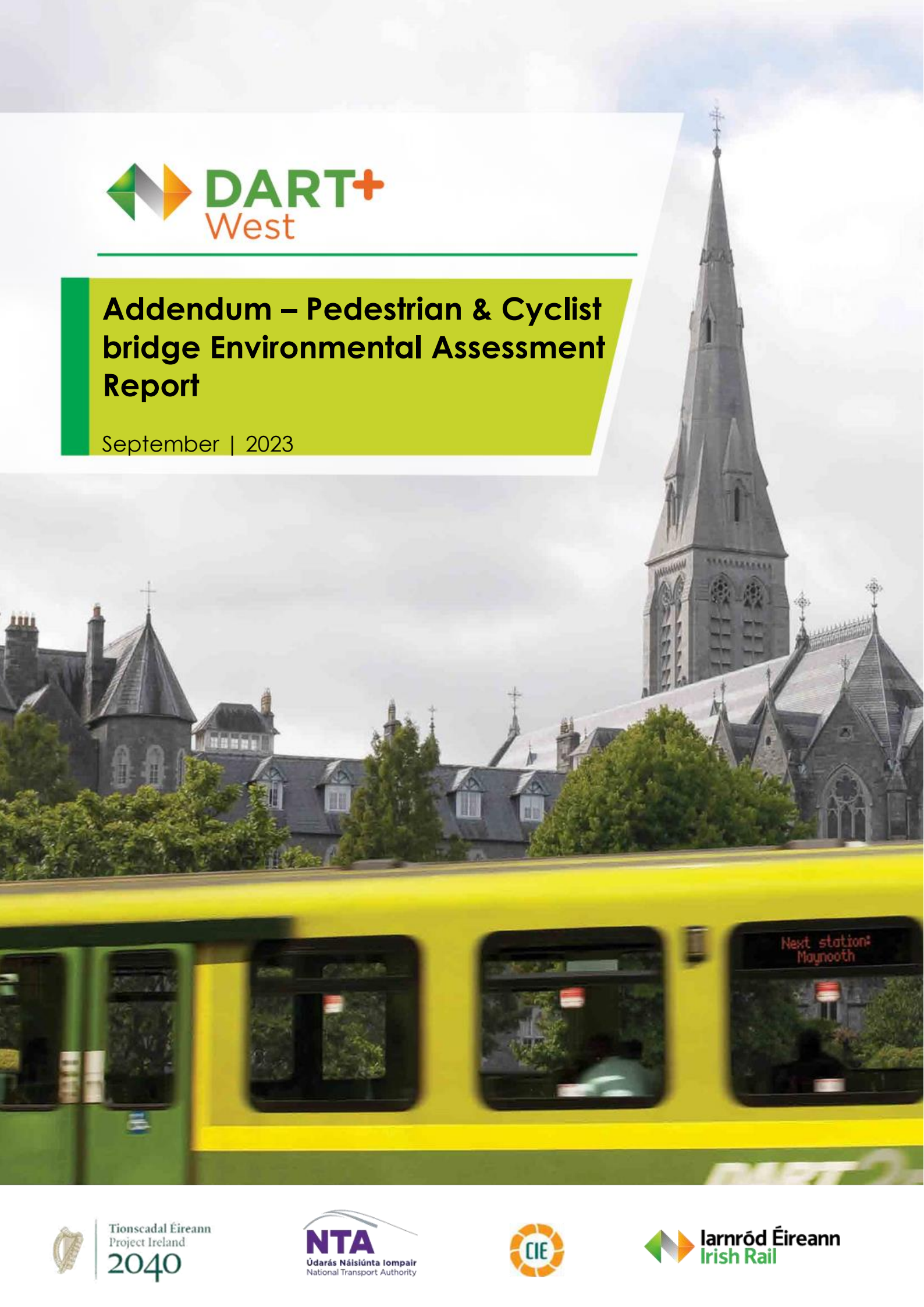




Addendum – Pedestrian & Cyclist bridge Environmental Assessment Report

September | 2023



Tionscaldal Éireann
Project Ireland
2040



Iarnród Éireann
Irish Rail

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1.1 Introduction

The DART+ West project is seeking to significantly increase rail capacity on the Maynooth & M3 Parkway lines. This will be achieved by changing from diesel powered trains to electrified, high-capacity DART trains and increasing the frequency of trains from 6 to 12 trains per hour per direction. The hourly passenger capacity will increase from 5,000 to 13,200. The project will involve the electrification of approximately 40 km of permanent way (railway line) from the Dublin City centre to west of Maynooth and to M3 Parkway Station and all associated supporting infrastructure. The electrification of the rail line is located predominantly within the existing railway corridor within Iarnród Éireann/ Córas Iompair Éireann (CIÉ) owned lands however some works will involve the acquisition of private lands to facilitate the project. The principal project components are as follows:

- Electrification and re-signalling of the Maynooth and M3 Parkway lines (approximately 40 km in length).
- Capacity enhancements at Connolly Station (to include modifications to junctions and the station) to facilitate increased train and passenger numbers.
- Provision of a new Spencer Dock Station, which will better serve the north Docklands area and improve interchange with the Luas.
- Closure of level crossings and provision of replacement bridges where required.
- Construction of a new DART depot facility west of Maynooth to facilitate the maintenance and parking (stabling) of trains.
- Interventions at existing bridges over the rail line where there are insufficient clearances for the overhead electrification equipment.
- Substations, electrical buildings and all other civil and ancillary works as necessary to accommodate the project. DART+ West will be the first project of the DART+ Programme to be delivered by IÉ.

1.1.1 Railway Order

CIÉ or 'the Applicant', applied for consent to An Bord Pleanála (ABP) in July 2022 for a Railway Order ("RO") for the DART+ West project ("the proposed project" or "proposed development") under the Transport (Railway Infrastructure) Act 2001 (as amended and substituted) ('the 2001 Act'). The draft RO application was made pursuant to the provisions of section 37 of the 2001 Act. The supporting documentation accompanying the draft RO application included:

- a) A draft of the proposed Railway Order, entitled 'DART+ West Electrified Railway Order 2022'
- b) A plan of the proposed railway works and the land requirements for the railway works;
- c) A book of reference to the plan, indicating the identity of the owners and occupiers of the lands described in the plan;
- d) An Environmental Impact Assessment Report (EIAR), providing a systematic analysis and assessment of the significant effects of a proposed project on the receiving environment; and
- e) A Natura Impact Assessment

The application initiated the Statutory Consultation, which closed in October 2022.

1.2 Background

During the Statutory Consultation, several stakeholders made submissions in relation to concerns on the proposed footbridges at Ashtown, Coolmine, Porterstown and Clonsilla stations. These concerns include:

1. The size of the proposed bridges and visual impact
2. The lack of lift facilities
3. Concerns on proposal land take impacts
4. Concerns on visibility/privacy impacts on neighbouring properties.

To address these concerns, IDOM have been requested by the Applicant to investigate the design of the bridges to address these concerns.

This Environmental Appraisal Report (EAR) has been prepared to consider the effects, if any, which the design proposal to address these concerns, if carried out, would have on the environment and how those impacts compare to those identified in the EIAR.

This EAR relates to the material and non-material environmental impacts associated with the footbridge design.

1.2.1 Draft Railway Order

1.2.1.1 Ashtown footbridge

As part of the Ashtown Station upgrades, the draft RO includes the construction of a new steel bridge/ramps suitable for pedestrians, cyclists and mobility impaired persons and it will allow passengers to cross from the north platform to the south platform and vice versa.

The weathering steel material (Corten steel) has been used for all the structural steel elements of the footbridge, designed as a lighter structure and, therefore, mitigate the visual impact on the surrounding landscape.

The bridge is designed resulting the following features and key dimensions:

Table 1-1 Ashtown bridge key dimensions

Bridge/Ramp Length (m)	Gradient	Landing Length (m)	Pedestrian Path (m)	Cycle Path (m)	Cycle path radius (m)	Bridge Clearance (m)	Parapets height (m)
387	1/20 (5%)	2.0 every 9.0	2.0	2.90	IR 2.25 ER 5.15	6.55	1.40/1.80

1.2.1.2 Coolmine footbridge

The draft RO includes the provision of a new steel structure bridge with ramps, suitable for pedestrians, bicycles and PMRs that will serve for the passengers of the station to cross from the North Platform to the South Platform and vice versa also accessible to the public 24/7.

The weathering steel material (Corten steel) has been used for all the structural steel elements of the footbridge, designed as a lighter structure.

The bridge is designed under the same principles and standards assumed in Ashtown station, resulting in the following features and key dimensions:

Table 1-2 Coolmine footbridge key dimensions

Bridge/Ramp Length (m)	Gradient	Landing Length (m)	Pedestrian Path (m)	Cycle Path (m)	Cycle path radius (m)	Bridge Clearance (m)	Parapets height (m)
413	1/20 (5%)	2.0 every 9.0	2.0	2.90	IR 2.25 ER 5.15	6.57	1.40/1.80

1.2.1.3 Porterstown footbridge

The draft RO includes the construction of a new cycle/pedestrian bridge over the railway and Canal.

The bridge structure predominantly comprises precast concrete finish.

The design consists of a two-span bridge over the Canal and railway. The main spans comprise precast W8 beams of 30.9 m and 24.5 m in length with composite precast slab units. The ramped approach to the north and south above the level of the 180-degree turn consists of precast W5 beam spans with an in-situ deck, while the ramped approaches below the 180-degree turn are supported.

Reinforced earthworks and embankments are included in the ramps ends.

The bridge design results in the following features and key dimensions:

Table 1-3 Porterstown footbridge key dimensions

Bridge/Ramp Length (m)	Gradient	Landing Length (m)	Pedestrian Path (m)	Cycle Path (m)	Cycle path radius (m)	Bridge Clearance (m)	Parapets height (m)
367	1/20 (5%)	2.0 every 10	2.0	3.00	7.0	5.30	1.35/1.85

1.2.1.4 Clonsilla footbridge

The Clonsilla footbridge draft RO design follows the same principles and standards assumed in Porterstown footbridges: precast concrete structure.

The bridge design results in the following features and key dimensions:

Table 1-4 Clonsilla footbridge key dimensions

Bridge/Ramp Length (m)	Gradient	Landing Length (m)	Pedestrian Path (m)	Cycle Path (m)	Cycle path radius (m)	Bridge Clearance (m)	Parapets height (m)
372	1/20 (5%)	2.0 every 10	2.0	3.00	5.15	5.30	1.35/1.85

1.2.2 Proposed Design Detail of Footbridge

1.2.2.1 Ashtown footbridge

The proposal consists of the same steel structure bridge proposed in the draft RO, reducing the bridge clearance from the original 6.55 m to 5.30 m and reducing the length of the ramp. The bridge design includes:

- 5.30m bridge clearance from TOR. (19% of reduction in bridge height)
- The proposed bridge length is 329 m, reducing 58 m from the draft RO design length (387m).
- 2 lifts incorporated (one on either side of rail)
- Slight amendments to stair access
- Improve transparency on parapets.

Figure 1 and **Figure 2** below are visual representations of how the design development to the parapets will look in the permanent situation.

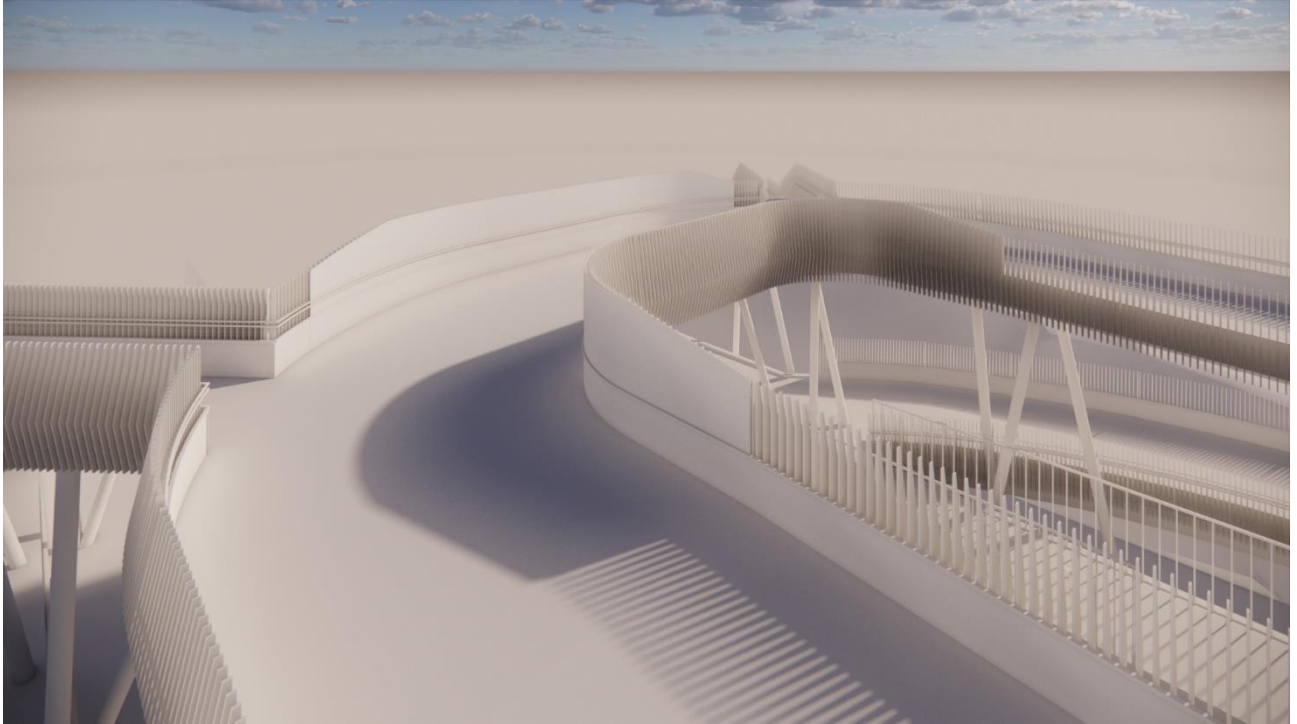


Figure 1 - Parapet Design Representation 1

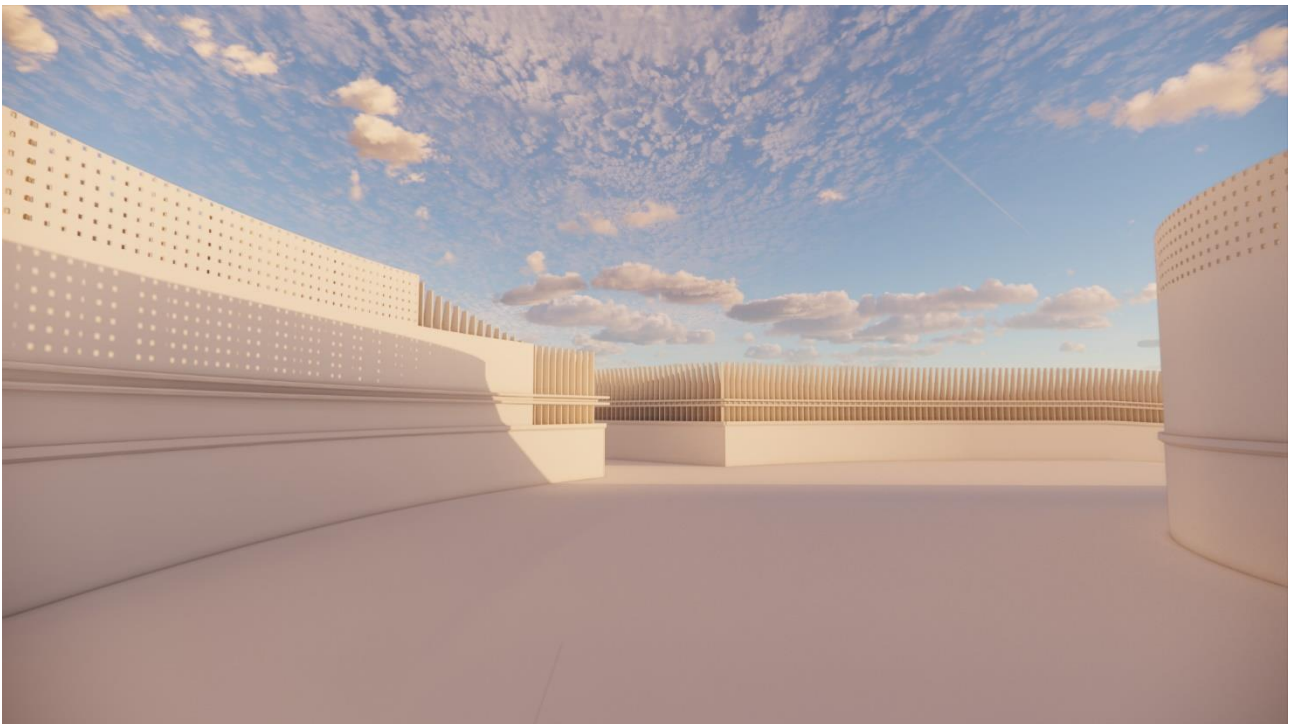


Figure 2 Parapet Design Representation 2

1.2.2.2 Coolmine footbridge

The proposal consists of the same steel structure bridge proposed in the draft RO, reducing the bridge clearance from the original 6.57 m to 5.30 m and reducing the length of the ramp. The bridge design includes:

- 5.30m bridge clearance from TOR. (19% of reduction in bridge height)
- The proposed bridge length is 361 m, reducing 52 m from the draft RO design length (413m).

- 2 lifts incorporated (one on either side)
- Slight amendments to stair access
- Improve transparency on parapets.

1.2.2.3 Porterstown footbridge

The proposal is for a steel structure bridge (Corten steel), the same type of material solution used on the Ashtown and Coolmine footbridge. This has been proposed for consistency across the project and due the fact that Corten steel does not need periodical maintenance which is another reason why this material is preferred.

The bridge design includes:

- A corten steel bridge solution
- The proposed bridge length is 321 m, reducing 46 m from the draft RO design length (367m).
- 5.30m bridge clearance (the same draft RO design clearance)
- Amendments to stair access
- Improve transparency on parapets.

The proposal reduces the overall footprint of the bridge in the permanent situation. However, there are some land take changes as a result of the proposal.

On the southside, the shorter ramps reduce the overall permanent land take .

On the northside, additional land take outside the current CPO (approx. 31 m²) is required. The overall impact is considered positive as the permanent land take is lower than what was proposed in the initial railway order submission.

Table 1-5 Land take required by Porterstown footbridge draft RO and Proposal designs.

	Draft RO	Proposal	Footprint reduction
Footprint (m ²)	2,174 m ²	1,252 m ²	922 m ²

The footprint includes only the area occupied by the permanent footbridge structure.

1.2.2.4 Clonsilla footbridge

The proposal is for a steel structure bridge (Corten steel), the same type of material solution used on the Ashtown and Coolmine footbridge. This design development has been proposed for consistency across the project and due the fact that Corten steel does not need periodical maintenance which is another reason why this material is preferred.

Provision has been made for the incorporation of 2 lifts, one on either side of the bridge.

The bridge design includes:

- A Corten steel bridge solution
- 5.30 m bridge clearance (the same draft RO design clearance)
- The proposed bridge length is 340 m, reducing 32 m from the RO design length (372 m).
- 2 lifts (one on either side)
- Slight amendments to stair access
- Improve transparency on parapets.

The proposal reduces the overall footprint of the bridge in the permanent situation. However, there are some land take changes as a result.

On the northside, additional land take outside the current CPO (approx. 30 m²) is required. The overall permanent land take is lower than what was proposed in the initial railway order submission.

Table 1-6 Land take required by Clonsilla footbridge draft RO and new proposal designs.

	Draft RO	Proposal	Footprint reduction
Footprint (m ²)	2,174 m ²	1,240 m ²	934 m ²

The footprint includes only the area occupied by the permanent footbridge structure.

Note that the new proposal reduces the impact on the Royal Canal, reducing both the length of the walkway that is over the Canal on the north side, from 50 m to 30 m, and the number of foundations that are located on the edge of the Canal are also reduced from 4 to 2.

1.3 Construction Strategy Detail of the Proposal

1.3.1 Ashtown and Coolmine footbridges

1.3.1.1 Construction methodology

Ashtown and Coolmine Footbridges' design reduces the ramp length due to the reduction in the vertical clearance. The footbridges typology (Corten Steel) is maintained, so the construction strategy and methodology are maintained as is explained in the EIAR Volume 2 Chapter 5 Construction Strategy, sections "5.6.4 Ashtown Station pedestrian bridge" and "5.6.15 Coolmine Station".

The construction methodology difference between foundation construction and superstructure:

1.3.1.1.1 Foundation (piling)

In the Ashtown footbridge, some piles must be constructed from the Canal. The reductions in the length of the ramps results in a reduction of the piles needed and the impact on the Canal.

Piling to be completed from the Canal:

1. Take possession of Canal.
2. Install clay dams.
3. Electro fish.
4. Dewater section of works.
5. Install through flow pipe.
6. Infill canal and install piling mat. (assuming infilling the Canal would provide protection to existing canal walls and remove the need to excavate in close proximity to existing railway).
7. Install red piles (approx. 25 in number).
8. Cut piles down to final level.
9. Install pile caps.
10. Remove canal infill, and clay dams.
11. Hand back Canal possession.

Once the piles have been installed from the Canal, the next step in the construction sequence will be to widen the existing platform 1 (north side). Once the platform has been widened, the remaining piles can be installed on the north side using a mini piling placed on the platform. These works will be undertaken during possessions.

The piles to the south of the railway, relocation of the existing station facilities and the construction of the new substation buildings can be completed during daytime project construction working hours.

For Coolmine footbridge, the piles on the north of the station platforms can be constructed without having to drain the Canal. However, to ensure safety to the general public during these works, the Canal and the pedestrian footpath will need to be closed during the piling works. Again, the reductions in the length of the ramps results in a reduction of the piles needed and the impact on the Canal and the footway.

1.3.1.1.2 Superstructure

The next step is to install the superstructure of the bridge. This will be completed during night-time and weekend possessions. For both Ashtown and Coolmine footbridges, the sequence of works are the same:

1. Install superstructure up to bridge deck level using a road rail vehicle crane or crane located on the road.
2. Backfill around the structural supports.
3. Dismantle existing pedestrian bridge.
4. Install the bridge structure, including lift shafts, during weekend possession.
5. Architectural finishes and MEP fitout.
6. Platforms and access repair.
7. Install and repair boundary walls and fences.
8. Landscaping.

Equipment required includes mobile cranes, road rail vehicle cranes, demolition machinery, excavators, piling rigs, concrete trucks, dumper trucks, and sheet piling rigs.

1.3.1.2 Construction duration

The construction durations at both Ashtown and Coolmine for the footbridges is not anticipated to be reduced, with the durations outlined in Chapter 5, Construction Strategy of Volume 2 of the EIAR to be maintained.

Although it is anticipated that there will be a reduction on the number of foundations to be installed and also a reduction in the volumes of steel to be installed on the bridge, the introduction on the lift structures is deemed additional to what was included in Chapter 5, Construction Strategy of Volume 2 of the EIAR. When assessing the impact on the construction durations for these lift structures it is anticipated that their construction duration will be equal to that of the saving from the bridge structure size reduction.

Table 1-7 Ashtown and Coolmine Construction work estimated duration.

	Draft RO	Proposal
Ashtown footbridge	12-14 months	12-14 months
Coolmine footbridge	10-12 months	10-12 months

1.3.1.3 Walking times

Reducing the length of the walkways results in a reduction of the walking time needed to cross from one footbridge side to the other.

To estimate the travel times of the draft RO footbridge design and this proposal, 72 m/min circulation average speed has been used.

Table 1-8 Ashtown and Coolmine walking times.

	Draft RO	Proposal
Ashtown footbridge	5.5 minutes	4.5 minutes

Coolmine footbridge	6 minutes	5 minutes
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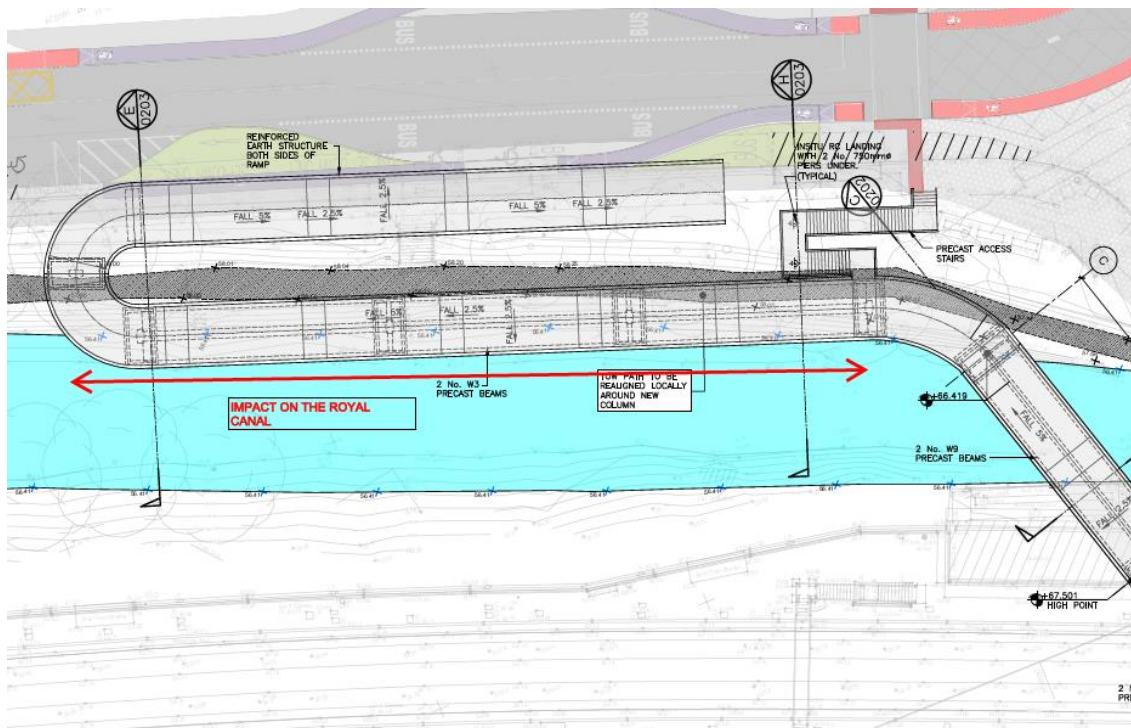
1.3.2 Porterstown and Clonsilla footbridges

1.3.2.1 Construction methodology

At the locations of the Porterstown and Clonsilla footbridges, the proposal is for a steel bridge, the same Corten steel proposal used in Ashtown and Coolmine footbridges.

Another relevant aspect is the geometric design, adopting a rotunda shape for the ramps that reduces the area impacted by the construction works.

In the case of the Clonsilla footbridge, the draft RO design required damming and dewatering of the Canal to install foundations under the piers at the north approach ramp. Temporary works in and around the Canal were undertaken to enable the piling.



- **Figure 3 Draft RO design with 4 piles impacting the Royal Canal. Damming and dewatering the Canal are required.**

The proposal does not require damming and dewatering of the Canal but it still needs works around the Canal.

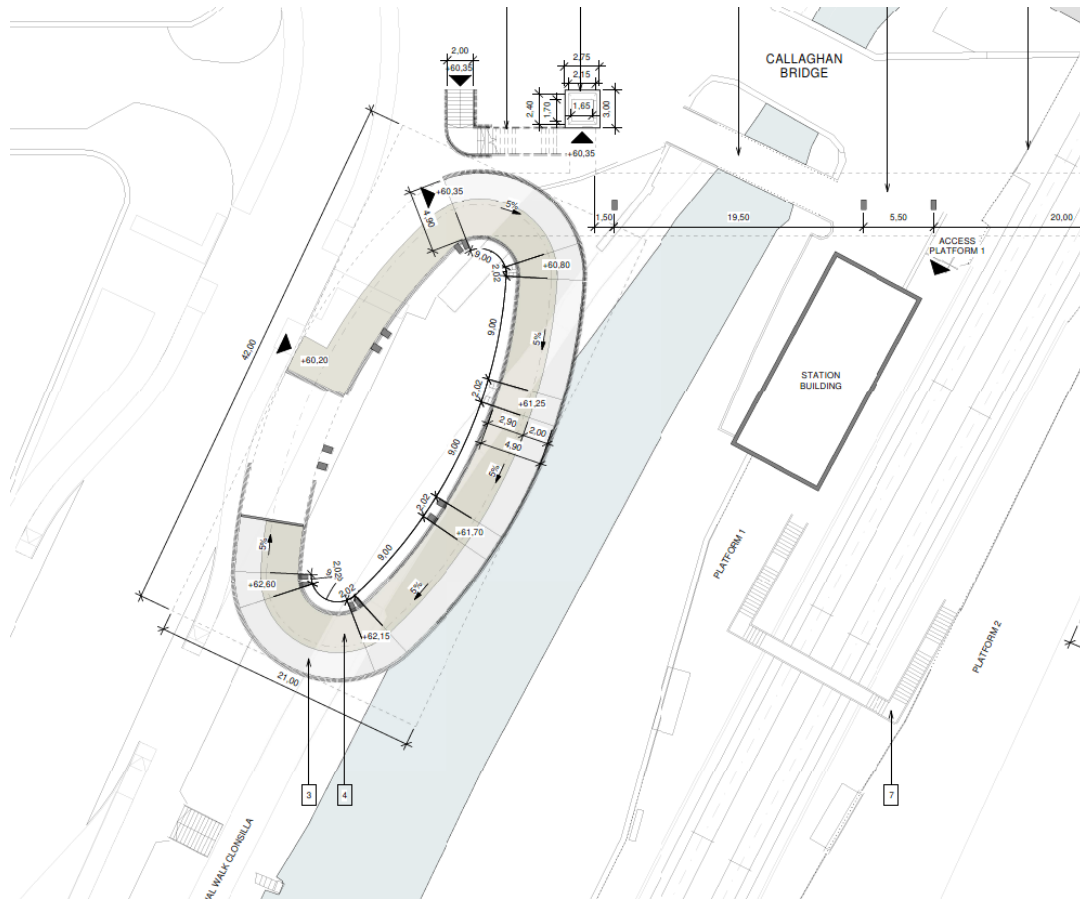


Figure 4 Clonsilla footbridge proposal. No damming and dewatering of the Canal is required.

The construction strategy will not be very different from the draft RO prefabricated concrete structure solution (manufactured off-site) since the proposal will be for a type of steel structure, also manufactured in an off-site workshop.

The construction of the foundations will be very similar but the assembly of the prefabricated elements, which in the case of the proposal involves a steel structure will require the execution of welding.

The Corten steel solution considerably reduces earthworks with respect to the solution in the draft RO, by eliminating the sections of ramps with a solution of reinforced earth structure and embankments.

The following section describes the anticipated construction sequence for the proposed footbridges. Different sequences are highlighted in black.

Table 1-9 Porterstown and Clonsilla footbridge draft RO design versus proposal construction sequence

Draft RO (precast concrete solution)	Steel structure (Corten steel) Proposal
1. Off-site fabrication of bridge beams and deck slab units.	1. Fabrication of steel bridge structure. Production of fabricated off site.
2. Erect temporary fence and barrier.	2. Erect temporary fence and barrier.
3. Site clearance.	3. Site Clearance.
4. Damming and dewatering of the Canal. This will be required to install the foundations under 3 no. piers at the north approach (only in Clonsilla footbridge)	No damming and dewatering of the Canal is required in Clonsilla footbridge proposed design.
5. Excavate to foundation level and uplift as required.	4. Excavate to foundation level and uplift as required.

Draft RO (precast concrete solution)	Steel structure (Corten steel) Proposal
6. Install piled foundations or install in-situ reinforced concrete spread foundations subject to detailed geotechnical investigation.	5. Install piled foundations or install in-situ reinforced concrete spread foundations subject to detailed geotechnical investigation.
7. Construct in situ piers, crossheads, abutments and retaining walls.	6.
8. Construct reinforced earth/embankment support on northern and southern approach ramps	7.
9. Transport prefabricated beams and slab units to agreed laydown area on both sides of the Canal and railway.	8. Transport prefabricated steel beams and concrete slab units to agreed laydown area on both sides of the Canal and railway.
10. Crane setup for bridge beam/deck installation including hard standing areas.	9. Crane setup for steel bridge deck installation.
11. Install precast bridge beams. Absolute possession is required for the placement of the main span over the railway.	10. Install and weld steel beams. In situ welding works. Absolute possession is required for the placement of the main span over the railway.
12. Install permanent formwork between bridge beams and between piers.	11.
13. Cast diaphragms.	12.
14. Install precast deck slab units.	13.
15. Cast insitu deck slab along ramped approaches.	14.
16. Install precast reinforced concrete parapet on the north face of the upper section of the south approach ramp under possession.	15.
17.	16. Install lifts (only in Clonsilla footbridge)
18. Install steel parapets.	17. Install steel parapets.
19. Install surfacing and drainage.	18. Install surfacing and drainage.
20. Removal of temporary fences and construction of permanent fences.	19. Removal of temporary fences and construction of permanent fences.
21. Install remaining finishes and lighting.	20. Install remaining finishes and lighting.

1.3.2.2 Construction duration.

A reduction of the construction duration of the Clonsilla footbridge is estimated concerning the duration established in Chapter 5, Construction Strategy of Volume 2 of the EIAR, attached in the tables below.

Table 1-10 Clonsilla footbridge draft RO solution approximate duration of the works (Table 5-13 EIAR Volume 2 Chapter 5 Construction Strategy)

Pedestrian Cycle and Mobility Impaired Bridges	Approximate duration of works
	Works (months)
Description of the activities required:	
Phase 1: Site clearance	
Vegetation removal, topsoil removal, site set up	1 month
Phase 2: Approaches and public realm	
Excavation, backfilling, kerbs, drainage, footpaths etc.	3-4 months
Phase 3: Canal works	
Installation of temporary works (sheet pile coffer dam and dewatering of part of the canal) to enable bridge foundations to be installed.	3 months
Phase 4: Bridge substructure	
Pad and piled foundation solution, construct abutments and wingwalls, backfilling	1-2 months
Phase 5: Bridge superstructure	
Install precast pier heads and bridge beams, install permanent formwork, cast deck stitches and deck slab, complete backfilling	2 months
Phase 6: Surfacing, barriers, finishing	
install surfacing, install barriers	1 month
Phase 7: Decommissioning existing level crossing	
Remove existing surfacing, divert services as required, remove existing level crossing controls and barriers, install new boundary treatments	1 month
Total Construction Phase	12 to 14 months

Table 1-11 Porterstown footbridge draft RO solution approximate duration of the works (Table 5-12 EIAR Volume 2 Chapter 5 Construction Strategy)

Pedestrian Cycle and Mobility Impaired Bridges	Approximate duration of works
	Works (months)
Description of the activities required:	
Phase 1: Site clearance	
Vegetation removal, topsoil removal, site set up	1 month
Phase 2: Approaches and public realm	
Excavation, backfilling, kerbs, drainage, footpaths etc.	3-4 months
Phase 3: Bridge substructure	
Pad and piled foundation solution, construct abutments and wingwalls, backfilling	1-2 months
Phase 4: Bridge superstructure	
Install precast pier heads and bridge beams, install permanent formwork, cast deck stitches and deck slab, complete backfilling	2 months
Phase 5: Surfacing, barriers, finishing	
install surfacing, install barriers	1 month
Phase 6: Decommissioning existing level crossing	
Remove existing surfacing, divert services as required, remove existing level crossing controls and barriers, install new boundary treatments	1 month
Total Construction Phase	9 to 12 months

For the construction of the Porterstown footbridge, a range of 12-14 months is estimated and for the Clonsilla footbridge 10-12 months.

The main reasons for this construction duration reduction are:

- Site clearances are reduced because of the reduction of the footprint works.
- Reinforced earthworks are reduced due to the change to steel structure solution, avoiding the draft RO embankments and earth-wall constructions.
- Reduction of work on the Royal Canal edge (foundations) reduces the work time in Clonsilla footbridge.
- Steel structure requires simplified resources and construction time with respect to precast concrete solutions.
- Although there is additional works for the Clonsilla footbridge to include lifts within the footbridge, the construction duration is not anticipated to exceed the durations at Clonsilla as identified in Chapter 5, Construction Strategy of Volume 2 of the EIAR. Overall, there is anticipated betterment in the construction durations in this location.

Table 1-12 Porterstown and Coolmine Construction work estimated duration.

	Draft RO Design	Proposal
Porterstown footbridge	9-12 months	8-10 months
Clonsilla footbridge	12-14 months	10-12 months

1.3.2.3 Walking times

In Porterstown and Clonsilla footbridges, the new design slightly reduces the structure length compared to the solutions proposed in the draft RO, thereby slightly reducing the walking times needed to cross from one footbridge side to the other.

Table 1-13 Porterstown and Clonsilla walking times.

	Draft RO Design	Proposal
Porterstown	5 minutes	4.5 minutes
Clonsilla	5 minutes	4.7 minutes

2. SCOPE OF ENVIRONMENTAL APPRAISAL

In order to examine the impact of the proposed footbridge design, each environmental factor of the EIAR (2022) was assessed in order to identify any potential material or non-material environmental impacts associated with the proposed footbridge design whether stand-alone or in-combination or cumulative effects with other developments including the DART+ West project.

The environmental impacts are sub-categorised as either:

- a) a Non-Material Environmental Impact, or
- b) a Material Environmental Impact.

A "**Non Material Environmental Impact**" is a potential environmental impact that is likely to be less than or no greater than the identified residual impact stated in the EIAR, on the relevant aspect of the environment underassessment..

A "**Material Environmental Impact**" is a potential environmental impact that is likely to be a greater impact and a significant negative impact on the relevant aspect of the environment than the residual impact stated in the EIAR. Consideration of any potential for cumulative impacts is also included.

Each assessment undertaken in this appraisal has applied the same methodology as outlined in the respective EIAR chapter. In instances whereby there have been policy or guidance updates since the submission of the draft Railway Order, this has been indicated under the respective environmental topic.

The outcome of the assessment of each environmental topic is outlined in Table 2-1 below. Environmental factors are scoped in or out in this way.

Where environmental factors are scoped out it is established that difference associated with the respective footbridge designs (draft RO and Proposed) are likely to have no greater adverse impact on the relevant aspect of the environment than the residual impact stated in the EIAR. Where it has been assessed that the proposal will have greater adverse material effects, these environmental factors are further expanded on in the respective sections.

Table 2-1 Scoping of Environmental Factors for further Environmental Assessment

Environmental Topic	Summary of Assessment	Scoping Result
Traffic and Transportation	<p>Ashtown footbridge No change in relation to construction stage impact on this aspect of the environment. Based on that the likely impact is considered as Non Material. Following construction, during operational phase the length of the bridge design will be reduced. The reduction in length is 58m, which result in shorter walk by less than a minute. The provision of lift facilities results in positive impact on pedestrians. Based on that the impact on Traffic and Transportation is considered as Non Material. Cumulative Impact Assessment It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Coolmine footbridge No change in relation to construction stage impact on this aspect of the environment. Based on that the impact is considered as Non Material. Following construction, during operational phase the length of the bridge design will be reduced. The reduction in length is 52m, which result in shorter walk by less than a minute. The provision of lift facilities results in positive impact on pedestrians. Based on that the likely impact on Traffic and Transportation is considered as Non Material. Cumulative Impact Assessment It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge Construction stage is expected to be 1-2 months shorter. Based on that the likely impact is considered as Non Material. Following construction, during operational phase the length of the bridge design will be reduced. The reduction in length is 46m, which result in shorter walk by less than a minute. The proposed bridge design will require less land and therefore will have less impact on St. Mochta's Football Club's parking. The potential impact of this design of the bridges is less than impact identified in the EIAR (July 22). Based on that the impact on Traffic and Transportation is considered as Non Material. Cumulative Impact Assessment It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge Construction stage is expected to be 2 months shorter. Based on that the likely impact is considered as Non Material. Following construction, during operational phase the length of the bridge design will be reduced. The reduction in length is 32m, which result in shorter walk by less than a minute. The provision of lift facilities results in positive impact on pedestrians. Based on that the impact on Traffic and Transportation is considered as Non Material. Cumulative Impact Assessment It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Population	<p>Ashtown footbridge <u>Land Use</u> The locations of the construction compounds for the proposed bridge design remain unchanged compared to those stated in the EIAR (July</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p>2022). Therefore the environmental impact remains unchanged.</p> <p>The land use zoning under the current Dublin City Development Plan (CDP) 2023-2028 and Fingal County Development Plan (CDP) 2023-2029 have not changed when compared to the land use zonings of the previous plans. The length of the bridge design at Ashtown has been reduced in length to 329 m from the draft RO design length 387m. The proposed bridge design also has a slightly smaller footprint within lands zoned as 'Zone Z9 amenity / open space lands / green network'. Overall, the proposed design is likely to have no greater environmental impact on land use than the residual impact stated in the EIAR.</p> <p><u>Journey Characteristics and Journey Amenity</u></p> <p>The construction activities for this footbridge design are similar to the draft RO design. Therefore, the proposed design is likely to have no greater impact on journey characteristics and journey amenity than the residual impact identified in the EIAR of <i>negative, slight and temporary</i> for rail users and <i>negative, slight and temporary</i> for road users at construction stage.</p> <p>During the operational stage this footbridge design will improve journey characteristics and journey amenity due to a slight reduction in length, slightly improving walking times by approximately 1 minute. The footbridge design also provides improved accessibility for vulnerable groups particularly for mobility impaired due to the introduction of lifts which were not included in the draft RO design. The EIAR level crossing replacement works the assessment states that by removing the road and rail interface at the existing level crossings there will be <i>positive significant long-term</i> effects on journey characteristics, journey amenity, reduced perceived community severance and improvements in safety which remains. There is no change proposed to the Ashtown underpass. Overall, the proposed footbridge design is likely to have a positive effect on journey characteristics and journey amenity and no greater negative impacts than the residual impact stated in the EIAR.</p> <p><u>Community Infrastructure</u></p> <p>The construction activities for this footbridge design are similar to the draft RO design. The proposed bridge design is likely to have no greater impact on population accessing community infrastructure than the residual impact of <i>negative, slight, temporary to short-term</i> as stated in the EIAR at construction stage.</p> <p>When compared to the draft RO design, the proposed bridge design does not cause a material change or impact relating to accessibility to community infrastructure at operation stage. The proposed bridge design provides improved access for pedestrians, cyclists and vulnerable groups including mobility impaired due to reduction of length and introduction of lifts. Overall, the proposed bridge design is likely to have a positive effect and no greater negative impact on access to community infrastructure than the residual impact stated in the EIAR.</p> <p><u>Severance</u></p> <p>The bridge design will ensure accessibility and connectivity is maintained for pedestrians and cyclists 24/7, similarly to the draft RO design which found there is no severance. The proposed bridge design is likely to have no greater impact on severance than the residual impact stated in the EIAR.</p> <p><u>Economic Impacts</u></p> <p>Chapter 7 of the EIAR assessed the economic impact of the proposed level crossing road replacement works at construction and operation phase. The assessment concluded that a positive impact on local economy and the GDA is likely through provision of jobs at construction and by relieving aggregated congestion at the six existing level crossings and improving journey time reliability for all populations particularly, commuters and tourists at operation phase. The proposed bridge design is likely to have no greater impact on economy than the residual impact stated in the EIAR.</p> <p>Cumulative Impact Assessment: It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
	<p>Coolmine footbridge Population is assessed in Chapter 7 of the EIAR (July 2022) and is cross-referenced in this assessment.</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p><u>Land Use</u></p> <p>The locations of the construction compounds for the bridge design remain unchanged compared to those stated in the EIAR (July 2022). Therefore, the environmental impact remains unchanged.</p> <p>The length of the bridge design at Coolmine has been reduced by 17% compared to the draft RO design. The Land use zoning under the Fingal CDP 2023-2029 has not changed when compared to the land use zonings of the previous plan. The bridge design has a slightly smaller footprint within lands zoned as 'RS-Residential' and 'OS – Open Space'.</p> <p>The Fingal CDP 2017-2023 included Objective 142: <i>“Preserve the existing pedestrian and vehicular right of way at the Coolmine Level Crossing”</i>. In the Fingal CDP 2023- 2029 has removed this objective and inserted <i>'Local Objective No. 113: Ensure pedestrian and cyclist connectivity is provided across the canal and rail line at this location'</i>. The bridge design is consistent with planning policy and provides connectivity for pedestrians and cyclists. Overall, the proposed bridge design is likely to have a positive effect on land use and no greater negative impact on land use than the residual impact stated in the EIAR.</p> <p><u>Journey Amenity and Journey Characteristics</u></p> <p>The construction activities for the proposed bridge design are similar to the draft RO design. Therefore, the proposed bridge design is likely to have no greater impact on journey characteristics and journey amenity than the residual impact identified in the EIAR of <i>negative, slight and temporary</i> for rail users and <i>negative, slight and temporary</i> for road users at construction stage.</p> <p>During the operational stage the proposed bridge design will improve journey characteristics and journey amenity due to slight reduction in length, slightly improving walking times by approximately 1 minute. The proposed bridge design also provides improved accessibility for vulnerable groups particularly for mobility impaired due to the introduction of lifts which were not included in the draft RO design. The EIAR level crossing replacement works assessment states that by removing the road and rail interface at the existing level crossings there will be <i>positive significant long-term</i> effects on journey characteristics, journey amenity, reduced perceived community severance and improvements in safety which is unchanged. There is no change proposed to the Ashtown underpass. Overall, the proposed bridge design is likely to have a positive effect on journey characteristics and journey amenity and no greater negative impacts than the residual impact stated in the EIAR.</p> <p><u>Community Infrastructure</u></p> <p>The construction activities for the proposed bridge design are similar to the draft RO design. The proposed bridge design is likely to have no greater impact on population accessing community infrastructure than the residual impact of <i>negative, slight, temporary to short-term</i> as stated in the EIAR at construction stage.</p> <p>When compared to the draft RO design, the proposed bridge design does not cause a material change or impact relating to accessibility to community infrastructure at operation stage. The proposed bridge design provides improved access for walker, cyclists, and vulnerable groups including mobility impaired due to reduction of length and introduction of lifts. Overall, the proposed bridge design is likely to have a positive effect and no greater negative impact on access to community infrastructure than the residual impact stated in the EIAR.</p> <p>Overall, the proposed bridge design is likely to have a positive effect and no greater negative impact on access to community infrastructure than the residual impact stated in the EIAR.</p> <p><u>Severance</u></p> <p>The proposed bridge design will ensure accessibility and connectivity is maintained for pedestrians and cyclists 24/7, similarly to the draft RO design which found there is no severance. The proposed bridge design is likely to have no greater impact on severance than the residual impact stated in the EIAR.</p> <p><u>Economic Impacts</u></p> <p>Chapter 7 of the EIAR assessed the economic impact of the proposed level crossing road replacement works at construction and operation phase. The assessment concluded that a positive impact on local economy and the GDA is likely through provision of job at construction and</p>	

Environmental Topic	Summary of Assessment	Scoping Result
	<p>by relieving aggregated congestion at the six existing level crossings and improving journey time reliability for all populations particularly, commuters and tourists at operation phase.</p> <p>The proposed bridge design is likely to have no greater impact on economy than the residual impact stated in the EIAR.</p> <p>Cumulative Impact Assessment</p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
	<p>Porterstown footbridge</p> <p>Population is assessed in Chapter 7 of the EIAR (July 2022) and is cross-referenced in this assessment.</p> <p><u>Land Use</u></p> <p>The locations of the construction compounds for the proposed bridge design remain unchanged compared to those stated in the EIAR (July 2022). Therefore, the environmental impact remains unchanged.</p> <p>The land use zoning under the Fingal CDP 2023-2029 is the same as that of the previous CDP for this area, zoned 'RA-Residential Area' and 'OS – Open Space'. The proposed bridge design has a slightly smaller footprint and therefore less of an impact on these zoned lands.</p> <p>The Fingal CDP 2017-2023 included Objective 137: <i>“Preserve the existing pedestrian and vehicular right of way at the level crossing at Porterstown”</i>. Since the draft RO was submitted The Fingal DP 2023-2029 has removed the previous objective and has inserted Local Objective No. 110: <i>“Ensure pedestrian and cyclist connectivity is provided across the canal and rail line at this location”</i>. The proposal ensures connectivity for pedestrians and cyclists therefore the bridge design is consistent with this objective. Overall the proposed bridge design is likely to have a positive impact on land use zoning and policy and no greater negative impact on land use than the residual impact stated in the EIAR. Due to the re-orientation of the structure, there is additional land-take required which is addressed in material assets section of this appraisal.</p> <p><u>Journey Characteristics and Journey Amenity</u></p> <p>The construction activities for the proposed bridge design are similar to the draft RO design. Therefore, the proposed bridge design is likely to have no greater impact on journey characteristics and journey amenity than the residual impact identified in the EIAR of <i>negative, slight and temporary</i> for rail users and <i>negative, slight and temporary</i> for road users at construction stage.</p> <p>During the operational stage the proposed bridge design will improve journey characteristics and journey amenity due to slight reduction in length, slightly improving walking times and improve journey amenity due to the introduction of stairs which provides a shorter option for users. In the EIAR level crossing replacement works the assessment states that by removing the road and rail interface at the existing level crossings there will be <i>positive significant long-term</i> effects on journey characteristics, journey amenity, reduced perceived community severance and improvements in safety which is unchanged but slightly improved. Overall, the proposed bridge design is likely to have a positive effect on journey characteristics and journey amenity and no greater negative impacts than the residual impact stated in the EIAR. Overall, the proposed bridge design is likely to have a positive effect on journey characteristics and journey amenity and no greater negative impacts than the residual impact stated in the EIAR.</p> <p><u>Community Infrastructure</u></p> <p>The construction activities for the proposed bridge design are similar to the draft RO design. The proposed bridge design is likely to have no greater impact on population accessing community infrastructure than the residual impact of <i>negative, slight, temporary to short-term</i> as stated in the EIAR at construction stage.</p> <p>The proposed bridge design will not cause a material impact on access to community infrastructure at operation for all users when compared to the draft RO design. The proposed bridge design remains at the same location and provides improved access for walkers, cyclists, and vulnerable groups including mobility impaired users. Overall, the proposed bridge design is likely to have a positive effect and no greater</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p>negative impact on access to community infrastructure than the residual impact stated in the EIAR.</p> <p>The construction activities for the proposed bridge design are similar to the draft RO design. Therefore, the proposed bridge design is likely to have no greater impact on population accessing community infrastructure than the residual impact of <i>negative, slight, temporary to short-term</i> as stated in the EIAR at construction.</p> <p>The proposed bridge design does not cause a material impact on access to community infrastructure for all users when compared to the draft RO design. However, the proposed bridge design reduces impact on St. Mochtas' football club facilities which will improve maintain access to this community facilities carparking spaces. Overall, the proposed bridge design is likely to have a positive and no greater negative impact on community infrastructure than the residual impact stated in the EIAR.</p> <p><u>Severance</u></p> <p>The proposed bridge design will ensure accessibility and connectivity is maintained for pedestrians and cyclists 24/7, similarly to the draft RO design which found there is no severance for these users. The proposed bridge design is likely to have no greater impact on severance than the residual impact stated in the EIAR.</p> <p><u>Economic Impacts</u></p> <p>Chapter 7 of the EIAR assessed the economic impact of the proposed level crossing road replacement works at construction and operation phase. The assessment concluded that a positive impact on local economy and the GDA is likely through provision of job at construction and by relieving aggregated congestion at the six existing level crossings and improving journey time reliability for all populations particularly, commuters and tourists at operation phase.</p> <p>The proposed bridge design is likely to have no greater impact on economy than the residual impact stated in the EIAR.</p> <p>Cumulative Impact Assessment</p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
	<p>Clonsilla footbridge</p> <p>Population is assessed in Chapter 7 of the EIAR (July 2022) and is cross-referenced in this assessment.</p> <p><u>Land Use</u></p> <p>The locations of the construction compounds for the proposed bridge design remain unchanged compared to those stated in the EIAR (July 2022). Therefore, the environmental impact remains unchanged.</p> <p>The land use zoning under the current Fingal CDP 2023-2029 has not changed when compared to the land use zonings of the previous 2017-2023 plan. The proposed bridge design has a smaller footprint within lands zoned as 'RA-Residential Area' and 'OS – Open Space', however overall the proposed bridge design is likely to have no greater impact on land use than the residual impact stated in the EIAR. Due to the re-orientation of the structure, there is additional land-take required which is addressed in material assets section of this appraisal.</p> <p><u>Journey Characteristics and Journey Amenity</u></p> <p>The construction activities for the proposed bridge design are similar to the draft RO design. Therefore, the proposed bridge design is likely to have no greater impact on journey characteristics and journey amenity than the residual impact identified in the EIAR of <i>negative, slight and temporary</i> for rail users and <i>negative, slight and temporary</i> for road users at construction stage.</p> <p>During the operational stage the proposed bridge design will improve journey characteristics and journey amenity due to slight reduction in length, slightly improving walking times. The proposed bridge design also provide improved accessibility for vulnerable groups particularly for mobility impaired due to the introduction of lifts which were not included in the draft RO design. The EIAR level crossing replacement works assessment states that by removing the road and rail interface at the existing level crossings there will be <i>positive significant long-term</i> effects on journey characteristics, journey amenity, reduced perceived community severance and improvements in safety which remains. Overall, the</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p>proposed bridge design is likely to have a positive effect on journey characteristics and journey amenity and no greater negative impacts than the residual impact stated in the EIAR.</p> <p><u>Community Infrastructure</u></p> <p>The construction activities for the proposed bridge design are similar to the draft RO design. The proposed bridge design is likely to have no greater impact on population accessing community infrastructure than the residual impact of <i>negative, slight, temporary to short-term</i> as stated in the EIAR at construction stage.</p> <p>When compared to the draft RO design, the proposed bridge design does not cause a material change or impact relating to accessibility to community infrastructure at operation stage. The proposed bridge design provides improved access for walker, cyclists, and vulnerable groups including mobility impaired due to reduction of length and introduction of lifts. Overall, the proposed bridge design is likely to have a positive effect and no greater negative impact on access to community infrastructure than the residual impact stated in the EIAR.</p> <p><u>Severance</u></p> <p>The proposed bridge design will ensure accessibility and connectivity is maintained for pedestrians and cyclists 24/7, similarly to the draft RO design which found there is no severance. The proposed bridge design is likely to have no greater impact on severance than the residual impact stated in the EIAR.</p> <p><u>Economic Impacts</u></p> <p>Chapter 7 of the EIAR assessed the economic impact of the proposed level crossing road replacement works at construction and operation phase. The assessment concluded that a positive impact on local economy and the GDA is likely through provision of job at construction and by relieving aggregated congestion at the six existing level crossings and improving journey time reliability for all populations particularly, commuters and tourists at operation phase.</p> <p>The proposed bridge design is likely to have no greater impact on economy than the residual impact stated in the EIAR.</p> <p>Cumulative Impact Assessment</p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
Biodiversity	<p>Ashtown footbridge</p> <p>The proposed bridge design of the Ashtown Footbridge will lead to an overall reduction in the footprint of the structure. As a result of the reduced clearance requirements, the bridge and ramp length from 387m to 329m, a reduction of 58m. This will reduce the loss of treeline habitat on the south side of the Canal from 100m as proposed in the draft RO, to 85.5m.</p> <p>The parapet design on the ramps and bridge deck assessed in the EIAR was solid to the full height of 1.4m, with a 1.8m height over the OHLE. The proposed bridge design of the parapets on the ramps and bridge deck includes parapets that are solid up to 0.6m. The solid section will be made of Corten steel and will fold inwards towards the deck at the top, enclosing the bridge lighting which will shine downwards onto the bridge deck. The solid section of the parapets will prevent all downward and horizontal light spill. Above 0.6m, the parapets will be constructed of vertical Corten steel fins up to 1.4m, and over the OHLE, an additional section of 0.4m of mesh will be provided to comply the safety requirements for bridges over electrified railway lines.</p> <p>The proposed bridge design of the Ashtown footbridge will not have a greater impact on biodiversity than stated in the EIAR.</p> <p>Cumulative Impact Assessment</p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out.
	<p>Coolmine footbridge</p> <p>The proposed bridge design of the Coolmine Footbridge will lead to an overall reduction in the footprint of the structure. As a result of the</p>	Scoped out.

Environmental Topic	Summary of Assessment	Scoping Result
	<p>reduced clearance requirements, the bridge and ramp length from 413m to 361m, a reduction of 52m. This will reduce the loss of treeline habitat on the south side of the Canal from 90m as proposed in the RO, to 78.9m.</p> <p>The parapet design on the ramps and bridge deck assessed in the EIAR was solid to the full height of 1.4m, with a 1.8m height over the OHLE. The proposed bridge design of the parapets on the ramps and bridge deck includes parapets that are solid up to 0.6m. The solid section will be made of Corten steel and will fold inwards towards the deck at the top, enclosing the bridge lighting which will shine downwards onto the bridge deck. The solid section of the parapets will prevent all downward and horizontal light spill. Above 0.6m, the parapets will be constructed of vertical Corten steel fins up to 1.4m, and over the OHLE, an additional section of 0.4m of mesh will be provided to comply the safety requirements for bridges over electrified railway lines.</p> <p>The proposed bridge design of the Coolmine footbridge will not have a greater impact on biodiversity than stated in the EIAR.</p> <p>Cumulative Impact Assessment</p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
	<p>Porterstown footbridge</p> <p>The proposed bridge design of the Porterstown Footbridge will lead to an overall reduction in the footprint of the structure. The rotunda design of the bridge will reduce the bridge and ramp length from 367m to 321m, a reduction of 46m, and the 'real footprint' by 586m². This will reduce the loss of treeline habitat on the north side of the Canal from 75m as proposed in the RO, to 40m. This is a reduction in habitat loss is within the Royal Canal pNHA. The proposed bridge design will be constructed from Corten steel rather than precast concrete. There is a risk of pollution to the Royal Canal arising from welding, however this can be mitigated for using standard best practice methods.</p> <p>The parapet design on the ramps and bridge deck assessed in the EIAR was solid to the full height of 1.4m, with a 1.8m height over the OHLE. The proposed bridge design of the parapets on the ramps and bridge deck includes parapets that are solid up to 0.6m. The solid section will be made of Corten steel and will fold inwards towards the deck at the top, enclosing the bridge lighting which will shine downwards onto the bridge deck. The solid section of the parapets will prevent all downward and horizontal light spill. Above 0.6m, the parapets will be constructed of vertical Corten steel fins up to 1.4m, and over the OHLE, an additional section of 0.4m of mesh will be provided to comply the safety requirements for bridges over electrified railway lines.</p> <p>The proposed bridge design of the Porterstown footbridge will not have a greater impact on biodiversity than stated in the EIAR.</p> <p>Cumulative Impact Assessment</p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge</p> <p>The proposed bridge design of the Clonsilla Footbridge will lead to an overall reduction in the footprint of the structure. The rotunda design of the bridge will reduce the bridge and ramp length from 372m to 340m, a reduction of 32m, and the 'real footprint' by 572m². This will reduce the loss of treeline habitat on the north side of the Canal from 90m as proposed in the RO, to approximately 45m. This is a reduction in habitat loss is within the Royal Canal pNHA. The new design will not require damming and dewatering of the Royal Canal, which was proposed in the Railway Order. The proposed bridge design will be constructed from Corten steel rather than precast concrete. There is a risk of pollution to the Royal Canal arising from welding, however this can be mitigated for using standard best practice methods.</p> <p>The parapet design on the ramps and bridge deck assessed in the EIAR was solid to the full height of 1.4m, with a 1.8m height over the OHLE. The proposed bridge design of the parapets on the ramps and bridge deck includes parapets that are solid up to 0.6m. The solid section will be made of Corten steel and will fold inwards towards the deck at the top, enclosing the bridge lighting which will shine downwards onto the bridge deck. The solid section of the parapets will prevent all downward and horizontal light spill. Above 0.6m, the parapets will be constructed of vertical Corten steel fins up to 1.4m, and over the OHLE, an additional section of 0.4m of mesh will be provided to comply the safety</p>	Scoped out.

Environmental Topic	Summary of Assessment	Scoping Result
	<p>requirements for bridges over electrified railway lines.</p> <p>The proposed bridge design of the Clonsilla footbridge will not have a greater impact on biodiversity than stated in the EIAR.</p> <p>Cumulative Impact Assessment</p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
Land and Soils	<p>Ashtown footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Coolmine footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Water (including Hydrology and Flood Risk)	<p>Ashtown footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
	<p>Coolmine footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Hydrogeology	<p>Ashtown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Coolmine footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR,</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p>either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
	<p>Clonsilla footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Air Quality	<p>Ashtown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. Mitigation measures will be put in place to ensure construction related dust impacts are mitigated, as per the EIAR. The proposal will have no residual environmental impact with respect to air quality and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p> <p>Coolmine footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. Mitigation measures will be put in place to ensure construction related dust impacts are mitigated, as per the EIAR. The proposal will have no residual environmental impact with respect to air quality and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p> <p>Porterstown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. Mitigation measures will be put in place to ensure construction related dust impacts are mitigated, as per the EIAR. The proposal will have no residual environmental impact with respect to air quality and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p> <p>Clonsilla footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. Mitigation measures will be put in place to ensure construction related dust impacts are mitigated, as per the EIAR. The proposal will have no residual environmental impact with respect to air quality and is scoped out. <u>Cumulative Impact Assessment</u></p>	<p>Scoped out</p> <p>Scoped out</p> <p>Scoped out</p> <p>Scoped out</p>

Environmental Topic	Summary of Assessment	Scoping Result
	It is not expected that there will be cumulative impacts associated with this aspect of the environment.	
Climate	<p>Ashtown footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. The impact of the proposed footbridge is a reduction in 2 tonnes CO₂e. The proposal will have no significant residual environmental impact with respect to climate and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be significant cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Coolmine footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. The impact of the proposed footbridge is a reduction in 2 tonnes CO₂e. The proposal will have no significant residual environmental impact with respect to climate and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be significant cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. The impact of the proposed footbridge was previously included under level crossings within the EIAR carbon assessment rather than a separate line item. The proposal will have no significant residual environmental impact with respect to climate and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be significant cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. The impact of the proposed footbridge was previously included under level crossings within the EIAR carbon assessment rather than a separate line item. The proposal will have no significant residual environmental impact with respect to climate and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be significant cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Noise and Vibration	<p>Ashtown footbridge</p> <p>The construction of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. Mitigation measures will be put in place to ensure construction related noise and vibration impacts are mitigated, as per the EIAR.</p> <p>During operation there will be additional mechanical and electrical plant required to serve the lift. Any noise emission from this plant will be subject to the noise limits outlined in Section 14.5.4.3 of the EIAR.</p> <p>The proposal will have no residual environmental impact with respect to noise & vibration and is scoped out.</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p><u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
	<p>Coolmine footbridge The construction of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. Mitigation measures will be put in place to ensure construction related noise and vibration impacts are mitigated, as per the EIAR. During operation there will be additional mechanical and electrical plant required to serve the lift. Any noise emission from this plant will be subject to the noise limits outlined in Section 14.5.4.3 of the EIAR. The proposal will have no residual environmental impact with respect to noise & vibration and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge The construction of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. Mitigation measures will be put in place to ensure construction related noise and vibration impacts are mitigated, as per the EIAR. The proposal will have no residual environmental impact with respect to noise & vibration and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge The construction of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR. Mitigation measures will be put in place to ensure construction related noise and vibration impacts are mitigated, as per the EIAR. During operation there will be additional mechanical and electrical plant required to serve the lift. Any noise emission from this plant will be subject to the noise limits outlined in Section 14.5.4.3 of the EIAR. The proposal will have no residual environmental impact with respect to noise & vibration and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Landscape and Visual Amenity	<p>Ashtown footbridge The proposed bridge design results in a more compact arrangement being c.14.5m shorter in length and with clearance over the railway reduced from 6.55m to 5.30m. The proposed bridge design also includes for visually permeable parapets and for provision of two lifts structures and amendments to the stair access. The addition of the lifts adds a degree of visual massing / bulking, while the provision of permeable parapets and the reduction in length of the footbridge reduces the overall visual scale of the structure. However, in overall terms there is no change to the assessment of construction phase impacts presented in Sections 15.5.1.1.3 and 15.5.1.2 and in Tables 15-6 and 15-8 in Chapter 15 of the EIAR. Likewise, in overall terms there is no change to the assessment of operation phase impacts presented in Sections 15.5.2.1.3 and 15.5.2.2 and in Tables 15-7, 15-9 and 15-10 in Chapter 15 of the EIAR.</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p>No additional mitigation measures other than those set out in Section 15.6 of Chapter 15 of the EIAR are required.</p> <p>While the proposed bridge design does not alter the assessment of landscape and visual impacts presented in Chapter 15 of the EIAR, they will result in an improved visual appearance of the Ashtown footbridge structure.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
	<p>Coolmine footbridge</p> <p>The proposed bridge design results in a more compact arrangement being between c.11.10m and c.14.85m shorter in length and with clearance over the railway reduced from 6.57m to 5.30m. The proposed bridge design also includes for visually permeable parapets and for provision of two lifts structures and amendments to the stair access.</p> <p>The addition of the lifts adds a degree of visual massing / bulking, while the provision of permeable parapets and the reduction in length of the footbridge reduces the overall visual scale of the structure.</p> <p>However, in overall terms there is no change to the assessment of construction phase impacts presented in Sections 15.5.1.1.3 and 15.5.1.2 and in Tables 15-6 and 15-8 in Chapter 15 of the EIAR.</p> <p>Likewise, in overall terms there is no change to the assessment of operation phase impacts presented in Section 15.5.2.1.3, and Section 15.5.2.2 and in Tables 15-7, 15-9 and 15-10 in Chapter 15 of the EIAR.</p> <p>No additional mitigation measures other than those set out in Section 15.6 of Chapter 15 of the EIAR are required.</p> <p>While the proposed bridge design do not alter the assessment of landscape and visual impacts presented in Chapter 15 of the EIAR, they will result in an improved visual appearance of the Coolmine footbridge structure in-keeping with other proposed footbridge structures on the scheme.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge</p> <p>The proposed bridge design results in a change from concrete structure to corten steel – in keeping with other proposed footbridges on the scheme. The proposed bridge design also includes for a reduction in height, for changes to the stair / ramp access, the provision of visually permeable parapets, reduced impact on St. Mochta’s and reduced visual impact on the residential property to the north.</p> <p>The proposed modifications will result in an improved visual appearance of the footbridge structure with reduced visual impacts.</p> <p>However, in overall terms there is no change to the assessment of construction phase impacts presented in Sections 15.5.1.1.3 and 15.5.1.2 and in Tables 15-6 and 15-8 in Chapter 15 of the EIAR.</p> <p>Likewise, in overall terms there is no change to the assessment of operation phase impacts presented in Section 15.5.2.1.3, and Section 15.5.2.2 and in Tables 15-7, 15-9 and 15-10 in Chapter 15 of the EIAR.</p> <p>No additional mitigation measures other than those set out in Section 15.6 of Chapter 15 of the EIAR are required.</p> <p>While the proposed bridge design does not alter the assessment of landscape and visual impacts presented in Chapter 15 of the EIAR, they will result in an improved visual appearance of the Porterstown footbridge structure in-keeping with other proposed footbridge structures on the scheme.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p>Clonsilla footbridge</p> <p>The proposed bridge design results in a change from concrete structure to corten steel – in keeping with other proposed footbridges on the scheme. The proposed bridge design also includes for a reduction in height, for provision of lifts and changes to the stair / ramp access, and the provision of visually permeable parapets.</p> <p>The proposed bridge design will result in an improved visual appearance of the footbridge structure.</p> <p>However, in overall terms there is no change to the assessment of construction phase impacts presented in Sections 15.5.1.1.3 and 15.5.1.2 and in Tables 15-6 and 15-8 in Chapter 15 of the EIAR.</p> <p>Likewise, in overall terms there is no change to the assessment of operation phase impacts presented in Section 15.5.2.1.3, and Section 15.5.2.2 and in Tables 15-7, 15-9 and 15-10 in Chapter 15 of the EIAR.</p> <p>No additional mitigation measures other than those set out in Section 15.6 of Chapter 15 of the EIAR are required.</p> <p>While the proposed bridge design does not alter the assessment of landscape and visual impacts presented in Chapter 15 of the EIAR, they will result in an improved visual appearance of the Clonsilla footbridge structure.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Material Assets: Agricultural Properties	<p>Ashtown footbridge</p> <p>The proposed bridge design will result in a reduction in the footprint of the structure. There will be a reduction in height of the bridge. The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either adverse or beneficial.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Coolmine footbridge</p> <p>The proposed bridge design will result in a reduction in the footprint of the structure. There will be a reduction in height of the bridge. The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either adverse or beneficial</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge</p> <p>The proposed bridge design will result in a reduction in the footprint of the structure. The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either adverse or beneficial.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p>Clonsilla footbridge</p> <p>The proposed bridge design will result in a reduction in the footprint of the structure. The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either adverse or beneficial.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Material Assets: Non Agricultural Properties	<p>Ashtown footbridge</p> <p>The proposed bridge design will result in a reduction in the footprint of the structure. There will be a reduction in height of the bridge. The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either adverse or beneficial.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Coolmine footbridge</p> <p>The proposed bridge design will result in a reduction in the footprint of the structure. There will be a reduction in height of the bridge. The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either adverse or beneficial</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge</p> <p>The proposed bridge design will result in a reduction in the footprint of the structure. The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either adverse or beneficial.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge</p> <p>The proposed bridge design will result in a reduction in the footprint of the structure. The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either adverse or beneficial.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Material Assets: Utilities	<p>Ashtown footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR,</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p>either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p> <p>Coolmine footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p> <p>Porterstown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p> <p>Clonsilla footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	<p></p> <p>Scoped out</p> <p>Scoped out</p> <p>Scoped out</p>
Material Assets: Resource and Waste Management	<p>Ashtown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p> <p>Coolmine footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u></p>	<p>Scoped out</p> <p></p>

Environmental Topic	Summary of Assessment	Scoping Result
	<p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
	<p>Porterstown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	Archaeology and Cultural Heritage	<p>Ashtown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>
<p>Coolmine footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>		Scoped out
<p>Porterstown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>		Scoped out
<p>Clonsilla footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR,</p>		Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p>either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
Architectural Heritage	<p>Ashtown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Coolmine footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge The reduction in the length of the northern ramp of the Porterstown footbridge will reduce the likelihood of damage to the school during construction, reducing the potential construction impact from significant to moderate negative. The proposed bridge design will have a lesser impact on the setting of Clonsilla School than the original design, reducing the predicted operational impact from moderate negative to slight negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Electromagnetic Effects and Stray Current	<p>Ashtown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out.</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p><u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
	<p>Coolmine footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
Human Health	<p>Ashtown footbridge <u>Physical Activity</u> The proposed bridge design do not cause a material impact on physical activity compared to the draft RO design as the proposed footbridge remains at the same location and provides the same level of segregated pedestrian and cyclist infrastructure for non-vehicular users. The proposed bridge design is likely to have no greater impact on physical activity than the residual impact stated in the EIAR. <u>Psychosocial effects:</u> Psychosocial hazards include nuisance, anti-social behaviour, suicide. Chapter 23 assessed the potential psychosocial effects of the draft RO design of the proposed development including the level crossing replacement works. The assessment concluded that the project as a whole has the potential to have wider positive societal health promotion effects that may be associated with public transport infrastructure. The proposed bridge design will replace the solid parapets of the original footbridge structure with parapets that will greater visibility to and from the footbridge allowing for passive surveillance of the structure/users. This will increase a sense of safety for users when on the footbridge. Overall, the proposed bridge design is likely to have a positive effect and no greater impact on psychosocial effects than the residual impact stated in the EIAR. Risks to human health from potential impacts on other environmental factors are assessed in separate sections of this appraisal.</p>	Scoped out

Environmental Topic	Summary of Assessment	Scoping Result
	<p><u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p> <p>Coolmine footbridge <u>Physical Activity</u> The proposed bridge design do not cause a material impact on physical activity compared to the draft RO design as the proposed footbridge remains at the same location and provides the same level of segregated pedestrian and cyclist infrastructure for non-vehicular users. The proposed bridge design is likely to have no greater impact on physical activity than the residual impact stated in the EIAR. <u>Psychosocial effects:</u> The proposed bridge design will replace the solid parapets of the original footbridge structure with parapets that will greater visibility to and from the footbridge allowing for passive surveillance of the structure/users. This will increase a sense of safety for users when on the footbridge. Overall, the proposed bridge design is likely to have a positive effect and no greater impact on psychosocial effects than the residual impact stated in the EIAR. Risks to human health from potential impacts on other environmental factors are assessed in separate sections of this appraisal. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p> <p>Porterstown footbridge <u>Physical Activity</u> The proposed bridge design do not cause a material impact on physical activity compared to the draft RO design as the proposed footbridge remains at the same location and provides the same level of segregated pedestrian and cyclist infrastructure for non-vehicular users. The proposed bridge design is likely to have no greater impact on physical activity than the residual impact stated in the EIAR. The proposed bridge design will replace the solid parapets of the original footbridge structure with parapets that will greater visibility to and from the footbridge allowing for passive surveillance of the structure/users. This will increase a sense of safety for users when on the footbridge. Overall, the proposed bridge design is likely to have a positive effect and no greater negative impact on psychosocial effects than the residual impact stated in the EIAR. Risks to human health from potential impacts on other environmental factors are assessed in separate sections of this appraisal. <u>Psychosocial effects</u> Overall, the proposed bridge design is likely to have no greater impact on psychosocial effects than the residual impact stated in the EIAR. Risks to human health from potential impacts on other environmental factors are assessed in separate sections of this appraisal. <u>Cumulative Impact Assessment</u> It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p> <p>Clonsilla footbridge <u>Physical Activity</u> The proposed bridge design do not cause a material impact on physical activity compared to the draft RO design as the proposed footbridge remains at the same location and provides the same level of segregated pedestrian and cyclist infrastructure for non-vehicular users.</p>	<p></p> <p>Scoped out</p> <p>Scoped out</p> <p>Scoped out</p>

Environmental Topic	Summary of Assessment	Scoping Result
	<p>The proposed bridge design is likely to have no greater impact on physical activity than the residual impact stated in the EIAR.</p> <p>The proposed bridge design will replace the solid parapets of the original footbridge structure with parapets that will greater visibility to and from the footbridge allowing for passive surveillance of the structure/users. This will increase a sense of safety for users when on the footbridge.</p> <p>Overall, the proposed bridge design is likely to have a positive effect and no greater negative impact on psychosocial effects than the residual impact stated in the EIAR.</p> <p>Risks to human health from potential impacts on other environmental factors are assessed in separate sections of this appraisal.</p> <p><u>Psychosocial effects</u></p> <p>Overall, the proposed bridge design is likely to have no greater impact on psychosocial effects than the residual impact stated in the EIAR.</p> <p>Risks to human health from potential impacts on other environmental factors are assessed in separate sections of this appraisal.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	
Major Accidents and Disasters	<p>Ashtown footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Coolmine footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Porterstown footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative.</p> <p>The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out
	<p>Clonsilla footbridge</p> <p>The construction and operation of the proposed bridge design will have no significant change to the impact assessment contained in the EIAR, either positive or negative. The proposal will have no material environmental impact and is scoped out.</p> <p><u>Cumulative Impact Assessment</u></p> <p>It is not expected that there will be cumulative impacts associated with this aspect of the environment.</p>	Scoped out

3. SUMMARY OF ASSESSMENT

As presented in Table 2-1 above, the proposed bridge designs do not have any material environmental impact on the environment and are considered to have benefits over the pedestrian and cyclist bridge designs presented in the EIAR and draft RO.

Appendix A - Drawings