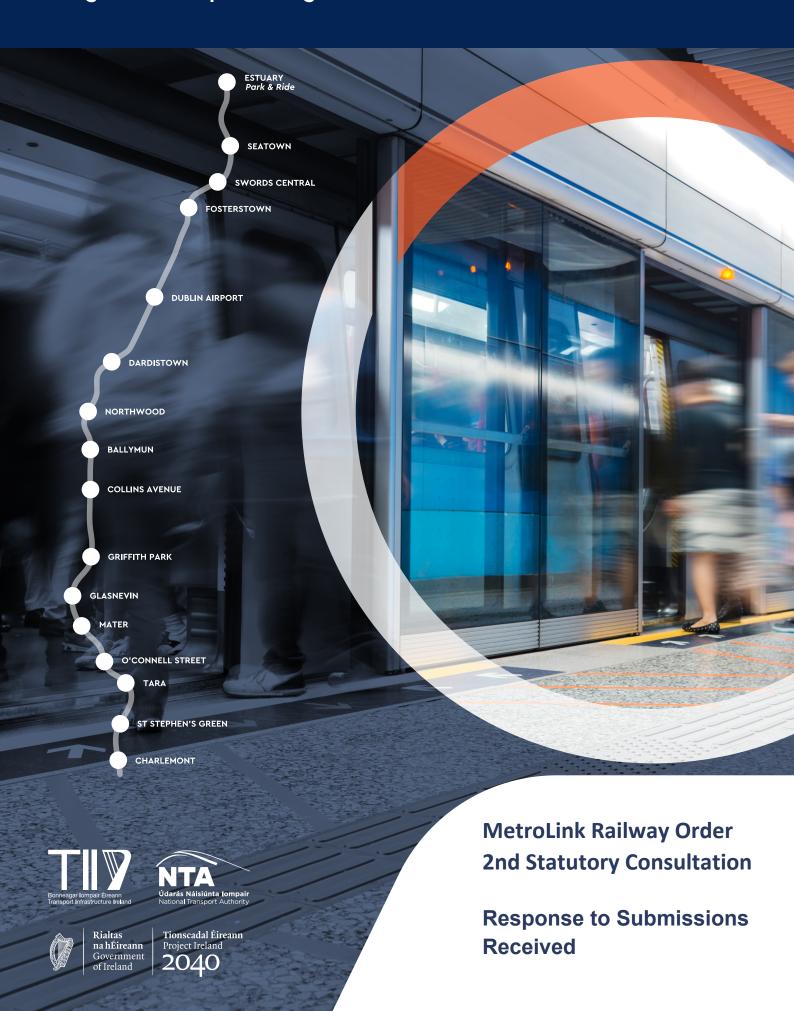
# METROLINK

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### Contents

1.	Introduction and Document Purpose	1
1.1	Submission of the MetroLink Railway Order Application	1
1.2	Second Statutory Consultation	1
1.3	Privacy and Personal Data	1
1.3.1	Property Details	1
1.3.2	Submissions to An Bord Pleanála	2
2.	Approach to Submissions Review	3
2.1	Introduction	3
2.1.1	Geographic Division of the MetroLink Route	3
2.1.2	Grouping of Submissions by Type or Organisation	1
3.	Analysis of Submissions Received	3
3.1	Introduction	3
3.2	Analysis	3
3.2.1	Number of Submissions Received Categorised by Location	3
3.2.2	Number of Submissions Received Categorised by Organisation or Individuals	4
3.2.3	Submissions Categorised by Construction and Operational Phase	4
3.2.4	Submission Themes	5
4.	Summary of Submissions and TII Responses	7
4.1	Submissions by Group 1: Statutory Authorities and Public Bodies	7
4.1.1	Submission: Development Application Unit	7
4.1.2	Submission: DECC Geological Survey Ireland	8
4.1.3	Submission: Dublin City Council	8
4.1.4	Submission: Fingal County Council	8
4.1.5	Submission: OPW (Leinster House Complex)	8
4.2	Submissions by Group 2: Location Specific	.11
4.2.1	AZ1 Estuary to Dublin Airport North Portal	.11
4.2.2	AZ2 Airport Section	.14
4.2.3	AZ3 Dardistown to Northwood	.14
4.2.4	AZ4 Northwood Portal to Charlemont	.16
4.3	Submissions by Group 3: Other submissions that are not location specific or address themes that cover a number of locations or are route wide.	
4.3.1	Submission: Association Of Combined Residence Association (Catriona McClean & Tom Newton) (ACRA)	.68
4.3.2	Submission: Metro South West Group	69
4.3.3	Submission: An Taisce	70
4.3.4	Submission: Cormac McKay and Aeravai	.73
4.3.5	Submission: D Holohan	.74
4.3.6	Submission: Donal O'Brolcáin	.74
4.3.7	Submission: Dublin Cycling Campaign	.75
4.3.8	Submission: NAMAI DAC	.77
4.3.9	Submission: Andrew Whelan	.77



4.3.10	Submission: Dublin Commuter	Coalition	79
1.0.10	Cabillicolorii. Dabiilli Collilliator	Outlier	

**Appendix A. Submission Analysis Matrix** 



### **Acronyms and Abbreviations**

Acronym	Abbreviation
ABP	An Bord Pleanála
ACP	Albert College Park
ACRA	Association Of Combined Residence Association
AIA	Arboriculture Impact Assessment
ASD	Adjacent Site Development
AZ	Assessment Zones
ВН	Borehole
BRARA	Berkeley Road Area Residents Association
CCTV	Closed Circuit Television
СЕМР	Construction and Environmental Management Plan
CGI	Computer Generated Imagery
CNT	Construction Noise Threshold
CNVMP	Construction Noise and& Vibration Management Plan
СРО	Compulsory Purchase Order
CSO	Central Statistics Office
DANP	Dublin Airport North Portal
DASP	Dublin Airport South Portal
DAU	Development Applications Unit
dB	Decibel
DCC	Dublin City Council
DCU	Dublin City University
DECC	Department of Environment, Climate and Communications
DFB	Dublin Fire Brigade
DVWSL	DeVere White & Smyth Limited



Acronym	Abbreviation
ECRA	Estuary Court Residents Association
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EPR	Emerging Preferred Route
ERM	Eastern Regional Model
ESB	Electricity Supply Board
EU	European Union
FCC	Fingal County Council
FOI	Freedom of Information
GADRA	Griffith Avenue & District Residents Association
GDA	Greater Dublin Area
GDPR	General Data Protection Regulation
GHG	Greenhouse Gas
HGV	Heavy Goods Vehicle
HVO	Hydrotreated Vegetable Oil
IEE	Independent Engineering Expert
IME	Independent Monitoring Engineer
LED	Light Emitting Diode
LGTI	Luas Greenline Tie In
MMP	Mobility Management Plan
MSWG	Metro South West Group
NAMA	National Asset Management Agency
NDAs	Non-Disclosure Agreements
NFPA	National Fire Protection Association
NPWS	National Parks and Wildlife Service



Acronym	Abbreviation
NSL	Noise Sensitive Locations
NTA	National Transport Authority
осс	Operational Control Centre
OPW	Office of Public Works
OSD	Over Site Development
PFAS	Perfluoroalkyl and Polyfluoroalkyl Substances
POPS	Property Owner Protection Scheme
PR	Public Relations
PRM	Persons with Reduced Mobility
RINA	Independent Engineering Expert
RMP	Recorded Monument and Places
RO	Railway Order
SCADA	Supervisory Control and Data Acquisition
SIR	Station Intervention Rooms
STMP	Site Traffic Management Plan
TAP	Trigger Action Plan
ТВМ	Tunnel Boring Machine
TEN-T	Trans-European Transport Network
ТІІ	Transport Infrastructure Ireland
ToR	Terms of Reference
UCD	University College Dublin



### 1. Introduction and Document Purpose

### 1.1 Submission of the MetroLink Railway Order Application

The timeline and information supporting the MetroLink Railway Order (RO) can be found at https://www. MetroLinkro.ie. (the Project Website)

### 1.2 Second Statutory Consultation

During the Oral Hearing, additional information was presented by Transport Infrastructure Ireland (TII) to An Bord Pleanála (hereafter referred to as ABP) in response to queries from Stakeholdersstakeholders, the public and ABP Inspectors. Furthermore, pursuant to a Request for Further Information issued by ABP, TII submitted on 12 June 2024 an updated Book of Reference to the plan indicating the identity of the owners and occupiers of the lands described in the plan. All of the above additional documentation is collectively called Further Information.

In order to ensure that stakeholders and the public had a sufficient opportunity to review, consider and comment on the Further Information, ABP directed that TII provide for a Secondary Public Consultation Period. In order to ensure that Stakeholders and the public had a sufficient opportunity to review, consider and comment on the Further Information, ABP directed that TII provide for a Secondary Public Consultation Period.

TII invited submissions on the Further Information from Stakeholders, members of the public, affected landowners and designated bodies to be made in writing to ABP from 19 August 2024 to 8 October 2024.

Following the statutory consultation period, ABP issued 42 submission documents to TII in two batches on 18 October and 4 November 2024. These submissions comprised individual submissions containing observations made in response to the MetroLink RO application having regard to the new documents and other material submitted to ABP during the project's Oral Hearing. In a letter received from ABP (dated 11 November 2024), ABP requested TII respond to submissions received to address the following only:

- Submissions received from new observers (Berkeley Road Area Residents Association, Charlemont and Dartmouth Community Group (3-11 Cambridge Terrace), D. Holohan and NAMA); and
- New Issues raised in the submissions by existing observers.

The purpose of this document is to provide a summary overview and understanding of and response to the submissions received and observations made in response to the Further Information submitted by TII. The document has been structured as follows:

- An introduction and overview in Section 1;
- An overview of the analysis of the submissions received, in Section 2; and
- TII's summary response to submissions and observations received, based on the grouping of types of submitters, geographic locations and themes covered in the submissions, in Section 3.

#### 1.3 Privacy and Personal Data

This document has been prepared in accordance with the EU General Data Protection Regulation 2016/679 (GDPR) and Data Protection Acts 1988 to 2018.

#### 1.3.1 Property Details

In order to comply with legal and regulatory obligations in seeking a RO in respect of the MetroLink Project (hereafter referred to as the propoed Project), TII was required in accordance with Section 40 of the Transport (Railway Infrastructure Act) 2001 as amended to compile the owners, assumed owners and occupiers of lands impacted by the Project (the "Book of Reference") including by reference to property records (e.g. from the Land Registry and the Registry of Deeds). The Book of Reference is contained in number 3 of the RO Application.

1



#### 1.3.2 Submissions to An Bord Pleanála

As part of the statutory public consultation process, submissions and or observations to ABP were furnished to TII for its response. Certain personal data has been voluntarily provided by those individuals who lodged submissions to ABP in accordance with RO Application process. TII has had to refer to the name and address of persons making submissions and other personal data in their submission in order that ABP can identify which of TII's responses relate to each submission.

For further information on how TII collects and processes personal data and how it is used, please refer to MetroLink's Data Protection Notice at www.metrolink.ie/en/dataprotectionnotice.



### 2. Approach to Submissions Review

#### 2.1 Introduction

The purpose of this Section is to explain the approach and methodology adopted to analyse the submissions received during the secondary public consultation period and provide an overview of what that analysis is showing. Section 3 provides a more granular level of detail in terms of the specific thematic, geographical and individual observations raised and TII's response.

The first step entailed undertaking a thorough review of the submissions received in order to identify which submissions were from new submitters and which submissions came from previous submitters but contained new issues and observations that were not previously addressed in the 1<sup>st</sup> Statutory Consultation Response document or at the MetroLink Oral Hearing held in February/March 2024.

There were four new submitters, and these were as follows:

- Berkeley Road Area Residents Association;
- Charlemont and Dartmouth Community Group (3-11 Cambridge Terrace);
- D. Holohan; and
- NAMAI DAC.

TII has taken a conservative approach when identifying new issues and have responded to:

- Clearly reference new material submitted during the Oral Hearing; and
- Raise new queries on the proposed Project that were not addressed previously when responding to submissions.

A 'Coding' methodology has been used to analyse the data contained within each submission to help with identifying the overall frequency, types, and geographic location of observations made, and thus their grouping thematically and geographically.

The submissions were also coded against the themes of the EIAR chapters and associated RO documentation, and the geographic areas described in Section 2.1.1. This approach has enabled TII to complete a thematic and geographic analysis of the submissions received to develop an in depth understanding of the observations made and to enable detailed responses to individual submissions. It should be noted that all observations were treated equally.

Appendix A of this report presents and summarises each observation and issue raised in each of the submissions. It provides the rationale for why an observation or issue was considered to be a new issue or not. It also signposts where responses have been previously provided and answered.

#### 2.1.1 Geographic Division of the MetroLink Route

The analysis of the submissions received mirrors the structure of the submitted Environmental Impact Assessment Report (EIAR). This is to ensure that the review and analysis of submissions received is aligned with the submitted RO application and the analysis presented in the EIAR, whilst also making it easy to follow for the Stakeholders and the Inspectors.

These Assessment Zones (AZ) are illustrated and summarised below by Figure 2.1 and Table 2.1 G, noting that AZ1 and AZ4 have been further subdivided for the purposes of this document to ensure observations are addressed with sufficient granularity for their respective geographic locations. For AZ1, the area has been split in two recognising that north of Swords Central Station is predominantly residential, while south of and including Swords Central Station to the Dublin Airport North Portal (DANP) is predominantly commercial with some exceptions. For the city centre Section AZ4, the area has been sub-divided into stations and an associated section of running tunnel.



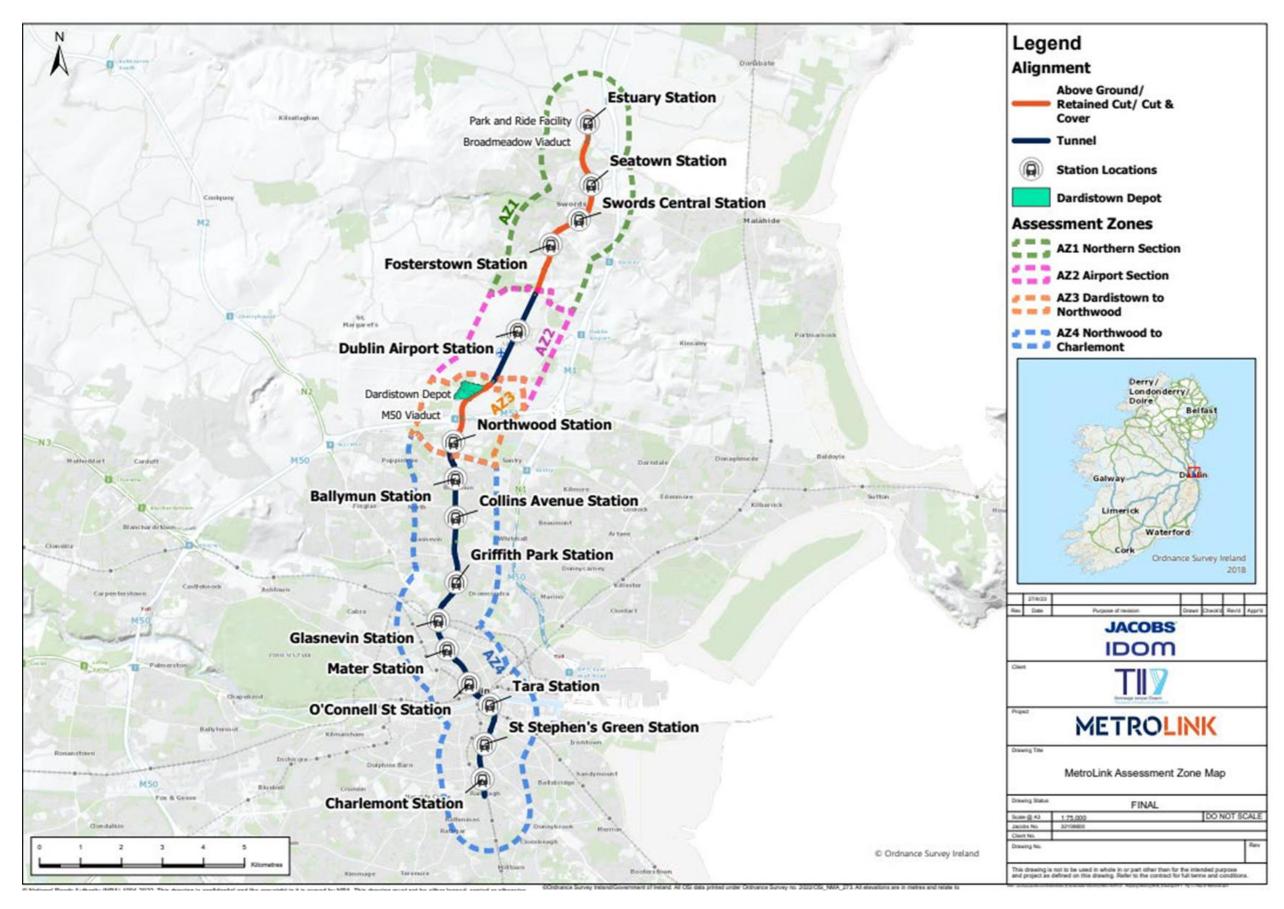


Figure 2.1: Map Showing MetroLink Assessment Zone

1



Zone	Geographical Section	Geographical Section Description
A-74	Estuary Station to Dublin Airport North Portal (DANP)	Section includes at-grade, embankment, open and retained cut, and cut and cover alignment Sections, as well as a railway viaduct crossing over the Broadmeadow and Ward Rivers and associated flood plains, Park & Ride facility at Estuary Station, plus stations at Seatown, Swords Central and Fosterstown.
AZ1	AZ1(a)	Estuary Station (including Park & Ride facility) to Seatown Station to northern end of Swords Central Station.
	AZ1(b)	Swords Central Station to Fosterstown Station to DANP.
AZ2	Airport Section	Section AZ2 includes the ESB Networks connection and new substations, the DANP, the tunnel running beneath Dublin Airport lands, Dublin Airport Station and Dublin Airport South Portal (DASP) and associated intervention and ventilation tunnels.
AZ3	Dardistown to Northwood	Section includes embankment, elevated, open and retained cut, and cut and cover Sections of the alignment. AZ3 extends from south of DASP to the Northwood Portal, and includes Dardistown Station, the Dardistown Depot, ESB Networks connection and substations, the M50 viaduct crossing, Northwood Station and the Tunnel Boring Machine (TBM) launch site at Northwood.
	Northwood Portal to Charlemont	AZ4 extends from south of the Northwood Portal in bored tunnel to just beyond Charlemont Station, and includes ten underground stations, and the Albert College Park Intervention Shaft.
	AZ4(a)	Northwood Portal to Ballymun Station, Ballymun Station and running tunnel to Collins Avenue Station.
	AZ4(b)	Collins Avenue Station and running tunnel to Griffith Park Station, including Albert College Park Intervention Shaft.
	AZ4(c)	Griffith Park Station and running tunnel to Glasnevin Station.
A 74	AZ4(d)	Glasnevin Station and running tunnel to Mater Station.
AZ4	AZ4(e)	Mater Station and running tunnel to O'Connell Street Station.
	AZ4(f)	O'Connell Street Station and running tunnel to Tara Station.
	AZ4(g)	Tara Station and running tunnel to St. Stephen's Green Station.
	AZ4(h)	St. Stephen's Green Station and running tunnel to Charlemont Station.
	AZ4(i)	Charlemont Station and tunnel turnback south of the Station.

Table 2.1 Geographical Division of the MetroLink Route by Assessment Zone (AZ)

### 2.1.2 Grouping of Submissions by Type or Organisation

To assist with managing and understanding the number of submissions received, interpreting the analysis and ensuring the necessary technical experts were deployed to review submissions, the submissions were categorised into three groups as detailed in Table 2.2.



Group	Description of Group
Group 1 Submissions from statutory and public bodies	
Group 2	Location specific submissions including those from Resident Groups/Associations, community groups, residential property owners, local residents and their representatives, local businesses, commercial properties and environmental groups
Group 3	Submissions from other interested parties that are not location specific or address themes that cover a number of locations or are route wide

Table 2.2: Description of Grouping of Submissions



### 3. Analysis of Submissions Received

#### 3.1 Introduction

This Section analyses the submissions received during the 2nd Statutory Consultation Period, and the subjects covered by the observations made within these submissions. To assist with understanding what the submissions received are showing, the information received has been presented in several ways; submissions by geographical area; grouping of submissions by type/organisation; number of individuals represented by submissions; submission categorisation by the project phase (construction or operation) and submission themes.

#### 3.2 **Analysis**

#### 3.2.1 **Number of Submissions Received Categorised by Location**

Most of the submissions refer to a particular geographic area along the proposed Project route, and in some cases to multiple geographic areas. All the submissions have been geographically categorised in accordance with the EIAR AZ's (refer to Table 2.1 above).

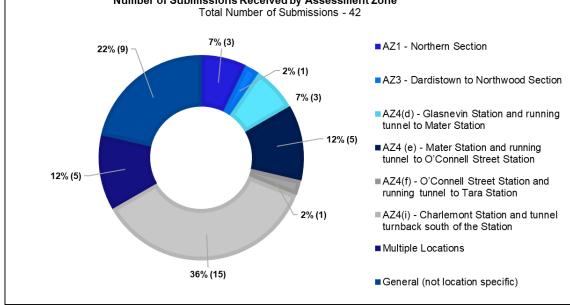
Figure 3.1 shows the split of submissions by AZ. 57% (24 submissions) of all submissions geographically fall within AZ4 (Northwood portal to Charlemont) and is reflective of this section of the alignment having the greatest number of stations (all underground), and concern around their associated scale, construction duration and their impact on the surrounding environment. The highest number of submissions are from AZ4(i) Charlemont Station and tunnel turnback south of the station with 36% (15) of all submissions. The second highest number of submissions within the AZ4 area are from AZ4(e) Mater Station and running tunnel to O'Connell Street Station with 12% (5) of all submissions. The third highest number of submissions within the AZ4 area are from AZ4(d) Glasnevin Station and running tunnel to Mater Station with 7% (3) of all submissions.

The second highest number of submissions were not location specific (9 submissions). There are 5 submissions that covered multiple locations. AZ1 relates to Estuary to DANP and has 3 submissions with AZ3 (Dardistown to Northwood, including the proposed depot) having 1 submission.

Figure 3.1 below summarises the split of the 42 submissions received across the three groups.

Number of Submissions Received by Assessment Zone Total Number of Submissions - 42

Figure 3.1: Percentage Split of Submissions by Assessment Zone

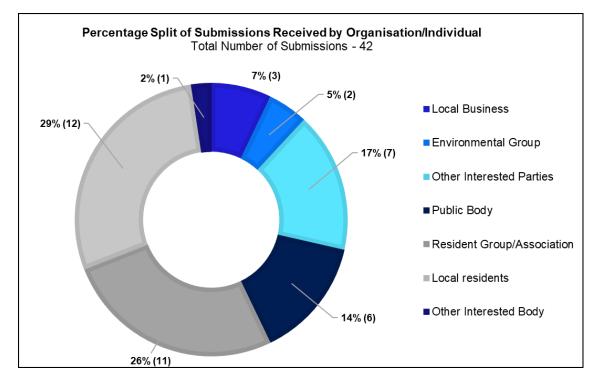




#### 3.2.2 Number of Submissions Received Categorised by Organisation or Individuals

Figure 3.2 below summarises the split of the 42 submissions received across organisations and individuals.

Figure 3.2: Percentage Split of Submissions by Group (Organisation or Individual)



29% of submissions are from local residents (12 submissions). The second highest number of submissions are from resident groups/associations, with 11 submissions. There are 7 submissions from other interested parties which include Metro South West Group and Dublin Cycling Campaign and 6 submissions from public bodies. There are 3 submissions from local businesses, 2 submissions from environmental groups and 1 submission from other interested bodies.

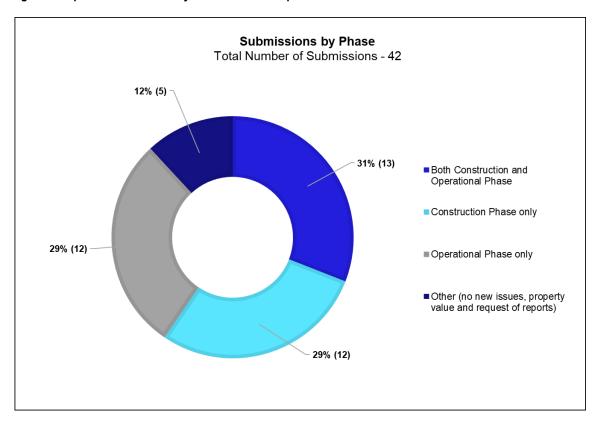
#### 3.2.3 Submissions Categorised by Construction and Operational Phase

31% of submissions received address issues on both the construction and operational phases of the proposed Project, with 29% of the submissions received addressing operational phase issues only and 29% covering construction phase issues only. 12% of the submissions received (5 submissions) did not relate to either the construction or operational phases.

Figure 3.3 shows the split of submissions by construction and operational phase.



Figure 3.3 Split of Submissions by Construction or Operational Phase



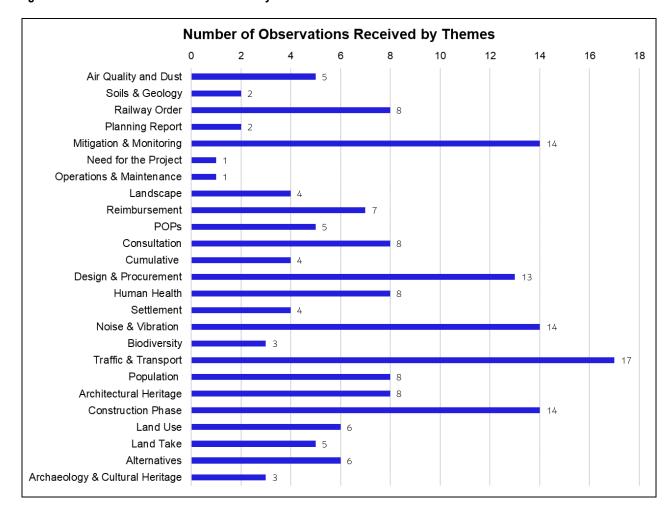
#### 3.2.4 Submission Themes

Figure 3.4 provides a summary of the analysis of the themes covered by the observations within the submissions received, showing the number of observations received in relation to a particular theme. A number of submissions raised concerns about more than one theme.

As can be seen in Figure 3.4 below, most observations were raised on traffic and transport (17 observations), followed by noise and vibration, mitigation and monitoring and construction phase all with 14 observations. The other themes that were raised included the RO, design and procurement and architectural heritage.



Figure 3.4: Number of Observations Received by Themes





### 4. Summary of Submissions and TII Responses

The submissions covered a wide range of themes as identified in the previous Section which corresponded to the chapters of the Environmental Impact Assessment Report (EIAR) and other RO Documentation, including the documents submitted during the Oral Hearing (OH).

### 4.1 Submissions by Group 1: Statutory Authorities and Public Bodies

Four submissions were received from statutory authorities and other public bodies and responses to these submissions are outlined in this Section.

#### 4.1.1 Submission: Development Application Unit

The submission from the Development Applications Unit (Department of Housing, Local Government and Heritage) raised issues in relation to the following topics for which a response is provided below.

- Biodiversity; and
- Architectural Heritage.

#### 4.1.1.1 Biodiversity

Observation: The observer requests that the downstream otter fencing depicted in in Drawing No. ML1-EIA-R001\_XX-DR-Y-3100002 'Otter Mitigation Measures Royal Canal-Cross Section' of the EIAR Biodiversity Update Report will need to be extended across the width of the basin immediately above the upper gates of the 5th Lock so as to effectively funnel otters moving upstream into the proposed otter passage, and not just end adjacent to the southern side of the basin.

<u>TII Response:</u> TII appreciate the engagement with the National Parks and Wildlife Service (NPWS) regarding the Otter Bypass Plan. TII are committed to updating the otter management plan for the Royal Canal and will ensure that safe access to the proposed otter pass through the full extent of the works area (as agreed with NPWS during the Oral Hearing) is provided. TII also commits to monitoring the proposed otter pass and will adjust as required to ensure that otter passage is maintained at all stages of the proposed works. TII is committed to working with the NPWS during the project and will provide all otter activity monitoring data to NPWS.

Observation: Otter Ledges: The Department notes that no ledges are proposed to be included in the culverts to be installed over the Mayne and Santry Rivers as part of the MetroLink Project. A recent otter survey work carried out in connection with both MetroLink, and other projects has proven the continued presence of otters on the Santry River. The NPWS recommends that ABP should give consideration to requiring the installation of a mammal ledge in the new proposed culvert over Santry River and, if feasible, as a biodiversity enhancement measure the installation of a similar ledge in the existing adjacent culvert also as part of the MetroLink Project. The installation of these ledges would help provide for the continued free movement of otters along the water course.

<u>TII Response:</u> The requested inclusion of a mammal ledge in the proposed new short culvert on the Santry River would not achieve more effective otter passage as the existing culvert which it adjoins under the R108 roadway does not have a mammal ledge and TII cannot install the same as it does not own or operate the existing culvert. Unless FCC installed such a ledge, it is not considered that the provision of a short section of culvert by itself would be of benefit for otter passage as its provision would not likely provide much practical gain for otters in terms of upstream passage.

TII is committed to a full monitoring regime at this location including of otter activity during the construction phase.

Observation: 'Note on Plan Level Biodiversity Policy Compliance': includes Wildflower Planting: The Department notes that the planting of wildflower meadows is proposed. The DAU notes that the All-Ireland Pollinator Plan advises against planting wildflower seed outside a garden setting. Recommends ABP should include as a condition of any permission granted for the MetroLink Project, that the planting of wildflowers should be omitted from the landscaping proposals for the project, but



where possible as a conservation measure along the project route bare areas should be left to recolonise with vegetation by natural dispersal and from local soil seed banks, and then managed as wildflower meadows into the future.

<u>TII Response</u>: TII notes the observation regarding the planting of wildflower meadows and will work with Local Authorities and NPWS to generate an appropriate seed mix for the planting of wildflower meadow or grassland areas to ensure that such planting uses native seed of local provenance only. This will mean that the proposed planting is in line with the All-Ireland Pollinator Plan 2021 – 2025 while also enhancing the local biodiversity. The project does not propose to leave any areas of bare ground as this risks soil mobilisation during the preestablishment period with potential for runoff to watercourses.

#### 4.1.1.2 Architectural Heritage

Observation: Protection of Lissenhall Bridge: The Department has reviewed additional documentation and is satisfied with the specific details provided by TII on how the National Monument of Lissenhall Bridge (RMP DU011-081; Protected Structure No 341 (Fingal)) will be protected during construction works. The minimum extent of the exclusion buffer zone around the bridge has been clarified, resolving previous queries. Unchanged Observation: All other archaeological observations and recommendations from the Department's original submission on 16 January 2023 remain unchanged.

TII Response: TII notes that the Department's queries regarding Lissenhall Bridge have been resolved.

#### 4.1.2 Submission: DECC Geological Survey Ireland

Observation: The submission from DECC Geological Survey Ireland highlighted useful DECC data sets. In addition, a request was made for reports detailing site investigations (data would be redacted). Finally, it was requested that should any significant bedrock cuttings be created, they should remain visible as rock exposure rather than covered with soil and vegetation in accordance with safety guidelines and engineering constraints.

<u>TII Response:</u> TII notes, as per its previous response, to the 1<sup>st</sup> Statutory Consultation that it is happy to share site investigation data with DECC. It should also be noted however that the design of MetroLink both in tunnel and open cut sections, is planned to have lined walls and will not therefore create visible rock exposures.

#### 4.1.3 Submission: Dublin City Council

Observation: The submission from Dublin City Council supports the Proposed Project.

<u>TII Response:</u> TII acknowledges the support from Dublin City Council and will continue to engage with them to progress this important project whilst addressing all concerns where possible to do so within the project constraints.

#### 4.1.4 Submission: Fingal County Council

Observation: The submission from Fingal County Council supports the Proposed Project.

<u>TII Response:</u> TII acknowledges the support from Fingal County Council and will continue to engage with them to progress this important project whilst addressing all concerns where possible to do so within the project constraints.

### 4.1.5 Submission: OPW (Leinster House Complex)

The submission from the Office of Public Works (OPW) raised issues in relation to the following topics:

- Planning;
- Noise & Vibration; and
- Mitigation and Monitoring.



#### 4.1.5.1 Planning

Observation: OPW notes that Planning Permission is in place for some extensive developments, including lower levels of buildings that may affect the MetroLink tunnel. The OPW requests that ABP attach a condition to the RO that acknowledges and mitigates any restrictions on future development of the subject properties.

<u>TII Response:</u> An agreed set of conditions which would be incorporated into any RO granted for the Project was submitted to ABP on Day 5 of the Oral Hearing on the basis that same addressed all of the concerns of the OPW except with respect to St Stephen's Green. TII has committed in the agreed conditions to take the following steps to fully address the OPW's concerns:

- It has committed to engage constructively with the OPW in the event of any plans for future development by the OPW with a view to ensuring that any such plans can proceed in a manner compatible with the Proposed Project. It has been agreed with the OPW that this be a condition applicable to all OPW properties; and
- TII has agreed to enter into property-specific bilateral legal agreements with the OPW to ensure the protection of key State properties. A draft agreement is currently being negotiated with the OPW.

In light of these measures, TII remains satisfied for conditions in these terms to be attached to the RO.

Observation: With regard to the Draft Guidance Note for Developers (May 2023) and Outline Guidance Note for Developers (March 2024 Revision 01) (Day 21: Book 1 of 2), the OPW requests that ABP consider how the Exclusion and Protection Zones would operate prior to the RO, and during the construction and operational phases of MetroLink.

<u>TII Response:</u> The boundaries of Exclusion and Protection Zones are enforced to safeguard MetroLink structures and to assist developers in understanding TII's requirements for the protection of MetroLink. They also provide guidance to developers on future land use development which may be undertaken without unduly affecting MetroLink structures. Developers of any development in the vicinity of the MetroLink Protection Zones are advised to consult with TII prior to making an application to the planning authority for planning approval.

Observation: The OPW notes that applications for permission may be pending and granted by the time ABP confirms the MetroLink RO. It is imperative that the confirmation does not create a situation of potentially conflicting conditions as this would create uncertainty in the implementation of grants of permission. The OPW has concerns that the MetroLink RO will be construed as conferring a power on TII to regulate other extant grants of permission in terms of timing and phasing which may have been defined by conditions in those grants of permission.

<u>TII Response:</u> It has been an objective of successive Fingal County Council and Dublin City Council development plans to protect the proposed MetroLink alignment. In that context, the NTA / TII in its role as statutory consultee is routinely consulted by planning authorities with regard to any planning application that may impact on the alignment route. For that reason, TII believes that there is no potential for "conflicting conditions" as described in the OPW submission. Nor has the OPW identified in its submission any extant grants of planning permission or pending applications where the potential for such conflict arises.

Notwithstanding the above, TII reiterates its commitment to continue to work constructively with the OPW in respect of any concerns it may have on this issue.

#### 4.1.5.2 Noise & Vibration

Observation: The OPW asks ABP to note that the Trigger Action Plan Note No 2 - Applicable Locations (from Day 11: Book 3 of 3) contains omissions; TII has confirmed that this is unintentional. Therefore, the OPW asks ABP to seek and confirm a full and complete list of properties under the Trigger Action Plan Note No 2 - Applicable Locations

<u>TII Response:</u> TII does not agree there has been any omission. For the avoidance of doubt, TII confirms that property specific Trigger Action Plans (TAPs) which will set out the Project's commitments in relation to the management of temporary construction noise and vibration effects associated with the construction of



MetroLink shall be provided for the following Nr.32 OPW properties as listed in the Appendix of the 'Letter from TII to OPW agreed conditions and accompanying plans' Day 05: Book 1 of 3:

- 1 GQ. George's Quay, Dublin 2;
- Corn Exchange, Burgh Quay, Dublin 2;
- Nos. 13-15 Hatch Street Lower, Dublin 2;
- Trinity Point, Nos. 10-11 Leinster Street, Dublin 2;
- Earlsfort Terrace, Dublin 2;
- Parnell Street / Kings Inn Street & Loftus Lane, Dublin 1;
- 13-14 Burgh Quay, Dublin 2;
- 14-17 Moore Street and 8-9 Moore Lane, Dublin 1;
- 16 Parnell Square, Dublin 1;
- 22-25 Clare Street, Dublin 2;
- 44-45 O'Connell Street, Dublin 1;
- 52 St Stephen's Green, Dublin 2;
- 9-15 O'Connell Street, Dublin 1;
- Apartments 1-8 Clare Court, Dublin 2;
- Ballymun Garda District Headquarters & Intreo Office, Dublin 9;
- Department of Enterprise, Trade and Employment and the Department of Tourism, Culture, Arts, Gaeltacht, Sports and Media, Dublin 2;
- Department of Finance, Dublin 2;
- Department of Justice, 50-51 St. Stephen's Green, Dublin 2;
- Garden of Remembrance, Dublin 1;
- Iveagh House, Department of Foreign Affairs, Dublin 2;
- Mobhi Road Complex, Dublin 9;
- National Concert Hall Complex, Dublin 2;
- National Gallery of Ireland, Dublin 2;
- St. Stephen's Green Buildings, Dublin 2;
- St. Stephen's Green House, Dublin 2;
- General Post Office, Dublin 1;
- Leinster House, Dublin 2;
- The National Library, Dublin 2;
- The National Museum of Archaeology, Dublin 2;
- The Natural History Museum, Dublin 2;
- Government Buildings, Dublin 2; and
- Department of Agriculture, Food and the Marine, Dublin 2.

TII acknowledges the support from OPW and appreciates the constructive engagement to date. TII will continue to engage with OPW to progress this important project whilst addressing all concerns where possible to do so within the project constraints.



#### 4.1.5.3 Mitigation and Monitoring

Observation: In Working Draft/Process for the oversite and implementation of Phase 3 assessments (Day 11: Book 3 of 3) states, under 'In Contract':12. No excavation that has the potential to impact buildings will commence until the Phase 3 Assessment and the associated instrumentation and monitoring and mitigation proposals are approved by the IME. The OPW requests that an additional step in the process be added as follows: 12 (a) Instrumentation and Monitoring will be installed and baselined before any excavation commences.

<u>TII Response:</u> TII agrees with this proposal, and it is standard for a monitoring programme to be in place in advance of excavation to allow a baseline of the ground conditions and natural seasonal settlement to be understood.

### 4.2 Submissions by Group 2: Location Specific

#### 4.2.1 AZ1 Estuary to Dublin Airport North Portal

# 4.2.1.1 AZ1(a) Estuary Station (including Park & Ride facility) to Seatown Station to northern end of Swords Central Station

There was a single submission received from individuals or groups in the AZ1(a) area and this was received from the Estuary Court Residents Association (ECRA). The new issues raised by this group of residents include the following:

- Population and Human Health;
- Construction Phase; and
- Alternatives.

#### 4.2.1.1.1 Population and Human Health

Observation: Concerns over the loss of green space and the impact this will have on local children. Length of Occupation: ECRA is concerned about the proposed 40-month occupation of the greens at Estuary Court for the construction of the cut and cover tunnel. The residents consider the duration of this work to be disproportionate for construction of a 105m length of tunnel when compared to the overall programme timeline of 8-9 years for 18.8km.

TII Response: TII has committed to minimise the length of time that the green area will be unavailable to residents. The satellite compound occupying the green area will be required for 36 months (The 40-month duration referred to by the observer includes 4 months of Enabling Works during which the green areas are not occupied). Further information on the phasing and durations of activities at this location, entitled 'AZ1 Seatown West & Estuary Court 21.2.2024' were shared with ECRA during Module 1 Day 3 and published on the TII RO Website under 'Documents submitted during the Oral Hearing', Day 3 Book 1 of 1. On Day 12 of the Oral Hearing TII explained the rationale for the duration of the works through the green space, linked to the required phasing of the works to facilitate the alignment crossing under the R132. TII also addressed the proportionality question and would reaffirm that the duration of the works through Estuary Court is in keeping with the overall construction duration of all the alignment structures through Swords (AZ1 – Estuary to the Airport) of approximately 5 years.

An assessment of the potential impacts on the local population, including Children has already been considered in Chapter 10 Human Health and Chapter 11 Population and Land Use of the EIAR.

Chapter 10 of the EIAR (Human Health) recognises that there will be a temporary loss of amenity, and that loss of amenity could cause potential health and psychological impacts. However, it is noted that these effects can be mitigated by individuals undertaking physical and social activity in other parks or sporting facilities in the area for example. at the nearby Balheary Park. Overall, the MetroLink human health specialist (Dr. Martin Hogan) has identified that the level of impact arising from loss of amenity will not have any detrimental impact on children's development.



Chapter 11 of the EIAR identified potential environmental effects on Neighbourhoods and Neighbourhood Amenity associated with environmental impacts such as noise and dust from the construction works. These impacts will bring about varying degrees of effects on residential amenity and local communities. The effect on population is generally assessed as negative, significant medium term, however mitigation measures will be implemented to ameliorate the effects of the construction measures locally. These mitigation measures will include providing notice to residents in advance of construction works and the implementation measures to manage emissions arising from the works. In addition, a Community Relations Officer will be employed to provide for community engagement during the construction phase. It should be noted that the population will still have access to other amenity facilities across the Study Area and at relatively close proximity.

Observation: ECRA request for TII to withdraw the proposal to occupy the north green at Estuary Court.

<u>TII Response:</u> TII cannot agree to withdraw the proposal to occupy the North Green due to the construction sequencing requirements discussed during the oral hearing. Withdrawing from the North Green would extend the use of the South Green and prolong the overall project duration at this location. TII believe that the solution proposed is the optimum solution through this location.

#### 4.2.1.1.2 Construction Phase

Observation: The submission suggests that a precast concrete construction method could be utilised in this area which has advantages over the in-situ method proposed by TII, such as a reduced on-site construction programme, lower cost, fewer workers required on site and a lower land take requirement.

<u>TII Response:</u> While the typical benefits of pre-cast concrete are recognised, the full deployment here as proposed by the residents would impact on the functional design of the structure (the control of the water table and offsetting the potential for structural uplift is achieved through the use of secant piling) and would increase the land take needed to deliver. For these reasons the observer's suggestion is unviable.

#### 4.2.1.1.3 Alternatives

Observation: Realignment to utilise the R132 and/or consider cut and cover at pinch points. ECRA requests that TII provide a substantiated reason as to why the proposal will not work.

<u>TII Response:</u> The submission from ECRA proposes a change in MetroLink alignment between the proposed Seatown Station and Balheary Park. This proposal was presented by ECRA on Day 12 of the Oral Hearing. It requests that a straight-line alignment for MetroLink is provided along this section along the eastern edge of the R132. TII has assessed this proposal and do not consider this alternative alignment is viable for the following reasons:

- For operational safety reasons, the proposed Seatown Station (as for all proposed stations) needs to be on a straight section of track, avoiding curves in stations leading to gaps between trains and platforms. The route alignment to the north of the station must then curve westwards to follow the R132 alignment but this requires the use of appropriate design curves as used for the RO alignment; as it is not possible to create a straight-line alignment, angled directly from the north end of the station as presented in the ECRA submission. It would thus only be possible to achieve a straight alignment for MetroLink parallel to the edge of the R132 as requested by ECRA where the alignment passes close to the corner of Estuary Court Road;
- The ECRA alignment would pass close to the west of Estuary Court, and both greens would still be required for construction access on the eastern side of the alignment. Construction access on the west of the alignment would not be possible unless traffic along the R132 was diverted and/or restricted to the west of the proposed works during the construction phase to avoid significant impacts to the properties in Comyn Manor;
- Heading northwards towards the Estuary Roundabout, an alignment of the metro along the east side
  of the R132 as shown by ECRA would directly impact the rear of properties along The Crescent,
  Seatown Park, which are not currently impacted; and
- In order to tie into the existing alignment across the Balheary Park area, it is not possible to tie the ECRA proposed straight-line option directly into the existing curved section of MetroLink alignment as



shown without appropriate design curves. This alternative option would thus need to curve eastwards, passing under the Estuary junction and a significant length of the R132 north of the junction, requiring extensive traffic management measures and phasing of the works across the whole Estuary junction which would extend the period for construction and therefore the period of all impacts along this section of the R132. (Under the RO proposal, traffic management measures are only required across one leg of this four-leg junction and the R132 is not impacted north of the junction).

The RO drawings showing the alignment between Seatown Station and Balheary Park can be found in Alignment Details Book 1 of 2 FCC, MetroLink General Arrangement Seatown, Sheets 1 of 3 to 3 of 3 and MetroLink General Arrangement Balheary Demesne, Sheet 4 of 5.

#### 4.2.1.2 AZ1(b) Swords Central Station to Fosterstown Station to Dublin Airport North Portal

There is one submission received that raised new issues relating to this geographical area and this was received from the McGreevy and Taylor families. The new issues raised by this group of residents include the following:

- Consultation; and
- Land Take.

#### 4.2.1.2.1 Consultation

Observation: It was noted (on behalf of the observers) that the McGreevy and Taylor families attended the oral hearing, and asserted that TII did not engage with them because they had not made a formal written submission.

<u>TII Response:</u> TII have actively engaged with the observer and have actually amended project drawings as detailed below in section 4.2.1.2.2 to address the concerns raised by the McGreevy and Taylor families.

Furthermore, by way of further evidence of TII's engagement with this landowner during the Oral Hearing, an agreement was reached to split the McGreevy plot at Fosterstown station to allow for the proposal by Mr McGreevy to relocate the Vodafone mast from his lands in advance of MetroLink construction and thereby obviate the need for MetroLink to acquire an additional plot to do this. TII refers ABP to the following updated drawing as issued on Day 19 of the hearing:

"67 Fosterstown - Property folio split to reflect agreement with landowner. ML1-JAI-BOR-ROUT\_XX-DR-Y-01023 METRO LINK - PROPERTY DETAILS AIRSIDE SHOPPING CENTRE (SHEET 1 OF 2) AIRSIDE SHOPPING CENTRE (SHEET 1 OF 2)"

#### 4.2.1.2.2 Land Take

Observation: The McGreevy and Taylor land is described as an undeveloped green-field site that extends to approximately 1.86 hectares at Pinnock Hill. The observers assert that TII proposes to permanently acquire approximately 1.068 hectares (57%) of the site. They also outline that the land currently has a single access point off the R132 and no other public road frontage or access points. The concern raised is that the CPO in its current form removes the only access to the lands, resulting in them being landlocked with no means of access.

<u>TII Response:</u> This concern was raised at the Oral Hearing and was addressed by TII by submitted changes to the relevant RO application drawings and land requirements. Please refer to the Updated Drawing Combined pdf submitted as Book 3 of 4 on Day 19 of the Oral Hearing. Item Nos. 20 to 25 detail changes made to the proposed Design at Pinnockhill.

These drawings show a replacement of approximately 50m of retained open cut south of Pinnockhill roundabout with cut and cover tunnel and revisions to property access. These changes entail the replacement of the existing accessway to the land (not proposed to be acquired under the MetroLink CPO) with the following:

 One new permanent access provided at the north end of the site over the extended cut and cover Section; and



One additional access at the south end of the site from the access road east of Fosterstown station.
 (TII notes that any use of this accessway would be subject to agreement being reached by the McGreevy and Taylor families with that landowner).

TII respectfully refers ABP to drawings: Swords Central – Fosterstown, Landscape Layout, Preliminary Design Issue, Drg No. ML1-JAI-ARL-SC03\_XX-DR-Y-00006 Rev P04 which shows both access locations; and METROLINK - GENERAL ARRANGEMENT, PINNOCK HILL ROUNDABOUT, Drg No ML1-JAI-ARD-ROUT XX-DR-Y-03022 P06, which provides details of the new northern access.

As a result, MetroLink is providing access to the site as outlined above through the above design changes, and it will not inhibit the future development of the site.

The permanent land acquisition required for the operation of Fosterstown station and adjacent landscaping is not excessive. By reference to the landscape drawing No. ML1-JAI-ARL-SC03\_XX-DR-Y-00006 Rev P04, it can be seen that:

- Only a narrow strip of land is required along the side of the retained cut Section of track through the McGreevy land, sufficient to provide for landscaping and maintenance access by MetroLink; and
- Land at the southern end of the land holding is required for the station access plaza, bicycle hub
  parking and access road requirements to the east of the station, together with associated landscape
  mitigation planting.

#### 4.2.2 AZ2 Airport Section

There were no submissions received that raised new issues relating to this geographical area.

#### 4.2.3 AZ3 Dardistown to Northwood

There was a single submission received from individuals or groups in the AZ3 area and this was received from LIDL Ireland GmbH. The new issues raised relate to the following:

- Construction Phase; and
- Planning policy.

#### 4.2.3.1 Construction Phase

Observation: Lidl contend that the MetroLink Outline Developer Guidelines exist in a flexible format subject to unilateral and unfettered change by TII. The submission states that Lidl did not have sight of this document, or any previous draft thereof, until it was made available at the Oral Hearing even though it has a profound impact on their proposals at Northwood.

<u>TII Response:</u> The Outline Guidance Note for Developers as submitted to ABP on Day 21 of the Oral Hearing, were based on the scheme design as developed for the RO. As the design and requirements for the scheme are further developed and refined, TII will update the Developer Guidelines as necessary.

Over the past 6 years, TII has engaged in at least 11 meetings with Lidl in relation to clarifying potential impacts and collaborating on any high-density Adjacent Site Development (ASD) proposals that Lidl may wish to promote in the future. As noted in the observer's submission, there has been engagement between the parties over the course of the development of the scheme design. This engagement is part of a process that TII has laid out in the Outline Guidance Note for Developers to assist developers with the development of oversite development. It is important to note that the Outline Guidance Note for Developers will develop further in line with the project as stated above.

Should Lidl wish to explore the development of alternative ASD or Over Site Development (OSD) proposals at this location rather than pursue the design developed in cooperation with TII, TII remains willing to work with Lidl on their various proposals as they continue to iterate, as the Proposed Project progresses to assist them in developing a design that meets the needs of both Lidl and MetroLink, subject to the necessary planning consents.



Observation: In their submission, Lidl maintain that the Outline Guidance Note for Developers effectively render major parts of their site at Northwood undevelopable due to the combined effect of development restrictions in the exclusion and protection zones. Lidl state that the vertical loading imposed on the Northwood Station is 20kn/m<sup>2</sup> which would only support a development equivalent to a single house.

TII Response: The MetroLink Outline Guidance Notes for Developers as issued on day 21 of the Oral Hearing. defines a surcharge load of 75kN/m2 for the tunnel. However, this does not imply that the maximum loads of future developments are limited to a maximum of 75kN/m2 at the base of their foundations. The surcharge load is defined as a surface load extended infinitely in all directions over the tunnel.

This value of 75kN/m2 is a reference load used in other international projects. For example, the Thames Tideway Tunnel has a maximum development surcharge load of 75 kN/m², Crossrail/Elizabeth Line has a surcharge load of 50 kN/m², and the Dublin Port Tunnel has a maximum acceptable developer surcharge load of 22.5 kN/m².

The surcharge load is defined as a surface load extended infinitely in all directions. For developments within the protection zone, and subject to consultation with TII, the surface load at the base of their foundations is not limited to the defined surcharge load value of 75 kN/m2 where the following conditions are met:

- The developments are built in a specific area, such that the development does not extend over an infinite surface in all directions. Therefore, the development loads are concentrated in these areas and are distributed so that The loads on any part of the tunnel lining are lower than the surface loads applied and do not exceed 75kn/m2. (Development loads are distributed in all directions and so the load exerted by the development on any part of the tunnel at the base of their foundations will in all cases always be less than the load at the base of their foundations exerted by the development on any part of the tunnel).
- Future works or developments are may be allowed in the Protection Zone with any depth of foundation.
   For this, it must be verified that the solutions proposed do not adversely affect the MetroLink structures. To this end, TII must be consulted and agree on the loading effect and foundation conditions of the development that are compatible with the MetroLink infrastructure.

In conclusion, MetroLink does not limit future developments to maximum surcharge loads of 75 kN/m² at the base of their foundations, but only requires that developments ensure the distributed load over the whole footprint of the development on any part of the tunnel does not exceed 75 kN/m². MetroLink is compatible with a wide variety of developments and structural and construction solutions in the Protection Zones, which will need to be coordinated with TII. As in the examples mentioned before, these cities have allowed ambitious developments compatible with tunnel infrastructures with the same or even more restrictive baseline conditions.

#### 4.2.3.2 Planning Policy

Observation: Lidl assert that if provision for over station development is not made at this strategically important site, this would be fundamentally inconsistent with proper planning (policy).

<u>TII Response:</u> Upon completion of the MetroLink construction works, the retained lands, can accommodate development in line with national, regional and local planning policy, including zoning objectives and the policies and objectives of the relevant development plans for this site. TII fully supports the high-density development of these lands for appropriate uses in line with relevant planning and development policies. However, as stated above and as outlined in the MetroLink Outline Guidance Notes for Developers issued on Day 21 of the Oral Hearing, the design for any future building or structure immediately over or adjacent to the MetroLink station and tunnel must be consulted on with TII to ensure that that they take cognisance of the MetroLink structures, to ensure their safe and secure operations.



#### 4.2.4 AZ4 Northwood Portal to Charlemont

### 4.2.4.1 AZ4(a) Northwood Portal to Ballymun Station, Ballymun Station and running tunnel to Collins Avenue Station

There were no submissions received that raised new issues relating to this geographical area.

### 4.2.4.2 AZ4(b) Collins Avenue Station and running tunnel to Griffith Park Station, including Albert College Park Intervention Shaft

There were two submissions received from resident groups in the AZ4(b) area:

- Hampstead Residents CLG; and
- Griffith Avenue & District Residents Association (GADRA).

The new issues raised by these residents' groups relate to the following:

- Alternatives;
- Consultation;
- Design/Land Take;
- Groundborne Noise and vibration;
- Mitigation and Monitoring;
- Traffic and Transport;
- Construction Phase;
- Landscape: Tree Retention and Protection;
- Construction Compounds;
- Risk Management and Responsibility;
- Communication;
- MetroLink Project Working Hours; and
- Climate.

#### 4.2.4.2.1 Alternatives

Observation: GADRA are concerned that the population data in the 'spider algorithm' used to base the decision of the location of Collins Avenue Station is inaccurate. GADRA dispute the fact that Bus Stop 115 Ballymun Church is, or has been, busier than Bus Stop 37 Ballymun DCU. It is their belief that the data used for analysis was collected during the COVID-19 lockdown period when less students were frequenting DCU as lectures were held online and student campus accommodation was closed.

<u>TII Response:</u> The decision to select a station location at Collins Avenue was not based on a population 'spider algorithm' alone. The rationale for locating a station here is presented in Section 7.7.10.7 of Chapter 7 of the EIAR. The 'Collins Avenue Station: Environmental Assessment Report of the Options' submitted on Day 1 of the Oral Hearing presents in detail the environmental assessment criteria that were used to inform the decision to locate a station here.

TII would like to clarify that the population data used to base the decision of the location of Collins Avenue Station is not inaccurate and was not collected during the COVID-19 lockdown period. In fact, the assessment of the Emerging Preferred Route as identified in Section 7.6 of Chapter 7 of the EIAR was undertaken in advance of COVID-19.

Furthermore, data used to define the population baseline presented in the EIAR (Chapter 11) is based on CENSUS 2016 data as this was the most up to date full census data available at the time of writing. Since then, the Census 2022 data was published in 2023 with updated statistics available. This is not TII collected



data, and the analysis of this data presented in the 'Witness Statement of Dr. Ronan Hallissey' outlines how the population baseline from the 2022 census does not alter the need for the project and in fact a 15% increase in the population between 2016 and 2022 illustrates the need for MetroLink to serve an increasing population.

Similarly, regarding the potential users at the proposed Collins Avenue Station, a note on 'Educational and Jobs Forecasts – Collins Avenue' was submitted on Day 18 of the Oral Hearing, which presents the population, education and employment forecasts for the area surrounding Collins Avenue. The note presents the statistics for students and staff at DCU, based on CSO 2016 census and workplace zone data, as well as population and jobs forecasts within a 15-minute walking distance. The presented data in the note is extracted from the NTA's planning sheets, which are spreadsheets produced for future years predicting future populations and demographics. The planning sheets are informed by both the 2016 CSO census results and National Planning Framework to forecast future population and demographics.

The proposed location of Collins Avenue Station will provide interconnectivity with a wide range of trip potentials beyond those noted by the observation, which will only increase over future years as more opportunities and benefits are realised from the improved connectivity provided by the GDA Transport Strategy 2022-2042.

#### 4.2.4.2.2 Consultation

Observation: GADRA and Hampstead Residents CLG are not satisfied that TII have adequately consulted with the public in relation to the position of the Albert College Park (ACP) Shaft. They cite instances where they had to resort to Freedom of Information (FOI) requests to obtain information and note that TII failed to attend pre-arranged meetings.

<u>TII Response:</u> TII draws attention to its response to Hampstead Residents' CLG Submission (made on 21 February 2024) and provided at the Oral Hearing on Day 9, referred to within: 'Documents Submitted at the Oral Hearing, Day 9, Book 1 of 1, 'TII response to Hampstead Heath Residents CLG Submission made on 21 February 2024', Section 3. TII's position that comprehensive consultation took place on this shaft remains unchanged.

TII published further information on the extent of the Shaft, following engagement with GADRA, and upon its request. TII acknowledged that a Freedom of Information request was received from GADRA, and that information (the subject of this request) was released by TII. However, this FOI request was not predicated on the lack of information previously provided on the proposed Intervention Shaft at Albert College Park because as stated above; this was fully consulted on.

Observation: In their submission GADRA state that they do not believe TII have satisfied the requirement of Section 39 of the 2001 Transport (Railway Infrastructure) Act.

<u>TII Response:</u> Section 39 of the Transport (Railway Infrastructure) Act 2001 (the "2001 Act") relates to the preparation of the EIAR and what this should include (e.g. a detailed description of the proposed railway works, their significant environmental effects, necessary data for assessing these effects, measures to mitigate adverse impacts, and a summary of reasonable alternatives considered. Additionally, the report must be written in non-technical language and incorporate results from other relevant assessments to avoid duplication). TII has complied with its statutory public consultation requirements. The location of ACP Shaft was clearly shown on the drawings submitted with the RO application and the impacts of this element of the Proposed Project were identified, described and assessed in the EIAR. There was no failure to disclose essential details about the structure under the statutory consultation process.

TII disagrees with GADRA's assertion that it has not satisfied the requirements for public consultation as set out in the Transport (Railway Infrastructure) Act 2001, as amended. TII addressed this issue at the Oral Hearing. Despite GADRA's criticisms, TII maintains that, prior and in addition to the statutory consultation, it conducted a thorough non-statutory public consultation process throughout this project. TII acknowledged at the Oral Hearing that there are lessons from this process about effective engagement with residents groups, and (as it does in all of its projects), TII will seek to incorporate those lessons into future engagements as part of its efforts to continually improve its Stakeholder engagement procedures.

Observation: The submission from GADRA also asserts that



- (1) The application for the RO was incomplete, and that essential information was only provided on the first day of the Oral Hearings, despite repeated requests from residents and independent experts; and
- (2) GADRA objects to the number of Non-Disclosure Agreements (NDAs) TII has entered into with other publicly funded entities, particularly those related to financial agreements, which they believe lack transparency and violate the Aarhus Convention (as per Article 3(1) of EU Directive 2003/4/EC).

#### TII Response:

- (1) TII disagrees with GADRA's assertion that the RO application submitted to ABP was incomplete. TII submitted all required documentation and information in accordance with its statutory requirements. The specific information referenced by GADRA, which was presented on the first day of the Oral Hearing, was supplementary and in fact addressed specific requests which were made by ABP. It is unclear which specific information GADRA claims was requested and not provided prior to the Oral Hearing.
- (2) TII also takes issue with the characterisation of third-party agreements as Non-Disclosure Agreements (NDAs). These are simply agreements reached between TII and public bodies (and have been made available at the direction of ABP and are on the MetroLink RO website) and with private entities. As can be seen from the documents on the MetroLink RO website, these agreements involve applying mitigation measures which are outlined in the EIAR to specific locations and elements of the works, and agreement around how the acquisition of properties under the CPO will be implemented. In a very limited number of cases, compensation has been agreed to be paid upfront upon the coming into operation of an RO, but only in cases where the relevant landowner would otherwise have a statutory entitlement to compensation, once determined by the property arbitrator. Confidentiality clauses are a standard form of any such agreement.

The process for large projects requiring planning consent from ABP includes the submission of representations by third parties directly to ABP. It is within ABP's remit to assess and consider these submissions. However, certain issues, such as financial compensation to property owners, fall outside the scope of ABP's functions. These matters are addressed directly by the project developer, in this case, TII, through bilateral discussions with the affected property owners.

Engaging in direct discussions with impacted property owners has been a long-standing practice in project development. These discussions often lead to agreements on financial compensation and acquisition arrangements, which are beneficial to both the individual and the project. For very good public policy reasons, ABP has always encouraged public sector developers, particularly where CPO powers are being exercised by that public body, to seek to agree terms with the relevant landowners. TII maintains that the practice of entering into third-party agreements is both appropriate and necessary for major public projects. Third-party agreements are a standard and important tool used to protect sensitive information and ensure that negotiations can proceed in a manner that respects the confidentiality of all parties involved. This approach is not unique to TII and is a widely accepted practice in the management of large-scale infrastructure projects globally.

Observation: The Hampstead Residents CLG request that as a condition granting of the RO 'a professional and quality tested (with inbuilt measurements and transparency) Stakeholder engagement process is sourced and implemented'.

<u>TII Response:</u> TII commits to continue in providing a Stakeholder engagement process that is professional, quality tested and transparent. The takeholderStakeholder Engagement (Management) Plan, as submitted on day 8 of the Oral Hearing, will be updated to provide a clear description of the process to be put into place during construction for residents to engage with TII and the Independent Engineering Expert, as appropriate.

Observation: The Hampstead Residents expressed frustration over "the significant TII/NTA document drop" on the first day of the Oral Hearing, which they believe was a "cynical tactic" to withhold information and was only released "under duress".

<u>TII Response:</u> The submission of documents on the first day of the Oral Hearing was not a "cynical tactic" by TII/NTA. This documentation was provided in response to a specific request by ABP, which asked TII to address eight distinct categories of issues. This request was appended to the agenda for the Oral Hearing,



ensuring transparency and allowing the public to see precisely what ABP requested. There was nothing unusual or untoward about this process, nor was there any duress involved in the disclosure of this information. Given the period of time between the RO application (September 2022) and the Oral Hearing (February-March 2024), ABP required updates on several matters to ensure their assessment reflected the most current information. The documentation has been available online since it was uploaded from the first day of the Oral Hearing and formed the basis of a second statutory consultation. This provided the public with the opportunity to review and comment on all documentation submitted throughout the Oral Hearing.

#### 4.2.4.2.3 Design/Land Take

Observation: GADRA raise the issue of why a station cannot be placed at Albert College Park (ACP) instead of the shaft.

TII Response: The justification for the ACP Intervention Shaft is explained in the following documents:

- EIAR Chapter 4, Section 4.17.5 Albert College Park Intervention Shaft;
- EIAR Chapter 7, Section 7.7.11.1 Albert College Park Intervention Shaft; and
- EIAR Appendix A8.16 Report on the ACP Tunnel Intervention Shaft.

The following documents were also submitted during the OH as further evidence that the proposed station location by the Our Lady of Victories is the most appropriate location:

- OH Day 4 Book 1 of 1, ACP Station comparison with Intervention Shaft. The proposed Collins Avenue station outline is shown superimposed on the ACP Intervention Shaft location for illustrative purposes. This shows visually the more extensive surface area implications of incorporating the Collins Avenue station, with its associated access and ventilation requirements, within Albert College Park compared to the proposed Intervention Shaft; and
- OH Day 14 Book 1 of 1, Collins Avenue Emerging Preferred Route (EPR) Summary Presentation, which described the derivation and justification of the station location from EPR assessments to Preliminary Design assessments.

Observation: GADRA request clarification on what standards were in play in March 2019 when TII announced the plan for a shaft in Albert College Park.

<u>TII Response:</u> In 2019, the project requirements were assessed against the recommendation of the TSI 1303/2014; Technical Specifications for Interoperability relating to "safety in railway tunnels" as well as National Fire Protection Association (NFPA) 130 Standard.

Based on the review of the relevant standards outlined above and the project risk assessments undertaken, it was recommended that MetroLink adopt the maximum spacing of 1,000m between emergency exits that is compatible with the European Standard TSI 1303/2014 and which could also satisfy the requirements of NFPA 130.

Observation: GADRA question the size of the compound and request that it be reduced in size with no fenced off areas and no parking.

<u>TII Response:</u> The size of the Albert College Park shaft compound was determined The size of the Albert College Park shaft compound was determined by the essential elements it must accommodate, including:

- Ventilation shaft, escape and intervention stairs and Lifts, headhouse and ventilation grille;
- Space for emergency vehicles such as fire brigade and ambulances to park adjacent to the headhouse following consultation with Dublin Fire Brigade; and
- Space for maintenance staff parking to work in the headhouse building.



The design of the tunnel ventilation shaft, headhouse, fire service access and personnel evacuation stairs, and the ventilation grille complies with NFPA 130 standards, which are universally applied in metro system designs.

The tunnel ventilation shaft, headhouse, fire service access and personnel evacuation stairs, and the ventilation grille are all designed to be compliant with NFPA 130 Standard, as would be the case with any other metro system design around the world, as the design is based on first principles and the required functionality.

The space planning of the shaft and technical building is dictated by the ventilation design for the network, determined from satisfying the operational requirements i.e. for pressure relief from the tunnel to maintain temperatures and pressures in the tunnel and to accommodate ventilation fans which are also designed to accommodate pressure relief and smoke control provision.

The differences between typical ventilation shafts seen in the Elizabeth Line, Madrid Metro and Dubai Metro area and ACP is that those other systems have an integrated headhouse building in which the ventilation grille is included within the main headhouse, which often results in a larger collective size for the headhouse. In MetroLink the headhouse building and ventilation grilles are separated which means that the footprint of the headhouse building itself is optimised.

After thorough consideration, TII has determined that there is no further opportunity for a significant reduction in the size of the intervention shaft.

Observation: GADRA note that other Metros in Europe and worldwide (Madrid Metro, Dubai Metro, Elizabeth line London) do not have a shaft located in a Public Park.

<u>TII Response:</u> This is not factually correct as there are multiple examples of other ventilation shafts in public parks; notably Crossrail's Stepney Green and Mile End Park Shafts in London, the Jubilee Line Green Park Shaft in London, the Northern Line Extension Shafts in Kennington Green and Kennington Park in London and Battery Park, Manhattan, New York. Furthermore, the choice of location for this intervention shaft within a park was taken in order to mitigate the potential for direct impacts on private residential property throughout this area while also designing it such that the impacts on the functionality of the park is minimised.

Observation: GADRA refer to the sizing of the compound to facilitate parking for emergency service vehicles maintaining that vehicles could use the hard area on the Ballymun Road. GADRA object to the proposal by TII to 'fence off a large corner of the park'.

<u>TII Response:</u> The justification for not using the adjacent Ballymun Road by Dublin Fire Brigade vehicles in the event of an emergency, rather than bringing the vehicles into the proposed parking area by the headhouse, was set out in TII's response to the Hampstead Residents written submission in response to the 1<sup>st</sup> Statutory consultation. Refer to the OH Day 9 Book 1 of 1 document 'TII Response to Hampstead Residents CLG Submission made on 21 February 2024'. Section 17. With regard to the overall compound size and fencing proposed around the compound, TII wish to respond as follows:

Regarding the overall compound size and proposed fencing:

- The overall plan area of the surface components including the ventilation shaft and ventilation components and the access roads have been kept as compact as possible as stated above in order to limit land take from the park;
- Security fencing around the compound area is necessary to protect against potential vandalism or damage occurring to the facility, as the area will be more secluded compared to other MetroLink facilities proposed and screened by landscaping from adjacent public areas; and
- Restricting fencing to just around the headhouse building is not feasible as this would restrict both access into the building and particularly egress from the emergency stairs which requires access to an open area.

As noted in the EIAR, notwithstanding the inclusion of the Intervention Shaft compound, the majority of Albert College Park will remain accessible for public use including the recreational sports pitches.



#### 4.2.4.2.4 Groundborne Noise & Vibration

Observation: GADRA request that floating track slab is installed within their residential area and query the rationale for TII not putting this in place in all residential areas.

<u>TII Response:</u> The operational groundborne noise assessment criteria are described in Section 14.2.1.1 of the EIAR. According to the EIAR, a significant effect during the operational phase is identified when the impact magnitude of 'Medium' (40 – 44 dB LAmax,S) or above is identified. Therefore, the EIAR reports significant operational groundborne noise effects at predicted groundborne noise levels of 40 dB LAmax,S or above.

Whilst not considered to be 'significant', a 'Low' impact is identified where groundborne noise levels are predicted to be between 35 and 39 dB LAmax,S.

On Day 10 of the Oral Hearing, TII made a commitment not only to mitigate significant adverse effects ('Medium' impacts and above), but also to mitigate 'Low' impacts at residential communities. The commitment states: "TII will ensure that during the operation of the MetroLink passenger service, the operational groundborne noise levels in any lawfully occupied residential dwellings, measured near the centre of any noise-sensitive room, will be below 35 dB LAmax,S".

This commitment provides an additional layer of protection to all residential communities potentially affected by groundborne noise from the operation of MetroLink. It goes beyond the specific requirements of the EIA Regulations to describe any measures envisaged "to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment".

The standard track form assumed in the EIAR for the operational groundborne noise assessment is a heavy bi-block booted sleeper. The EIAR states that an 'enhanced track' in the form of a floating slab track system will be incorporated into the design to remove any significant effects identified.

There are no significant operational groundborne noise effects identified in the EIAR in the GADRA residential communities, and hence no requirement for mitigation in the form of floating slab track identified.

The additional TII commitment in relation to the mitigation of 'Low' impacts at residential communities constitutes a further performance specification for TII to achieve, ensuring that groundborne noise levels within any residential buildings will be below 35 dB LAmax,S. In some cases, it may be possible to achieve these lower groundborne noise levels without needing to resort to further quantities of floating slab track, through the use of other available technologies. As such, it is not appropriate or necessary to stipulate floating slab track as the only solution to achieve the additional 35 dB LAmax,S commitment. This approach is known to have been adopted on other projects and has resulted in the incorporation of innovative track systems to achieve the groundborne noise and vibration requirements and performing as an alternative to floating track slab at specific locations.

#### 4.2.4.2.5 Mitigation & Monitoring

Observation: GADRA request there be an engineering point of contact for the Independent Expert and that this be a condition of the RO. They also request that the Independent Expert's contract be independent of TII and under the brief of the Department of Transport. GADRA request real time information with trigger monitoring plans for residential areas and that the monitoring of this information is part of the Terms of Reference (ToR) of the Independent Expert's contract.

<u>TII Response</u>: TII confirms that similar arrangements, as currently in place for direct resident group engagement with the Independent Engineering Expert (IEE) service, will be put in place during the construction stage. With regards to the provision and sharing of monitoring data, TII reiterates its commitment provided at Oral Hearing on the publishing of this data (real time where feasible) on our project website. In addition to access to the IEE to assist in understanding this data, there will be local liaison officers and on-site staff that residents can communicate with if any concerns.

TII reaffirms its commitment, as stated during the Oral Hearing, to publish monitoring data on our project website, including real-time data where feasible. In addition to access to the IEE to assist in understanding this data, there will be local liaison officers and on site staff that residents can communicate with if any concerns.



#### 4.2.4.2.6 Traffic & Transport

Observation: GADRA criticise the Mobility Management Plan for relying on the goodwill of workers rather than making it a condition of the RO. As this is not a condition of the RO there are concerns that Pay and Display parking and residential parking discs will be required.

<u>TII Response</u>: The Outline Mobility Management Plan (MMP), issued on Day 1 of the Oral Hearing, outlines strategies to minimize the impact of car usage of the workforce through the construction phase of MetroLink. This plan will serve as a framework for developing site-specific MMPs. Each site specific MMP will incorporate the high-level interventions set out within the Outline MMP to promote how sustainable transport options and reduce private vehicle journeys at each construction site.

Section 1.4 of the Outline MMP describes how TII, on behalf of the NTA, is currently planning to procure the detailed design and construction of the proposed Project and how one contractor(s) will be nominated as the main contractor(s) in each geographical location in order to ensure a coordinated approach to safety and environmental management, including mobility management.

With the granting of a RO, the requirements of the Outline Mobility Management Plan will be updated to incorporate the requirements set under the RO. The updated MMP will be incorporated into the requirements for the procurement of the Main Works Contractor to be appointed to deliver the works. The updated MMP will set roles and responsibilities, with:

- TII accountable for compliance with the RO;
- Through the terms of the contract assigning accountability and responsibility to the contractor to deliver the requirements set by the RO;
- The consultations with and approvals required from Local Authorities and any other relevant statutory authorities; and
- Others to be consulted or informed in the development of the site specific MMP(s), for example residents' groups or their appointed representatives.

The MMP is included within the overarching Construction Environmental Management Plan (CEMP) prepared by the Main Works Contractor and approved by the Local Authority (DCC) prior to construction commencement. The MMP agreed with the Local Authority will include actions, targets, monitoring, performance reviews and the frequency of future updates as the construction works are progressed.

The detailed MMP(s) will be specific, targeted, and 'stand-alone' plan(s) developed to support the construction methodologies developed by the Contractor prior to the commencement of the construction works.

Each construction site will be required to have an assigned Mobility Manager who will be a representative of the relevant contractor(s) in charge of the site (or multiple sites over an assigned geographic area). The Mobility Manager will be required to work with contractor leads and TII to ensure that sustainable transport options are available to construction workers to offset the demand for parking. The Mobility Manager will coordinate the travel of workers and visitors to the site during the construction phase. The Mobility Manager will also work with local community groups to understand parking concerns, particularly where on-street parking will cause significant issues to residents.

Furthermore, during the Oral Hearing, a commitment was made that during the construction phase, workers will be transported to site via min-buses from designated collection points (such as Luas and DART stations or other appropriate locations) and this is reflected in the Final Schedule of Additional Environmental Commitments (Section 6, reference 6.4) submitted on Day 21 of the oral hearing. This is a route wide commitment.

#### 4.2.4.2.7 Construction Phase

Observation: GADRA requests assurances that residents will not be affected by disruptions to utilities during the construction and operation of MetroLink. They also suggest backup generators be provided during outages.



<u>TII Response:</u> The potential for MetroLink construction works to impact or interrupt utility supply has been assessed in Chapter 22 of the EIAR. In some cases, planned service disruptions will be required to facilitate the connection of existing services to newly diverted services. When such disruptions are necessary, the requirements of the premises served by the utility will be carefully considered to determine the type, duration, and phasing of the planned disruption. The duration of service interruption will be agreed with the relevant utility provider, in accordance with their service level/business interruption requirements. In most cases, the duration of disruption should be no more than a number of hours.

Residents will be given advance notice of any planned service disruptions to ensure they can make necessary preparations. However, TII will not be providing back-up generators during these disruptions. The focus will be on minimising the impact and ensuring that any interruptions are as brief and infrequent as possible.

#### 4.2.4.2.8 Landscape: Tree Retention/ Protection

Observation: Hampstead Residents request assurance that there will be no tree removal along Hampstead Avenue. They identify that TII confirmed in their response to Hampstead Residents' CLG Submission (made on 21 February 2024) and provided at the Oral Hearing on Day 9 that "No trees along the Hampstead Avenue boundary, and the blue area (as identified in their maps), will be removed."

<u>TII Response:</u> TII confirmed in its response to Hampstead Residents Association made on 21st February 2024 and provided clarity on Day 9 of the Oral Hearing that no trees along the Hampstead Avenue boundary, and the blue area (maps indicated in Item 16), will be removed.

Observation: GADRA emphasize the need for the protection of retained trees in Albert College Park, in accordance with British Standards. They refer to 'Documents Submitted at the Oral Hearing', Day 9, book 1 of 1 and 'TII response to Hampstead Residents CLG Submission made on 21 February 2024', Section 11.

<u>TII Response:</u> The Arboriculture Impact Assessment (AIA) prepared for the MetroLink RO and amended for the Oral Hearing (Day 19) outlines the proposed felling and retention of trees. In the development of this strategy, every effort has been made to maximise the retention of trees. As stated in the AIA, the requirement to fell trees will be mitigated by way of the landscape design for the proposed Project.

### 4.2.4.2.9 Construction Compound

Observation: Hampstead Residents CLG request reassurance that the MetroLink construction compound in ACP will be used for activities only directed related to that facility that is proposed to be located in ACP itself. They also request reassurance that the football field re-instatement area in ACP is not used for storage or a staging ground, or any other temporary use, other than football field realignment.

<u>TII Response:</u> TII confirms that the park area outside of the Construction Compound lands will not be used as a storage/staging ground, and the Construction Compound lands (as described in the EIAR Figure 5.1 page 16 of 26) will only be used in relation to the construction of the MetroLink facility that is located in the Park.

#### 4.2.4.2.10 Risk Management and Responsibility

Observation: GADRA expresses concern about the clarity of roles and responsibilities within TII and its contractors, particularly in the event of a disaster or project stall. They request that TII/NTA be responsible for addressing and restoring all sites along the route if the project stalls.

<u>TII Response:</u> In the unlikely event of the cessation of construction works for an extended period of time, TII confirm it will be responsible for ensuring that sites are left safe, secure and as visually unobtrusive as possible.

#### 4.2.4.2.11 Communication

Observation: Hampstead Residents CLG request that there is a residents' charter set up and the Department of Transport (not TII/NTA) are responsible for defining any future scope of work/terms of reference for independent expert assistance and residents' representatives have a valid



involvement/input. GADRA request communications to be at a higher level than PR so residents have clear channels of contact to decision makers.

<u>TII Response:</u> TII operates under a Customer Charter (tii\_customer\_charter\_2024-2027.pdf) and is dedicated to maintaining the highest standards in our interactions with our customers and the public. Before construction begins, a MetroLink MetroLink Project specific charter will be established and put in place prior to the commencement of construction.

#### 4.2.4.2.12 MetroLink Project Working Hours

Observation: In their submission the Hampstead Residents refer to a breach of road safety when GI contractors moved equipment without lights in the dark. They previously issued their concerns/questions to TII/NTA on this.

<u>TII</u> <u>Response:</u> TII apologised for this incident and explained the circumstances under which it arose. The contractor involved has accepted that an error of judgement was made, and additional training has been provided to their staff. This is stated in TII's e-mail response, a copy of which is included within the Hampstead Residents submission document.

Observation: GADRA raises concerns about TII's interpretation of Section 36 of the RO Act 2001, which they believe does not grant the right to carry out routine ground investigations outside of normal working hours. They request that any application for out-of-hours work be made to the planning authority individually, with clear reasons for the derogation and contact details for the person granting it.

<u>TII Response</u>: Section 36 of the Transport (Railway Infrastructure) Act 2001 provides the powers for conducting surveys and inspections, as well as the performance of related works, and outlines the process that must be adhered to. While the 2001 Act does not specify the hours during which such activities can or cannot be conducted, TII will confine these works to designated normal working hours. In limited circumstances where out-of-hours works are required, this is strictly as a matter of necessity, TII will notify the relevant local authority and the affected residents, providing clear reasons for the derogation and contact details for the person granting it. This approach will ensure that any deviation from normal working hours is communicated transparently and justified appropriately, addressing the concerns of the residents while maintaining the necessary flexibility for project execution.

Observation: Hampstead Residents emphasize the need for a compensation/penalty system for any breaches of agreed work parameters by contractors or sub-contractors.

<u>TII Response</u>: As with all construction contracts TII oversees, measures will be put in place to ensure all contractors abide by the terms of the contract, including any defined parameters/requirements, in particular environmental parameter limiting criteria. All Contractors must comply with the conditions as set out in the Enforceable RO (if granted). TII will ensure that all contractors follow the rules and requirements set out in their contracts, especially those related to environmental protection. TII does not consider a separate compensation/penalty system is required to ensure compliance by contractors or sub-contractors.

#### 4.2.4.2.13 Climate

Observation: The submission from GADRA states "The Ballymun launch construction site will align with the decarbonisation zone as it will be operated on 100% renewable energy and have diesel site requirements replaced with sustainable sourced Hydrotreated Vegetable Oil" – they request that the ACP Shaft in the decarbonisation zone, aligns with DCC's Action Plan. GADRA request that the construction and operation of the shaft adhere to the same environmental standards as the Ballymun launch construction site.

<u>TII Response</u>: As presented on Day 1 of the Oral Hearing in Dr. Avril Challoner's Witness Statement, TII have committed to significant carbon reduction targets. These include:

 Commitment to 100% operational power from renewable energy 100% CPPAs for construction and operational phase Achieve net zero GHG emissions by 2050; and



The replacement of 100% diesel onsite with sustainably sourced HVO. In addition, MetroLink will
transition from HVO towards the use electric construction plant as they become available in the market
Commitment to use of low carbon concrete, where practicable. TII aim to further reduce embodied
carbon during the detailed design phase, achieving alignment with the PAS 2080 standard.

These commitments will apply to all construction locations along the alignment. TII will engage with Dublin City Council and other Stakeholders of the Ballymun Decarbonisation zone initiative to promote the carbon reduction benefits of the MetroLink Project to the local community while also ensuring that the project aligns with local initiatives that may be relevant to MetroLink.

#### 4.2.4.3 AZ4(c) Griffith Park Station and running tunnel to Glasnevin Station

There were no submissions received that raised new issues relating to this geographical area.

#### 4.2.4.4 AZ4(d) Glasnevin Station and running tunnel to Mater Station

There were two submissions received from individuals or groups in the AZ4(d) area. These were from:

- Shandon Residents Association; and
- The Royal Canal Clean-Up Group.

The new issues raised by these residents' groups relate to the following themes:

- Traffic and Transport;
- Population and Land Use;
- Landscape; and
- Biodiversity.

#### 4.2.4.4.1 Traffic & Transport

Observation: The Royal Canal Clean-Up Group maintain that the MetroLink updated drawings do not allow sufficient room for exiting and entering vehicles from the Royal Canal Way tow path (onto the R108 Phibsborough Road/Cross Guns Bridge) combined with increasing numbers of Greenway Commuters, pedestrians, and cyclists above existing levels. In relation to the standard of reinstatement of the Tow Path and traffic management control, they question whether there has been consultation between MetroLink and DCC Greenway.

<u>TII Response</u>: The Oral Hearing Documents for the Second Round of Public Consultation – Day 19: Book 3 of 4 Updated Drawing Combined, show the updated details for Glasnevin Station. The relevant drawings for Glasnevin are referenced as items 46 to 49 on the document register provided with the drawings, and are listed on pages 27, 41, 42 and 43 of 85.

The new drawing (reference ML1-JAI-SRD-ROUT\_XX-DR-Y-02057 Rev P06) for the entrance to the tow path at Glasnevin shows that it has been widened and access improved (from the original RO submitted design) by removing a lighting column, a tree and a bollard in this area. The revised drawing also shows a different surface treatment for the towpath where vehicles would have access (tarmac) and set back the stop line on the R108 from the crossing point to the south of the tow path entrance, thus further improving accessibility of all known and future traffic movements along the tow path.

TII can confirm that it has liaised directly with the DCC team responsible for the Greenway here and they have confirmed they are satisfied with the TII plans for this area. As outlined at the Oral Hearing, TII will reinstate the tow Path and access to the R108, improving the existing towpath width slightly while providing a suitable surface treatment (See next response for further details) and providing priority to pedestrians and cyclists.

However, due to the fact that the TII works are designed to reinstate this area following the MetroLink Glasnevin station construction, It is not possible to significantly widen the existing Towpath without introducing significant new infrastructure. Furthermore, based on the low numbers of vehicular traffic that use the tow Path, TII do not propose to install filter lights at the junction with the R108.



However, it should be noted that the Greenway project is proposing modifications to this area to facilitate enhanced vehicular walking and cycling infrastructure and to improve safety. These works will result in further enhancements to the area that will be addressed separately under that project. (Refer to https://www.dublincity.ie/residential/transportation/active-travel/projects/royal-canal-greenway-phase-4/project-info-amending-part-8)

Observation: Shandon Residents comment that the only view available in the Additional OH Documents of the access point from the Royal Canal Way tow path to Phibsborough Road has been repeated from the presentation given at the Oral Hearing. The presentation image shows surfacing that may not be suitable to withstand heavy vehicles and problematic shared use between pedestrians and traffic.

<u>TII Response</u>: It is acknowledged that the artist's impressions presented in the Glasnevin Station Architecture Presentation on Day 14 of the Oral Hearing, do not fully reflect the updated design intent, as shown on the updated details issued on Day 19 of the Oral Hearing, referred to earlier in this section.

TII confirms that all surfaces will be designed to the relevant technical standards taking account of the traffic that will be using the route, with priority given to pedestrians and cyclists over other users. Drawing ML1-JAI-SRD-ROUT\_XX-DR-Y-02057 illustrates separation between the station concourse (vehicles excluded by bollards, planting boxes etc.) and the entrance to the tow path and different surfaces indicated for both accordingly. The station plaza area will have no vehicular access and will be paved with high quality paving stones suitable for a pedestrian environment. The reinstated Royal Canal towpath, which is fully segregated from the station plaza as noted above, will have a tarmac roadway type surface treatment designed to withstand all vehicle types that will need access here e.g. oil delivery trucks etc.

Observation: The Royal Canal Clean Up Group observe that there is very little reference to vehicular access in any of the Project's documents and no reference to heavy vehicle access and have sought reassurance that sufficient consideration has been given to the standard of reinstating an existing towpath, which is 3.3m at its narrowest point, for the frequency and scale of vehicular access and safe use to and from Coke Oven Cottages on Royal Canal Way. The observer also challenges the flow figures presented on Day 15 of the Oral Hearing, and that they are out of line with real life experience.

<u>TII Response</u>: The document 'Flow Estimate – Royal Canal Way', issued on Day 15 of the Oral Hearing and included as part of the second statutory consultation period, presents the anticipated average number of trips per day along Royal Canal Way, and the number of trips in an average hour, based on the assumed number of people per household (of the 4 houses on Royal Canal Way). The data indicates that in an average hour, there will be 2 car trips, with 1 HGV (delivery/bin vehicles) trip. To note, HGVs are doubled as they are in/out as the same trip, and therefore in reality there is less than 1 trip per hour. It is acknowledged that there will also be occasional vehicular traffic associated with the nearby allotments in addition to Waterways Ireland staff. While it is noted that the Royal Canal Clean Up Group disagrees with the assessment presented at the Oral Hearing, there is no evidence that vehicular traffic frequency along the towpath will increase significantly beyond what was presented by TII at the Oral Hearing.

TII will ensure that following the construction of MetroLink, the Royal Canal towpath is reinstated in a condition that does not diminish it in any way, prioritising pedestrians and cyclists over other users. Further, TII has liaised with and will continue to liaise with, DCC's greenway team and Waterways Ireland to ensure the suitability and safe use of the towpath for all users.

Observation: Shandon Residents expressed concern that the temporary bridge will be difficult to navigate for the size of the vehicles required to use it on the tight turns and steep gradient proposed.

<u>TII Response:</u> TII confirms that the bridge will be designed to the relevant technical standards to ensure the correct loading, gradient and vehicle capacity. The bridge will be suitable for use by all vehicles that have need to use it, including emergency services, septic tank emptying vehicles and Waterways Ireland vehicles.

Observation: Shandon Residents consider that no satisfactory answer was provided during the Oral Hearing or in the additional Oral Hearing documents as to why the temporary access cannot be routed through the derelict industrial site instead of through Shandon Mills. They request that a comparative analysis of the alternative routes be carried out by TII.



<u>TII Response:</u> Whilst discussions remain ongoing with the landowner of the former industrial site, on an alternative proposal, no specific agreement has been reached on this matter and thus the option proposed in the draft RO remains the best option currently available to TII. It should be noted that the landowner has planning consent for a new residential development (planning reference: LRD6025/23-S3) and this is a material consideration for the landowner in their discussions with TII on alternative construction access arrangements for MetroLink.

Observation: Shandon Residents Association notes the loss of long-term permitted parking for Coke Oven Cottages residents at the Des Kelly Carpets on Phibsborough Road.

<u>TII Response</u>: TII has not previously been informed of the informal parking agreement between the Coke Oven Cottages residents and the Des Kelly Carpets business. The parking located outside Des Kelly Interiors shop is stated through multiple signs as 'strictly for customers only', with clamping and the use of fines in operation. As a result, this parking is not identified as residential in the EIAR assessment.

As the commercial property will be demolished as part of the Project, the commercial parking is therefore no longer available, and is deemed to have no significant impact when removed. To confirm, all residential parking associated with the Coke Oven Cottages properties will be maintained.

TII agrees to liaise with the affected residents from Coke Oven Cottages to understand their current usage of the Des Kelly parking spaces and to engage with residents on potential replacement parking opportunities close to the Phibsborough Road.

### 4.2.4.4.2 Population and Land Use

Observation: Shandon Residents expressed concern around security and amenity impacts of the temporary bridge access.

<u>TII Response</u>: The potential impacts on Population and Land Use due to the construction of Glasnevin Station have been assessed in the EIAR Chapter 11. While construction will cause localised disturbances such as traffic, noise, and temporary structures for a limited period, these impacts have been carefully assessed in the EIAR. The potential impacts on residents and amenities have been examined in detail in Chapter 11 of the EIAR and the impacts due to traffic and the establishment and construction of temporary structures (i.e., bridge, cofferdam and access roads) have been taken into consideration. Following the incorporation of mitigation and monitoring measures, TII continues to conclude that the residual impacts on Population and Land Use will be slight to moderate and medium-term in duration. With regards to security concerns, TII commits to the installation and monitoring of CCTV cameras in the area.

## 4.2.4.4.3 Landscape

Observation: Shandon Residents maintain that none of the images included in the Additional Oral Hearing Information is helpful at showing the planting proposal and that there seems to be contradictory visuals available between the plans showing planters and the renderings (photomontages and artists' impressions) that don't.

<u>TII Response</u>: The proposed landscape design is illustrated in document ML1-JAI-SRD-ROUT\_XX-DR-Y-02057 and this represents the landscape design intent at this location. In addition, the photomontages are generated from the RO drawings and are therefore representative of the proposed RO design.

It is important to note however that the Artist's impressions, such as those presented in the Glasnevin Station Architecture Presentation, on Day 14 of the Oral Hearing, may not always fully capture the design intent detailed in the documentation submitted with the RO application and these were prepared only as a visual aid to present viewers with an architectural presentation of what the stations are intended to look like when operational.

## 4.2.4.4.4 Biodiversity

Observation: Shandon Residents Association maintain that the loss of hedgerow and tree planting adjacent to the Royal Canal at Glasnevin arising from the construction of the station is a greater loss than has been stated in the MetroLink EIAR Biodiversity Update Report.



<u>TII Response</u>: TII's ecology specialist, Scott Cawley Ltd, maintains that the loss of the hedgerow adjacent to the Royal Canal at Glasnevin will not result in a likely significant negative residual effect at any geographic scale due to the habitats local ecological value.

Furthermore, a commitment was made at the Oral Hearing to replace the hedgerow at Glasnevin Station. Specifically, the hedgerow along the boundary between the northern towpath of the Royal Canal and the Irish Rail lands to the north will be replanted along the canal side at a suitable location along the proposed new boundary wall. This commitment is detailed in reference 7.2 of the Final Schedule of Additional Environmental Commitments document submitted on Day 21.

In their submission the Shandon Residents Association includes an extract from the RINA report which makes reference to the reinstatement of trees planted along the fence line by residents and the Royal Canal Cleanup Trust. TII are unaware of any trees planted along the fence line adjacent to the Canal/Tow Path. We understand this comment actually relates to the loss of hedgerow referred to above.

Observation: Shandon Residents Association criticize the decision not to include swift nesting blocks due to the station's glass construction, arguing that this is a missed opportunity for biodiversity enhancement, and contends that the rigid adherence to design features that lock out biodiversity is short-sighted, particularly given the biodiversity crisis.

TII acknowledges the concerns raised by the Shandon Residents regarding the missed opportunity for biodiversity enhancement at the Glasnevin Station, which is located adjacent to a habitat corridor. TII understand the importance of integrating biodiversity features into urban infrastructure. However, as detailed in our Oral Hearing submission, the predominant use of glass in the construction of Glasnevin Station presents significant challenges for the installation of swift nest boxes. Glass structures pose a high collision risk for birds, which can lead to fatal injuries. Swifts, in particular, are fast-flying birds that may not easily detect glass surfaces, increasing the likelihood of collisions. This risk is exacerbated by the reflective nature of glass, which can create illusions of open sky or vegetation, further confusing the birds. Thus, it is not considered appropriate to erect swift nest boxes on this structure.

### 4.2.4.5 AZ4(e) Mater Station and running tunnel to O'Connell Street Station

There were four no. submissions received from individuals or groups in the AZ4(e) area, and these were from the following:

- Amanda Hughes;
- Andrew Conlon & Maeve Fitzpatrick;
- Berkeley Road Area Residents Association (BRARA); and
- District 7 Community Alliance.

The response to these new issues are discussed below.

#### 4.2.4.5.1 Noise & Vibration

Observation: Andrew Conlon & Maeve Fitzpatrick, Berkeley Road Area Residents Association (BRARA) and District 7 Community Alliance have raised concerns around the dB outputs for vent noise at Mater Station. They cite the Inspectors' Expert's queries around the noise readings that were raised and addressed at the Oral Hearing.

<u>TII Response:</u> The operation of the ventilation shaft at Mater Station is detailed in Section 13.5.3.2.3 of the EIAR Chapter 13 Airborne Noise and Vibration. Additional specifics relating to the control of noise from fixed installations are provided in in the document "Noise Control from Fixed Installations for MetroLink" which was submitted to the Oral Hearing on Day 10. This document outlines the stringent noise control measures for all fixed installations, including ventilation shafts.

Section 3 of the document addresses the approach for managing any potential tonal or low frequency noise using best practice control and measurement techniques. The detailed methodologies, parameters and frequency weightings used for tonal and low frequency assessment are described in detail in the document



referenced above. This approach was discussed during the Oral Hearing on Day 10 to address the queries raised by ABP regarding the measurement and assessment of operational noise from fixed installations.

In summary, noise from the ventilation systems will be controlled by specific noise attenuation measures, ensuring compliance with the relevant design criteria. This process will involve measuring the background noise level (expressed as the LA90 parameter) at the nearest noise sensitive receptors. These measures will establish the design criteria according to the methodology outlined in Sections 13.2.5.2.4 and 13.2.6.2.4 of the EIAR and the additional document *Noise Control from Fixed Installations for Metrolink*.

Observation: BRARA express concerns regarding airborne noise during the operational phase and request that a floating track be implemented to minimise noise under homes.

<u>TII Response:</u> Despite the Observer making comments in relation to 'airborne noise', TII believes that this observation relates to operational groundborne noise.

The operational groundborne noise assessment criteria are described in Section 14.2.1.1 of the EIAR. For the operational phase a significant effect is identified when an impact magnitude of 'Medium' (40 – 44 dB LAmax,S) or above is identified. The EIAR therefore reports significant operational groundborne noise effects at predicted groundborne noise levels of 40 dB LAmax,S or above. Whilst not considered to be 'significant', a 'Low' impact is identified where groundborne noise levels of 35 to 39 dB LAmax,S are predicted.

On Day 10 of the Oral Hearing, TII published a commitment not only to mitigate significant adverse effects ('Medium' impacts and above), but also to mitigate 'Low' impacts at residential communities. The commitment states:

"TII will ensure that during the operation of the MetroLink passenger service, the operational groundborne noise levels in any lawfully occupied residential dwellings, measured near the centre of any noise-sensitive room, will be below 35 dB LAmax,S".

This commitment provides an additional layer of protection to all residential communities potentially affected by groundborne noise from the operation of MetroLink, that goes beyond the specific requirements of the EIA Regulations to describe any measures envisaged "to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment".

The standard track form assumed in the EIAR for the operational groundborne noise assessment is a heavy bi-block booted sleeper. The EIAR states that an 'enhanced track' in the form of a floating slab track system will be incorporated into the design to remove any significant effects identified.

The additional TII commitment in relation to the mitigation of 'Low' impacts at residential communities constitutes a further performance specification for TII to achieve, such that groundborne noise levels within any residential buildings will be below 35 dB LAmax,S. In some cases, it may be possible to achieve these lower groundborne noise levels without needing to resort to further quantities of floating slab track, through the use of other available technology. As such, it is not appropriate or necessary to stipulate floating slab track as the only solution to achieve the additional 35 dB LAmax,S commitment.

### 4.2.4.5.2 Air Quality

Observation: BRARA and District 7 Community Alliance submissions raised a concern around the risk of Aspergillus exposure to local residents, especially those with underlying health conditions. During the Oral Hearing on 27/02/24 it was requested that TII carry out a risk assessment and survey for Aspergillus for Berkeley Road residents that is separate to those proposed at Mater Hospital by District 7 Community Alliance. During the Oral Hearing on 19/03/24, the observer sought a commitment from TII in writing to reassure that residents will not be at risk.

<u>TII Response:</u> TII acknowledges the concerns raised by BRARA and District 7 Community Alliance regarding the risk of Aspergillus exposure to local residents, particularly those with underlying health conditions.

Chapter 16 (Air Quality) of the EIAR thoroughly considered the potential effects of construction related dust, including Aspergillus spp. Aspergillus spp. is a spore found in soil, compost and rotting leaves, plants, trees and crops, and dust. While the general population is exposed to aspergillus during routine activities such as



gardening, it typically does not affect healthy individuals. However, it can have adverse respiratory effects on individuals with immunosuppressed or low immunity.

Construction activities have the potential to spread aspergillus if construction related dust is not effectively managed. The mitigation measures for construction dust, as outlined in Chapter 16 of the EIAR, are designed to ensure that the spread of Aspergillus spp. is effectively controlled. These measures include:

- Stringent dust control measures across all construction sites for MetroLink; and
- Effective monitoring dust levels to ensure the effectiveness of the mitigation measures.

Discussions with respect to Aspergillus spp. within Chapter 16 of the EIAR focus on the Mater Hospital due to the presence of an immunosuppressed population, however the mitigation measures set to control dust which assist with the protection of the sensitive hospital population will also protect all other members of the local community. The mitigation measures for construction dust and Aspergillus spp. have been discussed with the MetroLink Human Health expert and has been assessed in Chapter 10 (human health) of the EIAR.

Aspergillus spp. surveys are not routinely conducted for construction projects as the lack of presence of Aspergillus spp. in a sample may not be representative of the complete construction area and provide a false sense of assurance. It is more effective to apply a high level of dust mitigation combined with dust monitoring to ensure the dust mitigation is effective. This mitigation remains unchanged from that which would be proposed if a positive sample for Aspergillus spp. was returned from a survey.

TII is committed to ensuring the safety and health of all residents. TII and will implement and monitor the highest standards of dust mitigation throughout the construction phase of the MetroLink Project. This includes the application of high-level dust control measures and real-time monitoring to minimize any potential risk of Aspergillus exposure.

The residual dust assessment (Chapter 16 (Air Quality) Section 16.7.1 of the EIAR) concludes that when the dust minimisation measures detailed in the mitigation Section of the chapter are implemented, fugitive emissions of dust from construction sites is not predicted to be significant and will pose no nuisance, human health or ecological risk to nearby receptors.

Observation: BRARA also welcomed a commitment to engage with the community around dust mitigation measures generally and requests that this engagement occurs prior to the works commencing.

<u>TII Response:</u> TII can confirm that community groups will be engaged with prior to the commencement of the construction phase in relation to dust mitigation measures.

#### 4.2.4.5.3 Architectural Heritage

Observation: District 7 Community Alliance refers to a request to provide a more legible version of the plan "Four Masters Park Railing Length and Green Space, Day 16: Book 1 of 1 (Document 48)" produced at the Oral Hearing.

<u>TII Response:</u> This plan is provided as Figure 1.1 in the report produced at the oral hearing. It is a reduced size copy of the RO Drawing ML1-JAI-ARD-ROUT\_XX-DR-Y-03084 (MetroLink General Arrangement, Goldsmith Street to Nelson Street). The original drawing can be viewed on page 31 of the Alignment Details Book 2 of 2 Dublin City Council. (www.MetroLinkro.ie)

Observation: BRARA have requested that the park railings located at the Four Masters Park is restored prior to reinstatement.

<u>TII Response:</u> TII commit to repairing these railings where required in advance of reinstatement. TII also reiterate their commitment to reinstating the existing park railings as per the RO design, The railings will be repaired where required prior to reinstatement as outlined in Table 26.66 of Chapter 26 of the EIAR.



### 4.2.4.5.4 Cumulative Impacts

Observation: District 7 Community Alliance raised a query around the document 'EIA Report Addendum. 'Chapter 30 Cumulative Impacts. 27.02.24 (Day 07:Book 1 of 2)'. They noted that it has not been updated and it does not include the following three major planned projects which they had requested to be included at the Oral Hearing;

- 4790/23 Hendron's 36-40 Upper Dominick Street;
- New Mater Hospital building Eccles Street; and
- 4145/22 Former Des Kelly site 168-169 Phibsborough Road.

They also noted concerns that no liaison has taken place regarding the timetabling of all these projects and their combined effect on the Phibsborough area. TII had agreed to come back to us on this but has not as yet.

TII Response: The Cumulative Impacts Addendum that was submitted as part of the Oral Hearing has considered Planning app. 4145/22 (ABP Reference 315984) and it was assessed within the shortlist. In relation to the new Mater Hospital Development, this development was constructed in 2023 and therefore there are no potential cumulative impacts arising during the construction phase of the proposed MetroLink Project. Planning application 4790/23 was submitted in August 2024 and therefore was not available at the time of the Oral Hearing. Should the cumulative impact assessment be updated in the future, this planning application will require it to be considered as part of ABP's assessment. TII acknowledges the importance of coordinating with other major projects in the Phibsborough area. TII is committed to ongoing liaison to ensure that the combined effects of these projects are managed effectively.

Observation: Amanda Hughes raised a concern around the cumulative effects of all construction measures at Phibsborough, in particular on traffic management and air pollution.

<u>TII Response:</u> The cumulative impact of projects has been assessed and presented in EIAR Chapter 30, and in the Oral Hearing documents, including the assessment of projects in relation to Traffic and Transport. If projects occur at a similar time, liaison will be required to ensure traffic management plans are compatible. In addition to Chapter 30 of the EIAR, Chapter 31 presents the Summaries of Route Wide Mitigation and Monitoring Proposed. The Site Traffic Management Plan (STMP), detailed in Appendix A9.5, outlines general measures to reduce traffic congestion. Further measures are specified in Appendix A5.1, the Outline Construction Environmental Management Plan (CEMP), including:

- A coordinated City Centre Traffic Management Plan for all stations; and
- Establishment of a Project Construction Traffic Forum with representatives from key Stakeholders.

According to Chapter 5, Section 5.4.12 on Traffic Works, the Local Authority (Dublin City Council) has statutory authority under Section 101D of the Road Traffic Act 1961 to issue directions for roadworks within their jurisdiction. These directions aim to coordinate concurrent roadworks and minimize traffic disruption. All traffic management measures will be agreed upon with the Local Authority and, where relevant, with An Garda Síochána and other statutory Stakeholders such as Iarnród Éireann. The Construction Traffic Management Plan will be approved by DCC as part of the CEMP consultation and approval process, as outlined in Section 1.3 of the Outline CEMP in Appendix A5.1 of the EIAR:

Construction vehicles will be controlled in terms of the hours of operation, and by ensuring that any local restrictions on the vehicle size and weight are complied with; and

Where practicable, construction work requiring short term disruption and road closures will be carried out when traffic volumes are lower.

Full details of the modelling of the potential construction phase traffic impacts on air quality are presented in Chapter 16 (Air Quality) of the EIAR. Updates to the air quality modelling were also contained in submissions on day one of the Oral Hearing (See Witness Statement from Dr. Avril Challoner) due to the publication of updated Guidance documents and the publication of the Clean Air Strategy for Ireland between the submission of the EIAR and Oral Hearing.



The air quality modelling of traffic data takes into consideration changes in the traffic flows due to the proposed development but also other cumulative schemes, as well as background pollutant concentrations to ensure a robust assessment of the impact of emissions on sensitive receptors.

In addition to the management of traffic, which will minimise air emissions, air quality monitoring will be undertaken at all construction sites. This monitoring will include real time air quality data which will be publicly available. A baseline air quality data set will also be captured prior to the commencement of construction to ensure an understanding of the current situation prior to construction is documented. In addition, air quality monitoring is conducted by the EPA and Dublin City Council which is publicly available and can be used as a resource to confirm if peaks captured at construction compounds are localised or due to a widespread air quality issue. Nearby monitoring stations include: Ballymun Library, Finglas (Finglas Sports and Fitness Centre), Cabra Community College, Drumcondra Library, Mountjoy Square, Amiens Street and TU Dublin - Park House (refer to https://dublincityairandnoise.ie/ and https://gis.epa.ie/EPAMaps/).

### 4.2.4.5.5 Population

Observation: Andrew Conlon & Maeve Fitzpatrick, BRARA and District 7 Community Alliance welcomed the reference to Community Gain. The three Observers have requested more detail is provided (such as budget provision) for supporting local initiatives.

<u>TII Response:</u> Whereas the concept of community gain arises in the case of some private developments, fundamentally different considerations arise with regard to the provision of public transport infrastructure, whose sole purpose is to serve the residents of Dublin city and visitors to our city as opposed to achieving a commercial return. TII does not consider that it is appropriate for ABP to impose a community gain condition in the case of this proposed public transport infrastructure. Without prejudice to this position, TII previously committed in its updated Stakeholder management plan to ensuring that appointed contractors work collaboratively with local communities and local authorities. This commitment remains. TII remains dedicated to contributing to the well-being of the communities affected by the construction of public transport infrastructure and will continue to engage these communities on an ongoing basis.

Observation: All four submissions request that clarification and detail on how local residents can access the independent advice service throughout the construction phase.

<u>TII Response:</u> While the precise mechanism for Stakeholder engagement with the IEE during the construction stage is still being developed, TII envisions direct engagement with this liaison body, similar to the current arrangements. The Stakeholder Engagement (Management) Plan as submitted on day 8 of the Oral Hearing, will be updated to provide a clear description of the process to be implemented during construction. This will ensure that residents have a straightforward and effective means to engage with the IEE. The IEE will be sufficiently resourced to provide the necessary services throughout this phase of the works, ensuring that local residents receive the support and information they need during the construction period.

Observation: All four submissions request that the increased value of 75,000 euro coverage under POPS be index linked to the construction industry value. In particular, they cite that the scheme should be extended to cover additional costs incurred by residents, for example increased maintenance costs arising from access issues, increased insurance premiums and additional security costs.

<u>TII Response:</u> The value of €75,000 will be subject to adjustment, in line with the Consumer Price Index, with adjustments to commence from the date of the grant of a RO. TII does not expect that there will be an adverse impact on the insurability of residential properties or an increase in insurance premiums because of the proposed Project. In this context TII cannot commit to reimbursing residents for any change in their insurance premiums and/or additional security costs.

POPS has been established to alleviate any concerns that private residential property owners may have regarding potential damage to their property, particularly those situated close to the MetroLink alignment. TII does not foresee any additional costs arising for residents as a result of the MetroLink construction works.

No evidence has been presented to ABP, either in the local context of Dublin Port Tunnel or in the international context of metro projects in other countries or regarding similar underground infrastructure projects, that suggests that such projects have led to an increase in insurance premiums payable by homeowners.



Therefore, TII maintains that the current provisions under POPS are adequate and that no additional costs should be expected for residents as a result of the MetroLink construction.

Observation: Amanda Hughes requests that the POPS be extended as one year of cover would not be sufficient to see the effects of subsidence.

<u>TII Response:</u> TII notes that the highest risk of subsidence occurring will be during the station construction and tunnelling phase that will be completed in the first 6 years of the proposed Project. With POPS coverage extending into an additional year post-opening for the project, TII is confident that the period of time between the completion of the station and tunnel construction works is sufficient to detect any potential subsidence. This extended coverage period is designed to ensure that any issues related to subsidence can be identified and addressed within a reasonable timeframe, providing adequate protection and reassurance to property owners.

### 4.2.4.5.6 Traffic Management

Observation: BRARA and District 7 Community Alliance requests that the local Traffic Management Plan be agreed with representatives of local residents and business prior to works commencing.

<u>TII</u> <u>Response:</u> Traffic plans will be agreed with Dublin City Council (DCC) prior to works commencing. However, once the traffic plans are agreed with DCC, (or FCC), the plans will be available for local groups, representatives and individuals to review.

As stated in the Outline CEMP (Appendix A5.1 of the EIAR), to ensure a coordinated response, there will be frequent communication with, and information exchanged between interested parties (i.e. Local Authorities, National Roads Authority, Local Chamber of Commerce). Additionally, advanced notice will be given to the owners of all residential, commercial and community properties (including social infrastructure) before construction starts and in advance of any major planned disruptions of services or localised traffic management measures, noting in particular residents and businesses affected by temporary construction works crossing roads and those located within 250m of construction works.

Observation: District 7 Community Alliance requests that traffic calming measures and zebra crossings are implemented on Berkeley Road as part of the MetroLink Project. Request that the cycle lanes along Berkeley Road are segregated.

<u>TII Response:</u> There will be no zebra crossings or segregated cycle lanes along Berkeley Road. However, the existing unsignalised junction of Berkeley Road with Eccles Street will be upgraded with traffic signals with toucan crossings in the 3 arms and a pedestrian crossing near St. Joseph's Carmelite Church, facilitating safer crossings for both pedestrians and cyclists. Additionally, existing cycle lanes will be extended through Berkeley Road adjacent to the MetroLink Station Section, as that ties-in with the existing infrastructure. The roads and signal design along Berkeley Road has been designed to improve the movement of pedestrians, cyclists and buses, while integrating with the passenger flow from coming MetroLink. Existing parking spaces southbound have been removed to provide for the required footpath width and continuous cycle lanes as per existing arrangement in front of the MetroLink station, hence improving the safety of both pedestrian and cyclists.

Observation: District 7 Community Alliance requests a commitment in writing that no construction workers will be allowed to park in the area of the station works and that contractors will provide off-site parking with workers being shuttled in.

<u>TII Response:</u> The 'Outline Mobility Management Plan' submitted on the opening day of the Oral Hearing details how the Project plans to limit the impact of car usage. As stated in Section 4.3 of the document, measures will be introduced to ensure local residential areas do not experience increased parking demand from workers from the proposed project. Interventions will be identified to manage disruption to the local transport network and local community. TII confirm that the Mobility Manager will undertake the following key steps:

- Will engage with construction site managers and TII to maximise the use of workers during on-peak periods;
- Will work with local community groups to understand parking concerns, particularly where on-street parking will cause significant issues to residents. The Mobility Manager willwillt undertake parking



surveys to assess any changes in local parking demand throughout the construction phases and use the results to update the Mobility Plan actions based on the level of on-street parking taking place;

- Will work with Local Authority officers to identify parking availability for workers including potential park and ride and park and share sites and other demand management measures; and
- Will work with contractor leads and TII to ensure that sustainable transport options are available to
  offset the lack of on-site parking to encourage and enable sustainable transport. This will include the
  promotion of the use of public transport, cycling and walking. Shuttle buses will be provided where
  required.

Furthermore as committed to in the Final Schedule of Additional Environmental Commitments submitted to the Oral Hearing on Day 21:

 During the construction phase, workers will be transported to site via min-buses from designated collection points (such as Luas and DART stations or other appropriate locations) in line with the mobility management plan.

### 4.2.4.5.7 Biodiversity

Observation: Amanda Hughes requested provision for bat friendly lighting in the area around Mater station as DCC Parks have recently identified bats at Blessington Basin.

<u>TII Response:</u> The Blessington Basin Park is approximately 100 meters away from the nearest point of the Four Masters Park, and separated from it by the buildings along Berkeley Rd., Sarsfield St, O'Connell Ave. and Geraldine St.. The Four Masters Park, and all the aforementioned streets between it and the Blessington Basin Park, already experience significant background light levels from existing artificial street lighting.

Given the distance between the proposed site of the Mater Station, the existing high level of background light levels locally, and the number and extent of buildings in the area between the Four Masters Park and Blessington Basin, there is no potential for construction or operational lighting associated with the Mater Station to influence light levels or bat usage at the Blessington Basin Park and there is no requirement for specific light mitigation for this location. Therefore, specific light mitigation measures for this location are not required.

Please refer to Section 15.5.2.5.1 of the EIAR where general mitigation measures for lighting that benefit bats are specified and these include:

- All proposed lighting will be from a LED light source, which is a more bat-friendly light source as it contains very little/no UV frequency lighting that bats are particularly sensitive to;
- Lighting will include an automatic dimming and switching off mechanism in order to reduce the duration of light disturbance as much as possible; and
- Lighting will be directional, i.e. there will be no upward light projection and lighting will not be projected behind lighting columns in order to reduce any backward lighting and any obtrusive lighting into adjacent areas; and where possible, the shortest lighting columns will be used to further reduce any light spill.

These measures ensure that the lighting around the Mater station will be considerate of bat activity, even though specific mitigation for the Blessington Basin Park is not deemed necessary.

### 4.2.4.5.8 Landscape & Design

Observation: Amanda Hughes, Andrew Conlon & Maeve Fitzpatrick, BRARA and District 7 Community Alliance have raised queries around the landscaping design for the urban realm surrounding Mater Station. Particular concerns were raised around the extents of paving and the materials proposed as part of the design. BRARA have also requested a reduction in the use of hard paving and replacement with trees/planting and that granite bollards are used.

<u>TII Response:</u> TII does not agree with the characterisation of the Mater Station Plaza as "unnecessarily large". The paving extents have been designed with careful consideration of both pedestrian movement at footpath



level and MetroLink passenger movements in and out of the station. The design includes build out kerbs to allow for the safe use of pedestrians as they traverse the area.

Tree planting and street trees have been incorporated into the design within the constraints of the street environment and existing site services and constraints. These constraints have influenced the quantity and placement of trees, ensuring that they do not interfere with underground utilities or other essential infrastructure.

The quantity and spacing of the bollards along the extent of the station plaza have been designed to provide protection from potential attacks by hostile vehicles. This aspect of the design has been developed in consultation with An Garda Síochána to ensure public safety.

With regards to the materiality of the proposed bollards, TII reiterates the commitment provided during the Oral Hearing to use granite within this area to reflect the local heritage.

The design of the Mater Station Plaza has been carefully considered to balance the needs of pedestrian and passenger movements, safety, and aesthetic integration with the local environment. While the concerns about paving and materials have been noted, the current design reflects a comprehensive approach to urban landscaping that prioritises functionality, safety, and heritage.

Observation: BRARA have requested that local residents have a formative role in the design of the Four Masters Park.

<u>TII Response:</u> While the current layout and design of Four Masters Park will change, every effort has been made to ensure that the design complements the existing layout of the park, and it continues to serve as a valuable and accessible green space for use by the public. TII commits to engaging with the local community on elements of the park design once further development takes place.

Observation: Andrew Conlon & Maeve Fitzpatrick, BRARA and District 7 Community Alliance raised concerns around the design of the fire brigade lifts proposed at Mater Station.

<u>TII Response:</u> The locations of the lifts are a paramount safety consideration for each station. With regards to the architectural design of these lifts, they are clad in brick to both distinguish them from public facing elements and to integrate them neatly into their contexts. This design choice aims to minimise the visual impact on the streetscape while ensuring that the lifts remain functional and accessible for emergency services.

The design and placement of the fire brigade lifts have been carefully considered to balance safety requirements with the need to maintain the aesthetic integrity of the streetscape. TII remains committed to ensuring that all elements of the Mater Station project meet both functional and visual standards, addressing the concerns of the community while prioritising public safety.

Observation: Andrew Conlon & Maeve Fitzpatrick and BRARA have requested a reduction in the size of the station entrance canopy to minimize its visual impact. They also expressed concerns that the Mater Station cannot be seen from the city centre side of Berkeley Road due to the fire brigade lifts.

TII Response: The size of the station opening of entrance is determined by the necessary dimensions of the stairs and escalators to ensure safe and efficient passenger flow. To mitigate the visual and mass impact, the design incorporates large, glazed areas that provide maximum transparency to the canopy. The station canopy has been designed to have a low impact on the public realm whilst retaining a visual presence required for MetroLink's line-wide identity and wayfinding, allowing for visual connection through the glazed sides.

Observation: Andrew Conlon & Maeve Fitzpatrick highlights that there is no reference to property 19 Berkeley Road in updates the Construction and Environmental Management Plan (CEMP).

<u>TII Response:</u> Within the CEMP, there are references to BH-63 and BH-64 because they are protected structures. Section 26.4.4.8.3 identifies that two other houses, 19 Berkeley Road and 22 Berkeley Road are not designated but in view of the proximity of the proposed works the two undesignated houses were included in the assessment.



Table 26.52 of the CEMP, titled "Potential indirect impacts During Construction of Mater Station", provides a detailed evaluation of the impacts on BH-63 and BH-64. These properties were given a baseline rating of medium and low, respectively. The magnitude of impact was assessed as low, and the significance of effect was deemed slight. The table states that during the construction of Mater Station, the works will take place close to the front of these properties, impacting their settings. Despite the low magnitude of impact and the medium to low architectural heritage value, the overall impact was considered slight.

Due to the slight impact, the mitigation measures for BH-63 and BH-64 was identified as follows: "the impact of the works has been reduced as much as possible at design stage and no further mitigation is possible". These specific measures are detailed in Table 6.10 of the CEMP, which focuses on architectural heritage.

Table 6.10 does not refer to 19 Berkeley Road because it is not designated. However, the inclusion of 19 Berkeley Road in the broader assessment indicates that its proximity to the construction site has been considered, even though it does not warrant the same level of detailed mitigation as the protected structures BH-63 and BH-64.

Observation: Andrew Conlon & Maeve Fitzpatrick requests a "clear and definitive boundary for the western vent site shaft site hoarding".

<u>TII Response:</u> The proposed positioning of the hoarding for the construction of the Mater Station Vent shaft were discussed with the observer Andrew Conlon and Maeve Fitzpatrick (No. 19 Berkeley Road) on day 15 of the Oral Hearing. Please refer to Figure 5.1 Sheet 21 for details of the extent of the construction works area required here.

Referring to the presentation of the Temporary Traffic Management drawings for Mater, contained in Appendix A9.5 'The Scheme Traffic Management Plan', pages 503 to 505 of 703, TII confirmed the construction of the Mater Station would be completed in three phases with provision made to maintain acc

- Phase 1 The construction of the station vent shaft structure under Berkeley Road. In this phase
  access is maintained to the observer's property, No. 19 Berkeley Road, but the footpath is restricted
  to the south by the proximity of site hoarding to the property's front railing;
- Phase 2 The vent shaft structure is completed, hoarding removed, and Berkeley Road and footway reinstated along its original alignment. In this phase, all the station works are progressed within the Four Masters site and subsequently there are no access restriction outside the observer's property; and
- Phase 3 The site is re-established outside the observer's property, but with a smaller footprint, to complete the internal building works, fit-out and surface works of the station vent shaft. In this phase, while the existing footway is slightly narrowed, full access past the observer's property is maintained.

Observation: Andrew Conlon & Maeve Fitzpatrick state that they sought clarification on the location of the secondary site boundary both prior to and during the Oral Hearing. They reference the information provided by Tll at the Oral Hearing and state that it indicated that the site boundary is located at the kerb. However, the updated AIA Drawings (Day 19, p. 100) show the site construction boundary meeting their house boundary, raising concerns about the accuracy of the information provided by Tll.

<u>Response:</u> Regarding the observers' reference to the details of AIA drawings issued on day 19 of the Oral Hearing, with details of page 100 of 108 showing the Arboricultural Impact at Mater extracted in the observers submission, TII confirm that the line on the edge of the observer's property on the AIA drawings is the planning red line boundary of the project and not the proposed construction site boundary.

#### 4.2.4.6 AZ4(f) O'Connell Street Station and running tunnel to Tara Station.

There was a single submission received from individuals or groups in the AZ4(f) area and this was received from Troy's Family Butchers Ltd. The new issues raised relate to the following themes:

- Construction Phase;
- Archaeology & Cultural Heritage (including protected structures);



- Traffic & Transport;
- RO Process;
- Reimbursement; and
- Human Health.

Construction PhaseObservation: The submission from Troy Butchers makes reference to TII issuing a temporary CPO on 24/25 Moore Street to enable Hammersons to use this site compound whilst constructing the MetroLink station box.

<u>TII Response</u>: This is incorrect. This plot will be acquired by TII temporarily under powers granted by the RO. It will be used by a TII appointed main works contractor (not a developer) for the purpose of construction of the O'Connell Street station site.

### 4.2.4.6.1 Archaeology & Cultural Heritage

Observation: The Troy Butchers submission refers to the use of 24/25 Moore Street as a construction compound and states it is highly unlikely that DCC will agree to sell this site as there are pre 1916 elements within its boundaries. It notes that No's 10-25 Moore Street are to be added to the list of protected structures and that the MetroLink proposal for this area interferes with the 1916 Cultural Quarter Bill.

<u>TII Response</u>: The record of protected structures for Dublin City includes many of the buildings between numbers 10 and 20-21 Moore Street. Numbers 22-23 and 24-25 Moore Street are late-twentieth century buildings and are not on the record of protected structures. To be protected in law under the planning acts, a building would either need to be included in the record of protected structures or have been formally declared a proposed protected structure; numbers 24-25 Moore Street are neither protected structures nor proposed protected structures. The proposal for a site compound does not in any event have any direct impact on the building at 24-25 Moore Street. The land to the rear of the buildings is currently used as a DCC compound and the potential lease of the site has been discussed with DCC.

The submission notes that the Moore Street, Moore Lane, Henry Place and O'Rahily Parade area is the last extant 1916 battlefield site and 'satisfies the criteria of a national monument'. It goes on to note that TII require Ministerial Consent for the proposed MetroLink works in this area. TII confirm that the remaining elements of the 1916 landscape is not a national monument, nor is it a recorded monument (RMP). The area is identified in Chapter 25 of the MetroLink EIAR as ACH178 and due to the fact that this area is not listed as a monument, it was assigned a medium sensitivity. Notwithstanding that, the effect of the proposed MetroLink Project was assessed as 'significant negative'. However, with the proposed mitigation measures (including archaeological monitoring during enabling and construction works) the residual impact is assessed as 'imperceptible'. The site and the potential effects have been correctly identified in Chapter 25.

Whilst the landscape of the 1916 Rising is not a national monument, 14-17 Moore Street is listed as a national monument and is designated as ACH180 in Chapter 25 of the EIAR. Section 25.5.1 of Chapter 25 states that 'the proposed Project has the potential to have a significant indirect permanent negative effect' on this site. Section 25.6.1.1 of Chapter 25 states 'Of the six National Monuments located within the study area, one will be directly impacted by the proposed Project (ACH211 St Stephen's Green Park) and two will be subject to indirect impacts (ACH020 Lissenhall Bridge and ACH180 14-17 Moore Street and 8-9 Moore Lane). In accordance with Sections 5 and 14 of the National Monuments Act 1930 (as amended), Ministerial Consent will be required for all works carried out within the zone of proximity of the relevant monuments which is defined by the MHLGH on a case by case basis. To clarify, Ministerial Consent will be applied for works adjacent to 14-17 Moore Street, following the grant (if any) of a RO for the proposed Project.

The 1916 Culture Quarter Bill 2021 referenced in the submission has no legal effect until enacted and in any event has lapsed with the recent dissolution of Dáil Éireann on 8 November 2024.



### 4.2.4.6.2 Traffic & Transport

Observation: The submission from Troy's Butchers states that the diagram on Tll's updated information suggests that traffic regressing from Moore Lane at Conway's pub can disperse via Parnell Square West which is incorrect due to the traffic island that was put in place to facilitate the Luas tracks.

<u>TII Response</u>: TII acknowledges that the schematic diagram on slide 6 from the document titled "Presentation on O'Connell Street Station" presented at the Oral Hearing on Day 16 to show the over site development at O'Connell Street Station is incorrect. However, the route diagrams presented on the subsequent slide titled "Haulage Route" are correct and are copies of the diagrams presented as Figures 7.37 and 7.38 in the Scheme Traffic Management Plan (STMP), Appendix 9.5 of the EIAR. Outbound construction traffic cannot use Parnell Square West, and when leaving Moore Lane will proceed westwards along Parnell Street. Inbound construction traffic will also utilise Parnell Street from the east, before entering Moore Street and turning into O'Rahilly Parade. Thus, the Section of Parnell Street between the Moore Lane junction and Moore Street junction will be utilised by both inbound and outbound construction vehicles, as stated by Troy's Butchers.

Observation: The submission from Troy's Butchers challenges the construction assessment, stating that the assessment doesn't include other construction traffic travelling along the same haul route to reach the various other site compounds at Hammersons. They dispute that the assessment also doesn't include residential traffic travelling to the underground car park, traffic to the llac service yard, traffic going to Moore Lane service yard, or traffic going to/from Sampsons Lane/Coles Lane service yard. Overall, they challenge that the assessment does not include 'realistic volumes of traffic in the area on a daily basis'.

<u>TII Response</u>: TII does not agree that the assessment is insufficient. The impacts on traffic, and particularly HGV volumes, during the construction phase are clearly presented in EIAR Chapter 9 Traffic and Transport. Model outputs indicate that there will be a minor increase only in HGV volume during peak periods as a result of MetroLink construction. Along O'Connell Street Upper northbound, there will be an estimated 2% increase in HGV volume during the morning peak, and a 1% decrease southbound. In the immediate area around O'Connell Street Station, there will be an estimated 1% increase with no changes in HGV volume in the immediate area of the station. At this Section of road, HGVs, including the Project's construction vehicles, account for a 13% share of all traffic. Therefore, TII would argue its assessment considers both existing and future HGV volumes from other projects.

### 4.2.4.6.3 RO Process

Observation: Troy's Butchers maintain that they have provided evidence to convey that laws have been broken and a conflict of interest clearly exists within TII, the Department of Heritage and Dublin City Council in relation to these inter-dependent MetroLink and Hammerson's planning applications.

<u>TII Response</u>: TII has taken Hammerson's plans into account in the design of the MetroLink station at O'Connell Street. However, MetroLink is not contingent on the design or on the delivery of the Hammerson's project in its current or any other configuration and can be delivered whether the Hammerson's development is constructed or not. The proposed development on the Hammerson's site is subject to a separate approval process, distinct and separate to the consent of the MetroLink RO. TII has complied with all applicable laws in relation to its engagement with Hammerson, DCC and the Department of Heritage, Housing and Local Government and denies that there has been illegality or conflict of interest.

In any event, none of the issues raised bear on the proper planning and sustainable development of the area or the environmental impact of the proposed railway works. Any investigation of Mr Troy's claims (which TII considers to be entirely without merit) are a matter for authorities other than ABP and TII respectfully submits, are not relevant to ABP's determination of the RO application.

### 4.2.4.6.4 Reimbursement

Observation: In their submission, Troy's Butchers question whether TII will compensate independent store traders at Moore Street for the loss of turnover that will inevitably occur for businesses in the immediate proximity of the works, considering the size, duration and nature of the project.



<u>TII Response:</u> TII does not have a policy of compensation for local businesses for disruption during the construction stage, however other forms of assistance for local businesses during the construction stage will be explored. As with the installation of the Luas line throughout the city, TII believes that any short-term disruption to businesses during the works is offset by the eventual benefits of owning and operating a business in close proximate to a Luas, or in this case, MetroLink.

#### 4.2.4.6.5 Human Health

Observation: The submission from Troy Butchers maintains that the EIA did not contemplate the mental health impact of the threat to the livelihoods of people because of the impact on business during the construction in the Moore Street area.

<u>TII Response:</u> The psychological and mental health impacts of construction and operation of the scheme were assessed in the EIAR (Chapter 11, Section 10.5.1.4) and during the Oral Hearing. Whilst it is recognised that human psychological impacts are complex and not easily predicted, the assessment maintains that there is no reason to predict significant adverse effects on human health from a psychological perspective. With mitigation, no significant impact on people's livelihood is anticipated. The proposed Project as a whole will create employment and stimulate economic activity and business both during construction, including the people employed building MetroLink, and during its operation.

### 4.2.4.7 AZ4(g) Tara Station and running tunnel to St. Stephen's Green Station

There were no submissions received that raised new issues relating to this geographical area.

### 4.2.4.8 AZ4(h) St. Stephen's Green Station and running tunnel to Charlemont Station

There were no submissions received that raised new issues relating to this geographical area.

### 4.2.4.9 AZA(i) Charlemont Station and tunnel turnback south of the Station

There were 15 submissions received from individuals or groups in the AZ4(i) area and these were from the following observers:

- Brendan Heneghan;
- Ciaran Black & Leon McCarthy;
- Conor and Lorraine Power;
- John Conway and Orlaith McCarthy;
- Leo and Anne Crehan;
- Michael A Doyle and Carmel Smith Doyle;
- Union Investment Real Estate GmbH;
- Charlemont and Dartmouth (General Area Submission);
- Charlemont and Dartmouth (1,3,5 and 7-16 Dartmouth Square);
- Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road);
- Charlemont and Dartmouth (Cambridge Terrace no. 3 to 11);
- Grace Maguire;
- Niall Parsons;
- Terry Reid; and
- Suzi Taylor.

Of the 15 observers, only the Charlemont and Dartmouth (Cambridge Terrace no. 3 to 11) has been identified as a new submission. The new issues raised by the remaining observers have also been addressed.



The new issues raised by this group of observers have the following themes, which allow grouping in TII's response under the following headings:

- Confidence in the Assessment;
- Settlement:
- Traffic and Transport;
- Noise & Vibration;
- Design & Procurement: Luas & Connection;
- RO Process: Errata and examination of evidence;
- Consultation;
- Cumulative Assessment;
- Mitigation and Monitoring;
- Impacts;
- Cumulative Assessment
- Property Valuation
- Amenity
- Protected Structures
- TII Indemnity;
- Construction of the Perimeter Wall;
- Land take;
- Seeking Costs; and
- Enabling Works.

### 4.2.4.9.1 Confidence in the Assessment

Observation: Three separate observers raised four comments implying a lack of confidence in the assessment process undertaken within the documents provided for the second consultation.

One observer, Brendan Heneghan, while making the following comment, seeks reassurance on project delivery.

- It is highly irregular that significant interference with two newly constructed buildings were
  identified at the Oral Hearing requiring emergency changes to the scheme. He identifies that
  this does not inspire confidence that there are no other significant unidentified problems and
  that the public have a right to expect that the applicant has identified these issues.' Mr.
  Heneghan also identified that likely impacts on residential buildings identified in the Gillarduzzi
  Paper were blithely dismissed by TII. He identifies that there is likely to be extensive minor
  damage; and
- Mr. Heneghan also raises three questions on the changes made to avoid damaging AerCap House and Cadenza building.

<u>TII Response:</u> The design and analysis in the RO application and presented at the OH was robust and had to consider a significant alignment through a heavily urbanised area. In this context, a single building was identified where additional detail (not available from the planning files) was made available to the project team. This required the amendment of the design within the Limits of Deviation, which have been set for the purpose of allowing amendments to the design/alignment due to unforeseen impediments to the alignment.

The level of scrutiny provided by the RO application process, the initial consultation, the Oral Hearing and subsequent second consultation period have fully identified all relevant issues for consideration by ABP.



TII confirms the likely impacts on residential buildings identified in the Gillarduzzi Paper were not dismissed. TII's intention in the commentary was to convey in a concise manner the conclusions of the Gillarduzzi paper and how the MetroLink Project has put in place measures to mitigate the causes of the settlement issues encountered within the Marino area. It is worth noting that one of the contributing factors to the settlement at Marino was the working pattern of the Dublin Port Tunnel where the working hours of the tunnel boring machine were restricted to 13 hours per day to limit noise and disturbance to residents. This meant that the tunnel front face remained unsupported for 11 hours per day which during this period allowed for the ground surrounding the tunnel boring machine to relax and the tunnel to act as a drain for the surrounding ground. These factors can lead to an increase of settlement observed at the surface. In comparison, the MetroLink construction methodology proposes 24/7 working hours for tunnelling with a closed faced tunnel boring machine.

Regarding the extent of property damage reported in the Gillarduzzi Paper, the paper notes that 32 properties presented noticeable aesthetic defects and three with serviceability damages limiting some functions of the building. The paper also notes that the pre-building survey, conducted within a 30-meter wide corridor on each side of the tunnel, identified noticeable defects in the main buildings and extensions of some properties. These defects were often attributed to poor-quality construction rather than damage induced by settlement from the Dublin Port Tunnel works.

The conclusion of the Gillarduzzi paper can be categorised into the following main causes of settlement observed on the Dublin Port Tunnel.

- Settlement caused by deformation and volume loss: The paper identifies that the unsupported excavation surrounding the Dublin Port Tunnel boring machine resulted sometimes in wedges of rock coming loose and the tunnel boring machine excavating a larger excavation profile leading to a greater volume loss and settlement. Notably, the report highlights at one location an overbreak (over excavation) of 0.5m at the top of the tunnel, 2m in front of the tunnel and 1.5m to the side of the tunnel was observed. The paper concludes that deformation of the tunnel excavation was greater where the tunnel intercepted faulting in the rock, difficult ground conditions such as rock rich in expansive clay or thinly bedded plastic mudstone (as opposed to thicker and stiffer limestone strata), and areas with thin and fractured rock cover above the tunnel crown (e.g., where the axis of the buried valley intersects the tunnel alignment). However, TII has considered these types of ground conditions when specifying the tunnel boring machine. The closed face tunnel boring machine will have the ability to vary the support pressures according to the ground conditions encountered ensuring the surround ground is supported throughout the excavation. Additionally, TII undertook extensive ground condition investigations to identify faults along the tunnel alignment.
- Settlement caused by dewatering of deposits and the surrounding bedrock: Gillarduzzi suggests that the dewatering causing consolidation of boulder clay is plausible but unlikely. However, he does state that the progressive ingress and removal of fine soil particles was a key factor in the settlement observed on the Dublin Port Tunnel. TII has selected a closed face TBM, which will prevent groundwater and fine soil particles entering the tunnel and therefore mitigating this form of settlement.
- Settlement Caused by Vibro-Densification: The primary cause of settlement, as concluded by Gillarduzzi in his report, is vibro-densification. This phenomenon occurs due to the combined actions of dewatering, which leads to the loss of fines (as explained in the previous paragraph), and ground-borne vibrations from the tunnel boring machine. These combined effects cause the surrounding soil to compact (densification), reducing both the porosity and, more significantly, the volume of the soil. TII has considered and mitigated this with the commitment to a closed-face tunnel boring machine which mitigates the risk of dewatering the surrounding soil, thereby minimising the impact of ground-borne vibrations from the tunnel boring machine on the surrounding soil.
- **Settlement caused by consolidation:** Gillarduzzi concludes that while there is no systematic correlation between the amount of settlement (0–20 mm range) and the location of rivulets and ponds, areas with settlement over 5 mm were often near backfilled rivulets. He also notes that consolidation of pond and rivulet strata likely occurred where settlement from DPT tunnelling works had already triggered dewatering of strata close to ground level, with these settlements observed over a relatively short time frame of one month. The proposed Project uses a closed-face tunnel boring machine to prevent the drainage of these strata removing the risk of settlement caused by consolidation.

The evidence presented at the Oral Hearing illustrated that TII understands the concerns of the homeowners particularly based on the experience at Dublin Port Tunnel and TII has taken due consideration of the findings



of causes of the settlement on Dublin Port Tunnel and proposed a project which mitigates the identified causes of settlement.

A statement is made in the submission received that the evidence given at the oral hearing supports the proposition that areas such as Prospect Avenue and Dartmouth Square have foundation issues comparable to Marino. This is incorrect. The properties at Marino were constructed during 1925 - 1929 and showed signs of being of poorer construction, as evidenced by the damage identified during the Dublin Port Tunnel precondition survey. In comparison, the buildings at Dartmouth Square are of a more substantial construction, showing very little sign of damage caused by the settlement of the foundations since they were constructed between the 1890s and early 1900s. In any event, the paragraphs above detail the measures the MetroLink Project has taken to take account of the ground conditions experienced at Marino and to mitigate the settlement impacts by the choice of a particular TBM.

#### 4.2.4.9.2 Settlement

Observation: One observer (Leo and Anne Crehan) and their structural engineering expert, Mr. Brian Kavanagh, indicated that the predicted ground settlement (up to 30mm) could severely damage the Victorian 3-storey brickwork houses.

Observation: One observer (Grace Maguire) stated that if Metrolink was to go ahead, it would/could compromise the structure our homes.

<u>TII Response:</u> TII notes the statement that "the level of ground settlement indicated by TII (up to 30mm) would severely damage the structural integrity of the 3-storey brick houses". The Phase 2a assessment, which utilises conservative parameters, shows that the expected damage falls into the "Slight" category. This classification implies that any cracks are cosmetic, can be easily filled and not structural, with some redecoration potentially required. The maximum settlement is 26mm with a slope of 1 in 667. However, 11 Dartmouth Square West has been identified for a Phase 3 assessment, which will apply more refined parameters, and account for the sequencing of the work, and is therefore expected to show that the damage category for 11 Dartmouth Square West will be less even than slight.

Mr Kavanagh's statement indicates that these properties should be classified under the damage category DC-4, labelled as "Severe." This assessment is incorrect because it relies on a straightforward calculation assuming this movement is linear and considering the partition wall (8m high and 16m long) as a rigid structure, this could result in a cracking of 20mm between the property's front façade and the dividing wall.

However, the assumptions made by Mr Kavanagh do not consider the actual profile of the ground movement generated by the construction of the tunnels and the station box, which is identified in Section 4.2 of Appendix A5,17 Building Damage Report of the EIAR or the construction of Dartmouth Square West.

This inherent stiffness of the walls and the building itself will also reduce the magnitude of settlement transmitted through the building up to roof level. It is expected that the differential settlement will be less than the settlement experienced at the foundation level. The magnitude of movement that will be experienced by the "daubing" in the roof will be of a similar magnitude that is currently experienced through movements caused by wind/snow loading and the natural contraction and expansion of the roofing materials such as the support timber rafters, slate coverings and lead flashings.

<u>TII Response:</u> In reference to the statement that the construction of the Metrolink Charlemont Station and Tunnel would "could/would compromise the structure of our homes," the Phase 2a assessment, which utilises conservative parameters, shows that the expected damage falls into the "Slight" category for the properties on Dartmouth Square West. This classification implies that any cracks are minor, in the range of 1 to 5mm crack width, these are cosmetic are not structural and can easily be filled, with some redecoration likely needed. However, as 3 Dartmouth Square West has been identified for a Phase 3 assessment, the Phase 3 assessment, will apply more refined parameters and the specific construction sequence is expected to show that the damage category for 3 Dartmouth Square West will be less than slight.

Please also see the Response to POPS (4.2.4.9.4 below) which also deals with this issue.



### 4.2.4.9.3 Traffic & Transport

Observation: One observer, Charlemont and Dartmouth (General Area Submission), commented that an assessment of pedestrian flows in and around Charlemont Station is provided in Appendix A9.2B of the traffic impact assessment. However, the assessment does not consider egress and access from the station entrance onto Dartmouth Road.

One observer (Grace Maguire) has raised a concern regarding the routes around the proposed development and the upgrade proposed for BusConnects to the junction at the top of Rathmines. Ms Maguire states that this will involve all the cars from Rathmines / Rathgar to divert down Ranelagh Rd with only one bridge to cross. This will cause traffic chaos at Ranelagh Bridge and the village of Ranelagh.

<u>TII Response:</u> As stated in section 6.1.3 of Appendix A9.2-B Traffic and Transport Assessment - Charlemont Station, a pedestrian comfort assessment has been undertaken to assess the impact of the Project on the comfort of the footway provisions following the increased volumes of pedestrians on the network in the design years. The Scenario A 2050 design year was assessed, with Scenario A 2065 also assessed as the 'worst-case scenario' for passenger numbers, as this scenario has the highest volume of total AM passenger demand in the future year between both Scenario A and Scenario B. The results show that Dartmouth Road meets the DCC guidelines and is deemed 'comfortable' in both 2050 and 2065, illustrating that no significant impacts are expected on Dartmouth Road as a result of pedestrian volumes. These results are presented in Figure 6.8 and 6.9 of Appendix A9.2-B Traffic and Transport Assessment - Charlemont Station.

Whilst BusConnects will increase traffic on the Ranelagh Road and Rathmines Road as a result of the introduction of a bus gate. It is TII's contention that MetroLink will not increase traffic volumes and will instead reduce car trips in the area.

Traffic modelling in the operational phase has been undertaken in two scenarios. Scenario A incorporates committed transport schemes including BusConnects Dublin Area Bus Network Redesign and Luas enhancements among others, whilst Scenario B presents the 'Likely Future' scenario, which includes schemes included within the National Development Plan and Greater Dublin Area Transport Strategy, including BusConnects Core Bus Corridors (including the Rathmines bus gate) and Luas enhancements, among others. EIAR Chapter 9 Traffic and Transport presents the changes in car trips between the Do Minimum and Do Something scenarios.

Over the 12hr period, the zones within a 2km radius of Charlemont Station see a reduction of over 340 car trips between the Scenario A 2035 Do Minimum and Do Something scenarios, reaching a reduction of over 620 trips in Scenario A 2050. In 2065, there is a reduction of over 830 car trips between the Do Minimum and Do Something scenarios. In Scenario B, these zones see a reduction of over 310 car trips between the 2035 Do Minimum and Do Something scenarios, increasing to a reduction of 350 car trips in 2050. 2065 sees a reduction of 410 car trips between the Do Minimum and Do Something scenarios.

#### 4.2.4.9.4 Noise & Vibration

Six observers (Ciaran Black and Leon McCarthy, Michael A Doyle and Carmel Smith Doyle, John Conway and Orlaith McCarthy, Charlemont and Dartmouth (1, 3, 5 and 7-16 Dartmouth Square), Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road), Charlemont and Dartmouth (Cambridge Terrace no.3 to 11)) have made 8 comments relating to Airborne Noise & Vibration at Charlemont.

In responding TII addresses the comments received under the following sub-headings:

- Updated Appendix A13.7 (Errata Appendix 10) Five comments from five observers; and
- Noise and Vibration Other Seven comments from seven observers.

### Updated Appendix A13.7 (Errata Appendix 10)

Observation: Five observers (Ciaran Black and Leon McCarthy, Michael A Doyle and Carmel Smith Doyle, Charlemont and Dartmouth (1, 3, 5 and 7-16 Dartmouth Square), Charlemont and Dartmouth (Cambridge Terrace no. 3 to 11), Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road) raised issues relating to noise and vibration.



• The observers have compared the original Airborne Noise and Vibration assessment as contained in Chapter 13 of the EIAR (and associated Appendix A13.7) with "Appendix A13.7: Charlemont Station - Errata". The observers noted that there are significant variations in the assessment of airborne noise and vibration in so far as they relate to the properties on Dartmouth Square West/Dartmouth Road/Cambridge Terrace. The document submitted is not an Errata within the meaning of that word. It proposed an assessment of the development with mitigating measures in place. This is effectively a new additional assessment. It is only by carefully examining the documentation that this becomes apparent.

<u>TII Response:</u> TII do not consider this to be accurate. Describing the changes made to the Airborne Noise & Vibration assessment as an "errata" is in no way misleading and nor does it seek to downplay the significance of the revisions made, which are in fact minor.

Calculations of airborne noise during construction at receptors are presented in EIAR Appendix 13.7 where, although unlabelled, pages 17 to 22 present the unmitigated noise predictions and pages 23 to 28 include results considering noise mitigation measures. The calculation results have been updated for some locations, including correction of the naming of receptors on Cambridge Terrace, in Errata on Day 01 of the Oral Hearing, superseding those presented in the EIAR. The construction noise prediction results for the receptors on Cambridge Terrace are however unchanged from those presented in the EIAR documents. The schedule of errata simply notes and corrects the labelling of these properties.

Observation: The overall assessment at 33 and 34 Dartmouth Road is incorrect because the wrong baseline information was used, the ambient noise levels were characterised incorrectly and the information in the EIAR vs the Appendix 13.7 is incorrect. An alternative noise assessment is provided with a lower baseline noise level as comparison. This change in effects is identified as a reason to not permit Charlemont station.

<u>TII Response</u>: It is noted that all baseline monitoring data was corrected to a façade noise level, where relevant, to compare directly to the predicted façade construction noise levels. Baseline noise levels specific to each construction threshold period was calculated from both the unattended and attended monitoring stations

Using the monitoring results from attended monitoring location AT72 within the EIAR which was measured along Dartmouth Road, a CNT of 70 dB L<sub>Aeq,12hr</sub> is applied. As shown in the EIAR noise monitoring appendices, construction noise was audible from the finishing works occurring at the Hines Building development at this monitoring location, however road traffic passing the noise level meter was the dominant contributor to the measured noise level.

In addition to the measured noise levels within the EIAR, a review of the EPA Round 4 Noise Maps (epa.ie/maps) along Dartmouth Road have a mapped free field road traffic noise level of 55 to 60 dB  $L_{den}$  and a mapped free field rail noise level of 65 to 70 dB  $L_{den}$ . Using the lowest mapped levels from the mapped contour ranges for each source and applying a correction between  $L_{den}$  to  $L_{day\,(12hr)}$  of -2 dB for road traffic and -6 dB rail traffic, the corrected cumulative road and rail façade daytime noise levels at 32 to 34 Dartmouth Road is 63 dB  $L_{Aeq,12hr}$ . When rounded to the nearest 5 dB, the value of 65 dB  $L_{Aeq,12hr}$  would apply the Category B CNT of 70 dB  $L_{Aeq,12hr}$ .

Notwithstanding the above, the EIAR and errata documentation has identified No. 33 and 34 Dartmouth Road to experience *significant to very significant* noise impacts at the first floor of the building. As the calculated levels during three phases of work exceed the Noise Insulation trigger value as set out in the *TII Airborne and Groundborne Noise Mitigation Policy (Appendix A14.6)*, these properties are eligible for noise insulation to the facade. This measure would be applied prior to construction works taking place and apply to all noise sensitive windows along the northern façade at ground and first floor. This measure is therefore applied irrespective of a CNT of 70 dB LAeq,12hr or 65 dB LAeq,12hr being applied.

Section 13.6.1.2 of Chapter 13 of the EIAR notes the following:

"The outline CEMP will encompass a Noise and Vibration Management Plan (CNVMP) which will be formulated for the construction phase and used by all contractors based on the mitigation measures outlined in this chapter, in Chapter 14 (Groundborne Noise & Vibration) and the outline CEMP (Appendix A5.1). The CNVMP will be a live document. This will involve a detailed investigation of potential noise and vibration impacts associated with each construction compound. The assessment



will identify through modelling and calculation, predicted construction noise levels, identification of potential exceedance of CNTs, identification of required noise mitigation measures specific to each work area to minimise noise and vibration impacts so far as is reasonably practicable; and

As part of the CNVMP a baseline noise study will be undertaken prior to the commencement of
construction works to characterise the prevailing noise environment at impacted NSLs at that time.
This information will be used to inform the relevant CNTs."

This approach is committed to in the EIAR in recognition of the potential for variation in baseline noise levels over time between the publication of the EIAR and the construction commencement dates.

Should the proposed Project be approved, TII commits to undertaking specific baseline noise measurements at these properties prior to any construction works commencing, with the agreement of the property owner, to confirm the relevant CNT to be used. In line with the EIAR, all updated baseline noise surveys will feed into the specific CNVMP for each construction compound.

Observation: New data submitted during the Oral Hearing regarding blasting and construction mechanical excavation identified there are changes to the significance of the impact without any mitigation being proposed. Two observers have identified that there will be significant effects to 33 and 34 Dartmouth Road from groundborne noise and vibration.

<u>TII Response:</u> Having regard to the Errata Appendix 5 Groundborne Noise & Vibration Amendment submitted on Day 1 of the Oral Hearing

and in in the two separate submissions, Ciaran Black and Leon McCarthy (33 Dartmouth Road), and Michael Doyle and Carmel Smith-Doyle (34 Dartmouth Road) state: "No mitigation for this 'significant impact' from groundborne noise and vibration is proposed in the Rail Order Application" The EIAR Addendum reported significant impacts for groundborne vibration from blasting, and for groundborne noise from mechanical excavation at 33 and 34 Dartmouth Road.

The EIAR Addendum does address mitigation for significant groundborne vibration impacts from blasting. In Table 6-1 on Page 6 of the EIAR Addendum under the column 'Mitigation', the text refers directly back to Section 14.6.1.3 of the EIAR, which states: "The blasts will be designed by the specialist contractor to avoid significant effects. In any case where proximity of receptors or sensitivity of receptors is such that significant effects cannot be avoided due to blasting, then alternatives to blasting will be employed".

Further, more detailed information on the mitigation measures available to reduce the impact of blasting, including the considerations for the blast design, is also presented in Section 14.5.1.2 of the EIAR. Section 6.2 of the EIAR Addendum, presents replacement text that applies to the original EIAR text to include the additional significant impacts highlighted in the EIAR Addendum, including direct reference to significant groundborne vibration impacts from blasting at 33 and 34 Dartmouth Road. With this EIAR Addendum replacement text in place, the unaltered text in the same Section of the EIAR relating to mitigation measures for blasting still applies, and reads:

"Should the above-mentioned mitigation measures not result in a significantly reduced noise and vibration levels such that they are still above the criteria set, then alternative non-explosive excavation methods will be used such as the following: Use of non-explosive blasting techniques, such as expanding grout or rock sawing; and Use of mechanical excavation instead of blasting. "As a result of the application of the stated mitigation within the EIAR, Table 6-1 reports 'Not significant' in the 'Residual Impacts' column for both 33 and 34 Dartmouth Road

Observation: The residents of Dartmouth Square West are unclear about what mitigation was used when Appendix A13.7 Charlemont Station - Errata was submitted and the impact the scheme will have on their houses. This submission references the 33 Dartmouth Road Submission as providing detail of the technical deficiencies in the assessment based on observations from the CDCG expert witness and the RINAs own engineer. They also identified that it was not possible to cross examine the noise consultant because this information was submitted during the Oral Hearing.

<u>TII Response:</u> The submission refers to the baseline noise location used to determine the Construction Noise Threshold (CNT) for Dartmouth Road properties and the views of Kenneth Goodwin based on a report submitted during the Oral Hearing. Whilst it is acknowledged UT52 is closer to the properties along Dartmouth



Road compared to UT51, it represents a baseline noise environment that is screened from road traffic by a greater extent than properties along Dartmouth Square West. UT51 also is significantly screened from road traffic noise and without any façade correction would result in a CNT of Category A.

As discussed on Day 10 of the Oral Hearing with Kenneth Goodwin from Malone O Regan, a CNT of 70 dB LAeq, 12hr is deemed appropriate for properties along Dartmouth Road due to the contribution of road traffic along Dartmouth Road and the contribution from the adjacent Luas Line. These properties are exposed to these two sources to a greater extent compared to properties along Dartmouth Square West for which baseline monitoring location UT52 was applied to. Baseline noise levels specific to each construction threshold period was determined from a review of both unattended and attended monitoring stations. It is noted that all baseline monitoring data was corrected to a façade noise level, where relevant, to compare directly to the predicted façade construction noise levels.

Using the monitoring results from attended monitoring location AT72 within the EIAR which was measured along Dartmouth Road, a CNT of 70 dB L<sub>Aeq,12hr</sub> is applied. As shown in the EIAR noise monitoring appendices, construction noise was audible from the finishing works occurring the Hines Building development at this monitoring location, however road traffic passing the noise level meter was the dominant contributor to the measured noise level. In addition to the measured noise levels within the EIAR, review of the EPA Round 4 Noise Maps (epa.ie/maps) along Dartmouth Road have a mapped free field road traffic noise level of 55 to 60 dB L<sub>den</sub> and a mapped free field rail noise level of 65 to 70 dB L<sub>den</sub>. Using the lowest mapped levels from the mapped contour ranges for each source and applying a correction between L<sub>den</sub> to L<sub>day</sub> (12hr) of -2 dB for road traffic and -6 dB rail traffic¹, the corrected cumulative road and rail façade daytime noise levels at 32 to 34 Dartmouth Road is 63 dB L<sub>Aeq,12hr</sub>. When rounded to the nearest 5 dB, the value of 65 dB L<sub>Aeq,12hr</sub> would apply the Category B CNT of 70 dB L<sub>Aeq,12hr</sub>.

Section 13.6.1.2 of Chapter 13 of the EIAR notes the following:

- "The outline CEMP will encompass a Noise and Vibration Management Plan (CNVMP) which will be formulated for the construction phase and used by all contractors based on the mitigation measures outlined in this chapter, in Chapter 14 (Groundborne Noise & Vibration) and the outline CEMP (Appendix A5.1). The CNVMP will be a live document. This will involve a detailed investigation of potential noise and vibration impacts associated with each construction compound. The assessment will identify through modelling and calculation, predicted construction noise levels, identification of potential exceedance of CNTs, identification of required noise mitigation measures specific to each work area to minimise noise and vibration impacts so far as is reasonably practicable; and
- As part of the CNVMP a baseline noise study will be undertaken prior to the commencement of construction works to characterise the prevailing noise environment at impacted NSLs. This information will be used to inform the relevant CNTs."

This approach has been committed to in the EIAR in recognition of the potential for variation in baseline noise levels over time between the publication of the EIAR and the construction commencement dates.

Should the MetroLink Project be approved, prior to any construction works commencing, TII commits to undertaking specific baseline noise measurements at this property with the agreement of the property owner and to confirm the relevant CNT to be used. In line with the EIAR, all updated baseline noise surveys will feed into the specific CNVMP for each construction compound.

Please refer to Section 13.7.1.1 of the EIAR (reproduced in point 2 of the Charlemont and Dartmouth (Cambridge Terrace no. 3 to 11) observation regarding airborne noise and vibration mitigation proposed in the CEMP).

With regard to the comment that RINA confirmed that "we have not found anything in the documents referring to the height of the noise barrier on any side of the Charlemont Metrolink compound", as confirmed on day 01 of the oral hearing in the schedule of errata, Item 119, the '7m high boundary to Charlemont Compound in Table 13.85 should read eastern boundary '

<sup>&</sup>lt;sup>1</sup> Brink, Mark, Schaffer, Beat, Pieren, Reto, Wunderli, JeanMarc, Conversion between noise exposure indicators Leq24h, LDay, LEvening, LNight,Ldn and Lden: Principles and practical guidance. International Journal of Hygiene and Environmental Health https://doi.org/10.1016/j.ijheh.2017.10.003



At all other locations a 4m high boundary hoarding is proposed, as per Table 13.85 of the EIAR. This was confirmed and discussed at the oral hearing.

Please refer to response to Observation 4.2.4.9.8 for details of when the observers cross examined TII at the Oral Hearing on this and other issues at Charlemont.

Observation: There is a specific observation made by observers, Charlemont and Dartmouth (1, 3, 5 and 7-16 Dartmouth Square West) and Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road), that there were "significant variations in the assessment of airborne noise and vibration in so far as they relate to the properties on Dartmouth Square West".

<u>TII Response: The highest mitigated noise levels with significance ratings of 'Moderate to Significant' along Dartmouth Square West are predicted during the Station Piling Works North and during the Ground Level Excavation Works. Calculated noise levels during these phases range between 65 to 69 dB L<sub>Aeq,T</sub>.</u>

The noise predictions provided in Appendix A13.7 to the EIAR match those presented in Appendix 10 to the Errata. However there was a transcription error in the original table (Appendix A13.7) which incorrectly identified that the effects were not significant for these properties. This error was amended in Appendix 10 of the Errata where the significance was identified as ranging from Moderate to Significant during two phases of work as stated above.

Construction noise levels in this range are in line within the typical construction noise thresholds set for construction works across Dublin City and would not form a rational for refusal of a project. It is noted that outside of these phases of works, the range of noise levels are not significant to slight to moderate. The same impacts for the calculated receiver locations will apply to all adjacent buildings on this row of properties.

Observation: One observer, Charlemont and Dartmouth (1,3,5 and 7-16 Dartmouth Square), makes the following comment in relation to 21 to 29 Dartmouth Square.

- There are no unmitigated results for these properties listed in the Errata; and
- The mitigated results for these properties are then listed in the Errata, but only for station piling works north.

<u>TII Response:</u> TII confirms the Errata Appendix 10 entitled *Updated Appendix 13.7 Charlemont* presents only the items which required correction as per the Schedule of Errata document Items 110 to 113. There are no changes to the unmitigated construction noise levels or construction significance thresholds for properties 21 – 29 compared to the original Appendix A13.7 and Errata Appendix 10 entitled *Updated Appendix 13.7 Charlemont* presents only the corrected items as per the Schedule of Errata document Items 110 to 113. As per item 113, the significance ratings for the mitigated scenario for Station Piling Works were updated. The construction noise levels remain unchanged from the original Appendix A13.7.

Observation: One observer, Charlemont and Dartmouth (General Area Submission) commented that the noise assessment in Chapter 13 and 14 only considers the impacts during the construction phase and the running of trains in the operational phase. They also identify that no assessment is provided of the noise impacts associated with escalators running in the operational phase.

<u>TII Response:</u> All mechanical elements associated with escalators are housed below ground and are fully enclosed. The moving Sections of escalators are covered by the entrance canopies and these elements of escalators are not sources of noise to the surrounding airborne noise environment. Therefore the operation of escalators will not generate any notable noise during operation and will not be audible above the prevailing noise environment.

Having regard to the to the groundborne noise and vibration assessment, the operational groundborne noise assessment criteria are described in Section 14.2.1.1 of the EIAR. For the operational phase a significant effect is identified when an impact magnitude of 'Medium'  $(40 - 44 \text{ dB L}_{Amax,S})$  or above is identified. The EIAR therefore reports significant operational groundborne noise effects at predicted groundborne noise levels of 40 dB  $L_{Amax,S}$  or above.

Whilst not considered to be 'significant', a 'Low' impact is identified where groundborne noise levels of 35 to 39 dB L<sub>Amax,S</sub> are predicted. On Day 10 of the Oral Hearing, TII published a commitment ("Additional GBNV")



Commitment") not only to mitigate significant adverse effects ('Medium' impacts and above), but also to mitigate 'Low' impacts at residential communities. The commitment states:

"TII will ensure that during the operation of the MetroLink passenger service, the operational groundborne noise levels in any lawfully occupied residential dwellings, measured near the centre of any noise-sensitive room, will be below 35 dB L<sub>Amax,S</sub>".

This provides an additional layer of protection to all residential communities potentially affected by groundborne noise from the operation of MetroLink, that goes beyond the specific requirements of the EIA Regulations to describe any measures envisaged "to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment".

Observation: One observer (Michael A Doyle and Carmel Smith Doyle) states that there were:

- (1) Inconsistencies in baseline noise levels and construction noise thresholds.
- (2) That the detached nature of 34 Dartmouth Road was ignored and construction noise levels should extend to the east, west and rear. The observer also refers to the fact that the house is only 5m from the construction site and not 10m as identified in the model.
- (3) That there was incorrect listing of drilling machine noise, compared to machine manufacturers listed noise output.
- (4) That there was incorrect HGV traffic listed on the site.
- (5) HGV back up bleepers were not included.
- (6) The submission also comments that no explanation was offered why Dartmouth Road is recorded as being as noisy as O'Connell Street or the R108.
- (7) The observer notes that the noise report submitted was incomplete and that monitoring took place during construction works at the Hines site.

### TII Response:

(1) Noise monitoring was undertaken during 2022 to add additional locations since the 2018 monitoring programme and to use as a spot check at some locations to determine any significant drift in baseline noise levels. The EIAR was published in 2022 and hence is it fully valid and good practice to have baseline measurements over different years during the preparation of the EIAR over a four year period.

It is clear from Figures A13.1, the description of locations discussed in Table 13.30 of the EIAR Chapter 13 and description and results within Appendix 13.1 – 13.2 that locations described as 'ATT' in Appendix 13.1 are the same locations as those marked 'AT.'

Finishing and fit out works were occurring at the Hines Building during the attended surveys in 2022 along Dartmouth Road as correctly described in the Appendix 13.1. The dominant noise source contributing to the measured noise level at this position was however, passing road traffic along Dartmouth Road and Luas trams.

(2) There are no windows on the west façade of this property. There are small windows along the east of the property at lower elevations to those reported in the EIAR and Errata documents. In any event, the highest noise levels for this property are presented in the EIAR and Errata to cover the worst case scenario in order to allow the significance of effects to be determined.

The noise model takes account of the location of receiver points and on-site noise sources. The closest noise sources will occur during the D-wall construction along this boundary. This phase of works results in the highest calculated noise levels at this boundary. During the remaining phases of works, plant and equipment are at further distances from this property façade.

(3) The noise source data used for the drilling equipment is as per manufacturer's data, as presented in the EIAR. A value of 91 dB at 10m is used for this plant item, it is not quoted as 91 dB at 20m as suggested in the



submission. The sound data has been used in line with published data for this item of plant. The sound data used also aligned with the values quoted in BS 5288-1 Table C9. 1 to 4 for Tracked Mobile Drilling Rig for *Drilling Blast Holes*.  $(87 - 92 \text{ dB L}_{Aeq} \text{ at } 10\text{m})$ .

Section 13.2.5.1.3 of Chapter 13 of the EIAR states:

"calculation of specific construction noise levels during the Construction Phase is limited to information available at EIAR stage. Whilst the phasing of works, location of activities, plant items and work sites have been progressed to detailed stages as part of this EIAR, the nature of the source is dynamic in nature and will vary over the course of the proposed Project at any one location subject to site conditions, work scheduling, contractor proposals and potential updated technology and methodologies."

"Construction noise levels will fluctuate at any one location over the full duration of the proposed Project given the variations in the items above on a week to week or month to month basis. The approach undertaken therefore is to review the likely significant effects across the proposed Project based on the extent of information that is available. This includes prediction of construction noise levels associated with the key work stages deemed representative of the likely worst-case scenarios for each work sites using expected plant types and numbers, and site layout plans provided by the design team. This approach allows the likelihood of significant effects to be identified and to address the way in which potential construction impacts will be managed, including mitigation and codes of practices that will be applied. It is important to note on the basis of the above, the construction noise calculations undertaken as part of the assessment are used to identify the likely significant effects and inform the requirement for noise mitigation and the approach for controlling and managing significant effects. Should the project be approved, prior to the commencement of any construction works, a detailed noise assessment for each work site will be undertaken based on the most up to date information for each".

The noise levels modelled for the use of drilling equipment during underground excavation works is robust for the purposes of calculating and assessing construction noise levels. It is noted, the specific item of plant may in fact be quieter than those modelled in the EIAR.

It is important to note that drilling equipment will be used during the underground excavation phase of works. This item of plant will be below the various concourse slabs and the ground level slab. The airborne noise emission has allowed a 10 dB reduction for drilling equipment below the slab. In reality, this is a conservative value given the depths at which this plant will be operating at, and the screening afforded by the ground floor slab.

- (4) TII have used a conservative estimate of the HGV movements and vehicle on-time for the purposes of noise modelling. TII are confident that these estimates are accurate as they capture time spent by vehicles on site with idling engines. The on time used for the 38 daily HGV movements over a 12-hour day, equates to 7.2 minutes per vehicle and a total time on site for HGV activity as 4.5 hours of the day.
- (5) Section 13.6.1.2.2 of Chapter 13 of the EIAR includes the following noise control at source measure relating to reverse alarms:

"Reverse alarms from mobile plant within construction compounds, will be broadband to reduce tonal elements from this source."

The use of tonal reverse alarms will therefore not be permitted on sites. The layout of the site compound is such that it avoids, as far as practicable the requirement for HGV vehicles to reverse on site, as this is a safety risk.

(6) In response, Appendix 13.1, as discussed and extracted in the submission clearly sets out the noted noise sources along Dartmouth Road, namely: construction from site across the road from monitoring location, road traffic along Dartmouth Road and Luas Trams. Baseline noise monitoring was completed in 2018.

It is reiterated again that baseline noise levels were corrected to include a façade noise level when used in the assessment of construction noise. Noise measurement heights were in all instances above 1.2m ground and were higher, as appropriate for first floor properties.



(7) Figure 4 is directly extracted from the noise monitoring Appendix A13.1 and A13.2. It is unclear why the observer has noted it was not provided in the noise report.

It is also incorrect to state noise monitoring at Location UT51 (2022) was undertaken during site construction at the Hines site. There were no construction works occurring at this site during this monitoring period.

Further noise monitoring was undertaken during 2022 to add additional locations since the 2018 monitoring programme and to use as spot check at some locations to determine any significant drift in baseline noise levels. As stated in TII Response (1) of this section, finishing and fit out works were occurring at the Hines Building during the attended surveys in 2022 along Dartmouth road as correctly described in the Appendix 13.1. However the dominant noise source contributing to the measured noise level at this position was passing road traffic along Dartmouth Road and Luas trams.

Observation: One observer (John Conway and Orlaith McCarthy) stated that TII have been untruthful about the airborne noise surveys completed.

<u>TII Response:</u> TII have not been untruthful about the noise surveys completed. There was some confusion during the OH when this issue was discussed, but TII clarified/corrected any erroneous statements made. To characterize this engagement as TII having "retracted their statement" is incorrect. TII is happy to take this opportunity to re-emphasise that the results of the noise monitoring undertaken for the purposes of defining the noise baseline are clearly set out in Chapter 13 of the EIAR, Appendix A13.1 and Appendix A13.2 and illustrated in Figure 13.1, which have of course been publicly available since September/October 2022.

Observation: One observer (Charlemont and Dartmouth (Cambridge Terrace no. 3 to 11) commented on the following:

- 1. The alleged ineffectiveness of noise barriers during the previous construction project;
- 2. They identified that mitigation proposed in the CEMP relating to airborne noise and vibration, were not specified for houses on Cambridge Terrace as these were not assessed, and that the significance of impacts identified have changed; and
- 3. They queried the selection of receptors assessed along Cambridge Terrace and asked why each individual address along Cambridge Terrace was not presented as a receptor. The submission suggests that those properties in closest proximity (Nos. 4, 6, 8 and 9) have not been assessed and those assessed (Nos. 3, 5 and 7) are likely to be less impacted by properties as they do not benefit from the shielding effects of a rear return.

## TII Response:

(1) TII notes the experience of this property owner with a noise barrier on a previous development. While TII cannot comment on the effectiveness of a noise barrier installed by another (private) developer, it has a lot of prior experience on other public transport projects of the successful deployment of noise barriers. The EIAR also predicts that the residual impacts on this property will be "moderate" following mitigation measures including the noise barrier. The relevant sections of the EIAR are reproduced here:

"Page 9/15: Construction Noise and Vibration

Potential impacts identified due to airborne noise & vibration are presented in EIAR Chapter 13. Proposed mitigation includes 4m high noise barriers and further proposed mitigation in line with the Airborne and Groundborne Noise Mitigation Policy. On the implementation of these measures the residual impacts are predicted to be moderate.

Page 12/15: No profound impacts have been identified for residents and mitigation measures proposed will be effective at reducing the impacts on these properties and in general terms impacts will be associated with the construction phase only. Significant mitigation is proposed to include 4m high noise barriers and further proposed mitigation in line with the Airborne and Groundborne Noise Mitigation Policy. On the implementation of these measures the residual impacts of airborne noise are predicted to be moderate."



(2) The mitigation proposed is identified in Chapter 13 of the EIAR provides a clear description of the mitigation measures that have been included in the mitigated noise models, these are also reproduced in the CEMP.

#### Text from Section 13.7.1.1 of EIAR states:

"Construction Phase noise models have been updated to include for localised screening and enhanced hoarding around construction site boundaries. The measures included in the mitigated scenarios are those which are deemed practicable and can be defined as part of this assessment. For construction compounds where construction noise levels were calculated above the CNTs, the following on-site mitigation measures were included:

- Localised screening has applied to surface level breakers and drills; and
- Enclosures to compressors, generators, pumps, motors and ventilation fans.

It is noted, the mitigated impacts modelled do not take account of other various measures set out in BS 5228-1 (BSI 2009 +A1 2014a) and summarised in Section 13.6.1.2 including selection of quieter plant, control of noise at source and ongoing day to day best practice mitigation measures which control overall noise emissions from construction sites. Where the application of the listed on-site mitigation resulted in residual significant impacts, models were calculated to include enhanced site hoarding as per Table 13.85. Using this approach, the residual noise level across a large number of construction site compounds are suitably reduced to below the CNTs. Construction compounds with residual noise levels above the CNTs are discussed in the following Sections. The full set of calculated residual construction noise levels inclusive of mitigation is included in Appendix A13.7".

With regard to the use of *Noise Control at Receiver: Noise Insulation and Temporary Rehousing* – The MetroLink Airborne Noise and Groundborne Noise Mitigation Policy (Appendix A14.6 of the EIAR) is designed to address special circumstances which will require further mitigation measures to be undertaken by TII in the delivery of the MetroLink project. With respect to the relevant criteria for determining the requirement for noise control at the receiver, these are taken from British Standard BS 5228 – 1 (2009 +A1 2014) *Code of Practice for noise and vibration control of construction and open sites* - Part 1: *Noise.* These measures are used to assist in the control of airborne noise from major infrastructural projects in the UK and have been adopted by TII having regard to the scale and nature of the MetroLink. It is accepted that noise controls at the Receiver can only be implemented with the consent of the property owner, but it is clearly relevant to include a description of same as available, effective mitigation measures.

- (3) The statement to the effect that houses on Cambridge Terrace have not been assessed is incorrect. The noise assessment work has considered addresses by each housing block, and so a listed receptor is also considered to be representative of the attached address to the one listed. For the avoidance of doubt, the following list is applicable:
  - Receptor 34 is listed as 11 Cambridge Terrace. This represents 11 Cambridge Terrace;
  - Receptor 35 is listed as 10 Cambridge Terrace. This represents 9 Cambridge Terrace and 10 Cambridge Terrace;
  - Receptor 36 is listed as 7 Cambridge Terrace. This represents 7 Cambridge Terrace and 8 Cambridge Terrace;
  - Receptor 37 is listed as 5 Cambridge Terrace. This represents 5 Cambridge Terrace and 6 Cambridge Terrace; and
  - Receptor 38 is listed as 3 Cambridge Terrace represents 3 Cambridge Terrace and 4 Cambridge Terrace

Figure 13.2, sheet 30 of the EIAR illustrates the modelled locations along Cambridge terrace with respect to the proposed construction compound area. The closest address in each block is modelled which represents those most impacted along this terrace. All results presented in the EIAR, relate to the highest façade window of the building. In the case of Cambridge Terrace properties, the calculation results for receptors R34 to R38 represent the third floor of the building.

The two closest NSLs to the Charlemont Construction Compound along this Terrace are 11, and 10 Cambridge Terrace. The modelled construction noise levels at these properties (R34 and R35) have the highest calculated



construction noise levels (which relate to the upper floors of these buildings). Moving south, as correctly noted in the submission, the return elements of the adjacent buildings provide screening to the remainder of the residential blocks. The calculated construction noise levels presented for receptors R34, R35 and R36 represent the highest construction noise levels across this row of properties which is clear from the results presented in Appendix A13.7. The assessment locations therefore present a robust set of modelled results for the most impacted properties along this row to establish the range of potential noise impact.

The residual noise impacts are summarised in EIAR Chapter 13 Airborne Noise and Vibration Table 13.90 where the provision of Noise Insulation or rehousing is identified for 11 Cambridge Square (which has been corrected in errata Appendix A13.7 as *Cambridge Terrace*.)

There are no changes to the impact discussed in the EIAR along this terrace of properties. Chapter 13 of the EIAR has identified the provision of noise insulation is applicable at 11 Cambridge Terrace in accordance with the TII Airborne and Groundborne Noise Mitigation Policy, which is presented in Appendix A14.6 of the EIAR.

The EIAR has therefore described the residual effects both in Chapter 13 of the EIAR and within Appendix A13.7 of the EIAR.

Observation: Conor and Lorraine Power, have questioned the following:

- (1) The noise monitoring which has been completed; and
- (2) They referenced their dissatisfaction with reassurance they have received regarding the level of disturbance to their home.

### TII Response:

(1) Noise monitoring equipment was installed at the request of the property owner for a period of one week at their property. As correctly noted in the submission, the results of the survey are lower than those recorded during 2018 at UT52. There was no construction works occurring within the Hines site during the week long monitoring period in May 2018 at monitoring period at UT52.

The 2024 survey which was installed within the rear garden of 5 Dartmouth Square West was north-east of monitoring location UT52. Notwithstanding, the recent noise measurement results from 5 Dartmouth Square West confirm that the baseline noise environment at this location falls within the construction noise assessment Category A as identified in the EIAR Chapter 13 Airborne Noise and Vibration and based on the ABC approach from British Standard 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Noise. This results in the lowest construction noise threshold level applied for the assessment of the onset of significant effects. The construction noise threshold has not changed at this location following the results of the updated noise survey.

The construction noise threshold from Category A sets a daytime weekday limit of 65 dB  $L_{Aeq,12hr}$  for construction noise. This is a conservative construction noise level and is the rationale for the use of the proposed 7m high boundary wall along the construction site boundary along the properties at Dartmouth Square West. As confirmed on day 01 of the Oral Hearing in the schedule of errata, Errata Item 119 notes the following:

Error – Charlemont Compound 7m hoarding states along North Boundary. This should read East Boundary Correction 7m high boundary to Charlemont Compound in Table 13.85 should read eastern boundary.

The height of the barrier was discussed and confirmed during the Oral Hearing on Day 10 during questioning from the Inspector and representatives of the residents along Dartmouth Square West. Options were discussed in relation to providing a transparent element to the top of the barrier and the residual (mitigated) airborne noise levels were discussed relevant to the Dartmouth Square West properties with respect to the proposed 7m high barrier.

(2) TII have engaged with residents in this area on a number of occasions since the MetroLink OH (3 no. individual meetings between TII and the observer since the oral hearing, group attendance at meetings as part of Dartmouth Square West Group and the observer has attended meetings with TII through RINA). This additional engagement with residents in this area is in recognition of the significant concerns of the residents



that were evident in response to the RO application and at the MetroLink OH. Please also note that TII undertook a visit to No. 5 Dartmouth Square West to address specific concerns around the settlement risk to the property and that the visit allowed the MetroLink specialists to confirm the outcomes of the settlement analysis presented at the Oral Hearing. Furthermore, additional noise monitoring was undertaken at this property and this monitoring confirmed to the residents that the baseline noise levels presented in the EIAR and at the OH were accurate.

Observation: One observer, Suzi Taylor, commented that significant noise levels during peak construction periods would be highly disruptive of residents' lives and would make it very difficult for them to plan their lives. She also noted that her property is in the orange/red zone of ground noise contours from the TBM.

<u>TII Response</u>: TII and the property owner have reached an agreement in principle which TII understands addresses all of the concerns which the property owner has with respect to the MetroLink Project. TII will continue to engage with the property owner to formalise this commercial agreement.

Without prejudice to this, the assessment of noise impacts during the construction of Charlemont Station, including the air vent, is presented in the EIAR Chapter 13 Airborne Noise and Vibration. Calculations of airborne noise during construction at receptors including 32 Dartmouth Road (receptor reference 40) are presented in EIAR Appendix 13.7 on pages 23 to 28 including consideration of noise mitigation measures. The calculation results have been updated in Errata on Day 01 of the Oral Hearing, superseding those presented in the EIAR. The results indicate that at 32 Dartmouth Road construction noise levels are predicted to be above the threshold level of 70 dB at 32 Dartmouth Road during Station piling works and below ground station excavation (Years 2 to 6) with a magnitude of impact that is Significant to Very Significant, and during underground excavation and finishing and fit-out (Years 6 to 8) with a magnitude of impact of Moderate to Significant. The residual noise impacts summarised in EIAR Chapter 13 Airborne Noise and Vibration are also superseded by the Errata with construction noise levels calculated to exceed the Noise Insulation trigger value at 32 Dartmouth Road. Were the commercial agreement referred to above not to be formalised and completed, the provision of Noise Insulation or rehousing will therefore be offered to this property owner in accordance with the TII Airborne and Groundborne Noise Mitigation Policy, which is presented in Appendix A14.6 of the EIAR.

Observation: One observer Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road)) noted that 35 Dartmouth Road has not been assessed.

Property Number 35 Dartmouth Road has been considered in the analysis and owing to the lower height of the first floor windows at this property, the 4m high boundary hoarding along the southern site boundary will effectively reduce construction noise levels at this property, in line with those presented in the original EIAR for 34 Dartmouth Road.

### 4.2.4.9.5 Enforceable Mitigation

Observation: Two observers (Charlemont and Dartmouth (1,3,5 and 7-16 Dartmouth Square), and Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road)) state that TII have failed to present appropriate and enforceable mitigating measures which remediate the Noise impacts.

<u>TII Response:</u> TII has presented mitigation which is both enforceable and appropriate to mitigate the potential impacts identified as outlined in the EIAR and the MetroLink OH.

All mitigation measures discussed in Chapter 13 relate to those in Appendix A13.7. Chapter 13 of the EIAR provides a clear description of the mitigation measures that have been included in the mitigated noise models. Text from Section 13.7.1.1 of EIAR is repeated in the Charlemont and Dartmouth (Cambridge Terrace 3-11) submission on mitigation and as discussed and clarified at the Oral Hearing, a noise hoarding of 4m in height forms the boundary hoarding for all boundaries with the exception of the eastern boundary, where a 7m high hoarding is proposed for the eastern boundary of the Charlemont compound. The hoarding height along the eastern boundary was confirmed as per Item 117 in the schedule of errata document and as per questions, clarifications and discussions on Day 10 of the Oral Hearing.

With regard to the use of Noise Control at Receiver: Noise Insulation and Temporary Rehousing – The proposed Project has set out an Airborne Noise and Groundborne Noise Mitigation Policy (Appendix A14.6 of



the EIAR). This TII policy is designed to address special circumstances which will require further mitigation measures to be undertaken by TII in the delivery of the MetroLink.

### 4.2.4.9.6 Triple Glazing

Observation: One observer, Terry Reid, requests that TII provide triple glazing solutions for the windows of their homes.

<u>TII Response:</u> The EIAR outlines TII's approach to the provision of noise insulation in Section 13.6.1.2.7 of Chapter 13 Airborne Noise and Vibration. Further information on the provision of noise insulation is given in the document Airborne and Groundborne Noise Mitigation Policy (Appendix A14.6 of the EIAR). In short, the policy document provides for noise insulation where the predicted noise levels merits or where it can be identified that the provision of noise insulation is merited.

The Airborne & Groundborne Noise Mitigation Policy ('the Policy') sets out the mitigation measures available to individuals where the impacts of airborne and groundborne noise exceeds the triggers set out in the policy.

Under Section 4.2 Noise Insulation, the noise insulation package may consist of:

- Secondary glazing for living room and bedroom windows on eligible facades plus supplementary ventilation if required; and
- Blinds where there is a need to control heat [i.e., south facing windows].

Ultimately, an assessment will be undertaken by suitably qualified professionals / conservation architects and depending on the circumstances, appropriate noise insulation measures can be offered (or the reasonable costs thereof) to eligible occupiers.

### 4.2.4.9.7 Design & Procurement: Luas & Connection

Three separate observers raised 6 comments relating to the provision of the connection to the Luas at Charlemont. In responding, TII address these comments under the following sub-headings:

- Capacity of New Staircase at Charlemont 4 comments from three observers;
- Use of Luas platform as a bridge 1 comment from one observer:
- Provision of an Escalator 1 comment from one observer; and
- Architectural Impact of Staircase at Charlemont 1 comment from one observer.

## Capacity of New Staircase at Charlemont

Observation: In summary, comments raised by the observers (Brendan Heneghan, Leo and Anne Crehan, and Charlemont and Dartmouth (General Area Submission)), centre on the credibility of the figures used by TII of people connecting with the Luas System at Charlemont from MetroLink and whether the existing infrastructure and new staircase provided for access to the Luas platforms could safely cope with the figure of 30,000 passengers per day suggested by the observer, Brendan Heneghan.

<u>TII Response:</u> As presented in Oral Hearing document 'Passengers at Charlemont Station, St Stephen's Green East, Tara Street Stations', modelling indicates that approximately 30,000 passengers will board and alight at Charlemont Station over the 12 hr period in Scenario A 2035, with 36,000 boarding and alighting over a 12hr period in Scenario A 2050. Oral Hearing document 'Review of Charlemont Station Note' presents model outputs which indicate that of the total passengers, over 8,000 passengers over the 12hr period will interchange to/from the Luas and MetroLink at Charlemont Station (Figure 5 of 'Review of Charlemont Station Note').

The pedestrian connection requirements between the Charlemont metro station and the Luas were based on industry standard modelling to determine the appropriate sizing of the facilities required which identified the over 8,000 passengers over the 12hr period will interchange to/from the Luas and MetroLink at Charlemont Station. This is described in the EIAR Appendix A9.2, Appendix A9.2-B Traffic and Transport Assessment-Charlemont Station. Section 6.1.3.1 describes the microsimulation Vis Walk model developed for the



immediate area surrounding Charlemont station, which covers the full extent of the publicly accessible station area, including the proposed stair and lift link to the Luas, and signalised crossing of Grand Parade, to assess the performance of the pedestrian network with the proposed Project in place. The modelling completed confirms that passengers will access and egress from the Charlemont station and disperse into the wider area.

The Vis Walk modelling shows that the Luas platforms perform well in terms of being able to accommodate passenger requirements, operating with a level B Level of Service (A being the least congested, F being the most) in both the 2050 AM and PM Peaks. However, in order to accommodate forecast demand from the Project station a new staircase was proposed. The model did not predict passenger movements that resulted in the Luas platform acting as a bridge, which would have resulted in design amendments.

Due to the processes completed as part of the design approach, which integrated both the microsimulations of passenger movements on the existing platforms and the proposed stairs, there will be no increased safety risk associated with the additional passengers associated with MetroLink, as the infrastructure design of Luas has been developed to allow for the safe access across the alignment at station locations.

### Use of Luas Platform as a Bridge

Observation: One observer, Brendan Heneghan, seeks a response to a point raised at the Oral Hearing on the use of the Luas platform as a bridge, similar to an existing platform at Dundrum Luas Station.

<u>TII Response:</u> TII does not agree that that the Luas platform will be used as a bridge for passengers crossing the canal. As stated in section 6.1.3.1 of Appendix A9.2-B Traffic and Transport Assessment - Charlemont Station, a microsimulation Vis Walk model has been developed for the immediate area surrounding Charlemont station. The simulation model covers the full extent of the publicly accessible station area, including the Luas stop and nearby junctions at Charlemont Bridge, on the north side of Grand Canal, and approaches from Leeson Street and Charlemont Road.

The model includes representation of the following behaviours: MetroLink ingress/egress, street level routing to onward destination, Luas ingress/egress, Luas boarding/alighting, Luas waiting behaviour, Luas lift and stair use, street level routing to onward destinations, and road users. Pedestrian and passenger volumes and origin-destination were extracted from the National Transport Authority's ERM Active Modes Model. Whilst it is possible for passengers to cross the Luas bridge to access Charlemont Street, these are expected to be minimal in number, as evidenced by the high level of service experienced at these locations (shown in Figure 6.13 in Appendix A9.2-B Traffic and Transport Assessment - Charlemont Station).

#### Provision of an Escalator

Observation: One observer, Charlemont and Dartmouth (General Area Submission), made the following comment 'While there is a provision of a lift there is no escalator up to the Luas Station'.

<u>TII Response:</u> The stair design meets the Building Regulation Technical Guidance Document K (Department of Environment, Community and Local Government, 2014) and its performance is tested by a flow modelling.

The installation of escalators would have potential to have a more significant visual impact on the Carroll Building, which is a protected structure, and its landings would impact on the footpath width, compromising the pedestrian traffic. As a result, TII considers the provision of an escalator inappropriate for this location.

#### Architectural Impact of Staircase at Charlemont

Observation: Two observers, Union Investment Real Estate GmbH and Leo and Anne Crehan, raised concerns in relation to the staircase and lift shaft at 2 Grand Parade where it was considered that these would have implications to privacy within the building and the cultural heritage designation of the building.

<u>TII Response:</u> The architectural heritage chapter of the EIAR identified the proposed lift and staircase to the front of the Carroll's Building as having a potential very significant indirect impact on the building, which is a protected structure. To mitigate this potential impact the chapter stated that:

The lift and staircase were to be kept as small as possible;



- They would impinge on the frontage of the protected structure to the least possible extent;
- that the design was to be such as to complement that of the protected structure; and
- Is to be reversible, not being tied into the building.

Following these mitigation measures, TII determines the impact would be significantly reduced.

During the Oral Hearing, more detailed designs for the lift and staircase were produced and shown in a CGI representation and these met the requirements for the mitigation, reducing the potential impact on architectural heritage to significant. As the CGI representation shows, the staircase would cross part of the front of the Carroll's Building, though the staircase would have an open design, minimising the extent to which it would impinge on the view of the building and affecting only a small percentage of the facade of the protected structure. It is noted that in summertime a greater proportion of the facade of the building is obscured by trees than would be obscured by the proposed staircase and lift.

#### 4.2.4.9.8 RO Process - Errata and Examination of Evidence

Observation: Six separate observers (Ciaran Black and Leon McCarthy, Michael A Doyle and Carmel Smith Doyle, Charlemont and Dartmouth (General Area Submission), Charlemont and Dartmouth (1, 3, 5 and 7-16 Dartmouth Square), Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road), Charlemont and Dartmouth (Cambridge Terrace no.3 to 11)) raised 3 similar comments on the issue of Errata Information requested by An Bord Pleanála on Day 1 of the commencement of the Oral Hearing.

In summary, comments raised by the observers in connection with the issue and quantity of Errata documents issued at day one (20) and throughout the course of the Oral Hearing (c200). Observers state that the issue of Errata information is wholly misleading and contrary to the transparency that would be expected for an EIA process. Concerns are raised about the update provided in relation to the assessment of noise where there are clear and contradictory submissions (Appendix A13.7).

<u>TII Response:</u> ABP notified TII by letter dated 8 January 2024 that the Oral Hearing would commence on 19 February 2024. This letter invited those persons who had made submissions to indicate whether they intended to participate in the Oral Hearing. ABP subsequently published an agenda and running order for the Oral Hearing on 31 January 2024. In Appendix 1 of this agenda, ABP set out eight distinct areas (with multiple requirements under several of those headings) which it requested TII to address, one of which was the identification of "any errata or proposed changes, modifications or updates as required, including Draft RO, associated Schedules and property drawings."

Many of the other items requested related to updates (since the RO application was submitted in September 2022, and the Oral Hearing took place in February-March 2024). This was requested by ABP, and TII complied with this request. TII submitted this information on 19 February 2024, and uploaded it online to a dedicated section of its website for the proposed Project, which was clearly labelled "Documents Submitted during Oral Hearing". This included a Schedule of Errata, which identified the specific errors in clear detail, and explained the correction made.

The use of the word "errata" does not "suggest a minor error in printing or text after proof reading has been undertaken", as has been asserted by the observers. Rather, the term has been interpreted in this way by the observers as though this is the only interpretation of the term. This is not correct. As invariably occurs at all oral hearings, the purpose of the errata schedule is to correct identified errors, so that the public and ABP had the correct information for the purpose of reviewing this and for carrying out an assessment.

It is also not correct to say that the RO application was incomplete, that the additional information sought by ABP and furnished by TII results in the application being "in effect, a new application" or that this party has been put at a significant disadvantage or that their rights to fair procedure have been prejudiced. ABP will be aware that —

- By a letter dated January 2024, ABP requested approximately 40 documents to be furnished by TII;
- In common with all CPOs, the Book of Reference was updated to reflect further information which had emerged from the title referencing exercise which continued after the date of the RO application submission date; and



A large number of these documents were either requested by the Inspector or third parties or was
volunteered by TII during the Oral Hearing for the ease of the Inspector/ those third parties. A
significant number of these additional documents were submitted to the Oral Hearing to ensure
currency as due to the passage of time between the application submission and the beginning of this
Oral Hearing.

The issuance of errata documents is a transparent process aimed at maintaining the accuracy of the EIA documentation. It allows Stakeholders to have the most accurate and up-to-date information. Each errata is accompanied by an explanation of the correction made.

During the course of the Oral Hearing, additional information was also provided to ABP upon ABP's request and in response to queries from the public. This information was submitted to offer further clarification and explanation of points of detail, thereby assisting the public's understanding and ABP's decision-making. This information has been on the MetroLink 's RO website since it was uploaded in February-March 2024.

To ensure that the public had sufficient opportunity to review, inspect and comment on these documents, ABP issued a Notice seeking the advertisement of this information pursuant to s.47D(1)(b) of the Transport (Railway Infrastructure) Act 2001, as amended. TII complied with this direction, and the consultation period ran from 19 August 2024 to 8 October 2024 inclusive.

There has been nothing misleading or opaque about this process, or about the material presented to ABP. The process has been transparent and clearly explained at each juncture to both the public and ABP. The errata documents are clearly labelled on TII's MetroLink RO website, as is the final schedule of errata issued after the oral hearing had commenced.

To characterise the correction of specific points of detail as being "effectively a new additional assessment" is simply not accurate or correct. The errata documents were intended to correct identified errors, ensuring that Stakeholders, the public and ABP had the correct information for the purpose of reviewing and carrying out an assessment.

Observation: One observer, Charlemont and Dartmouth (General Area Submission) commented that there is no opportunity now to ask questions of the Applicant in relation to the matters arising.

<u>TII Response:</u> TII notes that Charlemont and Dartmouth Community (General Area), gave evidence and questioned TII's experts on days 9, 10 and 20 of the Oral Hearing on the following issues:

- On Day 9 questions about settlement, construction durations, construction airborne noise and vibration assessment, human health, construction methods, Chapter 30 of the EIAR, interactions, operational airborne noise and vibration assessment and failsafe processes around the TBM.
- On Day 10 questions about the human health assessment, the architectural heritage assessment, mitigation proposed around screening and an alleged violation of Article 43 of the Constitution of Ireland because of the Project.
- On Day 20 questions were raised by this observer about (inter alia), whether Charlemont Station was required and if St. Stephen's Green was a better interchange, commented that considerable amount of people walking through Charlemont would be looking for bus stations or taxis, alternatives assessment impacts on residential amenity, construction duration, the lack of bus connects/pedestrian connection between the northern station entrance and Lesson Street footpath, commented on the ground infrastructure, lack of escalators and only one lift, the traffic assessment regarding drop-offs, the cost of the station box, the cost of the slab installed by the Hines Development and its uses as enabling works for the proposed Project. This observer also queried on that day that number of documents submitted by TII during the course of the Oral Hearing and were told by the Inspector that readvertisement would take place (now called the second round of public consultation or this consultation).

By any metric, this observer engaged fulsomely with the public consultation process in its first submission, over three days of the Oral Hearing and in a comprehensive submission in this second round of public consultation. Any claim of being at a disadvantage or prejudice to its ability to question TII or the RO application are entirely without foundation.



### 4.2.4.9.9 Mitigation and Monitoring

Eight separate observers made 14 comments relating to similar issues on mitigation proposals at Charlemont. In responding TII address the issues received under the following sub-headings:

- Site Hoarding/Acoustic Barrier 2 comments from three observers;
- Temporary Rehousing Policy 3 comments from two observers;
- POPS 4 comments from four observers;
- Enforceable Mitigation 1 comment from two observers;
- Triple Glazing 1 comment from one observer; and
- General 1 comment from one observer.

#### 4.2.4.9.10 Site Hoarding/Acoustic Barrier

Observation: Three observers (Ciaran Black and Leon McCarthy, Michael A Doyle and Carmel Smith Doyle, Charlemont and Dartmouth (1,3 5 and 7-16 Dartmouth Road) expressed concerns regarding the effectiveness of a 4m high acoustic barrier along Dartmouth Road and while the residents of Dartmouth Square West are unclear about what height the proposed noise barrier is, what mitigation was used when Appendix A13.7 Charlemont Station - Errata was submitted and the impact the scheme will have on their houses.

<u>TII Response:</u> A review of Schedule of Errata identifies in item 119, that Table 13.85: Construction Site Hoarding in Chapter 13 of the EIAR should state that at Charlemont Station, a 7m high barrier is proposed along the eastern boundary of the construction compound and a 4m high barrier on the northern, western and southern boundaries of the construction compound. This barrier height is included in the EIAR and errata airborne noise construction calculations.

For Charlemont, the construction noise levels presented in the EIAR and Errata documentation represent a conservative scenario assuming all plant items listed in the Appendix tables are operating simultaneously at any one time. The calculated construction noise levels presented in the EIAR, and errata are used to represent a phase of works, however, on any live construction site, varying levels of activities and process will occur during each phase of works. There will not be a continual level of construction noise at the levels calculated in the EIAR over the full course of the working phases. Due to the constrained nature of the site, it will not be possible for each item of plant modelled to operate for the full duration of each phase of works.

The highest calculated construction noise levels and significance ratings at each assessment location in the EIAR and the Errata documents are extracted for the purposes of impact assessment. The results are used to identify where significant impacts are likely to occur, to focus the requirement for noise mitigation.

For 33/34 Dartmouth Road, the calculated noise levels at ground floor level (representing the living / dining area of the property) are at least 10 dB lower than those at first floor with a 4m high barrier in place. There are no significant residual noise impacts at ground floor level at this property with the inclusion of the mitigation set out in the EIAR. Construction noise levels to the rear of the property will be significantly lower than those along the front property façade and no significant noise impacts will occur beyond the front façade.

Due to various engineering constraints discussed at the oral hearing and the potential for significant visual effects at Dartmouth Road properties, a noise barrier of higher than 4m is not proposed along Dartmouth Road. However No.s 32 to 34 Dartmouth Road are eligible for further mitigation measures as per TII Airborne and Groundborne Noise Mitigation Policy, as set out in the responses to the first round of submissions and as discussed at the oral hearing. The EIAR sets out the approach for dealing with residual construction airborne noise levels that exceed the trigger values as per the TII Airborne and Groundborne Noise Mitigation Policy (Appendix A14.6).

Due to the calculated residual noise levels at the upper floor of No. 32 to 34 Dartmouth Road, the properties meets the trigger values set out within the TII Airborne and Groundborne Noise Mitigation Policy (Appendix A14.6) as discussed at the Oral Hearing.



With the inclusion of Noise Insulation, residual impacts are reduced to moderate. Should temporary rehousing be provided, the occupants will be removed from the source, thus eliminating the specific noise impact during this phase of works.

### 4.2.4.9.11 Temporary Rehousing Policy

Observation: Three observers (Ciaran Black and Leon McCarthy, Suzi Taylor, and Michael A Doyle and Carmel Smith Doyle) provided the following comments on the proposed temporary Rehousing Policy:

- TII's "Temporary Rehousing" policy is designed for noise exceedance that may last for days
  or weeks and clearly is not effective mitigation for a situation where we will be faced with the
  significance of effects outlined for 8.5 years;
- Relocation for a prolonged period is not seen as a realistic option, with concerns about property vulnerability and maintenance in the owner's absence;
- They identified that all reasonable and available mitigation must be pursued before the grant
  of an RO otherwise it would be an unlawful attack on their Constitutionally protected property
  rights. The residents identified that TII had not progressed the acquisition of their house which
  is clearly a reasonable and available mitigation. The observers considered that the Charlemont
  terminus could not be consented in those circumstances; and
- Furthermore, the observers noted that TII has undertaken further assessment post-OH and offered enhanced mitigation measures to nearby residents, but it has not proposed any further engineering solutions to them e.g. no higher noise barrier. The residents state that in their view TII will not bring forward further engineering solutions unless compelled to by a refusal or a condition in the RO.

<u>TII Response:</u> The proposed Project has set out an Airborne Noise and Groundborne Noise Mitigation Policy (Appendix A14.6 of the EIAR). This policy is designed to address special circumstances which will require further mitigation measures to be undertaken by TII in the delivery of the MetroLink Project, it is not expected that these special circumstances will extend for 8.5 years and instead will be discussed with the observers when the relevant criteria for determining noise controls are met. More information on the criteria is presented in the Noise and Vibration responses to the Charlemont residents above. TII also confirms that it is continuing its engagement with each of these property owners.

### 4.2.4.9.12 POPS

Observation: Five observers (Ciaran Black and Leon McCarthy, John Conway and Orlaith McCarthy, Michael A Doyle and Carmel Smith Doyle, Suzi Taylor and Leo and Anne Crehan) commented on

- The effectiveness of the POPS scheme to provide adequate compensation for potential structural damage for their properties, including protected terraced homes built in the 1890 without foundations, and state that cost of remedial works is expected to exceed the maximum payout levels under POPS.
- TII's settlements contour maps which predict ground settlement, which they say could cause substantial damage, including cracks in masonry, misalignment of windows and doors, cracks in chimney stacks, roof alignment issues, and collapsing ceilings.
- Although one observer (Suzi Taylor) was reassured that there will be regular monitoring, they are not assured that damage impacts will be avoided. An observation was made that there is an indication of it being worth the damage to a few for the benefit of others.
- The property owners' scheme with a value of 75000 EUR. They query whether this will be index linked and relate to ever rising costs of renovations and repair should it be necessary.

<u>TII Response:</u> With regard to the overall effectiveness of POPS, TII is confident that POPS coverage limit is at a sufficient level to rectify any slight damage that may occur to this property during the construction stage. In the very unlikely event that the cost of repair of properties exceeds the POPS value limit, the property owner will engage with TII directly to commence the repair process, and in turn with TII's insurers.

In reference to the statement that "the level of ground settlement indicated by TII (up to 30mm) would severely damage the structural integrity of the 3-storey brick houses," the Phase 2a assessment, which utilises



conservative parameters, in fact shows that the expected damage falls into the "Slight" category. This classification implies that any cracks are cosmetic, can be easily filled and not structural, with some redecoration likely needed. The maximum settlement is 26mm with a slope of 1 in 667. However, as 11 Dartmouth Square West has been identified for a Phase 3 assessment, the Phase 3 assessment, which will apply more refined parameters, and account for the sequencing of the work, and is therefore expected to show that the damage category for 11 Dartmouth Square West will be less than slight. The purpose of the Phase 3 assessment is a) to further refine the settlement assessment and b) to identify which mitigation measures identified in the EIAR will be applied to this specific property.

TII notes that the highest risk of subsidence occurring will be during the station construction and tunnelling phase that will be completed in the first 6 years of the Project. With POPS coverage extending into an additional year post-opening, TII is confident that the period of time between the completion of the station and tunnel construction works, and the end of the POPS coverage period is an appropriate time to detect any further potential subsidence should it occur.

The value of €75,000 will be subject to adjustment, in line with the Consumer Price Index, with adjustments to commence from the date of the grant of an enforceable RO.

### 4.2.4.9.13 House Acquisition

Observation: The observers (Ciaran Black and Leon McCarthy, and Michael A Doyle and Carmel Smith Doyle) states that TII has not progressed the acquisition of the observers' house(s) which is clearly a reasonable and achievable mitigation. The Charlemont terminus cannot be consented in those circumstances.

<u>TII Response:</u> All reasonable and achievable mitigation of avoidable impacts are included within the application for a RO for MetroLink. The submission states that (a) acquisition of this property is a "reasonable and achievable mitigation" and (b) that all "reasonable and available mitigation" must be pursued before a RO may be granted. But acquisition by any developer of a property in order to eliminate an impact is a mitigation measure which in theory is available in every case. TII submits however that any failure to acquire a particular property cannot effectively give that property owner a right of veto over the consenting of vital public transport infrastructure. This would of course make development of any such public infrastructure prohibitively expensive at best and in practice impossible. All of that being said, TII confirms that it is continuing to engage with this property owner.

## 4.2.4.9.14 Alternatives

Observation: Three observers (Ciaran Black and Leon McCarthy, Michael A Doyle and Carmel Smith Doyle, and Charlemont and Dartmouth (General Area Submission)) provided the following comments relating to an alternative location for a station:

- (1) The assertion that the constitution (Article 43) supports their conclusion that Charlemont is the wrong location for a metro station.
- (2) That the Project has failed to recognise that the conversion of the Luas Green Line to Metro as far as Sandyford has effectively been abandoned.
- (3) Charlemont does not fall within any definition of the city centre and the rational for having a station at Charlemont no longer exists.
- (4) There is an inadequate assessment of alternative alignments, station locations, station design at Charlemont and future alignments.

## TII Response:

(1) TII acknowledges the fundamental constitutional protection afforded to private property under Article 43 of the Irish Constitution and agrees with the Observer's submissions that this right is not absolute. TII is satisfied that the delivery of MetroLink serves a legitimate objective in addressing community and social needs, which will be fulfilled through the implementation of the RO. MetroLink represents a transformative and urgently needed piece of public transport infrastructure.



While any interference or encroachment on property rights is regrettable, it is necessary and pursued in the most restrictive and proportionate manner possible. TII is satisfied that the implementation of MetroLink will not constitute an unjust attack on property rights. All reasonable and achievable mitigation of unavoidable impacts are included within the application for a RO for MetroLink.

- (2) Specifically relating to the comment about the conversion of the Luas Green Line, this assessment process considered passenger demand and footfall functions to both serve the local areas around canal and south city fringe areas south of canal. The overall alternatives assessment was presented in Chapter 07 of the EIAR, available on MetroLinkro.ie. Then there was a consideration of whether MetroLink should continue down the Luas Green Line as far as Sandyford. This assessment identified that any such proposal would involve significant disruption to the Luas Green Line for a long period of time. On that basis a decision was made that the Luas Green Line would not be upgraded to MetroLink standard. As a result, this went out to public consultation and analysis was undertaken as to where the most appropriate station location would be for the southern end of the alignment to terminate. This analysis (informed by the public consultation process undertaken) identified Charlemont as the optimal station location on the basis of the interchange opportunity at that location. This analysis (informed by the public consultation process undertaken) identified Charlemont as the optimal station location on the basis of the interchange opportunity at that location, this consultation is presented in Chapter 8 of the EIAR, available on MetroLinkro.ie. It was acknowledged that while the proposed Charlemont station would be underground, based on passenger modelling it offered a quicker connection to Luas when compared to St Stephens Green. In addition, there was also an analysis undertaken of future demand and how this would be best served. The section of Luas from St Stephens Green West as far as Charlemont is highly constrained in terms of passenger numbers that can use this into the future. By providing a MetroLink between St Stephens Green East and Charlemont there is a potential to add to this capacity, so the predicted constraints are avoided/ substantially mitigated. One of other main considerations was the avoidance of significant additional impacts on St Stephen's Green Park were it to be chosen as the terminus.
- (3) The submission to the effect that Charlemont does not fall within any definition of the city centre and the rationale for having a station at Charlemont no longer exists is assumed to refer to the statement in the Greater Dublin Area Transport Strategy 2022-2042 that: "Between the Airport and the South City Centre terminus, there are also major population centres such as Ballymun and Glasnevin, plus the North City Centre defined by its commercial, retail and cultural attractions" (section 12.3.2). Any suggestion that reference to "the South City Centre terminus" excludes the Charlemont station is plainly dispelled by the numerous references to Charlemont station in the Strategy document. Not least in the same section (section 12.3.2) where the Strategy goes on to say: "Charlemont offers the optimal location for the primary interchange with the Green Line in response to growing demand in the longer term and is an appropriate location to facilitate any potential future metro extensions to serve the south west, south or south east of the city region should sufficient demand arise".
- (4) TII confirms this issue was raised on Day 20 of the Oral Hearing and the response given was to reconfirm there had been an extensive alternative assessment completed. The overall alternative assessment was presented in Chapter 07 of the EIAR reported on as required by the EIA directive is robust and addresses the Project development from inception to the current RO status.

### 4.2.4.9.15 Consultation

Observation: Two observers (Ciaran Black and Leon McCarthy, and Michael A Doyle and Carmel Smith Doyle) provided a similar comment relating to engagement with TII. In addition, one observer (Conor and Lorraine Power) made observations about the lack of engagement and unsatisfactory reassurances from TII. The observers have found it difficult to make substantial progress in discussions with TII.

<u>TII Response:</u> While TII regrets any frustration experienced by the observers, TII also notes that there has been substantial and meaningful engagement with the observers both pre- and post-Oral Hearing, TII further notes that engagement with these property owners continues.

TII regrets that this observer does not believe that they received satisfactory reassurance at the recent meeting regarding the potential impacts of the proposed works on their home. This additional engagement with residents in this area on a number of occasions since the Oral Hearing is in recognition of the significant concerns of these residents that were evident in response to the RO application and at the Oral Hearing. Please also note that TII undertook a visit to No. 5 Dartmouth Square West to address specific concerns raised



by Mr and Mrs Power around the settlement risk to this property and that the visit allowed the MetroLink specialists to confirm the outcomes of the settlement analysis which was presented at the Oral Hearing. Furthermore, additional noise monitoring was undertaken at this property and this monitoring confirmed to the residents that the baseline noise levels presented in the EIAR and at the Oral Hearing were accurate.

### 4.2.4.9.16 Impact

Seven observers provided 11 comments relating to anticipated impacts from MetroLink. In responding TII address the comments received under the following sub-headings:

- Individual receptor impacts 4 comments from two observers;
- Property Valuations 3 comments from three observers;
- Traffic Management 1 comment from one observer;
- Amenity 2 comments from two observers; and
- Protected Structures 2 comments from two observers.

#### **Individual Receptor Impacts**

Observation: Two observers (Ciaran Black and Leon McCarthy and Michael A Doyle and Carmel Smith Doyle) commented that:

- The impact from the project would lead to the effective demolition of 33 and 34 Dartmouth Road.
- The observers reference reports made by their own experts to the Table (Appendix A13.7 Errata) issued during the Oral Hearing and concludes the assessment of impact on 32 Dartmouth Road (and therefore adjacent properties 33 and 34 Dartmouth Road) will be too great to endure in the house.
- Based on a review of the documents submitted during the Oral Hearing, the respondents have decided the scheme will make their dwelling unusable and ABP cannot rely on TII to actively seek solutions with impacted parties.
- Total cumulative impact a) has moved to "significant" or "very significant" on the basis of TII's further information at the OH and b) in fact is worse than the further information that TII is presenting.

<u>TII Response:</u> While TII empathises with the concerns raised by the residents, it is important to clarify that the MetroLink Project does not entail the physical demolition of their property or any part of it. The EIAR and supplemental additional impact assessments presented at the Oral Hearing clearly identify, describe, and assess the impacts of the proposed railway works on this property. The owners have called upon TII in their submission to engage meaningfully to mitigate these impacts and TII confirms that it has and continues to do so.

TII would also refer observers to the Metrolink Airborne and Groundborne Noise Mitigation Policy which includes noise insulation and temporary rehousing measures.

#### **Property Valuations**

Observation: Four observers (Charlemont and Dartmouth (1,3,5 and 7-16 Dartmouth Square), Charlemont and Dartmouth (Cambridge Terrace no. 3 to 11), Suzi Taylor and Niall Parsons have raised concerns regarding property values. The observers state that:

- They have submitted professional valuers reports which say the impact on their properties will be negative and significant. TII have not produced any evidence to counter this and the impact was defined and temporary though the EIA guidance states temporary is 1 year.
- There will be significant project impacts for 8.5 years. This is not "temporary" in EIAR terms it is a medium-term impact. This will inevitably lead to a diminution of property values.



- The development will have a considerable long period of upheaval potentially affecting properties values.
- Planning decisions should not adversely affect third party amenities with any associated devaluation of property and Article 43 of the Constitution protects property rights. This development if permitted would infringe those rights.

<u>TII Response:</u> A number of parties who are owners and/ or residents of Dartmouth Square and Cambridge Terrace make submissions to the effect that property valuation evidence has been put before ABP as to the impact of the proposed Project on the value of their properties. This is not in fact the case. The only property valuer evidence that has been submitted to ABP is by the owners of 33 and 34 Dartmouth Road comprising a two page "capital value impact assessment report" dated 4 March 2024 from deVere White & Smyth Limited (the "DVWSL Document").

Crucially, the EIAR shows that the impacts during the construction phase on these properties are different and of a different order of significance to the impacts on properties at Dartmouth Square and Cambridge Terrace. The DVWSL Document is a very high-level assessment based entirely on opinion rather than comparable valuation evidence from either Dublin (with regard to Luas or other public transport systems) or other European or international cities (with regard to metro systems).

TII recognises that living in close proximity to major construction works raises valid concerns about the future value of the Observer's property during the construction period. However, as stated in previous responses, there is evidence from both Dublin (with regard to the development of the Luas system) and other European cities with regard to metro systems (for example, the Elizabeth Line in London) to suggest that property values in proximity to public transport infrastructure tend to increase over the long term. This is based on the fact that enhanced accessibility and connectivity generally make these areas more desirable. Therefore, once the MetroLink is operational, the long-term benefits of having a world-class metro system providing access to key areas of the city are anticipated to outweigh the shorter-term effects (including any impacts on property values) which this imposes.

TII acknowledges the fundamental constitutional protection afforded to private property under Article 43 of the Irish Constitution, however this right is not absolute. TII is satisfied that the delivery of MetroLink serves a legitimate objective in addressing community and social needs, which will be fulfilled through the implementation of the RO. MetroLink represents a transformative and urgently needed piece of public transport infrastructure.

While any interference or encroachment on property rights is regrettable, it is necessary and pursued in the most restrictive and proportionate manner possible. TII is satisfied that the implementation of MetroLink will not constitute an unjust attack on property rights. All reasonable and achievable mitigation of unavoidable impacts are included within the application for a RO for MetroLink.

### **Amenity**

Observation: Five observers (Grace Maguire, Suzi Taylor, Niall Parsons, Ciaran Black and Leon McCarthy and Michael A Doyle and Carmel Smith Doyle) have raised concerns regarding how the amenity of the area will be changed during the construction and operation of the proposed Charlemont interchange, noting that:

- The development will transform a quiet residential neighbourhood into a noisy, busy and congested major transport hub, leading to a loss of amenity for the wider community. The project will change the character of the area. The noise will be intolerable even with the proposed wall; and
- Long term uncertainty has impacted on plans to renovate property. Quality of life will be impacted and reduction in use of outdoor space due to noise etc. of development. Even though it may fall just within what is assumed to be acceptable levels, it does not mean it is an acceptable level for relaxing and enjoying the outdoor/indoor spaces of our property.



Observation: One observer (Suzi Taylor) was concerned about the impact to quality of life because of the 4m high hoarding required during the construction phase and issues around littering outside 32 Dartmouth Road, when the road was closed.

Observation: Two observers (Ciaran Black and Leon McCarthy and Michael A Doyle and Carmel Smith Doyle) state the ineffectiveness of the proposed 4m noise barrier and the further negative impacts in terms of "fencing us in" for a minimum of 8.5 years, restricting light and causing access, safety and security issues representing further "unjust interference" and our right to be "peaceful enjoyment of our property".

<u>TII Response:</u> With regard to the amenity issues relating to the construction and operation of MetroLink, TII confirms they have committed to working with DCC to ensure any illegal parking in the area is discouraged.

TII acknowledges that the proposed Project would involve impacts on residents' enjoyment of their property during the construction phase, but TII notes that assessments made in the EIAR regarding air quality, air and groundborne noise and vibration, human health are made using industry standard methodologies so it can provide an objective assessment of the impacts of the Proposed Development. These assessments and the various measures which TII have proposed in order to eliminate, reduce or manage these impacts are described and assessed in the EIAR in accordance with TII's legal obligations.

Specifically relating to airborne noise and vibration, a detailed modelling exercise has been undertaken to provide a robust and detailed understanding of the noise levels during the construction phase. This evidence was presented in the EIAR and at the Oral Hearing and confirms that there is potential for significant to very significant impacts on some properties, if not mitigated. However, the modelling also indicates that the proposed mitigation measures (as per the EIAR and Errata presented at the Oral Hearing) will be effective in reducing the significance of these effects. In addition, the noise policy will allow for the implementation of additional property specific mitigation measures if required to further mitigate residual impacts. These measures include noise insulation and temporary rehoming, where deemed appropriate.

Chapter 10 of the EIAR (Human Health) recognises that there will be a temporary loss of amenity during construction, and that loss of amenity could cause potential health and psychological impacts. However, it is noted that these effects can be mitigated by individuals undertaking physical and social activity in other parks or sporting facilities in the area.

Chapter 11 of the EIAR identified potential environmental effects on neighbourhoods and neighbourhood Amenity. These impacts will bring about varying degrees of effects on residential amenity and local communities during different stages of the construction works as assessed in Chapter 11 of the EIAR. The mitigation measures to ameliorate these effects will include providing a Community Relations Officer to provide for community engagement during the construction phase.

#### **Protected Structures**

Observation: Two observers (Suzi Taylor and Leo and Anne Crehan) have raised concerns regarding how the Proposed Development will impact the Protected Structures at the Charlemont station location, noting that:

- If Section 28 states that the Railway Order is exempt from 2000 Act Provision Part 4, Protected Structures, does this impact the designations on the buildings within Dartmouth Road?;
- The railings on the frontage of 32 Dartmouth Road are part of the architectural heritage designation and these may be undermined by the Proposed Scheme; and
- The proposed open stairway from the Luas platform will obscure and diminish the value of the Carroll's Building, a protected structure.

<u>TII Response:</u> TII confirms the RO does not negatively impact on the Protected Structure Status of 32 Dartmouth Road. Nor does it mean the Proposed Development has not had due regard of the designation, the designation has been used to inform the assessment of Architectural Heritage (Chapter 26 of the EIAR). The assessments contained in the EIAR confirm that no impacts are predicted that would undermine the preservation value of the properties on Dartmouth Road.



TII acknowledge the railings on the frontage of 32 Dartmouth Road are part of the Protected structure designation. Protective measures will be put in place to ensure that the railings are not damaged during the construction phase. However in the unlikely event of any damage occurring to the railings due to construction activity, these will be repaired by TII. With regard to potential for settlement to impact the protected structure, EIAR Appendix A 5.17 Building Damage Report covers the assessed impacts of construction-generated ground movements and settlement. 32 Dartmouth Road is a Protected Structure, so it has been designated as "special." Hence, despite the impact only being assessed as 'slight,' a further Phase 3 refined assessment will be undertaken. This assessment will take account of the final design and construction methodology details, utilising advanced numerical modelling techniques and further surveys of the building and its curtilage including the railings where required. The results of this refined assessment typically show that earlier assessments are conservative and overestimate the likely impact of construction-generated ground movements.

The architectural heritage chapter of the EIAR identified the proposed lift and staircase to the front of the Carroll's Building as having a potential very significant indirect impact on the building, which is a protected structure. To mitigate this potential impact the chapter stated that:

- The lift and staircase were to be kept as small as possible;
- They would impinge on the frontage of the protected structure to the least possible extent;
- that the design was to be such as to complement that of the protected structure; and
- Is to be reversible, not being tied into the building.

Following these mitigation measures, TII determines the impact would be significantly reduced.

During the Oral Hearing, more detailed designs for the lift and staircase were produced and shown in a CGI representation and these met the requirements for the mitigation, reducing the potential impact on architectural heritage to significant. As the CGI representation shows, the staircase would cross part of the front of the Carroll's Building, though the staircase would have an open design, minimising the extent to which it would impinge on the view of the building and affecting only a small percentage of the facade of the protected structure. It is noted that in summertime a greater proportion of the facade of the building is obscured by trees than would be obscured by the proposed staircase and lift.

### *4.2.4.9.17 TII Indemnity*

Observation: Five observers (John Conway and Orlaith McCarthy, Leo and Anne Crehan, Charlemont and Dartmouth (1,3,5 and 7-16 Dartmouth Square), Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road), and Terry Reid) requested TII indemnify residents in the event of structural damage to their homes. The observers require:

- That the residents will have direct recourse to TII itself and not to the contractor or any insurance company in the event of structural damage to their homes; and
- That TII indemnify the residents against all losses and damage and restore our homes to the original condition.

<u>TII Response:</u> TII confirms that in the unlikely event of structural damage to a property as a result of the MetroLink works, the property owner will engage with TII directly to commence the repair process, and in turn with TII's insurers.

As is standard for large infrastructure projects, MetroLink will have comprehensive project insurance in place to address any potential issues. TII will therefore not be in a position to offer individual indemnification/guarantees which could negatively impact the ability of such policies to respond to any claims made. Notwithstanding the standard requirements of its insurance policies, however, TII will establish Local Liaison Officers to help facilitate "hands on" Stakeholder engagement and responsiveness in addition to technical support available to residents from the Independent Engineering Expert service. This is in addition to, and does not affect, property owners' entitlements under the POPs scheme.



#### 4.2.4.9.18 Construction of the Perimeter Wall at Charlemont extending diaphragm walls instead of secants

Observation: Five separate observers (John Conway and Orlaith McCarthy, Leo and Anne Crehan, Charlemont and Dartmouth (1,3,5 and 7-16 Dartmouth Square), Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road), and Terry Reid) have raised similar comments relating to the construction technique proposed for the perimeter walls of the station at Charlemont:

- (1) Settlement can be caused by groundwater leakage into the excavation. The observers advocate for the use of a diaphragm wall (D-wall) to prevent water ingress, which is cited to be more effective than the secant pile wall. The observers express concern that TII is considering using a secant pile wall instead of a D-wall, despite the latter being more effective. They request that the D-wall be specified as mandatory in the tender documents;
- (2) TII's proposal includes a D-wall only behind some houses, with a secant pile wall behind others. The observer requests a continuous D-wall behind all houses to mitigate settlement risks; and
- (3) It should be a condition of any planning permission that D-walls construction is used for the construction of all the Charlemont station exterior walls.

#### TII Response:

(1) The perimeter structural station walls, either in diaphragm walls (D-walls) and secant piles are proposed as part of the proposed Project design to ensure that the full lateral extents of all excavations are 'water-tight', thus minimising the risk of settlement as a consequence of ground consolidation from dewatering.

While TII has acknowledged that Diaphragm Wall (D-wall) can be more efficient than secant piling in excluding water ingress, either solution can achieve the desired outcome by ensuring that adequate design, tolerances and construction control practices are implemented through the procurement of the main works contractor.

What is fundamental for the success of either solution is that groundwater ingress is controlled by the completeness and integrity of the secant pile wall or D-Wall perimeters and their position with respect to bedrock. The anticipated infiltration of the ground water through the completed perimeter walls were assessed in Appendix A19.8 of the EIAR, and the methodology to achieve full efficiency of the system is already proposed in the EIAR, with the details outlined below.

(2) Settlement risk may be created by ground consolidation under buildings if the water table is lowered well below existing seasonal variations. The highest potential for this to occur is during the excavation of the station box at Charlemont.

To prevent this from happening, the proposed Project has set the requirements for the design and construction of the perimeter diaphragm and/or secant piled walls around each station to ensure that the full lateral extents of all excavations are 'water-tight' during the construction process.

The requirements of the design and construction process to achieve a 'water-tight' perimeter wall around each MetroLink Station is set out in Chapter 19, Section 19.6.2.2. The full efficiency of the system preventing water ingress incorporates the following recommended measures:

- The design of the D-walls or secant piles perimeter will be extended deep enough to lengthen the groundwater flow path to minimise water ingress;
- After the completion of the D-Wall or Secant Piling perimeter, site specific pumping tests will be carried
  out in advance of the excavation works to ensure that no excessive external drawdown will occur,
  providing adequate groundwater cut-off;
- In the event of an inadequate cut-off being achieved, then further permeation grouting will be undertaken. This will involve the drilling of additional grout injection holes within or outside the box footprint. The results of further grouting activities will be checked by further deep well pumping checks;



- Monitoring and control measures to check on any potential variations in the phreatic level will be
  designed based upon the outcomes of the site pump tests and a perimeter of vertical bored holes will
  be provided with two principal functions, namely to;
- Monitor the piezometric level outside the excavation footprint;
- Maintain and stabilise the phreatic level by injecting pressurised water where it is deemed feasible (Groundwater recharging); and
- During the excavation process, should defects in the perimeter D-Wall or Secant Piles be discovered, then such defects will be rectified by grouting or structural repairs as needed to maintain the integrity of the perimeter structures preventing water ingress.

Full compliance with the requirements set out in Chapter 19, Section 19.6.2.2 will ensure that during the station's construction, any impacts from the dewatering process will be confined to within the site boundaries cut-off by the perimeter structure of the station, ensuring that any variations in ground water levels will remain only subject to any seasonal variations.

(3) The draft RO application makes provision for flexibility in the final choice of construction technique used to construct the perimeter structures of the stations, where Chapter 5, Section 5.1 refers to alternatives to D-Wall with the following:

'It is however possible that subsequent design and build contractors propose alternative layouts, sequencing, equipment and / or methodologies to the benefit of MetroLink and the wider community. The use of alternatives is not precluded so long as the overarching environmental impact of the work is not any different to, or any greater than that assessed in the EIAR, and it is accepted by TII.'

At the Oral Hearing TII requested that this flexibility was maintained at Charlemont, primarily for the purpose of constructing the Northern Entrance Structure, which differs from the remainder of the perimeter structural wall around Charlemont Station as follows:

- Shallower excavation, approximately 12m deep compared to 30m in the deepest part of the station;
- Consequently, the structural perimeter walls are designed narrower, 0.5m compared with 1.0m elsewhere; and
- The slimmer perimeter walls, requires less land acquisition, which is particularly important adjacent to the laneway at the rear of properties 15 to 17 Dartmouth Square West.

A structural perimeter wall cannot be achieved in D-Wall at the Northern Entrance under the planned land take proposed in the submitted RO application. In those circumstances and given that engineering best practice allows for either secant piling or D-Wall, TII is seeking to retain flexibility in which construction methodology to deploy at this location (as with the rest of the alignment).

#### 4.2.4.9.19 Land Take

One observer (Union Investment Real Estate GmbH) has requested land take and parking be resolved regarding land acquisition matters, including wayleaves / rights of way and surface areas remain in charge of TII following completion and during the operation of MetroLink.

<u>TII Response:</u> TII requests that ABP confirms the CPO in the form applied for in the RO TII acknowledge the support from the observer and can confirm that through continued engagement post Oral Hearing, substantive progress has been made to reach agreement between the parties on matters relating to land take and parking. In those circumstances, TII requests that ABP confirms the CPO in the form applied for in the RO application.

### 4.2.4.9.20 Seeking Costs

One observer (Charlemont and Dartmouth (General Area Submission)) states that costs should be offered.



<u>TII Response</u>: The question of awarding costs to any third party is a solely matter for ABP's discretion.

### 4.2.4.9.21 Enabling Works

One observer (Charlemont and Dartmouth (General Area Submission)) states that the EIAR failed to adequately describe all aspects of the development, particularly the enabling works already undertaken at Charlemont and further elements of the project.

<u>TII Response:</u> The description of the development is presented within Section 4.17.12 Charlemont Station, Chapter 4 of the EIAR which provides a detailed description of the relationship between the proposed Charlemont Station, and the planning permission granted to Hines in April 2019 for Two Grand Parade including the refurbishment of Carroll's Building (an eight-storey office building), demolition of the warehouse at the rear, provision of offices and other works. The relationship between these elements was also further discussed on Day 20 of the Oral Hearing.

# 4.3 Submissions by Group 3: Other submissions that are not location specific or address themes that cover a number of locations or are route wide.

There were 10 No. submissions received from individuals or groups that were not location specific. These were from the following:

- Association Of Combined Residence Associations (Catriona McClean & Tom Newton);
- Metro South West Group;
- An Taisce:
- Cormac McKay and Aeravai;
- D Holohan;
- Donal O'Brolcháin;
- Dublin Cycling Campaign;
- NAMAI DAC;
- Andrew Whelan; and
- Dublin Commuter Coalition.

The new issues raised by these individuals or groups are addressed below and cover the following themes:

- Need for the Scheme Business Case;
- Soils and Geology:
- Design and Procurement; and
- Alternatives.

# 4.3.1 Submission: Association Of Combined Residence Association (Catriona McClean & Tom Newton) (ACRA)

The ACRA submission addressed a single new issue related to the following:

Need for the Project.



#### 4.3.1.1 Need for the Project

Observation: EU Transport Policy Compliance: The submission emphasises the importance of aligning with the Trans-European Transport Network (TEN-T) policy, which aims to develop a coherent, efficient, multimodal, and high-quality transport infrastructure across the EU. ACRA argues that the MetroLink Project does not align with EU policy as it fails to integrate and connect existing infrastructure effectively.

<u>TII Response:</u> The TEN-T Regulation (Regulation 2024/1679) was adopted on 13 June 2024. Its purpose is to establish guidelines for the development of a trans-European transport network. Article 34 requires airports with a total annual passenger traffic volume of more than 12 million passengers, such as Dublin Airport to be connected to the trans-European railway network. These connections should consist of high-speed railway network where possible, allowing long-distance services by 31 December 2040, except where specific geographic or significant physical constraints prevent such connection. The Irish Rail corridor connecting Northern Ireland through Dublin to Cork is part of that network. Member States can also apply to the European Commission for an exemption from this requirement on the basis of specific geographical or significant physical constraints, negative result of socio-economic cost-benefit analysis or significant negative impacts on environment or biodiversity.

As part of the Government approval process for the MetroLink project, an expert assurance review of the MetroLink Preliminary Business Case was undertaken by JASPERS on behalf of the Department of Transport. As part of this review JASPERS considered the alignment of the project proposal with the main policies of potential grants and/or financing entities such as may be available under TEN-T or through EIB financing. As part of discussions with TII, JASPERS recognised that based on the initial assessments undertaken as part of the Fingal North Dublin Study, and the GDA Transport Strategy 2016-2035 the provisions of the TEN-T regulations 1315/2013 had been considered. JASPERS noted that here is a clear focus of heavy rail in the elaboration of the priority on connectivity to airports, however it was recognised that for the Dublin this strategic connectivity to Dublin Airport would be delivered by metro, with onward connectivity to inter-urban corridors available through an interchange at the relevant railway nodes (Tara Street, Glasnevin and eventually St Stephens Green).

The MetroLink alignment allows for interchange with all other public transport in Dublin and beyond by allowing for rapid interchange with DART and DART+ services, existing heavy rail services, Luas and public and private bus services.

It should also be noted that the concept of allowing heavy rail services utilise the same tracks as MetroLink as proposed by ACRA is not compatible with the MetroLink model that will allow for high frequency, automated services along this alignment thereby creating a critical corridor connecting all of the above-mentioned transport services. The MetroLink alignment allows for interchange with all other public transport in Dublin and beyond by allowing for rapid interchange with DART and DART+ services, existing heavy rail services, Luas and public and private bus services.

### 4.3.2 Submission: Metro South West Group

The Metro South West Group (MSWG) submission addressed a single new issue related to the following:

Need for the Project.

### 4.3.2.1 Need for the Project

Observation: MSWG identified that the Revised Application for MetroLink is based on a flawed assumption regarding the Benefit to Cost ratio of extending MetroLink to the south west city. It was identified that a National Transport Authority (NTA)/Jacobs report estimated a Benefit to Cost ratio of 0.8, deeming the extension unviable. Reference was made to Professor Austin Smyth's assertion that the study contained serious flaws and that a contemporary analysis would show a much higher Benefit to Cost ratio, likely between 1.6 and 2.22. Despite this, the Revised Application persists with the assumption that the extension is not viable.

<u>TII Response:</u> The decision to apply for the RO is based on the requirements of proper planning and sustainable development, most particularly the GDA Transport Strategy 2022-2042 and the Dublin City and



Fingal County Development Plans. The observers' fundamental objection is to the NTA's decision to afford priority to MetroLink over a connection to the south-west. As MetroLink does not preclude such a connection, the observers can continue to make the case for that project as the GDA Transport Strategy and other planning and transport strategies develop in future years.

#### 4.3.3 Submission: An Taisce

The submission from An Taisce supports the Proposed Project and it raised issues in relation to the following topics on which a response is provided below:

- Supportive;
- Alternatives & Construction Phase; and
- Population and Land Use.

#### 4.3.3.1 Support

Observation: An Taisce outline their support for the proposed Project.

<u>TII Response:</u> TII acknowledge the support from An Taisce and will continue to engage with them to progress this important project whilst addressing all concerns where possible to do so.

#### 4.3.3.2 Alternatives

Observation: An Taisce raised concern with regard to the choice of the proposed "cut and cover" construction methodology when compared to mined construction methods which would be less impactful on the residents of the College Gate Apartment building.

<u>TII Response:</u> TII acknowledges the concerns regarding the proposed construction option at this location and the impact on residents. We understand the gravity of the decision in selecting this option, especially for homes which are directly affected. TII's position is that this option eliminates many significant risks and impacts that would otherwise attend the construction of Tara Station (including risks to and impacts on the College Gate apartments).

The alternative option (i.e. Option 4) would see residents leave the College Gate apartments for two years, requiring them to move twice and to either live for two years in temporary accommodation or to seek new permanent accommodation without statutory compensation. There would be significant risks of damage to the apartment building, which would also require a period of remediation before residents returned. Furthermore, while mined construction (which would be required for Option 4) can be carried out safely, it involves higher risks to worker health and safety, than the proposed open box structure, which should be eliminated where possible, with mitigation employed only where they cannot be eliminated. In addition to the drawbacks from a construction phase perspective, the mined option would lead to a station that is sub-optimal operationally, as is explained further below.

A number of alternative options which would retain the apartments and leisure centre were assessed and presented in the EIAR (Chapter 7 and Appendix A7.2) and summarised during the Oral Hearing. Careful consideration was given to each, but ultimately the proposed location and option presented in the draft RO was selected. This option reflects the need for the station to both manage the high passenger usage (it will be the busiest station on the route in the city centre) and provide for good integration with the adjacent DART station.

The mined tunnel option for constructing the station at this location presents several significant constraints, risks and potential impacts, particularly given the depth required for the station. These impacts would be similar to those detailed in the mined options review for St Stephens Green (EIAR Appendix A7.5, Chapters 5 & 6), which concluded that a mined station at that location would not perform as well as the proposed station box arrangement. The following are specific assessments of the key differences and challenges associated with a mined station at Tara compared to the proposed station box.

#### Construction Phase



- Property Demolition: Whilst the mined station option would avoid the demolition of the College Gate apartments and the Markievicz Leisure Centre, both options would still require the demolition of the Ashford House office building, two adjacent Georgian buildings and Numbers 25-32 Townsend Street duplex properties. The Ashford House office building in particular lies closely adjacent to the College Gate apartments and demolition of this building would introduce considerable noise and disturbance to residents as this demolition works progressed.
- Station Depth: The depth of the station is a critical factor using a mined construction methodology. During the Oral Hearing, TII presented a detailed analysis (Oral Hearing Day 17 submission), of the additional work and implications of a mined station at this location. Due to the platform width requirements at Tara Station, the cavern size needed under College Gate would be substantial. To ensure safe construction with adequate rock cover above, the station and the adjacent tunnel would need to be significantly deeper than the proposed station box. The increased depth, estimated at 9m deeper than the current design, and the mined tunnel arrangement would introduce several challenges.
- Access Shafts: Two large access shafts of overall size similar to the proposed station box, would be required at each end of the mined cavern to accommodate station access (passenger and DFB lifts, stairs, and escalators) and technical rooms. These shafts would also need to be deeper due to the increased station depth, further complicating construction due to the need for more and prolonged excavation work. Both access shafts would lie directly adjacent to the College Gate apartments with construction consisting of diaphragm wall installation followed by excavation of the shafts, with their associated drill and blast and mechanical excavation causing extended construction noise disturbance to College Gate residents.
- Cavern Construction: Mining the cavern under College Gate would be undertaken using drill and blast and mechanical excavation, with noise and vibration impacts assessed as requiring the relocation of residents.
- **Groundwater Control**: Controlling groundwater would be more challenging for a mined station. Construction in water-bearing ground inherently carries greater risks related to controlling construction and ground movements. The diaphragm walls of the proposed station box provide a stiff structure and effective control of groundwater ingress, minimizing ground movements. In contrast, the open-faced nature of the deeper mined cavern construction would encounter more groundwater at higher pressures, necessitating additional controls, fissure grouting, and dewatering.
- **Increased Excavation and Disposal**: The deeper station would require more extensive excavation, leading to higher volumes of material to be disposed of.
- **Increased Concrete Requirements**: More concrete would be needed to support the deeper structure and cavern construction, increasing construction traffic and the carbon footprint of the project.

### Operational Issues

- Some of the most critical operational phase advantages of the proposed station box design over the
  mined tunnel option relate to passenger access and egress and emergency intervention. The proposed
  station box design offers significant advantages in terms of safety and efficiency during emergencies
  with its more open and visible routes to the surface. In particular:
- **Evacuation Times:** The increased depth of the mined tunnel would result in longer evacuation times to the surface. The proposed station box, with its shallower depth, allows for quicker and more efficient evacuation routes;
- **Persons with Reduced Mobility (PRM):** The deeper mined tunnel could make PRM access more difficult due to the additional vertical distance to be travelled and potential increased reliance on lift use. The proposed station box design ensures that lifts, escalators, and stairs facilitate a smoother and faster movement through the station for all passengers;
- **Emergency Services Access:** The proposed station box design allows for better access for emergency services. The shallower depth and more straightforward layout enable quicker response times to platform level and more effective intervention in case of an emergency; and
- Passenger Experience & Wayfinding: From an operational perspective, the proposed station design
  also significantly enhances the passenger experience and wayfinding compared to the mined tunnel
  option. Tara station will be the busiest city centre station driven by its interchange with DART services.
  The proposed design aligns with MetroLink's architectural vision and project objectives and will ensure



a high-quality passenger experience with increased natural light from the skylights, easy wayfinding and accessibility, including for PRM, offering shorter and more convenient walking times from the surface to the platform level. In contrast, the mined tunnel option with its increased depth, more confined spaces and less straightforward access routes, would not achieve these objectives and would negatively impact passenger experience and accessibility.

Whilst the mined station option is technically feasible, it presents a worse risk profile compared to the opencut method used for other stations. However, our assessment indicates that if this option were pursued, and the demolition of College Gate and the Markievicz Leisure Centre avoided, these buildings would be unusable for approximately a 2-year period due to the construction works; in particular noise and vibration from cavern mining and piling directly adjacent to the buildings. In addition, both may suffer increased damage from settlement caused by the adjacent works, potentially including cracks requiring pointing, sticking doors or windows in apartments and risk to the swimming pool integrity. These would require remediation following completion of construction before re-use. Considering the significant period during which the buildings would be unusable and the potential for damage that would need to be remediated, TII determined that the preferred option would provide certainty, compensation and rehousing support to affected residents.

Based on this assessment, TII has determined that the proposed open-cut station box design is the best option. This decision is based on several critical factors: the mined tunnel option presents significant construction challenges, including the need for deeper excavation, complex groundwater control, and increased structural requirements, which introduce higher costs, risks and potential for delays. The proposed station box design offers superior operational benefits, such as quicker evacuation times, better accessibility for PRM, and more efficient emer#gency services access, whereas the mined station's increased depth would impede these critical aspects (which are important, as this will be the busiest station on the route in the city centre). Overall, TII believes that the proposed open-cut station box design is the optimal choice, balancing construction feasibility, operational efficiency, passenger experience, and cost-effectiveness.

### 4.3.3.3 Population and Land Use

Observation: The An Taisce submission provides a comparative cost analysis (preferred Option vs Option 4 (Mined Construction)): The projected construction cost for the current Tara Station design is €139.9 million (excluding risk) or €161.7 million (excluding risk but including a ground issues allowance). Additional costs for the current design include €48 million for relocating the Markievicz Leisure Centre and approximately €35 million for compulsory purchase compensation for the 70 College Gate Apartments. The final estimated cost for the current design is up to €222.9 million, compared to €161.7 million for Option 4, resulting in a €60 million difference in favour of Option 4.

TII Response: TIIhas put forward the preferred option as the option most compatible with proper planning and sustainable development. The costs of the proposed Project are primarily a matter for the Irish Government in accordance with the Public Spending Code and the new Infrastructure Guidelines were introduced on 1 January 2024 . Furthermore, cost considerations are outside the remit of ABP. Nonetheless, the following information on costs is provided for context.

As presented in the EIAR Appendix A7.2 Tara Street Report, the cost assessment for the proposed open-cut design (RO design) was based on the initially developed preliminary design, whereas the mined option was less developed, carrying a higher risk of cost increases as the design progressed. Both option costs excluded risk and property costs.

A detailed presentation on the mined station construction (Oral Hearing Day 17 submission), highlighted the additional work and thus cost implications of this form of construction compared to the proposed station box construction, arising from:

- Greater volumes of excavation required from the two access shafts and mined cavern with associated disposal costs;
- Increased structural concrete requirements due to the increased station depth required; and
- During its operational life, a deeper mined station and tunnel alignment would impact energy usage and traction power; would require increased ventilation requirements; and would require increased power requirements due to longer and additional escalators required.



Based on this more detailed assessment of requirements for a mined station option, a re-assessment of construction costs for both the proposed station box and the mined alternative was undertaken, using more developed design assumptions and construction requirements. These provided indicative cost assessments of approximately €300m for the mined option vs €200m for the proposed station box, both figures excluding risk and property costs. It can be seen that even adding in the property costs envisioned by An Taisce, the mined station option would remain more expensive to build, and as noted, incur greater operational costs.

Observation: The An Taisce submission claims that Option 4 should be preferred given the significant impacts of the loss of the Markiewicz Centre and the College Gate building.

<u>TII Response:</u> The potential impacts on the College Gate building and the Markievicz Leisure Centre due to the proposed construction methodology in terms of Population and Land Use have been assessed in the Chapter 11 of the EIAR (as updated). The potential impacts on the residents of the College Gate apartment complex have been assessed in the EIAR on the basis that the building would require demolition during the construction phase.

The potential impacts of the proposed demolition of the Markievicz Leisure Centre have also been assessed in the EIAR as resulting in negative, significant, permanent effects. As stated above, for residential properties that will need to be acquired permanently, significant mitigation measures have been proposed under the provisions of the RO.

In particular, a Land Acquisition Strategy has been prepared to provide information to residents and set out a proposed strategy for the provision of alternative accommodation for property owners and residents. TII will continue to work with Dublin City Council (DCC) in relation to the development of an alternative sports and recreational facility to replace the Markiewicz leisure centre and intends to fund the alternative. However, TII does not have control over that development, which is part of DCC's function to provide public sport and recreational facilities in its function area. DCC may or may not be in a position to deliver it in parallel with the MetroLink Project. Accordingly, and as previously noted by TII, ABP should assess the MetroLink Project on the basis that the alternative may not be available. During operational stage, the proposed Tara Station will provide an interchange between the DART, larnród Éireann and MetroLink networks with urban realm enhancements to create a more permeable and pedestrian friendly space. We continue to conclude that the impact on Population and Land Use during the operational stage is considered positive, moderate, and long term.

### 4.3.4 Submission: Cormac McKay and Aeravai

The submission received from Cormac McKay and Aeravai addressed issues related to the following themes:

- Soils and Geology;
- Noise & Vibration; and
- Business Case.

#### 4.3.4.1 Soils and Geology

Observation: The Observer points out the potential for PFAS contamination in the soil at Dublin Airport, which may require safe removal during tunnelling to protect groundwater.

<u>TII Response:</u> ABP has written to TII to specifically request a response to the submission made by Sabrina Joyce Kemper on behalf of Wild Ireland Defence during the Oral Hearing. This submission included reference to the issue of PFAS at Dublin Airport. As requested by ABP in a letter received on 06/11/24, TII will respond in writing to ABP in relation to that submission and will address the PFAS issue (and Mr McKay's specific observation on PFAS) in detail in that response which will be relevant to this submission. <u>TII has agreed to submit this response by 31 January 2025.</u>

### 4.3.4.2 Noise & Vibration

Observation: The Observer highlights the long-term health effects of noise pollution, particularly the impact of rail traffic vibration and noise on mental health.



<u>TII Response:</u> As identified in the EIAR (Chapter 13 and 14) and enhanced by additional commitments presented in the Final Schedule of Environmental Commitments presented on Day 21 of the Oral Hearing, there will be no significant residual operational noise effects from the operation of MetroLink. In fact, the proposed Project will result in modal shift with less cars on the road and therefore provide long term health benefits, with reduced levels of noise emissions and emissions to air.

Therefore, TII does not agree with the assertion made by the observer that long-term noise pollution health effects have not been considered.

#### 4.3.4.3 Business Case

Observation: The Observer states that "proper due diligence has not been carried out with this application and may have unduly influenced and Transport Consultants with significant financial gain based on unsound finance projections on a business case that is now clearly invalid and out of date and should be updated before proceeding what is at stake which could be seriously detrimental to any investors in to this project especially the taxpayer".

<u>TII Response:</u> This is not a matter within the remit of the Board in determining the RO application. Nonetheless, TII strongly refute this observation and point out that the preliminary business case for MetroLink has been prepared in line with the requirements of the Public Spending Code.

The preliminary business case has also been approved by the NTA Board for submission to the Department of Transport (DoT) and onwards submission to Department of Public Expenditure and Reform (DPER) for review. Further to the DoT and DPER review (including independent review by JASPERS and the Major Projects Advisory Group (MPAG)) elements of the PBC around timeline, costs and benefits were updated to inform the Government decision. On that basis the Government granted Approval in Principle to the NTA in July 2022 to enable the submission of a RO application by TII to ABP in respect of the MetroLink Project (Decision Gate 1).

#### 4.3.5 Submission: D Holohan

The D Holohan submission addressed a single new issue related to the following:

Design and Procurement

Observation: The Observer requests alternative aesthetic suggestions for stations.

<u>TII Response:</u> TII, supported by leading transport architectural firm Grimshaw, note the submissions proposing aesthetic ideas to be implemented in the MetroLink stations.

The station design has been developed based on the highest quality architectural design principles in line with the materials pallet submitted as part of the RO application. Details such as those raised in the submissions will be determined to ensure a high quality and legible design in line with the station design principles.

The finishes in the station will be high quality and when possible, self-finished to avoid surface deterioration. The finishes will be regularly maintained to a high standard to maintain a clean and welcoming environment for passengers. The stations will have warm tones throughout, and colour will be introduced through the integration of art and signage / wayfinding.

Third party advertising within the stations will be limited and the entrance portals will be secured and shut during non-operational hours.

### 4.3.6 Submission: Donal O'Brolcáin

Observation: The Observer states that the project is not needed since current airport journey times are reasonable. The benefit of the project is only a 14-minute saving on the journey time from Stephen's Green to Dublin Airport, given that:

50% of passengers can make that journey in 30 minutes.



- 75% can make that journey within 1 hour.
- 2/3 of passengers arrive outside peak commuting times.
- 75% of passengers travel for leisure.

Census 2016 report on commuting in Ireland shows that neither Dublin Airport nor Swords stand out as places which require this level of public transport provision.

<u>TII Response:</u> To state that there is no requirement for MetroLink to serve Dublin Airport and the Swords area is contrary to the approach of relevant transport policy i.e. the Transport Strategy for the Greater Dublin Area 2022-2042. The. EIAR Chapter 3, *Background to the MetroLink Project*, explains the need for the proposed Project, and how MetroLink will address challenges within the Greater Dublin Area. The proposed Project will provide significant benefits not only to those who choose to use it, but also to other transport network users, by reducing the demand for road space and creating the opportunity for the road transport system to achieve optimum levels of efficiency and effectiveness.

Also as outlined in Chapter 3, the proposed Project is part of an integrated transport network that also includes for BusConnects and DART+ which are all included under Project Ireland 2040. Together, these projects will result in a reliable, sustainable, affordable, integrated public transport network that will support the economy, help Ireland meet its climate change targets in line with Climate Action Plan 2023 and make Dublin a more liveable and sustainable city. Whilst MetroLink is a standalone project that is not dependent on any other projects for its delivery or effective operation, it is nonetheless a critical part of the proposed integrated transport network for the Greater Dublin Area.

### 4.3.7 Submission: Dublin Cycling Campaign

The submission from the Dublin Cycling Campaign raised issues in relation to the following topic on which a response is provided below:

Traffic and Transport.

### 4.3.7.1 Traffic and Transport

Observation: The submission outlined that the analysis provides data for the Opening Year and Opening Year +5 Years. The analysis has not been provided for the Design Year (2050), but the observer notes that TII knows there will be future demand growth for cycle parking after Opening Year +5 Years.

The submission identified that only a few years after opening the proposed cycle parking will not meet 70-82% of demand. The submission also identified the position that the cycle parking is significantly under provisioned in the Outer City and City Centre locations.

Dublin Cycling Campaign also indicated that a new bicycle parking demand analysis with significant changes from the analysis in the original RO was presented during the Oral Hearing. Furthermore, Dublin Cycling Campaign questioned how TII will work with local authorities and other relevant Stakeholders to provide additional cycle parking provision as part of other transport projects when it is not within the power of TII to implement.

<u>TII Response:</u> As outlined in the Cycle Parking Overview document submitted on Day 21 of the Oral Hearing New Cycle Parking Analysis 'Passenger demand has been modelled for both 2035 (Opening Year) and 2050 (Design Year/Opening Year +15 Years), with a 21% growth between the scenarios, resulting in a 7% growth between Opening Year and Opening Year + 5 Years'.

TII presented an analysis that clearly illustrates the potential demand for cycle parking, acknowledging that there are stations, particularly within the city centre, where the estimated demand for cycle parking is higher than the provision. The need to provide for cycle parking has had to be balanced with the need to ensure that the compulsory land take for the project is proportionate, and also having regard to NTA's and local authorities' functions and the potential for micro-mobility and share solutions to satisfy some of the demand that would otherwise require cycle parking provision.



As set out in EIAR Chapter 6, MetroLink Operations and Maintenance, due to space constraints in the vicinity of stations in the DCC area, it has not been possible to provide 100% of bicycle parking required to meet demand at every station. However, the maximum number of bicycle parking has been provided at each station taking cognisance of available space. EIAR Chapter 31, Summaries of the route -wide mitigation and monitoring proposed, goes on to further note (Mitigation Reference TT19) that cycle parking provisions per station will be monitored to ensure that the level of provision is meeting the demand.

It should also be noted that the volume and type of cycle parking provisions required may change over the course of the operational phase due to the ongoing shift to shared and micro mobility solutions. Notwithstanding this, TII does agree that there is a need for higher density cycle parking in the future to accommodate demand from the MetroLink Project, as well as demand from the general increase in cycling forecasted within the City. In recognising the shortfall, meeting this demand will require a coordinated multiagency approach to ensure efficient delivery of cycle parking spaces and facilities. As indicated in the 'Cycle Parking Overview' submitted at the Oral Hearing, the NTA has agreed to this approach and acknowledges that it is not expected to fully accommodate the projected cycle parking demand at stations within the MetroLink Project.

As there are wider transport needs along the MetroLink corridor, additional cycle parking will be delivered by the NTA through other interventions within their remit in coordination with Fingal County Council, Dublin City Council and other relevant Stakeholders, as supported by the Greater Dublin Area Transport Strategy 2022-2042. The Strategy outlines how the NTA and Local Authorities will deliver cycle parking throughout the Greater Dublin Area including the following measures:

- Measure CYC5: It is the intention of the NTA to deliver through the statutory planning process (and in liaison with relevant Stakeholders), high quality cycle parking at origins and destinations serving the full spectrum of cyclists including users of non-standard cycles; and
- Measure CYC6: Local Authorities will prepare public cycle parking strategies in order to ensure that
  there is sufficient short-stay safe and secure cycle parking available on-street and/or off-street,
  including spaces for cargo bikes and other non-standard bike designs in city, town and village centres.

In addition, the GDA Strategy INT5 notes the intention of the NTA to deliver Mobility Hubs. The concept of Mobility Hubs is a new addition to the NTA GDA Strategy. These facilities at Mobility Hubs will cover a range of different transport modes, including shared transport, and can also include features such as travel information, lockers, parcel collection etc.

Observation: Dublin Cycling Campaign states that TII has not considered alternative options to provide more cycle parking at all stations along the MetroLink network, i.e. two-tier cycle parking and cycle parking will not meet demand.

<u>TII Response:</u> TII does not agree that alternative options to provide more cycle parking were not considered by it. TII's engagement with these options is demonstrated within the 'Cycle Parking Overview' submitted during the Oral Hearing.

For each location, the available space for cycle parking was analysed in the context of the following opportunities/constraints:

- Available free space at ground level to accommodate cycle parking;
- Other existing and proposed land use and the appropriateness of cycle parking provision in that context;
- Streetscape and landscape sensitivity to the provision of cycle parking; and
- Opportunities to provide enhanced cycle parking in the form of either semi-enclosed or sheltered parking.

The optimum solution to provide the highest quality and maximum volume of cycle parking was chosen considering the opportunities and constraints at each location.



In addition, where station locations are constrained, TII has considered the potential demand that could be accommodated by shared mobility solutions. The analysis undertaken considered shared mobility data from various public transport locations across the UK and Ireland to understand potential turnover ratios that could be achieved by shared mobility solutions within the city centre. This supports the coordinated approach with the NTA (discussed above) to implement alternative interventions as part of their wider strategy for projects in this location. In line with the rise of shared mobility solutions, cycle parking demand is likely to vary greatly into the future.

Observation: The observer maintains TII failed to bring revised numbers to the Oral Hearing, updated analysis and massaged numbers were brought. For example, the original planning application provided did not provide for 29% of demand. Instead of increasing the area of the underground cycle parking their new analysis shows there is less demand.

<u>TII Response:</u> TII do not agree that the figures on cycle parking "were massaged". The data provided in the EIAR was updated at the Oral Hearing to provide additional detail on potential cycle parking demand, the cycle parking provision and future management of the same. It is quite clearly stated in the EIAR and in subsequent data provided at the Oral Hearing that there may be a shortfall in cycle parking provision at some of the stations due to space constraints.

TII also confirm that there is no potential to provide cycle parking within the underground stations without significantly increasing the station footprint. This would result in potential for significantly higher environmental impacts in terms of an increased construction duration, increased impacts on sensitive receptors due a larger footprint and an increase in waste generation and energy and materials required to construct the station.

Observation: TII included a letter from the National Transport Authority (NTA) stating that they will work with local authorities to ensure appropriate cycle parking provision in other projects. Dublin Cycling Campaign argues that An Bord Pleanála can only examine the current planning application and cannot attach conditions to ensure future cycle parking provision by local authorities or the NTA.

<u>TII Response:</u> ABP will have regard to plans and policies that require NTA and the local authorities to provide for the needs of cyclists.

As observed in the Dublin Cycling Campaign submission, TII has already submitted a letter from the National Transport Authority (NTA), confirming its commitment to collaborate with local authorities to ensure adequate cycle parking in future projects. TII is not in a position to make additional provisions for cycle parking within this application. However, the NTA's commitment ensures that cycle parking needs will be integrated into future projects, addressing the concerns raised by the Dublin Cycling Campaign.

#### 4.3.8 Submission: NAMAI DAC

Observation: NAMAI DAC note that they now own the lands formerly owned by Bovale Ltd. at Estuary and that the MOU that was in place still stands.

TII Response: TII notes the transfer of ownership and will engage with NAMAI DAC going forward.

### 4.3.9 Submission: Andrew Whelan

The submission from Andrew Whelan raised issues in relation to the following topics on which a response is provided below:

- Design and Procurement;
- Alternatives; and
- Miscellaneous.

## 4.3.9.1 Design and Procurement

Observation: Andrew Whelan outlines follow up concerns with regard to the presentation he gave at the Oral Hearing on 27 March 2024. This submission proposes that certain elements of construction



be delayed in order for daa to have "greater flexibility and depth to construct a screened passenger APM link at Level –1 to DAA's indicative Western Satellite Pier".

<u>TII Response:</u> TII has applied for the RO. The proposed Project is based on an in-depth analysis of the need for the project (refer to Chapter 2 of the EIAR). The proposed Project also considered different alternatives such as alternative routes and alternative transport modes to address the identified need for the project (Refer to Chapter 7 of the EIAR). TII is not in a position to amend the design or delay the implementation of this critical infrastructure on the basis of potential future development at the airport that is yet to be designed or planned. Please note however that TII has worked closely with daa to ensure that the proposed development at the airport allows for future potential development.

### 4.3.9.2 Alternatives

Observation: An alternative design for an intervention shaft at Iveagh Gardens was proposed, in order to facilitate a third loop and meet future capacity of the Metro.

<u>TII Response:</u> The proposed design and running profile have been completed to meet current and predicted passenger demand up to 2065 based on the current and future predicted passenger numbers and the analysis leading to this design has identified that a single or double loop strategy could/would be used to meet passenger demand. There is no requirement for a third loop to meet predicted future demand (up to 2065) and as a result there is no merit in providing ABP with an intervention shaft at Iveagh Gardens at this time.

#### 4.3.9.3 Miscellaneous

Mr Whelan raised six queries in his submission regarding potential future scenarios for the proposed Project and the wider public transport network. These queries are responded below.

Observation: Andrew Whelan requests that TII give assurance that it will engage with FCC on the future proofing metro issues raised.

<u>TII Response:</u> FCC is a key Stakeholder in the proposed Project and TII meets with senior FCC representatives on a regular basis to review progress on the project. TII intends to discuss with FCC the outcome of this second-round consultation process and the submissions received, including Mr Whelan's submission. While TII engages and will continue to engage with FCC as a key Stakeholder, the future proofing proposals are not required for the reasons outlined above.

Observation: Andrew Whelan requests that if Charlemont is axed, will TII consider the St Stephens Green North turnback suggestion either as a suggestion or an additional in line Green Station?

<u>TII Response:</u> Were such a fundamental change made to the proposed project by ABP, TII would have to reconsider all aspects of the project. It will be appreciated that TII is not in a position at this juncture to speculate as to the outcome of any such review.

Observation: Andrew Whelan asks if TII is minded to submit to ABP a technical paper on an end of tunnel dormant station proposal.

<u>TII Response:</u> Given the advanced stage of the design, commensurate with the RO application having been submitted to ABP in September 2022, it is inappropriate to propose such a fundamental design change. In those circumstances, TII does not propose to submit to ABP a technical paper on an end of tunnel dormant station proposal.

Observation: Andrew Whelan notes that "MetroLink capacity statistics run to 2065 = some 30 years after Metro opens. In order to increase Metro capacity after 2065" and if requests that if required "can the proposed 65m platforms be extended within the 120m station box to facilitate a fourth carriage?"

<u>TII Response:</u> TII has proposed the MetroLink Project on the basis of the design provided as part its RO application and has not carried out any feasibility study of an extension to platforms in the period from 2065 onwards.



Observation: Andrew Whelan queries if the 2017 "New Metro North LGTI (Luas Green Line Tie In) Options Appraisal Report" been updated to identify a MetroLink resurface point.

<u>TII Response:</u> The proposed MetroLink Project is not proposing a tie -in with Luas and so an update to this existing report is not currently merited. However, should future options assessment identify the requirement for MetroLink to progress along the Luas alignment, then a further assessment would be undertaken at that point in time.

Observation: Andrew Whelan queries if, given the acknowledged challenges associated with upgrade on Luas line, does TII anticipate abandoning proposal to connect to Sandyford.

<u>TII Response:</u> The Greater Dublin Area Transport Strategy 2022-2042 includes the following objective: "Measure LRT2 – Further Metro Development - In reviewing and updating the Transport Strategy, which takes place every 6 years, the NTA will assess the requirement to provide additional Metro lines in the GDA based on updated forecast demand for travel and on emerging significant changes in land use and spatial policy, including previously considered options to extend MetroLink southwards towards UCD, or along the existing Luas Green Line, or towards South West Dublin". Given this remains the applicable transport policy, it will be appreciated that no such decision has been made.

#### 4.3.10 Submission: Dublin Commuter Coalition

The submission from the Dublin Commuter Coalition raised issues in relation to the following topics on which a response is provided below:

- Design and Procurement; and
- Operations and Maintenance.

#### 4.3.10.1 Design and Procurement

Observation: The Dublin Commuter Coalition notes the requirement for adequate safe storage of bikes at mobility hubs and transit stations and adds that CCTV, open sight lines and good design are not a deterrent to bicycle theft. The Dublin Commuter Coalition request bicycle lockers or parking garages.

<u>TII Response:</u> As set out by EIAR Chapter 6, MetroLink Operations and Maintenance, due to space constraints in the vicinity of stations in the DCC area, it has not been possible to provide 100% of bicycle parking required to meet demand at every station. However, the maximum number of cycle parking has been provided at each station taking cognisance of available space.

Cycle parking is provided as close to the stations as possible indicated on the RO drawings and designed in accordance with best industry practice and sheltered wherever possible. TII would also note that as set out by EIAR Chapter 6, MetroLink Operations and Maintenance, the following security measures are provided for:

- The architectural and urban realm design is designed to discourage anti-social behaviour, for example through the attractive setting, use of public lighting, open sightlines, and avoidance of areas where individuals and groups of people can hide;
- The Operational Control Centre (OCC) will be the central communications and operational hub, located in the administrative building at the Dardistown Depot. The role of the OCC will include monitoring and managing security and anti-social behaviour. The OCC will direct and deploy staff to manage incidents when required; and
- CCTV will be installed throughout the MetroLink system to provide general security and surveillance
  of all the public areas, and to inform, if required, the directing and sending of staff to manage the
  situation.

The provision of bicycle lockers and/or cycle parking garages are not included in the RO The provision of bicycle lockers would further reduce the capacity of bicycle parking at the already constrained station locations.



Observation: The Dublin Commuter Coalition require increased speed in the construction and delivery of MetroLink.

<u>TII Response:</u> TII acknowledges the urgency and need for the MetroLink Project. TII has developed a clear and achievable construction programme for the delivery of the project when approval is received for the project.

#### 4.3.10.2 Operations and Maintenance

Observation: The Dublin Commuter Coalition notes that people with disabilities will be discriminated by MetroLink as lifts are not an optimum solution to platforms as they breakdown. The Dublin Commuter Coalition notes that a proposal during the Oral Hearing to allow them use emergency lifts is not acceptable, and that extra lifts should be included.

<u>TII Response:</u> TII contend that there has been no discrimination against those with disabilities in the design of the MetroLink and the needs of those with different abilities and needs have been factored into the project from the outset. All the emergency lifts will be able to be immediately unlocked remotely through the Supervisory Control and Data Acquisition (SCADA) from the Operation Control Centre (OCC) located at the Dardistown depot, and also from the Station Intervention Rooms (SIR).

TII does not believe that additional lifts are merited at each station for the following reasons:

- All passenger lifts will be of a high reliability type and their performance and operation always
  monitored. As such the reliability of the lifts provided will be to a much higher level when compared to
  older systems; and
- In the unlikely event of a lift failure, the operator will detect such an event and immediately dispatch repair staff to the affected station.

Each of these measures will mean that access will be maintained at all times to each station and so the requirement for more lifts is not merited.

Observation: The Dublin Commuter Coalition do not agree with the TII response that toilet facilities should and could not be provided on Health and Safety grounds.

<u>TII Response:</u> TII has committed to toilet facilities at interchange stations as these are the stations where passengers will potentially spend more time as they wait for interchange with other commuter services. These stations are at Estuary, Dublin Airport, Glasnevin, Tara and Charlemont. Toilet facilities are not required at other stations as passengers will only frequent these locations for a short period of time as they await Metro services.

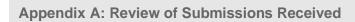
This approach is in line with newer metro systems, particularly unmanned systems which do not generally include welfare facilities, as detailed in the Technical Note on Public Welfare Facility provision at stations submitted on Day 18 of the Oral Hearing.





## **Contents**

Introdu	uction	1
1.	Group 1: Statutory Authorities and Public Bodies	1
1.1	Development Applications Unit	1
1.2	DECC Geological Survey Ireland	2
1.3	Dublin City Council	3
1.4	Fingal County Council	3
1.5	Office of Public Works	4
2.	Group 2: Location Specific	7
2.1	AZ1 Estuary to Dublin Airport North Portal	7
2.1.1	AZ1(a) Estuary Station (including Park & Ride facility) to Seatown Station to northern end of Swords Central Station	7
2.1.1.1	Estuary Court Residents' Association (ECRA)	7
2.1.2	AZ1(b) Swords Central Station to Fosterstown Station to Dublin Airport North Portal	8
2.1.2.1	McGreevy and Taylor Families (letter submitted by Pearse Mehigan Solicitors LLP)	8
2.2	AZ2 Airport Section	9
2.3	AZ3 Dardistown to Northwood	9
2.3.1	Lidl Ireland GMbH	9
2.4	AZ4 Northwood Portal to Charlemont	11
2.4.1	AZ4(a) Northwood Portal to Ballymun Station, Ballymun Station and running tunnel to Collins Avenue Station.	11
2.4.2	AZ4(b) Collins Avenue Station and running tunnel to Griffith Park Station, including Albert College Park Intervention Shaft	11
2.4.2.1	Griffith Avenue & District Residents Association (GADRA)	11
2.4.2.2	Hampstead Residents CLG	15
2.4.3	AZ4(c) Griffith Park Station and running tunnel to Glasnevin Station	17
2.4.4	AZ4(d) Glasnevin Station and running tunnel to Mater Station	
2.4.4.1	Royal Canal Clean Up Group (Nessa Winder)	18
2.4.4.2	Shandon Residents	20
2.4.5	AZ4(e) Mater Station and running tunnel to O'Connell Street Station	23
2.4.5.1	Amanda Hughes	23
2.4.5.2	Andrew Conlon and Maeve Fitzpatrick (19 Berkeley Road)	25
	Berkeley Road Area Residents Association (BRARA)	
	District 7 Community Alliance (representing six residents' associations and a business association in the Mountjoy, Broadstone, and Dorset Street areas)	
2.4.6	AZ4(f) O'Connell Street Station and running tunnel to Tara Station	
	Troy's Family Butchers Ltd	
2.4.7	AZ4(g) Tara Station and running tunnel to St. Stephen's Green Station	
2.4.8	AZ4(h) St. Stephen's Green Station and running tunnel to Charlemont Station.	





2.4.9	AZ4(i)	Charlemont Station and tunnel turnback south of the Station.	34
2.4.9.	1 Brend	an Heneghan	34
2.4.9.2	2 Ciarar	n Black & Leon McCarthy	37
2.4.9.3	3 Conor	and Lorraine Power	40
2.4.9.4	4 John (	Conway and Orlaith McCarthy	41
2.4.9.5	5 Leo a	nd Anne Crehan	43
2.4.9.6	6 Micha	el A Doyle and Carmel Smith Doyle	45
2.4.9.7	7 Union	Investment Real Estate GmbH	47
2.4.9.8	3 Charle	emont and Dartmouth (General Area Submission)	48
2.4.9.9	9 Charle	emont and Dartmouth (1,3,5 and 7-16 Dartmouth Square)	51
2.4.9.	10	Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road)	52
2.4.9.	11	Charlemont and Dartmouth (Cambridge Terrace no. 3 to 11)	52
2.4.9.	12	Grace Maguire	54
2.4.9.	13	Niall Parsons	55
2.4.9.	14	Terry Reid and Denis McLoughlin	56
2.4.9.	15	Suzi Taylor	57
3.		hissions by Group 3: Other submissions that are not location specific or address es that cover a number of locations or are route wide	60
3.1	Assoc	ciation Of Combined Residence Associations (Catriona McClean & Tom Newton)	60
3.2	Metro	South West Group	61
3.3	An Ta	isce	63
3.4	Corma	ac McKay and Aeravai	65
3.5	D Hol	ohan	66
3.6	Donal	O'Brolcháin	67
3.7	Dublir	Cycling Campaign	68
3.8	NAMA	AI DAC	70
3.9	Andre	w Whelan	70
3 10	Dublir	Commuter Coalition	71



## Introduction

This analysis is provided entirely for the assistance of the Board and TII understands that the Board will reach its own conclusions on which issues are new and which have been previously addressed. We would also note that in the event of any discrepancy between information set out in the main body of the Response document and in this Appendix A, the former shall take precedence.



## 1. Group 1: Statutory Authorities and Public Bodies

## 1.1 Development Applications Unit

No	Issue	New Issue	TII Comment
1	Architectural Heritage  Protection of Lissenhall Bridge: The Department has reviewed additional documentation and is satisfied with the specific details provided by TII on how the National Monument of Lissenhall Bridge (RMP DU011-081; Protected Structure No 341 (Fingal)) will be protected during construction works. The minimum extent of the exclusion buffer zone around the bridge has been clarified, resolving previous queries. Unchanged Observations: All other archaeological observations and recommendations from the Department's original submission on 16 January 2023 remain unchanged.	Yes	Please refer to Section 4.1.1.2 of the main report.
2	Biodiversity  Cross Guns Otter Bypass Plan:  The Department recommended a Cross Guns Otter Bypass Plan to ensure the movement of otters along the Royal Canal during construction works near Glasnevin Station.  TII has drawn up an Otter Bypass Plan, included in Section 10 of the EIAR Biodiversity Update Report, which the Department finds satisfactory. The plan involves providing an otter passage along the southern side of the canal basin between the 5th and 6th Locks during two three-month periods when the canal is drained for construction.  The downstream end of the otter fencing must be extended across the basin to effectively funnel otters into the passage.  Monitoring and Surveys of Otters:  The finalised Otter Bypass Plan should include revised drawings, timelines, and current status surveys of otters in the vicinity of the Cross Guns area.  Monitoring of otter occurrence should be conducted during the 30 months of MetroLink works and for at least 6 months after completion, with results submitted to the planning authority and the Department.	Yes	Please refer to Section 4.1.1.1 of the main report.
3	Biodiversity Mammal Ledges in Culverts:	Yes	Please refer to Section 4.1.1.1 of the main report.



No	Issue	New Issue	TII Comment
	The Department agrees with the applicant's evaluation that no mammal ledges are needed in the new culvert over the Mayne River due to minimal ecological impact.		
	For the Santry River, the Department recommends installing a mammal ledge in the new culvert and, if feasible, in the existing adjacent culvert to ensure the free movement of otters as a biodiversity enhancement measure.		
4	Biodiversity	Yes	Please refer to Section 4.1.1.1 of the main report.
	Wildflower Meadows:  The Department advises against planting wildflower seed mixtures outside garden settings, as it can introduce non-local genetic strains and compromise local flora (and that's informed by the All Ireland Pollinator Plan). The genetic integrity of what remains of our rare and ecologically significant native species is threatened by the introduction of seed from external sources).		Topoli.
	The Board should condition any permission granted to omit wildflower planting from landscaping proposals and allow bare areas to recolonize naturally, managed as wildflower meadows.		
	The Department highlights the importance of preserving local biodiversity and recommends natural recolonization of bare areas along the project route instead of planting wildflower seeds.		

## 1.2 DECC Geological Survey Ireland

No	Issue	New Issue	TII Comment
1	The submission highlights the availability of data related to land and soils, climate change, groundwater, geotechnical information. They had no comments on the OH docs.	Yes	Please refer to Section 4.1.2 of the main report.
2	GSI requests copies of reports detailing any site investigations carried out if the development proceeds (these reports will be redacted for confidentiality and added to GSI's national database of site investigation boreholes)	Yes	Please refer to Section 4.1.2 of the main report.
3	GSI suggests that any significant bedrock cuttings should remain visible as rock exposure rather than being covered with soil and vegetated, in accordance with safety guidelines and engineering constraints. This would enhance geological knowledge and	Yes	Please refer to Section 4.1.2 of the main report.



٨	<b>7</b> 0	Issue	New Issue	TII Comment
		could be included in the geoheritage dataset.		

## 1.3 Dublin City Council

No	Issue	New Issue	TII Comment
1	Previous Submission: Dublin City Council refers to its written submission lodged with the Board on 30 September 2022, and notes "this submission remains current" and outlines the Council's views on the Metrolink Project, including the potential effects on the environment and the proper planning and sustainable development of the area.	Yes	Please refer to Section 4.1.3 of the main report.
2	Engagement with TII: Dublin City Council highlights subsequent engagement with TII, particularly regarding agreed draft conditions dated 15 February 2024, which were submitted for inclusion as part of any Railway Order They are stated to adequately address:	Yes	Please refer to Section 4.1.3 of the main report.
	Conservation impacts along the route;		
	Improvement of green infrastructure; and		
	Enhancement of pedestrian and cycle connectivity and permeability.		
	Dublin City Council states that it has no additional substantive comments to make and they reiterate their support for the project and the various benefits it will bring to Dublin.		

## 1.4 Fingal County Council

No	Issue	New Issue	TII Comment
1	The submission reaffirms Fingal County Council's full support for the project, emphasizing its long-term benefits for sustainable travel, economic development, and community access. The submission re-iterates the positive ways MetroLink will shift towards sustainable transport, act as a catalyst for future economic and physical development and create opportunities (education, employment, health, goods etc).	Yes	Please refer to Section 4.1.4 of the main report.
2	Connectivity and Permeability  Fingal County Council emphasizes the importance of connectivity and permeability along the Metrolink corridor and flags the importance of integration with the R132 Connectivity	Yes	Please refer to Section 4.1.4 of the main report.



No	Issue	New Issue	TII Comment
	Project to improve pedestrian and cyclist safety (which it says MetroLink aligns with), and the necessity for optimal connectivity between Metrolink, Bus Connects, and the R132 Connectivity Project to ensure seamless transitions and achieve key objectives of the Fingal Development Plan 2023-2029.		
	The submission confirms that the Metrolink route and associated stations are compliant with the Fingal Development Plan 2023-2029		
3	Engagement with Transport Infrastructure Ireland (TII)	Yes	Please refer to Section 4.1.4 of the main
	Fingal County Council acknowledges ongoing engagement with TII regarding Metrolink. This engagement has led to:	Supportive – to note	report.
	Suggested minor revisions to requested conditions.		
	Agreement on these revisions, which have been submitted as part of the Oral Hearing Documents		

## 1.5 Office of Public Works

No	Issue	New Issue	TII Comment
1	Overall Support for MetroLink Project The Office of Public Works (OPW) expresses its overall support for the MetroLink project, recognizing its potential to deliver significant economic, social, and tourism benefits to Dublin.	No	TII acknowledge the support from the OPW and appreciates the constructive engagement to date. TII will continue to engage with OPW to progress this important project whilst addressing all concerns where possible to do so within the project constraints.
2	Concerns About Impact on National Heritage Sites  The OPW referenced its previous submissions and re-iterates that matters raised in these submissions stem from its responsibility to protect and preserve important State properties, like:  St Stephen's Green (SSG)  No. 14–17 Moore St  The GPO  National Library  Leinster House Complex	No	This issue was raised during Day 20 of the OH.  TII acknowledges the critical role that the OPW plays in ensuring the protection and preservation of important State properties. TII also appreciates the value and significance of these properties for the State and the public and is committed to ensuring that the MetroLink project does not adversely affect them.  All of that said, an agreed set of conditions which would be incorporated into any Railway Order granted for the Project was submitted to An Bord



No	Issue	New Issue	TII Comment
	National Museum of Archaeology		Pleanála on Day 5 of the oral hearing on the basis that same addressed all of the concerns of the OPW except with respect to St Stephen's Green.
3	St Stephen's Green Park	No	This issue was raised during Day 20 of the OH.
	The OPW reiterates its position as set out in the submissions made to the Board in January 2023 in respect of St Stephen's Green. St Stephen's Green is highlighted as a National Monument with significant historical and legal status. The OPW is concerned that the proposed station location would have a direct, severe, negative, profound, and permanent impact on the heritage value of the Green (stating that proposals would not seem sufficiently sympathetic to the history and environment of the spaces within and around the Green"). The OPW urges the Board to consider modifications to the railway order or conditions to reduce environmental impacts on St Stephen's Green.		TII acknowledge the observation and the points raised by OPW. It is TII's position that all impacts on St Stephen's Green have been mitigated such that residual impacts are acceptable. It is our understanding that An Bord Pleanála, if granting a Railway Order which consents the construction of a station at St Stephen's Green, is urged by both OPW and TII to incorporate the "Unagreed proposed St Stephen's Green Railway Order
	The OPW also ask the Board to note that the "The Unagreed proposed St Stephen's Green Railway Order Conditions (day 05: Book 1 of 3) remain not agreed."		Conditions".
3	Future Developments	Yes	Please refer to Section 4.1.5.1 of the main report.
	The OPW requests that the MetroLink tunnel routing should not limit the State's capacity to develop its property, particularly around or below key sites such as Leinster House, Government Buildings, the National Gallery, the National Museum, and the National Concert Hall complexes. Planning Permission is in place for some extensive developments, including lower levels of buildings that may affect the		
	MetroLink tunnel.		
	The OPW requests for conditions to be attached to the Railway Order to mitigate any restrictions on future development of these properties		
5	Ongoing Engagement with TII  The OPW acknowledges the positive and constructive engagement with TII over the years. Significant progress has been made in reaching agreements on many matters related to the construction and operation phases of MetroLink. The OPW will continue to work with TII on property-specific bilateral agreements "and reserves the right to amend, change or add to the current draft under consideration and to seek whatever property-specific provisions may be necessary as we further develop these agreements."	No	TII acknowledge the support from the OPW and will continue to engage to progress this important project whilst addressing all concerns where possible to do so within the project constraints.
6	Stage-3 Assessments and Trigger Action Plans	Yes	Please refer to Section 4.1.5.2 of the main report,





No	Issue	New Issue	TII Comment
	The OPW notes that TII will prepare property-specific Trigger Action Plans (TAPs) and conduct comprehensive Stage-2 and Stage-3 assessments for ground movement impact/settlement on OPW properties (and references the letter where this has been agreed).		
	The OPW requests confirmation of a full and complete list of properties under the Trigger Action Plan Note No 2 - Applicable Locations (noting that there are inadvertent omissions in the current version).		
7	Instrumentation and Monitoring	Yes	Please refer to Section 4.1.5.3 of the main report.
	The OPW requests an additional step in the process for the oversight and implementation of Phase 3 assessments, specifically that instrumentation and monitoring be installed and baselined before any excavation commences.		
8	Guidance Note for Developers	Yes	Please refer to Section 4.1.5.1 of the main report.
	The OPW requests clarification on the scope of the Draft Guidance Note for Developers and the Outline Guidance Note for Developers and requests that the Board consider how the Exclusion and Protection Zones would operate prior to the Railway Order, and during the construction and operational phases of MetroLink.		
	The OPW is concerned about the potential for the MetroLink Railway Order to be construed as conferring a power on TII to regulate other extant grants of permission in terms of timing and phasing which may have been defined by conditions in those grants of permission. Furthermore, applications for permission may be pending and granted by time the Board confirms the Metrolink Railway Order. It is imperative that the confirmation does not create a situation of potentially conflicting conditions as this would create uncertainty in the implementation of grants of permission. create conflicting conditions with other extant grants of permission, which could create uncertainty in the implementation of these grants		
9	Conclusion The OPW reiterates its support for the MetroLink project and hopes that its concerns and requests are reflected in the Board's decision, should it decide to confirm the Railway Order	No	TII acknowledge the support from the OPW and will continue to engage to progress this important project whilst addressing all concerns where possible to do so within the project constraints.



## 2. Group 2: Location Specific

## 2.1 AZ1 Estuary to Dublin Airport North Portal

## 2.1.1 AZ1(a) Estuary Station (including Park & Ride facility) to Seatown Station to northern end of Swords Central Station

### 2.1.1.1 Estuary Court Residents' Association (ECRA)

No	Issue	New Issue	TII Comment
1	Duration of Construction and Occupation of Greens  Length of Occupation: The ECRA is concerned about the proposed 40-month occupation of the greens in Estuary Court for the construction of a 105-meter cut and cover tunnel. They argue that this duration is disproportionate compared to the overall project timeline of 8-9 years for the 18.8 km route.  Request for Construction Programme: The ECRA requests a detailed construction	Yes	Please refer to Section 4.2.1.1.1 of the Main Report.
	programme for the 105-meter section to justify the lengthy occupation period (105m in Estuary Court cut and cover tunnelling).		
2	Reduction of Occupation Time		Please refer to Section 4.2.1.1.1 of the Main
	The ECRA urges TII to reduce the occupation time of the South Green and restore it as soon as the cover on the tunnel is complete. They also request the withdrawal of the proposal to occupy the North Green, as no construction is required there.	Yes	Report.
3	Impact on Residents and Children		Please refer to Section 4.2.1.1.1 of the Main
	Loss of Green Spaces: The greens are the only open spaces available for children in the estate. The ECRA emphasizes the importance of these areas for the development and growth of young children.	Yes	Report.
	Impact Assessment: The ECRA requests an impact assessment on the children who use the greens and how the loss of open green space for 5 years will affect their development at a young age, similar to the biodiversity impact assessment conducted for other species.		
4	Alternative Alignment Proposal Re-alignment on R132: The ECRA proposes an alternative alignment of the Metrolink onto the R132, which they say would reduce the impact on Estuary Court. This proposal includes:	Yes	Please refer to Section 4.2.1.1.3 of the Main Report.



No	Issue	New Issue	TII Comment
	Utilizing the reduced width of the R132 due to Fingal County Council's R132 Connectivity Project.		
	Constructing the cut and cover tunnel on the R132 at pinch points.		
5	Request for Substantiated Reason  Dismissal of Alternative Proposal: The ECRA notes that TII dismissed their alternative alignment proposal without providing a substantiated reason. They request a detailed explanation as to why their proposal is not feasible.	Yes	Please refer to Section 4.2.1.1.3 of the Main Report.
6	Advantages of Precast Concrete Method  The ECRA suggests using precast concrete for the tunnel construction, citing benefits such as reduced construction time, cost savings, fewer workers on site, and a lower carbon footprint.	Yes	Please refer to Section 4.2.1.1.2 of the Main Report.

## 2.1.2 AZ1(b) Swords Central Station to Fosterstown Station to Dublin Airport North Portal

## 2.1.2.1 McGreevy and Taylor Families (letter submitted by Pearse Mehigan Solicitors LLP)

No	Issue	New Issue	TII Comment
1	Land Take, current access and impact of CPO  The McGreevy and Taylor land is described (undeveloped green-field, extends to approximately 1.86 hectares at Pinnock Hill). They assert that TII proposes to permanently acquire approximately 1.068 hectares (57%) of the site. They say that the land currently has a single access point off the R132 and no other public road frontage or access points. Their concern is that the CPO, in its current form, removes the only access to the lands, resulting in them being landlocked with no means of access.  Their solicitor states that the families had some initial engagement with TII representatives approximately 2-3 years ago but lacked professional representation and were unaware that no development access was being provided into their retained lands. The families mistakenly believed that a new access would be provided via the proposed new Fosterstown Station, which is not the case	Yes	Please refer to section 4.2.1.2.2 of the main report
2	Zoning, Development Potential & Engagement with TII  The site is zoned High Technology (HT) under the Fingal County Development Plan 2023-	Yes	Please refer to section 4.2.1. of the main report



No	Issue	New Issue	TII Comment
	2029, intended for office, research and development, and high technology manufacturing type employment. The removal of access not only affects immediate accessibility but also obviates any future development or access to the overall holding.		
	Their solicitor states that the families had some initial engagement with TII representatives approximately 2-3 years ago but lacked professional representation and were unaware that no development access was being provided into their retained lands. The families mistakenly believed that a new access would be provided via the proposed new Fosterstown Station, which is not the case		
3	Oral Hearing and Lack of Engagement  The families attended the oral hearing in March 2024. Their solicitor states that TII representatives did not engage with the families at the hearing because they had not made a formal written submission.	Yes	Please refer to section 4.2.1.2.1 of the main report
4	Concerns and Requests	Yes	Please refer to section 4.2.1.2.2 of the main
	The families believe that "the stopping up" or removal of any private means of access to a development site of this nature is "unacceptable and irrational" without an alternative and viable means of access.		report
	The extent of the permanent acquisition to facilitate the proposed Fosterstown Station is considered grossly excessive and far in excess of what is required.		
	The proposed CPO is stated to be "unfair, unjust, and bad in law."		

## 2.2 AZ2 Airport Section

There were no submissions received that raised new issues relating to this geographical area.

## 2.3 AZ3 Dardistown to Northwood

### 2.3.1 Lidl Ireland GMbH

No	Issue	New Issue	TII Comment
1	Developer Guidelines	Yes	Please refer to Section 4.2.3 of the main report
	These guidelines had not been presented to Lidl before the OH (Lidl state that they were		
	not informed about these guidelines during earlier meetings, despite their significant		



No	Issue	New Issue	TII Comment
	impact on development plans).  The fundamental issue with the Guidelines is summarised in Punch Consulting's submission to the Hearing on 11 March 2024, basically: the guidelines (a) impose major limitations on vertical loading (20kN/m²) and (b) create exclusion and protection zones that severely restrict high-density development.  They render the maximisation of development on the subject site impossible, due to an unacceptably low loading limit which effectively prohibits high-density development. As they stand, the loading limits allow for over-station development equivalent to a single house, rather than a high density, mixed use, employment and residential development	Issue	
	which is an inefficient use of land located at a transport interchange.  In Lidl's opinion, the guidelines are currently unflexible and subject to "unilateral and unfettered" change by TII.		
2	Adjacent Station Development (ASD) Proposal  Lidl says it met with TII on a number of occasions (11 in total) to discuss, amongst other items, the future development of the subject site. ASD was discussed (which was a high density, 15 storey residential led development with net a density of 294 units / hectare).	No	Noted. TII concur that over the past 6 years, it has engaged in at least 11 meetings with Lidl in relation to clarifying potential impacts on any high-density adjacent site development (ASD) proposals that Lidl may wish to promote in the future.
3	Over Station Development (OSD) Proposal  Presented at the March 2024 hearing, this mixed-use project includes substantial employment components (along with residential) to align with the Fingal County Development Plan's objectives.  It is stated that "The concept of an OSD project was discussed with TII in later meetings, in advance of the oral hearing and was presented at the hearing, seemingly, to the surprise of TII" – they say this was unfair for 3 reasons: (a) (1) Lidl had as early as November 2022	Yes	Please refer to Section 4.2.3 of the main report
	made a written submission to An Bord Pleanala setting out the case for Over Station Development. (See TBP Submission at Appendix 3); (b) they provide an extract from a TII response and (c) at a meeting between TII and Lidl in August 2023 the concept and merit of OSD was discussed between the parties.  The Developer Guidelines apply equally to both the OSD and ASD developments. Both require appropriate loading tolerances to allow for high density development, significantly above those provided for in the Developer Guidelines.		



No	Issue	New Issue	TII Comment
4	Planning and Policy Context  National, regional and local policy objectives obligate high density development on the Northwood site (but the Developer Guidelines effectively prevent that)  National and Regional Objectives: Lidl cites National Planning Framework, EMRA's regional policy objectives, and the Fingal County Development Plan 2023-2029, all of which emphasize high-density development at public transport interchanges.  Sustainable Development: The guidelines conflict with sustainable development goals by limiting the efficient use of strategically important urban sites.  Planning Compliance: TII accepts OSD in principle to comply with the Fingal Development Plan. Without OSD provision, the project would be inconsistent with proper planning and sustainable development as required by the National Planning Framework.  Site Location: The site is at a Metrolink and BusConnects interchange, necessitating high-density development per current zoning objectives. The Board has historically rejected low-density projects here.	Yes	Planning and Policy context is detailed in the Planning Report submitted with the RO application and at a local level in Section 3.6, 4.4 (AZ3 Dardistown Station to Northwood Station) and 4.5 (AZ4 Northwood Station to Charlemont).  Comments in relation to the implications of the Developer Guidelines are responded to in Section 4.2.3 of the main report.

## 2.4 AZ4 Northwood Portal to Charlemont

## 2.4.1 AZ4(a) Northwood Portal to Ballymun Station, Ballymun Station and running tunnel to Collins Avenue Station.

There were no submissions received that raised new issues relating to this geographical area.

## 2.4.2 AZ4(b) Collins Avenue Station and running tunnel to Griffith Park Station, including Albert College Park Intervention Shaft.

### 2.4.2.1 Griffith Avenue & District Residents Association (GADRA)

No	o Issue	New Issue	TII Comment
1	Alternatives and Data Accuracy	Yes	Please refer to Section 4.2.4.2.1 of the main
	GADRA are concerned that the population data in the 'spider algorithm' used to base the decision of the location of Collins Avenue Station is inaccurate. GADRA dispute the fact that Bus Stop 115 Ballymun Church is, or has been, busier than Bus Stop 37 Ballymun DCU. It is their belief that the data used for analysis was collected during the COVID-19 lockdown period when less students were frequenting DCU as lectures were held online and student campus accommodation was closed.		report



No	Issue	New Issue	TII Comment
2	Consultation and NDAs  They argue that the application for the Railway Order was incomplete, and that essential information was only provided on the first day of the oral hearings, despite repeated requests from residents and independent experts. GADRA strongly objects to the number of "Non-Disclosure Agreements (NDAs)" TII has entered into with other publicly funded entities, particularly those related to financial agreements, which they believe lack transparency and violate the Aarhus Convention. "As financial NDAs impact the "costbenefit and other economic analyses of the measures and activities" (as per Article 3(1) of EU Directive 2003/4/EC), they are subject to AIE."	Yes	Please refer to Section 4.2.4.2.2 of the Main Report.
3	Mitigation and Monitoring GADRA objects to the Local Liaison Officer (LLO) being the first point of contact for the Independent Expert (IE), arguing that this role should be filled by an engineering point of contact. They also request that the IE's contract be independent of TII and under the brief of the Department of Transport. GADRA emphasizes the need for real-time information and trigger monitoring plans with associated Monitoring Action Plans (MAPS) for residential areas, not just schools and universities.	Yes	Please refer to Section 4.2.4.2.5 of the Main Report.
4	Mitigation & Monitoring  GADRA's concerns centre on the need for reliable and timely safety information during the MetroLink project, criticizing TII for a perceived 'hands-off' approach. They argue that TII's reliance on an Independent Monitoring Engineer (IME) employed by the contractor, without clear and regular communication of safety data to residents, fails to assure the community of the project's safety. GADRA demands real-time monitoring, transparent dissemination of information, and direct involvement of technical staff rather than public relations officers to address safety and environmental impacts effectively.	Yes	Please refer to Section 4.2.4.2.5 of the Main Report.
5	Consultation  GADRA criticizes TII's stakeholder engagement plan, stating that it has failed to meet its key objectives of timely, consistent, and coherent communication. They cite instances where they had to resort to Freedom of Information (FOI) requests to obtain information and note that TII failed to attend pre-arranged meetings. GADRA requests that An Bord Pleanála make it a condition of the Railway Order that "a real stakeholder engagement plan" is put in place.	Yes	Please refer to Section 4.2.4.2.2 of the Main Report.
6	Out-of-Hours Work and Communication GADRA raises concerns about TII's interpretation of Section 36 of the Railway Order Act	Yes	Please refer to Section 4.2.4.2.12 of the Main



No	Issue	New Issue	TII Comment
	2001, which they believe does not grant the right to carry out routine ground investigations outside of normal working hours. They request that any application for out-of-hours work be made to the planning authority individually, with clear reasons for the derogation and contact details for the person granting it.		Report.
	GADRA "want communications to be at a much higher level than PR – we need residents to have clear channels of contact to actual decision makers."		
7	Risk Management and Responsibility  GADRA expresses concern about the clarity of roles and responsibilities within TII and its contractors, particularly in the event of a disaster or project stall. They request that TII/NTA be responsible for addressing and restoring all sites along the route if the project stalls.	Yes	Please refer to Section 4.2.4.2.10 of the Main Report.
8	Consultation  GADRA argues that TII has not satisfied the requirements of the 2001 Act regarding the Environmental Impact Assessment (EIA). They claim that TII did not consult the public on the position of the Albert College Park (ACP) Shaft and failed to disclose essential details about the structure. ("Because of the change from twin bore to single bore and the move from Na Fianna grounds a shaft/station was required. However, the situating of that structure required public consultation just as every other structure did") GADRA requests that the Inspector ensure that TII meets the standards set out in the 2001 Act.	Yes	Please refer to Section 4.2.4.2.2 of the Main Report.
9	Design/ Land Take GADRA questions the fire safety standards used for the ACP Shaft and requests clarification on the standards in place when the shaft was initially planned.	Yes	Please refer to Section 4.2.4.2.3 of the Main Report.
10	Design/ Land Take GADRA raise the issue of why a station cannot be placed at Albert College Park instead of the shaft.	Yes	Please refer to Section 4.2.4.2.3 of the Main Report.
11	Design/ Land Take GADRA argue that the current plan to fence off a large corner of the park for the shaft is unnecessary and that alternative solutions should be considered.	Yes	Please refer to Section 4.2.4.2.3 of the Main Report.
12	Traffic & Transport GADRA criticizes the Mobility Management Plan for relying on the goodwill of workers rather than making it a condition of the Railway Order. They suggest that Pay and Display	Yes	Please refer to Section 4.2.4.2.6 of the Main Report.



No	Issue	New Issue	TII Comment
	parking be implemented throughout the GADRA area, with discs issued to residents for the duration of the build.		
13	Stakeholder Communications GADRA are requesting that all residents along the route are given advance notice of TBM activity and TII have a plan communicated to the stakeholder for re housing of vulnerable residents should that be required for the period of the TBM movements through an area.	No	This commitment by TII is contained within the update to Appendix A5.1 The Outline Construction Environmental Management Plan (CEMP), Section 3.3.1.  The update Outline CEMP A5.1, was issued on day 19 of the Oral Hearing and is part of the second consultation information issued.
14	Groundborne Noise & Vibration  GADRA are requesting floating track slab within their residential area and requesting the rationale for TII not putting this in place in all residential areas.	Yes	Please refer to Section 4.2.4.2.4 of the main report
15	Construction Phase GADRA requests assurances that residents will not be affected by disruptions to utilities during the construction and operation of Metrolink (and if they are, that advance notice and back-up generators be provided).	Yes	Please refer to Section 4.2.4.2.7 of the main report
16	Landscape – Tree Retention/ Protection  GADRA emphasize the need for the protection of retained trees in Albert College Park, in accordance with British Standards.	Yes	Please refer to Section 4.2.4.2.8 of the main report
17	Climate  GADRA state, "The Ballymun launch construction site will align with the decarbonisation zone as it will be operated on 100% renewable energy and have diesel site requirements replaced with sustainable sourced Hydrotreated Vegetable Oil (HVO)". GADRA request that the ACP Shaft in the decarbonisation zone, aligns with Dublin City Council's Climate Action Plan. They request that the construction and operation of the shaft adhere to the same environmental standards as the Ballymun launch construction site.	Yes	Please refer to Section 4.2.4.2.13 of the main report
18	Right of Reply GADRA requests the right to reply to any response to their submission.	Matter for the Board	



#### 2.4.2.2 Hampstead Residents CLG

No	Issue	New Issue	TII Comment
1	Public Consultation and Communication Issues  Delayed Document Release: The Hampstead Residents expressed frustration over "the significant TII/NTA document drop" on the first day of the oral hearing, which they believe was a "cynical tactic" to withhold information and was only released "under duress".	Yes	Please refer to Section 4.2.4.2.2 of the main report.
2	Public Consultation and Communication Issues Independent Expert Assistance: The residents found the assistance from the assigned Independent Tunnelling Expert (RINA) to be severely curtailed by TII/NTA's scope of services.	No	Since September 2021, RINA Consulting has been retained by TII as Independent Engineering Expert (IEE) to provide impartial technical advice to Residential Stakeholder Groups who may be affected by the construction and operation of MetroLink. The IEE was appointed following a competitive tendering process which included an independent member of the selection panel. This complaint has been raised previously by Hampstead Residents CLG and TII responded to this during days 3 and 14 of the Oral Hearing.
3	Public Consultation and Communication Issues  Lack of Genuine Consultation: The residents feel that the consultation process regarding the proposed vent shaft in Albert College Park was inadequate and did not afford them genuine consultation opportunities. They have asked the Inspector to initiate a review of TII's preferred route "consultation" re the vent shaft in ACP and alternatives.	Yes	Please refer to Section 4.2.4.2.2 of the main report.
4	Public Consultation and Communication Issues  Meeting Issues: A pre-arranged meeting with TII/NTA representatives was not attended by the TII team, causing significant upset among the residents.  They claim they were forced to use to the FOI process to obtain information.	Yes	Please refer to Section 4.2.4.2.2 of the main report.
5	Construction Impacts and Concerns  Vent Shaft in Albert College Park: The residents are concerned about the proposed vent shaft and its alternatives. They request a formal review of the consultation process and genuine engagement on this issue.	No	The observer's concern on the location of the Vent Shaft at Albert College Park, together with the consultation process undertaken were raised and addressed by TII on day 3



No	Issue	New Issue	TII Comment
			and 14 of the Oral Hearing.
6	Use of Albert College Park  The residents demand that the football field area in Albert College Park be used only for this compound itself and not for any other MetroLink construction activities – they say TII has confirmed that the ACP area outside of the main construction compound will not be used for storage or a staging ground, or any other temporary use, other than football field realignment.	Yes	Please refer to Section 4.2.4.2.9 of the main report
7	Tree Preservation  Hampstead Residents CLG say that TII/NTA confirmed that no trees along the Hampstead Avenue boundary and in blue areas of maps A and B, will be removed, and the residents want this assurance included as a condition for granting the Railway Order.	Yes	Please refer to Section 4.2.4.2.8 of the main report
8	Noise and Night-time Activity  The residents are concerned about noise breakout and site activities at night. They request that all night-time activities, including concrete pours and ground-level activities, be fully attenuated. Request that MetroLink construction sites are quiet and dark at night.	No	Response to Hampstead Residents' CLG Submission (made on 21 February 2024) and provided at the oral hearing on Day 9, referred to within: 'Documents Submitted at the Oral Hearing, Day 9, Book 1 of 1, 'TII response to Hampstead Heath Residents CLG Submission made on 21 February 2024', Section 6.2.  This observation has been raised previously by Hampstead Residents CLG and TII responded to this during 14 of the Oral Hearing.
9	Contractor Compliance  The residents have had negative experiences with TII/NTA contractors, specifically citing an incident where noisy tracked machines were moved late at night (on 17 September 2024), breaching agreed working hours (Causeway Geotech doing borehole work in ACP); there was a leaflet drop, and not all residents received this.	Yes	Please refer to Section 4.2.4.2.12 of the main report
10	Safety and Professionalism  Road Safety Breach: The residents reported a serious breach of road safety when contractors moved equipment without lights in the dark. They issued their	Yes	Please refer to Section 4.2.4.2.12 of the main report



No	Issue	New Issue	TII Comment
	concerns/questions to TII/NTA on this.		
11	Compensation and Sanctions  Compensation for Transgressions: The residents emphasize the need for a compensation/ penalty system for any breaches of agreed work parameters by contractors or sub- contractors.	Yes	Please refer to Section 4.2.4.2.12 of the main report
12	Residents Charter  They propose the establishment of a residents' charter, with the Department of Transport (not TII/NTA) responsible for defining the scope of work and terms of reference for independent expert assistance and the Hampstead residents to be involved/have input.	Yes	Please refer to Section 4.2.4.2.11 of the main report
13	Specific Requests for Conditions to RO  Stakeholder process: the residents want a "professional and quality tested (with inbuilt measurements and transparency) stakeholder engagement process" sourced and implemented.	Yes	Please refer to Section 4.2.4.2.11 of the main report
14	Additional Concerns Freedom of Information: The residents maintain they had to use the Freedom of Information process to obtain MetroLink-related information, indicating a lack of transparency from TII/NTA.	Yes	Please refer to Section 4.2.4.2.2 of the main report
15	Independent Expert Assistance The residents found the assistance from the assigned Independent Tunnelling Expert (RINA) to be severely curtailed by TII/NTA's scope of services.	Yes	Please refer to Sections 4.2.4 of the main report

## 2.4.3 AZ4(c) Griffith Park Station and running tunnel to Glasnevin Station.

There were no submissions received that raised new issues relating to this geographical area.



#### 2.4.4 AZ4(d) Glasnevin Station and running tunnel to Mater Station.

#### 2.4.4.1 Royal Canal Clean Up Group (Nessa Winder)

No	Issue	New Issue	TII Comment
1	General Support  The submission begins by expressing support for the Metrolink project, acknowledging its potential to alleviate traffic congestion and reduce air and noise pollution in Phibsborough.	To note	Noted with thanks.
2	Traffic and Vehicular Access Concerns  Vehicular Access: Concerns are raised about the adequacy of plans for vehicular access to and from the Royal Canal Way at Glasnevin Station. The submission notes that previous feedback to Metrolink engineers has not been sufficiently addressed. "There also appears to be no obvious plans to widen the towpath at the narrowest section indicated in the photos & drawings to follow". The submission provides a list of vehicles that need access to the Royal Canal Way.  Survey of pedestrian, cyclist and vehicular activity: asserts that the figures provided by the project are out of line with real life experience.  Heavy Vehicle Access: there is a lack of detailed plans for heavy vehicle access, which is crucial for various services and deliveries.  Traffic Management: The submission questions the existence and adequacy of a traffic management plan, particularly in relation to the new plaza layout and the need for filter lights to manage traffic flow.	Yes	Please refer to Section 4.2.4.4.1 of the main report
3	Integration with Royal Canal Greenway Phase 3 and 4 Plans: The submission discusses the ongoing Royal Canal Greenway Phase 3 and 4 projects and their traffic management plans, which may conflict with the Metrolink project.	Yes	Please refer to Section 4.2.4.4.1 of the main report
4	Pedestrian Crossings The submission notes potential issues with pedestrian crossings at Cross Guns Bridge and the need for better integration between the Greenway and Metrolink plans.	Yes	Please refer to Section 4.2.4.4.1 of the main report.
5	Consultation Between Bodies  The submission emphasizes the need for consultation between Metrolink and the Royal Canal Greenway project teams to ensure cohesive planning and avoid costly overlaps.	Yes	Please refer to Section 4.2.4.4.1 of the main report





No	Issue	New Issue	TII Comment
6	Narrow Section of Road Pedestrian and Cyclist Safety  Towpath Width: The submission highlights the narrow width of the towpath (3.3m wide and stretches for 50m) between the station and the canal, which poses a significant safety risk for pedestrians and cyclists. The submission notes that the water is very deep and there is no riparian verge. Concerns are raised about the increased footfall and frequency of bicycles and scooters once the station is operational, exacerbating the existing safety risks.  Legal Safety Standards: The submission questions whether the current towpath width meets legal safety standards and calls for immediate action to address this issue.  The submission suggests that addressing the towpath width issue may require significant structural changes to the current plans	Yes	Please refer to Section 4.2.4.4.1 of the main report
7	Specific Vehicular Access Needs to the Royal Canal Way Local Residents: The submission lists the specific vehicular needs of local residents, including access for 13 residents and 7 cars.  Service Vehicles: Frequent access is required for heavy vehicles such as septic tank vehicles, oil deliveries, An Post, and courier deliveries.  Agricultural Land: Access is needed for the O'Sullivan family's private agricultural land.  Community and Sports Facilities: The Cabra for Youth Sports Centre and Community Garden require regular vehicular access for events and maintenance.  Maintenance and Emergency Services: Waterways Ireland, DCC waste trucks, Irish Rail, and emergency vehicles need access for maintenance and safety operations.	Yes	Please refer to Section 4.2.4.4.1 of the main report
8	Visual and Structural Concerns  Drawings and Visuals: The submission asserts there has been a lack of detailed visual references to vehicular access in Metrolink's drawings, making it difficult to assess the adequacy of the proposed plans.	Yes	Please refer to Section 4.2.4 of the main report.



#### 2.4.4.2 Shandon Residents

No	Issue	New Issue	TII Comment
1	Lack of Public Minutes or Recordings: The association expresses disappointment that no public minutes or recordings of the Oral Hearing are available until after the case is decided.  Inadequate Responses: Despite assistance from the Independent Engineering Expert (IEE) and RINA, many questions remain unanswered (from the OH docs).  The association sent these questions to TII/Metrolink on September 10th and received responses on September 30th.	No	All records of supplementary documents to the Railway Order submission were submitted by TII to the Inspectors as part of the Oral Hearing process, between the 19 February (day 1) and the closing day, 28 March 2024 (day 22). These are available on the TII website and ultimately formed the contents of the Second Consultation Process.  Access to the records of the Oral Hearing is a matter for An Bord Pleanála.  Thank you for acknowledging the responses received to the RINA queries on 30th September where TII endeavoured to answer all questions raised. Whilst the engagement through RINA sits outside of the statutory RO process, any similar queries raised here have been addressed in like fashion to ensure there are no discrepancies between both responses.
2	Temporary Bridge at Lock 6 Temporary Exit Road: The association questions why the temporary exit road cannot be routed through the Crossguns site instead of Shandon Park. They argue that the proposed route through Shandon Park will cause significant disruption to local residents and increase air pollution. They say that the Inspector was also interested in this alternative and queried the proposed gradient of the bridge. They say that there's been no satisfactory answer as to why the temporary access could not be routed through the derelict industrial site instead of through Shandon Mills.  Concerns are also raised about the bridge's design, particularly its gradient and suitability for large vehicles. The association requests a comparative analysis of alternative routes.	Yes	Please refer to section 4.2.4.4.1 of the main report.
3	Glasnevin Station Plaza Design Surface Durability: The association questions whether the proposed surface can	Yes	Please refer to section 4.2.4.4.1 of the main report.



No	Issue	New Issue	TII Comment
	withstand heavy goods traffic.		
4	Traffic and Pedestrian Safety: Concerns are raised about how pedestrians and traffic will safely share space, with specific questions about the station's design and levels.	Yes	Please refer to section 4.2.4.4.1 of the main report.
5	Tow Path Access: The association notes that the updated drawings do not clearly show the widened entrance and other changes.	Yes	Please refer to section 4.2.4.4.1 of the main report.
	They express concern with the photo montages/their clarity; none of the images show the planting proposals ("It is impossible to reconcile the revised drawing showing the layout of the station (and access to the tow path with the amended photomontages and the presentation made at the Oral Hearing").		
6	Hedgerow Loss: The association disputes the claim that the loss of a single hedgerow will not have a significant negative impact. They request that the current hedgerow be reinstated post-construction and suggest planting a more diverse hedgerow.	Yes	Please refer to section 4.2.4.4.3 of the main report.
7	Reinstatement of Trees: The association requests the reinstatement of trees planted along the fence line by residents and the Royal Canal Cleanup Trust.	Yes	We understand this comment relates to the loss of hedgerow referred to in the biodiversity section of the submission. Please refer to section 4.2.4.4.3 of the main report for a response.
8	Biodiversity and Habitat Corridor: The association emphasizes the importance of the Royal Canal as a habitat corridor and expresses disappointment that the project does not fully incorporate biodiversity considerations.	Yes	Please refer to section 4.2.4.4.4 of the main report.
	Swift Nesting Blocks: The association criticizes the decision not to include swift nesting blocks due to the station's glass construction, arguing that this is a missed opportunity for biodiversity enhancement. "The rigid adherence to design features that lock out biodiversity when we are in a dire situation seems very short-sighted"		
	General: "There seems to be a lot of wasted opportunity and ambition for biodiversity net gain where the station is situated alongside such a vital habitat corridor where 'water is life'."		
9	Historical and Cultural Impact	No	This issue was addressed in the first round of
	Brian Boru Pub: The association laments the loss of the historic Brian Boru Pub, a		submissions and during the oral hearing.
	landmark with significant cultural and historical value. They suggest incorporating		See the Final Schedule of Environmental





No	Issue	New Issue	TII Comment
	elements of the pub into the station design to acknowledge its history.		Commitments issued on Day 21, reference 2.8.
10	Additional Concerns  Early Appointment of a Liaison Person: The association stresses the importance of appointing a liaison person early to facilitate ongoing dialogue with residents.  Overlapping Project Timelines: Concerns are raised about the potential overlap of timelines between Metrolink, BusConnects, and the Royal Canal Greenway Phase 4 projects. They have asked "Who will have oversight of potentially overlapping timelines across projects in the area between BusConnects, Royal Canal Greenway Phase 4 and Metrolink?"	No	These issues have been addressed in the first round of submissions and during the oral hearing.  See the Final Schedule of Environmental Commitments issued on Day 21 of the hearing and the Cumulative Impacts addendum report issued on Day 7.
11	Population Security and Amenity Impacts: The association highlights the potential negative impacts on security and amenity from the new bridge on Shandon. [extract from the ML Independent Engineering Expert Services report]	Yes	Please refer to section 4.2.4.4.2 of the main report.
12	Traffic Management and Access Temporary Access for Coke Oven Cottages: The association seeks assurances that the temporary access road and bridge will be suitable for all necessary vehicles, including emergency services. They also request consideration of an alternative route through a derelict site.  Permanent Access for Coke Oven Cottages: Clarification is requested on the proposed route for vehicles and the width of the reinstated stretch of the Royal Canal Way (RCW).  [pg 15 – in the ML Independent Engineering Expert Services report]	Yes	Please refer to section 4.2.4.4.1 of the main report.
13	Parking Loss: The association notes the loss of long-term permitted parking for Coke Oven Cottages residents at Des Kelly's on Phibsborough Road. [extract from the ML Independent Engineering Expert Services report]	Yes	Please refer to section 4.2.4.4.1 of the main report.



#### 2.4.5 AZ4(e) Mater Station and running tunnel to O'Connell Street Station.

#### 2.4.5.1 Amanda Hughes

No	Issue	New Issue	TII Comment
1	Design/ Visual Impact  The submitter maintains the Mater metro stop obscures the view of the Mater Hospital and is visually overwhelming.	No	Addressed in TII's response to the Observer during the first consultation process, see response number 006 Amanda Hughes, items 3 and 5.
2	Design The submitter maintains the size/design of this canopy will increase anti-social behaviour.	No	Addressed in TII's response to the Observer during the 1st consultation process, see response number 006 Amanda Hughes, item 5.
3	Design Critique of argument that this is needed for design continuity; only SSG is similar – different designs across 18 station lines.	No	The appropriateness of the design at Mater was covered in detail in TII's response to the Observer during the initial consultation process, see response number 006 Amanda Hughes, items 1 through to 7.  For further detail of new responses on Architectural Heritage and Landscape & Design, please also refer to Section 4.2.4.5.3 and 4.2.4.5.8 of the main report.
4	Design/ Architectural Heritage  Mater and SSG metro stops are not in keeping with the architectural heritage and historic location of their built environments.	No	The appropriateness of the design at Mater was covered in detail in TII's response to the Observer during the initial consultation process, see response number 006 Amanda Hughes, items 4 and 5.  For further detail of new responses on Architectural Heritage and Landscape & Design, please also refer to Section 4.2.4.5.3 and 4.2.4.5.8 of the main report.
5	Design The submission makes a series of design proposals:	No	This observation was previously raised by another observer at Mater, District 7, during the initial consultation process, but with other



No	Issue	New Issue	TII Comment
	New canopy design similar to Paris (Gare St Lazare)  Have a design competition for Mater stop canopy and fire brigade lifts		station examples given. TII's response on this is contained in initial consultation response number 066 District 7, items 15, That response states:  'TII believe that the commissioning of internationally renowned architect Nicholas Grimshaw and Partners, has delivered a contemporary station design which is appropriate for a state-of-the-art metro system such as MetroLink. Appropriately, significant emphasis is placed on the public spaces. The station concourse at Mater will be a soaring space illuminated from above with natural light. Dublin's rich architectural heritage has been respected but not copied in a pastiche imitation. In accordance with best conservation principles, as set out in the ICOMOS Venice Charter of 1964, the stations are architecturally distinguishable so as not to falsify the existing historic context. Reference and due respect to that context is made through the choice of high quality and appropriate materials and the scale of the interventions.'
6	<b>Design</b> The submission is critical of the extent of the plaza and bollards – "unnecessarily large" and requests more planting / trees.	No	Addressed in TII's response to the Observer during the 1st consultation process, see response number 006 Amanda Hughes, item 5.
7	Biodiversity The submission requests bat friendly lighting.	Yes	Please refer to Section 4.2.4.5.7 of the main report.
8	The submission raises a query about which body will be dealing with residents' concerns during construction (access to "independent professional liaison").	Yes	Please refer to Section 4.2.4.5.5 of the main report.



No	Issue	New Issue	TII Comment
9	Community Gain  The submission outlines the adverse effects that will occur to the community and welcomes community gain.	Yes	Please refer to Section 4.2.4.5.5 of the main report.
10	Insurance Home Insurance: the submission maintains that insurance premiums may increase due to the danger of subsidence – will TII assure residents that they will have cover and that associated premium excesses will be reimbursed?	Yes	Please refer to Section 4.2.4.5.5 of the main report.
11	POPS  Extension to POPS: the submission maintains that 1 year will not be sufficient to see the effects of subsidence; scale of coverage, 75k Euros – should be linked to construction industry value rather than consumer index.	Yes	Please refer to Section 4.2.4.5.5 of the main report.
12	Traffic Management & Air Pollution  The submission expresses concern regarding the "accumulative effects of all the construction vehicles in Phibsborough" – will residents be kept informed of air pollution levels during construction period of Metro, or will there be an independent monitoring body?	Yes	Please refer to Section 4.2.4.5.4 of the main report.

## 2.4.5.2 Andrew Conlon and Maeve Fitzpatrick (19 Berkeley Road)

No	Issue	New Issue	TII Comment
1	Construction Impact Security Provisions and Access Impact: TII should outline security provisions and the impact on access to No. 19, including access to the street directly outside the property. Review of Construction and Operational Impact Data: TII should review all data and information provided on the construction and operational impact of the project to ensure it is applicable to No. 19. Implementation of Mitigation Measures: Following the review, TII should confirm that all	No	The security provisions and impact on access to No. 19 remain the same as identified in the EIAR, as outlined within the First Consultation Response Report (Submission no. 9).  The mitigation presented within Chapter 31
	possible and relevant mitigation measures will be implemented and provide a list of these measures.		of the EIAR, including the updates within day 20 of the Oral Hearing, applies to 19 Berkeley Road.



No	Issue	New Issue	TII Comment
2	Impact on Property  Lack of Mitigation Measures: The material provided on Day 19 (Updates to Appendix A5.1 Outline CEMP, p. 105) mentions mitigation measures for properties at 20 and 21 Berkeley Road but does not reference No. 19 (i.e. their property), despite its closer proximity to the construction site and its status as an architectural heritage site (BH-62).	Yes	Please refer to section 4.2.4.5.9 in the main report.
3	Station Design  Skylight Height Reduction: While the reduction in the height of the skylights is welcomed, concerns remain about the overall design and scale of the station infrastructure.  Fire Brigade Lifts: The current design and location of the fire brigade lifts block views down Berkeley Road, including views of the station entrance, the Mater, and St. Joseph's Church.  Station Entrance Impact: The size of the station entrance should be minimized, and its visual impact reduced by narrowing the frame.  Increased Planting: The final design should include more planting, as the current design features extensive paving.	Yes	Please refer to section 4.2.4.5.8 in the main report.
4	POPS - Repair Value and Additional Costs  Repair Value Increase: The increase in repair value is welcomed but should be linked to the Construction Price Index.  Coverage of Additional Costs: The scheme should be extended to cover additional costs incurred by residents, such as increased maintenance costs due to access issues, higher insurance premiums, and additional security costs	Yes	Please refer to section 4.2.4.5.5 of the main report.
5	Operational Impact  Vent Noise Readings: db(C) Measures for Vent Noise: TII should provide db(C) measures for the vent located outside 19-20 Berkeley Road (they noted the issues raised by the ABP acoustic expert during the hearing for vent noise readings).	Yes	Please refer to section 4.2.4.5.13 of the main report.
6	Stakeholder Management Plan Independent Advice: The provision of independent advice throughout the construction period is welcomed. They want more details on how this advice can be accessed. Community Gain Initiatives: The inclusion of a section on Community Gain is welcomed. They have asked for more information on the types of initiatives supported.	Yes	Please refer to section 4.2.4.5.5 of the main report.



No	Issue	New Issue	TII Comment
7	Clarification on Site Boundary: The have sought clarification on the location of the secondary site boundary both prior to and during the Oral Hearing (their home is directly opposite the Mater Station and the construction site will be right outside their house during construction of the western vent shaft, during stages 2, 3 and 8 of the construction sequence). The information provided by TII at the Oral Hearing indicated that the site boundary is located at the kerb. However, updated AIA Drawings (Day 19, p. 100) show the site construction boundary meeting their house boundary, raising concerns about the accuracy of the information provided by TII. They have a map in their submission.	Yes	Please refer to section 4.2.4.5.8. of the main report

## 2.4.5.3 Berkeley Road Area Residents Association (BRARA)

No	Issue	New Issue	TII Comment
1	Station Design and Park Reinstatement  Architectural Heritage Concerns: The station's impact on the architectural heritage of the area, which is zoned under Objective 22 of the Dublin City Development Plan 2022-2028, is a primary concern (with this zoning aiming to enhance the architectural quality of the streetscape and protect its residential character)  BRARA contend that the station canopy design is inappropriate for the location, and there was "absolutely no consultation" with residents during the design phase. It was looked at more from the perspective of passersby, than residents.	No	Dealt with during the oral hearing including in the document "MetroLink – Architecture Station integration and common components overview presentation" issued on Day 15 of the hearing.
2	Design Skylights: The reduction in height of the skylights is welcomed. Signage: Confirmation that there will be no signage on the glass is welcomed.	No	Noted
3	Design Glass Specification: Planners are asked to ensure the glass used is as specified due to its intrinsic design importance.	No	This is considered a matter for An Bord Pleanála.
4	Design Fire Brigade Lifts: A redesign of the fire brigade lifts is requested due to their impact on the Berkeley Road streetscape.	Yes	Please refer to section 4.2.4.5.8 of the main report.
5	Design	Yes	Please refer to section 4.2.4.5.8 of the main



No	Issue	New Issue	TII Comment
	Granite Bollards: The use of granite bollards is requested due to their prominence and number.		report.
6	Design  Hard Paving: Concerns about extensive use of hard paving; a reduction is requested with the introduction of trees/planting to mitigate the overall impact.	Yes	Please refer to section 4.2.4.5.8 of the main report.
7	Design Station Canopy: A reduction in the size of the station canopy is requested. They would like to see an overall reduction in size and narrowing of the columns and entrance façade. Columns and Entrance Facade: A reduction in size and narrowing of the columns and entrance facade is requested.	Yes	Please refer to section 4.2.4.5.8 of the main report.
8	Design  Four Masters Park: They request that local residents have a formative role in park design (given its value to local residents). Restoration of the park railings prior to reinstatement is requested.	Yes	Please refer to section 4.2.4.5.8 of the main report.
9	Property Owners Protection Scheme  Repair Value: The increase in maximum repair value is welcomed. It is requested that this value be linked to the Construction Price Index rather than the Consumer Price Index, given the duration of the build and the nature of defects that may arise.  The scheme should also cover additional costs incurred by residents directly attributable to Metrolink works, such as increases in home insurance premiums	Yes	Please refer to section 4.2.4.5.5 of the report.
10	Construction Impact Worker Transportation: Confirmation that construction workers will be bussed to the site and will not be permitted to park in the local area is welcomed.	Yes	Please refer to section 4.2.4.5.6 of the report.
11	Construction Impact Working Hours: Confirmation that construction work will run from 7.30 am to 6.30 pm with a 30-minute site set-up and close-down period on either side is welcomed.	No	Noted and confirmed.
12	Construction Impact Aspergillus Risks: A formal outline of mitigation measures to address Aspergillus risks is requested.	Yes	Please refer to section 4.2.4.5.2 of the main report.



No	Issue	New Issue	TII Comment
13	Construction Impact  Dust Mitigation: Commitment to liaise with community groups on dust mitigation measures is welcomed, with a request for this engagement to occur prior to works commencing.	Yes	Please refer to section 4.2.4.5.2 of the main report.
14	Construction Impact  Traffic Management Plan: It is requested that the local Traffic Management Plan be agreed upon with representatives of local residents and businesses prior to works commencing.	Yes	Please refer to section 4.2.4.5.6 of the main report.
15	Operational Impact Airborne Noise: Concerns about airborne noise during train operations, particularly levels of 40 dB in bedrooms, are raised. This is especially concerning if Metrolink moves to 24-hour operations.  The use of floating track to minimize noise under homes is requested.	Yes	Please refer to section 4.2.4.5.1 of the main report.
16	Operational Impact  Noise Readings for Vents: It is noted that the noise readings for vents provided by TII may not be the most suitable indicator for low-frequency noise.  The provision of dB(C) measures for vents is requested	Yes	Please refer to section 4.2.4.5.1 of the main report.
17	Stakeholder Management Plan  Disruption: Acknowledgment of significant disruption for over nine years, with many local residents potentially never enjoying the benefits of Metrolink.	No	Disruption from the project is dealt with throughout the EIAR as submitted with the original RO application.
18	Stakeholder Management Plan Independent Expertise: The provision of independent expertise throughout the construction phase is welcomed.  Details on how local residents can access this service and reassurance that provision will be adequate given the scale and duration of the build are requested.	Yes	Please refer to section 4.2.4.5.5 of the main report.
19	Stakeholder Management Plan Community Gain: The reference to Community Gain is welcomed. More detail is requested, such as budget provision for supporting local initiatives	Yes	Please refer to section 4.2.4.5.5 of the main report.



# 2.4.5.4 District 7 Community Alliance (representing six residents' associations and a business association in the Mountjoy, Broadstone, and Dorset Street areas)

No	Issue	New Issue	TII Comment
1	Mater Station Design, Park Restoration, and Mitigation Works  Height of Skylights and Signage: The community welcomes the reduction in skylight height and the decision not to affix signage to the glass façade.	Noted	
2	Mater Station Design, Park Restoration, and Mitigation Works  Visual Impact: The entrance portal's scale and design are seen as harmful to the historic surroundings, including 19th-century buildings and the Four Masters Park. Negative impact on heritage value is emphasised.  Overground Structures: The design of the station entrance portal, passenger lifts, and fire brigade lifts is considered out of keeping with the historic urban parklet. They emphasise that the design of these features as currently planned has no support from local residents.  Material Use: The materials used for overground structures do not reflect the local historical architecture, missing an opportunity to use red brick or granite.	Yes	See section 4.2.4.5.8 of the main report.
3	Specific Requests for Design Adjustments  Entrance Portal Redesign: A request to reduce the width of the iron frame and use clear glass to lessen the portal's dominance.  Lift Redesign: A request to redesign the passenger and fire brigade lifts to soften their impact and use materials sympathetic to the surrounding architecture.  Bollard Material: A request to use granite instead of polished steel for bollards to match the local historic environment.  Paving Concerns: The community feels the amount of paving is excessive and requests the introduction of raised beds to address water permeability and soften the effect of the paving.	Yes	See section 4.2.4.5.8 of the main report.
4	Architectural Heritage  Park Restoration: Concerns about the alteration of the park's character and a request for a commitment to conserve historic railings by "a professional conservator" prior to reinstatement. They also request a clearer, more legible version of the reinstatement plan for railings/green space here.  District 7 Community Alliance refers to a request to provide a more legible version of the plan "Four Masters Park Railing Length and Green Space, Day 16: Book 1 of 1 (Document	Yes	See section 4.2.4.5.3 of the main report



No	Issue	New Issue	TII Comment
	48)" produced at the Oral Hearing.		
5	POPS Repair Value Index: A suggestion to link the repair value to the Construction Price Index instead of the Consumer Price Index.  Cost Coverage: A request for TII to cover any costs incurred by residents, such as increased insurance premiums	Yes	See section 4.2.4.5.5 of the main report.
6	Cumulative Impacts & Timing of Works  Inclusion of Additional Projects: The community requests the inclusion of three additional major planned projects in the cumulative impacts report: (a) 4790/23 Hendron's 36-40 Upper Dominick Street (b) New Mater Hospital building Eccles Street and (c) 4145/22 Former Des Kelly site 168-169 Phibsborough Road  The group expressed concerns about the lack of liaison regarding the timetabling of all projects and their combined effect on the Phibsborough area.	Yes	See section 4.2.4.5.4 of the main report.
7	Airborne Noise  Noise Readings: A request to resolve differing positions on noise readings above the tunnel path and vent noise (alleged differences between the Board's experts and TII's).	Yes	See Section 4.2.4.5.1 of the main report
8	Air Quality - Aspergillus Risk Risk Assessment: A request for a risk assessment and survey for Aspergillus exposure for local residents, separate from those proposed for the Mater Hospital. "TII agreed to come back on this but haven't done so"	Yes	See Section 4.2.4.5.2 of the main report
9	Air Quality - Dust Mitigation Measures  Community Agreement: A request for dust mitigation measures to be agreed upon with local residents' representatives prior to the works.	Yes	See Section 4.2.4.5.2 of the main report
10	Air Quality - Proximity and Dust Sensitivity  Hoarding Proximity: Concerns about the close proximity of hoarding to houses and shops on Berkeley Road.  Dust Impact: The impact of construction works on dust-sensitive properties and businesses, including a dry cleaner, coffee shops, a flower shop, and a pharmacy.	No	Chapter 16 (Air Quality) of the EIAR. Dust mitigation measures are detailed comprehensively in Appendix A16.2 (Site Specific Potential for Construction Phase Dust Impacts), Appendix A16.4 (Dust Management Plan) of the EIAR and in the updated CEMP presented at the oral hearing



No	Issue	New Issue	TII Comment
			on Day 20 (Section 6.3). Chapter 5 (Construction Phase) and Appendix A5.1 (CEMP) of the EIAR.
11	Stakeholder Engagement and Community Gain Local Liaison Officer	Yes	Please refer to section 4.2.4.5.5 of the main report.
	Clarification on Independent Experts: A request for clarification on whether independent experts' services will be mediated through TII or directly with stakeholders.		
12	Stakeholder Engagement and Community Gain Community Gain Projects	Yes	Please refer to section 4.2.4.5.5 of the main report.
	Project Funding Details: A request for further particulars on the types of projects that will be funded and whether there is a dedicated budget for community gain.		
13	Traffic & Transport	Yes	Please refer to section 4.2.4.5.6 of the main
	Construction Worker Parking: A request for a written commitment that no construction workers will park in the area of the station works and that contractors will provide off-site parking with shuttle services.		report.
	Rat-Run Concerns: Concerns about residential streets being used as rat-runs during and after the proposed works.		
	Traffic Management Plan: A request for the Traffic Management Plan to be agreed upon with local residents and businesses.		
14	Traffic & Transport	Yes	See section 4.2.4.5.6 of the main report.
	Traffic Calming and Cycle Lanes on Berkeley Road		
	Speeding Concerns: Concerns about speeding on Berkeley Road and the anticipated increase in pedestrian traffic.		
	Traffic Calming and Crossings: A request for traffic calming measures and zebra crossings to be implemented as part of the project.		
	Cycle Lane Safety: A request for the cycle lanes along Berkeley Road to be segregated to ensure cyclist safety.		



#### 2.4.6 AZ4(f) O'Connell Street Station and running tunnel to Tara Station.

#### 2.4.6.1 Troy's Family Butchers Ltd.

No	Issue	New Issue	TII Comment
1	Construction Compound The submission makes reference to TII issuing a temporary CPO on 24/25 Moore Street to enable Hammersons to use this site compound whilst constructing the MetroLink station box.	Yes	Please refer to Section 4.2.4.6.1 of the main report.
2	Tendering Process/ Conflict of Interest  The submission claims a failure to comply with tendering process rules and alleges conflicts of interest.	Yes	Please refer to Section 4.2.4.6.4 of the main report.
3	Planning Process The submission claim that it is not proper planning to have multiple interdependent planning applications.	No	The Planning application (Railway Order application) for MetroLink is stand alone and does not have interdependencies on any other planning applications. This was discussed at the oral hearing following Stephen Troy's evidence submission on 19 March 2024.
4	Planning Process/ Conflict of Interest  Maintain they have provided evidence to convey that laws have been broken, and a conflict of interest clearly exists within TII, the Department of Heritage and Dublin City Council in relation to these inter-dependent MetroLink and Hammerson's planning applications.	Yes	Please refer to Section 4.2.4.6.4 of the main report.
5	Traffic Management The submission maintains that TII have not submitted an independent traffic management plan and are reliant on the traffic management plan contained in the Hammersons Planning application for Dublin Central.	No	A scheme traffic management plan (STMP) was provided as a standalone report within the EIAR (Appendix A9.5). The STMP assesses the impact of the construction of the Project on all road users and proposes mitigation measures where appropriate.
6	Traffic Management The traffic management plan misses multiple other trip destinations challenge that the assessment does not include 'realistic volumes of traffic in the area on a daily basis'.	Yes	Please refer to Section 4.2.4.6.3 of the main report.



No	Issue	New Issue	TII Comment
7	Traffic Management  The traffic Dispersal route image is incorrect because traffic cannot exit to Parnell Square West due to the traffic island in place around the Luas.	Yes	Please refer to Section 4.2.4.6.3 of the main report
8	Architectural Heritage Using 24/25 Moore Street for a traffic compound is contrary to designation as protected structure and 1916 Cultural Quarter Bill.	Yes	Please refer to Section 4.2.4.6.2 of the main report
9	Compensation Proposes compensation fund for Moore Street traders who will be affected by works	Yes	Please refer to Section 4.2.4.6.5 of the main report
10	Compensation The submission queries how TII will mitigate financial losses of affected traders on Moore Street	Yes	Please refer to Section 4.2.4.6.5 of the main report
11	Human Health The EIA did not contemplate the mental health impact of the threat to the livelihoods of people because of the impact on business during the construction in the Moore Street area.	Yes	Please refer to Section 4.2.4.6.6 of the main report.

#### 2.4.7 AZ4(g) Tara Station and running tunnel to St. Stephen's Green Station.

There were no submissions received that raised new issues relating to this geographical area.

#### 2.4.8 AZ4(h) St. Stephen's Green Station and running tunnel to Charlemont Station.

There were no submissions received that raised new issues relating to this geographical area.

#### 2.4.9 AZ4(i) Charlemont Station and tunnel turnback south of the Station.

#### 2.4.9.1 Brendan Heneghan

No	Issue	New Issue	TII Comment
1	Unsuitability of Charlemont as a Terminus The submission states the following issues:	No	The majority of the issues outlined here were dealt with in the first-round consultation response to submission no. 027 Brendan



No	Issue	New Issue	TII Comment
	<ul> <li>Inadequate and unfit for purpose connection between the street level and the Luas</li> <li>Lack of sufficient bike parking</li> <li>The provision of two small lifts is plainly inadequate</li> <li>Alleged increase of Luas capacity south of Charlemont. Takes issue with lack of turnback options at Charlemont. Proposed routing of ML passengers to non-existent bus routes.</li> <li>Good alternative with similar connectivity at St Stephen's Green East</li> <li>Alleges that reason why ML cannot terminate at SSG is the requirement for an escape route</li> <li>Deficiencies for airport origin passengers in terms of bus provision, luggage facilities in those buses and difficulties in lugging cases up stairs.</li> <li>Excessive length of the construction period in close proximity to dwellings.</li> <li>Will constrain extension of ML to the southwest of the City.</li> </ul>		Heneghan and were also raised on Day 21 of the Oral Hearing  For the response on cycle parking, please refer to the Dublin Cycling Campaign response in Section 4.3.7.  Alternatives in general are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives. In particular, the choice of Charlemont over St Stephen's Green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.  As noted in the "Response to submissions of Elected Representatives at Charlemont" document, issued on Day 9 of the Oral Hearing. The location of the Charlemont Station as currently designed does not preclude the MetroLink from continuing to the south-west of the city in the future, taking in Rathmines and Terenure in the process.  The length of the Construction Period at Charlemont was addressed during Day 20 of the Oral Hearing.
2	The submission notes issues relative to the underground tunnelling, specifically: Likely impacts on residential buildings identified in the Gillarduzzi Paper were blithely dismissed by TII. Likely to be extensive minor damage. Raises 3 questions on the changes made to avoid damaging Aercap House and Cadenza building.	Yes	See section 4.2.4.9.1 of the main report.
3	The submission states there is a procedural complaint that significant information was presented at the oral hearing and not subsequently produced in writing by TII and thereby allowing TII to "evade comment".	No	The purpose of an oral hearing is to allow the Inspector stakeholders and members of the public to interrogate the evidence put forward by the project proposer. This evidence included the RO documentation and the responses to submissions made during the



No	Issue	New Issue	TII Comment
			1st round of statutory consultation. TII responded to all issues raised at the oral hearing with additional material produced as requested by Inspectors. This material was then subject to a 2nd statutory consultation where a further opportunity was given to stakeholders and the public to put further queries to TII with responses included in this document. In this context TII consider it unreasonable to suggest that TII had an opportunity to or sought to evade comment.
4	<ul> <li>The submission states there was significant information presented at the oral hearing and not subsequently produced in writing by TII, including:</li> <li>Use of the existing Luas platform as a bridge. Comparison made with use of the Dargan Luas bridge in Dundrum.</li> <li>Practical possibility of running more trams south of Charlemont – submitter believes that ML will disgorge 30,000 passengers a day onto the Luas which will not be able to cope with these passenger numbers.</li> <li>Lack of escalators – inadequate space on stairs and risk of chaos on stairs during peak times. Comparison made with the stairs at the Dundrum Luas stop.</li> <li>Impacts on the canal if the lay-by (alleged that this was a late drop in and has not been assessed properly)</li> <li>Detailed analysis of MetroLink passenger movement once passengers alight from station.</li> </ul>	Yes	See section 4.2.4.9.7 of the main report.  Ref the Grand Canal Lay-by, please see the Update to Appendix 4 Charlemont PRM Lay-by Assessment, Day One of the Oral Hearing.
5	The submission states a large number of people will have to cross the Luas tracks and this is a safety issue.	No	The issue of Luas safety was raised previously by the respondent in the first round of public consultation and responded to in this document (no. 027, Brendan Heneghan).



#### 2.4.9.2 Ciaran Black & Leon McCarthy

No	Issue	New Issue	TII Comment
1	The submission states that Errata is a misleading description of the vast amount of documentation submitted by TII at the oral hearing.	Yes	Please refer to Section 4.2.4.9.8 of the main report.
2	Further information in relation to Airborne Noise & Vibration	Yes	Please refer to Section 4.2.4.9.4 of the
	The submission states that TII conceded at the OH that an error had been made regarding the house height of 33 and 33 Dartmouth Road. TII recalculated the (after mitigation) impacts which are increased to "significant to very significant" for 6 of the 8.5 year construction period.		main report
	The submission queries through RINA whether a 7m high acoustic barrier could be deployed instead. This is not being proposed by TII however.		
	Further errors in TII's revised data – a) UT52 not UT51 is the appropriate noise receptor and (UT52 is 30m from the property and UT51 is 80m). b) 65dB and not 70dB should be the baseline noise level for UT51. Choosing the incorrect baseline artificially lowers the impact rating on the observers house.		
	The submission makes reference to RINA agreeing that the incorrect baseline is applied at this location, and that TII had conceded in a meeting with the owners that noise would be intolerable and rehousing would be necessary.		
	The submission states that if the correct noise receptor is used and the correct baseline is applied, the (after mitigation) impacts will be "significant to very significant" for the entire 8.5 year construction period.		
	The submission states the consequences of this are hugely important – under EIA Guidelines, significant residual effects must be considered carefully in deciding whether to consent the project at all.		
3	Further information in relation to Groundborne Noise & Vibration	Yes	Please refer to Section 4.2.4.9.4 of the
	The submission states that TII conceded that the thresholds will be exceeded during the blasting and mechanical excavation phases		main report.
4	Construction phasing and duration	No	The residents' concerns on the
	The submission states the TBM tunnelling and other construction activities proposed will be 24/7 and there is extensive provision for works outside the 5.5 day standard working week. This is effectively going to be a 24/7 construction site for 8.5 years. The impacts on human health in particular from sleep disturbance has not been properly assessed.		Construction Hours of Operation at Charlemont were addressed in Module one of the Oral Hearing, including an update to the proposed working hours Appendix 5.1,



please refer to 'Update to Chapter 5 MetroLink Construction Phase: Working Hours' submitted on day 7 of the Oral Hearing.  In addition to this, on day 9 of the Oral Hearing, TII provided oral evidence of the likely durations of the most impactful construction activities. These will occur in the first 6 years of construction at Charlemont and were summarised in the following sequence: Enabling Works; Piling; Roof Slab Construction; Excavation and Station Construction, and will be undertaken during standard working hours. As stated during the Oral Hearing, the following construction activities will be undertaken on a 24/7 working hours basis: The progression of the Tunnel Boring Machine; The mining of the Ventilation and Evacuation Tunnel; and MEP installation. These activities will occur during years 6 to 8.5 of the programme and are either short in duration (TBM and mining) or are low impact activities (MEP). In all cases where 24/7 working hours practices are deployed, the construction activities undertaken during these hours will be below ground within the confines of an enclosed station structure further mitigating impact. Outside of the 'abnormal or large deliveries' no deliveries will take place outside of standard working hours during the construction phase.



No	Issue	New Issue	TII Comment
5	The submission states the total cumulative impact a) has moved to "significant" or "very significant" on the basis of TII's further information at the OH and b) in fact is worse than the further info TII is presenting.	Yes	Please refer to Section 4.2.4.9.15 of the main report.
6	Acoustic barrier  The submission states the acoustic barrier proposed by TII, in addition to being ineffective as a mitigation against Airborne Noise and Vibration will fence in the observer and restrict light into the property and have access, safety and security issues.	Yes	Please refer to Section 4.2.4.9.15 of the main report
7	Rehousing Policy  The submission states that TII's "Temporary Rehousing" policy is designed for noise exceedance that may last for days or weeks and clearly is not effective mitigation for a situation where we will be faced with the significance of effects outlined for 8.5 years.	Yes	Please refer to Section 4.2.4.9.11 of the main report.
8	POPS The submission states the updated POPS scheme offers no effective mitigation to the observers house based on TII's estimates of the settlement impacts at this location.	Yes	Please refer to Section 4.2.4.9.12 of the main report.
9	'Effective Demolition' The submission states that 33 Dartmouth Road will effectively be demolished as Metrolink will completely destroy the purpose of the home and any ability to have quiet enjoyment.	Yes	Please refer to Section 4.2.4.9.15 of the main report.
10	Mitigation – Property Acquisition  The submission states that all reasonable and available mitigation must be pursued before the grant of an RO, otherwise it would be an unlawful attack on Constitutionally protected property rights. The submission states that TII has not progressed the acquisition of the house which is clearly a reasonable and available mitigation and the Charlemont terminus cannot be consented in those circumstances.	Yes	Please refer to Section 4.2.4.9.12 of the main report.
11	Mitigation Measures and Acoustic Barrier  The submission notes that although TII has undertaken further assessment post-OH and offered enhanced mitigation measures to nearby residents, it has not proposed any further engineering solutions to the observer e.g. TII are not offering to install a higher noise barrier. TII will not bring forward further engineering solutions unless compelled to by a refusal or a condition in the RO.	Yes	Please refer to Section 4.2.4.9.4 and Section 4.2.4.8.10 of the main report.



No	Issue	New Issue	TII Comment
12	The submission states there has been no agreement reached despite TII promises and active engagement from the Property owner over the last 6 months. ABP should compel TII to reach an agreement with the observer.	Yes	Please refer to Section 4.2.4.9.14 of the main report.

#### 2.4.9.3 Conor and Lorraine Power

No	Issue	New Issue	TII Comment
1	Objection to Charlemont Terminus  Conor and Lorraine Power object to the proposed Metrolink terminus at Charlemont, not the project as a whole. They align their concerns with those raised by McCabe, Durney, Barnes Consultancy, and the Dartmouth/Charlemont community, including Dartmouth Square West Residents and Dartmouth Road Residents.  The Powers argue that Charlemont is primarily a residential area and not a necessary component for the Metrolink to the airport.	No	Alternatives are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives. In particular, the choice of Charlemont over Saint Stephen's green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.  This issue was raised on day 20 of the oral hearing, where TII restated the rationale as to why a station Charlemont is the preferred location for the southern terminus, where its location provides an interchange with the Luas Green Line.
2	Lack of Engagement and Unsatisfactory Reassurances  The Powers had a meeting with TII and Jacobs representatives to discuss the impact of the terminus on their lives. They say they did not receive satisfactory reassurances about the disturbance from the construction site, potential damage to their home, and the effectiveness of proposed mitigation measures.	Yes	Please refer to Section 4.2.4.9.14 in the main report.
3	Noise and Disruption Concerns  Previous Construction Noise: The Powers have experienced elevated noise levels from the construction of the Hine's building behind their house, which they do not want to repeat. A noise monitor was installed in their garden in July 2024, showing lower noise levels compared to previous readings but still indicating unacceptable noise levels during construction.	Yes	Please refer to Section 4.2.4.9.4 of the main report.



No	Issue	New Issue	TII Comment
4	Noise and Disruption Concerns  Category A Construction Noise: The report confirms that Category A, Construction Noise Category, applies, which means they will face raised noise levels during the Metrolink construction.  The Powers maintain that there is a lack of clarity around the height of the proposed noise barrier (whether 4 meters or 7 meters) and consider it will be ineffective based on their experience during the Hine's development. They say that no alternative solutions have been offered by TII, and the Powers feel they are expected to endure the disruption without adequate consideration.	Yes	Please refer to Section 4.2.4.9.4 of the main report.
5	Impact on Family Life Prolonged Construction Period: The Powers are concerned about the nine-year plus construction period and its profound impact on their family life, especially on their four young children. They express apprehension about the noise and vibrations, potential structural damage to their home, and the overall stress and uncertainty this will bring to their lives.	No	The concerns raised have been outlined in their response to the initial consultation, response reference 051, and as presented on days 10 and 21 of the Oral Hearing are fully recognised by TII. In the responses provided to date in both the initial consultation and at the Oral Hearing TII remain committed to assisting the Powers through the implementation of proposed mitigation measures as the Project is progressed.
6	Technical Note on Noise Monitoring  The submission notes that a noise monitoring survey was conducted on behalf of TII in the garden of the property in July 2024 to provide baseline noise readings. A copy of the Technical Note by AWN Consulting, dated 17 September 2024, detailing the monitoring results was appended to the submission.	Yes	Please refer to Section 4.2.4.9.4 of the main report.

#### 2.4.9.4 John Conway and Orlaith McCarthy

No	Issue	New Issue	TII Comment
1	Noise Level Concerns	Yes	Please refer to Section 4.2.4.9.4 of the
	Inaccurate Data Presentation: The submission states that during the Oral Hearing (OH)		main report.
	on 26 March 2024, TII presented data on airborne noise level predictions, claiming it		



No	Issue	New Issue	TII Comment
	was based on a survey at 15 Dartmouth Square. However, the observer challenged this at the OH and TII retracted their statement, undermining trust in data accuracy and the observers trust in the truthfulness/accuracy of TII's data.		
	Noise Barrier		
	Proposed Noise Barrier: TII proposed a 7-meter high noise barrier along the eastern side of the site as a mitigation measure. The height varied during the OH but the residents understanding is that it settled at 7 meters.		
	Ineffectiveness of Noise Barriers: Residents, including John Conway and Orlaith McCarthy, have previous experience with noise barriers from the Carrolls Grand Parade building development, finding them ineffective. They are concerned that the predicted airborne noise values will exceed threshold levels during the 8.5-year construction period, leading to prolonged exposure to uncomfortable noise levels.		
2	Potential Structural Damage & POPS inadequacy	Yes	Please refer to Section 4.2.4.9.16 and
	Protected Structures at Risk: The terrace homes, built in the 1890s without foundations, are protected structures. TII's contour maps predict ground settlement, which the residents say could cause substantial damage, including cracks in masonry, misalignment of windows and doors, cracks in chimney stacks, roof alignment issues, and collapsing ceilings.		Section 4.2.4.9.12 of the main report.
	The observers express concern that the Property Owners Protection Scheme (POPS) proposed by TII offers inadequate compensation for potential structural damage. The cost of remedial works is expected to exceed the maximum payout levels under POPS.		
3	Construction Method for the 'Red Wall' detailed on Charlemont Station Design Drawing	Yes	Please refer to Section 4.2.4.9.18 of the main report.
	Secant Piling vs. Diaphragm Wall: TII plans to use secant piling for the 'red wall' (shown on Drawing ML 1-JAI-SRD-ROUT_XX-DR-Z-02090) near 15 Dartmouth Square, while diaphragm wall construction is used elsewhere. Mr. Conway argues that diaphragm wall construction is more efficient in excluding water ingress and reducing ground settlement risks.		
4	Connectivity and Accessibility Concerns	No	Please refer to Day 20 of the OH.
	Terminus vs. Interchange: Mr Conway states that TII insist Charlemont is an interchange, not a terminus, emphasizing connectivity with other public transport forms.		This issue was raised on day 20 of the oral hearing, where TII restated the rationale as



No	Issue	New Issue	TII Comment
	However, Mr Conway flags that the nearest bus stops are 90 and 150 meters away, allegedly undermining the claim of superior connectivity at this location.		to why a station Charlemont is the preferred location for the southern terminus, where its location provides an interchange with the Luas Green Line.
5	Requests and Recommendations	Yes	Please refer to Sections 4.2.4.9.17,
	Structural Damage Indemnity: The observers seek a guarantee and indemnification from TII, ensuring direct recourse to TII for structural damage compensation, rather than relying on an insurance company.		4.2.4.9.18 and 4.2.4.9.4 of the main report.
	Construction Method Specification: The observers request that the diaphragm wall construction method be specified for the 'red wall' to minimize risks of ground settlement and structural damage.		
	Noise Barrier Effectiveness: TII should demonstrate the effectiveness of the proposed noise barrier in mitigating airborne noise from the site.		

#### 2.4.9.5 Leo and Anne Crehan

No	Issue	New Issue	TII Comment
1	Terminus vs. Interchange Misrepresentation of Charlemont Station: The argue that the designation of Charlemont as an interchange rather than a terminus is misleading. They assert that it will function as a terminus for a long time, which is inappropriate for a residential area and an Architectural Conservation Area.	No	Please refer to the 1st Statutory Consultation response No. 166. Leo and Anne Crehan.  This issue was also raised on day 20 of the oral hearing, where TII restated the rationale as to why a station Charlemont is the preferred location for the southern terminus, where its location provides an interchange with the Luas Green Line.
2	Connectivity  Metro and Luas Connectivity: The submission maintains that the connection between the Metro and Luas at Charlemont is inadequate. The elevated Luas platforms are not wide enough to handle the increased passenger load, especially those with luggage. Inefficient Transfer Route: The submission references the proposed open staircase at the front of the Carrolls' Building, which it considers to be inefficient for passenger transfer.	Yes	Please refer to Section 4.2.4.9.7 of the main report



No	Issue	New Issue	TII Comment
3	Connectivity  Bus Connectivity: The nearest bus stops are 90 meters and 150 meters away, requiring passengers to navigate escalators, steps, and narrow footpaths, which is not practical.	No	Please refer to the response to observation 166, item 3 in the first public consultation response document.
4	Design - Impact on Carrolls' Building  Obstruction of Protected Structure: The proposed open stairway from the Luas platform will obscure and diminish the value of the Carrolls' Building, a protected structure.	Yes	Please refer to Section 4.2.4.9.7 of the main report.
5	Structural Integrity Concerns  Ground Settlement Risks: The observers' structural engineering expert, Mr. Brian Kavanagh, indicated that the predicted ground settlement (up to 30mm) could severely damage the Victorian 3-storey brickwork houses.  Diaphragm Wall vs. Secant Pile Wall: They assert that settlement can be caused by groundwater leakage into the excavation. The observers advocate for the use of a diaphragm wall (D-wall) to prevent water ingress, which is more effective than the secant pile wall. The observers express concern that TII is considering using a secant pile wall instead of a D-wall, despite the latter being more effective. They request that the D-wall be specified as mandatory in the tender documents.  TII's proposal includes a D-wall only behind some houses, with a secant pile wall behind others. The observers request a continuous D-wall behind all houses to mitigate settlement risks.	Yes	Please refer to Section 4.2.4.9.2 and Section 4.2.4.9.18 of the main report.
6	POPS Inadequacy of POPS Scheme: The observers argue that the POPS scheme is insufficient to cover potential repair or rebuild costs in case of severe structural damage. They request a guarantee from TII to cover full repair or rebuild costs.	Yes	Refer to Section 4.2.4.9.12 of the main report.
7	Noise Mitigation Ineffective Noise Barrier: The observers express concern that the proposed 7-meter high noise barrier along the eastern side of the site may be ineffective based on past experience (from the Hines development). The observers are concerned about unmitigated noise levels during the 8.5-year construction period.	No	This issue was raised and discussed during Day 10 and Day 21 in the Oral Hearing. This issue is also addressed in Section 4.2.4.9.4 of the main report.



#### 2.4.9.6 Michael A Doyle and Carmel Smith Doyle

No	Issue	New Issue	TII Comment
1	Airborne Noise & Vibration – Updated Appendix A13.7  The result of the additional noise modelling on 34 Dartmouth Road is to increase the impact at their property so that there are six continuous years (or 70% of the construction period) of 'significant to very significant effects'.	Yes	Please see Section 4.2.4.9.4 of the main report.
2	Airborne Noise & Vibration – Updated Appendix A13.7  The observers maintain that they queried through the IEE appointed by TII (RINA) whether it was possible to install a 7m acoustic barrier instead of a 4m barrier. They maintain that feedback received from TII is that TII is not proposing to increase the height of the acoustic barrier above 4m. The observers state it would therefore appear there is no engineering solution to mitigate against these 'significant to very significant' airborne noise and vibration impacts.	Yes	Please see Section 4.2.4.9.4 of the main report.
3	Airborne Noise & Vibration – Updated Appendix A13.7  The observers state in their submission that there are errors in TII's revised noise assessment, specifically: The baseline should be 65dB not 70dB.  UT51 is the wrong receptor to represent effects on 33 and 34 Dartmouth Road. UT52 should be used instead.  UT51 is not appropriate for baseline monitoring due to the reflective walls located either side of the sound level meter and should have been 1.2m to 1.5m above ground.  The observers maintain that the revised data presented is flawed and that with the appropriate baseline used, the impact is significant to very significant for the full 8.5 year construction period.	Yes	Please see Section 4.2.4.9.4. of the main report.
4	Groundborne Noise & Vibration  The impact of groundborne noise and vibration from blasting and mechanical excavation will have a significant impact on the resident's property with no mitigation proposed.	Yes	Please refer to Section 4.2.4.9.4 of the main report.
5	Airborne & Groundborne Noise & Vibration Impacts  The observers state in their submission that the new data shows the level of noise impact will be higher, the duration longer and the intensity of the impact over 24 hours	Yes	Please refer to Section 4.2.4.9.4 of the main report.



No	Issue	New Issue	TII Comment
	a day and 7 days a week will be greater than certain periods during the 8.5 years of construction. The construction works will be within 6.5m of the home.		
6	Human Health Impacts Human health impacts from the new prediction of residual noise impacts have not been adequately assessed.	No	Please refer to Chapter 10 (Human Health) and Chapter 11 (Population and Land Use) of the EIAR. Potential human health impacts associated with construction in this location were also discussed on day 10 of the Oral Hearing.
7	<ul> <li>Inconsistencies in Noise Monitoring Data</li> <li>The submission makes a number of comments in relation to the baseline noise data, specifically: <ul> <li>TII has not explained why baseline monitoring was repeated at 11 locations.</li> <li>The new recordings were with an uncertified device.</li> <li>The new recordings happened while the Hines building was being installed.</li> <li>Non-standard noises should have been excluded from the results as they are not representative.</li> </ul> </li> </ul>	Yes	Please refer to Section 4.2.4.9.4 of the main report.
8	Missing Data in Noise Assessment  The submission maintains that:  TII should have assessed noise impacts on 34 Dartmouth Road from 3 sides, rather than just the front elevation, because it is a detached house.  Noise is measured at 10m distance in the noise model, but 33-34 Dartmouth Road are only 5m from the construction site.	Yes	Please refer to Section 4.2.4.9.4 of the main report.
9	Noise Assessment - Incorrect Listing of Drilling Machine Noise  The submission states that there is an incorrect listing of drilling machine noise, compared to machine manufacturers listed noise output. (Manufacturers levels for the FlexiRoc T15 and T30 drills are different from those assessed).	Yes	Please refer to Section 4.2.4.9.4 of the main report.
10	Noise Assessment – HGV Data Assumptions  The submission maintains that the assumptions made for HGV traffic, heavy plant and reverse bleepers are inaccurate or not modelled.	Yes	Please refer to Section 4.2.4.9.4 of the main report.
11	Negative Impacts arising from the Acoustic Barrier	No	Please refer to Chapter 13 (Airborne Noise



No	Issue	New Issue	TII Comment
	Imposition of acoustic barrier is another very significant effect due to access, safety and security issues.		and Vibration) of the EIAR.
12	Temporary Rehousing Policy  TII has acknowledged that relocation would be necessary, but its temporary rehousing policy is limited to 4 weeks. The submission maintains that based on the updated noise information it seems that it will not be possible for noise levels to be adequately mitigated for periods in excess of 4 weeks. The temporary rehousing policy is irrelevant in the context of 33 and 34 Dartmouth Road.	Yes	Please refer to Section 4.2.4.9.11 of the main report.
13	POPS scheme The submission maintains that the maximum compensation payable under the POPS scheme is inadequate to compensate for structural damage that may occur to the properties as a result of ground settlement.	Yes	Please see Section 4.2.4.9.12 of the main report.
14	'Effective Demolition' of Properties  The submission maintains that the impact from the project is so profound on 33 and 34 Dartmouth Road that it is equivalent to a 'demolition'.	Yes	Please see Section 4.2.4.9.16 of the main report.
15	Mitigation through Property Acquisition  The submission maintains that at the oral hearing TII committed to actively seek a solution with the owners of 34 Dartmouth Road, who express disappointment and frustration at the lack of progress. They maintain that the obvious mitigation in their case is for TII to acquire their property under principles that are close to those of a compulsory purchase order.	Yes	Please see Section 4.2.4.9.13 of the main report.

#### 2.4.9.7 Union Investment Real Estate GmbH

No	Issue	New Issue	Previous Reference
1	The submission notes the observer is looking forward to engaging with TII in respect of remaining land acquisition matters, including wayleaves / rights of way and surface areas to remain in charge of TII following the completion and during the operation of the Metrolink project. The submission notes these matters need to be resolved prior to final acquisition of lands by TII.	Yes	Please refer to Section 4.2.4.9.18 of the main report



No	Issue	New Issue	Previous Reference
2	The submission objects to the connection lift and stairs at NW of Carrolls building because it will obstruct fire escape routes.	No	Issue was raised during Day 10 and Day 20 of the OH.
3	The submission objects to the connection lift and stairs at NW of Carrolls building because of risks associated with fire spread.	No	Issue was raised during Day 10 and Day 20 of the OH.
4	The submission objects to the connection lift and stairs at NW of Carrolls building because the updated modelling submitted to the oral hearing indicates upwards of 8,000 individuals will traverse the front entrance area of 2 Grand Parade daily to interchange with Luas services and this will impact the Carrols building and its operations.	No	Issue was raised during Day 10 and Day 20 of the OH.
5	The submission objects to the connection lift and stairs at NW of Carrolls building because of its incongruous relationship with the Carrol building and its detrimental impact on the setting of the main entrance, along with the curtilage and hard landscaping for the building including the restored water feature.	No	Issue was raised during Day 10 and Day 20 of the OH.
6	The submission states that the alternative design proposal the observer proposed in the Oral Hearing would be more appropriate.	No	Issue was raised during Day 10 and Day 20 of the OH.
7	The submission objects to the connection lift and stairs at NW of Carrolls building because of its impact on setting of the protected structure (Carrolls Building) and the proximity of the lift and staircase in such close proximity to the architecturally important front facade would not be in keeping with this approach.	Yes	Please refer to Section 4.2.4.9.7 of the main report

## 2.4.9.8 Charlemont and Dartmouth (General Area Submission)

No.	Issue	New Issue	TII Comment
1	Process  The submission states the application was incomplete, the CPO documentation was inaccurate, and the Board should have suspended the process at that stage. While the public notices have given parties the opportunity to comment, after having undertaken a proper and full review of the amended application documentation, there is no opportunity now to ask questions of the Applicant in relation to matters arising.	Yes	Please refer to Section 4.2.4.9.8 of the main report.
	The submission states the assessment of airborne noise is presented is unclear and contradictory submissions (and refers to the submission made by Dartmouth Sq		



No.	Issue	New Issue	TII Comment
	West).  The submission requests that costs to be awarded to CDCG under section 42(10) of the 2001 Act.		
2	Rationale for Southern Section of Order (from SSG to Charlemont)  The submission states the conversion of the Luas Green line to Metro as far as Sandyford was envisaged by the <i>MetroLink Preferred Route Design Development Report</i> (prepared in 2019). That this reflected the Transport Strategy for the Greater Dublin Area 2016-2035 which applied at that time. However, this aspect of the project has effectively been abandoned but the project has completely failed to recognise this reality.  The submission states that once the decision had been made not to proceed with the extension to Sandyford, the rationale for the final section to Charlemont should have been reconsidered. However, this did not occur and Charlemont will be a stranded terminal station, remote the from the city centre which it is intended to serve. The NTA's own Draft Dublin Transport Plan 2023 identifies the city centre as being within the canal ring.	Yes	Please refer to Section 4.2.4.9.13 of the main report.  Alternatives in general are also dealt with in the first instance in EIAR Chapter 7,  Consideration of Alternatives. In particular, the choice of Charlemont over Saint Stephen's green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.
3	Terminus v Interchange  The submission states it is a key policy for the Board to have regard to is in relation to interchange and there is no effective interchange with bus services, no integration with DART underground, no integration with taxi set down, no kiss and ride facilities, no evident integration with cycle provision at Charlemont.  The submission notes the TII Review of Charlemont Station note submitted to the oral hearing, indicates that there will be 29,300 people using the Charlemont Station during a 12hr period, with only 8,000 (27%) of these accessing Luas (the only mode with interchange at Charlemont).	Yes	Please refer to Section 4.2.4.9.13 of the main report.
4	Prejudicing Alignments to Southwest Dublin  The submission states the west of the City is the zone that is in most need of fixed rail, as it is the area that area that does not, or will not, benefit from high quality public transport before 2042. However, the amended application has prejudiced the potential to provide quality public transport in the form of Metro to serve important areas such as Portobello and Rathmines, as an alignment terminating at Charlemont will not be capable of serving these areas.  The submission proposes that a Metro which terminates at St. Stephens Green will	No	As noted in the "Response to submissions of Elected Representatives at Charlemont Station" document issued on Day 9 of the Oral Hearing, the location of the Charlemont Station as currently designed does not preclude the MetroLink from continuing to the south-west of the city in the future, taking in Rathmines and Terenure in the process.





No.	Issue	New Issue	TII Comment
	however facilitate such an onward extension to the Rathmines, Portobello area and beyond to the Southwest.		
5	Stair Access and Interchange between Luas and Metro  The submission states the flight of stairs at Charlemont is the main interchange between the Luas and Metrolink, which will have to accommodate all passengers including those with baggage who are either coming from or going to the Airport. The submission queries why there are two flights of stairs with a width of 1.2m in each direction. The submission states this is less than a minimum footpath width on a standard road, let alone that which would be required for high volumes of pedestrians interchanging between Luas and Metro.  The submission queries why there is the provision of a lift there is no escalator up the Luas Station.	Yes	Please refer to Section 4.2.4.9.7 of the main report.
6	Other Deficiencies  The submission notes deficiencies identified in their original submissions have not been addressed with reference to the development description and alternatives.  The submission requests that the Tara St to Charlemont section of the alignment be omitted, and a revised RO application be required to be submitted for a terminus at St Stephens Green.	No	Alternatives are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives. In particular, the choice of Charlemont over Saint Stephen's Green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.
7	Other Deficiencies  The submission identified a deficiency in the Traffic and Transport Assessment that access and egress from the station entrance to Dartmouth Road is not considered.	Yes	Please refer to Section 4.2.4.9.3 of the main report.
8	Other Deficiencies  The submission identified a deficiency where escalator noise was not considered during the operational phase of Charlemont Station.	Yes	Please refer to Section 4.2.4.9.4 of the main report.



#### 2.4.9.9 Charlemont and Dartmouth (1,3,5 and 7-16 Dartmouth Square)

No	Issue	New Issue	TII Comment
1	The original and new Airborne Noise Assessment applicable to Charlemont Station are significantly different and the new one is not an errata.	Yes	Please refer to Section 4.2.4.9.4 of the main report
2	The submission queries what mitigation measures are included in arriving at the mitigated impacts in Appendix 13.7 Charlemont Station Errata, in particular whether the noise barrier is 4m or 7m high?	Yes	Please refer to Section 4.2.4.9.4 of the main report
3	The submission queries whether the errata replace Appendix 13.7 or supplement it.	Yes	Please refer to Section 4.2.4.9.4 of the main report
4	The submission notes that in relation to reference properties 21-29: There are no unmitigated noise results for these properties The mitigated results are only presented for Station piling works north	Yes	Please refer to Section 4.2.4.9.4 of the main report
5	The submission notes there are significant to very significant noise effects on all of the properties on Dartmouth Square West over an 8.5-year construction period.	Yes	Please refer to Section 4.2.4.9.4 of the main report
6	The submission notes there will be extensive works amounting to a 24/7 construction period over the 8.5-year construction period	No	As previously stated in responses to the 1st Statutory Consultation (various submissions) and at the Oral hearing, 24/7 construction site working over 8.5 years is not proposed anywhere along the MetroLink Route. The Proposed working hours for the project are fully evaluated within the EIAR (refer to Chapter 5) and were updated and issued on day 7 of the Oral Hearing, reference 'Update to Chapter 5 MetroLink Construction Phase - Working Hours'.
7	The submission notes the impact on human health of late working hours, disrupted sleep and amenity of rear gardens has not been assessed.	No	This topic was discussed during day 9 of the Oral Hearing. The assessment for Human Health impact is contained in Chapter 10 of the EIAR.
8	The submission states the residents have provided evidence of impact on property	Yes	Please refer to Section 4.2.4.9.15 of the main



No	Issue	New Issue	TII Comment
	values. TII has submitted no evidence to rebut them.		report.
9	The submission states, the residents seek a guarantee and indemnification from TII and not an insurance company in the event of structural damage.	Yes	Please refer to Section 4.2.4.9.16 of the main report.
10	The submission states that TII has admitted that D-Wall is more efficient than secant pile in preventing water ingress and therefore in reducing risk of ground settlement and structural damage. D-Wall should be specified for the entire site.	Yes	Please refer to Section 4.2.4.9.17 of the main report.

#### 2.4.9.10 Charlemont and Dartmouth (26-28 and 32-35 Dartmouth Road)

No	Issue	New Issue	TII Comment
1	The submission repeats the issues regarding hours of operation, impact on human health and property values as the 1-4, 5-7 and 8 of Dartmouth Square submission.	See above	Please refer to the response above for the common issues raised in the 1, 3, 5 and 7-16 Dartmouth Square submission.
2	The submission makes reference to the submission made by the residents of No. 33 Dartmouth Road, which references the assumptions underpinning the airborne noise assessment and identifies technical deficiencies in the assessment based on the observations from the CDCG expert witness and RINAs own independent engineer.	Yes	Please refer to Section 4.2.4.9.4 of the main report.
3	The submission states it was not possible to ask questions of the applicants noise expert in relation to the revised EIAR given the documentation was only presented at the hearing and it was not possible to make any meaningful observations.	Yes	Please refer to Section 4.2.4.9.4 of the main report.
4	The submission highlights that one of the properties, No. 35 Dartmouth Road has not been assessed, using Appendix A13.7 (original).	Yes	Please refer to Section 4.2.4.9.4 of the main report.

## 2.4.9.11 Charlemont and Dartmouth (Cambridge Terrace no. 3 to 11)

No	Issue	New Issue	TII Comment
1	Misleading Description of submitted Documents  The submission states that describing the amended airborne noise and vibration assessment as an "erratum" downplays the nature of this revision to suggest that there is only a minor error and this is wholly misleading and contrary to the transparency that would be expected for an EIA process.		Please refer to Section 4.2.4.9.4 and Section 4.2.4.8.8 of the main report.





No	Issue	New Issue	TII Comment
2	Noise Barrier and Assessment of Noise Effects  The submission states the CEMP proposes three types of mitigation: Noise control at Source; Noise Control along Pathway; and Noise Control at Receiver and it is wholly unclear as to what elements are included in the mitigated assessment. The submission also states that in any event, Noise Controls at Receiver are not mitigation as they are outside the control of the developer.  The submission states that 5 of 11 houses on Cambridge Terrace have been assessed and those assessed are likely to be slightly less impacted than some other houses. The submission states that all house on the terrace should be assessed.  The submission states there will be significant to very significant (post-mitigation) noise and vibration impacts on 7 and 10 Cambridge Terrace during certain construction phases and significant to very significant noise and vibration impacts on 11 Cambridge Terrace during all construction phases.	Yes	Please refer to Section 4.2.4.9.4 of the main report.
3	Hours of Operation The submission states the TBM tunnelling will be 24/7 and there is extensive provision for works outside the 5.5-day standard working week and this is effectively going to be a 24/7 construction site for 8.5 years.	No	As previously stated in responses to the 1st Statutory Consultation (various submissions) and at the Oral hearing, 24/7 construction site working over 8.5 years is not proposed anywhere along the MetroLink Route. The proposed working hours for the project are fully evaluated within the EIAR (Refer to Chapter 5) and were updated and issued on day 7 of the Oral Hearing, reference 'Update to Chapter 5 MetroLink Construction Phase - Working Hours.'
4	Impact upon Human Health and Amenities  The submission states that noise and vibration impacts will impact sleeping and health of residents at this location.	No	Please refer to Chapter 10 (Human Health) and Chapter 13 (Airborne Noise and Vibration) of the EIAR.
5	Impact and Property Values  The submission states that affected parties on Dartmouth Square and Dartmouth Road have submitted valuation reports showing devaluation of properties and TII has asserted no devaluation impacts but has produced no expert evidence.  The submission states that TII has admitted significant project impacts for 8.5 years	Yes	Please refer to Section 4.2.4.9.16 of the main report.



No	Issue	New Issue	TII Comment
	and this is not "temporary" in EIAR terms, it is a medium-term impact. The submission notes this will inevitably lead to a diminution of property values.		

## 2.4.9.12 Grace Maguire

No	Issue	New Issue	TII Comment
1	Traffic Impacts  The submission objects to the proposed MetroLink Terminus at Charlemont, stating it is misplaced. The submission states that BusConnects will cause greater traffic problems and cause traffic at Ranelagh bridge and village (because cars will divert from Rathmines/Rathgar).	Yes	Please refer to Section 4.2.4.9.3 of the main report.
2	Alternatives The submission states that a city centre terminus is more appropriate for this type of project. The open space of the army barracks at Rathmines would be more appropriate.	No	This issue was raised on day 20 of the oral hearing, where TII restated the rationale as to why a station at Charlemont is the preferred location for the southern terminus, where its location provides an interchange with the Luas Green Line.  With regards to why an army barracks at Rathmines, was not used for the purposes of this project was addressed in response 107 to the 1st statutory consultation, with the open space of the army barracks at Rathmines directly responded to in response 034,The assessment of alternatives presented in Chapter 7 of the EIAR also provides an explanation of the assessments completed with resulted in the Charlemont Station location.
3	Character of Area & Noise  The submission states the project will change the character of the area and turn it into a parking lot, with 24-hour activity and noise impacts which will impact the amenity of the area.	Yes	Please refer to Section 4.2.4.9.15 of the main report.



No	Issue	New Issue	TII Comment
4	Structural Damage The submission states that if MetroLink does go ahead "it could/would compromise the structure of our homes."	Yes	Please refer to Section 4.2.4.9.2 of the main report.
5	Extend the Luas  The submission states that all citizens of Dublin deserve a Luas and it should go out to areas beyond the city boundaries.	No	Alternatives in general are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives.

#### 2.4.9.13 Niall Parsons

No	Issue	New Issue	TII Comment
1	Negative Impact on Property Values:  The submission states that the proposed development will negatively impact the property values of residences on Dartmouth Square West, particularly the observers own property. The submission notes that since the announcement of the Charlemont station as the Terminus, property values have already been affected due to uncertainty about the development.  The submission notes that residents have commissioned professional valuation reports confirming the negative impact on property values which have been submitted to the Board and TII.	Yes	Please refer to Section 4.2.4.9.15 of the main report.
2	Construction Phase Concerns  The submission states that during construction, Dartmouth Road will be closed for 5-6 years for deep station excavation and build. Additionally, Dartmouth Square West and an adjoining section of Cambridge Terrace will be closed for 18 months for major utility diversions. The submission states that construction will have a major impact on residential properties on Dartmouth Road, especially those facing the site of the Metro station's southern entrance.	No	The Construction Phase at Charlemont and concerns therein were raised on days 9 and 21 of the Oral Hearing.
3	Loss of Residential Amenity  The submission highlights that the development will transform a quiet residential neighbourhood into a noisy, busy, and congested major transport hub, leading to a loss of amenity for the wider community and that the deep construction proposed for the Charlemont Terminus Station, immediately adjacent to residential houses, is wholly inappropriate and will result in a severe loss of amenity and devaluation of	Yes	Please refer to Section 4.2.4.9.15 of the main report.



No	Issue	New Issue	TII Comment
	property.		
4	Requests to ABP  Amend RO: The submission requests the omission from the Railway Order of the section from Tara Street Station to Charlemont Station, including the associated onward tunnel extension and intervention tunnel.  Alternative: The submission suggests submitting a railway order for a section from Tara Street Station to St. Stephens Green, which would integrate with the Luas Green Line, multiple bus routes, and future DART underground.	No	Alternatives in general are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives. In particular, the choice of Charlemont over Saint Stephen's green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.

## 2.4.9.14 Terry Reid and Denis McLoughlin

No	Issue	New Issue	TII Comment
1	St Stephen's Green Cut-Off The submission requests that the Board refuses permission for the section of Metrolink from St Stephen's Green to Charlemont.	No	Alternatives in general are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives. In particular, the choice of Charlemont over Saint Stephen's green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.
2	Diaphragm Method of Construction  If permission is granted, the submitters request that it be a condition of the Railway Order that the Diaphragm Method of construction be used for the creation of the station box.	Yes	Please refer to Section 4.2.4.9.17 of the main report.
3	TII Indemnity  If permission is granted, the submitters request that it be a condition of the Railway  Order that TII indemnify the residents of Dartmouth Square West against all loss and damage and restore their homes to their original condition.	Yes	Please refer to Section 4.2.4.9.16 of the main report.
4	Triple glazing:  If permission is granted, the submitters request that it be a condition of the Railway Order that TII provide a triple glazed solution for the windows of their homes to mitigate noise and other impacts.	Yes	Please refer to Section 4.2.4.9.6 of the main report.



## 2.4.9.15 Suzi Taylor

No	Issue	New Issue	TII Comment
1	Construction Impacts  The submission notes, the property is situated on the construction/tunnelling site, opposite the proposed Charlemont/Dartmouth Terminus entrance/exit.	No	Noted
2	Listed Buildings and relationship to Railway Order  The submission notes that Section 28 of the Railway Order states it is exempt from the 2000 Act provision 4, Protected Structures. The submission queries how does this impact the existing protected structures?	Yes	Please refer to Section 4.2.4.9.15 of the main report.
3	Listed Buildings and Renovation Restrictions  The submission notes the property is categorized as "Listed," which has imposed severe restrictions on renovation and redevelopment and the high emphasis on maintaining the preservation value of these properties has been undermined by the development plans. The submission notes the uncertainty surrounding the project has impacted plans to renovate the property and the quality of life. Development noise, even if within acceptable levels, will significantly impact the use of outdoor and indoor spaces.	Yes	Please refer to Section 4.2.4.9.15 of the main report.
4	Damage During Works  The submission is concerned about potential damage to the property during construction and the adequacy of monitoring and mitigation measures. The submission questions the adequacy of the €75,000 POPS scheme and whether it will be index-linked to account for rising renovation and repair costs	Yes	Please refer to Section 4.2.4.9.12 of the main report. Please also refer to Chapter 2 Section 2.5.3.5 of the EIAR.
5	Site Deliveries and Material Removal  The submission states that regular heavy vehicle access and removal of materials from the site will be disruptive, with delivery/removal site vehicles standing close to the property.	No	TII response during the initial Consultation, response no. 286 Suzi Taylor and G.I Taylor addresses the observer's concerns.
6	Construction Noise  The submission notes there will be significant noise levels during peak construction periods, including piling, tunnel boring, and terminus construction, and this will be very disruptive (particularly on Saturday mornings). The submission queries what counts as "significant", how long would that notice be? The submission queries how do residents plan their lives with these variables, especially those working from home	Yes	Please refer to Section 4.2.4.9.4 of the main report.



No	Issue	New Issue	TII Comment
	and that reasonable notice should be given to property owners of lead in time.		
	Ground-Borne Noise		
	The submission notes the property is in the orange/red zone of ground noise contours from the tunnel boring machine.		
7	Road Access and Parking	No	TII response during the initial Consultation,
	Road Closures: The submission notes the section of Dartmouth Road from Dartmouth Square to Dartmouth Place and Dartmouth Terrace will be cut off from regular traffic, affecting access to off-street parking for up to 30 months or longer.		response no. 286 Suzi Taylor and G.I Taylor addresses the observer's concerns.
	Parking Allocation: The submission notes there is no indication of nearby parking allocation for affected residents.		
8	Hoarding, Security & Quality of Life	Yes	Please refer to Section 4.2.4.9.15 in the main
	Hoarding Impacts: The submission notes the front of the house will be boxed in with a 4-meter hoarding, reducing light and creating a claustrophobic feeling.		report.
9	Hoarding, Security & Quality of Life	Yes	Please refer to Section 4.2.4.9.15 in main
	Security Issues: The submission is concerned about the protection of private gateways and the impact on railing settings, which are a listed part of the property frontage.		report.
10	Hoarding, Security & Quality of Life	Yes	Please refer to Section 4.2.4.9.15 in the main
	Littering: The submission states that increased pedestrian traffic on one side of the road will lead to more littering outside the property.		report.
11	Hoarding, Security & Quality of Life	No	TII response during the initial Consultation,
	Pedestrian Traffic Increase: The submission state that the operational terminus will increase pedestrian traffic, with passengers wheeling travel cases and drop-off traffic for airport and city centre-bound passengers.		response no. 286 Suzi Taylor and G.I Taylor addresses the observer's concerns.
12	Hoarding, Security & Quality of Life	No	TII response during the initial Consultation,
	Lighting Pollution: The submission expresses concerns about lighting pollution during development and once the terminus is operational.		response no. 286 Suzi Taylor and G.I Taylor addresses the observer's concerns.
13	Property Value and Impacts	Yes	Please Refer to Section 4.2.4.9.15 in the main
	The submission notes the long period of upheaval and uncertainty will impact property		report.



No	Issue	New Issue	TII Comment
	values on Dartmouth Road.		
14	Property Value and Impacts Relocation Concerns: The submission notes the offer of relocation for a prolonged period is not seen as a realistic option for homeowners, with concerns about property vulnerability and maintenance in the owner's absence.	Yes	Please Refer to Section 4.2.4.9.11 in the main report.



# 3. Submissions by Group 3: Other submissions that are not location specific or address themes that cover a number of locations or are route wide.

## 3.1 Association Of Combined Residence Associations (Catriona McClean & Tom Newton)

No	Issue	New Issue	TII Comment
1	EU Transport Policy Compliance TEN-T Policy: The submission emphasizes the importance of aligning with the Trans-European Transport Network (TEN-T) policy, which aims to develop a coherent, efficient, multimodal, and high-quality transport infrastructure across the EU. Integration and Connectivity: ACRA argues that the Metrolink project does not align with EU policy as it fails to integrate and connect existing infrastructure effectively.	Yes	Please refer to Section 4.3.1.1 of the main report.
2	Alternative Proposal: Metro Dart Plan  ACRA recommends the Metro Dart plan as a more efficient, cost-effective, and EU policy-compliant alternative to the Metrolink project  Project Overview: ACRA proposes an alternative Metro Dart plan, which includes less than 20 km of new track from Glasnevin to Dublin International Airport and onwards to Donabate, joining the Belfast line.  Benefits:  Access to Dublin Airport  Consistency with TEN-T Policy  Avoidance of Destruction  Economic and Strategic Justification: The plan avoids the opportunity cost associated with the MetroLink project, which uses a different gauge and cannot link up with existing infrastructure.	No	Please refer to Chapter 7 (Consideration of Alternatives) of the EIAR.  Covered in Alternatives (generally). Strategic to project specific alternatives fully considered-
3	Criticism of Metrolink Project Gauge Incompatibility: The MetroLink uses a different gauge from standard rail, making it impossible to link up with existing infrastructure and limiting its utility. Public Spending Concerns: The MetroLink project is compared to the National Children's Hospital in terms of high costs and limited benefits until project completion. The benefits are restricted to those travelling from Dublin City Centre to Dublin Airport. Lack of Integration: The MetroLink does not solve existing rail connectivity issues, such	No	This was covered at the OH.  Please refer to Day 22 of the OH.



No	Issue	New Issue	TII Comment
	as the space problem at Connolly Station and the dead-end problem at Heuston Station. Idle Capacity: The MetroLink would be idle during off-peak times, leading to unnecessary extra expenses.		
4	Advantages of Metro Dart Plan  Direct Service to Key Areas: The Metro Dart plan would directly serve main entertainment areas in Dublin, including Croke Park, Aviva Stadium, Bord Gáis Theatre, and Point Depot.	No	This is addressed in Submission No. 2 of the Responses to the First Statutory Consultation.
	Future Expansion Potential: The plan offers the potential for future rail expansion and is consistent with EU policy on linking public transport.		

# 3.2 Metro South West Group

No	Issue	New Issue	TII Comment
1	Public Transport Deficit in South West Dublin  The Metro South West Group (MSWG) argues that the south west city area, with a population of 355,000 residents situated between two Luas lines, is severely underserved by public transport. They emphasize that the original plan to extend MetroLink to Sandyford was shelved, and any credible application should address the public transport deficit in this area	No	Addressed as part of First Statutory Consultation - Submission no. 189.
2	Flawed Benefit to Cost Ratio Assumption  The Revised Application for MetroLink is based on a flawed assumption regarding the Benefit to Cost ratio of extending MetroLink to the south west city. MSWG points out that the National Transport Authority (NTA)/Jacobs report estimated a Benefit to Cost ratio of 0.8, deeming the extension unviable. They say their expert (Professor Austin Smyth) demonstrated that the study contained serious flaws and that a contemporary analysis would show a much higher Benefit to Cost ratio, likely between 1.6 and 2.22. Despite this, the Revised Application persists with the assumption that the extension is not viable	Yes	Please refer to Section 4.3.2.1 of the main report.
3	Comparison with South East Dublin  MSWG highlights that South East Dublin, where MetroLink to Charlemont is directed, already has robust infrastructure, including two fixed rail lines and two wide four-lane roads. They argue that the cost of extending MetroLink to the south	No	Please refer to Chapter 7 of the EIAR.





No	Issue	New Issue	TII Comment
	west and Rathmines would be similar to extending it to Charlemont, but the benefits would be greater due to the larger population and superior (though unspecified) attractions in Rathmines.		
4	Omissions and Ignored Submissions	No	Please refer to Chapter 7 of the EIAR.
	The Revised Application omits any comparison of the superior attractions of the Rathmines area, despite these being raised at the hearing. Additionally, both the original and revised applications ignore submissions showing that buses on A, D, and F corridors in the south west city cannot meet the NTA's own passenger demand forecasts.		
	They assert that no details have been provided (in either the Original or the Revised Applications) as to how MetroLink could be continued to South West Dublin via Portobello/Rathmines in the future.		
5	Problematic Assertions and Safety Concerns	No	Transportation software models have been used
	Assertions made about serving Portobello and Rathmines with a MetroLink extension were problematic and not addressed in the Revised Application. The Revised Application suggests running 30 trams an hour south of Charlemont, but it is silent on how this will be achieved, raising feasibility concerns. The proposed stairway interchange between street and Luas is deemed grossly inadequate and endangers public safety.		in the design development of Charlemont station which include modelling the number of people interchanging here. The design has accounted for these numbers of people.
6	Safety of Charlemont as a Terminus  MSWG maintain that an interchange with Luas at Saint Stephens Green would be safe, and that will not be the case at Charlemont. They consider that locating the terminus at Saint Stephens Green would preserve TII's options for further ML development.	No	Alternatives in general are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives. In particular, the choice of Charlemont over Saint Stephen's Green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.
7	Recommendations  The MSWG recommends that the Charlemont leg of MetroLink should be dropped unless the issues raised are addressed in a further application. They suggest that the MetroLink terminus and its interchange with Luas should be located at Saint Stephens Green rather than Charlemont for safety and future extension considerations. They also recommend that An Bord Pleanála should approve the MetroLink Application subject to modifications to the southern end, allowing for a	No	Alternatives in general are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives. In particular, the choice of Charlemont over Saint Stephen's green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.



No	Issue	New Issue	TII Comment
	review of all options for South Dublin.		
8	Recommendation 1 Grant a Railway Order as far south as Parnell Square East. In the meantime, the Applicant could then review all the options for the southern end of MetroLink, including reaping the benefits of incorporating most of the Metro North Option as far as Saint Stephens Green. Continuing to Portobello/Rathmines or Charlemont should also be examined. Recommendation 1 would approve MetroLink as far as Parnell Square East: the final station would be at the Mater Hospital, with a run-off to Parnell Square East.	No	Alternatives in general are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives. In particular, the choice of Charlemont over Saint Stephen's green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.
9	Recommendation 2 Grant a Railway Order as far south as Tara Street. The Applicant could then review all the options from Tara Street, including terminating at Tara Street., and either Saint Stephens Green West or East. Continuing to Portobello/Rathmines or Charlemont should also be examined.	No	Alternatives in general are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives. In particular, the choice of Charlemont over Saint Stephen's green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.
10	Recommendation 3 Grant a Railway Order as far south as Saint Stephens Green East. In the meantime, the Applicant could then review all the options from Saint Stephens Green East, including terminating at Saint Stephens Green East, Portobello/Rathmines or Charlemont.	No	Alternatives in general are dealt with in the first instance in EIAR Chapter 7, Consideration of Alternatives. In particular, the choice of Charlemont over Saint Stephen's green as an end point for the proposed project is dealt with in Section 7.7.8 - MetroLink Southern Terminus Location.

## 3.3 An Taisce

٨	lo	Issue	New Issue	TII Comment
1		<b>Overall Support for the MetroLink Project:</b> An Taisce are supportive of the project (noting that it's long-overdue strategic priority for improving and expanding the public transport network in and around Dublin) and appreciated TII's clarification re interchange with other modes of transport.	Yes	TII acknowledge the support from An Taisce and will continue to engage with them and An Bord Pleanála to progress this important project whilst addressing all concerns where possible to do so within the project constraints.  Please refer to Section 4.3.3.1 of the main



No	Issue	New Issue	TII Comment
			report.
2	Concerns about Tara Station: The current 'cut and cover' construction methodology is criticized for leading to "the unnecessary loss of vital community infrastructure" and being more expensive compared to an alternative option. They advocate for the consideration of an alternative construction method, specifically Option 4, which is the mined construction method (and would allow the retention of the College Gate apartment building and the Markievicz Leisure Centre, and they say, save up to €60 million).	Yes	Please refer to Section 4.3.3.2 of the main report.
3	<b>Comparative Cost Analysis:</b> The submission provides a comparative cost analysis (preferred Option vs Option 4):	Yes	Please refer to Section 4.3.3.3 of the main report.
	The projected construction cost for the current Tara Station design is €139.9 million (excluding risk).		
	Option 4 is projected to cost €161.7 million (excluding risk but including a ground issues allowance).		
	Additional costs for the current design include €48 million for relocating the Markievicz Leisure Centre and approximately €35 million for compulsory purchase compensation for the 70 College Gate Apartments.		
	The final estimated cost for the current design is up to €222.9 million, compared to €161.7 million for Option 4, resulting in a €60 million difference in favour of Option 4.		
4	Project Risks and Constraints for Option 4: An Taisce acknowledges the 'Project Risks and Constraints' cited by TII for ruling out Option 4 (in the MCA), which include safety risks during construction and significant disturbance to residents. However, An Taisce argues that similar risks have been successfully mitigated in other underground metro projects worldwide and believes that these risks can be managed with alternative construction strategies.	Yes	Please refer to Section 4.3.3.3 of the main report.
5	Importance of Markievicz Leisure Centre: The submission emphasizes the critical importance of the Markievicz Leisure Centre to the south inner city local community. It is described as the only remaining publicly accessible swimming pool in Dublin's South inner city and a heavily used sports amenity.	Yes	Please refer to Section 4.3.3.3 of the main report.
6	Housing Crisis and Human Cost: An Taisce highlights the severe human cost of losing 70 apartments in the College Gate complex during Ireland's housing crisis. The loss of these apartments is seen as particularly detrimental given the current	Yes	Please refer to Section 4.3.3.3 of the main report.



No	Issue	New Issue	TII Comment
	housing shortage.		
7	Recommendation for Alternative Construction Method: In conclusion, An Taisce recommends that the planning inspector and An Bord Pleanála request the applicant to consider retaining the College Gate complex by utilizing alternative construction methodologies, such as Option 4.	Yes	Please refer to Section 4.3.3.3 of the main report.

# 3.4 Cormac McKay and Aeravai

No	Issue	New issue	TII Comment
1	The submission expresses disappointment over the lack of response to his request for an on-site visit to The Boring Company and current RoBoTaxi operations.	No	TII appreciates the offer received, however the project team are focused on the delivery of the proposed MetroLink project, which is the application before An Bord Pleanála at this time and are currently unavailable to take up the offer.
2	Due Diligence	Yes	See section 4.3.4.3 of the main report.
	The submission states that 'proper due diligence has not been carried out with this application and may have unduly influenced and Transport Consultants with significant financial gain based on unsound finance projections on a business case that is clearly invalid and out of date and should be updated before proceeding what is at stake which could be seriously detrimental to any investors on to this project especially the taxpayer.'		
3	PFAS Contamination	Yes	See section 4.3.4.1 of the main report.
	The submission points out there is potential for PFAS contamination in the soil at Dublin Airport, which may require safe removal during tunnelling to protect groundwater.		
4	Noise Pollution		See section 4.3.4.2 of the main report.
	The submission highlights the long-term health effects of noise pollution, particularly the impact of rail traffic vibration and noise on mental health and states that TII did not consider long-term pollution health effects.		
5	Site Visits for Better Insight	No	Not an issue for TII to address.



No	Issue	New issue	TII Comment
	The submission urges the Board and inspectors to conduct site visits to various locations to gain better insight into the potential future of transport in Ireland, as well as:		
	Visits to Waymo in Phoenix, AZ, USA, and Baidu in Beijing to experience current airport RoboTaxi services.		
	Visits to The Boring Company Loop operations in Las Vegas, NV, and Austin, TX, USA, to understand the potential future of underground transport		
	Visits to electric aviation deployments to understand how future travel to Dublin Airport might evolve, potentially reducing the need for traditional airport travel.		
	The observer offers to act as an intermediary to arrange these on-site visits.		

## 3.5 D Holohan

No	Issue	New issue	TII Comment
1	Design - Colour Scheme  The submission highlights a potential issue with the proposed interior finishes scheme, which predominantly features Grey on Grey, Black, and Blue/White lighting. While this may appear smart and corporate, it could be perceived as unwelcoming, especially in underground stations. The concern is that if these finishes are not maintained to a high standard, the stations may appear drab and uninviting.  Recommendation for Additional Colours: To enhance the visual appeal, it is suggested to incorporate more White and other colour finishes. For instance, adding a plinth to walls or a band of paving made from Irish stone, unique to each underground station, could be beneficial. This approach is compared to the stone samples in the TCD Geology building.	Yes	See section 4.3.5 of main report.
2	Signage and Visibility  Metro 'M' Symbol: The submission proposes adding a simple 'M' in Metro Red, Silver, or White color metal onto or above the parapet at the front and rear of station portal entrances.  Station Name Text: It is recommended to replace the hyphen between English and Irish translations of station names with the Metrolink 'M' in a ring symbol. Additionally, the size of the station name text/font at portal station entrances should be enlarged.  Parapet Signage: For larger stations, it is suggested to add 'M' symbols onto the	Yes	See section 4.3.5 of main report.



No	Issue	New issue	TII Comment
	parapets on the side and front elevations.  Color Coding for Lines: The submission advises replacing the lower left White ring around the 'M' with Blue to highlight the 'Blue Line' service. For interchange stations, the upper right ring should be changed to Green.		
3	Design Colour Coding for Lines: The submission advises replacing the lower left White ring around the 'M' with Blue to highlight the 'Blue Line' service. For interchange stations, the upper right ring should be changed to Green.	Yes	See section 4.3.5 of main report.
4	Operations - Advertising Limiting Third-Party Advertising: To reduce potential visual clutter and maintenance issues, it is recommended to allow only limited, if any, third-party advertising inside the stations	Yes	See section 4.3.5 of main report.

## 3.6 Donal O'Brolcháin

No	Issue	New Issue	TII Comment
1	The submission alleges the suppression of data in relation to passenger traffic at Dublin Airport.	No	Addressed on Day 20 of the Oral Hearing (March 19th) 2024. TII continue to refute any allegations made of data suppression.
2	Project Benefits	Yes	See section 4.3.6 of main report.
	The submission claims that the benefit of the project in relation to Dublin Airport is only a 14-minute saving on the journey time from Stephen's Green to Dublin Airport, given that:		
	The benefit of the project is only a 14-minute saving on the journey time from Stephen's Green to Dublin Airport, given that:		
	50% of passengers can make that journey in 30 minutes		
	75% can make that journey within 1 hour		
	<ul> <li>2/3 of passengers arrive outside peak commuting times</li> </ul>		
	75% of passengers travel for leisure		
3	Alternatives	Yes	See section 4.3.6 of main report.
	The submission claims that Census 2016 report on commuting in Ireland shows that		



No	Issue	New Issue	TII Comment
	neither Dublin Airport nor Swords stand out as places which require this level of public transport provision.		
4	Alternatives The submission proposes a North Dublin Luas Loop as an alternative.	No	Addressed in response to submission no. 67 in first round of consultation.
5	This submission should also be addressed by reference to NTA GDA Transport Strategy	No	Addressed in response to submission no. 67 in first round of consultation.

# 3.7 Dublin Cycling Campaign

No	Issue	New Issue	TII Comment
1	Analysis of Cycle Parking Demand Target Year Analysis: The Dublin Cycling Campaign (DCC) highlights that the new cycle parking demand analysis was presented on the day of their oral hearing, catching them off guard. The analysis models passenger demand for 2035 (Opening Year) and 2050 (Design Year), showing a 21% growth between these years.	Yes	Please refer to Section 4.3.7.1 of the main report.
2	Unmet Demand for Cycle Parking The analysis reveals significant unmet demand for cycle parking: Opening Year (2035): 68.8% unmet demand in the Outer City and 81.3% in the City Centre. Opening Year +5 Years: 70.8% unmet demand in the Outer City and 82.5% in the City Centre. Design Year (2050): 74.2% unmet demand in the Outer City and 84.6% in the City Centre. DCC say TII knows it has significantly under provisioned cycle parking and has sought to massage the numbers.	Yes	Please refer to Section 4.3.7.1 of the main report.
3	Comparison with Other Transport Modes  The DCC points out that while other parts of the transport impact analysis (walking, public transport, car use) provide data through 2050 and 2065, the cycle parking analysis only goes up to 2035, avoiding the full extent of future demand.	Yes	Please refer to Section 4.3.7 of the main report.
4	Role of Local Authorities and National Transport Authority	Yes	Please refer to Section 4.3.7 of the main



No	Issue	New Issue	TII Comment
	Letter from NTA: The applicant included a letter from the National Transport Authority (NTA) stating that they will work with local authorities to ensure appropriate cycle parking provision in other projects.		report.
	Board's Limitations: The DCC argues that the Board can only examine the current planning application and cannot attach conditions to ensure future cycle parking provision by local authorities or the NTA.		
5	Providing More Cycle Parking	Yes	Please refer to Section 4.3.7 of the main
	Two-tier cycle parking: The DCC suggests using two-tier cycle parking stands, a common approach for high-density cycle parking. They argue that this option was not adequately considered by TII despite being recommended in multiple submissions.		report.
	Examples of potential locations: Charlemont Station, Glasnevin Station, and Griffith Park Station are cited as locations where two-tier cycle parking could be implemented without significant visual impact.		
	Additional space for cycle parking: The DCC questions the applicant's claim of space constraints at certain stations.		
	TII controlled land: DCC highlight the lack of explanation for not using TII controlled land around Tara metro station.		
	Glasnevin Station: The DCC suggests incorporating cycle parking on the first storey of the metro station building above the ticket hall, noting the absence of a floor plan for this space in the planning application.		
6	Conclusion	Yes	Please refer to Section 4.3.7.1 of the main
	Integration with cycling: The DCC concludes that the MetroLink project does not sufficiently integrate with cycling due to the under-provision of cycle parking.		report.
	Alternative solutions: DCC criticize TII for not exploring options and alternatives to provide more cycle parking, instead relying on new analysis and unenforceable promises.		
	Recommendations for the Board: The DCC suggests that the Board could secure additional cycle parking at multiple stations via conditions or request further information from TII to explore alternatives.		



#### 3.8 NAMAI DAC

No	Issue	New Issue	TII Comment
1	Change in Ownership of Lands	Yes	Please refer to Section 4.3.8 of the main
	Ownership Transfer: The submission notifies An Bord Pleanála that the lands at Lissenhall, which are proposed to accommodate the Estuary station, Park & Ride, and associated works, have changed ownership. These lands were previously owned by Bovale Developments Limited and its associated entities (Bovale Developments UC, Lissenhall Demesne Properties UC, Balheary Properties UC, Michael Bailey, Tom Bailey, and the CT Partnership).		report.
	The lands are now owned by National Asset Management Agency Investments DAC (NAMAI DAC).		
	Bovale had reached agreement with TII reflected in a Memorandum of Understanding "MoU" with regard to certain matters. This MoU is now assigned to NAMAI DAC.		
	The submission requests that all further correspondence related to the Railway Order be directed to Declan Ballance, Senior Asset Manager at NAMAI DAC.		

## 3.9 Andrew Whelan

No	Issue	New Issue	TII Comment
1	Mr Whelan expressed disappointment with the "vague/ non-committal replies" from TII's Senior Counsel Declan McGrath to his six questions at the Oral Hearing.	Yes	See Section 4.3.9 of the main report.
2	Future Proofing Metrolink: he formally recorded his concern that the current construction plans for Metrolink might limit any planned expansion of Dublin Airport.	Yes	See Section 4.3.9 of the main report.
	He noted an agreement between TII and DAA which states that Metrolink structures will accommodate future development above the stations and tunnels. He says that he met with a DAA representative on 1 October 2024 to discuss his concerns about the shallow tunnel depth and its impact on future airport expansion.		
	His view is that the proposed shallow tunnel depth at section AA (ML RO 302 D-E) could jeopardize the construction of a possible Automatic People Mover (APM) above the metro tunnel. He suggested that delaying the incline southbound from the Dublin Airport station could provide DAA with greater flexibility and depth to construct a screened passenger APM link at Level -1 to DAA's indicative Western Satellite		



No	Issue	New Issue	TII Comment
	Pier.		
	He drew a parallel to the Grand Canal main sewer issue, which prevented a Metrolink gradient connection to the Ranelagh Luas station platform		

## 3.10 **Dublin Commuter Coalition**

No	Issue	New Issue	TII Comment
1	Operational Hours  MetroLink is not planned to operate between 12:30 am and 5:30 am.  Concerns:  An average of 65 flights land at Dublin Airport each night, necessitating a reliable transport link during these hours. Reduced Aircoach services and infrequent Nitelinks make it challenging for passengers and staff to find transportation. A 24-hour service would support the night-time economy and meet the demand from extended licensing hours in the City Centre.  Recommendation: Implement a 24-hour service or, at a minimum, provide overnight services 2-3 times an hour.	No	Not a new issue.  Responded to in response to Submission No. 72 in 1 <sup>st</sup> statutory consultation.  A request for a condition for 24 operation of the Metro was made during the OH on day 22, Module 2. Please refer to Submission No. 72 (See page 487 of 795, which addresses 24 hour operation) of the first statutory consultation document.
2	Secure Bicycle Parking Inadequate provision of cycle parking across the network. This under-provision will force more people into cars, in order to get to their Metro station, rather than using active transport, because they have nowhere to park a bike.  Concerns:  A significant shortfall of 2,259 parking spaces based on current expected demand. Poor future provision even five years post-delivery. High incidence of bicycle theft in Dublin, with 26,026 bikes reported stolen between 2021 and 2023. Comment that 'nice benches and good lighting don't stop thieves from robbing bikes - lockers and security staff do'.  Recommendation: Increase the number of cycle parking spaces to meet current and future demand, and that this be made a condition of the RO.  Provide secure bike parking options, such as parking garages and bicycle lockers, at all stations.	Yes	Please refer to Section 4.3.10.1 of the main report.





No	Issue	New Issue	TII Comment
3	Accessibility (Lifts) Limited lift provision, with reliance on emergency services lifts in case of failure. Concerns: Single lift failures can make stations inaccessible for people with mobility issues. Frequent lift failures on the DART network highlight the need for multiple lifts. Use of the emergency lift will require anyone using the Metro system to contact the operator with advanced notice (this problem has been countered with DART, where many wheelchair users have to pre-plan journeys days in advance just in case the lifts are not working on a particular day). Recommendation: Install multiple lifts at each station level to ensure continuous accessibility for all users, including those with disabilities.	Yes	Please refer to Section 4.3.10.2 of the main report
4	Welfare Facilities (Toilets)  Dublin Commuter Coalition express concerns that toilets are only provided at main interchange stations, and not across the entire network. They don't accept the justification of "safety concerns" as the reason not to have them.  Concerns:  "At a very basic level, people need to use the toilet, and they do not always have the convenience of choice of when that need will arise". Retrofitting toilets in the future would be more costly and less efficient.  Lack of toilets can cause distress for commuters, especially women, parents, and those with medical conditions. The lack of public toilets can be a significant issue to women, who may need to use toilets more frequently for hygiene, health and pregnancy related reasons.  Recommendation: Include toilet facilities at all stations to ensure accessibility and convenience for all users.	Yes	Please refer to Section 4.3.10.2 of the main report.