Submission No.	317
Organisation Name or Name of Submitter	Wynn's Hotel

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RE: SUBMISS	SION ON THE IV	IETROLINK	ON BEHALF OF WYNN'S HOTEL, 35-39 ABBEY STREET LOWER, DUBLIN 1, D01 C9	F8
1	Introduction (paragraph 1)	3	Our client, Wynn's Hotel, welcomes the opportunity to make a submission on the Railway Order for the MetroLink line. Our client has a number of observations and concerns in relation to the Railway Order. As further detailed in the enclosed Memorandum by PUNCH Consulting Engineers dated the 12 th January 2023, our client requires further information and reassurance in regard to a number of technical queries to fully understand the potential impact on Wynn's Hotel. In particular these concerns relate to the potential impact on the structural integrity of the building and potential negative impacts on the building and its occupants during the construction and operational phase.	TII appreciates the submission and the sharing of the observer's concerns related to the potential impact on the building and its occupants. We have reviewed the submission and provided response for the observations/ concerns raised in detail below.
2	Introduction (paragraph 2)	3	Our client also wishes to request that an Oral Hearing is held in respect of the Railway Order application so that the points raised within this submission can be further clarified and addressed at the hearing for the benefit of all parties.	The purpose of the oral hearing will be to allow issues relevant to an application for approval be examined. The oral hearing can be attended by anyone, but only those that have made a written application may make an oral submission at the oral hearing.
3	Introduction (paragraph 3)	3	Our client has the benefit of an extant permission for additional floors (DCC Reg. Ref. 3131/28; ABP-303179-18) which our client intends to implement, we seek confirmation that the Railway Order will not prejudice this permission.	TII confirm that the Railway Order will not prejudice the additional floors as contained in DCC. Reg Ref. 3131/28; ABP-303179-18.
4	Site Location (paragraph 1)	5	The Metrolink line is proposed to run beneath Abbey Street and directly under Wynn's Hotel. It is acknowledged by the applicant & TII that the construction of the proposed Metrolink will have an impact on the subject site. However, our client has serious concerns in relation to the identified noise and associated disruption contained with the Railway Order documentation and the significant difficulties this would cause for the hotel operation and to the hotel structure itself. Wynns Hotel is a Protected Structure in the Dublin City Development Plan 2022-2028.	TII note the concerns related to potential noise impacts and associated disruption on your building and business operations in our response Item number (25) below.
5	Site Location (paragraph 2)	5	Our client has the benefit of an extant permission for additional two storey extension (please see Appendix 1 DCC Reg. Ref. 3131/18) which our client proposes to implement, we seek confirmation from the applicant, TII that the Railway Order will not prejudice the ability of our client to carry out this permission.	Refer to response Item number (3) above.
6	Site Location (paragraph 3)	5	The information and documentation submitted with the application is considered insufficient and inadequate to enable a proper assessment of the likely impacts to be carried out. Our client therefore requests a list of further information, data and analysis as set out by Punch Consulting Engineers to enable a proper assessment to be undertaken. It is respectfully submitted that such additional assessment be undertaken prior to the Board making any decision on the Railway Order application.	
7	Engineering Considerations (paragraph 1&2)	5	A Memorandum has been prepared by PUNCH Consulting Engineers to accompany this submission, and is included in Appendix 2. The memo states: "iii) TWHD primary concern is the effect the proposed works will have on the business operations of its company. The hotel is in existence over 170 years and its operations cannot be negatively impacted by the proposed Metrolink works. We would request immediate engagement with TII on all of these concerns.	TII are available to engage further with Wynn's Hotel regarding your concerns regarding potential impacts of MetroLink Project on business operations.

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8	Engineering Considerations (paragraph 3)	5		TII are available to engage further with Wynn's Hotel regarding concerns of potential impacts of MetroLink Project on building structure. The Building Damage assessment is referred to in response item number (19) below.
9	Concluding Comments (paragraph 1)	5	Our client welcomes the opportunity to make a submission on the Metrolink Railway Order and the sustainable transport benefits which would be delivered. The proposed MetroLink alignment is running directly through our client's property and our client's concern relates to the impact the proposed MetroLink project will have on the operation of Wynn's hotel, and on the structure of the hotel itself, which is a Protected Structure in the current Dublin City Development Plan 2022-2028. Our client acknowledges that a scheme of this scale will result in impacts, however, these should be mitigated to the full extent possible and should be carefully managed to minimise the effects on our client's hotel.	TII note the concerns related to potential impacts of MetroLink project on your building and business operations. TII are fully committed to mitigating all impacts as far as reasonably possible, as has been included for this in the EIAR. Responses for the specific observations/concerns raised in detail below.
10	Concluding Comments (paragraph 3,4,5)	5	Our client reserves the right to elaborate further on these issues as necessary should the Board decide to hold an oral hearing or require any clarification and would welcome any responses from the applicant. We trust this submission will be taken into consideration in assessing the proposals. The assessment of compensation would not be limited to the content of this submission.	TII acknowledges the rights of the owner and refer also to response item numbers (2) and (8) above.
11	APPENDIX 1: EXTANT PERMISSION DCC. REG. REF. 3131/18; ABP- 303179-18	7	ABP issued decision to grant permission on 07 May 2019 for the following development, as set out in the statutory notices: PROTECTED STRUCTURE: Permission for development of a two-storey roof extension at a 623 sq.m site. The proposed development will comprise the following: The removal of the existing lift overrun structure and lift motor room, water tanks, service plant, 5 no. non-original roof lights and 4 no. disused chimneys to the rear at roof level to facilitate the provision of a 2 no. storey extension at sixth and seventh floor levels, with 776 sq.m floor area with terrace areas of 29 sq.m. The proposed works will also include the raising of 5 no. chimneys by 450mm, general fire safety upgrades and the replacement of an external steel fire escape and open walkways to the rear serving first to fifth floor levels. The proposed extension comprises a part cantilevered structure with metal cladding on top of the existing 6 no. storeys over basement Protected Structure, bringing the total height to 27,9m above ground (excluding lift overrun), increasing the total gross floor area to 4,049 sq.m. The proposal consists of the addition of 27 no. ensuite bedrooms, terraces at sixth and seventh floor levels, a covered walkway across an existing lightwell at sixth and seventh floors to provide safe access doors from bedrooms within the pitched roof enclosure. The proposed roof structure will also incorporate perforated metal panels to provide natural ventilation to the new consolidated and concealed plant areas at roof level. The proposed fire safety works comprise fire protection upgrades to the existing internal staticrase including new glazed fire screens at second to fifth floor levels, the provision of an enclosed firefighting statirs with metal cladding from first floor to seventh floor levels and new external covered walkways of the existing lift within the existing lift within the existing lift within the existing lift within the existing lift approached to the existing its to fifth floor levels facing Harc	

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12	APPENDIX 2: Introduction (paragraph 3)	9	It is essential that each of the points raised in this submission are addressed in full by TII. It is noted that the comments in this submission will expand following further engagement with TII. The hotel is over 170 years old and is a Protected Structure (NIAH 50010276) and is an iconic hotel in Dublin City Centre. It is vital to WHD that the building remains fully operational during the works and in its operational phase and cannot accept any interruption or damage to its business.	TII note the concerns and are available to engage further with Wynn's Hotel regarding the concerns raised on potential damage to your property and disruption to your business operations. Please also refer to response item number (19) below.
13	APPENDIX 2: Introduction (paragraph 4)	9&10	The hotel was badly affected during construction works of the Luas Red Line in the early 2,000's and cannot suffer similar issues with the proposed Metrolink. Lack of clear communication when works would be undertaken by TII during construction of the Luas Red Line led to significant disruption for the hotel. Also the hotel did not have a specific point of contact in TII or with the Main Contractor during these works which further added to the disruption.	TII are fully cognisant of the importance of the Wynn's Hotel. Furthermore it is important to acknowledge issues that the observer has experienced in the past with regard to Luas Red Line. TII would ensure that consultation will continue throughout the construction phase to ensure that you are informed of progress on the construction of the proposed Project and to allow for you to raise queries or other communications with the project team. Further details on the proposals for external communications during the construction phase can be found in section 3.3.1 of Appendix A5.1 Outline CEMP.
14	APPENDIX 2: Introduction (paragraph 5)		The hotel requests early engagement with TII on the items raised in this submission and request that An Bord Pleanála condition same in any grant of the Railway Order.	Til would welcome engagement with Wynn's Hotel to further explore your concerns presented in this submission.
15	APPENDIX 2: Introduction (paragraph 6)	10	WHD suffered substantial financial losses during construction works of the Luas Red Line and request details from TII for proposed compensation procedures. WHD noted there were no procedures in place during construction of the Luas Red Line to compensate businesses for losses and cannot accept the same with the proposed Metrolink.	While there will be some disruption to business premises during the construction of MetroLink, TII do not have a compensation policy in place to compensate businesses for such disruption. It is envisioned that all businesses in the locality of MetroLink will benefit significantly once MetroLink is operational.
16	APPENDIX 2: Introduction (paragraph 7)	10	We wish to confirm our client requests an Oral Hearing is held in respect of the Railway Order application and again the justification for this is outlined further in this submission.	S Please refer to response item number (2) above.
17	APPENDIX 2: Technical Observations (paragraph 1)		The following is a preliminary list of technical queries which we require to be fully assessed and resolved to our client's satisfaction prior to the proposed Oral Hearing. We request ABP condition in any grant of the Railway Order early engagement from TII with WHD to work though this technical list.	We have reviewed the submission and provided response for the observations/ concerns raised in detail below. TII are happy to engage further regarding your observations and concerns raised in this submission.

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			a. What is the Tunnel detail design procurement approach i.e. client design or contractor design? In responding to this item, we ask that Til to consider the following along with any other items they consider relevant: i) A detailed design programme for the tunnel under Wynns Hotel Dublin is required?	The works will be procured as a design and build contract. TII's contractor will develop the design to detailed design and retain responsibility for the efficacy of the design. The detailed design and construction programme will be provided once developed by the TI Contractor and TII will continue to update all stakeholders on the timings of tunnelling impacting their property. Details of communicative regarding tunnel boring are contained in section 3.3.1 of Appendix A5.1 Outline CEMP. Notwithstanding the statement above on the construction programme, following the granting of the Railway Order (RO) it is anticipated that the tunnel through Dublin (AZ4) will be provided along the following estimated timeline: • Contract Award: RO + 3 months. • Tunnel Design Complete: RO + 21 months. • Tunnelling commences Northwood to Charlemont: RO + 30 months. • Tunnel from O'Connell Street to Tara Street: RO + 60 months. • Tunnel completed into Tara Street: RO + 63 months.	
	APPENDIX 2: Technical Observations (Query A)			ii) If the tunnel design is by the main contractor, TII to confirm how soon after the grant of the Railway Order a Main Contractor be appointed	Please refer to response item number (18), first paragraph above.
			iii) TII to confirm estimated construction programme from when WHD are likely to experience noise and vibration from the proposed Construction Works	It is anticipated that noise and vibration impacts may be discernible for approximately 2 weeks as the TBM approaches and passes bey the hotel.	
18			iv) TII to confirm what information WHD will receive prior to the Oral Hearing	There are no plans to issue any further information prior to the Oral Hearing apart from any clarifications issued herewith. As stated al TII are happy to meet and discuss these issues.	
			v) Assuming the detailed design is by the Main Contractor, TII to confirm the extent to which the Main Contractor will be required to engage with WHD during the detailed design process? WHD would request a sole point of contact from the main contractor for the full duration of works	The main contractor will be responsible for all design and construction. However, all designated designs will be independently checked Til will accept the design. Til will provide the assurance to WHD that the design and modelling, together with proposed instrumentation and monitoring is fit for purpose and will not result in impacts greater than that assessed in the EIAR. This is detailed in section 1.1 of Appendix A5.1 Outline CEMP. If monitoring is to be installed on or in your properties, then the methodology and timing of the installati will be agreed with WHD together with any ongoing maintenance of the monitoring. The Contractor and Til will provide updates as required during the construction process. Details of the plans for external communications during the construction phase are presente section 3.3.1 of Appendix A5.1 Outline CEMP. Additionally, condition surveys will be coordinated with Wynn's Hotel including any close condition surveys and the identification of any remedial measures needed. If required by WHD TII will issue the Phase 3 Assessment details. Details of the condition surveys can be found in section 6.2 (Table 6.2) of Appendix A5.1 Outline CEMP. A sole point of contact from the main contractor (and TII) will be provided for the full duration of works. As stated in section 3.3.1 of Appendix A5.1 Outline CEMP, the contractor(s) will be responsible for putting in place a Stakeholder Communications Plan which will be developed under the consent of a designated Public Liaison Officer appointed by TII. This plan will provide a two-way mechanism for members of the public to communicate with a designated member of the contractor(s) staff and for the contractor(s) to communicate important information on various aspects of the proposed Project to the general public.	

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			 b. Confirmation that a full copy of the detail design and construction package will be issued by TII in relation to Wynn's Hotel Dublin. In responding to this item, we ask that TII to consider the following along with any other items they consider relevant: i) We expect to see a full copy of the detailed design and construction package which allows for an independent assessment to be carried out by WHD as they wish. We request confirmation of timelines from TII for this but note this needs to allow sufficient time for our client to fully review the proposals. 	TII would welcome a meeting with WHD to further explore the details presented here and to collate the relevant information to educate the further assessment. TII will issue WHD with the detailed Phase 3 assessment if required. The assessment will be independently checked (CAT 3) and assured by TII, in line with best practice. With regard to timings please refer to response item number (19) above.
19	APPENDIX 2: Technical Observations (Query B)	11	ii) It is vital for WHD that the building is not damaged during these works and the extent of building damage suggested by TII in the railway order is not acceptable.	MetroLink tunnel going under these properties has been assessed at the depth and on the alignment proposed and TII are satisfied that the assessed movements will not lead to structural damage to these properties. EIAR Appendix A 5.17, Building Damage Report, covers the assessed impacts of construction generated ground movements and settlement on properties. Table 5-2 of this report shows that the WHD building has been assessed as falling within the "Slight damage" category currently, an explanation for which can be found in Table 4-4 of the aforementioned report. TII does recognise the importance of your buildings and hence they are designated as special buildings which will move forward to further assessment at the detailed design phase. The Phase 3 assessment will take account of final design and construction methodology details proposed by the appointed contractor. The buildings will be subject to detailed assessment, including a detailed survey carried out to provide the necessary additional information to inform this detailed analysis of how the individual elements of the building would be affected by the predicted ground movements. Details of the Phase 3 Assessment can be found in section 4.5. of Appendix A5.17 Building Damage Report. The method and extent of the detailed analysis will be determined on a case-by case basis and may include a more sophisticated semi-empirical or a detailed soil-structure interaction using finite element modelling methods. Details of the Phase 3 Assessment can be found in section 4.5. of Appendix A5.17 Building Damage Report. It is likely that the Phase 3 assessment will yield further improvement to the damage category determined by the Phase 2b assessment. The results of this refined assessment typically show that earlier assessments are conservative and overestimate the likely impact of construction generated ground movements.
			iii) The efficient running of the business operations in the hotel is of paramount importance to WHD. Whilst some disruption in terms of noise and vibration is likely, these levels cannot be such that they affect the company's daily operations. We would request that TII provide detailed reassurances on these matters.	Noise and vibration impacts from the advancement of the TBM beneath this location will occur for a very short period of days. Unfortunately, no effective mitigation methods are available to reduce ground-borne noise or vibration from TBMs at source. The impact on your commercial activity due to Groundborne Noise and Vibration as a result of tunnelling activities following mitigation will be negative, slight and short term. To mitigate impacts, advance public consultation and stakeholder engagement will take place which will greatly reduce the significant of groundborne noise effects, as building occupants would be prepared for the passage of the TBM and resultant elevated Noise and Vibration levels (Table 11.70, Chapter 11 Population and Land Use).
20	APPENDIX 2: Technical Observations (Query C)		c) Confirmation by TII of the Identity of the Civil and Structural Design Firm for the Metrolink tunnel beneath Wynn's Hotel Dublin?	The detailed design is yet to be undertaken and the Contractor is planned to be procured within the timeline described in response item number (18) above. The preliminary design has been undertaken by a Joint Venture of Jacobs and IDOM and is the design assessed under the EIAR supporting the Railway Order
21	APPENDIX 2: Technical Observations (Query D)		d) Confirmation of the Identity of the Geotechnical Design Firm for the Metrolink tunnel beneath Wynn's Hotel Dublin?	Please refer response item number (20) above.

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e) Confirmation of the Technical Design Checking Process for the Metrolink tunnel beneath Wynn's Hotel Dublin APPENDIX 2: Technical In responding to this item, we ask that TII to consider the following along with any other items they consider relevant: The design checking process is to be developed by TII and will incorporate a CAT 3 checking process, in line with best practice. 22 11 Observations (Query E) i) Category 3 independent checking is expected as a minimum checking process. We ask TII to confirm checking process and we request An Bord Pleanála to condition same in any grant of the Railway Order Condition surveys are best undertaken just prior to works that could give rise to damage. Normally this would mean that the preconstruction condition survey would be undertaken circa three months prior to the TBM approaching the hotel. Impacts of the tunnel works would be noticed very soon after TBM passage and it would normally be the case that any residual movements would terminate with a few months of the TBM passing. TII's monitoring will be used to verify that movement has ceased and hence trigger the close out construction condition survey. The operation of the MetroLink would not impact on the structure and no further condition surveys are deemed necessary. TII would respond to the points raised as follows: Response to point i): Slight damage is predicted at the Wynn's Hotel building (B-241) following the Refined Phase 2a Damage Assessment. This category of damage is not considered structural damage and an explanation for typical damage and likely forms of repair can be found in Table 4-4 of the Building Damage Report (EIAR Appendix A 5.17). In this case, typical damage and likely forms of repair would be limited to "Cracks easily filled. Redecoration probably required. Several slight fractures inside building. Exterior cracks visible some repointing may . Details and frequency of proposed condition surveys for Wynn's Hotel Dublin by TII, both in advance of and during the construction be required for weather tightness. Doors and windows may stick slightly". works as well as during the tunnel operational phase. Response to point ii): TII note and agree, and further comment below. As detailed in section 6.2. of Appendix A5.1 Outline CEMP, In responding to this item, we ask that Til to consider the following along with any other items they consider relevant: photographic records will form part of the pre and post-construction condition surveys. Ground Movement Impact Assessment i) In the Damage Assessment Report of Building document on https://www.metrolinkro.ie/, it places WHD (B-241) in Damage Category B Please refer to response item number (19) above. (Refer to Appendix A). This cannot be accepted by WHD and will likely negatively impact the building's basement, frame and facades which in turn affects the operations of the business. APPENDIX 2: Technical ii) Visual condition surveys of the building are expected prior to and during construction works. There must be photographic condition Till will procure its contractors to develop Instrumentation and Monitoring Plans in tandem with Monitoring Action Plans, As indicated in section 1.1. of Appendix A5.1 Outline CEMP. These plans will help assure that the risks associated with tunnelling are appropriately 23 Observations (Query F) surveys carried out by professional independent parties procured by TII/Main Contractor to ensure any potential damage to the building i accurately recorded. managed and controlled for this property. TII will provide details of any monitoring proposed by the contractor at detailed design stage and iii) It is expected that the condition surveys continue post construction and through the tunnel operational stages and request frequency agree the methodology of installation to the Wynn Hotel. TII will provide advance notice of any attendance that the monitoring contractor of these surveys to be confirmed by TII may require. With regard to the timing of monitoring specific to ground movement TII will ensure that it is commenced 3 months prior to iv) We request this information from TII as soon as possible to ensure the integrity of the building is maintained during all phases of the the construction activities that would give rise to the settlement. However, as these construction activities may complete years prior to the MetroLink operational phase the termination of monitoring will be linked to a determination that settlement has effectively ceased, v) We request TII to confirm when guidelines regarding the process for remediation will be released, should remediation be required. It is allowing a removal of the instrumentation. our understanding these guidelines are under development by TII based on information from https://www.metrolinkro.ie/ . We reiterate that damage to the building cannot be accepted but we need to understand the guidelines nonetheless. Response to point iii): Condition surveys will continue until the effect of the construction has ceased, long term impacts during the operational phase are not anticipated. (EIAR Ch5, Section 5.4.11.4, Section 5.4.11.1 & 5.4.11.2- Ch26, Section 26.3.4). Response to point iv): TII agree that the surveys and assessment are to be undertaken in time such that the integrity of the building is maintained. This is TII's stated position. (EIAR Ch5, Section 5.4.11.4, Section 5.4.11.1 & 5.4.11.2 - Ch26, Section 26.3.4). Response to point v): Regarding remediation please note that TII do not intend to put in place a Property Owners Protection Scheme for Commercial Properties along the MetroLink route. To protect commercial properties, TII contractors appointed to carry out the works will, with the agreement of the owners of such properties, commission chartered building surveyors to carry out a precondition survey of commercial properties. In the event that it is determined that damage has occurred. Til's contractor will be required to commission a follow up survey to confirm the extent of the damage and confirm if the damage has been caused by MetroLink works. Where property damage is confirmed to have been caused by MetroLink works the property concerned will have recourse to MetroLink project insurances.

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g. Vertical settlement of the existing structure at The Wynns Hotel Dublin from the proposed works.

APPENDIX 2: Technical

Observations (Query G)

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In responding to this item, we ask that TII to consider the following along with any other items they consider relevant:

i) The predicted settlement is a concern from available information on https://www.metrolinkro.ie/. The settlement contours on Figure 20.16, sheet 26 of 30 (Refer to Appendix B), suggest settlement of 40-45mm in the calculated settlement trough. We request details from Till on how they established this deflection data. The building is a Protected Structure and over 170 years and Til must recognise this.
ii) There appears to be no evidence of undertakings on https://www.metrolinkro.ie/ to confirm the quality of the rock at the tunnel level beneath WHD. We request that geophysical surveys are carried out by TII on the rock at tunnel level from the existing basement. 2d Resistivity and Seismic Refraction surveys are suggested to determine the rock mass characteristics.
iii) It appears that the tunnel will be formed in limestone rock with gravel and made ground layers above the rock. If a dense rock with

iii) It appears that the tunnel will be formed in limestone rock with gravel and made ground layers above the rock. If a dense rock with little fractures is encountered during this testing, this is favourable in terms of boring. If the rock is heavily fractured together with the crown of the tunnel close to the gravel layers, this increases risk of settlement. We ask TII to comment on the rock/soil characteristics below the hotel.

Further to response item numbers (19) and (23) above, TII would respond to these points as follows:

i) The EIAR Chapter 5 Appendix 5.17 describes 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, and how it has been applied to the MetroLink project. Section 1.3 of this document clearly describes the ground movement assessment methodology. Til do recognise that this building is a Protected Structure and have therefore designated it as a "Special" structure. This designation requires Til (through its contractor) to undertake a further Phase 3 assessment to assure that the predicted impacts are correct. The results of this refined assessment typically show that earlier assessments are conservative and overestimate the likely impact of construction generated ground movements.

ii) Ground investigation has been undertaken for the scheme and documented in EIAR Chapter 20. This information has been used to educate the movements assessments undertaken to date (Phase 2a). For the Phase 3 assessment the Contractor will verify to data collated to date and ascertain if further is required to undertake the refined analysis. As detailed in Appendix A5.1 Outline CEMP section 6.8, mitigation measures which may be undertaken prior to and during the Construction Phase include geophysical surveys (including Ground Penetrating Radar (GPR)).

iii) The ground investigation data has been used to describe the geology which is included in Chapter 20. Specific to the tunnelling is discussed in EIAR Appendix 5.13 and the section specific to your hotel is contained in section 3.6.7 of this document. The same data has been used to assess the impact of the tunnel construction on the buildings above and referenced in Appendix 5.17. The data is included within table 5-1 of this appendix. The data used for the Phase 2a assessment is described as moderately conservative. Please note also that the TBM will be designed for both full face rock and mixed face conditions with the slurry pressure equipped to deal with the prevailing conditions.

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25		APPENDIX 2: Technical Observations (Query H)	13	h. Noise Impacts under the existing structure at Wynn's Hotel Dublin from the proposed works. In responding to this item, we ask that TII to consider the following along with any other items they consider relevant: i) There is a concern in relation to the identified noise and associated disruption contained within https://www.metrolinkro.ie/. A "Very High Adverse (significant)" residual impact is identified in the documentation. This is not acceptable to WHD and will be detrimental to our client's daily business operations. TII should assess this further and mitigate this impact. ii) Whilst this impact is noted as being "short term", there is no clarity or estimate provided beyond this in relation to the duration of these works and associated negative impacts. We request TII to confirm duration of the proposed works and associated impacts on our client's building. iii) Table 14.3: Groundborne Noise from Underground Sources - Threshold of Significant Effects on Non-Residential Buildings (Refer to Appendix C) states a threshold of 45dB for commercial buildings. The calculated noise levels from works under the hotel are 50dB and in excess in the threshold. iv) There is a concern with the noise levels during the operational phase of the Metrolink. TII to confirm these levels directly under the building. Disruption to the hotel due to noise cannot be accepted by WHD. v) In the event the hotel experience noise disturbance during the construction phase which results in WHD incurring losses. We will require confirmation from Metrolink or the contractor that WHD will be reimbursed.	building. ii) Unfortunately, there are no effective methods available to reduce groundborne noise or vibration from TBMs at source, but noting that the duration of this impact will be in the order of up to two weeks as the TBM passes. TII will liaise with Wynn's Hotel to ensure the timing of these impacts are known. iii) Please see answer to response item number (25), paragraph i) above. iii) According to Appendix 14.5 Groundborne Noise and Vibration and Blasting Modelling Results, the value of noise during operation is 35 dB compared to the threshold value of AD dB. The vibration levels for operation are also below the threshold values. As a result, no
26		APPENDIX 2: Technical Observations (Query I)		i) TII to confirm that the tunnel can be constructed in the proposed position/depth considering the depth of the existing rock and gravels and formation level of the single basement level at Wynn's Hotel Dublin?	TII confirm that the tunnel can be constructed at the depth and alignment shown and that the assessment described above has taken into account the presence of a basement.
27		APPENDIX 2: Technical Observations (Query J)	14	j) TII to confirm that the permissible vertical deviation for the tunnel as outlined in Section 6(d)ii of the Draft Railway Order of 5m upwards has been fully considered on the proposed tunnel under the hotel? In responding to this item, we ask that TII to consider the following along with any other items they consider relevant: i) It appears that the tunnel will be formed in limestone rock with gravel and made ground layers above the rock based on information in https://www.metrolinkro.ie/ ii) Should the tunnel deviate 5m upwards, it will likely formed in the gravels. Tunnelling in gravel strata increases the risk of greater settlements in the building when compared to tunnelling in rock. Tunnelling in the gravels likely results in greater damage to the building. We ask TII to comment on the proposed tunnel level on relation to the rock and gravel strata.	The design includes for a limit of deviation which is required to allow for unforeseen obstructions and construction tolerances which may necessitate a change to the alignment. In the highly unlikely event that this were to occur, any resulting environmental impacts will comply with the limits set by the enforceable Railway Order. TII has carried out a comprehensive set of ground investigations in accordance with relevant guidelines and best practice. It has a high confidence that MetroLink can be constructed along the proposed alignment without requiring vertical or horizontal adjustment. However, in order to guard against rare and undetectable subterranean conditions that might interfere with construction, the Railway Order provides for limits of deviation (as have other railway authorisations since at least the 1840s). The impacts of potential changes within the Limits of Deviation are considered in the Wider Effects Report (Appendix A5.19).

Submission No.	317
Organisation Name or Name of Submitter	Wynn's Hotel

Item No.	Section Ref.	Page No.	Observation Statement	TII Response
RE: SUBMISS	SION ON THE M	IETROLINK	ON BEHALF OF WYNN'S HOTEL, 35-39 ABBEY STREET LOWER, DUBLIN 1, D01 C9)F8
28	APPENDIX 2: Technical Observations (Query K)	14	k) TII to confirm the calculated loads used in the tunnel design from the existing building at Wynn's Hotel Dublin?	TII confirm that the tunnel is to be designed to cater for all existing buildings above the tunnel.
29	APPENDIX 2: Technical Observations (Query L)		l) The hotel structure has been designed for a number of additional floors and the client intends to extend the height of the building in the future accordingly. Planning Permission for these works was obtained in 2018, Planning Reference 3131/18. TII to confirm that the loadings for the additional floors will be included in design of the tunnel.	Please refer to response item number (3) above.
30	APPENDIX 2: Technical Observations (Query M)	15	m. TII will need to provide full details of the constraints the tunnel will impose on the future development potential/value of the site. This will need to set out the engagement process which the client/site owner will need to undertake for the preparation of any future planning applications. In responding to this item, we ask that TII to consider the following along with any other items they consider relevant: i) As outlined above Planning Permission has been granted for additional floors, Planning Reference 3131/18. We note our client's intention to proceed with these works. ii) TII to confirm if the Luas located outside the front of the building impacts on the design of the tunnel at this location?	MetroLink will be a catalyst for and provide opportunity for future development and regeneration. While the MetroLink Railway Order does not include for future neighbouring or overhead development, the tunnels and stations are designed to support appropriate future imposed loads. I'll will be required to make submissions in relation to planning applications for proposed future developments on or adjacent to MetroLink and there will necessarily be some engineering constraints (such as permissible loadings) required. However MetroLink is committed to engaging with known development proposals and new development proposals as they emerge with the intent of facilitating such developments as they emerge to the maximum extent consistent with the safe operation of the proposed Project. Again in common with other existing rail and tunnel projects, following grant of the Railway Order and development of detailed design, I'll will produce "Guidance Note for Developers" that will be the subject of bye-laws following the grant of Railway Order and which is designed to facilitate future adjacent or over-site development while protecting the integrity and safety of the MetroLink works and operations. Therefore at this stage I'll is dealing with known development proposals on a case by case basis, I'll will work with parties in the future to assist with the wider development of sites over and above stations and tunnels. In this context I'll has successfully engaged with a number of developers over the last two years to accommodate development over and in proximity to the alignment and there have been no material restrictions on development subject to the implementation of agreed design and mitigation measures and it is not anticipated that MetroLink will have a material impact on the development potential of sites above and in proximity to the alignment in future. 1. With regard to point i) please refer to response item number (3) above.

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Item No.	Section Ref.	Page No.	Observation Statement	TII Response
RE: SUBMISS	SION ON THE IV	IETROLINK	ON BEHALF OF WYNN'S HOTEL, 35-39 ABBEY STREET LOWER, DUBLIN 1, D01 C9	F8
31	APPENDIX 2: Technical Observations (Query N)	15	n. Written confirmation from TII of any anticipated negative impacts on the hotel building and its occupants at Wynn's Hotel Dublin during the construction phase? In responding to this item, we ask that TII to consider the following along with any other items they consider relevant: i) PUNCH request TII to issue details and timelines of any negative impacts for WHD on the normal execution of their business operations during construction phase of the works.	TII confirm that there will be a temporary but very high adverse (significant) impact for groundborne noise at 35-39 Abbey Street during TBM works. Where eligibility is established, there will be an opportunity to apply the TII Airborne Noise and Groundborne Noise Mitigation Policy (EIAR Appendix A14.6). Additionally, advance public consultation and stakeholder engagement will be carried out and TII will continue to communicate timelines and construction details as the project progresses. TII are happy to discuss the application of the TII Airborne Noise and Groundborne Noise Mitigation Policy further. The impact on your commercial activity due to Groundborne Noise and Vibration as a result of tunnelling activities following mitigation will be negative, slight and short term to medium term (Table 11.70, Chapter 11 Population and Land Use). Currently, a detailed timeline for TBM passage is not available as the appointed contractor(s) will prepare the programme for the TBM once they have been appointed. TII will continue to communicate with landowners as the project progresses. Plans for communications regarding tunnel boring are detailed in section 3.3.1 of Appendix A5.1 Outline CEMP. The EIAR fully details all impacts on the hotel and its operation during construction phase of the MetroLink. Please refer to, inter alia, EIAR Appendix 5.17 for Ground movement impacts, EIAR Chapter 11 Population and Land Use, EIAR Chapter 13 Airbourne Noise and Vibration and Chapter 14 for Groundborne Noise and Vibration. For timelines of impacts please refer to response item number (18) above.
32	APPENDIX 2: Technical Observations (Query O)	15	 o. Written confirmation from TII of any anticipated negative impacts on the building and its occupants at Wynn's Hotel Dublin during the operational phase? In responding to this item, we ask that TII to consider the following along with any other items they consider relevant: i) PUNCH request TII to issue details and timelines of any negative impacts for WHD on the normal execution of their business operations during the operational phase of the works. 	No significant noise and vibration effects are predicted during the operational phase at 35-39 Abbey Street (Section 14.5.2, Chapter 14 Groundborne Noise and Vibration). Business operations of Wynn's Hotel Dublin will not be negatively affected during the operational phase (Section 11.7.2, Chapter 11 Population and Land Use). The EIAR fully details all impacts on the hotel and its operation during operational phase of the MetroLink. Please refer to, inter alia, EIAR Chapter 11 Population and Land Use, EIAR Chapter 13 Airbourne Noise and Vibration and Chapter 14 for Groundborne Noise and Vibration. With regard to timelines, the operational impacts will commence once operations commence, which is anticipated to open 10 years after the granting of the Railway Order. Once operational, demand will vary through the day and week, with different service levels provided to meet varying demand. Services will operate between 05:30 and 00:30 every day. Service frequency is reduced on weekends and public holidays to reflect lower demand during these periods.
33	APPENDIX 2: Technical Observations (Query P)	16	p. Confirmation that that the structural integrity of the building at Wynn's Hotel Dublin will not be affected in any way by the proposed works during the construction and operational phase. In responding to this item, we ask that TII to consider the following along with any other items they consider relevant: i) In the Damage Assessment Report of Building document on https://www.metrolinkro.ie/, it places the Wynn's Hotel Dublin (B-241) in Damage Category B. We note that the building is a protected structure and because of this, a Phase 3 assessment will be undertaken. This Phase 3 assessment, as we understand it, will be a detailed assessment of the Ground Movement Response for the hotel specifically. We request timelines of when this will be carried out by TII and specific details of the process? ii) WHD will not accept building damage and the integrity of the building cannot be compromised in any way. The superstructure and facades cannot be damaged. Should remediation be required to the superstructure, the work practices and daily operations of the company will be hugely affected.	As previously outlined in response item numbers (19) and (23) above, TII confirm that structural damage will not occur. As evidenced in Appendix 5.17 impacts are assessed as "Slight". Response to point i): Slight damage (Damage Category 2) is predicted at the Wynn's Hotel building following the Refined Phase 2a Damage Assessment. The building is designated as special building which will move forward to further assessment at the detailed design phase. The Phase 3 assessment will take account of final design and construction methodology details. Further detail on the Phase 3 Assessment can be found in EIAR Appendix A 5.17, Building Damage Report. Response to point ii): TII commit to undertaking the condition surveys pre and post construction and will remediate damage caused and ensure that functionality is not compromised. (Appendix A5.1 Outline CEMP, section 6.2).

Organisation Name or Name of Submitter Wynn's Hotel	Submission No.	317
	Organisation Name or Name of Submitter	Wynn's Hotel

Item No.	Section Ref.	Page No.	Observation Statement	TII Response
RE: SURMISS			ON BEHALF OF WYNN'S HOTEL, 35-39 ABBEY STREET LOWER, DUBLIN 1, D01 C9	
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34	APPENDIX 2: Conclusions (i)		i) The project is of both Local and National significance and accordingly warrants an Oral Hearing. Accordingly, our client wishes to request that an Oral Hearing is held in respect of the Railway Order application, so that the points raised within this submission can be further clarified and addressed in detail at the hearing for the benefit of all parties.	Please refer to response item number (2) above.
35	APPENDIX 2: Conclusions (ii)		ii) We wish to develop and resolve each of the observations made in this submission in advance of any future Oral Hearing and request immediate engagement with TII accordingly. We request that ABP condition same in any grant of the Railway Order.	TII note WHD request for early engagement with TII and are happy to engage further regarding your observations and concerns.
36	APPENDIX 2: Conclusions (iii)	16&17	iii) WHD primary concern is the effect the proposed works will have on the business operations of its company. The hotel has operated successfully for over 170 years and its operations cannot be negatively impacted by the proposed Metrolink works, either in the construction or the operational phase. We would request immediate engagement with TII to allay these concerns.	TII note WHD request for early engagement with TII and are happy to engage further regarding your concerns regarding potential impacts of MetroLink Project on buildings structure and business operations.
37	APPENDIX 2: Conclusions (iv)	17	iv) There are serious concerns based on information received that the building will be damaged by the proposed Metrolink works. The building is a protected structure and its structural integrity cannot be compromised by any works. We would request immediate engagement with TII to allay these concerns.	TII appreciates the submission. We have reviewed the submission and provided responses for the observations/ concerns raised in detail above. TII are happy to engage further with WHD regarding the observations and concerns raised in this submission and can confirm that structural integrity will not be compromised by MetroLink.