS). The similar and expanded concerns of Birdwatch Ireland (10th September 2020) and by a number of well-informed individual submissions is noted."*

RFI Response:

12.1.2 Ecological Consultants have undertaken a full winter Low Tide Assessment for all relevant SCI species and additional surveys for ALL other species (e.g. Breeding Kingfisher and Little Tern, Otter) and also an avian disturbance survey, expanded from the survey previously completed. All surveys have been carried out in line with Best Practice methodology. This information has been submitted as part of this RFI response, see **Appendix K & L**. The survey findings have been assessed and used to update the design of the proposed development and the required mitigation measures to avoid adverse effects on the integrity of relevant European sites. The updated conclusions of this assessment show that significant adverse effects will be avoided with the application of the mitigation proposed, including screening to avoid disturbance to birds and the provision of information signage to highlight the importance and sensitivities of the European sites to visitor (see **Appendix K**).

12.1.3 In Item 9 (a) (i) of the RFI, ABP requested:

> *"The applicant is requested to address in full the concerns raised by the Department in relation to the Boyne Estuary SPA and to provide updated bird survey data covering a more representative timeframe for wintering waterbirds in line with best practice methodologies and undertake a quantitative assessment of that data using the best scientific information available."*

RFI Response:

12.1.4 Additional bespoke field survey data have been collected by Inís Environmental Consultants in order to inform the NIS report (see **Appendix K**), specifically:

- Wintering waterbird surveys within/in close proximity to Boyne Estuary SPA in January to March and October to December 2021;
- Little tern surveys (focusing on breeding and foraging activity) within/in close proximity to Boyne Estuary SPA in April to September 2021; and,
- Kingfisher surveys (focusing on breeding activity) in close proximity to River Boyne and River Blackwater SPA in March to July 2021.

The surveys were undertaken using best practice methods and at the appropriate time of year, and detailed quantitative analysis is provided relating to wintering waterbird populations of Boyne Estuary SPA. These data have been evaluated, in combination with evaluation of most recent available I-WeBS data for Boyne Estuary SPA (2013-2018), particularly in relation to potential disturbance impacts on wintering waterbirds designated within Boyne Estuary SPA. The assessment concluded that likely significant effects on the European site would be avoided following the application of mitigation measures outlined in the NIS report (see **Appendix K**).

12.1.5 In Item 9 (a) (ii) of the RFI, ABP requested:

"The assessment needs to consider the site-specific conservation objectives for each SCI species, taking into account the targets and objectives of same and more recent IWebs data as relevant. Mitigation measures need to be assessed for effectiveness."

RFI Response:

12.1.6 Site-specific conservation objectives for European sites subject to Appropriate Assessment, including SCI species, are detailed in Section 6.2 of the NIS report (see **Appendix K**). These have been taken into consideration during the assessment of likely significant effects and when proposing any alternative solutions, mitigation and/or monitoring (see section Section 7 of the NIS report in **Appendix K**). Most recent available I-WeBS data have also been referred to in the updated NIS report. Likely effectiveness of mitigation measures is discussed in Sections 6 and 7 of the NIS report.

12.1.7 In Item 9 (a) (iii) of the RFI, ABP requested:

"The applicant is also requested to quantify the area of wetland habitat that will be impacted by the proposal in terms of the conservation objectives cited for Wetlands and Waterbirds of this SPA and implications for foraging or roosting of same for bird SCIs."

RFI Response:

12.1.8 Detailed discussion of the likely scope of disturbance impacts on SPA waterbird populations, and the shading of areas of designated habitats used by SPA waterbird populations, is provided in Section 6 of the NIS report (**Appendix K**), in reference to the conservation objectives for relevant features detailed in Section 6.2 of the NIS report. It is predicted that the proposed Greenway will result in the potential shading of approximately 4000m^2 of Tidal Mudflats and Sandflats habitat, which would constitute approximately 0.1% of the Tidal Mudflats and Sandflats habitat present within the European site. However, the effect of the shading is not considered as being likely to adversely impact the foraging resource on which the SCI birds rely.

12.1.9 In Item 9 (a) (iv) of the RFI, ABP requested:

"Provide clarity on screening heights along the proposed boardwalk section in particular, and assess the likely effectiveness of same in reducing disturbance to SCIs."

RFI Response:

12.1.10 With regard to minimising disturbance impacts on SCI waterbirds species, screening proposals along the proposed Greenway are discussed in Sections 6 and 7 of the NIS report (see **Appendix K**), including screening heights and locations, and the likely effectiveness of these measures in avoiding significant impacts on wintering waterbirds.

12.1.11 Boardwalk screening would be 'full height' (c.1400mm), where there would be an absence of natural screening from tree and hedgerow planting between the Greenway and those intertidal habitats that are of particular importance to birds. The screening will be provided by fixing boardwalk running boards to the fence posts (further details are provided in the EcIA report, see **Appendix L**). The bespoke field surveys for wintering birds undertaken in 2018 and 2021 recorded significant proportions of SPA

baseline populations using all five sub-sites within (OVL01, OVL02 and OZL05) and adjacent to (OZL02 and OZL03) the proposed Greenway route. Based on these findings, half-height (c.600mm) screening to minimise operational disturbance is proposed within Zone 4 (Chainage 1810-2000), to supplement proposed hedgerow planting that would be situated to the north of the boardwalk, between it and the intertidal habitats. Full-height (c.1400mm) screening is proposed within Zone 4 (Chainage 2000-2104) and Zones 5-8 (Chainage 2270-4735) where landscape screening from tree and hedgerow planting is not proposed.

12.1.12 In Item 9 (a) (v) of the RFI, ABP requested:

"Provide clarity and detail on any proposed post construction bird monitoring of the operation of the Greenway (survey methodology, locations, frequency etc) and how the monitoring scheme could respond to any measured effects if found to occur."

RFI Response:

12.1.13 It is proposed that three years post construction monitoring will be undertaken and it will be adapted to suit any changes that are identified. However, it is not currently anticipated that any measured effects post construction will be identified. Nevertheless, it is noted that it would be difficult to predict/quantify potential results of the proposed post construction monitoring at this stage, and to include provision for any potential effects that may never occur or are outside our control e.g. climate – random stochastic events. Details of the proposed bird monitoring are provided in Section 7 of the NIS report (see **Appendix K**). It is proposed that the monitoring methodology follows that of the baseline bird surveys that were undertaken to inform the assessment of likely significant effects, so that any changes in bird behaviour can be identified. In the unlikely event that adverse effects are identified then provisions for additional mitigation, such as additional screening for example, can be explored with relevant stakeholders.

12.1.14 In Item 9 (b) of the RFI, ABP requested:

> *"The submission received form the Department of Culture Heritage and Gaeltacht also raises issues in relation to the assessment of impacts on this European Site. Other informed submissions also identify the potential for adverse effects on qualifying interest habitats including Dune habitats which are not examined in the NIS despite drawings showing that the greenway terminates at a point within the SAC on Tower Road."*

RFI Response:

12.1.15 Appropriate Assessment of potential adverse effects on the integrity of Boyne Coast and Estuary SAC has been updated in Section 6 of the NIS report (see **Appendix K**). This includes consideration of potential impacts (including in combination impacts) on dune habitats where the greenway terminates at Tower Road, for which additional mitigation and monitoring is recommended in Section 7 of the NIS report. Note that the Greenway design has been amended to terminate adjacent to (outside of) the SAC boundary.

12.1.16 In Item 9 (b) (i) of the RFI, ABP requested:

> *"Meath Count Council are requested to provide precise detail on the proportion of QI habitat affected in the SAC by the proposed greenway and any potential impacts of shading on those habitats taking into account conservation objectives, targets and attributes as relevant."*

RFI Response:

12.1.17 Details on the proportion of QI habitat within the SAC to be affected (notably by shading from the boardwalk) are provided in Section 6 of the NIS report (see **Appendix K**), during which potential adverse effects are assessed, in view of the conservation objectives for these habitats detailed in Section 6.2 of the NIS report. It is predicted that the proposed Greenway will result in the potential shading of approximately 4000m^2 of Tidal Mudflats and Sandflats habitat, which would constitute approximately 0.1% of the Tidal Mudflats and Sandflats habitat present within the SAC. However, this habitat is highly dynamic, being subjected to daily tidal inundations, and the impact of shading is not predicted to adversely affect the integrity of the SAC.

12.1.18 In Item 9 (b) (ii) of the RFI, ABP requested:

"Please provide more detailed information on any proposed post construction monitoring of habitats within the SAC."

RFI Response:

12.1.19 Post-construction monitoring is proposed for dune habitat adjacent to the eastern terminus of the proposed Greenway route at Tower Road. This is detailed in Section 7 of the NIS report (see **Appendix K**), where it is stated that three years of post-construction monitoring would be undertaken to ensure the efficacy of all mitigation measures employed.

12.1.20 In Item 9 (b) (iii) of the RFI, ABP requested:

"Please clarify the meaning of the reference to proposed habitat restoration/creation within the SAC in the NIS."

RFI Response:

12.1.21 Reference is made within the NIS report (**Appendix K**) to the employment of a suitably qualified Ecological Clerk of Works (ECoW), who would be responsible, amongst other duties, to undertake post-construction monitoring of proposed habitat restoration/creation measures. This relates to those areas of proposed landscape planting along the route and any areas of habitat restoration where temporary impacts occur (see **Appendix H** for further details). The monitoring would ensure the efficacy of these habitat restoration/creation measures.

12.1.22 In Item 9 (b) (iv) of the RFI, ABP requested:

"Please provide an assessment of direct/indirect impacts on dune habitats that are QI features of the SAC including any possible in-combination effects."

RFI Response:

12.1.23 Assessment of potential adverse effects on the integrity of Boyne Coast and Estuary SAC has been updated in Section 6 of the NIS report (see **Appendix K**). This includes consideration of potential impacts (including in combination effects) on dune habitats where the greenway terminates at Tower Road, for which additional mitigation and monitoring is proposed in Section 7 of the NIS report.

APPENDIX A

Relevant Correspondence between ABP and MCC

APPENDIX B

Route Alignment Drawings (including SPA and SACs)

APPENDIX C

Stage 1 Road Safety Audit

APPENDIX D

Updated Construction Methodology Report

APPENDIX E

Landscape and Visual Impact Assessment (LVIA)

APPENDIX F

Updated Flood Risk Assessment Report

APPENDIX G

Updated Arboricultural Report & Drawings

APPENDIX H

Landscape Plan Drawings

APPENDIX I

Laytown and Bettystown Walking and Cycling Study

APPENDIX J

Lighting Design

APPENDIX K

Updated Natura Impact Statement (NIS)

APPENDIX L

Updated Ecological Impact Assessment (EcIA)

APPENDIX M

Accommodation Works - Local Access drawings