

Submission No.			291	
Organisation Name or Name of Submitter			The Abbey Theatre Amharclann na Mainistreach	
Item No.	Section Ref.	Page No.	Observation Statement	TII Response
The Abbey Theatre Amharclann na Mainistreach Cover Letter - Re: Railway (Metrolink - Estuary to Charlemont via Dublin Airport) Order [2022] Metrolink. Estuary through Swords, Dublin Airport, Ballymun, Glasnevin and City Centre to Charlemont, Co. Dublin				
1	Cover letter - Planning Policy	8	<p>RPO 9.24 <i>Promote and facilitate the role of arts and culture in recognition of its importance to people’s identity and the potential for economic development through a unique cultural tourism offering throughout the Region.</i></p> <p>Cultural and the arts are important elements to the Irish society and Irish economy, generating revenue from local, national and international tourists. The Abbey Theatre is notably the national theatre of Ireland. Thus, the protection of its operations should be facilitated. This is not evidenced within the submitted railway order documentation.</p>	<p>TII recognise the National (and International) importance of the Abbey Theatre and are of the view that a high quality transportation corridor that MetroLink will provide will only serve to enhance this theatre and other nationally important arts and cultural venues in Dublin City Centre. As described in our response to specific observations with regards to noise and vibration below, MetroLink will not cause any significant long term impact on the operation of the Abbey Theatre.</p> <p>There will be potential for a short term impact during the progression of the Tunnel Boring Machine which would last for approximately 2 weeks. TII and their contractors will undertake advanced consultation and stakeholder engagement to provide significant advanced notice for the Abbey Theatre to prepare for the passing of the TBM so that any impacts can be effectively mitigated during this short duration.</p>
2	Cover letter - Dublin City Development Plan 2022- 2028	10	The relevant development plan against which any planning application at our clients’ premises would be assessed against is the Dublin City Development Plan 2022-2028. This plan is set to come into effect in December 2022, replacing the current Dublin City Development Plan 2022-2028.	Please refer to Response (7) below.
3	Cover letter - Concerns on Submitted Application	12	As stated, our clients are generally supportive of necessary improved public transport infrastructure within Dublin City and County, as well as the improvement of national connectivity. However, the submitted railway order application causes some concerns, primarily relating to the lack of communication by the Applicant with the Abbey Theatre and possible adverse impacts arising from the proposal on the operations of the theatre.	<p>TII are appreciative of Abbey Theatre's support for the Project. Since the receipt of this submission, TII have engaged with the Abbey Theatre to discuss mitigation measures that will be necessary in respect of the effect of ground borne noise which will occur during the passage of the TBM. This will occur over a period of two weeks.</p> <p>Mitigation measures will be put in place to ensure operational noise and vibration impacts are kept within and beneath stated thresholds contained in the EIAR.</p>

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4	Cover letter - Concerns on Submitted Application	12	The Abbey Theatre is located along the red Luas line. This light railway system has extremely high frequency during peak hours as well as having regular frequency trams at non-peak times of the day. This proximity currently results in disturbance to the Abbey Theatre. Our clients seek reassurance that Metrolink will not result in any additional disturbance of performances or rehearsal space. The purpose of the rehearsal is to prepare the performance and to also achieve a sense of the performance space, allowing for familiarity with the surrounds. This could be adversely impacted by any adjoining vibrations, noise and/or disturbance which may result from the operation of Metrolink or the tunnelling works related to same.	<p>Regarding the possible disturbance to the Abbey Theatre during the construction and operational phases, the only possible disturbance will occur due to noise and vibration arising from (i) the passage of the Tunnel Boring Machine (TBM) and (ii) from train movements during the operational phase.</p> <p><u>Construction Phase</u></p> <p>EIAR Chapter 14, Ground-borne Noise and Vibration, section 14.4.1.8 AZ4 Groundborne Noise during Construction, Table 14.29, presents the predicted noise levels during TBM Passage compared to the threshold values for noise for various sensitive receptors (including Abbey Theatre). Table 14.29 shows the L_{Amax}'s for TBM Passage at Abbey Theatre has a value of 45 dB while the Threshold Level for this building is 30 dB, resulting in a significant impact on the buildings operation during TBM passage. It is important to note that the TBM advancement will only potentially effect the Abbey Theatre for a short period of time (up to 2 weeks). As noted above, unfortunately, there are no effective methods available to reduce groundborne noise or vibration from the TBM at source. As a result, the principal mitigation measure to minimise effects on the Abbey Theatre will be advance public consultation and stakeholder engagement to reduce the significance of groundborne noise effects during construction so that the Abbey Theatre is prepared for the passage of the TBM and resultant elevated noise levels. 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 of the EIAR).</p> <p>With regards to Groundborne Vibration, EIAR Chapter 14, section 14.4.1.9 AZ4, Groundborne Vibration during Construction, Table 14.32 shows the predicted vibration levels during TBM Passage compared to the threshold values for vibration for various sensitive receptors (including Abbey Theatre). Table 14.32 shows the VDV (Vibration Dose Value is a parameter that combines the magnitude of vibration and the time for which it occurs) for TBM Passage at Abbey Theatre has a value of 0.217 m/s-1.75 and is therefore much lower than the VDV Threshold Level for this building of 1.0 m/s-1.75, resulting in a not significant impact on the buildings operation.</p> <p><u>Operation Phase</u></p> <p>EIAR Chapter 14, table 14.44 shows the L_{Amax,s} for operation at Abbey Theatre has a value of 27 dB while the Threshold Level for this building is 25 dB, resulting in a significant impact on the buildings operation if not mitigated. As a result, mitigation measures, will be implemented to reduce the noise and vibration effects on the building's operation. As set out by section 14.5.2 Operational Phase, Table 14.47, in the case of the Abbey Theatre, the specific mitigation measure proposed will be a Floating Slab Track system for this section of the alignment, resulting in a residual impacts that are not significant for the Abbey Theatre during the operational phase.</p> <p>EIAR Chapter 14, table 14.45, shows the predicted vibration levels during Railway Operation for various sensitive receptors. For the Abbey Theatre, the predicted VDV (Vibration Dose Value) for Railway Operation is 0.004 m/s-1.75, resulting in a not significant impact on the buildings operations.</p>

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5	Cover letter - Concerns on Submitted Application	12	The Applicant has not directly consulted with the Abbey Theatre group, nor have they submitted adequate information, models or details to demonstrate that rehearsals or performances will not be impacted upon. Such relevant information includes possible additional contaminants from electromagnetic interference to instruments, amplifiers, sound loops, broadcast units etc..	<p>TII consider that they have provided adequate information, models and details to demonstrate the impacts on the Abbey Theatre. This is set out in a detailed EIAR, that identifies, describes, assesses and mitigates, where necessary, the environmental impacts resulting from the construction and operation of MetroLink. TII would also draw the Abbey Theatre's attention to response (4) above, and TII's further response below with regards to assessed electromagnetic interference (EMI) impacts that summarises why the Abbey Theatre is not expected to be impacted by EMI.</p> <p>TII would also note that for identified stakeholders, including the Abbey Theatre, information requests were made to complete questionnaires listing potentially sensitive equipment. Predominantly stakeholders listed standard electrical and electronic items such as phone systems, hard drives etc. These types of equipment are discussed within the EIAR and evaluated to not be at risk of interference from electromagnetic radiation (DC, AC or RF fields) from the proposed Project. No feedback was received from the Abbey Theatre.</p> <p>The Abbey Theatre is not expected to possess atypical equipment other than what would be found in other similar entertainment and arts venues. Specifically that of professional audio, video and broadcast equipment. Professional audio visual equipment is more vulnerable to EMI as a result of operating in the audio acoustic range and as a result undergoes specific immunity testing in that frequency range before sale in the European Market place. Similar stakeholders from whom feedback was received, and who are closer, to the alignment include the Gate Theatre and the National Concert Hall. Neither of these sites have been identified as being at risk of interference from the proposed development.</p> <p>EIAR Chapter 12, Electromagnetic Compatibility and Stray Current, section 12.4.2 details the width of the study area for EMI which is up to 100m. As noted above, questionnaires would have been received by identified stakeholders within that area to identify and highlight equipment that they would class as potentially being sensitive to EMI. This 100m range relates to equipment vulnerable to two aspects of the electromagnetic radiation generated from the proposed development. That of DC magnetic field perturbations and Radio Frequency field interference e.g. Scanning Electron Microscopes (vulnerable to DC), Radio equipment (vulnerable to RF). The sensitivity and potential impacts on these types of equipment are discussed within the chapter for any stakeholders that may be in possession of such equipment. The Abbey Theatre is circa 30m from the alignment. This is close enough that a questionnaire should have been sent but not close enough to be at risk or require consideration for AC Field interference. (see paragraph below).</p> <p>For the third aspect of the electromagnetic radiation generated by the proposed development (that of AC fields), the study area is narrowed to within 10m of the proposed alignment, see Table 12.2 of the EIAR, Chapter 12. This is due to the fact that the AC fields generated decrease rapidly with distance from the alignment to the point of falling below background levels at greater distances. AC field interference with respect to audio visual equipment is discussed within the chapter for sites that do fall within this 10m envelope. CE marked broadcast, IT, audio visual, or any other approved electrical equipment will not experience EMI from the proposed development. Unapproved/custom equipment (such as magnetic pickups on electric guitars) will not be vulnerable to interference from AC fields due to the distances involved (30m approximately).</p> <p>Therefore, potential impacts from AC fields were not classed as requiring additional investigations from an EMI perspective for the Abbey Theatre, which was considered when reviewing the Baseline Environment and assessing the distances involved.</p> <p>As noted by response (3) above, TII propose a meeting is held between TII and The Abbey Theatre to discuss the observations and responses made with regards to this submission and any other relevant matters.</p>
6	Cover letter - Concerns on Submitted Application	12	Again, a significant concern arises in relation to the construction period of the railway if approved, especially during the tunnelling period which may be highly disruptive and may require changes to performance or rehearsal programmes operating at the Abbey Theatre. There is a lack of information demonstrating how the construction stage, including tunnelling, may affect the structure of the Abbey Theatre and surrounding buildings.	Please refer to Response (4) above.

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7	Cover letter - Concerns on Submitted Application	12	As noted, the Abbey Theatre has been earmarked for large-scale redevelopment within national plans prepared by the Government. This has not been referenced by the Applicant. Information on the possible impacts of Metrolink operations of the Abbey Theatre and the impending comprehensive redevelopment should be sought and considered prior to any grant of permission. Such information should be provided by the Applicant and its team with all relevant stakeholders, including our clients.	<p>TII can confirm that the planning assessment for the Railway Order (RO) application was carried out using the relevant plans published at the date of RO lodgement: i.e. the DCDP 2016-2022 then in force. TII also reviewed the draft DCDP 2022-2028 that was available at the time which did not include reference to any redevelopment of the Abbey Theatre. At the time of our assessment of the environmental impacts on the Abbey Theatre 2019-2022, a planning application for a large scale redevelopment of the Abbey site had not been lodged and could therefore not be assessed by the MetroLink team. TII commit to working with the Abbey Theatre to seek to ensure that any large scale development at this important cultural site is not unduly constrained by MetroLink.</p> <p>For the reasons noted in Response (5) above, TII consider they have comprehensively considered and assessed the impacts and required mitigations resulting from the construction and operation of MetroLink. Potential impacts on the Abbey Theatre (as it currently stands) are assessed in the EIAR having regard to potential impacts arising from Groundborne Noise and Vibration, and EMI, both discussed above by responses (4) and (5) respectively. Construction generated ground movements have also been considered (see EIAR Appendix A5.17, Table 5.2) where it was assessed there would be no impact on the Abbey Theatre from settlement.</p>
8	Cover letter - Conclusion	12	We submit that the proposed railway order application has been made without consideration of the possible adverse impacts on the functioning or operation of the Abbey Theatre and surrounding properties. The Abbey Theatre is designated as Ireland's National Theatre and thus should be protected from undue impacts arising from developments, including at construction and operational stages. The Abbey Theatre currently adjoins a high frequency Luas line. Rail traffic along the line will increase in the event of the Metrolink being approved and constructed, resulting in impacts to performance and rehearsal spaces of the Abbey Theatre and the Peacock Theatre. The level of impact has not been measured or detailed by the Applicant. Whilst our clients are generally supportive of the improvement of national public transport infrastructure, it is submitted that the scheme should not be approved without consideration of any impacts it will have on the Abbey Theatre and/or appropriate conditions to mitigate same.	<p>TII do not agree that the Railway Order application has been made without consideration of the possible adverse impacts on the functioning or operation of the Abbey Theatre and surrounding properties. TII have submitted a detailed and comprehensive EIAR that evidences that the level of impact has been measured and assessed, and which identifies, describes, assesses and mitigates (where necessary) the environmental impacts resulting from the construction and operation of MetroLink. A summary of this assessment, covering groundborne noise and vibration, EMI and construction generated ground movements has also been presented in responses (4) and (5) above, noting that the only environmental impact that cannot be mitigated is groundborne noise from the TBM. As a result, advance consultation with the Abbey Theatre will be necessary to reduce the significance of groundborne noise effects during construction so that the Abbey Theatre is prepared for the passage of the TBM and resultant elevated noise levels.</p> <p>As noted above, TII propose a meeting is held between TII and The Abbey Theatre to discuss the observations and responses made with regards to this submission and any other relevant matters.</p>