

Submission No.			146		
Organisation Name or Name of Submitter			John and Josiane Bullows		
Item No.	Section Ref.	Page No.	Observation Statement	TII Response	
Re: Metrolink Terminus Case Reference Number: NA29N.314724 November 21, 2022					
1	Letter	1	As owners of 17 Dartmouth Square, we are opposed to the acquisition of the land under our property, both in terms of the amount of building and disturbance it would create but also the vibrations of the power of the Metro structure which, in such proximity, would affect the integrity of our house and the neighbouring houses and would be a cause of devaluation.	<p>TII understand the reasons for your concerns and would like to provide the assurance that the potential disturbance impact on your property as a result of the proximity of the proposed tunnel and station has been carefully assessed. This includes the impact of noise and vibrations from: the tunnel boring machine (TBM), mechanical excavation and blasting; construction generated ground movements leading to settlement and possible building and property movement; and the operation of MetroLink. All of which have been assessed and reported in the EIAR and are summarised below. With exception of a temporary disturbance when the TBM passess your property, TII are predicting a 'not significant' impact to the building occupants and your building, or risk to the integrity of your house.</p> <p>Regards devaluation, 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. The benefits of the project for all communities along the MetroLink route are described in Chapter 3: Background to the MetroLink Project, section 3.4 MetroLink Response to Challenges.</p> <p>Construction Phase – Airborne Noise and Vibration</p> <p>EIAR Chapter 13 Airborne Noise and Vibration, Table 13.68 summarises the potential significant construction noise impacts from the construction of the proposed Charlemont Station, which includes receptor 29 for 17 Dartmouth Square. The predicted impact without additional noise mitigation is Significant to Very Significant during some of the work phases. Noise mitigation measures are detailed in section 13.6.1 and include for a proposed 4m high acoustic noise screen along the east, west and southern boundaries of the Charlemont construction compound, and a 7m high noise screen along the northern boundary. Surface activities to support sprayed concrete tunnel construction will be enclosed within an acoustically clad steel framed building to control airborne noise breakout to surrounding receptors. With these mitigations the construction impacts are reduced to below significant.</p> <p>Construction Phase – Groundborne Noise and Vibration</p> <p>EIAR Chapter 14 Groundborne Noise and Vibration, Appendix 14.5 presents the predicted groundborne noise and vibration levels during the construction phase of the project for 17 Dartmouth Square:</p> <ul style="list-style-type: none"><li>• The predicted level of groundborne noise during TBM passage is 49 dB LASmax, which is above the 45 dB LASmax threshold resulting in a significant impact on the occupants of the building for the relatively short duration of TBM passage.</li><li>• The predicted level of groundborne vibration during TBM passage is 0.254 ms-1.75 day and 0.214 ms-1.75 night, below the VDV (Vibration Dose Value is a parameter that combines the magnitude of vibration and the time for which it occurs) Threshold Level of 1.0 ms-1.75 day and 0.5 ms-1.75 night, resulting in a not significant impact on the building.</li><li>• The predicted level of groundborne noise during mechanical excavation at Charlemont Station is 38 dB LASmax, which is below the 40 dB LASmax threshold resulting in a not significant impact on the occupants of the building.</li><li>• The predicted level of groundborne vibration during mechanical excavation at Charlemont Station is 0.002 ms-1.75 day and 0.002 ms-1.75 night, well below the VDV Threshold Level of 0.8 ms-1.75 day and 0.4 ms-1.75 night, resulting in a not significant impact on the building.</li><li>• The predicted level of vibration during blasting at Charlemont Station is 6.1mm/s PPV (Peak Particle Velocity), which is below the 8mm/s PPV threshold resulting in a not significant impact on the building.</li><li>• The predicted level of air overpressure during blasting at Charlemont Station is 110.1dB, below the Threshold Level of 125dB, resulting in a not significant impact on the building.</li></ul> <p>Unfortunately, there are no effective methods available to reduce groundborne noise or vibration from the TBM at source but noting that the duration of this impact will be temporary and of the order of up to two-weeks as the TBM passes. TII will undertake advanced consultation and stakeholder engagement to prepare people for the passing of the TBM and ensure the timing of these impacts are known.</p>	

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			Response (1) continued.	<p>TII's contractor(s) will prepare a Construction Noise and Vibration Management Plan (CNVMP) for the proposed Project as referred to in EIAR Appendix A5.1, Outline Construction Environmental Management Plan (CEMP). The CNVMP will be a live document and will include a full monitoring and auditing programme which will be agreed with the Local Authorities prior to the commencement of the Construction Phase, including predetermined monitoring trigger levels to ensure noise and vibration limits are not breached, noting that it is not possible to mitigate TBM groundborne noise and vibration at source. Table 6.2: Noise and Vibration Measures of the Outline CEMP outlines the monitoring programme requirements.</p> <p>The Transport Infrastructure Ireland (TII) Airborne Noise and Ground-borne Noise Mitigation Policy (Appendix A14.6 of EIAR Chapter 14) also sets out the construction noise insulation and temporary rehousing measures to be implemented where required.</p> <p>Construction Generated Ground Movements</p> <p>EIAR Appendix A 5.17 Building Damage Report, covers the assessed impacts of construction generated ground movements and settlement on your property and has been predicted to not exceed the 'Slight' category, an explanation for which can be found in Table 4-4 of the aforementioned report.</p> <p>The assessment work undertaken for the EIAR has determined that your property along with other similar neighbouring properties have been designated as "special" and hence a further Phase 3 refined assessment will be undertaken that will 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> <p>Monitoring instrumentation will also be installed to monitor the performance of the works and potential environmental impacts, including those discussed above to ensure that acceptable limits are not breached. TII would also draw attention to the fact that private properties within 50m of the station excavation, or 30m of the tunnel are eligible to subscribe to the Property Owners Protection Scheme (POPs). 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>Operational Noise and Vibration</p> <p>EIAR Chapters 13 and 14 present a comprehensive and detailed assessment of operational groundborne and airborne 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 results in a not significant to slight impact when added to the prevailing noise environment.</p>

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			Response (1) continued.	<p>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>EIAR Chapter 14, Groundborne Noise and Vibration, Appendix 14.5 presents the predicted groundborne noise and vibration levels during the operation phase of the project for 17 Dartmouth Square:</p> <ul style="list-style-type: none"><li>• The predicted level of groundborne noise during the railway operation is 21 dB LASmax, which is below the 40 dB LASmax threshold resulting in a not significant impact on the occupants of the building.</li><li>• The predicted level of groundborne vibration during the railway operation is 0.001 ms-1.75 day and 0.00 ms-1.75 night, well below the VDV Threshold Level of 0.8 ms-1.75 day and 0.4 ms-1.75 night, resulting in a not significant impact on the building.</li></ul>	
2	Letter	1	TII admitted at a Metrolink meeting that it was possible to position the proposed Metro under the Carroll’s building. This would be a better solution for Dartmouth Square residents.	Though the possibility of locating the station beneath the Carolls building may have been discuss at one of the meetings with TII staff, TII confirm that it is not possible to locate the station beneath this building due to geometric constraints at this location.	

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3	Letter	1	By positioning the terminus centrally in St Stephen’s Green, passengers can avail of other forms of transport such as luas, bus, coach, taxi and rail, in an area that can absorb future major transport activity on the scale of a Metrolink southside terminus.	<p>TII do not agree that St Stephen's Green is a better interchange with the Luas Green Line than Charlemont for the reasons set out below.</p> <p>The Board is required to have regard to the likely consequences for proper planning and sustainable development in the area in which it is proposed to carry out railway works (section 43(1) of the 2001 Act) and as such the following matters are relevant.</p> <p>The connection from St Stephens Green to Charlemont / Ranelagh is supported by the current Transport Strategy for Greater Dublin Area (2022-2042). The Transport Strategies were prepared by the National Transport Authority, scrutinised by the Joint Oireachtas Committee on Transport and approved by the Minister for Transport. It notes in 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>The Transport Strategy is "a consideration material to the proper planning and sustainable development of the area or areas in question." Development Plans are required to be consistent with the Transport Strategy. The Dublin City Development Plan 2022-2028 envisages this station at Charlemon in policy SMT22 "To support the expeditious delivery of key sustainable transport projects so as to provide an integrated public transport network with efficient interchange between transport modes, serving the existing and future needs of the city and region and to support the integration of existing public transport infrastructure with other transport modes. In particular the following projects subject to environmental requirements and appropriate planning consents being obtained: ... MetroLink from Charlemont to Swords".</p> <p>Accordingly, the location of the Charlemont station was a strategic decision made at the highest levels of transport and land use planning and such is fully consistent with the proper planning and sustainable development of the area.</p> <p>The current Transport Strategy 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 any of the above directions.</p> <p>The current Transport Strategy 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 Metro to the Luas line 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 detailed analysis done for the Railway Order application further confirms that 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. . Further information is available in Chapter 7: Consideration of the Alternatives, section 7.7.8 MetroLink Southern Terminus Location.</p>	

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			Response (3) continued.	<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>
4	Letter	1	<p>In Charlemont, there are no bus tops, coach stops or taxi ranks on the boundary roads and to introduce them, would be creating an unimaginable chaos, and Luas would not connect. The canal road is congested and blocked in the morning and evening. It would be dangerous for a car or a taxi to stop to drop or collect a passenger in the middle of the traffic. There is also very limited transport access to the location as it is defined from the East by the residential houses of Dartmouth Square and from the West by the very narrow residential Dartmouth Lane. To the South is Dartmouth Road which is also severely congested. This would become the point of entry for cars, buses, coaches and taxis and would have devastating consequences for the residents and also for Dublin traffic in general.</p>	<p>As noted in response (3), the location of the Charlemont station was a strategic decision made at the highest levels of transport and land use planning and such is fully consistent with the proper planning and sustainable development of the area. The terminus is consistent with the GDA Transport Strategy. TII would note that the observations made with regards traffic congestion is one of the reasons why MetroLink is such an important project for the Greater Dublin Area. The proposed Project will provide significant benefits not only to those who choose to use it, but also to other transport network users, by reducing the demand for road space and creating the opportunity for the road transport system to achieve optimum levels of efficiency and effectiveness.</p> <p>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 do not anticipate that there will be significant volumes of people driving to any stations, other than the Park &amp; Ride station at Estuary.</p> <p>When the Project is operational, car mode share will decrease, with a reduction of up to approximately 830 car tips to and from the zones surrounding Charlemont Station over the 12hr period in 2065. In overall terms, the Charlemont Station will provide for improvements to the public transport network resulting in decreases in private car usage/trips, increases in public transport usages and will facilitate walking and cycling to the station, without significantly impacting on the operation of the road network in the area. Chapter 9: Traffic &amp; transport, Appendix A9.2-B Traffic and Transport Assessment Charlemont Station, Section 6.1.2. refers.</p> <p>With regards to the observation that "Luas would not connect", a microsimulation VisWalk model has been developed for the immediate area surrounding Charlemont Station during the operational phase. The model covers the full extent of the publicly accessible station area, including the immediate vicinity of the station entrance at street level, the Luas stop and nearby junctions at Charlemont Bridge. In order to accommodate the forecast demand from the Project station, a new staircase with 2.4m stair width is proposed at the south east corner of Charlemont Luas stop. An elevator will also be provided at this location. Both have been sized for Metro to Luas, and Luas to Metro passenger numbers.</p> <p>TII would also note they have deliberately designed Charlemont 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.</p>

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5	Letter	1	The logical location for the Metro link in St Stephen’ s Green, in the city centre, where the amenities, attractions, shopping and cultural activities are.	Please refer to response (3) above.
6	Letter	1	The added cost of tunnelling and building a terminus in Charlemont cannot be justified as there are no advantages in building it there. On the opposite, one would face a minefield of traffic, human and environmental issues which would have to be reversed.	<p>The Board is not responsible for any decisions in relation to the funding the Project. It is solely responsible for assessing whether the Project is consistent with proper planning and sustainable development and that its effects on the environment are acceptable.</p> <p>The responsibility for funding the Project lies with the NTA, the Government and ultimately the Oireachtas. It has received all necessary approvals, including under the Public Spending Code for the making of a Railway Order. It will undergo further scrutiny and approvals, including under the Public Spending Code, before it is funded. It is not appropriate for the Board to make findings in relation to value-for-money that are outside its statutory functions and would cut across those arrangements. Members of the public are entitled to make representations to their TDs in relation to the value-for-money of any element of the Project.</p> <p>In any event, TII do not agree with the statement "building a terminus in Charlemont cannot be justified" for the reasons set out by response (2) above, noting that infrastructure is not being duplicated given the capacity of the Luas south from St. Stephen's Green is restricted due to on-street running.</p> <p>There is a limit to the potential of the Luas to provide additional capacity in the on-street non-segregated section of the Luas Green Line from Charlemont northwards through the city centre. The nature of this route and the fact that it currently crosses several road junctions (Adelaide Road, Harcourt Street / Hatch Street upper and Harcourt Street / St Stephen's Green south) limit the service to a maximum of 24 trams per hour per direction. The projected demand for this section would require a higher frequency of up to 30 trams per hour and this demand cannot be met with on-street systems (Luas / bus). The interchange between Luas and MetroLink proposed at Charlemont will provide the necessary capacity to address the demand on this corridor and reduce overall travel time for passengers</p> <p>There is also high passenger demand forecast for a Metrolink station at Charlemont, including from the Ranelagh area, which would be lost if St. Stephen's Green was the MetroLink southern interchange station. The additional fare revenues collected by the Charlemont Station interchange increase the benefits delivered by the Project, reflected by an improved Project Benefit Cost Ration (BCR).</p> <p>Further, to ensure that public investment delivers value for money, the Public Spending Code sets out requirements for the evaluation, planning and management of public investment. The preparation of a Business Case is a key element of meeting these requirements. The Public Spending Code requires that both the Preliminary Business Case and Final Business Case for public investment projects are published.</p> <p>In July 2022, the Government granted Approval in Principle to the NTA to enable the submission of a railway order application by TII to An Bord Pleanála in respect of the MetroLink project (Decision Gate 1). This approval was granted after the Preliminary Business Case (PBC) had undergone significant scrutiny and challenge by bodies that are independent of TII, including DoT and DPER review (including independent review by JASPERS and the Major Projects Advisory Group (MPAG)) of the PBC around timeline, costs and benefits that were updated to inform the Government decision.</p> <p>TII would also note, for the reasons explained by response (4) above that the observation that traffic impacts are made worse is incorrect and contrary to one of the key objectives and benefits of the MetroLink Project. TII acknowledge there are human and environmental impacts, but TII have demonstrated these can be mitigated to acceptable levels.</p>

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7	Letter	1	For all the reasons listed above and the impact it would have on a residential area and the environment, it would be inappropriate and prejudicial to position the Metro directly behind Dartmouth Square and build a Metro station with lifts and escalators at 1,5 m (5 feet) from our homes.	TII have carefully considered the submission and responded to the observations made. As reflected by the TII responses above to the observations raised, TII consider they have demonstrated why the proposed Charlemont Station has been selected by TII as the preferred interchange with the Luas Green Line.	