

Submission No.			040		
Organisation Name or Name of Submitter			Charlemont & Dartmouth Community (CDCG) on behalf of Dartmouth Road (Agent - MacCabe Durney Barnes)		
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Charlemont & Dartmouth Community Group MetroLink Submission - Dartmouth Road Submission 13 January 2023					
1	EXECUTIVE SUMMARY Policy and Procedure	1	<ul style="list-style-type: none"><li>• The submission is fully supportive of the CDCG General Area Submission which seeks the removal of the Tara Street to Charlemont section of the rail order.</li><li>• Specifically the Charlemont station should not form part of the rail order as it will severely and demonstrably adversely affect the residential amenities of the Dartmouth Road residents both during the construction phase and the operational phase.</li><li>• The reliance on an element of the railway works in the form of the station box previously constructed as part of the office development fundamentally prejudices the entire process and is non-compliant with the EIA Directive.</li></ul>	<p>TII disagree and are of the view Charlemont Station should form part of the Railway Order application for the wider strategic reasons summarised below, noting that as outlined by the responses below, the environmental impacts of both the construction and operational phase can be mitigated with the exception of groundborne noise generated by the TBM passing which will be temporary for a period of c. 2 weeks at any single location. It is acknowledged that the proximity of the works to Dartmouth Road residents is an understandable concern and TII commit to working closely with local residents to ensure the required mitigation measures are put in place. While TII are of the view that the environmental impacts can be mitigated, temporary relocation of affected residents on Dartmouth road immediately adjacent to the construction works could be facilitated under certain conditions. TII are available to discuss this option if that is something the property owner would like to explore and consider.</p> <p>The MetroLink enabling works constructed as part of the Hines development has the benefit of planning permission which was granted in April 2019. The station box location was not fixed by the Charlemont Development. The preferred route for MetroLink was published in March 2019 following a comprehensive route options study. The preferred route was based on the emerging preferred route for the scheme which included a station at Charlemont. The Charlemont Metro Enabling Works were constructed to enable the Charlemont Development to proceed whilst simultaneously ensuring there was an option available to construct a station at Charlemont that avoided unnecessary demolition, took advantage of an available site, provided infrastructure that is integrated with planned development rather than necessitating later changes and retrospective adjustments to a new development or even possible demolition of the new development, whilst providing protected provision for the future extension of the scheme south, if required.</p> <p>There is no inconsistency with the EIA Directive. All options remain open to the Board in relation to this location. The critical factor in favour of the station at this location are the policy decisions and supporting analysis outlined above and not the permitted enabling works.</p> <p>TII rejects the assertion that the inclusion of a roof slab at Two Grand Parade has prejudiced the EIA process. There were no "neutral" alternatives available to ABP when it made a decision on the application for permission for Two Grand Parade. It had three options, all of which had significant consequences for proper planning and sustainable development and the environment:</p> <p>*grant permission without the roof slab, which would have required TII to demolish Two Grand Parade or another development in this area to deliver a Metro station in the location that was emerging from the contemporary optioneering reports; *refuse permission for Two Grand Parade, sterilising the site a frustrating the zoning objective for the site *grant permission with the roof slab, securing the zoning objective and leaving open the option of a station at this location.</p> <p>The Board opted for the third option having regard to submissions from the NTA and revised designs from the developer. That decisions was challenged by way of judicial review, but the judicial review was withdrawn. The objections now raised attack the validity of that decision, which is prohibited by Section 50 of the Planning and Development Act 2000.</p>	

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			(1) continued	<p>Rationale for the Proposed Charlemont Station</p> <p>The connection from St Stephens Green to Charlemont / Ranelagh is supported by the previous Transport Strategy for Greater Dublin Area (2016-2035) and the current Transport Strategy for Greater Dublin Area (2022-2042). The latter considers a range of options for the onward extension of MetroLink to meet the demand for travel over the period of the strategy. This includes consideration of the need for the upgrade of the Luas Green Line to metro, with a metro extension to Dublin south west, south or south east. Whilst the strategy envisages that further extensions will be delivered after 2042, MetroLink which terminates at Charlemont allows for the possible extension of the metro in all the above directions.</p> <p>The proximity of the MetroLink station to the Luas stop at Charlemont provides for a positive customer experience for all users with short interchange distance and due to the proximity, clear wayfinding and high visibility of the interchange. The interchange arrangements at Charlemont provide for significantly better interchange arrangements compared to an alternative interchange at St Stephen's Green Station. Passengers wishing to interchange between Luas and metro at an alternative St Stephen's Green terminus would face a 500m-walk along a route either through St Stephen's Green park or along the footpath north of the park, which adds significantly to the time for interchange and therefore the overall journey time for passengers and a less positive customer experience for all interchange users. This passenger experience would be reduced further for those with mobility or visual impairments as well as those travelling to/from the airport with luggage.</p> <p>The section of MetroLink route between St Stephen's Green and Charlemont Stations contributes significantly to the overall benefits of the scheme. It serves a significant area of the south city of Dublin and offers enhanced access from the local area to the city centre and a direct connection to Dublin Airport. It serves key trip attractors including residential areas and offices / workplace locations, with high passenger boarding and alighting figures in the peak hours. During the morning peak, at Charlemont station the flows include 1,800 passengers alighting, 2,300 boarding and 1,229 passengers alighting, 2,276 boarding during the evening peak. The passenger numbers contribute significantly to the overall benefits of the scheme and the effect of these benefits outweigh the additional costs that are associated with the delivery and operation of the section from St Stephen's Green to Charlemont station. Please refer to Chapter 7: Consideration of the Alternatives, section 7.7.8 MetroLink Southern Terminus Location, Table 7-16 Summary to Identify Southern Termination Point for MetroLink.</p> <p>The location of the interchange at Charlemont does not preclude onward extension south. An interchange at Charlemont is supported by policy including the Dublin City Development Plan 2022 - 2028 and the Transport Strategy for the Greater Dublin Area. As noted by the GDA Transport Strategy 2022-2042, section 12.3.2, "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."</p> <p>By extending MetroLink to Charlemont it provides for future proofing of the Green Line, bypassing the capacity constrained Luas on-street running section, and ensures potential future connectivity options are enabled, either to the Green Line or for extensions of the metro.</p> <p>The Charlemont Station interchange provides for increased passenger utilisation of the MetroLink system, thereby increasing the benefits delivered by the Project, reflected by an improved Project Benefit Cost Ration (BCR).</p>

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2	EXECUTIVE SUMMARY  Policy and Procedure	1	<ul style="list-style-type: none"><li>As is described in detail in the CDCG General Area Submission, the Charlemont Station Box is an unauthorised development that also required an EIA. Clearly Charlemont Station is an integral part of the Metrolink proposal and the subject Rail Order Application. The Board, therefore, cannot grant the current Rail Order as to do so would a) facilitate the circumvention of the EIA Directive by the splitting of projects and b) amount to a retention permission which it is compelled to refuse. Effectively, Charlemont Station cannot be considered as usable for the Metrolink project because it will remain legally unsafe.</li></ul>	<p>Please refer to response (1) above. TII would also note as presented in EIAR Chapter 30 the cumulative potential of the Charlemont works has been assessed.</p> <p>We understand the reference to the Charlemont Station Box to be a reference to the MetroLink advance enabling works.</p> <p>The MetroLink advanced enabling works is not an integral part of the MetroLink proposal. The construction of these works allowed a key site with commercial zoning to proceed without prejudicing the delivery of a MetroLink station at this location. It was clearly entitled to do so as part of its statutory remit to safeguard the proper planning and sustainable development of the area. The Board remains entitled to refuse permission for a station at this location or seek revised designs if it has any concerns with the effects of the MetroLink advanced enabling works-on the environment. TII has already outlined why, in its view, the Board can and should grant a Railway Order for the construction of the station at this location.</p> <p>The reference to retention permission is fundamentally mistaken. The MetroLink advanced enabling works are permitted by the permission for the office development. Its construction does not require any retrospective consent. The Railway Order will not purport to authorise any development retrospectively.</p>	
3	EXECUTIVE SUMMARY  Policy and Procedure  2.2.1 Operational Phase  2. Size of Charlemont Box	1, 8 and 10	<ul style="list-style-type: none"><li>The documentation and in particular the drawings submitted are misleading and do not illustrate the relationship between the proposed station works and the houses on the southern side of Dartmouth Road. The deep construction required immediately adjacent to residential houses is wholly inappropriate and will result in a very severe loss of amenity and devaluation of property.</li></ul> <p>2.2.1 We contend that the submitted drawings are inadequate as they do not clearly illustrate the above ground elements.....</p>	<p>TII disagree that the documentation and drawings submitted are misleading and do not illustrate the relationship between the proposed station works and the houses on the southern side of Dartmouth Road. Drawing ML1-JAI-SRD-ROUT_XX-DR-Z-02090 (Structures Details Book 2 of 3) shows the outline of the underground station, property Drawing ML-P 307 0-A (Property Details, Book 2 of 2) also shows the footprint of the station in relation to surrounding property, as does Alignment drawing ML1-JAI-ARD-ROUT_XX-DR-Y-03096 (Alignment Details Book 2 of 2). Regards drawing ML1-JAI-SRD-ROUT_XX-DR-Y-02096, the relationship of the section shown to Dartmouth Road is a function of where the long section has been taken and is therefore correct.</p> <p>Neither do TII agree that deep construction adjacent to the residential houses is inappropriate and would also note the environmental impacts have been carefully considered. TII would also note that while TII are of the view that the construction environmental impacts can be mitigated, relocation is an available option for Dartmouth Road residents immediately adjacent to the construction site during peak construction. TII are available to discuss this option if that is something the property owner would like to explore and consider.</p> <p>Regards loss of amenity during construction, Dartmouth Road will be closed between Dartmouth Place and Dartmouth Square West during the enabling works and main works (please also see response (31) below) but diversions will be put in place for local access, including deliveries, emergency services, bin collection, and pedestrian access will be maintained to the property.</p> <p>The impacts on parking will be monitored during construction to reinstate any disrupted areas as soon as practicable. As referenced in the Scheme Traffic Management Plan, Appendix A9.5 section 7.11.6.2, while Dartmouth Road is closed during the construction phase (either partially or fully), existing parking levels along this road will be impacted. The existing parking will be fully reinstated on the reopening of Dartmouth Road,.</p> <p>The benefits of the proposed MetroLink Project are provided in Chapter 3: Background to the MetroLink Project, section 3.4 MetroLink Response to Challenges provides the benefits of the project. TII are of the view that the proposed development will have a long term positive affect in terms of property value. There is possibility that property values will in fact increase in close proximity to public transport infrastructure and that local residents will greatly benefit from having a world class metro system providing access to the city centre, airport and north city at their door step.</p>	
4	EXECUTIVE SUMMARY  Policy and Procedure	1	<ul style="list-style-type: none"><li>The lack of detail in the Rail Order documentation is in no small part due to the procurement method adopted by the Applicant, which is a 'design and build'. The first component is 'design' which should be undertaken prior to submission for a Railway Order consent. By following a 'design and build' approach NTA/TII is failing to provide the required level of detail under which a) affected residents can adequately understand the implications of the proposals and b) a Rail Order could be granted by An Bord Pleanála (ABP).</li></ul>	<p>There is no connection between the selected procurement method and the level of design for the Railway Order application. The level of design undertaken is appropriate for a Railway Order application, noting that the design to inform the Railway Order application has been developed to Preliminary Design level. This Preliminary Design provides the required level of detail to inform the EIAR, and the level of design presented and used to inform the EIAR is consistent with previous successful Railway Order applications.</p>	

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5	EXECUTIVE SUMMARY  Inadequate EIAR  &  4 CONSTRUCTION IMPACTS, 4.2 Noise and Vibration, 4.2.1 Methodology	1 and 21	<ul style="list-style-type: none"><li>Noise and vibration impact assessment have been deferred until after consent is issued.</li></ul> "....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." "We consider this to be a serious inadequacy in the methodology adopted for the purposes of the EIAR, ...." "...there is no assessment upon the internal noise levels. The construction noise thresholds (CNTs) have only been applied to the facades of buildings (section 13.2.6.1.3. of the EIAR).	Noise and vibration assessments have not been deferred until after an enforceable railway order is granted.  The EIAR presents a comprehensive and detailed assessment of both groundborne and airborne noise and vibration in Chapter 13 and 14 of the EIAR in accordance with best practice and the guidance cited in those chapters of the EIAR. The assessments includes for predictive modelling in order to identify the potential impacts on sensitive receptors during both the construction phase and the operational phase. Where necessary, mitigation measures are proposed to reduce any identified effects. Section 13.2.6.1.3 simply identifies that the project will develop within the confines of the consent as contractors are appointed and translate the designs and methods developed for the purpose of the Railway Order and EIAR into detailed designs and methods. The EIAR proposes monitoring and mitigation measures that will ensure that the proposed construction and operation of the proposed Project is in line with that presented in the EIAR. The Board can also impose any requirements of an enforceable Railway Order if it considers it necessary.  The assessment of noise levels at building facades is normal best practice for this type of analysis noting the assessment criteria generated from best practice guidance (BS5228) all refers to noise levels at building facades.  We refer further in response (14) below.	
6	EXECUTIVE SUMMARY  Inadequate EIAR  Section 4.2.4 Mitigation	1 and 27	<ul style="list-style-type: none"><li>The impacts of construction noise and vibrations on internal dwelling environments has not been assessed.</li></ul> Referring to Metro North Railway Order 2010 and the conditions appended to schedule 14 of that order: - Condition 15 of the previous metro north railway order specified that the airborne construction noise levels that should be applied at the facade of any residence. - From the evidence submitted (this EIAR), it is apparent that it will not be possible to achieve these thresholds, particularly when the cumulative impacts of noise and vibration, both air borne and ground borne, are taken into account.  Condition 12 and 13 of the aforementioned Metro North relate to vibration impacts. They reference German Standard DIN 4150-3:2016 "Vibrations in buildings - Part 3: Effects on structures". The ability of the project to comply with any such standard needs to be fully explored by the Board and at any oral hearing held.  For this reason, we request that the Board appoints specialist noise and vibration consultancy advice in order to assist it in conducting this element of the assessment.	The assessment undertaken in EIAR were completed by internationally recognized specialist consultants and is in line with best practice and with all relevant guidelines and policy requirements as laid out in EIAR Chapter 13 Airborne Noise and Vibration, section 13.2.2. The assessment of noise levels at building facades is normal for this type of analysis as the assessment criteria generated from best practice guidance all refers to noise levels at building facades, as referred to in response (5) above.  As per "Old Metro North", the assessment has been presented in Chapter 13 of the EIAR in terms of the potential effects at the façade of all properties potentially impacted (as detailed in other responses above). As also stated it is generally possible to achieve the criteria at the majority of facades. The exceptions are presented in Section 13.7 Residual Impacts. Having regard to groundborne vibration, the DIN 4150 standard is also utilised to determine the potential for building damage in the assessment presented in Chapter 14. (Please refer to Table 14.5 of Chapter 14).	
7	EXECUTIVE SUMMARY	1	<ul style="list-style-type: none"><li>There has been no night-time impact assessment of construction noise.</li></ul>	Night-time noise has been assessed. The Proposed Working Hours are outlined in EIAR Chapter 5, MetroLink Construction Phase, section 5.2.4. Standard working hours will generally be the norm for all above ground works i.e. Monday to Friday 07:00 to 19:00 and Saturday 07:00 to 13:00. Only tunnelling and other works underground will be undertaken 24 hours a day. The only exception to this is the requirement for work above ground outside standard working hours for exceptional events such as concrete pours, and abnormal deliveries. In the exceptional event that these night time works are necessary, the contractor will engage with the local community and local authority before such works are undertaken.  All planned night-time work activities will have to be undertaken, controlled and mitigated under the detailed Construction Environmental Management Plan to maintain impacts below the agreed construction noise thresholds. Examples of mitigation measures that can be used to reduce impact are detailed within Chapter 13, section 13.6, including the use of enclosure structures for planned activities outside of the standard working hours.  The rationale for 24/7 working on underground activities such as Mechanical Electrical Power (MEP) installation, TBM strip out, and tunnel clean and track laying, is that they can be managed underground without causing disturbance at night. While activities below ground are progressed on a 24/7 basis, site level activities such as deliveries etc will be limited to standard working hours (Chapter 5, Section 5.5.17.3 refers). In addition progressing this work 24 hours a day will ensure that the construction phase is completed much more quickly, thereby reducing the duration of effect on nearby sensitive receptors, including dwellings on Dartmouth Road.  Owing to the nature of the sprayed concrete intervention tunnel construction and to ensure a safe and stable method of excavation, and	

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	Inadequate EIAR			<p>minimising settlement impact, the sprayed concrete intervention tunnel construction will be undertaken 24 hours per day, seven days per week. The groundborne noise and vibration arising from mechanical excavation of the tunnel will not exceed threshold limits. During night-time support works at the surface, an acoustically clad steel framed temporary building located above the access to the SCL work site on the south east corner of the compound will control airborne noise breakout to surrounding sensitive properties. All concrete to support the sprayed concrete tunnel lining operation will be batched on site within the acoustic enclosure and will not require night-time delivery.</p> <p>The predicted level of groundborne noise during Tunnel Boring Machine (TBM) passage is 49 dB LASmax at 33 Dartmouth Road which is above the 45 dB LASmax threshold, resulting in a significant impact on the occupants of this address for the relatively short period estimated at up to 2-week duration of the TBM passage beneath this property where it can be anticipated that occupants of certain properties identified in the EIAR will experience noise impact. Unfortunately there are no effective methods available to reduce groundborne noise from TBMs at source and therefore the principal mitigation measure is advance consultation and engagement to inform residents of the timing of the TBM passing to allow building occupants to prepare for the temporary elevated noise levels.</p> <p>Therefore with the exception of some temporary disturbance (c. 2 weeks) resulting from the TBM passing. All other activities are not predicted to cause significant impact at night.</p> <p>As outlined in Transport Infrastructure Ireland (TII) Airborne and Groundborne Noise Mitigation Policy (Appendix A14.6) there is a process in place whereby further mitigation measures can be implemented at individual properties should this be merited.</p>	
8	EXECUTIVE SUMMARY  Inadequate EIAR  Section 4.5 Construction of Intervention Tunnel.	1 and 30	<ul style="list-style-type: none"><li>• The blasting impacts of tunnelling directly under the houses on Dartmouth Road has not been assessed in terms of amenities, noise, vibration and human health.</li></ul> <p>The construction of this tunnel is by mechanical excavation and by blasting. As noted above the blasting impacts are not assessed. The use of hydraulic breakers will be required, although for limited periods of time.....</p> <p>Of particular concern for the residents in the area is the SCL nigh time support works (i.e. concrete mixing) will be required on the compound site at Charlemont. A steel clad building is required to provide acoustic attenuation, but details of this building are not provided and no actual modelling or assessment is undertaken of this operation.</p>	Section 13.6.1.2.4 discusses the proposed steel clad building, in the fourth bullet point under Table 13.85. To reduce reverberant noise build up, the requirements of this building are that it will be suitably clad to achieve a minimum sound reduction index of 24dB Rw.	
9	EXECUTIVE SUMMARY  Inadequate EIAR	1	<ul style="list-style-type: none"><li>• A traffic impact assessment of local junctions has not been undertaken.</li></ul>	<p>As part of Appendix D of Appendix A9.5 Scheme Traffic Management Plan, the initial criteria used to determine whether local junction modelling was undertaken was as follows: * Station construction requires new site access onto a key road; * Station construction would result in a significant alteration to the receiving road environment; * Station construction would result in a &gt;10% increase on traffic on existing road volumes, special consideration was given to where roads/junctions were subject to the cumulative impact of multiple construction sites (i.e. R108 for example).</p> <p>Local LinSig junction assessments were not undertaken at Charlemont Station as the design indicated it would not meet the criteria.</p> <p>As presented in Appendix A9.5 Scheme Traffic Management Plan, analysis has been undertaken to assess the impact of the traffic management measures on the local road network surrounding Charlemont Station, following a 2-stage assessment process as identified in section 2.4. At the local level the following parameters have been used to assess impacts on general traffic: * Increase in driver delays at junctions; * Changes in traffic flows on surrounding streets; and, * Additional distance travelled due to diversions.</p> <p>Local traffic impacts have been assessed against key performance indicators, including the removal of one or more lanes of traffic, increase in traffic flow of +10% (PCUs), where there is predicted to be a permanent increase in journey length of 500m, or a new signalised junction. Local modelling undertaken at this location indicates that the increased volume of traffic on Grand Parade and Northbrook Road does not translate into any significant increase in driver delay. The largest increase in diver delay of 12 seconds is registered on the westbound approach on Grand Parade to the Ranelagh Road signalised junction.</p>	

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10	EXECUTIVE SUMMARY  Inadequate EIAR  Section 4.3 Settlement & Subsistence: 4.3.1 Methodology	1 and 28	<ul style="list-style-type: none"><li>• The EIAR fails to properly assess the settlement impacts of the tunnelling upon the houses on Dartmouth Road and there may be settlement of between 35mm and 45 mm which would severely affect these protected buildings.</li></ul> <p>From a review of the EIAR and associated appendices, it is evident that a very limited assessment of settlement and subsidence has been carried out. It can be seen from the above diagram that the houses directly over the tunnels on Dartmouth Road fall within the 35mm to 45mm settlement zone.....</p> <p>However, given that all bar one of the buildings covered by this submission are protected structures, they should be classed as damage category risk 3 (moderate).</p> <p>However, the protected buildings on Dartmouth Square West and on Dartmouth Road are excluded.</p> <p>Appendix A5.17 provides an assessment of 'representative' buildings. It is unclear why these buildings were selected. There is no map illustrating the location of reference numbers/properties. The presentation of the information is opaque and unclear and does not facilitate a full and proper examination of the true impacts upon the houses on Dartmouth Road. Again, this is a significant inadequacy in the EIAR.</p> <p>The assessment effectively defers most of the assessment of subsidence and settlement to a further assessment. Such an assessment if undertaken after the railway order is issued, removes property owners' rights to review the actual impact of the development on their properties. This is wholly contrary to the principle of protecting third party rights.</p>	<p>TII do not agree that that "a very limited assessment of settlement and subsidence has been carried out". The assessment undertaken covers the whole route of the proposed Project. In addition, as is standard with a long linear project, buildings were selected to provide a representative sample and coverage to inform the EIAR, and TII can confirm that the protected buildings on Dartmouth Square West and on Dartmouth Road were not excluded from the assessment. Please refer to Figure 20.16 in Appendix A5.17 where the settlement contours can be examined to identify the predicted level of ground movement for each property.</p> <p>As stated in Appendix A5.17, the approach taken by TII for assessing the impact of construction generated ground movements reflects the industry standard three-phased ground movement impact assessment process that is undertaken on tunnelling and underground projects around the world, that includes Channel Tunnel Rail Link (CTRL), Dublin Port Tunnel, Crossrail and High Speed 2. The level of assessment, Phase 2, is appropriate for this stage of the Project to inform the Railway Order application.</p> <p>TII does not agree that the EIAR fails to properly assess the settlement impacts of the tunnelling upon the houses on Dartmouth Road or that the EIAR has assessed the impact of settlement on the houses on Dartmouth Road. EIAR Appendix 5.17 refers. The settlement predicted for the buildings directly over the tunnel are of up to 45mm as stated. The Phase 2 assessment of the damage for these buildings is "Slight" - please refer to building B151 (32 Dartmouth Road, the representative building) in table 5-2 of that appendix, the representative building (section 5.2.1 of Appendix A5.17 refers) for the assessment along Dartmouth Road. It is also important to note that the Property Owner Protection Scheme (POPs) scheme (as outlined in section 5.4.11.4 of the EIAR) which will entail undertaking pre and post construction surveys of every property within the zone of influence of the alignment. The Property Owners' Protection Scheme is in addition to the existing legal rights of property owners and is in place to provide a simple and prompt way of rectifying any damage caused under the project up to the ceiling of €45,000. If the sum should exceed this amount the normal claims process would be used with the insurance companies for TII and/or the contractor.</p> <p>The protected nature of a building does not alter the classification of damage from slight to moderate as stated. The protected buildings along Dartmouth Road, within the zone of influence of the works, will be subject to a further Phase 3 refined assessment (despite the impact only being assessed as 'slight') to take account of final design and construction methodology details, most likely utilising advanced numerical modelling techniques and further surveys of the building. The results of this refined assessment typically show that earlier assessments are conservative and overestimate the likely impact of construction generated ground movements.</p>	
11	EXECUTIVE SUMMARY  Inadequate EIAR  Section 4.4 Hydrogeology	2 and 30	<ul style="list-style-type: none"><li>• The hydrogeological impact assessment is inadequate as it has not been based upon local bore hole logs and no local impact assessment has been undertaken around the Charlemont station.</li></ul> <p>No detailed specific localised groundwater modelling has been undertaken as part of the EIAR. Water depth reading from boreholes some 550m from the proposed station are used in the broad assessment (Table 19.15). The data on which the assessment is undertaken does not relate to the site concerned. It is a requirement of the EIA process to provide relevant up-to-date and accurate information in relation to impacts of any aspect of the development. As such relying on bore hole data which is some considerable distance from the area of the works, has resulted in a wholly inadequate assessment. Hydrogeological information along the line of the underground elements should have been collected, particularly in an around a major intervention such as Charlemont Station.</p>	<p>TII have undertaken localised and specific groundwater modelling, and TII can also confirm that hydrogeological information along the line of the underground elements has been collected.</p> <p>Please refer to Figure 19.6 of the EIAR which identifies the location of a boreholes at Charlemont. Pump tests were undertaken here and groundwater samples were taken (from 3 boreholes here) and analysed in order to inform the baseline conditions presented in the EIAR. Furthermore calculations were undertaken to estimate the effects of excavations on the groundwater for every station including Charlemont (refer to Table 19.35 Table 19.41 and Charlemont subsection under section 19.5.3.6.</p>	



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12	EXECUTIVE SUMMARY Inadequate EIAR	2	<ul style="list-style-type: none"><li>The impact of ventilation systems has not been assessed.</li></ul>	<p>EIAR Chapter 13, Airborne Noise and Vibration, section 13.5.3.2 of the EIAR discusses noise from fixed plant, such as extract fans and ventilation systems. All plant associated with ventilation are housed within back of house plant rooms below ground level within the stations and hence will not generate any measurable airborne noise emissions at ground level. The key potential noise source relates to breakout noise from ventilation shafts and grilles at surface level. The assessment shows that without mitigation there are potential significant noise impacts from surface grills.</p> <p>The final airborne noise impact at sensitive receptors is very sensitive to small changes in the final construction and design of the ventilation systems. As a result, modelled impacts and mitigation will have to be updated in parallel with the detailed design. Section 13.6.2.3 outlines the detailed considerations that will be included in the design to ensure that the ventilation systems do not exceed limits as per BS 4142, including:</p> <ul style="list-style-type: none"><li>Reduction of induct flow rates;</li><li>Reduction of elements in the airflow;</li><li>In duct attenuators;</li><li>Orientation of grilles and louvres away from sensitive receptors;</li><li>Acoustic louvres; and</li><li>Anti-vibration mountings and couplings will be incorporated into the design to control vibration.</li></ul> <p>Once the Project moves into the next phase of design development then the detailed design of each shaft and surface grill will include measurements of background and ambient noise at the closest noise sensitive receptors to each of these fixed items of plant, this data will be used to establish a noise threshold level in accordance with BS 4142, that each item of plant must be below, with bespoke noise mitigation at each location.</p> <p>We comment further in responses (22), (057) and (058) below.</p>	
13	EXECUTIVE SUMMARY Inadequate EIAR	2	<ul style="list-style-type: none"><li>The ground borne vibration/noise impacts of the train operations upon the houses of Dartmouth Road have not been assessed</li></ul>	<p>This statement is incorrect. EIAR Appendix A14.5, Groundborne Noise and Vibration and Blasting Modelling Results, Section 14.4 AZ4 Northwood to Charlemont, presents the predicted vibration levels during railway operation for sensitive receptors. The predicted groundborne noise at 33 Dartmouth Road (a property directly above the alignment) is 28 dB LASmax, which is below the threshold level of 40 dB LASmax, indicating no significant impact during railway operation. The predicted VDV (Vibration Dose Value is a parameter that combines the magnitude of vibration and the time for which it occurs) during railway operation is 0.005 ms-1.75 (VDV day) and 0.003ms-1.75 (VDV night). Both of these values are well below the VDV Threshold Levels of 0.8ms-1.75 (VDV day) and 0.4ms-1.75 (VDV night) indicating no significant impact for the building or for residents of this address.</p>	

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14	EXECUTIVE SUMMARY  Construction Phase	2	<ul style="list-style-type: none"><li>The construction noise impact assessment is wholly inadequate as it fails to consider the internal noise impact over a 9 year period, defers assessments to the design and construction stage, fails to properly assess night time impacts, incorrectly categorises impacts as very significant as opposed profound</li></ul>	<p>Further to response (5) above, the assessments presented in Chapter 13 and Chapter 14 of the EIAR are undertaken in line with best practice and all relevant guidelines and policy requirements as laid out in Section 13.2.2 of the EIAR. Further to response (5) above, the assessment of noise levels at building facades is normal best practice for this type of analysis as the assessment criteria used is based on predicting the noise levels at building facades as per the relevant guidelines and standards including BS 5228.</p> <p>EIAR Chapter 2, Methodology used in Preparation of the EIAR provides the details of the durations of effect utilised in the analysis throughout the EIAR. The assessment in EIAR Chapter 13 has noise and vibration impacts over shorter durations to reflect the duration of the actual activity i.e. excessive noise effects resulting from the construction will not last 9 years, and will be of short durations for each of the activities on site: Piling, Excavation, building and MEP etc and mitigated through the measures described in the EIAR.The majority of the most impactful noise activities are completed within the first 5 years of the construction programme.</p> <p>In EIAR Chapter 5, MetroLink Construction Phase, Table 5.5, the proposed working hours for this site are outlined. The assessments presented in Chapters 13 and 14 are based on these proposed working hours with no works proposed above ground occurring during the night time (Refer to response (7) above for further detail). As outlined in Table 5.5 of the EIAR, there will be underground works during the night time period and these have been assessed in both Chapter 13 and 14. The impact of support activities for those works and associated mitigation has also been assessed in Chapters 13 and 14. Chapter 13 assesses potential impacts associated with the operation of plant above ground only i.e. ventilation fans at the surface to facilitate this work, while Chapter 14 covers the potential impacts associated with underground works.</p> <p>TII do not agree that impacts are incorrectly categorised as very significant rather than profound. EIAR Chapter 13, section 13.2.6 outlines the appraisal methodology and along with Tables 13.12, 13.13 and 13.14 shows 'very significant' rather than 'profound' is the correct categorisation.</p>	
15	EXECUTIVE SUMMARY  Construction Phase  Section 4.2.3 Ground-borne Noise and Vibration	2 and 26	<ul style="list-style-type: none"><li>Construction vibration impact assessment fails to assess the evacuation tunnel. This element of the project is likely to have a significant effect upon the Dartmouth Road residents. It will not be possible to meet airborne noise condition limits that may be reasonably set by An Bord Pleanála.</li><li>Construction of the intervention tunnel will give rise to significant noise and disturbance, 24/7 during the period of its construction.</li></ul> <p>Intervention Tunnel: The assessment of the impacts of the intervention tunnel have not been undertaken. Table 14.13 assumes that the construction methodology for the intervention tunnel will be "Drill-and-blast". The impacts associated with either blasting or drilling of this 360m tunnel, which passes under the properties at Dartmouth Road, have not been assessed.</p> <p>Table 14.11 of the EIAR indicates that the construction of the intervention tunnel is assessed under airborne impacts in Chapter 13, notwithstanding that the construction method would be blasting (i.e. Air overpressure). Both Figures 14.4 and 14.5 (extracts above) clearly do not assess the impacts of this intervention tunnel on any properties on Dartmouth Road or further south into Ranelagh.</p>	<p>As referred to in response to Item (8) above, there is an error in Table 14.13 of the EIAR where it is outlined that drill and blast will be used at "all underground stations and intervention tunnels". A number of amendments were made to the proposed construction methodology for the intervention tunnel and these were assessed in the EIAR. These amendments included moving the intervention tunnel deeper and excavating the tunnel by mechanical means only. Both of these interventions were proposed to reduce potential effects arising from the construction of the intervention tunnel. The assessment of the mechanical excavation for the evacuation tunnel and intervention tunnel has been carried out, and is included within Chapter 14 of the EIAR. The assessment of groundborne noise and vibration from mechanical excavation for a number of representative receptors is presented in Table 14.31 and Table 14.33, with predictions for a greater number of receptors in the area presented in Appendix 14.5 Groundborne Noise and Vibration Blasting Modelling Results.</p> <p>Owing to the nature of the sprayed concrete intervention tunnel construction and to ensure a safe and stable method of excavation minimising any potential for settlement, the sprayed concrete intervention tunnel construction will be undertaken 24 hours per day, seven days per week. The groundborne noise and vibration arising from mechanical excavation of the tunnel will not exceed threshold limits. During night-time support works at the surface, an acoustically clad steel framed building will be used within the compound to control airborne noise breakout to surrounding sensitive properties. All concrete to support the sprayed concrete tunnel lining operation will be batched on site within the acoustic enclosure and will not require night-time delivery.</p>	



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16	EXECUTIVE SUMMARY  Construction Phase	2	<ul style="list-style-type: none"><li>The construction phase on Dartmouth Road, assuming no delays, will last 8.5 years (102 months). This is a medium-term effect which has not been properly considered in the EIAR. This may be termed "medium-term" from a broad community perspective, but in the lives of the residents of Dartmouth Road the impact is profound. Especially when the cumulative effect of the ongoing construction of the Office Building at 2 Grand Parade that will last for 4-5 years is considered. The residents of Dartmouth Road will have to endure almost a decade and a half of major scale construction within meters of their houses in an area zoned as residential.</li></ul>	<p>As outlined in EIAR Appendix A5.2 Construction Programme, Including Tunnel Elements, the proposed construction activities from advance works through to completion assessed for the EIAR will progress at this site for a period of 8.5 years. TII are of the view, as demonstrated by the detailed EIAR submitted that the environmental impacts have been carefully assessed and mitigation measures proposed where necessary. As detailed in the relevant environmental chapters and the Outline Construction Environmental Management Plan (CEMP) in Appendix A5.1, a significant suite of mitigation measures and monitoring has been proposed to mitigate the effects of this construction period so far as possible.</p> <p>TII would also note that while TII are of the view that the construction environmental impacts can be mitigated to levels consistent with residential amenity for the vast majority of the construction period, relocation is an available option for Dartmouth Road residents immediately adjacent to the construction site during peak construction. TII are available to discuss this option if that is something the property owner would like to explore and consider.</p> <p>Please refer to Transport Infrastructure Ireland (TII) Airborne and Groundborne Noise Mitigation Policy (Appendix A14.6) for further information.</p>	
17	Executive Summary  Construction Phase	2	<ul style="list-style-type: none"><li>The hours of construction proposed include 12 hour working days and significant element of 24 hour working during certain periods of the contract.</li></ul>	<p>Proposed Working Hours are outlined in Section 5.2.4 of Chapter 5 of the EIAR. Standard working hours will generally be the norm for all above ground works i.e. Monday to Friday 07:00 to 19:00 and Saturday 07:00 to 13:00. Only tunnelling (please see response (15) above) and other works underground will be undertaken 24 hours a day. The only exception to this is the requirement for other noisy work above ground outside standard working hours for events such as concrete pours, abnormal deliveries etc. TII and their Contractor will engage with the local community and local authority to advise of any such upcoming events such as this, and will do their best to minimise any such occurrence so far as practicable.</p> <p>All planned night-time work activities will have to be undertaken, controlled and mitigated under the detailed Construction Environmental Management Plan to maintain impacts below the agreed construction noise thresholds. Examples of mitigation measures that can be used to reduce impact are detailed within Chapter 13, section 13.6, including the use of enclosure structures for planned activities outside of the standard working hours.</p> <p>The rationale for 24/7 working on activities such as Mechanical Electrical Power (MEP) installation, TBM strip out, and tunnel clean and track laying, is that they can be managed underground without causing disturbance at night. While activities below ground are progressed on a 24/7 basis, site level activities such as deliveries etc will be limited to standard working hours (Chapter 5, Section 5.5.17.3 refers).</p> <p>Owing to the nature of the sprayed concrete intervention tunnel construction and to ensure a safe and stable method of excavation, and minimising settlement impact, the sprayed concrete intervention tunnel construction will be undertaken 24 hours per day, seven days per week. The groundborne noise and vibration arising from mechanical excavation of the tunnel will not exceed threshold limits. During night-time support works at the surface, an acoustically clad steel framed temporary building will be used within the compound to control airborne noise breakout to surrounding sensitive properties. All concrete to support the sprayed concrete tunnel lining operation will be batched on site within the acoustic enclosure and will not require night-time delivery.</p> <p>The predicted level of groundborne noise during TBM passage is above the 45 dB LASmax threshold, resulting in a significant impact on the occupants for the relatively short 2-week duration of the TBM passage. Unfortunately there are no effective methods available to reduce groundborne noise from TBMs at source and therefore the principal mitigation measure is advance consultation and engagement to inform residents of the timing of the TBM passing to allow building occupants to prepare for the temporary elevated noise levels.</p> <p>Therefore with the exception of some temporary disturbance (c. 2 weeks) resulting from the TBM passing. All other activities are not predicted to cause significant impact at night.</p> <p>As outlined in Transport Infrastructure Ireland (TII) Airborne and Groundborne Noise Mitigation Policy (Appendix A14.6) there is a process in place whereby further mitigation measures can be implemented at individual properties should this be merited.</p>	

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18	Executive Summary Construction Phase	2	<ul style="list-style-type: none"><li>The alternative construction compound has not been properly assessed and given the impacts of that proposed, it is incumbent upon TII to properly assess this and propose it as a mitigating measure.</li></ul>	There is one construction site proposed for Charlemont Station, and that encompasses the construction footprint of the proposed Charlemont Station.  The rationale for the location of Charlemont Station is provide in response (1) above.	
19	Executive Summary Construction Phase	2	<ul style="list-style-type: none"><li>Additional traffic will be generated during construction and the rediverting of traffic will have an adverse effect upon the local road network. HGV traffic on quiet residential roads will have a severe impact upon amenities.</li></ul>	<p>Appendix A9.5 Scheme Traffic Management Plan details the proposed HGV routing associated with the construction works at Charlemont Station. Routing from the site is mainly via the R111 and R110, and routing to the site is via the R810 and R110. Alternative routing options via the R110/Kildare Road and the R110/R811 are also considered, all of which are part of the regional road network. As detailed in Appendix A9.5 Scheme Traffic Management Plan, access will be provided either from Grand Parade or from Dartmouth Road. The localised construction traffic routeing to and from the various site accesses will require consideration of the local traffic restrictions along Grand Parade and the junctions which intersect it. Due to banned movements on Grand Parade, inbound movements to the south site will need to route via the R114 gyratory to the north. When the full closure on Dartmouth Road (lasting up to 30 months) is in place, inbound and outbound traffic will route via Dartmouth Road, R138 and Grand Parade. Local modelling undertaken at this location indicates that the increased volume of traffic on Grand Parade and Northbrook Road does not translate into any significant increase in driver delay. The longest delay occurs eastbound on Dartmouth Road during the AM peak of 14 seconds.</p> <p>Model outputs indicate that there will be a moderate increase in HGV movements during construction at this location. The most significant increase, of just over 2%, will be in both directions along Ranelagh Road/Charlemont Street, which is part of the regional road network. Elsewhere in the area, including local residential streets, increases are significantly lower.</p>	
20	Executive Summary Construction Phase	2	<ul style="list-style-type: none"><li>No local traffic modelling has been undertaken as part of the assessment and the impact upon pedestrians has not been properly assessed.</li></ul>	<p>This statement is incorrect, both local traffic modelling and the impact upon pedestrians has been assessed. EIAR Appendix A9.5 Scheme Traffic Management Plan presents the analysis undertaken to assess the impact of the traffic management measures on the local road network surrounding the proposed Charlemont Station during the construction phase. At the local level the following parameters have been used to assess impacts on general traffic and on pedestrians:</p> <ul style="list-style-type: none"><li>Increase in walking distance/quality of service for pedestrians (through removal of footpath, reduction of quality of service, removal of a pedestrian crossing or relocation of crossing by more than 100m);</li><li>Increase in driver delays at junctions;</li><li>Changes in traffic flows on surrounding streets; and,</li><li>Additional distance travelled due to diversions.</li></ul> <p>The analysis undertaken at this location indicates that the increased volume of traffic on Grand Parade and Northbrook Road does not translate into any significant increase in driver delay. The largest increase in driver delay of 12 seconds is registered on the westbound approach on Grand Parade to the Ranelagh Road signalised junction.</p> <p>During the construction phase, pedestrians will experience a reduction in quality of pedestrian infrastructure and space. The construction site boundary will encroach upon footways in the local area, including the northern side of Dartmouth Road, and the southern side of Grand Parade. However, a temporary signalised crossing will be provided west of the Luas to maintain pedestrian access to and from the Stop. Whilst there are partial closures on Dartmouth Road and Grand Parade, pedestrian movements will be maintained on appropriately sized footways through the area.</p>	

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21	Executive Summary  Construction Phase  Section 4.11 Human Health	2 and 41	<ul style="list-style-type: none"><li>There will be a severe impact upon human health which has not been properly assessed.</li></ul> <p>This is the only assessment of the impact upon human health. House nos. 32 to 35 Dartmouth Road are not even identified as very highly sensitive receptors. It appears as though this section to the EIAR has not fully reviewed or had regard to the construction phasing with night-time working, ground borne noise and vibrations and other matters raised above. This is considered to be a wholly inadequate assessment of the impact upon human health in so far as it relates to the properties on Dartmouth Road.</p>	<p>It is not correct to say "There will be a severe impact upon human health which has not been properly assessed." EIAR Chapter 10, Human Health has identified that there may some residual effects after mitigation measures due to the noise and vibration arising from mechanical excavation, TBM advancement and proposed blasting resulting in "annoyance to users, but no health effects".</p> <p>The Human Health Assessment is presented in Chapter 10 Human Health. This chapter identifies human beings as being sensitive due to their age, health status or for other reasons. But as outlined in section 10.3.4 of the Chapter 10 of the EIAR, it is neither possible or necessary to identify every sensitive receptor along the proposed alignment. The approach used in the assessment is to present residences (including the ones listed), schools, workplaces and places of worship as "highly sensitive" as identified in section 10.3.4.2. This EIAR has had full regard to the construction phasing, including night time working, and groundborne noise and vibration etc as the health assessment is based on the modelling and assessment outputs of a number of chapters (see Table 10.3). These are Chapter 9 Traffic and Transport, Chapter 11 Population and Land Use, Chapter 12 Electromagnetic Compatibility and Stray Current, Chapter 13 Airborne Noise &amp; Vibration, Chapter 14 Groundborne Noise &amp; Vibration, Chapter 16 Air Quality , Chapter 18 Hydrology, Chapter 19 Hydrogeology and Chapter 20 Soils and Geology.</p>	
22	Executive Summary  Amenity Impacts	2	<ul style="list-style-type: none"><li>The operation of the trains and associated ventilation systems has the potential to adversely affect the amenities of the residents and has not been properly assessed</li></ul>	<p>Further to response (12) above and please also refer to response (57) and (58) below.</p> <p>TII have assessed the impact of the trains and ventilation system and do not predict that amenity will be significantly impacted.</p> <p>With regards to the noise of operating rail infrastructure, EIAR Chapters 13 and 14 present a comprehensive and detailed assessment of operational airborne and groundborne noise and vibration. No residual noise impacts are identified at this location during operation. The calculated rail noise levels across the proposed Project are not significant in terms of any widespread community disturbance and result in a not significant to slight impact when added to the prevailing noise environment.</p> <p>EIAR Chapter 13, sections 13.2.3.2 and 13.5.3.2.3 recognise that ventilation systems if not designed and mitigated effectively are potential noise sources. Section 13.6.2.3 outlines the detailed considerations that will be included in the design to ensure that the ventilation systems do not exceed limits as per BS 4142, including:</p> <ul style="list-style-type: none"><li>Reduction of induct flow rates;</li><li>Reduction of elements in the airflow;</li><li>In duct attenuators;</li><li>Orientation of grilles and louvres away from sensitive receptors;</li><li>Acoustic louvres; and</li><li>Anti-vibration mountings and couplings will be incorporated into the design to control vibration.</li></ul> <p>Measures to mitigate noise from the use of public address systems is also detailed in Chapter 13 (sections 13.5.3.2.4 and 13.6.2.4). Best practice design principles will be employed to minimise noise breakout at the surface from these systems via escalators, lift shafts and stairwells.</p> <p>Mechanical elements associated with escalators are housed below ground and are fully enclosed. The operation of escalators will not generate any notable noise sources during operation and will not be audible above the prevailing noise environment.</p> <p>As noted above, with regards to stations entrances, these are transient areas for passengers entering and exiting the station. These activities are not the source of significant noise generation and form part of the existing soundscape in the existing prevailing environment. It is acknowledged footfall numbers will increase in the vicinity of the station entrance, however this activity does not translate to significant noise impacts.</p>	
23	Executive Summary  Amenity Impacts	3	<ul style="list-style-type: none"><li>The post completion permanent arrangement will result in significant rat running between Ranelagh Road and Grand Parade to the detriment of the residents on Dartmouth Road.</li></ul>	<p>As presented in EIAR Chapter 4, Description of the MetroLink Project, the internal street between Grand Parade and Dartmouth Road will have barriered and controlled access, be speed restricted and traffic calmed, and be treated as a shared vehicular pedestrian space. This will prevent it from being used as a "rat-run".</p>	

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24	Executive Summary  Amenity Impacts  Section 5 Operational Impacts: 5.4 Traffic and Transport	3 and 50	<p>No adequate drop-off pick up facilities, taxi ranks, or interchange with other services are proposed. There will be an inevitable loss of parking on Dartmouth Road.</p> <p>Section 5.4.2 Drop-Off and Pick Up There is a major station entrance onto Dartmouth Road. It has no drop- off or pick facility and inevitably there will be a loss of parking for residents along this section of Dartmouth Road as the requirement for a drop-off and pick-up facility becomes evident. Given the very low level of integration with bus services in this suburban location, there will be a significant demand for such a drop-off facility. .</p> <p>No assessment has been undertaken of the demands, requirements and impacts of such a significant interchange element. This will result in a significant loss of amenity for local residents.</p>	<p>As detailed in EIAR Chapter 6, MetroLink Operations and Maintenance, the proposed Project has been designed to ensure maximum interchange with other modes of transport, specifically more sustainable modes of transport such as walking, cycling and public transport, to discourage the use of private vehicles. The provision of drop-off facilities have been considered during the design process with such facilities only provided at locations that are less likely to encourage unnecessary short journey car trips in the local area. While a short drop off is proposed between Grand Parade for persons of restricted mobility only and the Royal Canal, along Dartmouth Road all existing street parking is reinstated on completion.</p> <p>During the operational phase, the model zones around Charlemont Station forecast a reduction in Car mode share, with a reduction of between 400 and 800 car trips over the 12hr period. With the reduced demand for car trips, it is anticipated that the demand for parking will also reduce. Transport modelling presented in EIAR Chapter 9, Traffic and Transport also indicates that the majority of passengers boarding and alighting at Charlemont will transfer from/to other forms of public transport by foot, and therefore will not require drop-off facilities or a bus interchange</p> <p>TII would note that it is not correct to say no assessment has been undertaken and that the Station is intentionally designed with only one drop-off for persons of restricted mobility only. There will be no further drop-offs provided and therefore the assertion that parking will be reduced in the future is not correct.</p>	
25	Executive Summary  Amenity Impacts  Section 5 Operational Impacts: 5.6 General Impacts	3 and 53	<ul style="list-style-type: none"><li>• The overall impact of the both the construction and operational phases of the project, in terms of noise, vibration, visual impacts, traffic, HGV movement, construction activity, operational emissions, anti-social behaviour and general activity around the station will be such as to severely and permanently adversely affect the residential amenities of the residents listed in this submission. The impacts will be so severe as to evidently be in material contravention of the Dublin City Development Plan zoning objective for the area, which is Z2: "to protect and/or improve the amenities of residential conservation areas."</li></ul>	<p>The impacts of the proposed project, both during the construction and operational phase have been assessed in the EIAR that accompanies the Railway Order, with mitigation measures proposed where necessary and practicable, to ensure impacts are within acceptable limits, noting that there will be a temporary groundborne noise significant impact when the TBM passes for approximately 2 weeks. For the vast majority of the construction phase and all of the operational phase, the impacts of the project are consistent with the protection and improvement of the amenities of this residential conservation area. The operation of the project will improve those amenities by improving access to sustainable transport and reducing traffic.</p> <p>While TII are of the view that the construction environmental impacts can be mitigated, relocation is an available option for Dartmouth Road residents immediately adjacent to the construction site during peak construction. TII are available to discuss this option if that is something the property owner would like to explore and consider.</p> <p>The above responses to this Executive Summary have also addressed in summary the impacts raised by this observation with the exception of anti-social behaviour. In this regard, the interchange will increase the number of people passing through the area, however it is important to note that people will be using MetroLink, similar to Luas as a transport hub, moving quickly in and out of the area. The station will not be a destination attracting people to remain in the area. Further, TII have deliberately designed the Station with minimum set down space (with the exception of a drop-off on Grand Parade for persons of restricted mobility only) or room for taxi ranks so that it does not encourage the Station to be used as a terminus. Also see response (67) below. As stated in EIAR Chapter 11: Population &amp; Land Use, and in common with all other stations along the route, measures to reduce anti-social behaviour, including the provision of real time CCTV and appropriate lighting will be delivered on completion.</p> <p>Regards the reference to the Z2 zoning objective. The zoning under the Dublin City Development Plan 2022 - 2027 for the residential properties in question is "Z2 Residential Neighbourhoods (Conservation Areas)" with an objective to "protect them from unsuitable new developments or works that would have a negative impact on the amenity or architectural quality of the area (See Table 3.11 of the submitted Planning Report). As outlined in Section 4.5.18.6 of the Planning Report, the element of the Project within the Z2 zoning area will affect a below ground area only and will not impact on the amenities or architectural qualities of the area. The majority of the proposed Charlemont Station and all above ground elements are located within the lands zoned Z5 with the objective “To provide for the creation and protection of enterprise and facilitate opportunities for employment creation”. The Station has been designed so that it is integrated with the proposed redevelopment of this site by a third party development, and as such, the Station design promotes the zoning objective. The MetroLink station design does not result in any segregation of the area, with no surface barriers or walls proposed.</p>	

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26	Executive Summary  Property Issues	3	<p>Property:</p> <ul style="list-style-type: none"><li>• Houses 32-35 are the subject of sub-stratum CPO.</li><li>• The development will inevitably impact upon the value of retained land/property.</li><li>• The owners of no.35 Dartmouth Road have not been properly served with the relevant papers (to confirm).</li><li>• There will be a significant devaluation in property and the Board must refuse this element of the railway order. Owners’ costs of engaging in the process should be borne by TII.</li></ul>	<p>TII can confirm sub-stratum acquisition of land is sought below properties 32-35.</p> <p>All issues in relation to compensation for lands to be acquired are a matter for negotiation and, in the absence of agreement, reference to the Property Arbitrator. They are not a matter within the jurisdiction of ABP.</p> <p>No. 35 was under construction at the time referencing was carried out and would note the property lies within the land owned by 11 Cambridge Terrace who were referenced.</p> <p>35 Dartmouth Road is a new mews residence to the rear of 11 Cambridge Terrace. The owner of 11 Cambridge Terrace was served the notice and the submission on page 15 notes the owner of 35 Dartmouth Road as one and the same. The new build was completed in Q4 2022 and remains part of the garden to the rear of 11 Cambridge Terrace until separately registered.</p> <p>A letter seeking confirmation of title pertaining to 11 Cambridge Terrace was issued on 02/02/2022, in the full knowledge that TII understood that a dwelling was currently being constructed to the rear of 11 Cambridge Terrace. A Mr John Neary responded on 09/02/2022 confirming ownership of 11 Cambridge Terrace and referring to the new dwelling being currently being constructed at the rear of 11 Cambridge Terrace.</p> <p>- At the time of the RO Application there was no change/new Folio to Land Registry boundary information to 11 Cambridge Terrace, therefore no transfer (of part) to new owners. - At the time of the RO Application there was no update to Registry of Deeds title, therefore no transfer (of part) to new owners. - At the time of the RO Application there was no update to The Property Price Register, therefore no indication of a sale.</p> <p>Accordingly, there was no new data/evidence at the time, and the understanding would have been the property (i.e. the new dwelling known as 35 Dartmouth Road) was not completed/sold prior to September 2022, at the time of the RO Application. It has not been alleged by the observer that the facts are different, but this may be clarified at oral hearing.</p> <p>From a Land Referencing perspective, TII could not done anything further to establish possible ownership/tenancy on a new build which was possibly not completed prior to the MetroLink RO. This will be subject of legal submissions at oral hearing in due course.</p>	

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27	1. INTRODUCTION  1.1 Background  1.2 Strategic Planning Issues	4	1.1 The submission is made on behalf of the residents of properties 26-28 and 32-35 Dartmouth Road  1.2 The submission concludes that the link between St. Stephens Green and Charlemont cannot be justified in planning terms. Furthermore, it undermines the business case for the entire project. For this reason the associated submission requests that the section between Tara Street and Charlemont be omitted from the Railway order and that a new railway order application for the section between Tara Street and St Stephen's Green be submitted.	<p>The preliminary business case for the project is a matter for the Oireachtas, the Government, NTA and TII to be approved in accordance with the Public Spending Code. The Preliminary Business case which includes the section between St Stephen's Green and Charlemont was approved by Government in July 2021. The section of the route contributes positively to the over benefit to cost ratio (BCR ) for the scheme. It is incorrect to state that the St. Stephens Green to Charlemont section " undermines the business case for the entire project".</p> <p>ABP role is only to determine whether the project should be approved by reference to the proper planning and sustainable development of the area and the impacts of the project on the environment, including the carrying out of an EIA and AA. A scheme which terminates at Tara Street would not be consistent with the Transport Strategy for Greater Dublin Area (2022-2042).</p> <p>Tara Street and Charlemont are specifically identified as locations for stations in the GDA Transport Strategy 2022-2042. ABP is required to have regard to those requirements as policies and objectives for the time being of a public authority whose functions have a bearing of the proper planning and sustainable development of Dublin (Transport (Railway Infrastructure) Act 2001 and 143 of the Planning and Development Act 2000). The transport strategy is also a consideration material to the proper planning and sustainable development of the area (Section 31 J of the Planning and Development Act 2000).</p> <p>ABP has to give considerable weight to the GDA Transport Strategy, given its elevated role in the statutory scheme relating to proper planning and sustainable development, including that:</p> <ul style="list-style-type: none"><li>* the NTA is required to provide a report to planning authorities making regional spatial and economic strategies, development plans and local area plans ("relevant plans") with recommendations on the optimal use, location, pattern and density of new development taking account of the Transport Strategy and stating whether there is inconsistency between the relevant plan and the Transport Strategy;</li><li>* relevant plans are required to be consistent with the Transport Strategy;</li><li>* the Office of the Planning Regulator is required to evaluate relevant plans to ensure that they address consistency with the Transport Strategy;</li><li>* the Minister for Housing can direct variations to draft relevant plans to ensure that they are consistent with the Transport Strategy;</li><li>* landowners are not entitled to compensation where permission is refused due to inconsistency with the Transport Strategy.</li></ul> <p>The responses to the observations made in this submission explain why TII, by reference to Transport Strategy and project level assessment data that supports the conclusions of the Transport Strategy, do not consider it is correct or appropriate that the MetroLink alignment south of the proposed Tara Station should be omitted.</p> <p>In addition any decision to terminate the scheme at Tara will significantly impact on the overall viability and benefits of scheme.</p>	
28	Section 2.2.1 Operational Phase  Charlemont Station, Turnback Tunnel and Intervention Tunnel.	9	The City Tunnel continues southwards, terminating 360m beyond Charlemont Station to provide for a turnback facility for trains going back in a north bound direction. The reason for this 0.3km length of tunnel is not explained in the documentation. A parallel evacuation and ventilation will also be constructed alongside this section of tunnel that will connect back to Charlemont Station. Again, the rationale and justification is very limited in the documentation submitted with the Rail Order application. The full costs and benefits of alternatives, including an emergency exit emerging at the southern end of the turnback facility, is not considered.	<p>The need for turnback's and intervention tunnels is covered by EIAR Chapter 4, Description of the MetroLink Project. This section of tunnel is required to allow for the safe and efficient operation of the turnback facility , while also facilitating the stabling of a small number of trains at this location to allow for the efficient operation of the MetroLink system. Please refer to Appendix A7.4 Charlemont Shafts Options Report where there is a review of a number of options for the proposed turnback facility and for the location of an intervention/ventilation tunnel/shaft. The intervention tunnel avoids the need for surface landtake, and the impact associated with this, to accommodate a shaft.</p>	
29	Section 2.2.1 Operational Phase  Charlemont Station, Turnback Tunnel and Intervention Tunnel.	12	The Applicant has not justified why Charlemont station, located in a residential area, is "by far the longest underground station box" in the Metrolink project. The IEE suggests that the Applicant should make efforts to produce a "more compact station design with less of an impact on Dartmouth Road".	<p>The station footprint has already been designed with a key objective to minimise the station footprint in order to reduce the potential environmental effects and project costs, while ensuring that each station functions to meet the passenger requirements during the operation of the system. However this station has been amended when compared to other stations:</p> <p>(1) To avoid a direct impact on surrounding properties including the gardens on Dartmouth Square West, which led to an increase in overall length to maintain space within the station for required functionality.</p> <p>(2) And includes a second entrance/exit to Dartmouth Road.</p>	



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30	Section 2.2.1 Operational Phase  Potential to reverse the orientation of the Dartmouth Road entrance	12	<p>The Independent Engineering Expert also draws some conclusions as follows:</p> <p><i>'We are of the view that the design of the station should be optimised to try and reduce the overall size of the station box and therefore reduce the incursion into Dartmouth Road and should this not prove practicable to utilise a construction methodology which minimises the closure time of Dartmouth Road and provides the residents full access to their properties. It is also our view that given the size and potential developments on the site it would be at the very least practicable to reverse the orientation of the entrance to face away from the street and into the site (facing the development), so although footfall might not be reduced, the residents would not at least have to be faced with continual exposure to light and noise such as that which accrues around such station entrances. Some discreet signage would be all that would be required to guide walkers to their destination.</i></p> <p><i>We are also of the view that whilst moving the second entrance, perhaps into Dartmouth Park itself, might be technically feasible it might cause as many problems as it solves."</i></p> <p>The conclusion of the IEE clearly demonstrates that the Applicant has not adequately considered alternatives to reduce the impact on the residents of Dartmouth Road and thereby the EIAR is inadequate and incomplete. We support the further investigation of a reorientation of the station entrance away from the road. This may have the potential to reduce some of the Operational Impacts outlined in section 5 below.</p>	<p>Response (29) above explains the rationale for the sizing of Charlemont Station. TII are very cognisant of the impact on Dartmouth Road and have examined the construction methodology carefully (see responses (31) and (46) below), however regrettably it is not possible to avoid a road closure given the station box will extend under Dartmouth Road. TII do not accept that the EIAR is inadequate or incomplete because it has been necessary to extend the station box under Dartmouth Road.</p> <p>The current access arrangement whereby the entrance canopy faces Dartmouth Road is the optimum design solution as it will allow passengers to exit the station and move away from the station quickly. Along with all other stations along the route, the entrance layout, structure, lighting etc is in keeping with the Architectural, Urban Realm and Landscaping Design Principles set out for MetroLink within section 4.7 of EIAR Chapter 4: Description of the MetroLink Project. The proposed architectural finish provides an open station entrance from Dartmouth Road and reduces the risk of anti-social behaviour.</p> <p>All lighting within the station and at ground level will be designed to ensure that there is no significant light spill effecting nearby residential properties. Furthermore, as outlined in responses above, noise levels from the entrance canopy are not predicted to be significant.</p>	

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31	Section 2.2.2 Construction Phase	13 and 14	<p>The principal access and egress to the construction compound will be from the south via Dartmouth Road. Dartmouth Road will be partially closed (one way traffic only) for 12 to 18 months for utility diversions and fully closed for between 24 and 30 months for the main station construction works.</p> <p>However, Appendix 5.2 of the EIAR outlines construction schedule and it indicates that the Charlemont Station Compound/Deep Station has a 102 month construction period from Q3 of Year 1 to Q4 of Year 9.</p>	<p>The overall construction of the works at Charlemont Station is anticipated to be 102 weeks, see EIAR Chapter 5: MetroLink Construction Phase, Table 5.15.</p> <p>Two options have been considered in the EIAR to construct the station under Dartmouth Road. Both options utilise a top down construction method for the station, meaning that Dartmouth Road is only closed long enough to facilitate access to the site and the installation of the foundation piles and roof slab of the station, before utilities are rediverted back along Dartmouth Road and the road reinstated, with the remainder of the works continuing underneath.</p> <p>The first option considered allows for no vehicle access to Two Grand Parade, and the staging of the works for MetroLink for this option is set out within Chapter 5 MetroLink Construction Phase Appendix A5.3, Figures 8-72 to 8-78. This option results in a full closure of Dartmouth Road of up to 5 years to facilitate access (utility diversions, temporary works etc.) to the site and the installation of the foundation piles, roof slab of the station and reinstatement.</p> <p>The second option (The Developer Alternative Construction Methodolgy) considered and proposed by the RO application to maintain access to Two Grand Parade, and the staging of the works for MetroLink for this option is set out within Chapter 5 MetroLink Construction Phase Appendix A5.3, Figures 8-79 to 8-87. This option involves two stages on Dartmouth Road: a partial closure; followed immediately by a full closure of Dartmouth Road. The full duration of these consecutive activities is estimated to take 4 years.</p> <p>Partial Closure: To close Dartmouth Road for the works, the utilities have to be diverted. Subject to Statutory Undertaker approvals (ESB, Eircom etc.) this process is estimated to take up to 18 months, while access is maintained along Dartmouth Road via a proposed single lane closure.</p> <p>Full Closure: Once the utilities have been diverted, the road is then shut to through traffic (pedestrian access is maintained) and is estimated to take up to 30 months to complete the piling, and roof slab. The utilities and road will then be reinstated and road reopened.</p> <p>As referred to in response (54) below, the principal points of access to the site are from both Dartmouth Road and Grand Parade.</p>	
32	3.3.1 (P.A Reg. Ref: 2373/17)	17	<p>It also emerged during the course of considering the alignment and required depth of the track, that previous studies had failed to have due regards to the main east west sewer along Grand Canal, which the top of the tunnel had to pass under.</p>	<p>The observation is not correct as TII were aware of the sewer, however, as is natural for any design being developed, further information was sought to refine the design development. Specific surveys of this sewer were undertaken over July/August 2018 (ie after publication of the EPR but prior to publication of the Preferred Route) to ascertain its precise location. This detailed information was then utilised to refine the ongoing preliminary design development of the tunnel alignment and adjacent Charlemont Station layout to ensure the sewer would be avoided.</p>	
33	3.3.1 (P.A Reg. Ref: 2373/17)	17	<p>The resulting station box that was incorporated into the commercial development was also on a different alignment and angled relative to the existing Luas line, passing under houses on Dartmouth Square West. The alignment of the line also meant that any future tie-in with the Luas Green line to the south would have to pass through existing built areas, including a significant amount of demolition within the Ranelagh area (Mander's Terrace), before tying in and replacing the Luas Green line to the south. The revised station box in the planning application is detailed below.</p>	<p>Neither the alignment at Emerging Preferred Route (EPR) or Preferred Route (PR) stage passed underneath the houses on Dartmouth Square West.</p> <p>If in the future, MetroLink was extended south, this does not mean that inevitably open cut construction will be required or demolition of property will be necessary. It is possible that in the event of a tunnel being constructed to connect to Charlemont Station that the TBM would be launched from a site further south.</p>	
34	3.3.1 (P.A Reg. Ref: 2373/17)	18	<p>Note that it would appear that line of the piled wall to the east is straight and differs significantly from the revised station box drawing that is contained in the planning application.</p>	<p>The section of piled wall shown as straight is in accordance with what is shown on the Railway Order application drawings.</p>	

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35	4. CONSTRUCTION IMPACTS  4.1 Introduction	20	<p>The construction impacts for the residents who are represented in this submission will be very severe.....</p> <p>While further mitigation is proposed, this is wholly without prejudice to our fundamental point that the Charlemont Station, tunnel for the turnback facility and the intervention tunnel should not form part of the Railway Order. The requested omission of the section of Metro from St. Stephen's Green to Charlemont is to safeguard amenities, ensure an economically and cost effective scheme, and provide for the proper strategic planning of public transport, all of which is in the common good.</p>	<p>Please refer to response (1) above that explains the reasons for why a station is proposed at Charlemont and that while TII are of the view that the construction environmental impacts can be mitigated with the exception of short-term temporary disturbance during the passage of the TBM, relocation is an available option for Dartmouth Road residents immediately adjacent to the construction site during peak construction. TII are available to discuss this option if that is something the property owner would like to explore and consider.</p>	
36	Section 4.2.2 Airborne Noise and Vibrations	24	<p>".....it is unclear as to where the monitoring was undertaken for Dartmouth Road in the baseline report. In the case of station piling, there is a significant discrepancy between Table 13.68 of the EIAR and Appendix 13.7. The former gives a predicted impact of 71-80 dB, while the actual appendix indicates significantly higher levels of between 78 and 83.</p>	<p>Baseline noise monitoring along Dartmouth Road (ATT 72) was measured along the footpath, outside property Number 33 Dartmouth Road. Attended monitoring Location ATT71, was measured along Dartmouth Place. The unattended monitoring location UT51 was measured within the proposed Charlemont compound adjacent to the Luas Line, and monitoring location UT52 was measured to the rear of properties within Dartmouth Square.</p> <p>In relation to Table 13.68, values for Station Piling Works: South are correct within Appendix 13.7 which are in the range of 78 to 83 at receivers 39 to 40, representing properties on Dartmouth Road. Whilst the values in Table 13.68 of the EIAR are incorrectly transcribed as marginally lower, the specific impact ratings are correctly quoted as 'Significant to Very Significant' without mitigation. Post mitigation, a marginal exceedance of the adopted threshold is identified, resulting in a residual effect of 'Moderate to Significant' during this particular phase at properties 32 -34 Dartmouth Road. The values are below the upper threshold of 75 dB LAeq,T.</p>	
37	Section 4.2.2 Airborne Noise and Vibrations	25	<p>We would contend that the impacts identified above on very sensitive residential receptors are profound and not merely significant</p>	<p>Please refer to response (14) above.</p>	
38	Section 4.2.2 Airborne Noise and Vibration	25	<p>Critically, the EIAR does not assess the night time impacts of the construction compound, notwithstanding the fact that the EIAR itself as highlighted above, indicates that it will be operating on a 24/7 basis. This in itself would trigger a profound impact which has not been assessed. The EIAR is therefore fundamentally inadequate.</p>	<p>Both Chapter 13 Airborne Noise and Vibration and Chapter 14 Ground-borne Noise &amp; Vibration have assessed 24 hour working during the construction phase where relevant.</p> <p>The TBM will operate on a 24-hour basis, and this has been considered within Chapter 14 Groundborne Noise and Vibration for the construction phase. When the TBM is in operation then some support activities will also need to occur at the tunnel portals at Northwood and DASP , which have been assessed in Chapter 13 Airborne Noise and Vibration. Other activities such as some track laying activities are required to occur outside of daytime working hours, including night-time, and this has been assessed in Section 13.5.2.3 of Chapter 13. The final paragraph of Section 13.5.2.6.6 also discusses noise impacts during the night-time for works at Charlemont Station.</p> <p>Owing to the nature of the tunnelling works and to ensure a safe and stable method of excavation, and minimising settlement impact, the intervention tunnel construction will be undertaken 24 hours per day, seven days per week and this has been assessed in Chapter 14 Ground-borne Noise and Vibration. It is proposed that during sprayed concrete night-time support works, an acoustically clad steel framed temporary building will be used within the compound to control airborne noise breakout to surrounding sensitive properties and so there will be no significant impact as outlined in Chapter 13 Airborne Noise and Vibration.</p> <p>Please also refer to response (7) above.</p>	

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39	Section 4.2.2 Airborne Noise and Vibration	25	Table 13.90 of the EIAR refers to the impacts upon certain properties including ID 34-35 (10-11 Cambridge Square). This reference to this property is wholly misleading. This mews house at 35 Dartmouth Road was constructed in the rear garden of Nos.11 Cambridge Terrace (not Cambridge Square). The Eircode for 35 Dartmouth Square is D06 P6Y1. This property is not properly referenced in the EIAR.	The residual noise levels in Table 13.90 relate to the rear façade of properties along Cambridge Terrace (it is noted this is incorrectly referred to as Cambridge Square in the EIAR) Figure 13.2, Sheet 30 illustrates the assessment locations. When read together, the clerical error is apparent and the meaning of the EIAR is clear. The residual noise levels at receptor 34 and 35 (10-11 Cambridge Terrace) relates to the upper floors of these residential buildings which are 3 stories in height. The adjacent properties along Dartmouth Road are two story properties and the calculated residual noise levels at these floor levels benefit to a greater extent from the enhanced 4m noise hoarding around the compound. Noise levels at receptor 39 are representative of the mews building at 35 Dartmouth Square. TII therefore consider, notwithstanding the observation regards referencing, that the assessment undertaken is correct.	
40	Section 4.2.2 Airborne Noise and Vibration	25	Construction Noise Levels at No's 10 & 11 Cambridge Square are calculated to exceed the NI trigger value.....  The mitigating measures in the EIAR must be deemed inadequate in relation to the detail provided. It is inconceivable that the properties next door (i.e. nos. 32, 33 and 34 Dartmouth Road) would not experience the same or very similar residual impacts, given they have effectively the same relationship with the site compound and the station works as no.35 Dartmouth Road (specified as 10-11 Cambridge Square)	Numbers 32 to 34 Dartmouth Road (Receptor ID 's 40 and 41) have a predicted magnitude of impact of 'significant to very significant' before the implementation of mitigation measures. This is the same magnitude of impact as 10 and 11 Cambridge Terrace (receptor ID 34) as outlined in Table 13.68, which outlines potential significant construction noise impacts.  Table 13.90 provides the significant residual noise impacts (after the implementation of mitigation) at 10-11 Cambridge Terrace (incorrectly called up as Cambridge Square) due to fact that these buildings are 3 stories in height and so noise barriers are not effective at mitigating noise on the third floor the houses. Therefore application of the Airborne and Groundborne Noise mitigation policy is proposed for these receptors. This policy document outlines a procedure to allow TII to work with affected properties in order to identify the most appropriate mitigation.	
41	Section 4.2.3 Ground-borne Noise and Vibration	26	The EIAR takes Dartmouth Square West as the location for this element of the assessment. However, the tunnel and works associated with it, do not pass under the houses on Dartmouth Square West. The main tunnel and indeed the intervention tunnel do however, pass under directly 32 to 34 Dartmouth Road. This is a significant inadequacy in this part of the EIAR. Effectively the EIAR fails to assess the very significant potential impacts upon our clients' properties, amenities and human health.	The reference to "Dartmouth Square West" in Table 14.29 refers to the location where the highest modelled noise value was predicted in this general area (17 Dartmouth Square West). However it is not true to say that the analysis did not include for the properties on Dartmouth Road. These have been fully assessed with results presented in Appendix A14.5 and on Figure 14.2. For clarity a number of properties in the Dartmouth Square/Dartmouth Road area will experience temporary exceedances for approximately 2 weeks in groundborne noise levels during the passage of the TBM as per the results presented in Appendix A14.5. (Unfortunately there are no effective methods available to reduce groundborne noise from TBMs at source and therefore the principal mitigation measure is advance consultation and engagement to inform residents of the timing of the TBM passing to allow building occupants to prepare for the temporary elevated noise levels and potentially relocation where this is requested.	
42	Section 4.2.3 Ground-borne Noise and Vibration	27	The impact of ground borne noise and vibration for each of the project elements listed above was assessed, but only in relation to Dartmouth Square West.....  The assessment of the impacts of the intervention tunnel have not been undertaken. Table 14.13 assumes that the construction methodology for the intervention tunnel will be "Drill-and-blast". The impacts associated with either blasting or drilling of this 360m tunnel, which passes under the properties at Dartmouth Road, have not been assessed.  Table 14.11 of the EIAR indicates that the construction of the intervention tunnel is assessed under airborne impacts in Chapter 13, notwithstanding that the construction method would be blasting (i.e. Air overpressure). Both Figures 14.4 and 14.5 (extracts above) clearly do not assess the impacts of this intervention tunnel on any properties on Dartmouth Road or further south into Ranelagh.	Please refer to response (41) with regard to the reference to the assessment at Dartmouth Square West only. Please refer to responses (8) and (15) above that explains that drill and blast will not be used to construct the intervention tunnel.	

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43	Section 4.2.4 Mitigation	27	<p>Given the deficiencies in the EIAR, it is impossible to judge whether the mitigation measures are adequate. There is little that can be done in terms of mitigation to render the impacts non-significant, particularly where these have not been identified in the first instance.....</p> <p>In addition, the interaction of noise effects will be significant. Only 6 locations have been identified for pre-construction surveys in relation to noise and vibration arising from the project. While the Charlemont station new oversite development is identified, the properties on Dartmouth Road are not.</p>	<p>TII have responded to all observations made on the EIAR by the respondent. TII do not agree with the respondents opinion that there are deficiencies in the EIAR.</p> <p>In terms of the potential for (N&amp;V) mitigation measures to be effective, in Chapter 13, modelling has been undertaken of the potential effects with no mitigation in place and then with mitigation in place where it is required, thereby demonstrating the effectiveness of the proposals. The only exceedances of criteria identified for Groundborne Noise and Vibration relate to the passage of the TBM and as highlighted in section 14.5.1.1 of that chapter there are no effective ways of reducing the groundborne noise and vibration associated with this short term activity (predicted to occur for up to two weeks) at source. Therefore the principal mitigation measure is advance consultation and engagement to inform residents of the timing of the TBM passing to allow building occupants to prepare for the temporary elevated noise levels.</p> <p>In addition TII will accept and consider applications for additional measures on a case-by case basis, in accordance with its Noise and Vibration Mitigation Policy (see Appendix A14.6). This could for example include relocation during peak construction for residents significantly affected by the works.</p>
44	Section 4.3.2 Tunnel Driving and Secant Walls	29	<p>The 30m deep excavation will be within the boundary thus described. This secant wall, and very deep excavation proposed, will be within 14m of the rear walls of three storey Victorian houses on Dartmouth Square West, and within 8m of the front elevations of Victorian two/three storey houses n Dartmouth Road. It is a mere 2m from the front elevation of No. 35 Dartmouth Road.</p> <p>Following completion of the station box, it is proposed to drive a TBM through the north east end of the box, and exiting through the south west corner, continue the tunnel boring activity for 350m further south, to behind Ranelagh Village.</p> <p>Ground settlement following the construction of both secant walls and TBM tunnelling is inevitable. it is unavoidable, and it will occur. It will occur to varying degrees, across a settlement zone around the excavation of the tunnel centre line, and behind all the secant walls.</p> <p>Compounding the alarming settlement projections of between 35mm and 45mm caused by deep secant wall, and subsequent excavations, wall deformations, and disturb the water table, the whole of the residential stock within the established slump zone will be subjected to further compounding settlement disruptions with the arrival, and departure, of the TBM tunnelling process, some two years later.</p> <p>Engineering research experience has shown that projection of accurate expected settlement is usually unreliable, and results usually fall within certain ranges above or below expected. This is an important point in the consideration of settlement impacts associated with the proposed development.</p>	<p>EIAR Appendix 5.17, section 4.2 explains the methodology, empirically based and industry recognised approach to estimate the predicted ground movements generated by tunnel, and cut and cover construction, taking account of the design, construction methods and ground conditions. Both cut and cover, and tunnelling generated construction ground movements have been taken account of at this location. TII agree with the observation that ground movements can be challenging to predict and hence the parameters used by TII to predict ground movements are intentionally conservative, and are based on documented empirical data.</p> <p>Settlement and horizontal movements for retaining wall construction and bulk excavation associated with the station box and retaining walls have been undertaken based on the case history data documented in CIRIA Report C760 “Embedded retaining walls – guidance for economic design”, taking account of the ground conditions, proposed design and construction methodology. Further details for which can be found in EIAR Appendix 5.17, section 4.2.5.</p> <p>The TBM will be of the type that maintains positive pressure to the face and surrounding ground while the segmental tunnel lining is installed, thereby allowing ground movements to be closely controlled and minimised. TII would also note that TBM entry and exit from the station box will be sealed, with possible ground treatment to further stabilise the ground if required, to manage ground movements within acceptable limits.</p> <p>The prediction of tunnelling generated ground movements has been undertaken in accordance with the volume loss methodology outlined in CIRIA PR 30. This is an empirical method based on the percentage of tunnel volume excavated that is over and above that required for the tunnel itself. The calculation of the resultant settlement trough requires the derivation of a number of ground factors, these are explained in EIAR Appendix 5.17, sections 4.2.2. to 4.2.4. Similar to the cut and cover ground movement predictions, conservative volume and trough width parameters have been selected to ensure the ground movements predictions at this stage are robust.</p> <p>Please also refer to response (10) above that summarises the results of the construction generated ground movement impact assessment.</p>

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45	Section 4.6 Phasing & Programme	30	<p>.....the construction period for Charlemont Station is 102 months, or 8.5 years.</p> <p>It is quite clear that this station box which has already been constructed constitutes main works that form part of the first stage of the MetroLink project. They do not relate to the commercial office development.</p> <p>The length of time that the residents of Dartmouth Road have to endure is not temporary with reference to the EIAR Guidelines (EPA 2022). The EIA Directive requires a project to describe the likely significant effects, including the duration and frequency of effects. Table 3.4 of the EIAR Guidelines sets out definitions, which the introduction and project description suggests have been used.</p> <p>It is clear the duration of the impacts fall within a medium term effect as they last between seven to fifteen years. This is length of time is intolerable for any resident on Dartmouth Road.</p> <p>We also contend that this is a significant inadequacy in the EIAR. The duration of the effects in accordance with the guidelines are not given in any of the relevant chapters in so far as they relate to Dartmouth Road.</p>	<p>Regards the observation "that this station box which has already been constructed constitutes main works that form part of the first stage of the MetroLink project. They do not relate to the commercial office development." please refer to response (2) above.</p> <p>TII do not agree that the duration of impacts have not been assessed. As described elsewhere, the works are undertaken in a series of stages to construct the station, while reducing the impact on residents along Dartmouth Road and elsewhere at Charlemont. The assessment undertaken in the relevant chapters of the EIAR is detailed and comprehensive and reflects the different stages of construction and the effects resulting. As a result, effects are described in terms of the duration of these effects, rather than an overall duration for the whole of the construction phase which would be inaccurate. The most impactful construction activities at Charlemont in terms of settlement, noise, vibration and traffic (piling, station build and excavation) will occur in the first 4 to 5 years of the scheme and therefore TII do not agree that the "duration of the impacts fall within a medium term effect as they last between seven to fifteen years". All of these impacts, including the planned closure to vehicle traffic along Dartmouth Road have been assessed and mitigation proposed in the EIAR.</p> <p>Please note that for each of the impact assessment chapters in the EIAR, the likely significant effects, including the duration of these effects are presented as per the EIAR Guidelines definitions. Further descriptors of the works, including a programme of the construction phase for each construction compound is presented in Appendix A5.2.</p>	



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46	Section 4.6 Phasing & Programme	32 and 33	<p>3. Length of Closure of Dartmouth Road</p> <p>It is the view of the IEE, that even if it proves impossible or impracticable to move back the D-wall line from the far kerb line (see above) in any event there is no good engineering or planning reason to close Dartmouth Road for this extremely extended period. There are a number of alternate construction approaches, widely used, which would enable Dartmouth Road, which is quite narrow, to reopen after a matter of several weeks or a very few months two of which we outline below.</p> <p>i) Top down Construction</p> <p>ii) Temporary over decking with a steel 'umbrella' or bridge.</p>	<p>TII disagree that the works under Dartmouth Road could be completed and the road reopened “after a matter of several weeks or a very few months” with either of the methods described. One of these methods, Top-Down construction is proposed for all deep station construction on MetroLink and is as set out in the EIAR Chapter 5, section 5.5.9, Underground Stations.</p> <p>Top-down Construction:</p> <p>This methodology will assist to minimise the duration of the proposed closures on Dartmouth Road. Chapter 5, section 5.10.13 Charlemont Station sets out the outline sequence proposed for a consecutive partial and full closure along Dartmouth Road, further described below as follows:</p> <ul style="list-style-type: none"><li>• Commence utility diversions – Dartmouth Road partially open to through traffic and partial parking suspensions (Estimated duration: 12 to 18 months).</li><li>• Dartmouth Road Closed (Estimated duration: 24 to 30 months):<ul style="list-style-type: none"><li>- Site established, hoarding and protection works.</li><li>- Complete final utility diversions.</li><li>- Prepare and install DWall.</li><li>- Excavate and construct roof slab under Dartmouth Road.</li><li>- Reinstate Dartmouth Road, including utilities.</li><li>- Reopen for through traffic and local parking.</li></ul></li></ul> <p>Therefore, the total duration of works on Dartmouth Road is estimated to be between 36 to 48 months, with the road closed to traffic and parking for up to 30 months during this period.</p> <p>Once Dartmouth Road is reopened the remainder of the works will continue to completion below ground without any further major impact on the roadway and parking above.</p> <p>Temporary Over decking/Bridge:</p> <p>While feasible, it is TII's view that a solution to create the station box under Dartmouth Road using temporary over decking would add further unnecessary complexity to the construction sequence with no tangible impact improvement for residents. While traffic could be facilitated through Dartmouth Road across the temporary decking or bridge, residents parking would remain impacted for the duration that the decking/bridge is in place. Dartmouth Road would then have to be closed again to remove the temporary decking and to reinstate the utilities and the road before it is fully restored for both traffic and parking. The duration of such a scheme is likely to be longer than the Top-down option assessed in the EIAR.</p> <p>Therefore, the assessment presented in the EIAR (Top-down construction) is a credible robust scenario in terms of the durations of proposed road closures on Dartmouth Road.</p>	
47	Section 4.7 Working Hours	36	<p>It is quite evident that the works undertaken outside of this standard work week is going to be extensive and ongoing given the extent of works required in relation to the station construction, site clearance, tunnel construction and MEP station works. This is effectively going to (be) a 24/7 construction (site) for a significant period of time over the 9 years of the project.</p> <p>.....this will be an intolerable level of interference in amenities with a loss of sleep, general disturbance and psychological impacts resulting in a detriment to human health.</p>	<p>Please Refer to responses (7), (15), (17) and (21).</p>	

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48	Section 4.8 Construction Compound	38	Access to the houses on Dartmouth Road is going to be severely restricted for 9 years. All on-street parking is removed.	<p>The duration of the works impacting Dartmouth Road is set out in Chapter 5, section 5.10.13. While acknowledging that restrictions to Dartmouth Road properties will be significant, the duration of those restrictions will not be the full 9 years of the construction works at Charlemont Station.</p> <p>Pedestrian access to the houses along Dartmouth Road will be maintained at all times. During the 18 months of the utility diversions works along Dartmouth Road, through traffic and on street parking can be maintained along one side of the street, alternating between sides to suit the utility diversion works. Following the completion of the utility diversions, Dartmouth Road will be shut for through Traffic and Parking for up to 30 months, while pedestrian access will be maintained. This will impact on street parking between, 35 (the property at the rear of 11 Cambridge Terrace) through to 29 Dartmouth Road (south) and 28 to 26 Dartmouth Road (north). On completion of these works, the hoarding will be moved back to the other side of Dartmouth Road, the road reopened and parking reinstated.</p>	
49	Section 4.8 Construction Compound	36	<p>A 'Developer Alternative' for the sequencing is outlined in Appendix A5.3. This is evidently much better than the main sequencing presented in the Appendix, as it allows for Dartmouth Road to be retained as a functioning road for a longer period of time and the construction compound is set back from the nos.32-35. However, it is unclear what the status of this alternative is. It is not referred to in Chapter 7 relating to Alternatives. The only reference to alternative assessment of compounds is in Table 7-19 where it indicates that no alternatives were considered as the compound had to centre on the station box. indeed, this is a further demonstration of how the commercial development at Two Grand Parade has prejudiced the entire EIA process, as it has not been possible to properly consider alternative construction compounds and station locations as this was previously determined by TII in advance of any rail order application.</p>	<p>The rationale for the location of Charlemont Station is provide in response (1) above. Chapter 7: Consideration of Alternative Construction Compounds, section 7.8.3 Location of Construction Compounds, references the selection and assessments of the proposed construction compounds along the MetroLink Alignment.</p> <p>In the majority of cases, including Charlemont it is not possible to consider an alternative site for a construction compound as the site is the location of the construction works for the MetroLink Station at Charlemont. Table 7-19 also refers.</p> <p>The commercial development that has been developed on the site did not in any way preclude alternative construction methods that would potentially reduce the duration of closure on Dartmouth Road. In so far as there are any constraints at this location, they are due to the construction of the principal development at Two Grand Parade, not the incorporation of a roof slab to facilitate the construction of a station. The incorporation of a roof slab reduces constraints in this area, promoting the objectives of the EIA Directive. The only alternative with fewer constraints would have been if ABP had refused permission for Two Grand Parade, sterilising the site, and frustrating the achievement of the zoning objective (which is set out in a Development Plan that had been subject to SEA).</p> <p>The site and thus location of the proposed Charlemont Station is constrained on all four sides of the site while response (29) above explains the rationale for the sizing of Charlemont Station, and hence the need to extend out under Dartmouth Road. However regrettably, it is not possible to avoid a road closure.</p> <p>TII are very cognisant of the impact on residents of Dartmouth Road from a road closure and have examined the construction methodology carefully, with two options presented in Appendix A5.3 and assessed in the EIAR. As referred to in response (31) above, one option included the completion of a review with the Developer of Two Grand Parade of an alternative construction sequences referred to as the “Developer Alternative Construction Methodology”. The outcome of this review led to the possibility of reducing the duration of the road closure on Dartmouth Road, which has been outlined in response (46) above.</p> <p>The assessment presented in the EIAR is a credible robust worst-case scenario in terms of the proposed road closures, but it may be possible for the contractor to propose another alternative solution to reduce the duration of the periods of the road closure further, as long as any changes proposed do not result in any additional environmental effects.</p>	
50	Section 4.9 Traffic and Transport  Section 4.9.1 Traffic Modelling and Assumptions	39	From a review of Appendix D of Appendix A9.5 local impact assessments of junctions around the stations using LinSing modelling was undertaken with the exception of Charlemont Station. Effectively, it appears as though the entire assessment was reliant on the strategic modelling exercise at this location. Notwithstanding this significant deficiency, certain conclusions can be drawn from the limited assessment which was undertaken.	<p>It is not correct to say that the entire assessment was reliant on the strategic modelling exercise at Charlemont. It is also incorrect to say that a limited assessment was undertaken.</p> <p>Please refer to response (9) in relation to the local junction modelling undertaken as part of Appendix A9.5 Scheme Traffic Management Plan. As indicated, local LinSig junction assessments were not undertaken at Charlemont Station as the design indicated it would not meet the criteria.</p> <p>However, local traffic modelling was undertaken to assess the impact of construction traffic and the proposed traffic management measures on the surrounding road network. Impacts to driver delay and traffic flows were assessed and presented. Please refer to response (20) in relation to the local traffic modelling assessments.</p>	

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51	Section 4.9 Traffic and Transport  Section 4.9.3 Access, Loading and Parking	39 & 40	Appendix A9.5 suggests that the impact upon loading, parking and access is either slight or moderate. This in our opinion under-estimates the impact upon the residents of the properties listed in this submission. There will be a very severe impact upon access to their properties which is reflected in the loss of parking, no access for deliveries or bin collection. Critically, no assessment has been undertaken in relation to fire, ambulance and other emergency access. The entire stretch of Dartmouth Road will be closed off to traffic, with a hoarding positioned to the back edge of the pavement preventing access in the case of emergency.	<p>As detailed in Appendix A9.5 Scheme Traffic Management Plan, traffic management plans for the construction of MetroLink have been developed to minimise the impact of the Project on road users, and to maintain access to properties. A hierarchical approach to traffic management has been adopted, with pedestrian, cyclist, public transport and commercial needs provisions taking priority over private vehicles, in line with the GDA Transport Strategy.</p> <p>As identified in Appendix A9.5 Scheme Traffic Management Plan, the impact on parking and loading, and local access has been assessed on the following parameters and key performance indicators: * quantum of on-street parking removed - removal of &gt;30% residential parking with 200m, or removal of &gt;10% commercial parking within 200m; * quantum of loading bays and taxi bays removed- reduction of on-street loading facilities within 200m; and, * additional distance travelled due to diversions - diversion of over 2km for commercial access.</p> <p>During the partial closure of Dartmouth Road, diversions will be indicated to ensure access is maintained. To mitigate the increase in journey length and U-turn needed to route northbound, removal of the right-turn ban at this junction will reduce the diversion distance.</p> <p>During the complete closure of Dartmouth Road, approximately 30 on street parking spaces will be lost during the main works, however there will be no impact to on-street loading bays. EIAR Chapter 05 (MetroLink Construction Phase) specifies the 5 residential properties that will be impacted during the works. The closure will be monitored to determine if it is required at all points, or if the spaces can be temporarily reinstated throughout the works. This commitment is detailed in Chapter 9 (Traffic and Transport) section 9.7.1.2.</p> <p>Traffic management measures and road construction works is based on the key principle (among others) of maintaining uninterrupted access for emergency vehicles. During the duration of the road closure along Dartmouth Road, access for emergency response vehicles will be maintained through the site to the edge of the excavation in front of No. 32 to 35 Dartmouth Road. The Outline Construction Environmental Management Plan (CEMP) referred to in Appendix A5.1 sets out the full requirements of the main contractor to protect the environment during the construction phase. The CEMP includes the requirement to provide an Emergency Response Plan, section 5.10. The plans for emergency access through the site will be developed by the contractor and agreed in consultation with the emergency services and documented as part of the detailed CEMP in advance of construction commencement for approval by DCC.</p> <p>Please also refer to responses (52) and (53) below.</p>	
52	Section 4.9 Traffic and Transport  Section 4.9.4 Pedestrian Movement	40	Pedestrian movement in and around the construction compound will be severely constrained. A narrow footpath will be retained in front of the houses on Dartmouth Road. Pedestrian and HGV conflicts will be inevitable, particularly at the entrance and exit to the compound, which is immediately in front of the houses.	<p>As indicated in EIAR Chapter 09 (Traffic and Transport), pedestrian access on Dartmouth Road will be maintained with a reduced footpath width measuring a minimum of 1.8m. Appendix A5.1 Outline CEMP details the proposed mitigation and monitoring measures that the contractor(s) will be required to adhere to during the construction phase. As detailed, there will be strict controls and regulations at the site entrances/exits for construction vehicles in order to ensure the safety of other road users. This is standard practice for all construction site accesses and egresses.</p>	
53	Section 4.9 Traffic and Transport  Section 4.9.5 Summary Assessment	40	<p>The assessment provided in Appendix A9.5 in section 7.11.7.2 highlights that in relation to the main works the impacts are as follows:</p> <ul style="list-style-type: none"><li>• Severe impact upon traffic volume redistribution</li><li>• Moderate impact from HGV volume increase</li><li>• Moderate impact upon cyclists caused by diversions</li></ul> <p>This does not accurately consider the impact as detailed above in relation to access, loading and parking.</p>	<p>Section 7.11.7.2 outlines a summary of the impacts identified in the assessment of the main works. The summary outlines where moderate or above impacts have been identified in the Phase 2 impact assessment. Therefore, based on the assessment ratings, the impact on parking and loading was not noted in the summary.</p> <p>Please refer to response item (51) in relation to the methodology for assessing the impact to parking and loading. The loss of 30 spaces at this location is less than 30% of the available parking within 200m, and therefore is not considered significant. Parking will be restricted on Dartmouth Road however pedestrian access will be maintained to the properties, and therefore residents can utilise available parking in the surrounding area and walk to their property.</p> <p>Please refer to response item (51) in relation to the impacts to access, loading and parking at Charlemont.</p>	

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54	Section 4.9 Traffic and Transport  Section 4.9.5 Summary of Assessment	40	<p>View of the Independent Engineering Expert (IEE) - RINA</p> <p>Our view is that while this would no doubt be convenient from a construction perspective, the reality is that the impact on the residents of the entire length of narrow Dartmouth Road will be very considerably negative, for a period of some years. The safety of this arrangement on all locals but particularly the elderly and young children and other vulnerable persons should be very closely examined.</p> <p>Given that 'through flow' construction sites are by no means the norm (most major construction sites will demonstrate the use of the single entrance and exit format), we suggest that TII consider this and accommodate both entry and exit from the site on Grand Parade, which is wider and actually entirely open on one side (facing the canal) with buildings on the other side a considerable distance away.</p> <p>As confirmed by the RINA analysis, the proposal of a HGV 'drive through' is done for the convenience of the developer and not to reduce the impact on residents. We agree with the opinion of the IEE suggests that the Applicant should accommodate both entry to and exit of HGVs from the site on the Grand Parade.</p>	<p>While acknowledging the comments received from RINA, it is not possible to limit construction traffic to and from Grand Parade only for the full construction period without resulting in major impacts to the efficient delivery of the works, including the duration of construction. Construction traffic flow to and from the site is evenly balanced between Grand Parade and Dartmouth Road during the construction phase limiting impacts on all road users around Charlemont.</p> <p>The site area and width restrictions as referred to in response (29) above constrain traffic management options within the site. During the completion of the roof slab across the whole site it will not be possible to connect through traffic between Grand Parade and Dartmouth Road. On the completion of the roof slab, and with Dartmouth Road reopened, the vast majority of the station is excavated from the south (adjacent to Dartmouth Road) in a mining technique under the completed roof slab. This is illustrated as Phase 3 on Charlemont Station Developer Alternative Construction Methodology Appendix A5.3, as referred to in response (31) above.</p> <p>From this stage until the works are completed the roof slab will allow a connection between Grand Parade and Dartmouth Road but limited to a single lane and subject to periodic closures to facilitate the station construction programme. To limit impact on Dartmouth Road from the excavation stage until completion, construction traffic will either arrive or depart the site via Grand Parade or Dartmouth Road, transiting the site one-way and exiting at the opposite end of the site to which they arrived. During the periodic closures of the one-way system referred to above, arrivals and departures from site will be at both access points. While it is essential that flexibility of construction operations is maintained as described above, from the mined excavation stage onwards priority will be given to use Dartmouth Road only for departing construction traffic, further lessening the overall impact for all users of this road.</p> <p>While maintaining two points of access from the Charlemont Station site the EIAR assessment has considered all users impacts, including vulnerable users as a consequence of the proposals (Please refer to Appendix A9.5, section 7.11.6.3 Main Works Phase 2 Assessment (Charlemont)). As referred to in Appendix A9.2 Overall Project Traffic &amp; Transport Assessment, TII have through pre-construction planning in advance of the Railway Order anticipated the implications of the planned works on the locality, particularly traffic and accordingly have provided mitigation strategies in the EIAR for the construction phase. While the works will attract additional traffic to and from this station location, the assessments of vehicle movement during the peak construction phase will generally add approximately 50 additional daily movements of construction vehicles each way to the existing traffic flows. As detailed in Appendix A9.5 Scheme Traffic Management Plan section 7.11.6.3, model outputs indicate this will result in a moderate increase in HGV movements during construction. The most significant increase, of just over 2% will be in both directions along Ranelagh Road/Charlemont Street, however elsewhere in the area, increases are significantly lower.</p> <p>Chapter 5 of the EIAR, MetroLink Construction Phase, explains that traffic management plans for the construction phase of the Project have been developed to minimise the impact on all road users at Charlemont, and to maintain access to businesses and other premises. The Scheme Traffic Management Plan Appendix A9.5 section 7.11 refers to the traffic assessment undertaken at Charlemont Station with the route to and from the site provided in Figure 7-56. The Plan will include measures such as the establishment of Local Community forums which will cover areas local to each station, where stakeholders will have an opportunity to inform the traffic management element of the project. Other measures include the control of construction vehicles in terms of their hours of operation and restrictions on vehicle size and weight, and all access and egress from sites will be controlled by marshals to ensure safety at all times.</p> <p>Prior to implementation, all traffic management measures will be agreed with DCC and where relevant, consultation with An Garda Síochána and other statutory stakeholders will be undertaken. The design of traffic management measures and highways works is based on achieving the key objective of maintaining continual access to all properties during the works. Where necessary, a safe alternative route will be provided for pedestrians and vulnerable road users, such as children, and persons with restricted mobility, to maintain pedestrian access. Where detour routes are required, these will be kept as short as possible and detour signage will be clear and easy to understand. All construction sites will be designed to be as unobtrusive as possible.</p>	
55	Section 4.10 Impact on Utilities	41	It is evident that the diversion of utilities on Dartmouth Road and Dartmouth Square West will have a significant impact upon local access, including pedestrian, cycle and vehicular.	Please refer to response (48) above.	

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56	Section 4.12 Interactions of Effects	41	Again we consider it to be wholly inadequate as it fails to adequately address the interactions between air borne noise and vibrations, ground borne noise and vibrations, traffic impacts, visual impacts (e.g. of the hoardings) and human health. All of these effects come together in an interaction which significantly impacts upon the amenities of the residents listed as part to this submission. Moreover, the inadequacies of the assessments of individual effects, as highlighted above, are compounded when considering the interaction of these effects.	TII disagree with this statement. Chapter 29 of the EIAR presents a comprehensive and detailed assessment of a number of interactions of environmental topics. In Table 29.1 of the chapter the topics that are deemed to interact with each other significantly are set out. It is also worth noting that the Chapter states that <i>"Some of the environmental topic assessments within this EIAR already address impact interactions. For example, Chapter 11 (Population &amp; Land Use) provides an assessment of effects on community amenity, which relates to the interaction of impacts on air quality; visual amenity; traffic and transport; and noise and vibration. Furthermore, Chapter 10 (Human Health) describes and assesses how a combination of impacts on health determinants (air quality; noise and vibration; community amenity; traffic and transport) can interact and influence health outcomes."</i> In the main it can be observed from the assessment presented in the EIAR that impacts are not predicted to significant once mitigation measures are in place with the exception of exceedences for noise during some limited construction phases. As a result, the potential for interactions is limited as outlined in Chapter 29 of the EIAR. However, having regard to noise, where residents consider that their circumstances merit additional mitigation measures, these can be applied for as per the process outlined in Appendix A14.6 Airborne Noise & Groundborne Noise Mitigation Policy.	

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57	Section 5.2 Noise and Vibration	43	The proposed over track ventilation system and smoke system gives rise to impacts that have not been properly assessed in terms of noise and air emissions. These systems are directly opposite nos. 34 and 35 Dartmouth Road.....	<p>Further to response (12) and (22) above, the EIAR Chapter 13, sections 13.2.3.2 and 13.5.3.2.3 recognise that ventilation systems if not designed and mitigated effectively are potential noise sources. Section 13.6.2.3 outlines the detailed considerations that will be included in the design to ensure that the ventilation systems do not exceed limits as per BS 4142, including:</p> <ul style="list-style-type: none"><li>• Reduction of induct flow rates;</li><li>• Reduction of elements in the airflow;</li><li>• In duct attenuators;</li><li>• Orientation of grilles and louvres away from sensitive receptors;</li><li>• Acoustic louvres; and</li><li>• Anti-vibration mountings and couplings will be incorporated into the design to control vibration.</li></ul>	
58	Section 5 Operational Impacts  Section 5.2 Noise and Vibration	44 and 45	<p>5.2.2 Ventilation Assessment</p> <p>Ventilation is an important element of the design and workings of the tunnel, for instance in relation to maintaining adequate levels of moisture in the air and to air quality. Yet it does not appear that it was subject of a full assessment. In fact, it will be subject to 'further design development'. Section 13.5.3.2.3 of the EIAR indicates that an acoustic study was undertaken to assess the proposed ventilation strategy. This important referenced study is not included as an appendix to the EIAR.....</p> <p>We would emphasise here that specific noise levels from ventilation from ventilation systems have not been assessed as part of this EIAR but rather would 'be calculated as part of the further design development.' Effectively the impacts upon nos. 32 to 35 Dartmouth Road of the ventilation systems illustrated on the figure above have not been assessed.</p> <p>5.2.3 Ventilation - Observation</p> <p>It should be noted that ventilation is also not an element considered under the alternative chapter. There are different technologies that could be used for ventilation, the location of fans and vents could be different, yet no alternative was considered.</p> <p>It is queried why noise that is continuous is not assessed as part of this EIAR and may be assessed as part of future iteration. There is no indication that this would be subject of a consultation with potentially affected parties unless this is clearly specified in a condition of a potential grant of the railway order.</p>	<p>Further to response (57) above and as outlined in Section 13.5.3.2.3 of the EIAR the development of the ventilation design included consideration of noise emissions whereby potential noise sources from the ventilation systems were identified as the ventilation shafts and grilles at ground levels. During a tunnel emergency situation noise levels at the external grilles would be elevated. However these noise levels would be below 55dB LAeq at 10m distance. It was considered that in emergency cases this level of noise was acceptable. It should be noted that there is no "missing study" and that the reference to an acoustic study is part of the "preliminary design development " for the project which is summarised in Chapter 4 and Chapter 6 of the EIAR.</p> <p>The assessment of ventilation systems has been assessed in line with best practice for this type of fixed installation and as is normal will be further refined as the design develops. The observer has not identified any failure to adhere to best practice guidelines in the assessment, which has demonstrated that the the ventilation can be provided at this location within noise thresholds consistent with residential amenity. It is anticipated that adherence to those thresholds will be a condition of the RO as standard.</p> <p>In that regard, Section 13.2.6.2.4 of Chapter 13 of the EIAR states that noise level from all fixed installations (which includes ventilation plant from stations) will be limited to not exceed an operational noise level of 50 dB LAeq,16hr during daytime periods and 45 dB LAeq,8hr at noise sensitive buildings to achieve acceptable internal noise levels with windows open. The section also notes that in areas where background noise levels (expressed using the LA90 parameter) are below the fixed noise limits above, there is potential for the operation of a new noise sources at this level to be audible and to generate potential significant effects, depending on the magnitude above the background noise level. Therefore, when considering the potential impact of the noise emissions from operational plant associated with the proposed Project consideration will also be given to the British Standard BS 4142 (BSI 2014 +A1 2019).</p> <p>Background noise levels measured at Location UT52 to rear gardens of Dartmouth Square. This value was used as a more conservative estimate of the background levels of noise in the area, which is representative of Dartmouth Road.. The measured background levels here are below the fixed limits above (Table 13.30, Chapter 9 of EIAR), and hence in line with the EIAR noise design criteria for fixed installations, the design of operational plant will also be undertaken in line with BS 4142: 2014 + A1 2019 to ensure no significant noise impact arises as a result of the operational phase plant items. The operational noise criteria for this source is therefore largely dependent on the most up to date and accurate prevailing background noise level. Given the fixed items of plant will not be installed until some 8 years post project commencement, the background noise environment will be resurveyed at the time of the design development to ensure the most up to date information informs the design, specific plant selection and mitigation to comply with the noise criteria set within the EIAR, which forms part of the Railway Order.</p> <p>This will be undertaken to determine the permissible increase above the prevailing background noise level to avoid any adverse noise impact in accordance with the standard. As discussed, this approach is set as part of the criteria proposed for the project and hence forms part of the proposed railway order.</p> <p>Due to ongoing design development of the systems under consideration here, it is premature to define the specific attenuation measures for noise control until the specific make, model and size of the units is procured. This information alongside the most up to date background noise levels will then inform the acoustic design study at each ventilation location in line with best practice. Notwithstanding, the resultant noise impact will be not significant at the closest noise sensitive locations.</p>	



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59	Section 5 Operational Impacts  Section 5.2.4 Train Operations - Description	46	Section 6.6.3 of the EIAR discusses communication systems, particularly communications with passengers.....These systems are an integral part of the operation of the train service, yet are not adequately addressed.	Measures to mitigate noise from the use of public address systems are detailed in Chapter 13 (sections 13.5.3.2.4 and 13.6.2.4). Best practice design principles will be employed to minimise noise breakout at the surface from these systems via escalators, lift shafts and stairwells. There are no significant impacts associated with this source.	

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60	Section 5 Operational Impacts  Section 5.2 Noise and Vibration 5.2.6 Train Operations - Observations	47 & 48	<p>5.2.5 Train Operations - Assessment</p> <p>While Dartmouth Square West is assessed, it is highlighted that Dartmouth Road is not assessed, notwithstanding that it is opposite the southern station entrance.</p> <p>5.2.6 Train Operations - Observation</p> <p>It is queried why only train rolling have been accounted for in the assessment of groundborne noise at operational stage. As demonstrated in the preceding section, there are other elements that should have been assessed, specifically ventilation. Ventilation, train rolling and the use of the PAVA system should be cumulatively assessed in accordance with the requirements of the EIA directive to provide a more accurate picture of operational noise levels.</p> <p>By way of comparison, we refer to the noise impact assessment prepared as part of the Crossrail Project.....We note the following project elements were considered as part of the assessment of noise levels arising from the operational phase.....</p> <p>In summary, there is a variety of potential sources of noise which could arise from the operational phase. Either these were overlooked by the applicants or scoped out. If the latter applies, an explanation should be provided.</p> <p>As a minimum, noise arising from ventilation and traffic should have been considered as these are measurable. Given that underground metro systems are common in Europe, where the EIA Directive also applies, it is hard to comprehend why the operational noise assessment is so scant and includes so little information.</p> <p>We query why the assessment of predicted noise levels at operational stage has been narrowed to include sole consideration for train rolling but no other sources of noise. (for example traffic, PA Systems, escalators, ventilation etc, and potentially in operation 19 hours per day). The results presented by TII are not realistic and do not comply with the requirements of the EIA Directive which require that impacts be assessed cumulatively. We also contend that by excluding much of the potential sources of noise, the results presented are misleading and inaccurate.</p>	<p>As per the response to Item (40) above, TII acknowledge that the text in the EIAR chapter is a little misleading in regard to the assessment of "Dartmouth Square West" in Table 14.29. Here it refers to the location where the highest modelled noise value was predicted in this general area (17 Dartmouth Square West). However it is not true to say that the analysis did not include for the properties on Dartmouth Road. These have been fully assessed with results presented in Appendix A14.5 and on Figure 14.2. For clarity a number of properties in the Dartmouth Square/Dartmouth Road area will experience temporary exceedances for approximately 2 weeks in groundborne noise levels during the passage of the TBM as per the results presented in Appendix A14.5. (Unfortunately there are no effective methods available to reduce groundborne noise from TBMs at source and therefore the principal mitigation measure is advance consultation and engagement to inform residents of the timing of the TBM passing to allow building occupants to prepare for the temporary elevated noise levels.)</p> <p>Section 13.5.3.2.4 of the EIAR notes that the majority of station structures for the proposed Project will be fully underground. Any breakout of noise from the station areas is likely to be via the access stairwells and escalators to ground surface.</p> <p>At Charlemont, the station platform is 22m below ground level and hence noise from PAVA systems at platform level will be significantly attenuated with distance and the screening by the intervening concourse and mezzanine levels between the ground level and the platform.</p> <p>The submission makes reference to the cross rail assessment of rail noise sources, the Cross rail document scopes out a specific assessment / calculation of noise from PA systems based on the following:</p> <p>“Noise from PA systems at Stations and Depots – This is scoped out on the basis that ..... where there is to be a new PA installation, where there was none previously, technology is available to avoid a significant impact or disturbance arising. This is also necessary as local authorities use nuisance control powers to limit noise from PA systems”</p> <p>Section 13.5.3.2.4 of the EIAR explains that the design of the PA system will follow the following requirements:</p> <ul style="list-style-type: none"><li>• The PA system shall be designed to minimise noise disturbance to the specific surroundings. An acoustic simulation shall be developed to check audio levels at a later stage of the design; and</li><li>• Audio levels shall be simulated to ensure correct intelligible levels and audio distribution throughout the stations.</li></ul> <p>The best practice design principles which will be employed as part of the PA system design will have full regard to minimising noise breakout from these systems to the surrounding environment.</p> <p>Specific noise calculations are not undertaken of this source as it will not generate any audible or significant noise impact once operational in line with best practice applied to other similar large scale rail projects, including Cross Rail.</p> <p>Airborne noise from trains within the tunnel and station will not be audible at ground level. The principal noise source associated with operational trains is groundborne noise which has been fully assessed in Chapter 14. No significant impacts are determined.</p> <p>As discussed above, noise from PA systems will be substantially screened due to the platform depth and the system design. There are no significant impacts associated with this source.</p> <p>Escalators will provide access between ground level to station platform level. Mechanical elements associated with escalators are housed below ground and are fully enclosed. The station entrance is enclosed by a roof structure and walls around the perimeter at ground level. The escalators set back into the station entrance and from Dartmouth Road. Notwithstanding, operation of escalators do not generate any notable noise sources during operation and will not be audible above the prevailing noise environment to the adjacent residential properties.</p> <p>Section 13.5.3 of Chapter 9 of the EIAR discusses the noise impact assessment associated with operational phase traffic on the surrounding road network. The change in road traffic noise is determined to be negligible and not significant as a result of the proposed development. Also please note that no 'drop-off' areas are provided with the exception of a proposed drop-off on Grande Parade for persons of restricted mobility only. Response (23) above explains how drivers will be deterred from using the through route to Grand Parade.</p> <p>In summary, the key potential sources of airborne noise associated with the operational phase is set out in Chapter 9 of the EIAR.</p>	

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61	Section 5 Operational Impacts  Section 5.2 Noise and Vibration 5.2.6 Train Operations - Observations	48	The drawings indicate drop-off points at the metro station and it is evident from drawing no. ML1-JAI-SRD- ROUT-XX-DR-Z-02090 - Proposed Street Level Design that cars dropping off users at the Dartmouth Road entrance of the station will be using the new through route as a means to return to Grand Parade or other drivers as a rat-run to avoid the Ranelagh Road / Grand Parade junction. It is queried why no traffic noise assessment was undertaken and was not considered in cumulation with other operational noise.	A traffic noise assessment has been undertaken for the full extent of the study area which includes the surrounding road networks of Charlemont Station. During the operational phase, Dartmouth Road will have a new pedestrian crossing, one of which is located towards Ranelagh Road. The provision of this crossing will also act as a traffic calming measure on Dartmouth Road. A drop off point will be available on Grand Parade, but will be restricted for use by people with disabilities. In this context, it is proposed that the number of drop offs will be minimal and as such will not impact traffic movements significantly.  The drawing referred to presents a road across the finished station between Dartmouth Road and Grand Parade. The intent of this road is to provide access to the Union Development only and will not allow through access. Please refer to response (23) above.  Chapter 13 Airborne noise and vibration includes the assessment of changes in road traffic noise resulting from the project in Section 13.5.3.1.	
62	Section 5 Operational Impacts  Section 5.2 Noise and Vibration 5.2.7 PA Systems	49	However residents are concerned that placing a second MetroLink entrance directly on their road will have... potentially very disruptive side effects[in relation to]:  • Placing the entrance directly on the road will cause considerable extra noise and light pollution to the houses directly facing the entrance for very extended periods every day.....  ...It is the view of the IEE that the EIAR documentation clearly does not provide assessments that cover the noise that would arise from passenger surface movements, or from the noise of escalators or lifts, PA announcements, local traffic and car parking and not just rail noise or ventilation and this is a serious omission that should be rectified (actually at all of the underground stations, not just Charlemont).  It is not clear if any assessment has been made of light pollution that might arise from the station entrance....  We agree that these are 'serious' omissions and must be rectified by the applicant. This fact renders the EIAR inadequate and incomplete.	Please refer to response (30) above that explains the reasons for the location and orientation of the southern entrance and the treatment of the lighting design.  Please refer to response (60) above that explains the reasons why there are no significant noise impacts that will arise from the mechanical plant, PA announcements or traffic.  TII do not agree with the observation "that the EIAR documentation clearly does not provide assessments that cover the noise that would arise from passenger surface movements, or from the noise of escalators or lifts, PA announcements, local traffic and car parking and not just rail noise or ventilation". The above responses have addressed these particular elements and provides no basis for the statement made that the "EIAR inadequate and incomplete".  With regards to stations entrances, these are transient areas for passengers entering and exiting the station. These activities are not the source of significant noise generation and form part of the existing soundscape in the existing prevailing environment. It is acknowledged footfall numbers will increase in the vicinity of the station entrance, however this activity does not translate to significant noise impacts. Further, as noted above, TII have deliberately designed the Station with minimum set down space (with the exception of a drop-off on Grand Parade for persons of restricted mobility only) or room for taxi ranks so that it does not encourage the Station to be used as a terminus and pick-up point.	
63	Section 5 Operational Impacts  Section 5.3 Hours of Operation	50	MetroLink is planned to operate 19 hours per day, 365 days a year. It is planned that there would 20 trains per hour at a frequency of three minutes between trains. Stations would be opened from 5.30 am to 00.30 every day of the year.  Open access and anti-social behaviour are likely to arise from this arrangement.  It is also not clear how the station concourse area will be physically closed to the public outside of operating hours. Metallic rolling shutters are noisy. Both of these could affect the residential amenities of nearby neighbours.  There is no justification to operate the interchange for an extra hour when there is no Luas to interchange to. The inevitable result is that cars will pick up passengers between 23.00 and 00.30 on Sundays. This increase in traffic is not assessed.  The inevitable result is that cars will pick up passengers between 23.00 and 00.30 on Sundays. This increase in traffic is not assessed.	This misalignment with Luas Green timetable is worthy of further consideration. Alignment of the operaing hours of Luas, Bus and Metro services will be a matter for the National Transport Authority".  Whilst the station offers interchange with the Luas Green Line at this location, this is not the only option. Passenger modelling also indicates that there will be passengers with origins and destinations in the surrounding area via other means of transport, and therefore the MetroLink service will provide a mode of transport for those wishing to access these areas. As previously noted, no drop off / pick up areas are provided for private cars or taxis, with the exception of a single drop-off on Grand Parade for persons of restricted mobility only.  As detailed in Chapter 09 (Traffic and Transport), the East Regional Model (NTA) provides a detailed representation of travel demand of four peak time periods. Off-peak travel, which is antedated to be much lower than peak travel times, such as late Sunday nights, have not been individually assessed as it is considered that all potential significant impacts have been captured during the peak time periods. Impacts occurring in the off-peak times are expected to be much lower.  The station entrances are enclosed with gates, there are no roller shutter doors proposed at the station entrances.  With regards anti-social behaviour, please refer to response (67) below.	

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64	Section 5 Operational Impacts  Section 5.4 Traffic and Transport	50	<p>No local area modelling is undertaken of the impact upon the road network around the Charlemont Station. The assessment done as part of the EIAR (Appendix A9.2-B Traffic and Transport Assessment- Charlemont Station) fails to have regard to the most up-to-date bus connects plans. As with the construction phase, the assessment relies on a strategic assessment that does not take into account the local impacts.</p> <p>The development creates a significant new link in the road network through the site linking Grand Parade with Dartmouth Road and Ranelagh Road. This creates a rat-run which will effectively bypass the Ranelagh Road/Grand Parade signalised traffic junction. This traffic movement has not ben assessed.</p>	<p>It is not correct to say no local area modelling has been undertaken. A VISWALK local model has been developed for this station, assessing the impact of the new pedestrian crossing on Grand Canal on the road network. The model demonstrates that it will have a minimal impact on driver delay on this road. In overall terms, the Charlemont station will provide for improvements to the public transport network resulting in decreases in private car usage/trips, as evident in the forecasted modal shift, and as such further local traffic or junction modelling was not undertaken.</p> <p>Additionally, as detailed in Appendix A9.2-B Traffic and Transport Assessment - Charlemont Station, the Project has been assessed in two alternative future scenarios.</p> <p>Scenario A: includes (but is not limited to) Bus Connects Dublin Area Bus Network Redesign, and Bus Connects Fares and Ticketing.</p> <p>Scenario B: includes (but is not limited to) Bus Connects Core Bus Corridors (planned 16 corridors).</p> <p>The anticipated future receiving environment at this location with Bus Connects Network Redesign services in place, is presented in section 3.2 of this document, with the assessment of impacts during the operational phase presenting impacts in both Scenario A and Scenario B.</p> <p>Please refer to response (23) in relation to the internal street between Grand Parade and Dartmouth.</p>	
65	Section 5 Operational Impacts  Section 5.4.3 Pedestrian Movements on Dartmouth Road	51	<p>Given that a major station entrance is proposed on Dartmouth Road, a significant volume of pedestrian movements is likely to be generated. However, there is a complete failure to assess this in the application and Appendix A9.2-B only assesses the northern entrance to the station. It does not illustrate the station entrance on Dartmouth Road.</p>	<p>TII disagree with the statement that there is a failure to assess the impact of pedestrian movements at the southern entrance of Charlemont Station on Dartmouth Road. As detailed in Appendix A9.2-B Traffic and Transport Assessment - Charlemont Station, a static pedestrian comfort assessment has been undertaken to assess the footway provisions following the increased volumes of pedestrians on the network in the design years. The results show that at Charlemont Station in both 2050 and 2065 , the comfort level on Dartmouth Road is rated as 'Comfortable' for the anticipated volume of pedestrian movements, and meets with the guidelines identified in the DCC Public Realm Masterplan. The results of the static assessment are presented in section 6.1.3 Pedestrian Impact Assessment of Appendix A9.2-B Traffic and Transport Assessment - Charlemont Station.</p> <p>Further examination of the performance of the street network surrounding Charlemont Station was undertaken using a microsimulation VisWalk model. The simulation model covers the full extent of the publicly accessible station entrances, including the immediate vicinity of the station entrances at street level on both Grand Parade and Dartmouth Road. With the proposed pedestrian infrastructure in place, the model indicates that at the northern entrance, the footways will operate at an acceptable level of service. A reduced level of service is only observed at the pedestrian crossing whilst pedestrians are waiting for the green phase at signals. The model indicates that the strongest flow of passengers will be going west from the northern entrance, towards the Luas interchange and Charlemont Street, with lower flows of pedestrians utilising the southern entrance on Dartmouth Road to travel east towards Dartmouth Square West. Therefore, the level of service of the pedestrian network at the southern entrance will be higher than that of the northern entrance.</p>	

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66	Section 5 Operational Impacts  Section 5.4 Traffic and Transport	52	<b>View of the Independent Engineering Expert (IEE) - RINA</b>  EIAR documentation does not include a local model of the extra vehicular and pedestrian traffic generated from the use of the Dartmouth Road entrance as the drop off and pick up point for passenger journeys to the Airport.	<p>TII would first of all note that the Station is intentionally designed with only one drop-off / pick-up on Grand Parade for persons of restricted mobility only. MetroLink is not designed as a terminus station with drop-off and pick-up points for passenger journeys to the Airport and instead forms part of an integrated public transport network. The system is designed in an integrated manner so that people travelling from the area south of Dublin to access locations north of Charlemont, such as Dublin Airport, Mater, Swords etc. will utilise public transport to interchange with the MetroLink, or will walk or cycle to access their local station. The system is not designed to encourage people to drive to stations within the City and TII actively discourage people from doing so other than the Park &amp; Ride station at Estuary.</p> <p>Please refer to response item (65) in relation to the static and microsimulation pedestrian modelling undertaken at Charlemont Station, which includes the southern entrance at Dartmouth Road.</p> <p>Local modelling was not undertaken at Charlemont Station as the strategic Eastern Regional Model indicates a reduction in car trips to and from the model zones at Charlemont Station, including the zones containing Dartmouth Road. As presented in Appendix A9.2-B Traffic and Transport Assessment - Charlemont Station, over the 12hr period, the zones within a 2km radius of Charlemont Station see a reduction of over 830 car trips between the Scenario A 2065 Do Minimum and Do Something scenarios. Figure 6.6 (within Appendix A9.2-B) presents the Changes in Car Mode Share in Scenario A 2065 AM Peak Hour, demonstrating that the zones at Charlemont Station see a reduction in Car mode share of up to 5 percentage points, including the zones at Dartmouth Road. Therefore, as fewer car trips are seen in the operational phase than in the baseline at this location, a further local modelling assessment was not undertaken.</p>	
67	Section 5 Operational Impacts  Section 5.5 Anti-Social Behaviours	53	The residents have significant concerns that this major interchange will attract anti-social behaviour for up to 19 hours a day during its operational times, and also when the station is closed.	<p>The interchange will certainly increase the number of people passing through the area, however it is important to note that people will be using MetroLink, similar to Luas as a transport hub, moving quickly in and out of the area. The station will not be a destination attracting people to the area. Furthermore as outlined in Chapter 6 of the EIAR, CCTV will be installed at all stations including Charlemont with monitoring of each station being managed from the Operational Control Centre. This means that in the unlikely event of antisocial behaviour, MetroLink security staff and /or An Garda Siochana will be notified immediately to manage the situation.</p>	
68	Section 6 Property Issues  Section 6.2 CPO	54	We would point out that this submission highlights that there will be a significant loss of amenity of the properties which are the subject of the CPO and hence there will be a diminution in the value of retained land.	<p>The loss of amenity referred to is temporary. TII do not agree that the development will have a long term and permanent negative affect on the value of property. In fact there is evidence to suggest that property values will in fact increase in close proximity to public transport infrastructure and that local residents will greatly benefit from having a world class metro system providing access to the city centre, airport and north city at their door step.</p>	
69	Section 6 Property Issues  Section 6.3 Properties	54	This submission has highlighted that No.35 Dartmouth Road has not been identified in the Book of Reference. It appears to be referred to as 11 Cambridge Terrace. The owners of no.35 Dartmouth Road did not receive relevant papers from the Applicant and this is, therefore, an error in the Rail Order.	<p>Please refer to response (26) above.</p>	
70	Section 6 Property Issues  Section 6.4 Devaluation of Properties	54 and 55	<p>During the construction stage, there will be a severe impact upon property values.</p> <p>There is no assessment of the impact upon value of properties.</p> <p>.....we strongly reject the general conclusion that property values will increase. This is due to all the reasons outlined in this submission. The Planning and Development Act specifically links the loss of amenity and the devaluation of property as a reason for refusal. It is only properties that are purchased as a result of the CPO associated with the Rail Order that can benefit from compensation. The State is not in a position to grant permission for development which will devalue property, as there is no mechanism for compensation in these circumstances. To grant permission where there is a loss of amenity, and an associated devaluation of property, would be impinge upon individual property rights which are protected under the Constitution.</p>	<p>For the reasons noted by response (68) above, evidence indicates that the long-term the value of property will increase.</p> <p>The provisions of the Planning and Development Act referred to deal with reasons for refusal for which the property owner cannot claim compensation (Section 191 and Fourth Schedule). They are not applicable to the consideration of Railway Orders, because TII is not entitled to compensation where a Railway Order is refused. The impact of the proposed railway on amenity and devaluation of properties is a relevant consideration in ABP's consideration of the Railway Order application, but as outlined elsewhere, TII do not agree that the the proposed railway works will cause anything other than a temporary loss of amenity and will not cause the devaluation of properties.</p>	

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71	Section 6 Property Issues  Section 6.5 Temporary Relocation	55	Some, or all of the residents listed in this submission may have to be temporarily relocated at TII's expense. Indeed, given the 9 year duration of the construction programme, this would effectively be a permanent relocation.	<p>As set out elsewhere in this response and in accordance with the Noise and Vibration Mitigation Policy (see Appendix A14.6), TII will accept and consider applications for additional mitigation measures on a case-by case basis, including short term relocation during peak construction (for example TBM passage) for residents significantly affected by the works.</p> <p>TII can confirm that relocation is an available option for Dartmouth Road residents immediately adjacent to the construction site during peak construction. TII however do not consider relocation would be necessary for 9 years, and for residents on Dartmouth Road would instead be for the period that Dartmouth Road is fully closed to construct the station beneath. TII are available to discuss this option if that is something the property owner would like to explore and consider.</p>
72	Section 6 Property Issues  Section 6.6 Costs	55	Representation and the costs of this submission by a land-owner affected by a CPO will be a legitimate cost incurred.	Please refer to response (26) above.
73	7. Conclusions	56	The submission supports the request made in the general area submission to omit from the Railway Order the section from Tara Street Station to Charlemont Station and associated onward tunnel extension and intervention tunnel. In addition to the strategic planning reasons for the omission of this section of MetroLink, this submission clearly highlights that the EIAR fails to adequately assess impact of the development upon the houses on Dartmouth Road. The project would seriously affect the residential and other amenities of the residents of Dartmouth Road both during the construction and operational phases.	<p>TII do not consider it is correct or appropriate that the MetroLink alignment south of the proposed Tara Station should be omitted for the reasons explained by response (1) above, noting also that a scheme which terminates at Tara Street would not be consistent with the Transport Strategy for Greater Dublin Area (2022-2042). In addition any decision to terminate the scheme at Tara will significantly impact on the overall viability and benefits of the scheme.</p> <p>However, while there is a strategic need for a MetroLink station at Charlemont, TII recognise that the short-term implications for local residents on Dartmouth Road will be significant as the scheme progresses through the construction stage. TII are committed to working closely with local residents to ensure the required mitigation measures are put in place, but while TII are of the view that the construction environmental impacts can be mitigated, relocation is an available option for Dartmouth Road residents immediately adjacent to the construction site during peak construction. TII are available to discuss this option if that is something the property owner would like to explore and consider.</p> <p>Finally, TII note that throughout this submission MacCabe Durney Barnes have frequently referred to the Railway Order application, and in particular the EIAR as being inadequate. TII do not accept this, and consider that the level of detail not only submitted as part of the Railway Order application, but the particular responses provided above to individual statements and observations made demonstrate the detailed consideration that has been applied to the submitted MetroLink Railway Order application. TII note that MacCabe Durney Barnes have not identified any instances where the assessment fell short of the level of detail required by the guidelines in the EIAR, nor have they identified any alternative guidelines that required a greater level of assessment.-</p>