

HSE National Drug Treatment Centre
HSE Estates Office
Bridge House
Cherry Orchard Hospital
Ballyfermot
Dublin 10

Date: 15 December 2022

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

Dear Sir / Madam,

An Bord Pleanála has received your recent submission and oral hearing request in relation to the above-mentioned proposed Railway Order and will take it into consideration in its determination of the matter.

The Board will revert to you in due course with regard to the matter.

The Board has absolute discretion to hold an oral hearing in respect of any application before it, in accordance with section 218 of the Planning and Development Act 2000, as amended. Accordingly, the Board will inform you on this matter in due course.

Please be advised that copies of all submissions/observations received in relation to the application will be made available for public inspection at the offices of the relevant County Council(s) and at the offices of An Bord Pleanála when they have been processed by the Board.

More detailed information in relation to strategic infrastructure development can be viewed on the Board's website: www.pleanala.ie.

If you have any queries in the meantime, please contact the undersigned. Please quote the above mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,



Niamh Thornton
Executive Officer
Direct Line: 01-8737247

RA05 (No Receipt to Issue)

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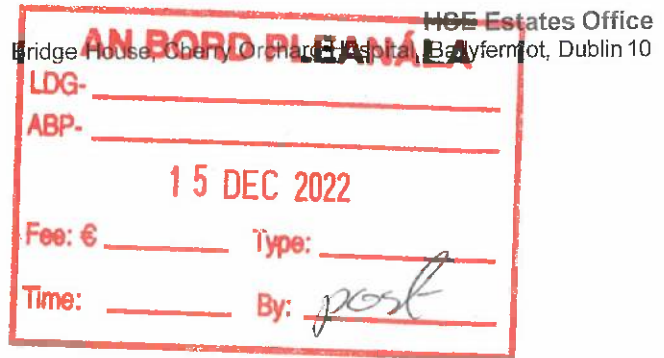
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An Bord Pleanála
64 Marlborough Street
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08th December 2022

RE: Railway (Metrolink-Estuary to Charlemount via Dublin Airport) Order 2022

Dear Sir/Madam,

We write in connection with the recent MetroLink Railway Order submitted to An Bord Pleanála ("ABP") on the 30th September 2022. HSE National Drug Treatment Centre ("NDTC") at 30/31 Pearse Street received correspondence dated 20th September'22 from Transport Infrastructure Ireland (TII) outlining that they intend to submit an application to An Bord Pleanála under section 37(1) of the Transport (Railway Infrastructure) Act 2001 for the Railway (Metrolink – Estuary to Charlemount via Dublin Airport) Order [2022].

TII also note in this correspondence that HSE may be an owner, or occupier of the land, or have rights over or an interest in the land, referred in the documents which will accompany the Railway Order application.

30/31 Pearse St. is a HSE property that accommodates the National Drug Treatment Centre (NDTC) and the NDTC Laboratory. Whilst the HSE are supportive of vital infrastructure such as MetroLink we also remain concerned about the potential risks and impacts on our site and service delivery at this location, both during the construction phase and post completion of the MetroLink project.

We understand that the Bord will consider submissions in relation to the likely impacts of the proposed development. HSE have retained O'Connor Sutton Cronin & Associates Ltd (OCSC) to carry out an initial review of the MetroLink and its interfacing with our facility at 30/31 Pearse St.

To this end, we attach with this submission a Technical Note from OCSC (dated 21st Nov'22) summarising their findings within the short time frame available for review and outlining the concerns of the HSE regarding the potential impacts on the building and services provided.

The HSE requests the Bord to have regard for the general concerns as set-out within the above referenced Technical Note including seeking the Requests for Further Information (RFI's), together with directing the Applicant to agree and incorporate satisfactory mitigation, amend designs and construction proposals accordingly for the MetroLink.

We further ask the Bord to include and impose the (non-exhaustive list) recommended conditions also set-out in this Note.



Oifig Eastáit FSS
Teach an Droichid, Ospidéal Ghort na Silíní, Baile Formaid, Baile Átha Cliath 10

HSE Estates Office
Bridge House, Cherry Orchard Hospital, Ballyfermot, Dublin 10

The HSE wish to advise the Bord that together with our Advisors, we are available for further discussions and engagement with the Applicant and their representatives to discuss the potential concerns and impacts as referred above. We also understand at the Bord's discretion an Oral Hearing may be conducted into the application for this Railway Order and confirm the HSE request the opportunity to attend and elaborate on their initial concerns.

As the owner of the property at 30/31 Pearse Street we have not enclosed the 50 euro fee on the understanding that it is not payable by certain prescribed bodies or by persons whose lands may be acquired under the draft Railway Order.

We trust the above is satisfactory and look forward to further positive engagement on this matter

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'Austin Lyons'.

Austin Lyons
A/Chief Assistant Technical Services Officer
HSE Capital and Estates

Encl:
OCSC Technical Note

21st Nov. 2022

Rev Ref:

PROJECT NO. H670



Technical Note Re: MetroLink/HSE 30/31Pearse St.

1. INTRODUCTION

On the 30th September 2022, the National Roads Authority ("**NRA**") operating as Transport Infrastructure Ireland ("**TII**") applied to An Bord Pleanála ("**ABP**") for a Railway Order to enable the construction, operation, maintenance and improvement of a railway designed as a metro, mostly underground for approx. 18.8 km together with 16 stations from Swords in north county Dublin to Charlemont in the south of Dublin City Centre. ABP is currently noting on its website that the case is due to be decided by 10th April 2023.

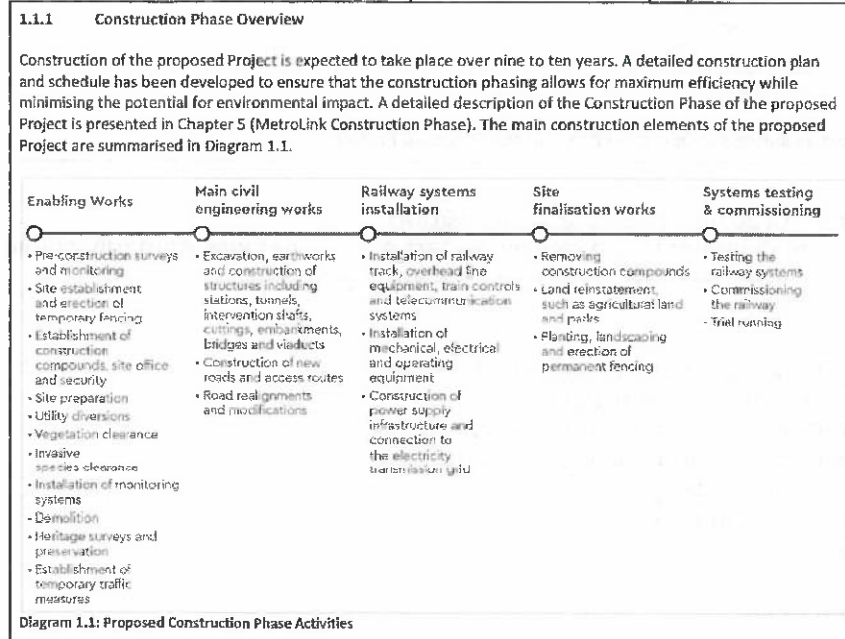
The proposed alignment of the **MetroLink** tunnel extends under part of 30/31 Pearse St. 30/31 Pearse Street, Dublin 1 located on the Northern side of and approx. mid way along Pearse St. is in the ownership (understood to be Freehold) by the Health Services Executive ("**HSE**") and currently accommodates the National Drug Treatment Centre ("**NDTC**").

O'Connor Sutton Cronin & Associates Ltd ("**OCSC**") are retained by the HSE to advise and assist in the understanding of the potential for impacts from the MetroLink Project that might be considered to arise to this Building and its Occupants.

2. METROLINK PROJECT

2.1 Description

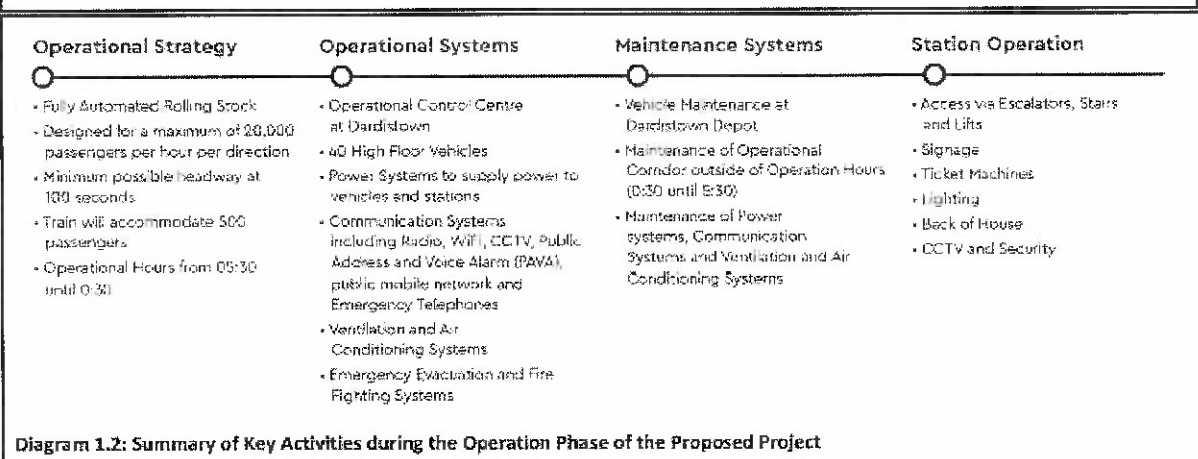
An extract from the Planning Report describes the project as follows:



1.1.2 Operational Phase Overview

The Operational Phase of the proposed Project will be based on the following operational elements:

- 16 new stations including interchange opportunities with:
 - Dublin Airport at the new underground station of the same name;
 - Interchange with the Western Commuter and the South Western Commuter Lines at Glasnevin;
 - DART at Tara Station;
 - Luas Green Line at O'Connell Street Station, St Stephen's Green and Charlemont Station;
 - P&R Facility at Estuary Station; and
 - Existing Dublin Bus network and future proposed bus services (BusConnects).
- Dardistown Station will be for use by staff only arriving and leaving by train, until development in the area merits the opening of the station as a public station;
- Operating 19 hours per day, 365 days a year;
- In the opening year operations, there will be 20 trains operating per hour at a frequency of three minutes between trains;
- The proposed Project is designed for a maximum of 20,000 passengers per hour per direction (pphpd) in the peak hour;
- 64m long trains running up to every 100 seconds at peak demand;
- Approximately 25 minutes journey time between Swords and the City Centre and 20 minutes journey time from Dublin City Centre to Dublin Airport; and
- Fully automated high floor rolling stock.



2.2 Some Available Relevant Information & Documentation

The following information and documentation review as part of this brief was primarily obtained from the dedicated Railway Order website, available at www.metrolinkro.ie.

- Draft Railway Order 2022
- EIAR Chapters
 - Chapter 04 Description of the MetroLink Project
 - Chapter 05 MetroLink Construction
 - Chapter 06 Operations and Maintenance
 - Chapter 14 Ground-borne Noise and Vibration
 - Chapter 19 Hydrogeology
 - Chapter 20 Soils and Geology
 - Chapter 21 Land Take
- EIAR Appendices
 - A5.1 Outline CEMP

- A5.12 Piling
- A5.13 Tunnelling
- A5.17 Building Damage Report
- Railway Order Plans\Drawings
 - Alignment drawings (Selection Relevant to Pearse St Area)
 - Property drawings (Selection Relevant to 30/31 Pearse St Area)
- Planning Report

NOTE: Some of the above noted documents are not material for our Brief/Scope at this time and it is to be noted that a Detailed and Exhaustive Review was NOT undertaken for this scope, rather an overview to formulate an initial understanding of the potential for impacts on the building and if MetroLink has had regard to the building Occupancies.

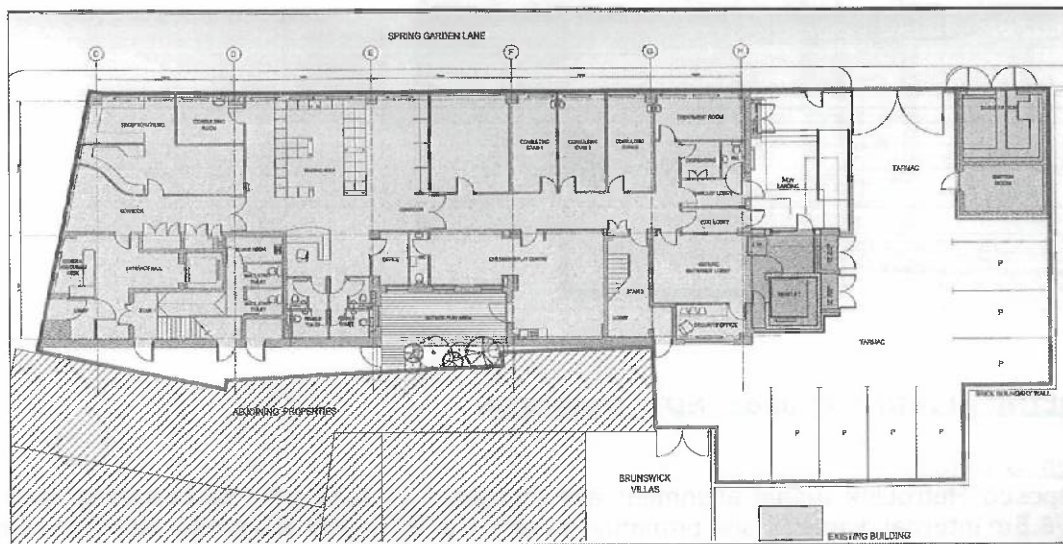
3. 30/31 PEARSE STREET—NATIONAL DRUG TREATMENT CENTRE (NDTC)

3.1 Building Description

30/31 Pearse St. which is currently occupied by the National Drug Treatment Centre (NDTC) is thought to have been built around 1970's. The building oriented primarily in a North/South direction is a 5 Storey brick clad concrete frame building approx. 40m x 15m (fronting onto Pearse St) as indicated per below extract plan. Of particular note are;

- a) The National Drug Treatment Centre Laboratory ("**NDTC Lab**" see 3.2 below) and;
- b) A new lift enclosure and glazed link, thought to have been built late 2000's to early 2010's, located in the North/East corner and directly above the proposed MetroLink tunnel alignment (see below blue shaded)

We understand the ESB Sub-station although feeds the NDTC is not in ownership of HSE



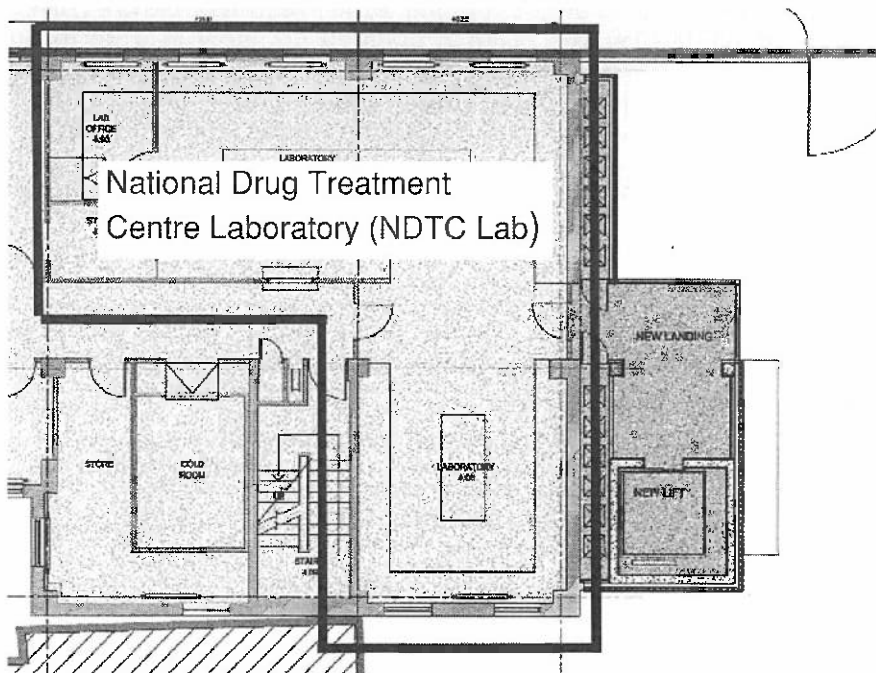
3.2 Building Occupancy—HSE National Drug Treatment Centre Laboratory (NDTC Lab)

The HSE National Drug Treatment Centre Laboratory (NDTC Lab) is located at 3rd Floor level occupying the northern third of the building as indicated in the extract below.

This laboratory is the largest specialist provider of drugs screening for drug treatment services providing an essential nationwide service to the HSE Addiction Services, hospitals, General

Practitioners, voluntary organizations, Department of Education (juvenile detention centres), the Probation Service, the Courts Service, the Medical Council, an Bord Altranais and various occupational health departments. The HSE NDTCLaboratory contains much sensitive equipment including Microscopes and High Performance Mass Spectrometers and is accredited by the Irish National Accreditation Board (INAB) to undertake testing in conformity with ISO/IEC 17025:2017 as detailed in Figure 9 above and in the Schedule bearing the Registration number 169T which is available at: <http://www.inab.ie/Directory-of-Accredited-Bodies/Laboratory-Accreditation/Testing/HSE-National-Drug-Treatment-Centre.html>

The Laboratory also performs an essential trend monitoring role including the first ever back of house drug testing service in Ireland at Electric Picnic Festival 2022 membership and the first Irish Syringe Analysis Project as part of the European Escape Syringe Testing Project 202. The laboratory contributes to Early Warning Emerging Trends Committee and the Working Group set up by HSE under action 1.3.11 under National Drug Strategy 2017-2025.

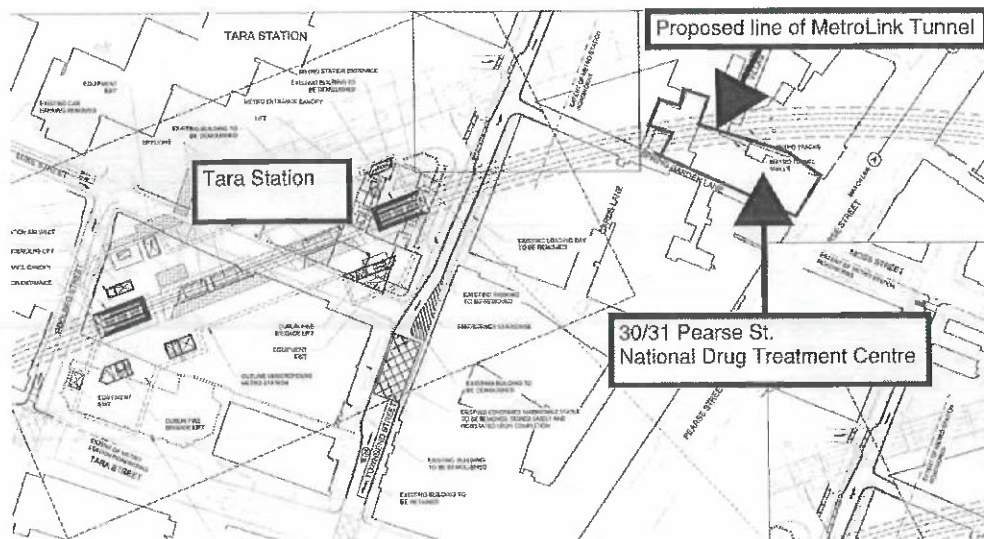


4. **METROLINK ALIGNMENT under NDTCL BUILDING**

4.1 **Alignment & Details**

The proposed MetroLink tunnel alignment will consist of a single bore bi-directional tunnel, approx. 8.5m internal diameter and primarily constructed by means of a tunnel boring machine (TBM).

Reviewing the extract below from the proposed MetroLink Alignment drawings, it can be seen that the proposed alignment extends diagonally across the Northeast corner of 30/31 Pearse St, but most particularly under the new lift shaft enclosure as referenced earlier under 3.1 above. Tara Station is also in relatively close proximity to the rear of the building.



The depth of the tunnel where it passes underneath 30/31 Pearse St is approx:

- c.24m below existing ground/road to proposed track level
- c.15-16m below existing ground/road to crown of tunnel

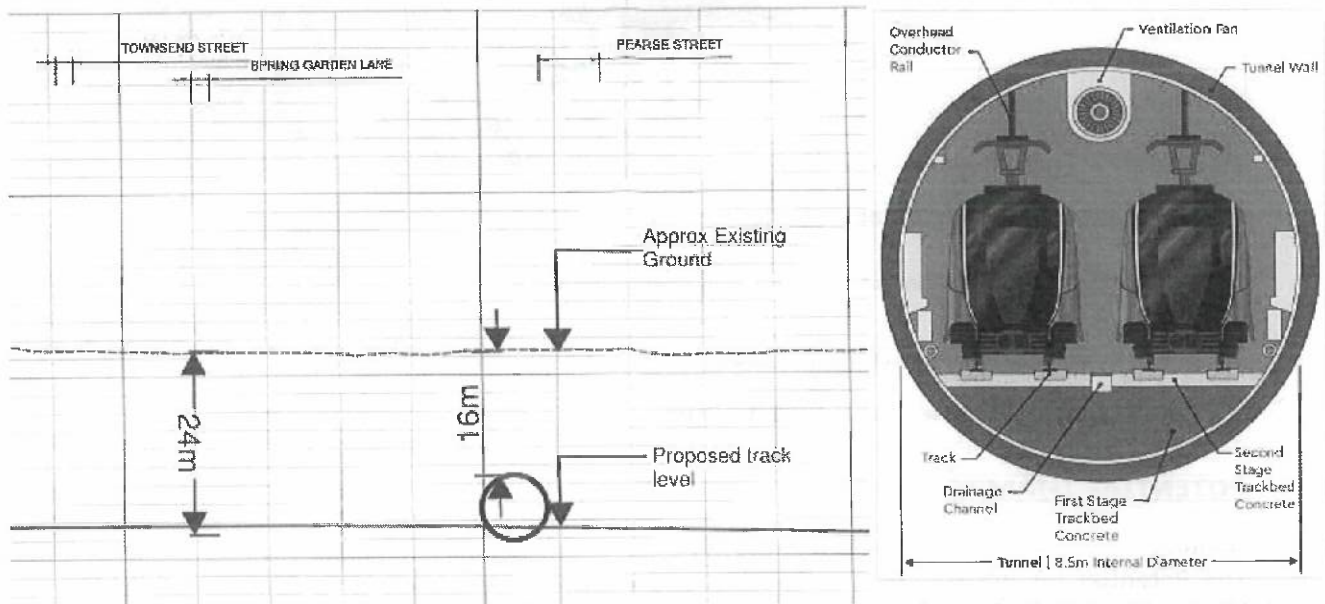
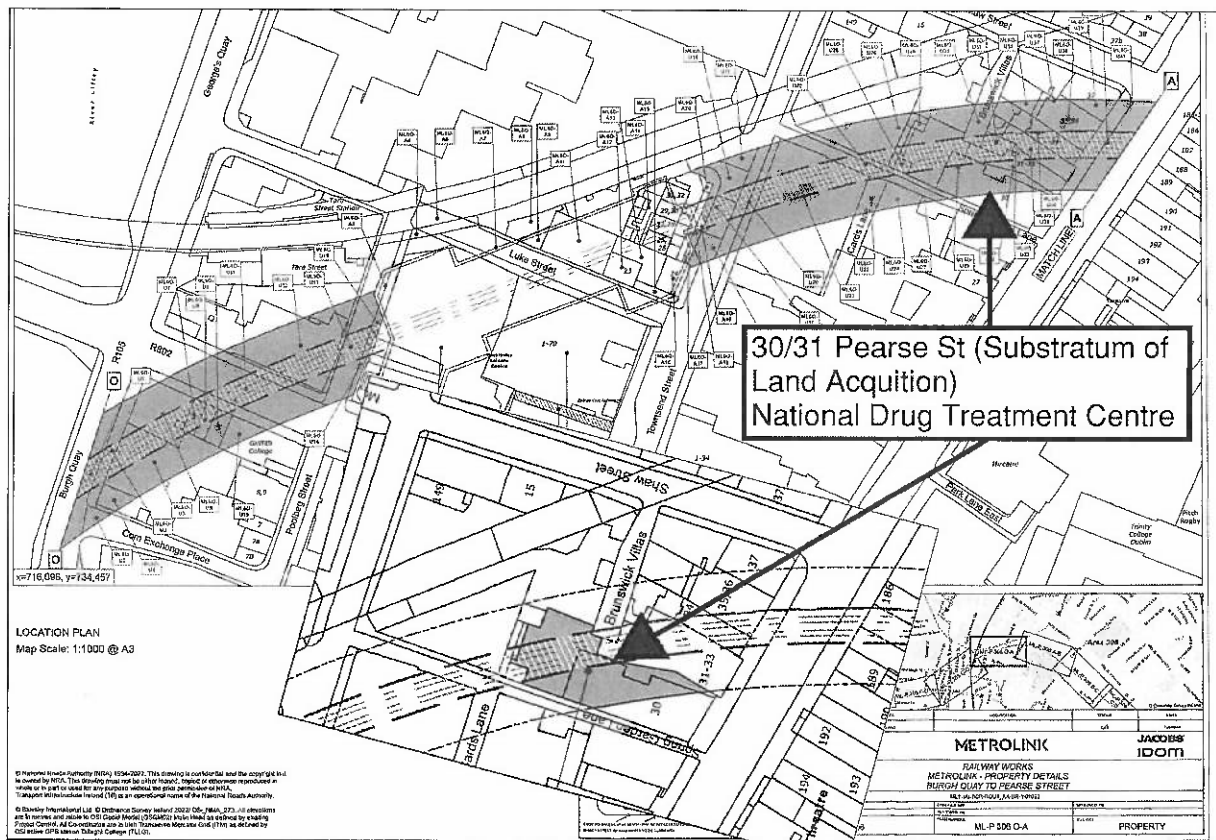


Diagram 4.19: Indicative Bored Tunnel Configuration

4.2 Property Acquisition

The Railway Order, if granted, will allow the Applicant, TII to proceed with the construction & operation of MetroLink. It also includes powers for TII to acquire compulsorily land or rights in, under and over land or any Substratum of land specified in the order. This will include Substratum lands at 30/31 Pearse St. and TII have forwarded the below relevant extracted drawings indicating the extent of the lands or rights affected as part of the Substratum acquisition relating to 30/31 Pearse St. with a unique land take reference number "**ML60-U29**". It can be seen that the substratum acquisition includes land both within and outside the building footprint.



In the Railway Order, Substratum is defined as;

“substratum of land” means any subsoil or anything beneath the surface of land required—

- i. for the purposes of the authorised works, or
- ii. for any other purposes connected with this Order;

5. **POTENTIAL IMPACTS**

5.1 General

The Potential for impacts on the Building and its Occupancies are likely to arise under the following significant phases of the MetroLink Project. Whilst it appears that there are no Enabling Works immediately surrounding 30/31 Pearse St., there are significant Enabling works associated with the construction of Tara Station in close proximity.

- Enabling
- Construction
- Operation

5.2 Impacts During Construction

5.2.1 **Settlement**

The potential for building settlement to occur during construction will predominantly arise from the tunnel construction (TBM or Blasting) and de-watering proposals.

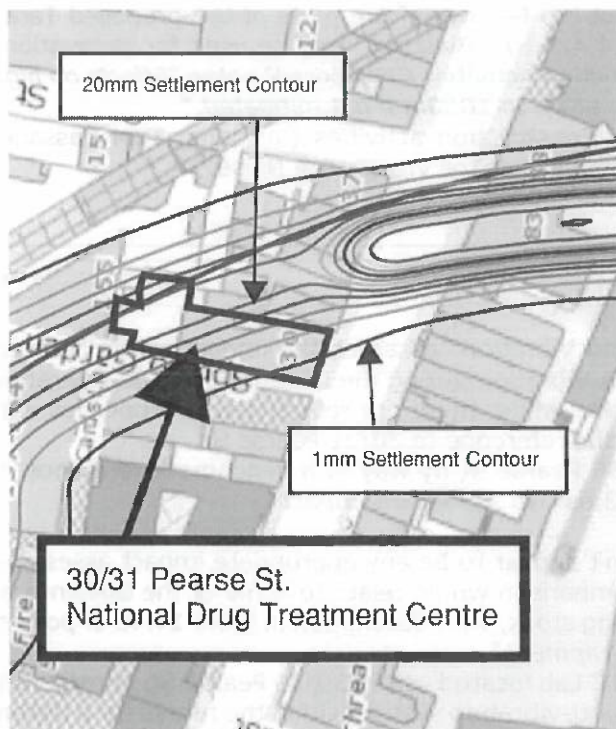
As part of the Railway Order application, the Applicant has prepared a Building Damage Assessment (Appendix A5.17) which has set-out the process for Assessment of Settlement. The methodology used to predict ground movements and assess building damage has been

adopted using the well-recognized worldwide Industry Standard three phase ground movement impact assessment, noted to have been undertaken for tunnels and underground projects including the Dublin Port Tunnel, Channel Tunnel Rail Project, Crossrail and High Speed 2 (HS2) with other worldwide examples.

Section 4 of A5.17 further describes and assesses this approach. In summary;

- **Phase 1:** Generic assessment of "Greenfield" settlement contours using generic ground parameters, screening of sensitive receptors including building, structures and services
- **Phase 2:** Assessment of potential damage to receptors identified from Phase 1 based on standard assumptions and classified into damage categories 0-5, receptors placed in damage category of 3 or greater carried to Phase 3; and
- **Phase 3:** Each receptor from Phase 2 considered individually to determine its behavior using detailed information, refined ground characteristics + modelling together with sophisticated finite element assessment methods. The Applicant notes that this assessment is likely to be carried out by the D&B Contractor.

A marked-up extract (extract Fig 20.16 below) of the Phase 1 assessed "Greenfield" settlement contours relating to 30/31 Pearse St. is set-out below and from this assessment, it can be seen that the MetroLink has the potential to generate settlements of between 1mm to 20mm(plus) across the building footprint. More particularly, the assessment predicts a potential differential settlement varying between the 10mm-20mm contours across the area of the new liftshaft thus rendering vulnerable to out-of-plumbness. Such differential settlements have the potential to cause damage across the building and will thus necessitate the more detailed Phase 3 building damage impact assessment.



Extract Fig 20.16 Settlement Contours (OCSC Mark-Up)

Section 4.7 "Settlement Effects Due to De-Watering" (Appendix A5.17) focuses primarily on Station Box construction and indicates that *"No external dewatering (outside of the site boundaries) will be permitted during the construction of the station boxes, that increases the impact due to settlement on others, beyond the natural ground water fluctuations. Any*

settlement due to the short-term lowering of the water table outside the station box will therefore be constrained to within the site boundaries." This needs to be clarified in the context of Tara Station construction which is in close proximity to 30/31 Pearse St.

The Applicant does not appear to have given any specific consideration to 30/31 Pearse St. building which according to the Phase 1 "Greenfield" assessment seems to have the potential to cause damage which might affect the building, levels of service and its Occupants. As per section 4.1 of Appendix A5.17, 30/31 Pearse St. should be classified as a Type D "Sensitive" building with a Phase 3 damage assessment undertaken.

5.2.2 **Noise & Vibration**

EIAR Chapter 14 "Ground-borne Noise and Vibration" assesses the impact of the MetroLink Project arising from Ground-borne Noise & Vibration during the Construction and Operational Phase. As noted earlier for other aspects and whilst there are references to properties either side, there does not appear to be any specific reference to 30/31 Pearse St.

From a **Noise** perspective and using No. 35 Pearse St by way of a benchmark reference (Noise only), the assessed impact is described in table 14.28 as "*Noticeable to all and disturbing to some over a number of days*" This is a matter of some concern to the HSE and the NDTC occupancies.

From a **Vibration** perspective, we say, 30/31 Pearse St. cannot be assessed using the same threshold criteria as 35 Pearse St. Moreover, due to the very sensitive Occupancies, the NDTC Building & Laboratory falls within and should be considered and assessed as an "Especially Sensitive Receptor" similar to those defined under 14.3.1 with more onerous appropriate criteria.

Similarly, the rear of 30/31 Pearse St is not too far away from parts of the proposed Tara St station for which as described in section 14.4.1.10, "Blasting" may be used for excavation at underground stations. Table 14.14 "Construction Activities Considered" notes "*Effects on highly sensitive laboratory equipment could occur at up to 1000m if not mitigated.*"

The Applicant should assess the effect of Construction activities (including TBM passage & "Blasting") on the NDTC building and its occupancies for Vibration & Noise.

5.3 Impacts During Operation

5.3.1 **Noise & Vibration**

EIAR Chapter 14 "Ground-borne Noise and Vibration" assesses the impact of the MetroLink Project arising from Ground-borne Noise & Vibration during the Construction and Operational Phase. As noted earlier for other aspects and whilst there are references to properties either side, there does not appear to be any specific reference to 30/31 Pearse St.

From a **Noise** perspective and using No. 35 Pearse St by way of a benchmark reference, the assessed impact is described in table 14.43 as "*No significant impact*".

From a **Vibration** perspective, there doesn't appear to be any appropriate impact assessment for 30/31 Pearse St. The closest similar comparison would relate to some of the buildings and occupancies assessed within the TCD building stock, with description in table 14.46 of potential impact as "*Potential impact on sensitive equipment*".

Due to the very sensitive nature of the NDTC Lab located within 30/31 Pearse St. consideration shall be given to installing a "floating slab" anti-vibration system within the tunnel for a distance either side under this building to reduce and mitigate the impacts of vibrations on the Occupancies & Equipment—All as described in section 14.5.2 "Operational Phase" & Table 14.47 for sensitive receptors and similar to that proposed for buildings in close proximity ie. TCD.

6. MONITORING & LIAISON

6.1 General

Apart from reference under Property Acquisition & Ownership, we have not encountered any other specific reference to this property at 30/31 Pearse Street in the more Technical Sections of the Application which might suggest that the Applicant is not aware or familiar with the sensitivity of the building and most particularly, some of the activities undertaken within, namely the NDTC Lab.

6.2 Monitoring of Building & Equipment

It is recommended that settlement, noise and vibration monitoring equipment be installed at and within 30/31 Pearse Street building to;

- i. Assess current background levels to inform appropriate "Trigger" levels
- ii. Monitor during the Construction Works
- iii. Monitor during Operation

Appropriate "Trigger" levels on a Traffic Light system basis should be established based on background levels together with Best Practice and Industry Standards referenced and predicted within the EIAR.

We would suggest (as non-exhaustive) the following instrumentation as a Minimum:

- Settlement monitoring points, Movement Targets & Tape Extensometer points
- Crack Gauges, Electrolevels & Tiltmeters
- Vibration Monitoring Sensors (Internal & External)
- Noise Monitoring

The instrumentation should be logged in "real-time" basis and if/when trigger levels are exceeded, ALL Stakeholders are contacted and pre-agreed mitigation proposals implemented.

6.3 Liaison—24 Hour Emergency Contact Services

A 24-Hour Emergency Contact should be available for relevant Stakeholders (building Owners, Occupiers & Professionals) where cause for concern arises.

7. PROPOSED RFI's & SUGGESTED CONDITIONS

7.1 General

As referred earlier and whilst it is noted that other buildings and properties along Pearse St. (some being further away from the proposed tunnel alignment than the NDTC) are referenced and assessed for Impacts throughout the Application, the HSE as owners of 30/31 Pearse St does not appear to have been consulted to an appropriate level of detail for a building subject to such potential for impact, nor indeed does the building appear to have been given due consideration. As a consequence, the HSE and its Advisers has had little time to consider the possible implications and to review these in advance with the Applicant. We suggest & recommend that particular consideration is focused on this building due to the Sensitivities and Occupancies and propose the following RFI's & Conditions are imposed on the Applicant.

7.2 Proposed Requests for Further Information (RFI's)

We understand that an Oral hearing is likely to be conducted into this Application. We would propose the following non-exhaustive series of RFI's are forwarded to the Applicant for immediately addressing with responses returned well in advance of any Oral hearing.

RFI 1

Apart from proximity to the proposed Tara Street Station, it appears that no Enabling works or ground level works are proposed in the immediate vicinity of 30/31 Pearse St. building. The Applicant should confirm that this is the case.

RFI 2

The Applicant should prepare a more detailed Phase 3 Building Subsidence & Damage Assessment specific for this building at 30/31 Pearse St, having specific regard for the more sensitive areas of the building.

RFI 3

Section 4.7 "Settlement Effects Due to De-Watering" (Appendix A5.17) focuses primarily on Station Box construction and indicates that *"No external dewatering (outside of the site boundaries) will be permitted during the construction of the station boxes, that increases the impact due to settlement on others, beyond the natural ground water fluctuations. Any settlement due to the short-term lowering of the water table outside the station box will therefore be constrained to within the site boundaries."* This needs to be clarified in the context of Tara Station construction in close proximity to 30/31 Pearse St.

RFI 4

The Applicant should carry-out and prepare a detailed Vibration Assessment specific for this building at 30/31 Pearse St, for both the Construction & Operation Phases, having specific regard for the more sensitive activities undertaken within this building together with inclusion of appropriate mitigation measures.

RFI 5

Section 14.2.1.3 of Chapter 14 references "Especially Sensitive Receptors-Construction and Operation" and describes such receptors as *"Receptors with particularly sensitive to vibration include laboratories containing sensitive equipment such as electron microscopes, buildings containing fragile artefacts"*. The NDTC Lab located within the 3rd floor would fall within this categorization and therefore should be assessed accordingly. 30/31 Pearse St does not appear to have been included by the Applicant as falling within this category and should be assessed accordingly.

RFI 6

Section 14.4.1.10 of Chapter 14 references "Blasting" to be used for excavation at underground station and Table 14.34 assess impact of same at Dublin Fire Brigade HQ as "Significant" describing as *"Blasting would be noticeable to people within the building and just above threshold for structures"*. The rear of 30/31 Pearse St is not too much further away from parts of the proposed Tara St Station. Table 14.14 "Construction Activities Considered" notes *"Effects on highly sensitive laboratory equipment could occur at up to 1000m if not mitigated."* The Applicant should assess the effect of Blasting on the NDTC building and its occupancies for Vibration & Noise and present the findings with appropriate mitigation measures (if necessary) well in advance of an Oral hearing.

RFI 7

The HSE request confirmation to be kept informed throughout the remainder of the An Bord Pleanála process and reserve the right to seek further information on the Construction & Operation of the MetroLink. In addition, the HSE requests that if an Oral hearing is to be conducted into the MetroLink project that they will be invited to attend and reserve the right to make a further submission at this Oral Hearing stage.

7.3 Suggested Conditions to be Applied to Application

Having regard to the potential for Impacts on 30/31 Pearse Street and the very sensitive nature of its Occupants, namely, the National Drug Treatment Centre Laboratory, we recommend the following conditions be applied to the Application unless clearly demonstrated that no negative impacts will arise from the Construction and or Operation of the MetroLink.

Condition 1 Building Settlement

The maximum allowable differential settlement under the NDTC Building at 30/31 Pearse St. shall be limited to avoid any Structural Damage or Interruption to service delivery.

The Applicant does not appear to have given any specific consideration to 30/31 Pearse St. building which according to the Phase 1 Generic Assessment Based on "Greenfield" Settlement Contours seems to have the potential to cause damage which might affect the building, levels of service and its Occupants. As per section 4.1 of Appendix A5.17, 30/31 Pearse St. shall be classified as a Type D "Sensitive" building with a more detailed Phase 3 Building Subsidence & Damage Assessment undertaken.

Appropriate mitigating & remediation shall be implemented where damage of a "Cosmetic" nature might arise.

Condition 2 Construction Methods in Rock

The method of construction in rock shall be appropriate to avoid damage and noise impacts to the NDTC building and its Occupants. No Blasting shall be used until demonstrated that it will have no negative impacts on the NDTC building and its Occupancies.

Condition 3 Ground-bourne Vibrations, NDTC Lab

Due to the very sensitive nature of the NDTC Lab located within 30/31 Pearse St. this building & the NDTC Lab shall be considered as an "Especially Sensitive Receptor" and assessed accordingly for Ground-bourne vibrations both during Construction & Operation. Where necessary, appropriate Mitigation measures shall be implemented prior to the occurrence of any detrimental impacts.

Condition 4 Ground-bourne Vibrations--Operation, NDTC Lab

Due to the very sensitive nature of the NDTC Lab located within 30/31 Pearse St. the Applicant shall install a "floating slab" anti-vibration system within the tunnel under this building to reduce and mitigate the impacts of vibrations on the Occupancies—All as described in section 14.5.2 & Table 14.47 for sensitive receptors and similar to that proposed for buildings in close proximity ie. TCD.

Condition 5 Ground-bourne Vibrations, Building related

The Ground-bourne vibrations in the vicinity of 30/31 Pearse St. building shall be limited to ensure that there will be a "Low probability of adverse comment from the building Occupants" and no damage to the building.

Condition 6 Monitoring

A comprehensive suite of Monitoring Instrumentation shall be installed both on and within the building at 30/31 Pearse St. in advance of any works and shall remain in place for an agreed period of time post Operation.

Condition 7 Noise, Dust & Dirt

From a **Noise** perspective and using No. 35 Pearse St by way of a benchmark reference, the assessed impact during the passage of the TBM is described in table 14.28 as "*Noticeable to all and disturbing to some over a number of days*" This is a matter of some concern to the HSE and the NDTC occupancies and appropriate mitigation shall be incorporated.

30/31 Pearse St. building is in close proximity to the location of Tara St. station. As part of the nuisance related matters including the Minimization Plans, the Properties and Streets in the surrounding areas shall be kept clean and clear at all times.

Condition 8 Emergency Contacts

A 24-hour "manned" Emergency Contact person & facility should be made available to contact should relevant Stakeholders (building Owners, Occupiers & Professionals) become concerned

or where cause for concern arises. This facility should be operated and manned by Technically Competent Personnel capable of dealing with such matters as are likely to arise.

Condition 9 Consultation

The HSE shall be kept informed throughout the course of the project (Construction & Operation) by TII or their Agents of any identified Risks to Service Delivery (Building + Occupancies) and any proposed mitigation measures shall be agreed well in advance with the HSE or Agents acting on behalf of HSE.