Guide to Working in Sydney Trains

Transport
Sydney Trains

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1 Introduction

Welcome to Sydney Trains. We are appointed by Transport Asset Holding Entity of New South Wales (TAHE) to manage, operate and maintain the rail infrastructure, corridor and assets in the Sydney metropolitan area. Rail infrastructure in country areas is managed by Australian Rail Track Corporation (ARTC) and Country Rail Network (CRN).

This guide is to help external parties understand our requirements when planning design or construction work within or near rail infrastructure or within the rail corridor.

It outlines **processes, timeframes** and **reference documents** that may be required (dependent on the complexity and proximity to rail infrastructure) to complete your project.

This document will also help you address planning conditions as part of a Development Application (or other planning approval), safety in design, accessing the corridor to undertake investigative works or working safely around rail infrastructure and rail high voltage assets.

TfNSW projects originating from an external party, (including Infrastructure and Place Division, Precinct Renewal, Active Transport Links, unsolicited proposals, direct deals, land divestments) are included in the scope of this project.

Note

TAHE is the Government Agency that owns the rail corridor and rail assets. Sydney Trains has been appointed as TAHE's agent to manage its rail infrastructure, corridor and assets, including the operations and maintenance of these assets, in the metropolitan area, refer Image 1. In country areas, Australian Rail Track Corporation (ARTC) and Country Rail Network (CRN) manage the rail infrastructure. TAHE makes available to Sydney Trains and NSW TrainLink railway assets necessary for them to deliver rail services, and is the lessor or licensor of certain land on which light rail services are operated.

The External Interface Management (EIM) team is the work group within Sydney Trains that will coordinate and manage the review and acceptance of requests from external party applicants on behalf of Sydney Trains, and ultimately TAHE.

The EIM team have the following responsibilities:

- Act as the single point of contact into Sydney Trains for all Applicants and access or work requests;
- Facilitate the review and assessment by Sydney Trains Subject Matter Experts of the Applicant's proposals, based on safety and technical documentation submitted by the Applicant;
- Coordinate the responses from the relevant stakeholders within Sydney Trains and provide feedback to the Applicant;
- Assist with your rail specific support, access and work requirements;
- Provide timely advice and guidance, Pre-Development (DA) review, acceptance or rejection of the proposed works, monitor the Applicant's works, and acceptance of as-built and related asset information for inclusion into Sydney Trains systems.

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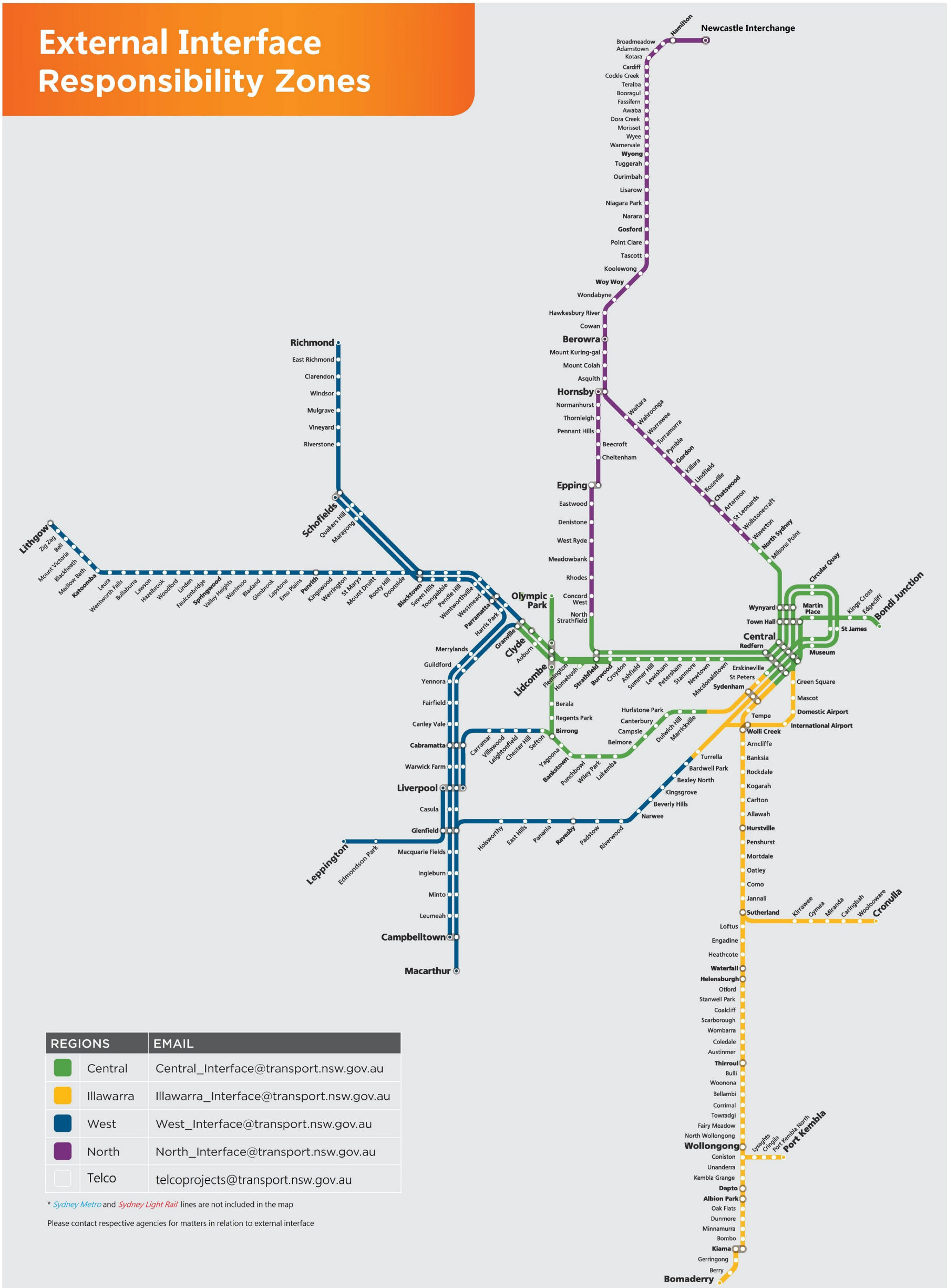
2 Sydney Trains Regions

External Interface Responsibility Zones



REGIONS		EMAIL
	Central	Central_Interface@transport.nsw.gov.au
	Illawarra	Illawarra_Interface@transport.nsw.gov.au
	West	West_Interface@transport.nsw.gov.au
	North	North_Interface@transport.nsw.gov.au
	Telco	telcoprojects@transport.nsw.gov.au

* *Sydney Metro* and *Sydney Light Rail* lines are not included in the map

Please contact respective agencies for matters in relation to external interface

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3 Terms and Acronyms

The following acronyms apply in this document

AIDF	Asset Information Delivery Form
AMD	Asset Management Division (Sydney Trains)
AMB	Asset Management Branch (TfNSW)
CAA	Corridor Access Agreement
CCB	Configuration Control Board
CCM	Configuration Change Manager
CCR	Configuration Change Request
CMP	Configuration Management Plan
CEB	Customer Experience Branch (Sydney Trains)
SRA	Delivery Resource Assessment
EOD	Electrical Operating Diagram
EMB	Engineering & Maintenance Branch (Sydney Trains) External
EIM	Interface Management, AMD (Sydney Trains) Engineering &
ESI	Systems Integrity Division (Sydney Trains) Final Completion
FCC	Certificate
MAD	Master Access Deed
ONRSR	Office of the National Rail Safety Regulator
PCC	Practical Completion Certificate
POD	Proposed Operating Diagram
RFI	Request For Information
RIM	Rail Infrastructure Manager
SAD	Safety Approach Distance
SEPP	State Environmental Planning Policy
ST	Sydney Trains
SFAIRP	So Far As Is Reasonably Practical
SME	Subject Matter Expert
SWG	Station Working Group
SWMS	Safe Working Method Statement
TAO	Technically Assured Organisation
TNAC	Transport Network Assurance Committee

4 Definitions

Assurance	Assurance is 'a positive statement intended to give confidence[1]. This 'positive statement' can be made only once a series of defined activities have been completed, by competent people, resulting in appropriate evidence, against a set of *requirements* deemed *important* to the business.
Asset	An item, thing or entity that has potential or actual value to an organisation. Physical assets usually refer to equipment, inventory and properties owned by the organisation.
Delivery Resource Assessment	The aim of the Delivery Resource Assessment (DRA) process is to assess the resource requirements (design, construction, commissioning and possessions) in conjunction with the schedule of the proposed project within the planning phase. This assessment process will provide Sydney Trains with early visibility of resourcing issues and potential impacts to the Sydney Trains Master Schedule program. For Project Managers it enables better planning taking into account the availability of critical Sydney Trains' resources and it is also a gateway for related resource processes.
Configuration	Interrelated functional and physical characteristics of a product defined in product configuration information.
Rail Corridor	The land on which a railway is built; comprising all property between property fences, or if no fences, everywhere within 15m from the outermost rails – refer RailSafe.org. Under Planning legislation rail corridor is defined as: land a) That is owned, leased, managed or controlled by a public authority for the purpose of a railway or rail infrastructure facilities: or b) That is zoned under an environmental planning instrument predominately or solely for development of the purpose of a railway or rail infrastructure facilities.
Protection Officer	A Qualified Worker responsible for managing the rail safety component of worksite protection.
Possession	A planned closure of one or more rail lines to allow work to be carried out in the Danger Zone using a Local Possession Authority (LPA) or a Track Occupancy Authority (TOA), or near the overhead wiring.
Services	Any products or equipment related to energy, telecommunications, water and sewerage. For example: underground electrical cables.

[1] Definition used by Asset Management Branch and Macquarie Dictionary

5 Reference Documents

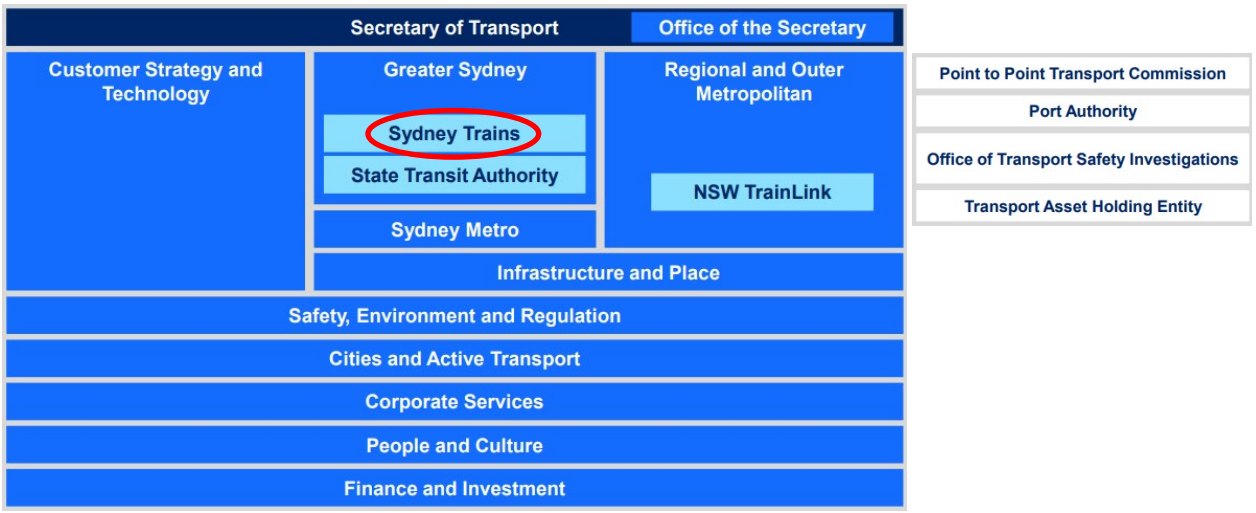
#	Reference	Document Title	Link/Internet site
1		Transport Administration Act 1988 No 109	https://legislation.nsw.gov.au/~/view/act/1988/109/full
2	TS 10504:2013	TAO Guide to Engineering Management	https://www.transport.nsw.gov.au/industry/asset-standards-authority/find-a-standard/TAO-guide-to-engineering-management-1
3	T MU AM 01005 ST	Asset Handover Requirements (AMB)	https://www.transport.nsw.gov.au/industry/asset-standards-authority/find-a-standard/asset-handover-requirements-1
4	T MU AM 02001 ST	Asset Information and Register Requirements	https://www.transport.nsw.gov.au/industry/asset-standards-authority/find-a-standard/asset-information-and-register-requirements-3
5	T MU AM 02004 ST	Management of Asset Information	https://www.transport.nsw.gov.au/industry/asset-standards-authority/find-a-standard/management-of-asset-information-1
6	PR D 78700	Working Around Electrical Equipment	PR D 78700 V1.0 Working around Electrical Equipment (railsafe.org.au)
7	T HR EL 00004 ST	Building and Structures under Overhead Lines	https://www.transport.nsw.gov.au/industry/asset-standards-authority/find-a-standard/buildings-and-structures-under-overhead-lines-1
8	T HR EL 00007 ST	Management of Activities Within TAHE Easements and Close to the TAHE HV Distribution System	https://www.transport.nsw.gov.au/industry/asset-standards-authority/find-a-standard/management-of-activities-within-TAHE
9	T HR CI 12190 ST	Service Installations within the Rail Corridor	https://www.transport.nsw.gov.au/industry/asset-standards-authority/find-a-standard/service-installations-within-rail-corridor-1
10	T HR EL 10005 ST	Requirements for Electric Aerials Crossing TAHE Infrastructure	https://www.transport.nsw.gov.au/industry/asset-standards-authority/find-a-standard/requirements-for-electric-aerials-crossing-0
11	T HR CI 12090 ST	Airspace and External Developments	Airspace Developments 1 | Transport for NSW
12	T HR CI 12051 ST	Development Near Rail Tunnels	https://www.transport.nsw.gov.au/industry/asset-standards-authority/find-a-standard/development-near-rail-tunnels-2

#	Reference	Document Title	Link/Internet site
13		Guide to Transport for NSW Framework for Assuring the Safety of Rail Assets and Infrastructure	https://www.transport.nsw.gov.au/industry/asset-standards-authority/reference-material#Asset_Management
14		Rail Safety National Law – NSW Legislation	https://www.transport.nsw.gov.au/industry/asset-standards-authority/reference-material#Asset_Management
15		NSW Government Department of Planning – development Near Rail Corridors and Busy Roads – Interim Guideline	http://planning.nsw.gov.au/Policy-and-Legislation/Planning-System-Circulars
16	ISSC 20	Work Near Overhead Power Lines – Code of Practice	https://www.safework.nsw.gov.au/hazards-a-z/electrical-and-power/power-lines
17	AS7000	Australian Standard – Overhead Line Design	https://www.safework.nsw.gov.au/hazards-a-z/electrical-and-power/power-lines
18		Office of the National Rail Safety Regular – Factsheets	https://www.onrsr.com.au/publications/fact-sheets-guidelines-and-policies/fact-sheets
19	T MU AM 04003 GU	Configuration Management Guide	https://www.transport.nsw.gov.au/industry/asset-standards-authority
20		Infrastructure – State Environment Planning Policy (SEPP) 2007	https://www.planning.nsw.gov.au/Policy-and-Legislation/Infrastructure
21		Work Near Underground Assets - Guide	http://www.safework.nsw.gov.au/__data/assets/pdf_file/0009/54378/SW08773-Work-near-underground-assets-guide.pdf

Table 5-1. Reference Documents

6 Sydney Trains Requirements

Sydney Trains is part of the Transport for New South Wales (TfNSW) transport cluster. We work in partnership with TfNSW to deliver improved transport outcomes for NSW.



Sydney Trains operates and maintains fixed and rolling stock assets within the Sydney metropolitan train network and maintains assets for NSW Trains.

This includes safety duties to ensure the safe management of those assets. Sydney Trains is the accredited Rail Infrastructure Manager (RIM) for the operations and maintenance of the rail assets, as per the Rail Safety National Law.

Electrical Distribution Authority (EDA)

Sydney Trains operates an electrical distribution network and a 1500V DC rail traction system for the Metropolitan Rail Network.

This includes: high and low voltage AC aerial lines and cables, traction and distribution substations and 1500V DC overhead wiring systems.

The EDA is a network operator, electricity distributor and retail supplier (under the *Electricity Supply Act 1995)* and also an electricity supply authority (under the *Electricity Safety Act 1945).*

If you are required to perform works within the rail corridor or proximity of rail infrastructure, there are various Sydney Trains and State Legislated processes, standards and requirements that may need to be considered.

6.1 Considerations

If you are proposing to alter Sydney Trains' assets, or are planning to design or construct near, adjacent, over or under rail infrastructure (including rail assets outside the corridor), you'll need to consider the following:

1. Assuring Sydney Trains of the safety and compliance of any altered assets during design, construction and prior to handover over of the asset via control gates.
2. Assuring Sydney Trains of the safety and compliance of any works that have the potential to impact on Sydney Trains assets, operation or maintenance.
3. Using appropriately competent and/or authorised personnel/companies to undertake design, analysis and construction.
4. Allowing adequate time to access rail assets and if required, to engage competent rail personnel.
5. Addressing the conditions set as part of the Development Application review and providing demonstration that these conditions have been met.
6. Ensuring an allowance for working safely near rail infrastructure and services that exist outside the rail corridor.

During the review of a proposal, Sydney Trains will advise you of potential impacts and set specific conditions to be met prior to acceptance of proposals, and prior to construction works taking place. There will be cost implications for support provided by Sydney Trains.

6.1.1 Providing Assurance to Sydney Trains

An appropriate assurance process is required if you are proposing a change to existing rail assets or introducing new rail assets. You will need to provide evidence to demonstrate that the new or altered assets;

- have been designed, constructed, tested and commissioned in accordance with the design;
- that the design meets all safety requirements of relevant standards, procedures, regulations and contracts and those requirements have been verified and validated.

The Sydney Trains Configuration Control Board (CCB) has been delegated by TfNSW as the acceptance authority for configuration management changes to their network and is responsible for conducting appropriate due diligence of any assessment of TAO-provided assurance.[2]

[2] TS 10504:2013 TAO Guide to Engineering Management Section 9.4

Safety Assurance

Any works planned and undertaken around and on TfNSW rail assets should be done using a robust safety assurance regime. You must demonstrate that all risks have been identified and analysed during the planning, design and construction stages and that the risks have been appropriately eliminated, controlled and managed throughout.

You will need to demonstrate that safety risks have been eliminated, **so far as is reasonably practicable (SFAIRP**). **Refer to section 46 of the Railway Safety National Law.**

The process for safety assurance includes, but is not limited to:

- Safety change assessment, analysis, demonstration and reporting
- Safety in design workshops with attendance from Sydney Trains' SMEs if required
- Risk management in consultation with key affected stakeholders.

Engineering Assurance

Engineering assurance activities and deliverables are essential in order to demonstrate that any changes to, or works with potential impacts on, rail infrastructure have been designed in accordance with the appropriate AMB and Australian standards and implemented accordingly.

The processes involved in the provision of engineering assurance may include:

- Documents by an TAO that demonstrate compliance with relevant standards and legislation, such as **design drawings, design reports, risk and safety assessment**, and **engineering analysis**.
- Provision of documents by an TAO that demonstrates engineering **due diligence for review by Sydney Trains** (Engineering & System Integrity Division). Allow four plus weeks for review
- Presentation of the proposal and impacts to Sydney Trains' at their Tier 3 Configuration Change Board (CCB)
- Meetings occur monthly in each of the four Districts as well as at the Station Working Group (SWG) if station related. Arranged through a Sydney Trains External Interface Manager.

Note

The deliverables will need to demonstrate compliance and conformance at the relevant CCB to seek endorsement to proceed to the next project phase.

- If the proposed change is deemed to be a **moderate** or **significant safety change** to Sydney Trains network, a presentation at the Tier 2 Configuration Change Board will also be required.

Configuration Management

For an asset to be and remain fit for purpose, it is important that any changes to the asset (through its design, maintenance or operation) are documented and that the safety implications of these changes are understood by Sydney Trains.

Configuration Management is a systems engineering process that establishes and maintains control of an item and its configuration information throughout the asset/system life cycle.

The configuration management process[3] involves a set of gates. The gates require that a level of assurance has been completed, including:

- evidence of stakeholder consultation and the provision of various documentation such as engineering reports and hazard logs

Once this assurance has been approved, you can move to the next gate.

Examples of configuration changes to the Sydney Trains' network that an external party may undertake include:

- Relocating a Sydney Trains' power pole.
- Installing a pipe of service under the track within the rail corridor.
- Constructing a bridge or support structure over the corridor.

The typical steps involved in managing a configuration change include the following:

- Provide relevant engineering documents for review by stakeholders.
- Presenting the proposal, highlighting potential impact to Sydney Trains infrastructure or operations, to key Sydney Trains stakeholders at one of the monthly CCB (region specific) and SWG forums.
- Closing out any comments raised at the CCB forum.
- Agreeing any asset information and configuration materials required to be produced, such as as-built drawings. Progressively providing the required information, in the format required, to Sydney Trains throughout the project lifecycle.

Any change to the configuration of the **electrical network**, such as relocating OHW or removing an asset, requires a Proposed Operating Diagram (POD) showing what the configuration of the network will be after the change.[4] It is important that an TAO is engaged to develop the POD and obtain appropriate approvals, as well as to produce subsequent Electrical Operating Diagram and Advice of Alteration.

[3] 4TP-PR-199/1.0 TfNSW Configuration Management Plan

[4] GL E 73006 Preparing and Lodging a Proposed Operating Diagram

6.1.2 Construction Risk Management

All parties that undertake construction work need to comply with Work Health and Safety (WHS) Act and regulations. This includes the following:

- Work carried out on or near energised electrical installations or services.
- Work carried out on, in or adjacent to a road, railway, shipping lane or other traffic corridor in use by traffic other than pedestrians.

Construction work carried out near Sydney Trains' infrastructure or operations is defined as **high risk**, For these 'high risk' works there is a requirement to prepare, keep and comply with WHS Risk Management and review a safe work method statement (SWMS) for the work.

Things to consider with respect to working safely around rail assets and operations include:

- Workers responsible for planning or managing construction work/project might have to conduct safety assessment to identify potential hazards that may arise from, or during, construction works and to determine how risks will be eliminated or minimised.
- Preparing and following site specific SWMS that consider any interfaces with rail.
- Erecting and using cranes that have the potential to swing over the corridor or over high voltage overhead wiring, including the provision of a crane plan - refer photo 1.
- Planning for and requesting an isolation of electrical services or partial closure of the network (possession) if works are close to the corridor or electrical overhead wiring, as well as cost implications.

Note

All people who enter the corridor must be accompanied by a Protection Officer. All people and workers, who plan to work in the corridor, or to access the danger zone, must been accompanied by a Protection Officer and must have undertaken a **Rail Industry Safety Induction** (RISI) and hold a valid **Rail Industry Work** (RIW) Card, as a minimum.

Photo 1. Crane working near the rail corridor

While on site and during construction it is also important to be aware of the necessary steps to follow if there is an incident near rail assets or the corridor. These are as follows:

Incident Response

Rail Incidents	Non-rail incidents
Notify relevant Network Control in Rail Operations Centre (ROC) on **Ph: 9379 1743 or 9379 4444.**	**Report it to the Safety Incident and Injury Hotline 1800 772 779** If necessary, call (0) **000** for emergency services.

Note

If there is a serious injury or illness, a death or a dangerous incident, you must also report it to **Safework NSW immediately** on **13 10 50** as an urgent investigation might be needed.

6.1.3 Technically Assured Organisation

If you are required to work on rail assets, including changing the configuration of the network, you will need to engage an Technically Assured Organisation (TAO).

TAOs are organisations that are authorised to provide engineering services for the NSW rail network, or use standards under TfNSW Asset Management Branch (AMB) control.

TAOs are able to undertake design and engineering work on NSW rail assets without needing to demonstrate their competence to do so each time they begin work on a new activity or project.

The aim of the TAO process is to provide TfNSW with assurance about the quality of the systems, competence and capacity of organisations undertaking work on TfNSW transport assets.

Following completion of designs by a TAO, Sydney Trains undertakes a due diligence design review. This is to ensure the designs have been undertaken in accordance with the relevant standards and that they do not change or impact our network or maintenance regimes.

It is also recommended that a TAO is engaged to address any engineering considerations and conditions that are requested as part of a Development Application process.

6.1.4 Access to Assets

If you need to access the corridor, rail tunnel or an asset (e.g., external overhead wiring) to inspect or carry out work, you need to allow for the following activities and timeframes:

- An **agreement** (e.g., Access Deed, Release & Indemnity) must be entered into with the rail authority enabling intrusive or non-intrusive work to be planned and proceeded with in a safe and timely manner. The agreement will define required involvement of rail staff and the controls which should be implemented in managing the access and/or the potential impacts on rail facilities.
- Appropriate **insurances** will need to be furnished to undertake works in the rail corridor.
- You will need to engage a **Protection Officer** (PO) from a panel of PO contractors.
- Anyone undertaking work within the corridor needs to have undertaken **Rail Industry Safety Induction (RISI) training** and be able to demonstrate this competency.
- You may need to wait for a possession – this requires a **16-week planning window and will incur costs.**
- An **isolation of electrical assets** may be required, so works can be undertaken safety near your site. You will need to allow **at least 16 weeks** to plan for the isolation, to secure resources to undertake the isolation and the **associated costs** related to this support.

6.1.5 Development Applications and Planning Approval

Adjoining land owners are typically notified of any Development Applications (DA) submitted to a local Council and this would apply to TAHE (or Sydney Trains as its Agent).

However, Councils also have a statutory obligation to refer certain DAs for comment or concurrence under **State Environmental Planning Policy** (Infrastructure) 2007 (ISEPP) to the relevant rail authority or electricity supply authority (such as TAHE/Sydney Trains).

The ISEPP also refers to guidelines which must be taken into account by Councils in their assessment of DAs where development is proposed in, or adjacent to, railway corridors.

For certain developments near rail corridors, the ISEPP requires Councils to obtain the concurrence from the rail authority before Council can grant its development approval.

Any concurrence conditions issued by the rail authority must be imposed by Council. Before it grants its concurrence, the rail authority has a statutory obligation to take into account:

- the safety and structural integrity of the rail corridor and rail infrastructure facilities in the rail corridor;
- the safe and effective operation of rail services and rail infrastructure and;
- what measures are proposed, or could reasonably be taken, to avoid or minimise those potential effects.

Concurrence under the ISEPP is required as follows:

- Development involving access via level crossings (Clause 84).
- Excavation in, above, below or adjacent to rail corridors (Clause 86).

The ISEPP also requires Councils to refer certain DAs for review and comment that do not fall within the requirements of triggering concurrence.

- Development in close proximity to electrical infrastructure (Clause 45).
- Development Adjacent to Corridors (Clause 85).

Note

The relevant rail authority under the ISEPP in this instance is the Secretary of Transport. The Secretary has delegated this function to the relevant rail operators or specific Divisions within TfNSW.

For the TAHE area of responsibility Sydney Trains will be exercising the Secretary's concurrence and referral function under the ISEPP.

Sydney Trains is also the relevant authority for the assessment of developments being proposed as State Significant Developments (SSD), State Significant Infrastructure (SSI) or being determined under a Part 5 Review of Environment Factors (REF).

In the assessment of proposed developments, Sydney Trains will assess proposed developments in accordance with the relevant applicable standards (e.g., AMB, Australian Standards, BCA) and planning instruments (e.g., Development Near Rail Corridors and Busy Roads – Interim Guideline).

Pre- DA consultation is available from the Sydney Trains External Interface Management Team. The Pre-DA consultation may include but not limited to review of design documents, impact to Sydney Trains assets, geotechnical investigation, survey access and adequacy of information to lodge the DA.

6.1.6 Sydney Trains Services

Sydney Trains manage and maintain various services both within and outside the rail corridor, including underground electrical cables, above ground (aerial) electrical wiring, signalling cables and copper/fibre communication cables.

It is important that **before digging outside the corridor** you ensure you undertake an **underground services search** through the National Referral Service, **Before You Dig** www.1100.com.au.

If there are Sydney Trains underground services located, you will be referred to the Sydney Trains BYD process.

If you are undertaking intrusive works within the corridor, you'll need to obtain a **Detailed Site Survey** (DSS) via your Sydney Trains External Interface Program Manager. This involves the provision of information on the relevant location and proposed works and an associated fee.

The DSS plan will generally be issued within **10 working days of submission of compliant Services Search Request form**, of which your Interface Manager will assist you with.

When planning to develop and work near **overhead power lines** ensure you **review the ownership information on the pole to** determine if Sydney Trains (City Rail, State Rail) use the pole to supply power to the rail network.

See photo 2 below as an example plaque demonstrating that Sydney Trains use this pole for their 33kV Feeder No.722. This **information can also be obtained from Sydney Trains Geographical Information System** (GIS) plans, as requested via your External Interface Program Manager.

Photo 2. Sydney Trains OHW power pole identification

Works under an aerial line easement must comply with relevant standards and codes, as highlighted in table 5-1 and including SP D 79051 Temporary Structures Around Electrical Equipment, AS7000 and ISSC20.

It is also important to refer to and comply with the Electricity Supply Act 1995, the Electrical Network Safety Rules (ENSR) and also the Electricity Safety Act 1945.

If your works are proposed to be within a certain Safe Approach Distance (SAD) of electrical assets, it may be necessary for the power to be isolated to ensure no impact to Sydney Trains' operations and to reduce the risk of electric shock/electrocution.

The process for **requesting an electrical isolation** may include the following:

- Request for isolation – **'permit request form'** completed and submitted in parallel to a Construction Resource Request (CRR) form being submitted – **at least 16 weeks before the proposed works and isolation.**
- External party to **arrange for accredited permit holder** (certification ME161) through an external panel.
- A cost estimate will be provided for the isolation and support, which is to be agreed to by external party and paid.
- Refer to the **Railsafe.org** website for further information.

6.2 Example Scenarios

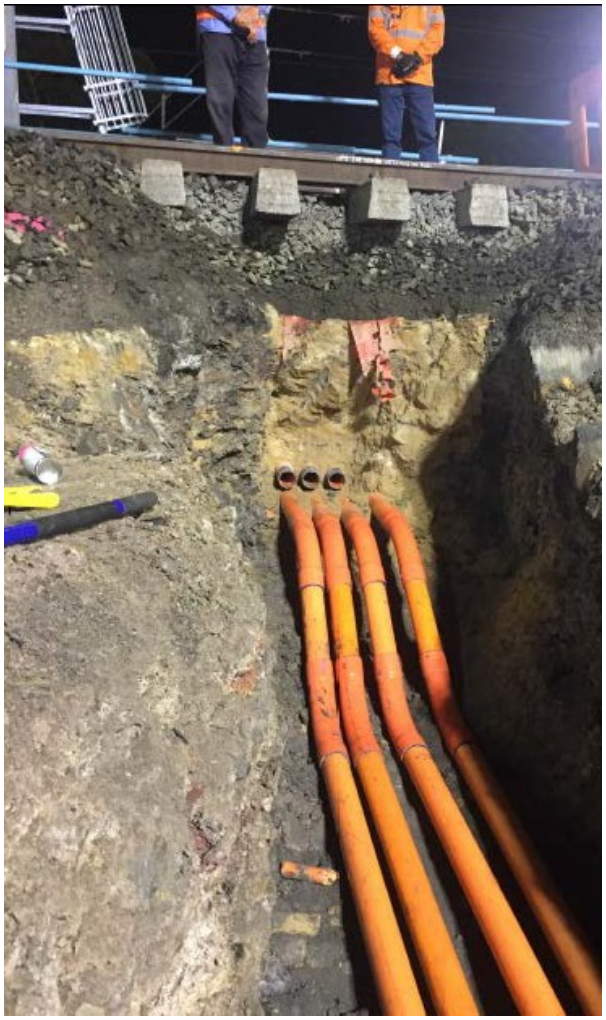
The following provide some example scenarios of work you may undertake or be involved in. The steps detailed are indicative only. Project specific advice will be provided by your allocated Program Manager.

Scenario 1. Relocating a Sydney Trains asset (HV)

Scenario 1

Sydney Trains high voltage (HV) overhead wiring and poles needs to be relocated to enable a new building development to be undertaken.

1. Refer to the instructions and information on the TfNSW website: https://www.transport.nsw.gov.au/sydneytrains/commercial/building-near-railway
2. Provide the completed application form to Sydney Trains. You will be allocated an External Interface Program Manager to support you through the process and advise of associated support costs.
3. Provide payment for Sydney Trains support (including application fee).
4. Engage a TAO for design and construction, with advice from AMB.
5. Attend a DRA to obtain resources (and possession if required).
6. Provide designs for due diligence review by Sydney Trains (ESI) and achieve compliance.
7. Design finalised and TAO assurance provided.
8. Present at the regional CCB and obtain approval for the configuration change. The presentation should confirm no impact on Sydney Trains maintenance regimes. At the CCB you will be advised of the asset information that you will need to provide or update, such as as-built drawings.
9. Request isolation and construction resources from Sydney Trains.
10. Arrange for a permit holder.
11. Complete works.
12. Provide asset information requested.



Scenario 2. Installing a service under the Rail Corridor

Scenario 2

A utility company requests to install an undertrack crossing through the rail corridor:

1. Confirm if there is a Master Access Deed (MAD) in place. If so, follow the Deed with respect to access agreements.
2. An External Interface Program Manager will be allocated to assist you.
3. Provide payment for Sydney Trains support (including application fee).
4. Engage a TAO for design and construction, with advice from AMB.
5. Attend DRA to obtain resources (and possessions, if required).
6. Provide designs for due diligence review by Sydney Trains (ESI) and achieve compliance.
7. Design finalised and TAO assurance provided.
8. Present at the regional CCB and obtain approval for the configuration change. The presentation should confirm no impact on Sydney Trains maintenance regimes. At the CCB you will be advised of the asset information that you will need to be provide or update, such as as-built drawings.
9. Complete works during possession.
10. Provide asset information requested.

Scenario 3. Works adjacent to the Rail Corridor

Scenario 3

A Developer is constructing a multistorey building, with a basement, next to the corridor:

1. Following receipt of appropriate Development Application (DA) approval from the relevant determining authority, contact Sydney Trains via the TfNSW website: https://www.transport.nsw.gov.au/sydneytrains/commercial/building-near-railway
2. An External Interface Program Manager will be allocated to assist you to meet your DA conditions.
3. Provide payment for Sydney Trains Support (including application fee).
4. Engage an TAO to undertake relevant engineering assessments required as per the DA conditions. For example geotechnical analysis to ensure no embankment movement during excavation.
5. Provide engineering assessment and other DA conditions including SWMS and crane plan, to Sydney Trains for review.
6. Once DA conditions are satisfied a **Letter of Compliance** will be issued.
7. Attend DRA to organise for works that need to be undertaken during a possession such as installation of scaffolding.
8. Provide any further information required as requested by Sydney Trains, or as part of the DA conditions.
9. Complete works.
10. Provide asset information requested.

6.3 Summary

- In summary, when working around and in the rail corridor it is important to consider the potential impact and interfaces with rail and therefore the potential limitations and impacts to the planning and delivery of your project.
- The common considerations detailed in this document are listed below. The below factors may or may not be relevant to each proposal.
- Clear definition of property/title boundaries, existing easements on land and for tunnels etc.
- Acoustic/vibration treatment of development (generally within 60m of the nearest rail) to mitigate noise and vibration arising from rail operations.
- Stray currents and electrolysis.
- Geotechnical, structural and foundation engineering, including effects on tunnels, bridges, tracks, embankments and retaining walls, cuttings, rock bolts and anchors, supporting structures etc.
- Set backs from Rail Corridor for building outlines and balconies.
- Derailment protection of structures adjacent to track (within 20m of rail line).
- Use of lights and reflective materials.
- Dilapidation surveys may be required prior to, during and after any works being undertaken.
- Service Searches to identify the presence of underground, surface and aerial rail and other services, including transmission lines and communication cables, pipelines etc., refer section 6.1.6.
- Demolition and excavation impacts on rail infrastructure (vibration, falling material, access).
- Works near Electrical infrastructure including: craneage, concrete pump and other aerial movements adjacent to rail and with potential to reach over rail and encroach within electrical safety clearances. Refer section 6.1.6.
- Environmental factors (including contamination).
- Erection and dismantling of scaffolding on or near the Rail Facilities.
- Storm water egress to/under Rail Corridor (during and after construction), drainage
- Physical access to Rail Corridor and associated safety requirements (Rail Safety – maintaining separation of people and equipment from trains, and WH&S), refer section 6.1.2 and 6.1.4.
- Requirements for track possessions and/or power outages.
- Graffiti, screening, landscaping, anti-vandalism measures

- Boundary fencing between the development site and Rail Facilities.
- Consideration of easements and licensing and leasing of TAHE land.
- General access to the Rail Facilities for maintenance and work purposes (e.g. road closures).
- Future maintenance of structures adjacent to rail property that may impact on Rail property and/or require Rail Corridor access.
- Future Rail development, any of the projects or works in the area and operational requirements.
- Use of suitability qualified designers, organisations, works, equipment and safety systems, refer section 6.1.3.

Document control

Document custodian:	Associate Director Engineering & Maintenance Interface
Document approver:	Deputy Executive Director Asset Management
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Version History

Version	Effective Date	Author	Change Notes
1.0	23/10/2018	C. Wilke	Initial issue
1.1	25/11/2019	N. Solanki	Periodic update
1.2	25/02/2020	V. Kerijwal	Periodic update
1.3	05/06/2020	B. Leishman	Periodic update
1.4	26/05/2023	B. Leishman	Periodic update
1.5	07/07/2023	B. Leishman	Periodic update