

# BUSINESS AND SOCIAL IMPACT ASSESSMENT

TAS-CYP-SDL-ZWD-REP-XLP-NAP-X0002 REV C  
24<sup>TH</sup> APRIL 2018



Cross  
Yarra  
Partnership



## Document Verification



Job title		Metro Tunnel Project - Tunnel and Stations PPP Package			
Document title		Business and Social Impact Assessment			
Document ref		TAS-CYP-SDL-ZWD-REP-XLP-NAP-X0002 RevC Business and Social Environmental Impact Assessment			
Revision	Date	Filename	Business and Social Impact Assessment Rev A		
A	21/12/2017	Description	Business and Social Impact Assessment		
			Prepared by	Checked by	Approved by
		Name	Agata Chmielewski	Amy Brown	Greg Harrison
		Signature			
B	13/03/2018	Filename	Business and Social Impact Assessment Rev B		
		Description	Business and Social Impact Assessment		
			Prepared by	Checked by	Approved by
		Name	Agata Chmielewski	Amy Brown	Greg Harrison
		Signature			
C	24.04.2018	Filename	Business and Social Impact Assessment Rev C		
		Description	Business and Social Impact Assessment		
			Prepared by	Checked by	Approved by
		Name	Agata Chmielewski	Amy Brown	Greg Harrison
		Signature			

# Table of Contents

<b>Executive Summary .....</b>	<b>1</b>
<b>1 Introduction .....</b>	<b>3</b>
1.1 Purpose of this Report.....	3
1.2 Project Description .....	3
1.2.1 Parkville Station to CBD North Station.....	4
1.2.2 CBD North Station .....	4
1.2.3 CBD South Station.....	5
1.2.4 Additional road surface works .....	6
1.3 Purpose of this Report.....	6
1.4 Study Area.....	6
<b>2 Methodology.....</b>	<b>25</b>
2.1 Environmental Risk Assessment .....	25
2.2 Impact Assessment .....	25
<b>3 Legislation, policy and guidelines .....</b>	<b>27</b>
3.1 Commonwealth and State Government Policies .....	27
<b>4 Impact Assessment.....</b>	<b>29</b>
4.1 Overview.....	29
4.1.1 Benefits and Opportunities.....	29
4.2 Parkville to CBD North.....	31
4.2.1 Project Components.....	31
4.2.2 Existing Conditions .....	31
4.2.3 Review of Government Policy .....	31
4.2.4 Risk Assessment .....	31
4.2.5 Impact Assessment.....	34
4.2.6 Stakeholders .....	34
4.2.7 Environmental Performance Requirements .....	36
4.2.8 Assumption and Limitations .....	36
4.3 CBD North Station .....	37
4.3.1 Project Components.....	37
4.3.2 Existing Conditions .....	37
4.3.3 Review of Government Policy .....	38
4.3.4 Risk Assessment .....	38
4.3.5 Impact Assessment.....	42
4.3.6 Stakeholders .....	42
4.3.7 Environmental Performance Requirements .....	42
4.3.8 Assumption and Limitations .....	42
4.4 CBD South Station .....	43
4.4.1 Project Components.....	43
4.4.2 Existing Conditions .....	43
4.4.3 Review of Government Policy .....	44
4.4.4 Risk Assessment .....	44

4.4.5 Impact Assessment.....	49
4.4.6 Stakeholders .....	49
4.4.7 Environmental Performance Requirements .....	49
4.4.8 Assumption and Limitations .....	49
4.5 Additional road surface works.....	50
4.5.1 Project Components.....	50
4.5.2 Existing Conditions .....	50
4.5.3 Review of Government Policy .....	51
4.5.4 Risk Assessment .....	51
4.5.5 Impact Assessment.....	55
4.5.6 Stakeholders .....	55
4.5.7 Environmental Performance Requirements .....	55
4.5.8 Assumption and Limitations .....	55
<b>5 Conclusion.....</b>	<b>56</b>

## Executive Summary

Cross Yarra Partnership (CYP) has been contracted by Melbourne Metro Rail Authority (MMRA) to design, build and maintain the tunnels and stations for the Metro Tunnel Project, (the Project). The project includes two nine-kilometre train tunnels and five new underground train stations, linking the north-west Sunbury rail corridor and the south-east Cranbourne/Pakenham rail corridor, unlocking additional capacity in the existing City Loop. The five new underground stations are located at Arden, Parkville, CBD North, CBD South and Domain.

This report details an Environmental Risk Assessment (ERA) of the additional Project Land proposed by CYP for Melbourne Metro. Effective environmental risk management is a continuous, collaborative and forward-looking process. It aims to anticipate potential impacts so that project related activities can be planned and managed, and where applicable, mitigate adverse impacts. Environmental risk is a function of the likelihood of an adverse event occurring and the consequence of the event. CYP will continue to apply a robust and transparent environmental risk assessment across all phases and components of the Project including construction and operational phases.

The project has already undergone an extensive and robust planning assessment. As part of this, MMRA published an Environment Effects Statement (EES) and draft Planning Scheme Amendment that included an integrated assessment of the potential environmental, social, economic and planning impacts of the project, and the approach to managing these impacts.

In developing the EES, MMRA undertook a comprehensive engagement program to seek input from stakeholders and the community. This included stakeholders and the community having the opportunity to provide formal submissions during a public exhibition period, which were then presented to an Inquiry and Advisory Committee. The key focus of the Committee's review, findings and recommendations was the planning and environmental control framework for the Project, which resulted in a report prepared for the Minister for Planning.

In December 2016, the Minister for Planning released his Assessment of the environmental effects of the project. The Assessment was undertaken in line with the *Environment Effects Act 1978* and completed the EES process. The Minister's Assessment concludes that the environmental effects of the Project are acceptable, provided appropriate mitigation and management is implemented. The Minister subsequently approved a Planning Scheme Amendment and Incorporated Document for the project. The Incorporated Document, under Section 4.7 Environmental Management Framework (EMF), required an EMF to be approved. The EMF ensured the inclusion of Environmental Performance Requirements (EPRs), which address 16 environmental factors. This encompassing process will be referred throughout as the EES and PSA processes.

The EPRs measurements ensure that there is a clear, unambiguous and transparent set of controls in place to guide Project delivery. The EPRs define the project-wide environmental outcomes that must be achieved during design, construction and operation of Melbourne Metro, (regardless of the design solutions adopted). While it will not be possible to avoid all effects and impacts, the recommendations and outcomes of the public submission, Inquiry and Ministerial Assessment; found the EPRs should provide an effective way to manage potential risk.

It is therefore these EPRs that will be used to assess the ability for CYP to appropriately manage and mitigate the proposed changes outside of Project Land. As a consequence of this an updated ERIA has been undertaken for the proposed changes to the Project Land.

This assessment finds that the proposed CYP changes to approved Project Land generally has no long-term impacts on local businesses and community as there has been no significant departure from the works previously assessed under the EES and PSA processes. These changes generally represent a realignment of works. EPRs established as part of the EES and PSA processes remain relevant and applicable to the proposed changes. In the majority of cases there is no appreciable increase in direct long-term impact to business and the community as the majority of works proposed are subsurface (rail tunnel alignment, additional underground support structures, pedestrian/construction adits) or superficial in nature (additional road surface works).

The risk assessment process has resulted in no residual risk rating of medium, but all ratings returned a low or very low rating. Despite this, there was still concern the initial desktop assessment was based on assumption and a draft design that may, if inaccurate, lead to worse impacts on local business and the community. Therefore, an impact assessment was recommended.

Business and social impacts that could arise from tunnel realignment, additional ground support structures, pedestrian adits and road surface works relate to:

- land use restrictions, specifically below ground development such as basements
- decreased amenity such as increased dust and noise from construction
- vibration impacts, particularly on heritage buildings
- visual impacts of haulage vehicles and other construction activity
- changes in access to workplaces, retail, social infrastructure or residences
- changes in commuter and pedestrian accessibility and experience.

The impact assessment determined that the existing EPRs are adequate to ensure no detrimental impacts will result from changes to Project Land. Full implementation of the EPRs is expected to reduce the residual risk rating of all potential events to low or very low.

# 1 Introduction

Cross Yarra Partnership (CYP) has been contracted by Melbourne Metro Rail Authority (MMRA) to design, build and maintain the tunnels and stations for the Metro Tunnel Project (the project). The project includes two nine-kilometre train tunnels and five new underground train stations, linking the north-west Sunbury rail corridor and the south-east Cranbourne/Pakenham rail corridor, unlocking additional capacity in the existing City Loop. The five new underground stations are located at Arden, Parkville, CBD North, CBD South and Domain.

The project has undergone an extensive and robust planning and environmental assessment. In 2016 MMRA exhibited and received public comment on:

- An Environment Effects Statement (EES) that presented an integrated assessment of the potential environmental, social, economic and planning impacts of the project, and the proposed approach to managing these impacts.
- A Draft Planning Scheme Amendment (PSA) to facilitate the use and development of the project, as well as, establishing a mechanism to protect the tunnels, stations and associated infrastructure from potential adverse effects of development in their vicinity.

In December 2016, the Minister for Planning released his assessment of the environmental effects of the project. The Minister subsequently approved a PSA (GC45) for the project which, among other things, inserted the *Melbourne Metro Rail Project Incorporated Document (December 2016)* into the Melbourne, Port Phillip, Stonnington and Maribyrnong Planning Schemes and gave legal effect to the Incorporated Document through clause 52.02 of each of these Schemes. The project's Incorporated Document was subsequently amended by PSA GC67 to facilitate the Park Street, South Melbourne tram stop. The latest Incorporated Document is *Melbourne Metro Rail Project Incorporated Document (May 2017)*.

The EES and PSA processes assessed a Concept Design and indicative construction methodology for that project that was prepared by MMRA. This was described in some detail in Chapter 6 of the EES. Following appointment as the project contractor, CYP proposes a series of enhancements and changes to the Concept Design as exhibited in the EES and PSA processes that will deliver improvements in accessibility and construction and operational efficiencies.

Some of these CYP enhancements necessitate a need to change the boundary of the approved Project Land, which can only be done by a planning scheme amendment to vary the plans appended to the Incorporated Document. The CYP changes predominately relate to the provision of underground support structures, additional station connections and temporary road occupations that affect surface land.

A PSA to amend the Incorporated Document is required as the alternative would be to seek either multiple planning permits or planning scheme amendments. The CYP design changes affect land located both inside and outside of the approved Project Land

## 1.1 Purpose of this Report

The purpose of this report is to assess the potential positive and adverse business and social impacts of the changes to the approved Project Land resulting from the CYP design changes from the previously assessed Concept Design.

This Business and Social Impact Assessment Report assesses new potential impacts arising during construction and operation, and includes consideration of both direct and indirect impacts.

This report will support CYP's proposed planning scheme amendment (GC82), which will include the additional Project Land in an updated Incorporated Document.

## 1.2 Project Description

The physical infrastructure proposed to be constructed as part of Melbourne Metro, and assessed as part of the EES and PSA processes, broadly comprises:

- Twin nine-kilometre rail tunnels from Kensington to South Yarra connecting the Sunbury and Cranbourne/Pakenham railway lines to form the new Sunshine-Dandenong Line (with the tunnels to be used by electric trains)
- Rail tunnel portals (entrances) at Kensington and South Yarra
- New underground stations at Arden, Parkville, CBD North, CBD South and Domain with longer platforms to accommodate longer High Capacity Metro Trains (HCMTs). The stations at CBD North and CBD South would feature direct interchange with the existing Melbourne Central and Flinders Street Stations respectively
- Train/tram interchange at Domain station.

The following sections outline the extent and location of CYP design changes, which will result in modifications of the approved Project Land, as exhibited in GC45 and GC67. The changes, or project components generally relate to the following works at Parkville Station, CBD North Station and CBD South Station:

- Rail alignment: The modified rail alignment represents a change in horizontal or vertical alignment (i.e. change in track geometry).
- Underground support structures: Underground support structures are ancillary structures that are used for stabilisation of a primary structure such as a shaft, station box or tunnel:
  - Usually rock bolts are shorter in length and used predominantly along the rail tunnels.
  - Rock anchors are longer in length and can be used to support shafts at the stations.
 CYP are further refining the tunnel construction methodology and will confirm the use of these underground support structures or other construction techniques during the detailed design process.  
 In both instances, each stabiliser can sit 1.5 to 2 metres apart and protrude at an angle.  
 Note: The underground support structures will be used temporarily by CYP to provide ground support during the construction phase and then will remain in situ pending removal or modification as part of any future redevelopment by others.
- Pedestrian adits: A pedestrian adit is a permanent underground passage that connects the tunnel or station to a ground level access point and has a primary purpose of facilitating passenger movements.
- Construction adits: A construction adit is an underground passage that will connect the station to a ground level access point. It is typically used for the movement of equipment, materials and excavated material. It can also be used for storage purposes.
- Flinders Street Station platform works: Additional lifts connecting the station platforms to the Degraes Street Underpass/Campbell Arcade underpass.
- Additional road areas: Additional road areas are road reserves required for construction management, together with temporary and legacy road requirements. TMPs will be prepared and implemented in accordance with the approved EPRs, for each area, setting out specific traffic management activities and legacy roadworks. Generally, temporary traffic management will involve signs, workers and possible signage line marking adjustments. Legacy roadworks will generally involve the re-surfacing of road, kerb and channels, road works, pedestrian/cycle crossings, and hard and soft landscaping.

There are also a series of changes to the approved Project Land related to surface road works. These are described in Section 1.2.4.

### 1.2.1 Parkville Station to CBD North Station

The design and construction changes to the project land at Parkville Station and between Parkville Station and CBD North Station relates to changes to the rail tunnel alignment and additional underground support structures.

Also as a result of these changes, two properties will be removed from the approved Project Land. They are 212 Berkeley Street, Carlton and 214 Berkeley Street, Carlton.

Table 1 provides a breakdown of the location of changes to project land resulting from the above enhancements and changes at Parkville Station and between Parkville Station and CBD North Station.

TABLE 1: PARKVILLE STATION TO CBD NORTH STATION CHANGES TO PROJECT LAND

Element	Location of change to approved Project Land
<b>Rail tunnel alignment</b>	<p>Excursion outside of the approved Project Land is as follows:</p> <ul style="list-style-type: none"> <li>▪ south of Grattan Street (near the corner of Bouverie Street), Carlton</li> <li>▪ south of Church Street, Carlton</li> <li>▪ Lincoln Street North, Carlton</li> <li>▪ Swanston Street, Lincoln Square North to Pelham Street, Carlton</li> <li>▪ Swanston Street, south of Kelvin Place and north of Queensberry Street, Carlton.</li> </ul>
<b>Additional underground support structures</b>	<p>Excursion outside of the approved Project Land is as follows:</p> <ul style="list-style-type: none"> <li>▪ the southern side of Grattan Street, east of Royal Parade and west of Barry Street</li> </ul>

### 1.2.2 CBD North Station

The design and construction changes to the approved Project Land at CBD North Station relate to changes to the rail tunnel alignment and additional underground support structures.



Table 2 provides a breakdown of the location of changes to the approved Project Land resulting from the above enhancements and changes at CBD North Station.

TABLE 2: CBD NORTH STATION CHANGES TO THE APPROVED PROJECT LAND

Element	Location of change to approved Project Land
<b>Rail tunnel alignment</b>	Excursion outside of the approved Project Land is three metres or less as follows: <ul style="list-style-type: none"> <li>along Swanston Street, between Franklin Street East and Little Lonsdale Street (east of alignment)</li> <li>along Swanston Street between Franklin Street West and Little Lonsdale Street (west of alignment)</li> </ul>
<b>Additional underground support structures</b>	Excursion outside of the approved Project Land is as follows: <ul style="list-style-type: none"> <li>north and south Franklin Street West, between Swanston Street and Stewart Street</li> <li>south of Franklin Street East</li> <li>along Swanston Street, between Franklin Street West and A'Beckett Street</li> <li>391 Swanston Street</li> <li>north of Literature Lane and between south of Literature Lane and north of Little La Trobe Street</li> <li>along Swanston Street between La Trobe Street and Little Lonsdale Street (east of alignment)</li> <li>south Franklin Street East along Swanston Street, between south Franklin Street to Red Cape Lane between La Trobe Street (east side of alignment)</li> </ul>

### 1.2.3 CBD South Station

The design and construction changes to the approved Project Land at CBD South Station relate to changes to the rail tunnel alignment, additional underground support structures, pedestrian and construction adits and works to Flinders Street Station platforms.

As a result of CYP's design modifications, the car parking area located at Chapter House Lane, adjoining St.Paul's Cathedral, can be omitted from the Project Land.

Table 3 provides a breakdown of the location of changes to project land resulting from the above enhancements and changes at CBD South Station.

TABLE 3: CBD SOUTH STATION CHANGES TO THE APPROVED PROJECT LAND

Element	Location of change to approved Project Land
<b>Rail tunnel alignment</b>	Excursion outside of the approved Project Land are as follows: <ul style="list-style-type: none"> <li>between Collins Street and Flinders Lane (west side of alignment)</li> <li>between the southern side of Collins Street and the northern side of Flinders Lane (west side of alignment)</li> <li>south Flinders Lane to north Flinders Street (east side of alignment)</li> <li>a small section of the Federation Square forecourt (east side of alignment).</li> </ul>
<b>Additional underground support structures</b>	Excursion outside of the approved Project Land are as follows: <ul style="list-style-type: none"> <li>between south Bourke Street and the north Collins Street</li> <li>between south of Collins Street and the north Flinders Lane (west side of alignment only)</li> <li>between south Flinders Lane and north Flinders Street (east side of alignment only)</li> </ul>
<b>Pedestrian adit</b>	A pedestrian adit will be required to link CBD South Station with Federation Square. This will sit parallel to St.Paul's Cathedral footprint and Swanston Street, between south of Flinders Lane and north of Flinders Street.  Another pedestrian adit will be required to provide an emergency egress from the tunnel to City Square. This will sit under Melbourne Town Hall footprint and the footpath at the corner of Collins Street and Swanston Street.
<b>Construction adit</b>	A construction adit extending diagonally south from Flinders Lane towards Swanston Street, under the north western corner of St.Paul's Cathedral.

<b>Flinders Street Station platform works</b>	<p>The CYP design changes at Flinders Street Station will require an extension to the approved Project Land to include the middle section of Flinders Street Station Platforms.</p> <p>There will be some works occurring at Degrares Street Underpass/Campbell Arcade.</p>
---	---

## 1.2.4 Additional road surface works

In addition to CYP modifications to the tunnel and station design, there is a requirement for additional roads to be added to the Project Land. This will be for construction purposes and legacy road works as follows:

- Construction purposes will namely result in road management activity such as temporary traffic management measures including signage, line marking and small kerb and channel adjustments.
- Legacy road works including road adjustments and resurfacing, tram works, and pedestrian and cycle crossings.

Table 4 provides a breakdown of the location of changes to the approved Project Land resulting from the above additional road surface works.

TABLE 4: ADDITIONAL ROAD SURFACE WORKS CHANGES TO THE APPROVED PROJECT LAND

Element	Location of change to Project Land	Road management activity	Legacy road works
Arden Street	Located south of North Melbourne Football Club and north of Laurens Street and east of Fogarty Street and west of Dryburgh Street. Expected use of the road is 3 months	✓	X
Royal Parade	Located south of Storey Street to Genetics Lane. The area is required for road management lanes 2, 3, 4 (west to east) and tram tracks. Expected use of the road is 3 months	✓	✓
Grattan Street	Located east of Bouverie Street and west of Swanston Street. Expected use of the road is 3 months	✓	X
Cardigan Street	Located north of Victoria Street and south of Earl Street. Expected use of the road is 3 months	✓	X
Flinders Street	Located east of Queen Street and west of Elizabeth Street. Expected use of the road is 3 to 6 months	✓	✓
Flinders Lane	Located west of Elizabeth Street and east of Swanston Street. More specifically, the western half of this area is required for temporary traffic management. Located west of Swanston Street and east of Russell Street. Expected use of the road is 3 to 6 months	✓	✓
Kings Way	Located south of Palmerston Crescent and north of Albert Road. Expected use of the road is 3 to 4 months	✓	✓
Albert Road	Located west of Kings Way and east of Stead Street. Expected use of the road is 3 to 6 months	✓	✓
Toorak Road	Located west of Darling Street and east of Claremont Street. Expected use of the road is 2 to 3 months	✓	✓

## 1.3 Purpose of this Report

The purpose of this report is to assess the potential positive and adverse business and social impacts of the proposed CYP changes in approved Project Land during construction and operational phases, including consideration of both direct and indirect impacts. The report also identifies measures to manage adverse impacts and potential opportunities.

## 1.4 Study Area

The study area for the impact assessment includes additional Project Land located in the City of Melbourne, City of Port Phillip and City of Stonnington, as shown on Figure 1 through Figure 18.

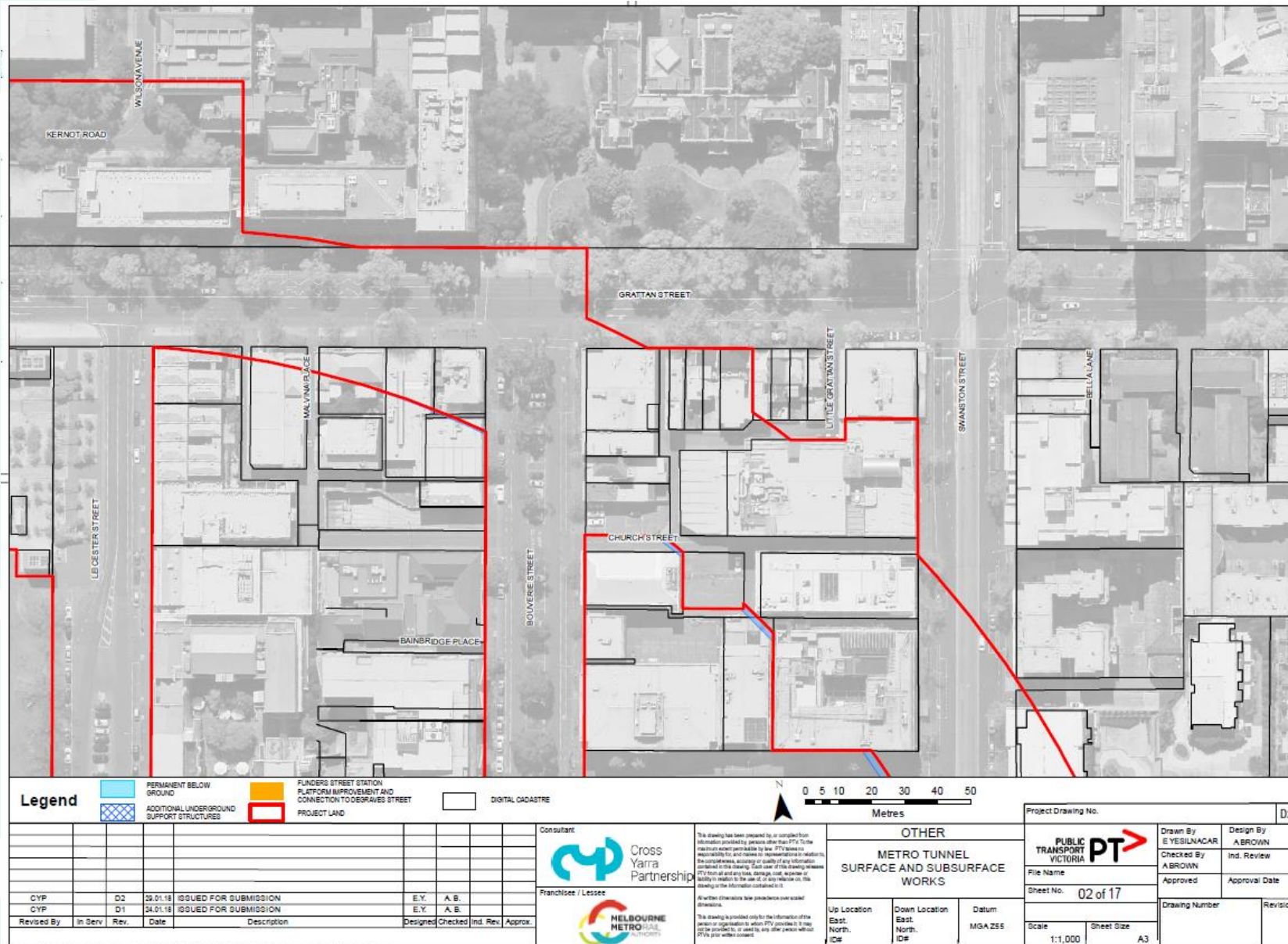


FIGURE 1: ADDITIONAL PROJECT LAND REQUIRED FOR PERMANENT BELOW GROUND BETWEEN PARKVILLE STATION AND CBD NORTH STATION



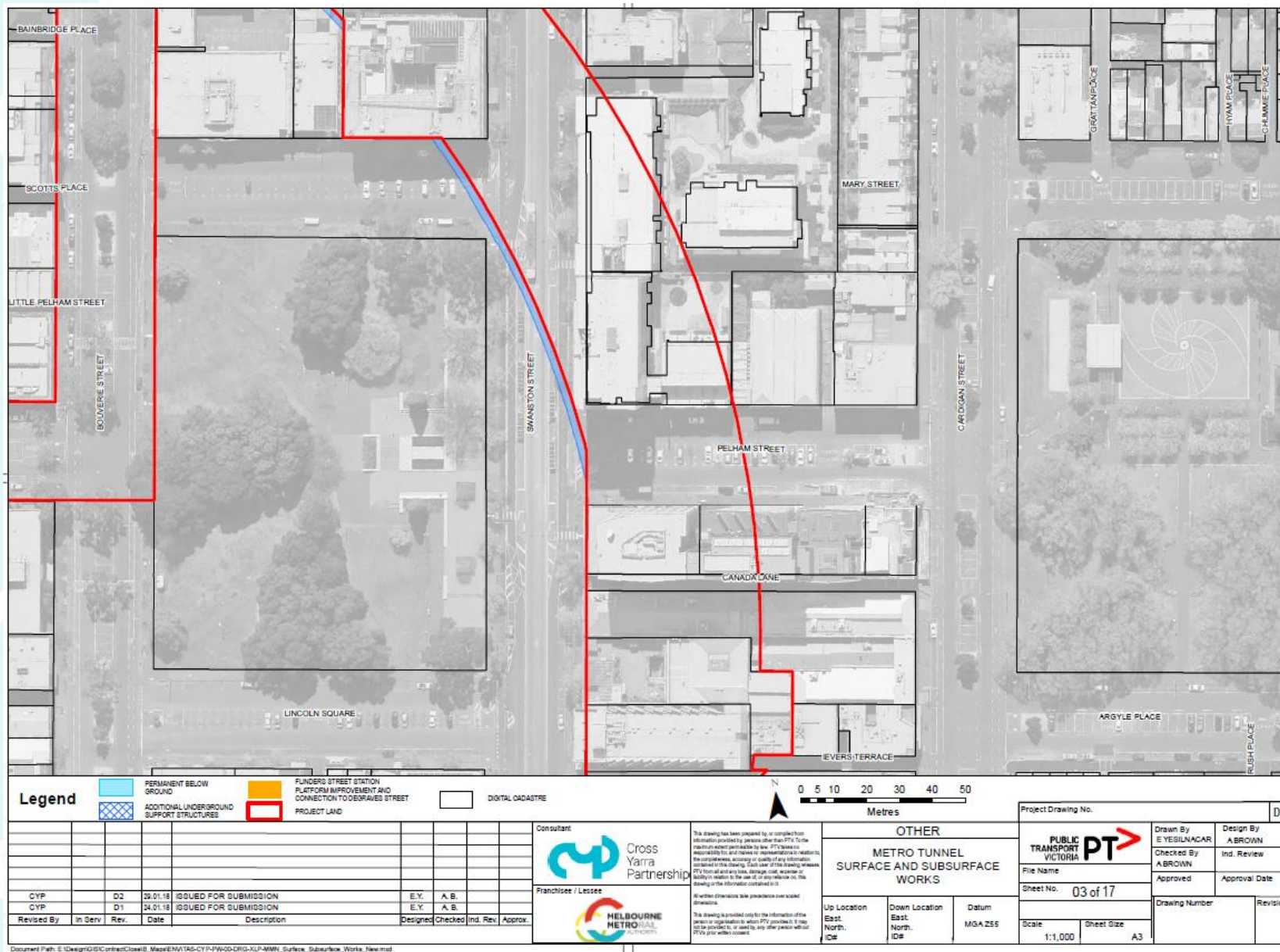


FIGURE 2: ADDITIONAL PROJECT LAND REQUIRED FOR PERMANENT BELOW GROUND BETWEEN PARKVILLE STATION AND CBD NORTH STATION

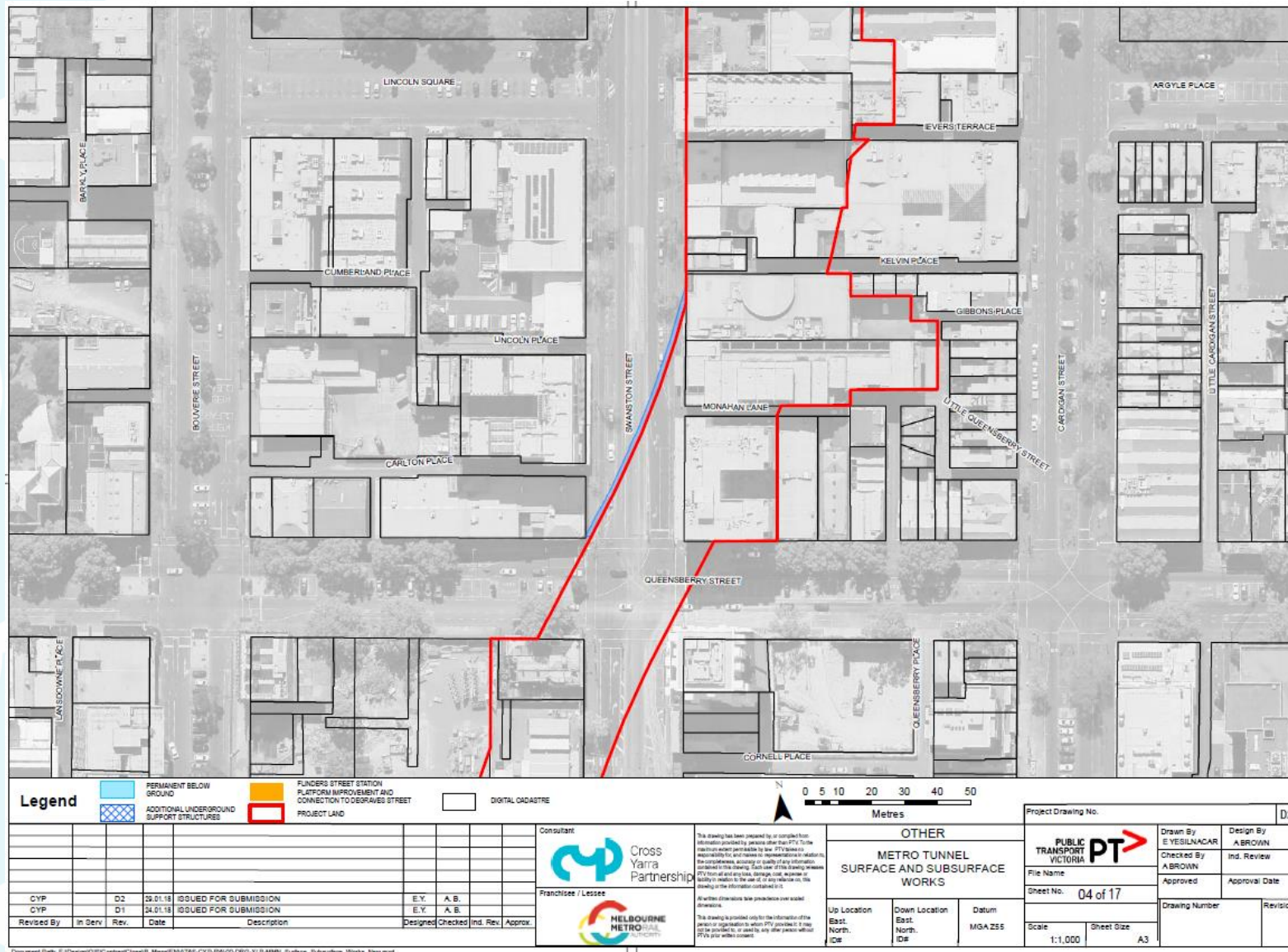


FIGURE 3: ADDITIONAL PROJECT LAND REQUIRED FOR PERMANENT BELOW GROUND BETWEEN PARKVILLE STATION AND CBD NORTH STATION



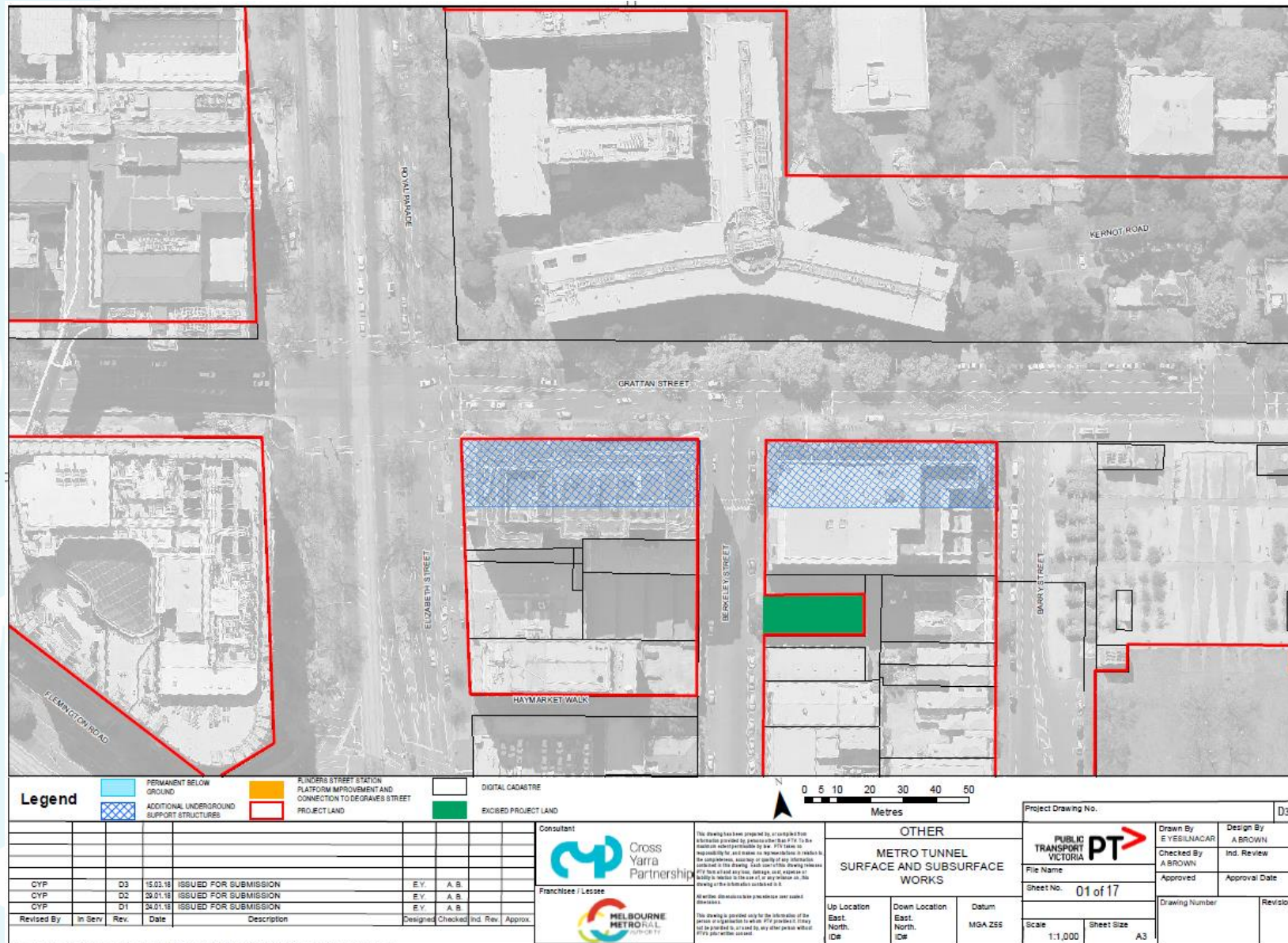


FIGURE 4: ADDITIONAL PROJECT LAND REQUIRED FOR UNDERGROUND SUPPORT STRUCTURES AT PARKVILLE STATION AND EXCISED LAND

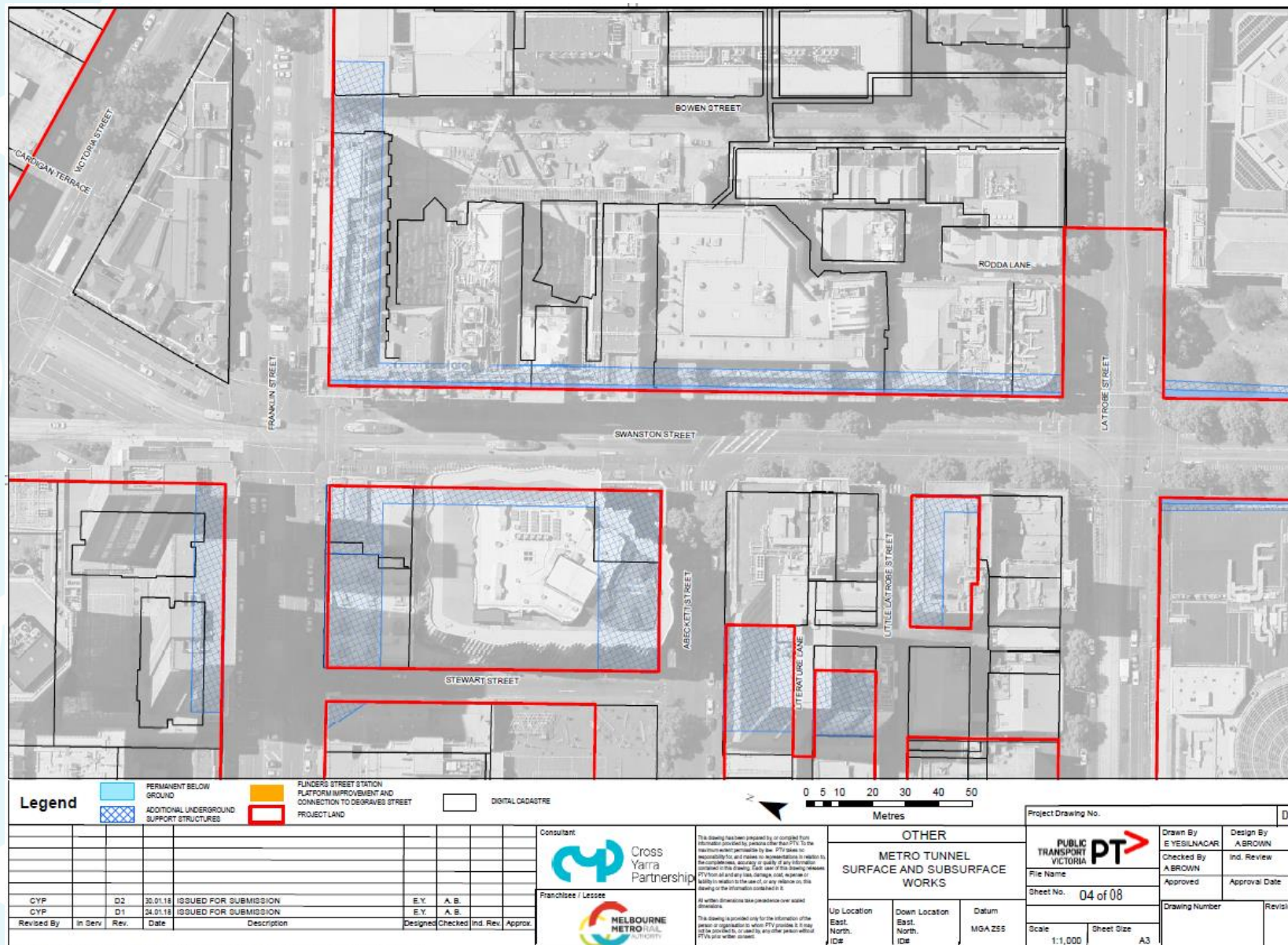


FIGURE 5: ADDITIONAL PROJECT LAND REQUIRED FOR UNDERGROUND SUPPORT STRUCTURES AND PERMANENT BELOW GROUND AT CBD NORTH STATION



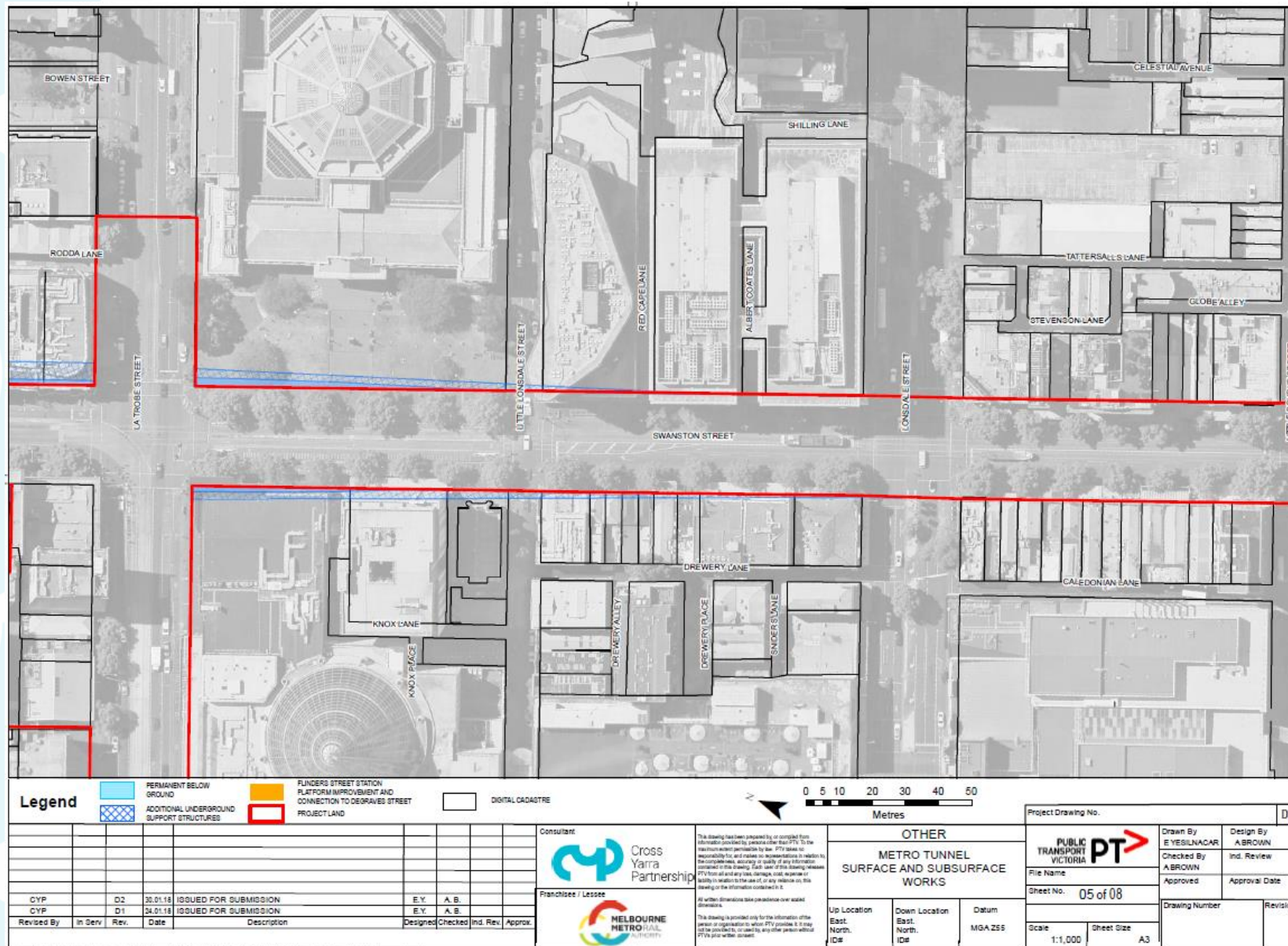


FIGURE 6: ADDITIONAL PROJECT LAND REQUIRED FOR UNDERGROUND SUPPORT STRUCTURES AND TUNNEL ALIGNMENT AT CBD NORTH STATION



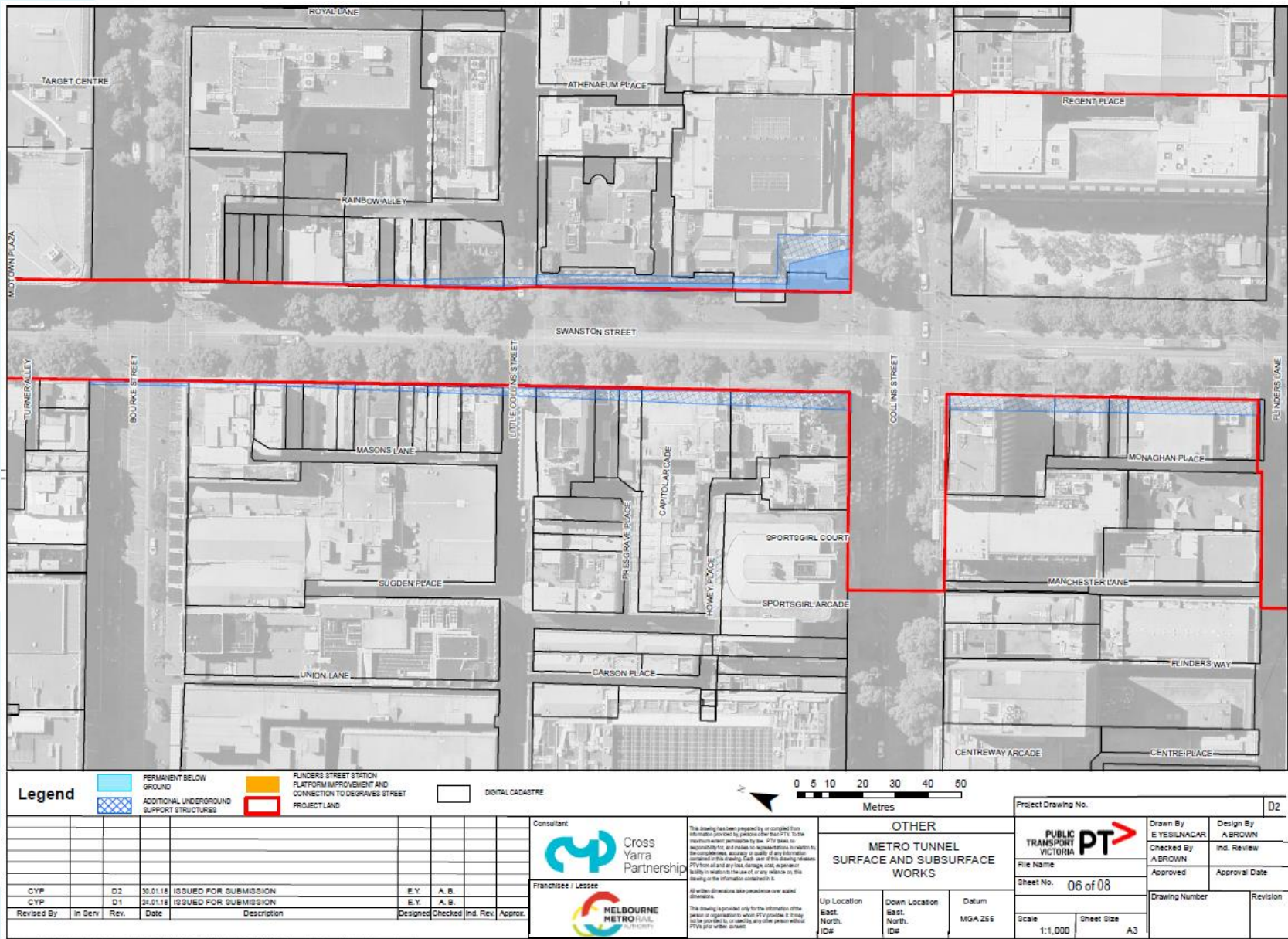


FIGURE 7: ADDITIONAL PROJECT LAND REQUIRED FOR UNDERGROUND SUPPORT STRUCTURES AND TUNNEL ALIGNMENT AT CBD SOUTH STATION

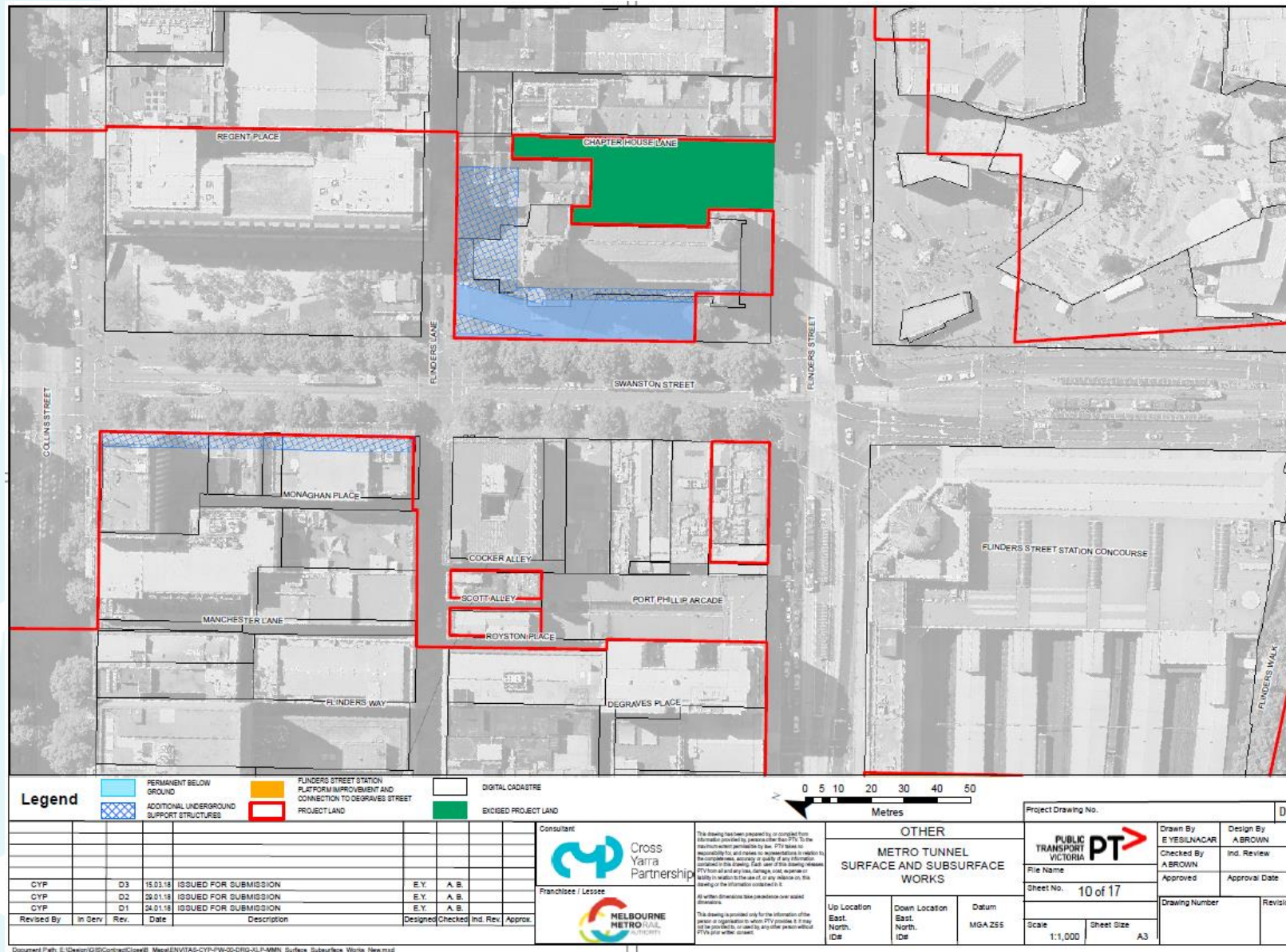


FIGURE 8: ADDITIONAL PROJECT LAND REQUIRED FOR UNDERGROUND SUPPORT STRUCTURES, TUNNEL ALIGNMENT AT CBD SOUTH STATION AND EXCISED LAND



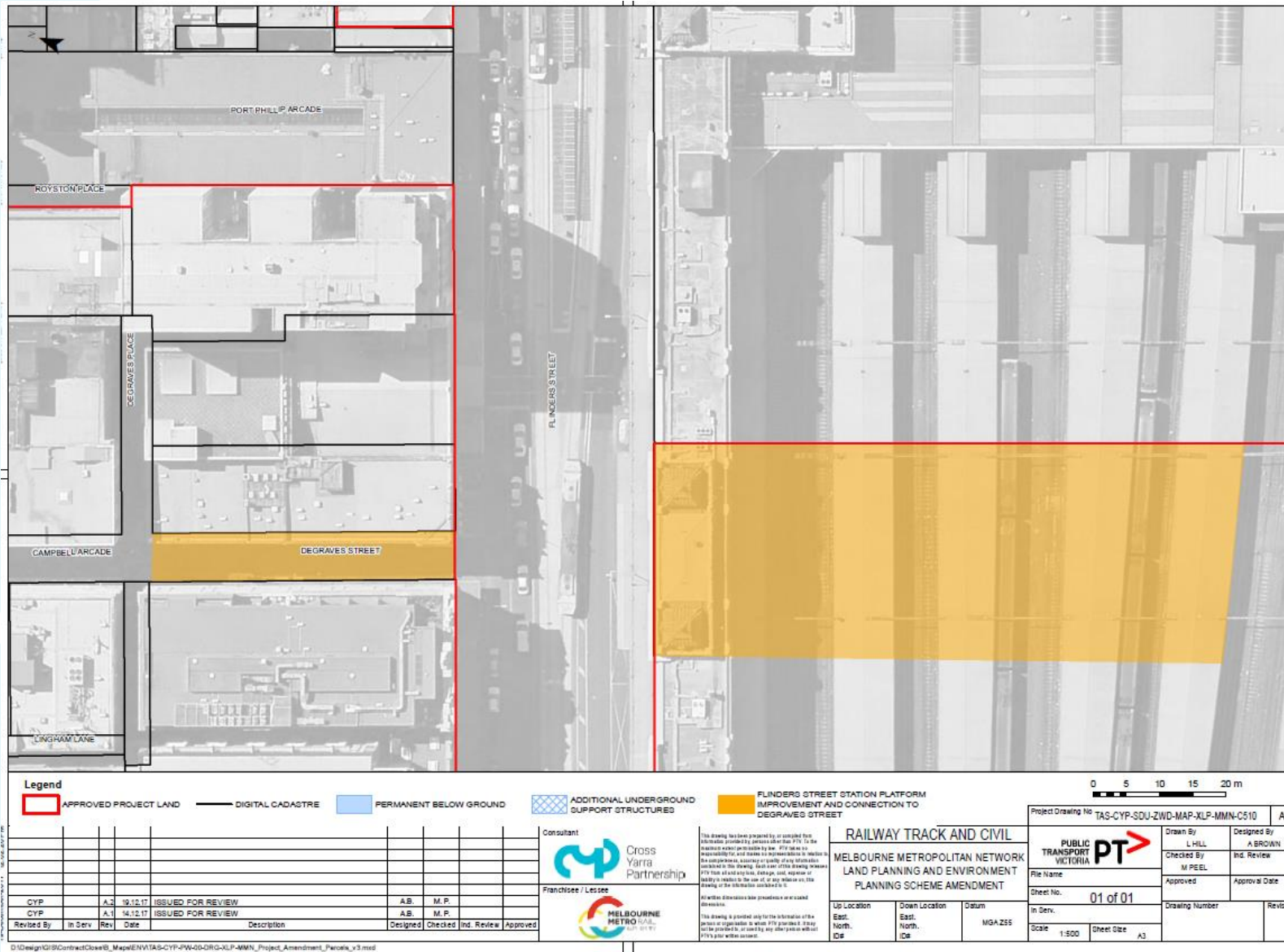


FIGURE 9: ADDITIONAL PROJECT LAND REQUIRED FOR FLINDERS STREET STATION PLATFORM IMPROVEMENTS AND CONNECTION TO DEGRAVES STREET

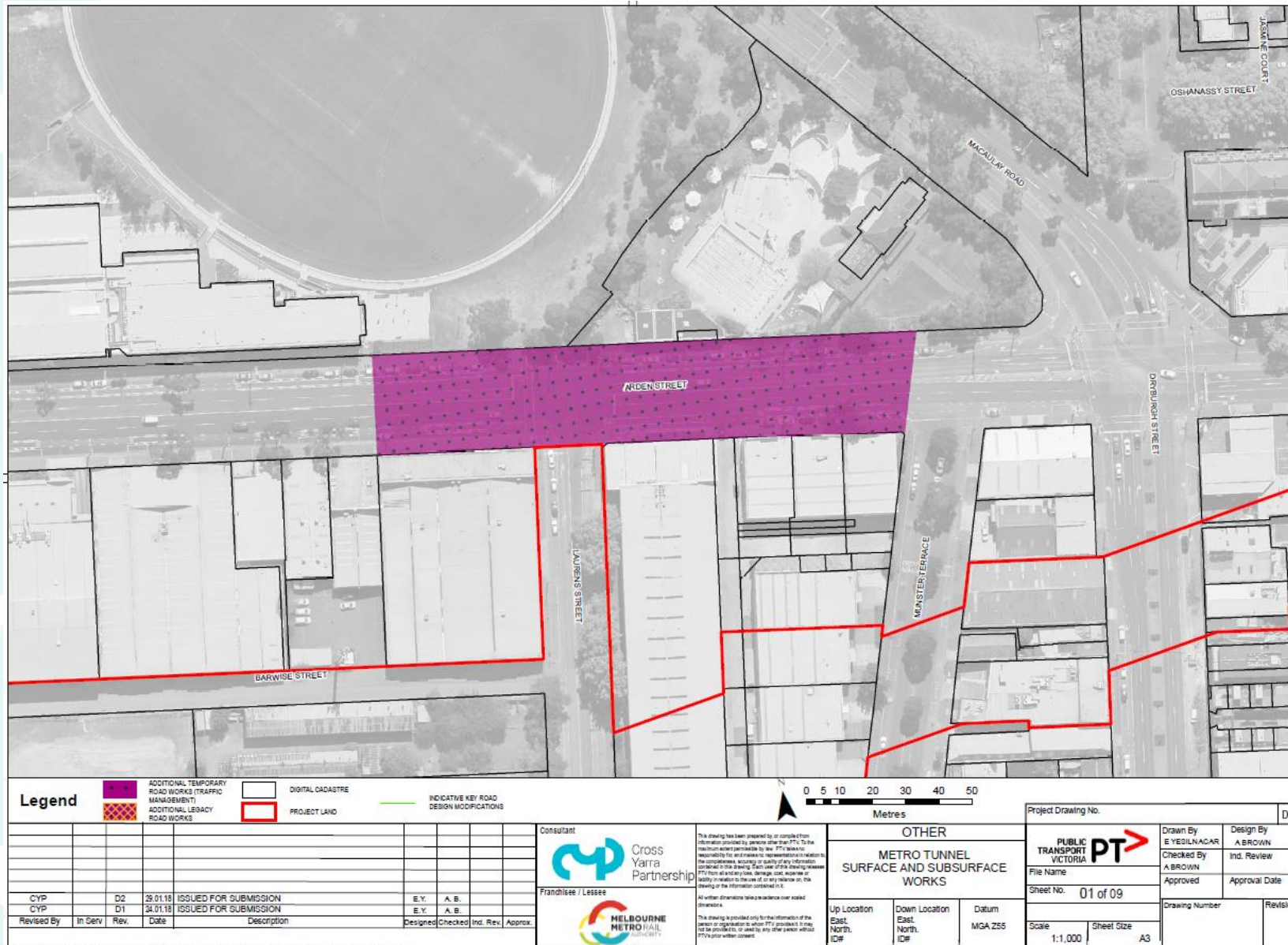


FIGURE 10: ARDEN STREET ADDITIONAL ROAD SURFACE WORKS



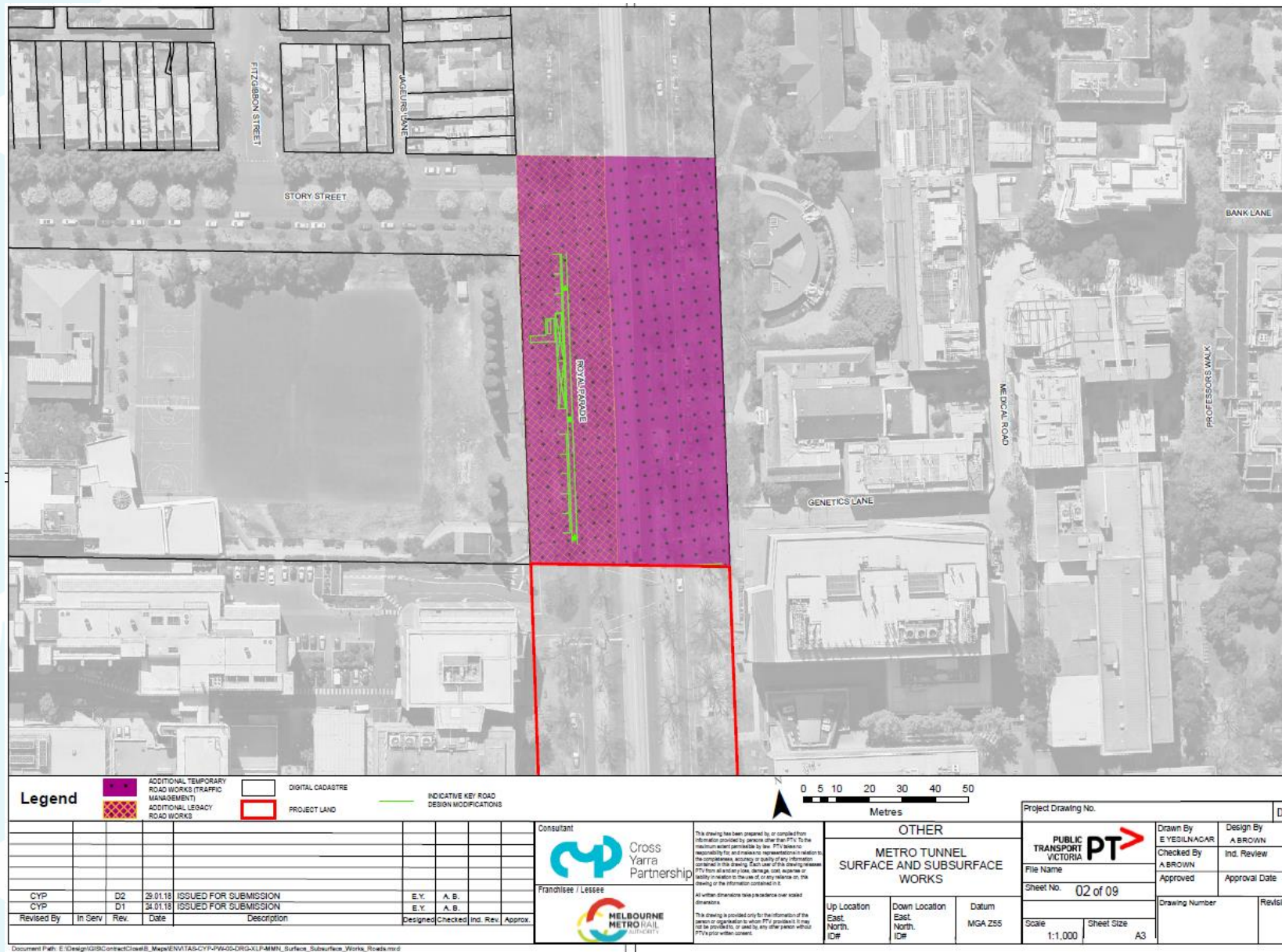


FIGURE 11: ROYAL PARADE ADDITIONAL ROAD SURFACE WORKS





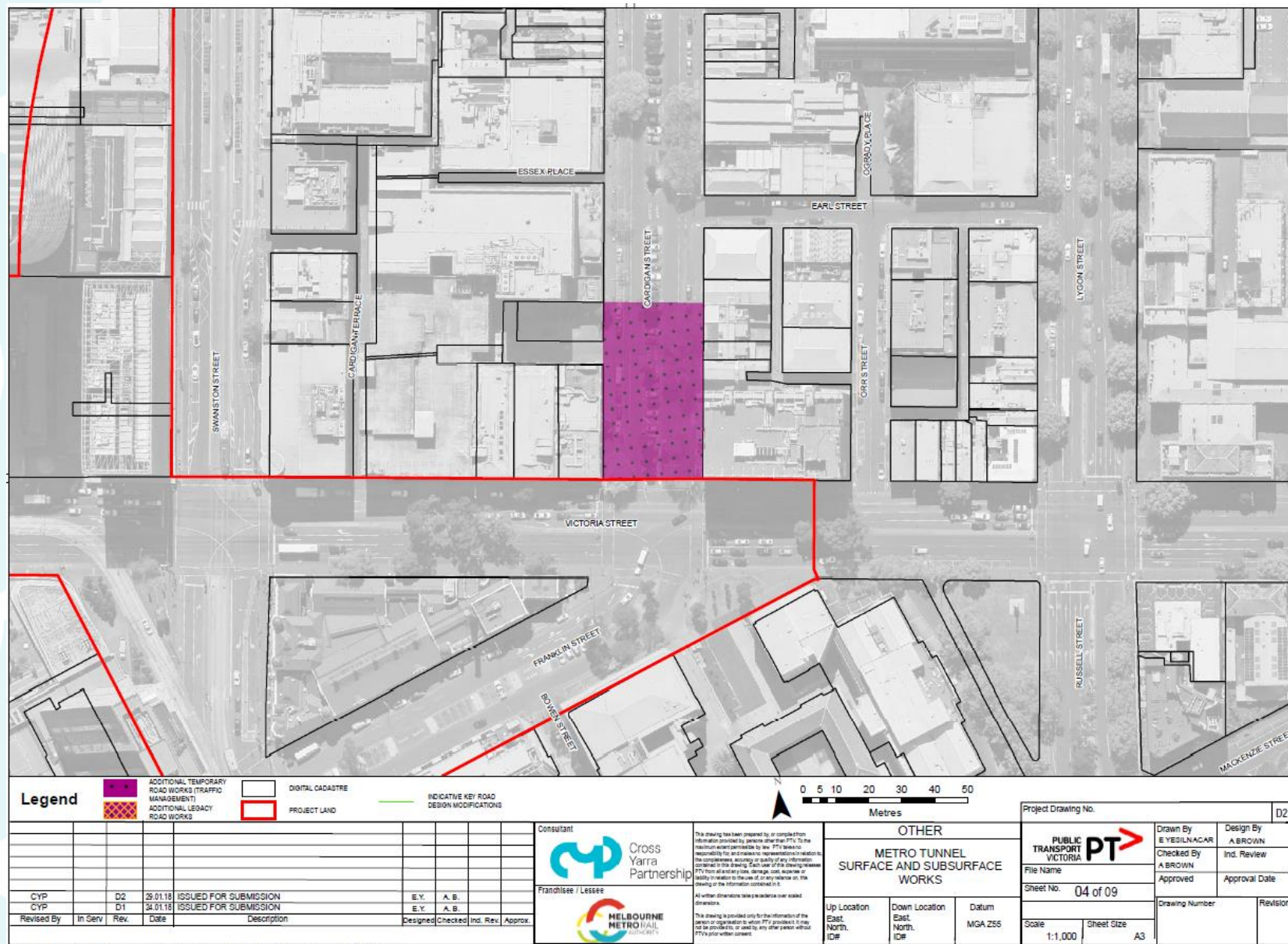


FIGURE 13: CARDIGAN STREET ADDITIONAL ROAD SURFACE WORKS

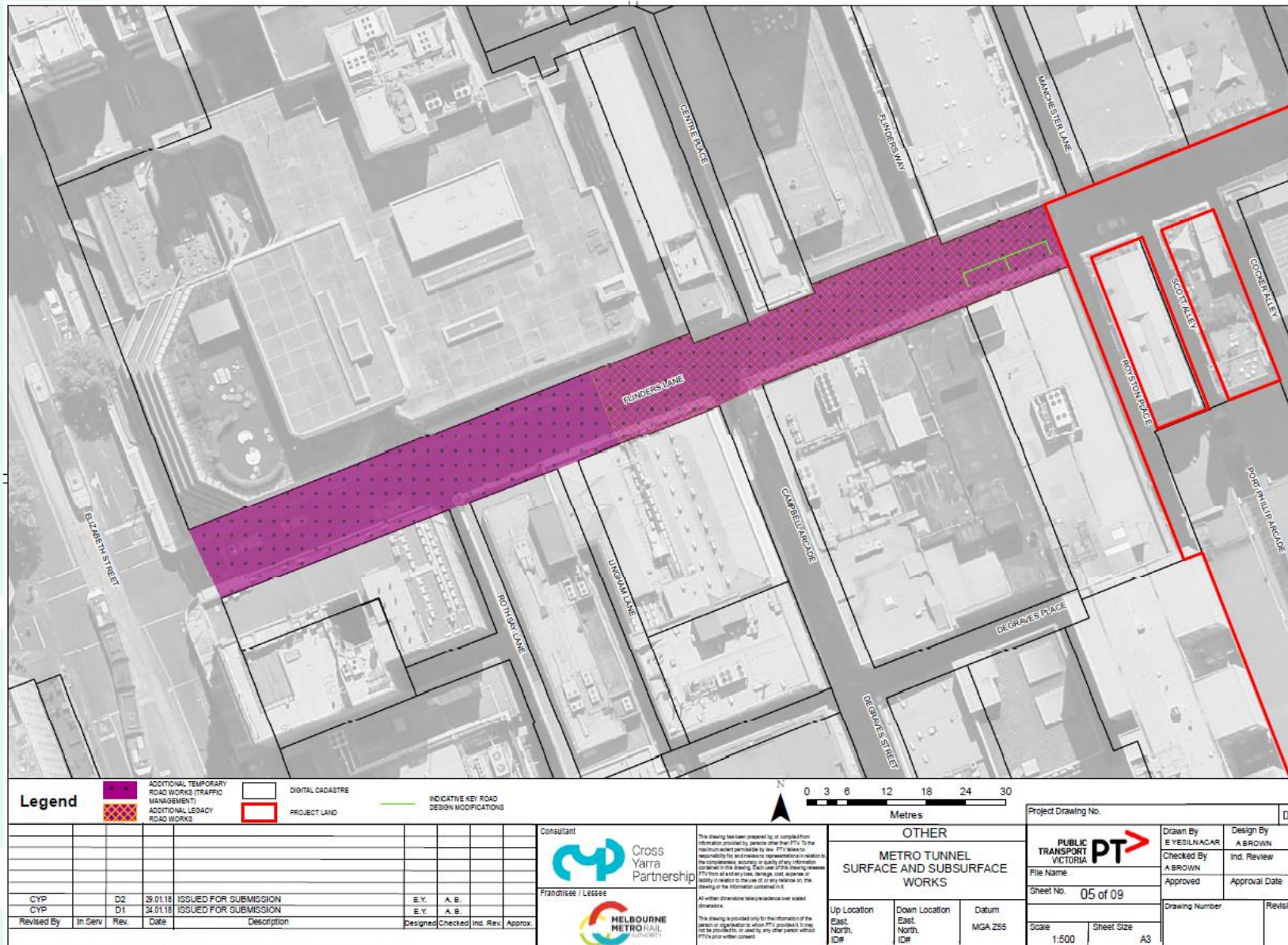


FIGURE 14: FLINDERS LANE ADDITIONAL ROAD SURFACE WORKS



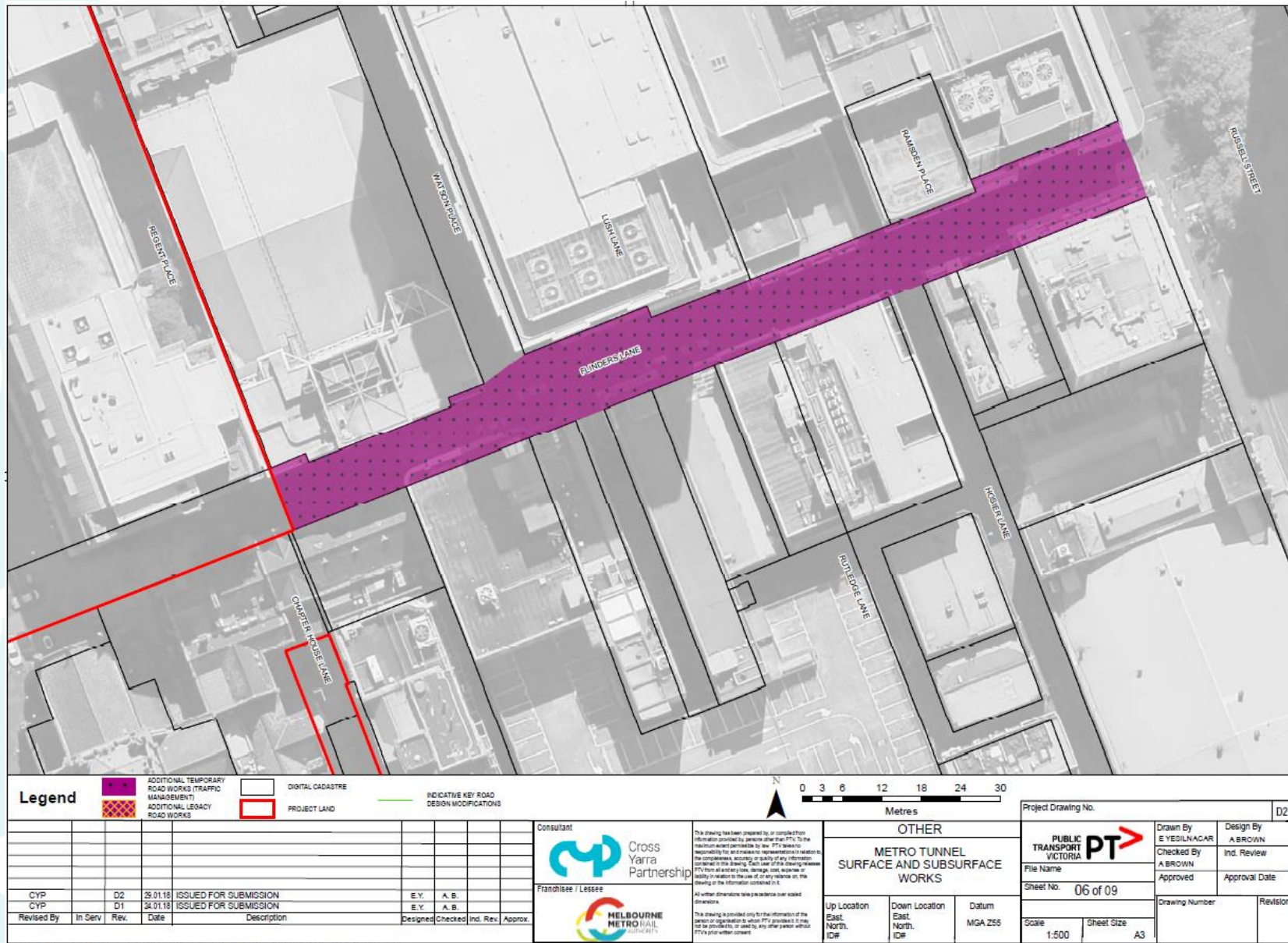


FIGURE 15: FLINDERS LANE ADDITIONAL ROAD SURFACE WORKS

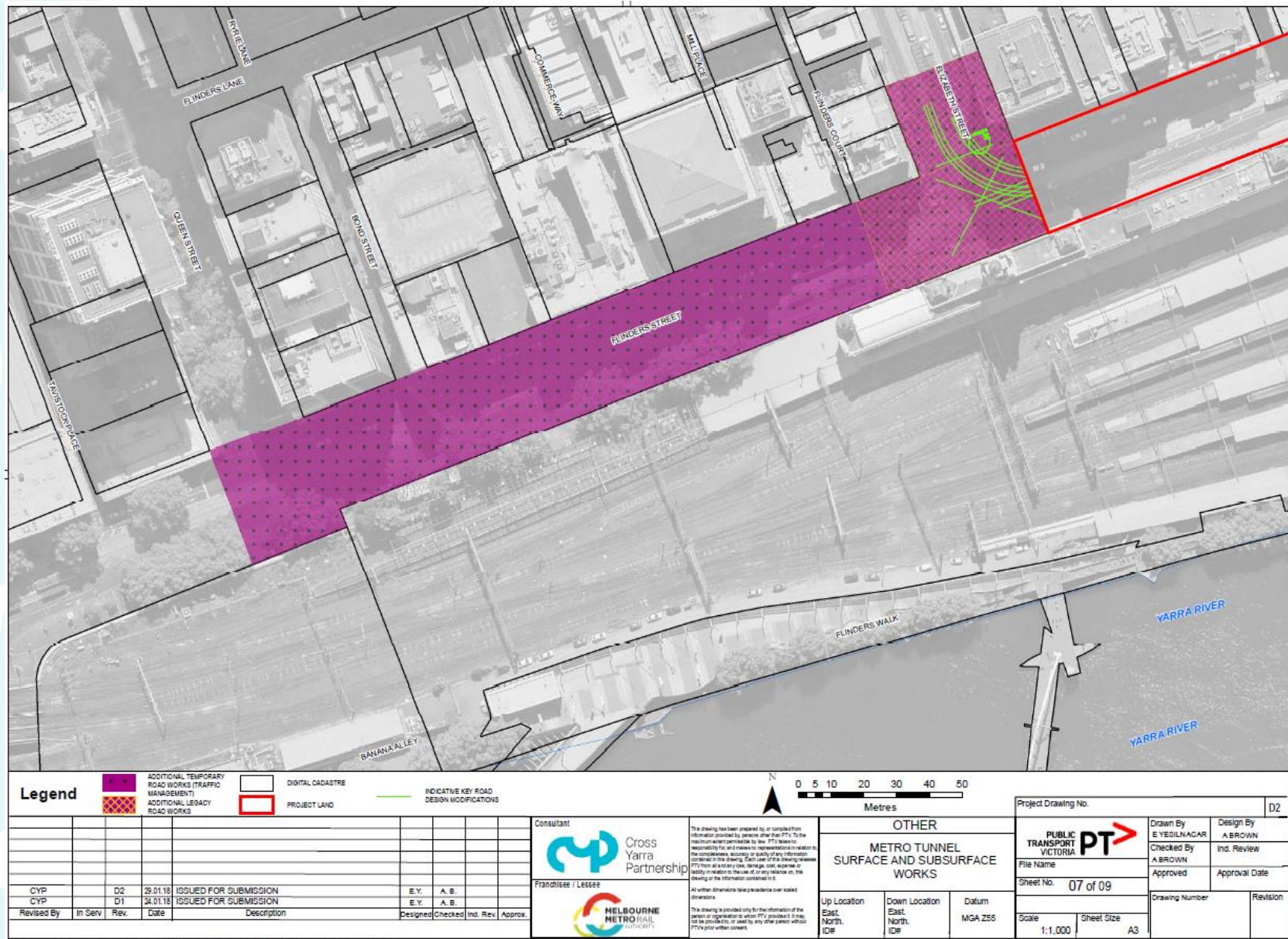


FIGURE 16: FLINDERS STREET ADDITIONAL ROAD SURFACE WORKS



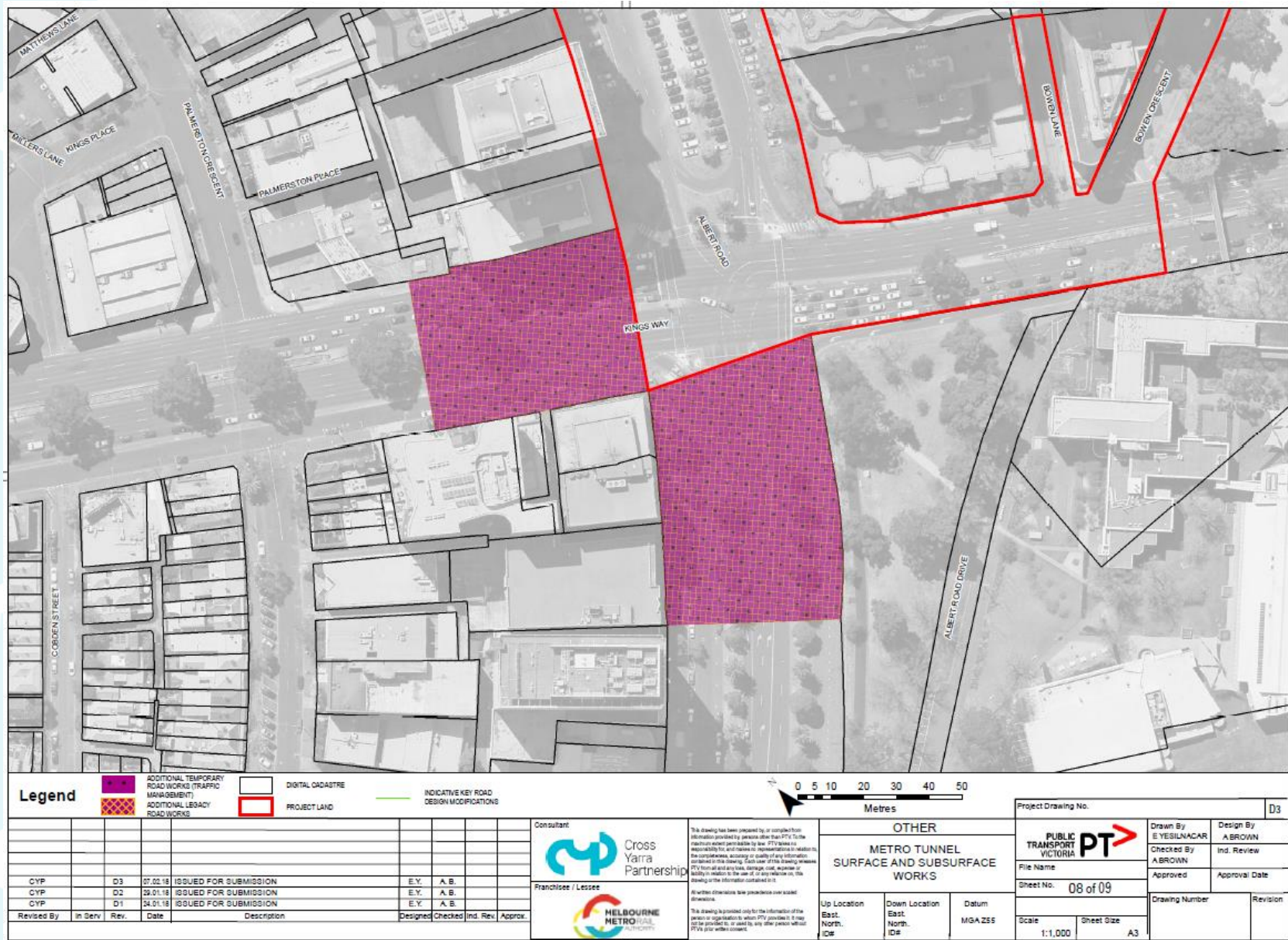


FIGURE 17: KINGS WAY AND ALBERT ROAD ADDITIONAL ROAD SURFACE WORKS

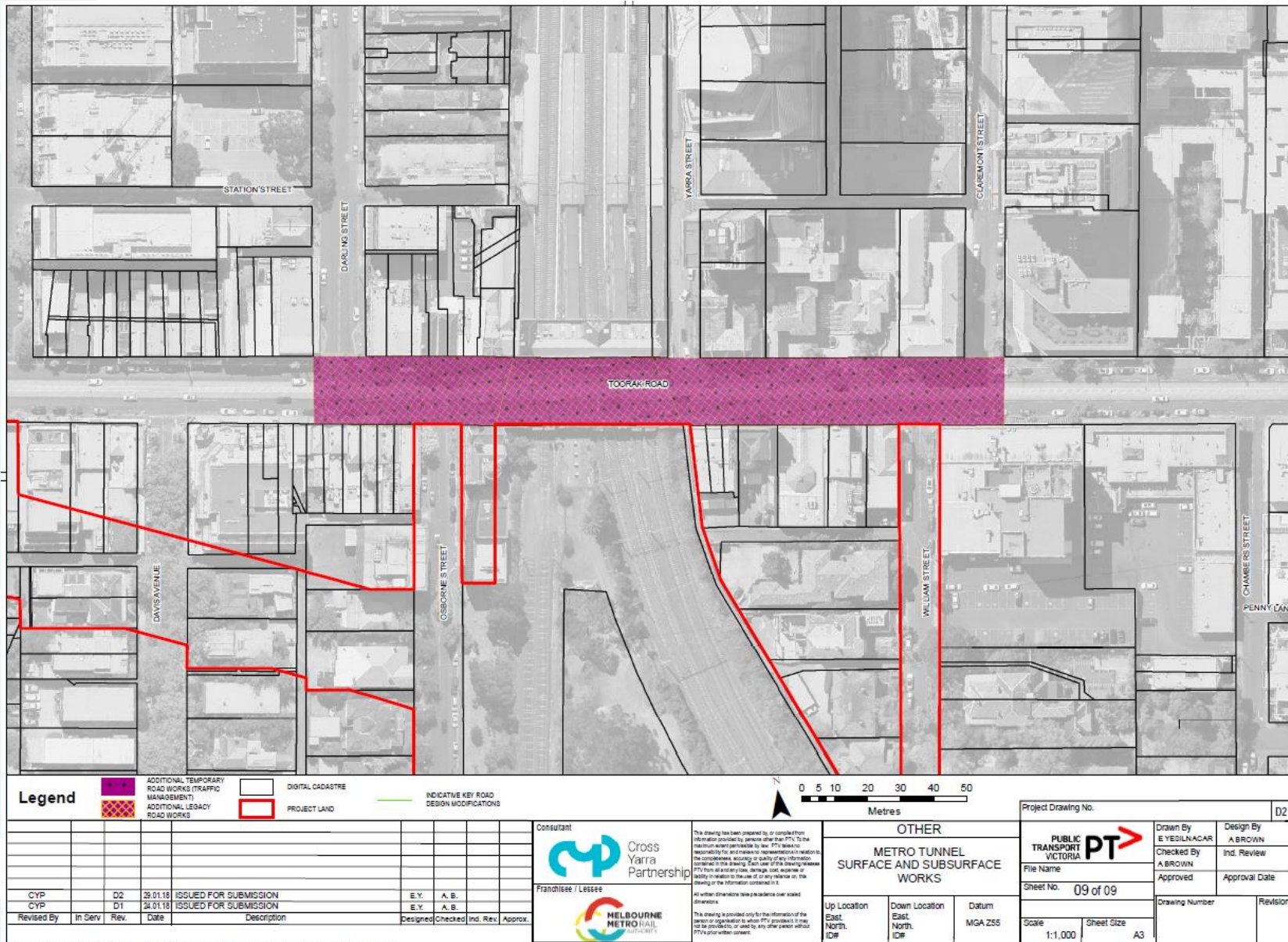


FIGURE 18: TOORAK ROAD ADDITIONAL ROAD SURFACE WORKS



## 2 Methodology

### 2.1 Environmental Risk Assessment

As part of the EES and PSA processes undertaken in 2016, MMRA completed a detailed environmental risk assessment (ERA) based on the Concept Design. Through this process an approved set of Environmental Performance Requirements (EPRs) were defined. The EPRs define the project-wide environmental outcomes that must be achieved during design, construction and operation of Melbourne Metro, (regardless of the design solutions adopted). As stated previously, CYP has proposed enhancements and changes to the Concept Design, and consequently, have undertaken an updated desktop environmental risk assessment to determine the impacts of the proposed changes on the required additional Project Land.

CYP have continued to apply a robust and transparent environmental risk assessment to the project, based on the requirements of Risk Management Standards AS/NZS ISO 31000:2009, as depicted in Figure 19 below. ISO 31000:2009 provides principles and generic guidelines on risk management and represents a standardised risk management approach. It provides a structured approach for the risk assessment and is widely used for EESs and EIAs.

The environmental risk assessment initially involved the definition of the context and scope of the additional Project Land required for the additional works. This entailed the preparation of an updated Project Description for buildings and works located outside of the approved Project Land. Following this, an initial environmental risk screening using the EPRs was undertaken. The approach followed by CYP involved the application of the EPRs as an assessment tool, an approach that accords with the framework established during the EES and PSA processes for the Project.

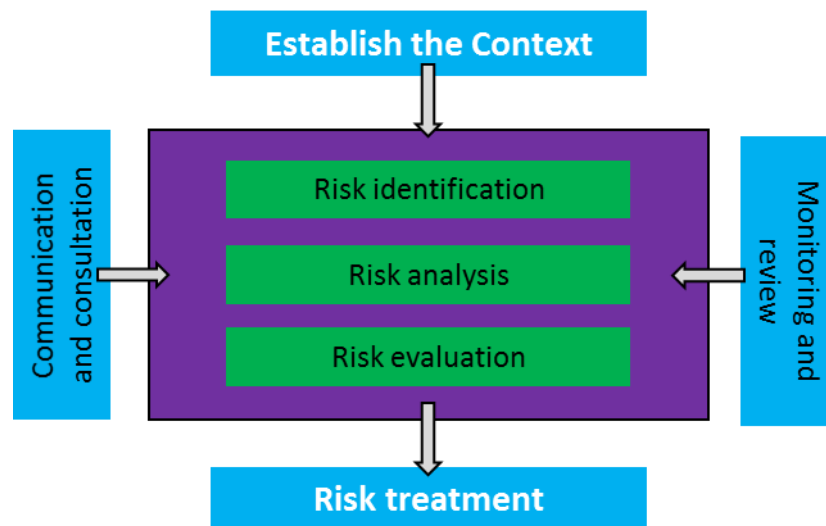


FIGURE 19: RISK ASSESSMENT PROCESS

The initial business and social risk assessment undertaken by CYP confirmed an overall low to medium risk associated with the proposed changes. The risks were mainly associated with potential future development possibilities for those properties affected at strata (below ground). Therefore, further assessment of the strata (below ground) business and social impacts as a result of the CYP modified design was required.

### 2.2 Impact Assessment

The methodology for the business and social impact assessment considers the impacts arising from CYP's design and construction changes for Melbourne Metro. Specifically, impacts arising from changes in:

- Access to residential properties by owners and occupiers.
- Amenity for residents and the community.
- Community access to valued places.
- Operation and access to social infrastructure.
- Business operations.

For residential dwellings, social infrastructure and businesses already included in the approved Project Land area, this assessment considers whether the flow on effects of the design and construction changes are likely to change the nature or extent of the impacts already identified through the EES and PSA processes, specifically in the *Melbourne Metro Rail Project Social and Community Impact Assessment* and the *Melbourne Metro Rail Business Impact Assessment*.

For residential dwellings, social infrastructure and businesses that are not in the approved Project Land area, impacts are assessed against existing conditions.

The tasks undertaken to assess the potential social and business impacts from the Melbourne Metro design and construction changes were:

- A review of the original and revised project description to understand differences.
- Briefings from the Cross Yarra Partnership (CYP) project team with regard to design and construction detail.
- A review of relevant Commonwealth, State and Local Government legislation.
- A desktop review of relevant studies and assessments, including:
  - EES main report
  - EES Technical Appendix B Environmental Risk Register
  - EES Technical Appendix C Community and Stakeholder Feedback Summary Report
  - EES Technical Appendix D Land Use and Planning
  - EES Technical Appendix E Social and Community
  - EES Technical Appendix F Business
  - Environmental Management Framework
  - Project description for the Planning Scheme Amendment
  - Briefing from CYP project team
- Inspections of the areas affected by the design and construction changes.
- Briefings from other technical disciplines (transport, heritage, land use) to understand the flow-on social and business impacts.

This assessment considers the social and business impacts arising from the Melbourne Metro design and construction changes. Specifically, impacts arising from changes in:

- Land use restrictions on private residential and business properties.
- Access to residential properties by owners and occupiers.
- Amenity for residents and the community.
- Community access to valued places.
- Operation and access to social infrastructure.
- Business operations.
- Client access to businesses.

For residential dwellings, social infrastructure and businesses already included in the approved Project Land area, this assessment considers whether the design and construction changes are likely to change the nature or extent of the impacts already identified through the EES and PSA processes, specifically in the *Melbourne Metro Rail Project Social and Community Impact Assessment* and the *Melbourne Metro Rail Business Impact Assessment*.

For residential dwellings, social infrastructure and businesses that are not in the approved Project Land area, impacts are assessed against existing conditions.

### 3 Legislation, policy and guidelines

This section summarises the relevant legislation, policy and guidelines for business and social that applies to the project as well as the implications.

#### 3.1 Commonwealth and State Government Policies

Commonwealth and State Government legislation which provided context for the report is detailed in Table 5.

TABLE 5: COMMONWEALTH LEGISLATION

Legislation	Relevance
<b>Commonwealth Policy</b>	
<b>Disability Discrimination Act 1992</b>	<p><i>The Disability Discrimination Act 1992</i> provides legal protection for everyone in Australia against discrimination based on disability. The relevant objectives for this assessment are:</p> <ul style="list-style-type: none"> <li>a) to eliminate, as far as possible, discrimination against persons on the ground of disability in the areas of: <ul style="list-style-type: none"> <li>(i) work, accommodation, education, access to premises, clubs and sport</li> <li>(ii) the provision of goods, facilities, services and land</li> <li>(iii) existing laws</li> <li>(iv) the administration of Commonwealth laws and programs</li> </ul> </li> <li>b) to ensure, as far as practicable, that persons with disabilities have the same rights to equality before the law as the rest of the community</li> <li>c) to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.</li> </ul> <p>The most relevant clauses for this assessment are:</p> <ul style="list-style-type: none"> <li>▪ Section 23: Access to premises</li> <li>▪ Section 24: Goods, services and facilities</li> <li>▪ Section 26: Land</li> </ul>
<b>State Policy</b>	
<b>Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978</b>	<p>The Ministerial guidelines for the assessment of environmental effects under the <i>Environment Effects Act 1978</i> detail the matters to be examined and documented in an EES. The relevant matters for this assessment are: Human communities - the social implications of a project for affected communities using a combination of recognised quantitative and qualitative methods to meaningfully assess potential social effects. Relevant aspects of social effects could be:</p> <ul style="list-style-type: none"> <li>▪ Potential changes to local population and demographic profile</li> <li>▪ Social structure and networks</li> <li>▪ Residential amenity and social well-being</li> <li>▪ Social vulnerability and differential effects on parts of the community</li> <li>▪ Housing and social infrastructure needs</li> <li>▪ Perceptions of aesthetic, recreational and other social values of landscape or locality</li> </ul> <p>Attitudes to proposed development</p>
<b>Planning and Environment Act 1987</b>	<p>The <i>Planning and Environment Act 1987</i> sets out the key planning environmental objectives for Victoria. The relevant objectives for this assessment are:</p> <ul style="list-style-type: none"> <li>c) To secure a pleasant, efficient and safe working, living and recreational environment for all Victorians and visitors to Victoria</li> <li>e) To protect public utilities and other assets and enable the orderly provision and coordination of public utilities and other facilities for the benefit of the community</li> </ul> <p>2(d) To ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land</p>
<b>Transport Integration Act 2010</b>	<p>The <i>Transport Integration Act 2010</i> provides a key legislative context for the assessment of transport projects. The Act lists a range of themes and uses relevant to transport. Section 11 outlines the principles for the integration of transport and land use including:</p>

Legislation	Relevance
	<ul style="list-style-type: none"> <li>▪ The transport system should provide for the efficient integration of transport and land uses and facilitate access to social and economic opportunities</li> <li>▪ Transport and land use should be effectively integrated so as to improve accessibility and transport efficiency with a focus on: <ul style="list-style-type: none"> <li>a) Maximising access to residences, employment, markets, services and recreation.</li> <li>d) Facilitating better access to, and greater mobility within, local communities.</li> </ul> </li> </ul>
<b>Public Health and Wellbeing Act 2008</b>	<p>The <i>Public Health and Wellbeing Act 2008</i> outlines the state's role in promoting, protecting and reducing inequalities in public health and wellbeing. The most relevant section of the Act is Part 2, Section 4: Objectives:</p> <ul style="list-style-type: none"> <li>▪ Public health and wellbeing includes the absence of disease, illness, injury, disability or premature death and the collective state of public health and wellbeing</li> <li>▪ The objective of this Act is to achieve the highest attainable standard of public health and wellbeing by: <ul style="list-style-type: none"> <li>○ Promoting conditions in which persons can be healthy</li> <li>○ Reducing inequalities in the state of public health and wellbeing</li> </ul> </li> </ul>
<b>Victorian Charter of Human Rights and Responsibilities Act 2006</b>	<p>This charter is a tool to protect human rights and freedoms. The most relevant section for this assessment is Section 20 Property Rights: A person must not be deprived of his or her property other than in accordance with the law.</p>
<b>State Planning Policy Framework</b>	<p>The State Planning policy context provides a framework for integrated policy decision making with regards to how land is used and developed across the state. This framework is consistent across the state and is contained with the local municipal planning scheme. The most relevant clauses for this assessment are:</p> <p>Section 10 Settlement:</p> <ul style="list-style-type: none"> <li>▪ Planning is to facilitate sustainable development that takes full advantage of existing settlement patterns, an investigate in transport and communication, water, sewerage and social facilities.</li> </ul> <p>Section 15 Built environment and heritage:</p> <ul style="list-style-type: none"> <li>▪ Creating quality built environments supports the social, cultural, economic and environmental wellbeing of our communities, cities and towns.</li> <li>▪ Land use and development planning must support the development and maintenance of communities with adequate and safe physical and social environments for their residents, through the appropriate location of uses.</li> </ul> <p>Section 19 Infrastructure:</p> <ul style="list-style-type: none"> <li>▪ Planning for development of social and physical infrastructure should enable it to be provided in a way that is efficient, equitable, accessible and timely.</li> </ul> <p>Planning is to recognise social needs by providing land for a range of accessible community resources, such as education, cultural, health and community support (mental health, aged care, disability, youth and family services) facilities.</p>



## 4 Impact Assessment

### 4.1 Overview

The business and social impact assessment has determined that all potential impacts to the operation and access to business and community facilities as well as residents; arising as a result of the changes to project land, can be dealt with appropriately and effectively by the existing project EPR's.

The risk assessment has resulted in all potential impact resulting a low or very low impacts, however this was based on the assumption of a draft design. As the design evolved, it was deemed necessary to undertake a further assessment to ensure no detrimental or long-term impact could result due to the changes in CYP design.

An Environmental Risk Assessment has been completed for the CYP design changes for the Melbourne Metro project. The overall Environmental Risk Assessment process adopted was based on AS/NZS ISO 31000:2009. As part of this process, an initial Business and Social risk assessment was undertaken for the CYP design changes located outside of the approved Project Land. In conjunction with a number of other technical areas, the initial risk assessment recommended that a detailed land use and planning assessment be undertaken for the CYP design changes located outside of the approved Project Land.

#### Social

The social assessment considers the impacts of the proposed CYP design and construction changes on private residential property owners and occupiers and the operators and users of affected social infrastructure. It also considers the potential new or additional impacts on amenity and community access to valued places.

#### Business

A number of businesses are affected by the CYP design and construction changes relating to the rail tunnel alignment, additional underground support structures, as well as along roads that will be required for construction phase traffic management and legacy road works.

The business assessment considers the impacts of the design and construction changes on affected businesses, specifically business operation and access restrictions.

The following section identifies and appraises new or additional impacts arising from the CYP design changes. Impact relates to the outcome of an action in relation to values of a resource or sensitivity of a receptor and potential benefits of new and additional impacts. Impact assessment must be informed by risk assessment so that the level of action to manage an impact relates to the likelihood of an adverse impact occurring. For ease of reference, the impact assessment relates to discrete sections of the overall project.

#### 4.1.1 Benefits and Opportunities

Table 6 and Table 7 list the benefits and opportunities, respectively that the business and social impact assessment has determined arise from the changes in Project Land.

TABLE 6: SOCIAL AND BUSINESS BENEFITS OF THE CHANGE TO APPROVED PROJECT LAND

Element	Benefits
<b>Parkville to CBD North</b>	<ul style="list-style-type: none"><li>Construction will occur at strata, limiting surface work and therefore disruptions in access to businesses and social infrastructure and loss of amenity.</li></ul>
<b>CBD North Station</b>	<ul style="list-style-type: none"><li>Construction will occur at strata, limiting surface work and therefore disruptions in access to businesses and social infrastructure and loss of amenity.</li></ul>
<b>CBD South Station</b>	<ul style="list-style-type: none"><li>More efficient connection between CBD South Station and Flinders Street Station and Federation Square.</li><li>Decreased pedestrian congestion in the CBD South precinct.</li><li>Improved access and pedestrian movement at Flinders Street Station and between CBD South Station and Flinders Street Station.</li></ul>
<b>Additional road surface works</b>	<ul style="list-style-type: none"><li>Improved landscaping as a result of the legacy works should result in improved public realm.</li><li>Improved road surface as a result of legacy works, benefiting cyclists.</li><li>Increased efficiency and capacity in the tram network due to the construction of the tram curve at the corner of Elizabeth Street and Swanston Street.</li></ul>

TABLE 7: OPPORTUNITIES FROM THE CHANGE TO APPROVED PROJECT LAND

Element	Opportunities
<b>Parkville to CBD North</b>	<ul style="list-style-type: none"> <li>▪ All changes to Project Land within this project component are below ground, therefore do not present additional social and business opportunities.</li> </ul>
<b>CBD North Station</b>	<ul style="list-style-type: none"> <li>▪ All changes to Project Land within this project component are below ground, therefore do not present additional social and business opportunities.</li> </ul>
<b>CBD South Station</b>	<ul style="list-style-type: none"> <li>▪ Maximising all abilities access for mid-platform lifts at Flinders Street Station and for pedestrian access.</li> </ul>
<b>Additional road surface works</b>	<ul style="list-style-type: none"> <li>▪ Involve local communities and stakeholders in planning for public realm legacy improvements.</li> </ul>

## 4.2 Parkville to CBD North

### 4.2.1 Project Components

The CYP project changes of relevance to this assessment include:

- realignment of the tunnels outside of approved Project Land
- additional ground support structures at Parkville Station.

Activities in this area include operation of the tunnel boring machine (TBM), cross passage excavation, installation of ground support structures, and the operation and maintenance of trains.

All changes to Project Land area in this component are below ground. The additional strata (underground) is required for ground support structures encasing shafts at Parkville Station and the new tunnel alignment between Parkville Station and CBD North Station.

### 4.2.2 Existing Conditions

Social and business impacts that could arise from tunnel realignment and additional ground support structures relate to:

- land use restrictions, specifically below ground development such as basements.
- decreased amenity such as increased dust and noise from construction.

Relevant existing conditions therefore relate to the nature of the land use of affected properties and community and business activities surrounding additional construction areas.

#### Precinct overview

The area between Royal Parade to Victoria Street is part of Melbourne's key health, medical research and educational precinct. It includes the Peter Doherty Institute for Infection and Immunity, Royal Melbourne Hospital, Royal Women's Hospital, Victorian Comprehensive Cancer Centre and various University of Melbourne medical teaching and research facilities.

Retail, commercial and high density residential uses are located along Swanston Street, as well as the Lincoln Square open space. The School of Audiology, Trinity College, the Melbourne University Digitisation Centre and Grattan Institute are also located in this part of the precinct.

A number of properties within the University of Melbourne, University Square, on Leicester Street and Royal Parade have Heritage Overlays and are on the Victorian Heritage Register.

#### Affected privately owned residential dwellings

No new privately owned residential properties are affected by the proposed change in Project Land area.

There is no change in the extent of the effect on privately owned residential properties considered in the EES and PSA processes.

#### Affected social/community uses

The additional Project Land area will intercept the following buildings at strata:

- The Peter Doherty Institute for Infection and Immunity at 792 Elizabeth Street, operated by the University of Melbourne and The Royal Melbourne Hospital.
- The University of Melbourne's Alan Gilbert Building on the corner of Grattan and Barry Streets (161 Barry Street). This facility comprises educational facilities such as lecture theatres and university offices.
- The University of Melbourne's Trinity College at 18-20 Lincoln Square. This facility comprises a small number of educational facilities and staff offices.
- The Melbourne University Digitisation Centre at 158 Bouverie Street.

### 4.2.3 Review of Government Policy

Commonwealth and State Government policy and legislation summarised in Section 3 provided context for the impact assessment.

### 4.2.4 Risk Assessment

All changes to Project Land area in this precinct are below ground, and therefore will be minimal risks to the enjoyment of, or access to residences, social infrastructure and recreational assets. The initial and residual social risks are considered to be low or very low.

The below ground changes also mean there will be minimal risks to business operations and functionality. The initial and residual business impacts are also considered to be low or very low.

TABLE 8: SOCIAL AND BUSINESS RISK PATHWAYS FOR PARKVILLE TO CBD NORTH

			Initial Risk				Residual Risk		
Aspect	Impact Pathway	Project phase	Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
<b>Operation of TBM</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Rare/Remote	Negligible	Very Low	Addressed by EPR B1, B2 & B3	Rare/Remote	Negligible	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Rare/Remote	Negligible	Very Low	Not relevant to changes between Parkville and CBD North	Rare/Remote	Negligible	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Unlikely	Minor	Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC11	Rare/Remote	Minor	Very Low
<b>Cross passage excavation</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Unlikely	Minor	Low	Addressed by EPR B1, B2 & B3	Rare/Remote	Negligible	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Rare/Remote	Minor	Very Low	Not relevant to changes between Parkville and CBD North	Rare/Remote	Negligible	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Possible	Negligible	Low	Addressed by EPR SC2, SC3, SC4, SC6, SC7, SC10 and SC11	Rare/Remote	Minor	Very Low
<b>Ground support structures</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Rare/Remote	Negligible	Very Low	Addressed by EPR B1, B2 & B3	Rare/Remote	Negligible	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Unlikely	Minor	Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC11	Rare/Remote	Minor	Very Low

			Initial Risk				Residual Risk		
Aspect	Impact Pathway	Project phase	Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Unlikely	Minor	Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC11	Rare/ Remote	Minor	Very Low
<b>Operation</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Operation	Rare/ Remote	Minor	Very Low	Not relevant to changes between Parkville and CBD North	Rare/ Remote	Negligible	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Operation	Rare/ Remote	Minor	Very Low	Not relevant to changes between Parkville and CBD North	Rare/ Remote	Minor	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Operation	Rare/ Remote	Minor	Very Low	Not relevant to changes between Parkville and CBD North	Rare/ Remote	Minor	Very Low
<b>Maintenance</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Operation	Rare/ Remote	Minor	Very Low	Not relevant to changes between Parkville and CBD North	Rare/ Remote	Negligible	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Operation	Rare/ Remote	Minor	Very Low	Not relevant to changes between Parkville and CBD North	Rare/ Remote	Negligible	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Operation	Rare/ Remote	Minor	Very Low	Not relevant to changes between Parkville and CBD North	Rare/ Remote	Negligible	Very Low

## 4.2.5 Impact Assessment

The *Land Use Impact Assessment* for the proposed change in Project Land area concluded that the additional Project Land and associated works should not cause any detrimental impact to land use and planning within the area.

It is therefore unlikely that there will be any adverse social or business impacts resulting from the Parkville to CBD North design and construction changes.

There is likely to be some increase in noise and dust from construction, however these impacts will be managed through the relevant Noise and Vibration EPRs and SC4 and SC6.

Vibration and electromagnetic impacts (EMI) could occur at The Peter Doherty Institute for Infection and Immunity, however this will be addressed through further EMI studies as part of the EPRs.

## 4.2.6 Stakeholders

MMRA, with the assistance of CYP, will be undertaking consultation in relation to draft Planning Scheme Amendment GC82, as well as some consultation with Councils and key landowner. In recognition that project progress and decisions can be enhanced through dialogue with the community and relevant stakeholders, MMRA has developed core principles and goals for the planning and construction of the Project. These are further described in Table 9. CYP shares these same principles and goals. Furthermore, the findings from these impact assessments will inform refinement of the Communication and Stakeholder Engagement Strategy.

TABLE 9: PRINCIPAL AND GOALS OF THE STAKEHOLDER AND ENGAGEMENT STRATEGY

Principle	Goal
<b>Effective</b>	Engagement is open, consistent, inclusive, accessible and transparent throughout planning and delivery of the project
<b>Timely</b>	Engagement spans all stages of the project, ensuring information is provided to stakeholders as the project develop and feedback is responded to and incorporated in the project's development
<b>Meaningful</b>	Engagement is clear on the elements of this project that can be influenced by the community and stakeholders, how the feedback will be used and is explicitly on which elements of the project are fixed and the reason for this
<b>No surprises</b>	Engage early to gain understanding of interests, concerns, requirements and preferred outcomes. Close the loop to determine how feedback has been considered

A three phase approach has been developed. Phase 1 – Early Engagement, Phase 2 - Engagement to support public display of draft PSA and Phase 3: Engagement post PSA. The Consultation and Summary Report provides further detail of the process and outcomes and next steps.

### Phase 1: Early Engagement

#### Key stakeholders –government agencies / entities /precinct based

Engagement was focused on briefing key stakeholders particularly government departments and agencies, and Councils on the proposed changes to the Project Land. MMRA and CYP held stakeholder meetings to outline the PSA process and to obtain feedback leading up to submission of the draft PSA to the Minister for Planning. Where possible, MMRA and CYP used existing stakeholder meetings to discuss the PSA. Key messages were high level with the provision of information tailored to the specific needs of the stakeholder.

CYP and MMRA held meetings with each of the following stakeholder stakeholders as part of the ongoing stakeholder engagement strategy:

- City of Maribyrnong
- City of Melbourne
- City of Port Phillip
- City of Stonnington
- DELWP
- EPA
- Heritage Victoria
- Melbourne Water
- Parkville Precinct Reference Group
- Public Transport Victoria (PTV)/TfV
- State Library
- Transport for Victoria (TfV)
- VicRoads.

## Landowner/Tenant Engagement

Strata divestment will be required for the proposed CYP design and construction changes to Project Land. Further, temporary occupation may also be required for the Project Land changes at 2 and 2A Chambers Street, South Yarra, for the purposes of the Rail Infrastructure Alliance (RIA), which is yet to be appointed.

MMRA commenced early engagement with the impacted property owners and tenants as part of PSA GC82 and will continue to do so throughout the PSA process.

Letters were sent to landowners and tenants about the proposed changes to Project Land in PSA GC82. The letters outlined the impact to their property, the planning process, how to be involved and how to contact the project for assistance or support.

MMRA and CYP held meetings with each of the following stakeholders as part of the ongoing stakeholder engagement strategy:

- Capitol Theatre
- Federation Square
- MATC
- Melbourne Central
- Manchester Unity
- QV Building
- RMIT University
- University of Melbourne.

## Road Surface Works

A number of roads will be included in the draft PSA to enable construction management and some legacy roadworks. Engagement with stakeholders will occur before these permanent changes are undertaken. The nature of the road surface works and the broad timelines (where available) was provided in letters to relevant stakeholders.

### *Phase 2: Engagement to support public display of draft PSA*

The PSA will be on display for 30 calendar days with the following proposed communications tools.

#### **Targeted Letters**

Information packs were provided to landowners and tenants, tailored to whether the proposed impact on the property is as follows:

- newly within the Project Land
- newly within the DDO
- an increase in the Project Land
- an increase in the DDO
- adjacent to the road surface works

Strata divestment and DDO-related change information packs included:

- Letters to landowners advising of the proposed changes to the PSA and potential strata divestment/ a potential Design and Development Overlay (DDO) on their property
- Maps relevant to the property
- Invitation to provide feedback online or contact the project team
- The information packs will outline the time frames for the PSA process, opportunity to provide feedback, the strata divestment process (if relevant) and address any immediate questions.

The draft PSA and supporting documents will be published on the Metro Tunnel website for 30 calendar days. An online feedback form will also be made available for the duration of the draft PSA public display period for landowners and tenants to provide feedback on the PSA process and potential impacts on their property. These comments will be responded to, as outlined in Phase 3 of the consultation process. A consultation summary report will be produced to support formal submission of draft Amendment GC82.

### *Phase 3: Engagement post PSA*

CYP will provide a response and update on the issues raised to prescribed stakeholders, key stakeholders, Reference Groups, and the community. Prescribed stakeholders will receive a response on their feedback including through comprehensive briefings.

Key stakeholders will be responded to formally in writing, and in stakeholder meetings. CYP will include presentations on the feedback received to the Parkville Precinct Reference Group and Community Reference Groups. Organisations and



members of the community who provide feedback either online through the survey or in writing will be responded to, where email or address details are provided.

In accordance with the existing approved Environmental Performance Requirements and the project's contractual Project Scope & Technical Requirements, further detailed technical assessments are being undertaken including of building and asset condition, ground movement, groundwater, noise and vibration, and Electro Magnetic Interference (EMI). These assessments variously involve stakeholder consultation, and are used to inform design and construction of the project

#### **4.2.7 Environmental Performance Requirements**

No additional business or social EPRs are considered to be required.

#### **4.2.8 Assumption and Limitations**

It is assumed that further assessments and modelling, such as EMI, will be undertaken to minimise impact on The Peter Doherty Institute for Infection. This is an assumption based on the obligation outlined in the EPRs, specifically EMI1 and EMI2 which specifies a project wide EMI assessment is undertaken for existing infrastructure and an Electro Magnetic Compatibility Management Plan is prepared.



## 4.3 CBD North Station

### 4.3.1 Project Components

The project components of relevance to this assessment include:

- Realignment of four sections of the tunnel outside of approved Project Land
- Additional ground support structures at CBD North Station.

Activities in this area include operation of the excavation, cross passage excavation, installation of ground support structures, and the operation and maintenance of trains.

All changes to Project Land within this project component are below ground. The additional strata (underground) is required for ground support structures encasing shafts at CBD North Station and the new tunnel alignment between CBD North Station and Lonsdale Street.

### 4.3.2 Existing Conditions

Social and business impacts that could arise from tunnel realignment and additional ground support structures relate to:

- land use restrictions, specifically below ground development such as basement
- decreased amenity such as increased dust and noise from construction
- vibration impacts, particularly on heritage buildings.

Relevant existing conditions therefore relate to the nature of the land use of affected properties and social and business activities surrounding additional construction areas.

#### Precinct overview

The project component is in the northern part of Melbourne's CBD. RMIT occupies a large proportion of this project component with its facilities running along the eastern side of Swanston Street between Franklin and La Trobe Streets, as well as a number of buildings on the western side.

This project component also includes the very highly utilised State Library of Victoria forecourt, Melbourne Central Shopping Centre, Melbourne Central Station and the forecourt of the QV Shopping Centre.

Swanston Street is a key transport corridor, with tram, cycle and pedestrian routes linking Melbourne's north and south east. A tram super stop is located just south of La Trobe Street, near the corner of Swanston and Franklin Streets.

#### Affected privately owned residential dwellings

No privately owned residential properties are newly affected by the proposed change in Project Land area.

There is no change to the extent of the effect on privately owned residential properties already considered in the EES and PSA processes.

#### Affected social/community uses

The additional Project Land area will intercept the following buildings (at strata):

- RMIT. RMIT's Building 9, at 1-55 Franklin Street and Storey Hall at 344-346 Swanston Street are on the Victorian Heritage Register.
- The Church of Christ at 333 Swanston Street. The Church is on the Victorian Heritage Register.
- The State Library forecourt. The State Library is on the Victorian Heritage Register.

#### Affected businesses

The additional Project Land area will intercept the following businesses (at strata):

- RMIT University
- UniLodge student accommodation at 339 Swanston Street
- Melbourne Real Estate
- Restaurants including: Sichuan Dining Room, Café Mimo, Joomak Mr.Burger, Nandos, Subway, 7-11
- Hardrock Rock Climbing Centre
- Newsagency
- Student Flight Centre
- Melbourne City Conference Centre
- QV forecourt

### **4.3.3 Review of Government Policy**

Commonwealth and State Government policy and legislation summarised in Section 3 provided context for the impact assessment.

### **4.3.4 Risk Assessment**

All changes to Project Land area in this precinct are below ground. Therefore, there will be minimal risks to the enjoyment of, or access to residences, social infrastructure or recreational assets. The initial and residual social risks are considered to be low or very low.

The below ground changes also mean there will be minimal risks to business operations and functionality. The initial and residual business impacts are also considered to be low or very low.

TABLE 10: SOCIAL AND BUSINESS RISK PATHWAYS FOR CBD NORTH STATION

			Initial Risk		Residual Risk				
Aspect	Impact Pathway	Project phase	Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
Excavation									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Possible	Minor	Low	Addressed by EPR B1, B2 & B3	Unlikely	Minor	Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Possible	Minor	Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC11	Unlikely	Moderate	Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Unlikely	Moderate	Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC12	Unlikely	Moderate	Low
Cross passage excavation									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Possible	Minor	Low	Addressed by EPR B1, B2 & B3	Rare/ Remote	Negligible	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Rare/ Remote	Minor	Very Low	Not relevant to works at CBD North Station	Rare/ Remote	Negligible	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Possible	Minor	Low	Addressed by EPR SC2, SC3, SC4, SC6, SC7, SC10 and SC11	Rare/ Remote	Minor	Very Low
Ground support structures									

Aspect	Impact Pathway	Project phase	Initial Risk		Residual Risk				
			Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Unlikely	Minor	Low	Addressed by EPR B1, B2 & B3	Rare/Remote	Minor	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Unlikely	Minor	Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC11	Rare/Remote	Minor	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Unlikely	Minor	Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC11	Rare/Remote	Minor	Very Low
<b>Operation</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Operation	Rare/Remote	Minor	Very Low	Addressed by EPR B1, B2 & B3	Rare/Remote	Negligible	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Operation	Rare/Remote	Minor	Very Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC11	Rare/Remote	Minor	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Operation	Rare/Remote	Minor	Very Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC11	Rare/Remote	Minor	Very Low
<b>Maintenance</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g.	Operation	Rare/Remote	Minor	Very Low	Addressed by EPR B1, B2 & B3	Unlikely	Negligible	Very Low



Aspect	Impact Pathway	Project phase	Initial Risk		Residual Risk				
			Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
	relocation, amenity, deliveries, waste removal, access, foot traffic)								
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Operation	Rare/ Remote	Minor	Very Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC11	Unlikely	Negligible	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Operation	Rare/ Remote	Minor	Very Low	Addressed by EPR SC2, SC3, SC4, SC7 and SC11	Unlikely	Negligible	Very Low

#### **4.3.5 Impact Assessment**

The Land Use Impact Assessment for the proposed change in Project Land area concluded that the additional Project Land and associated works should not cause any detrimental impact to land use and planning within the area.

There is likely to be some increase in noise and dust from construction, however this is an already busy area. Amenity impacts are likely to be minor and will be managed through the relevant Noise and Vibration EPRs and SC4 and SC6.

Vibration could impact heritage listed buildings (and therefore their community value), however this will be addressed through noise and vibration modelling as part of the EPRs and the Heritage Management Plan (HMP).

It is therefore unlikely that there will be any adverse social or business impacts resulting from the CBD North design and construction changes.

#### **4.3.6 Stakeholders**

Refer to Section 4.2.6.

#### **4.3.7 Environmental Performance Requirements**

No additional business or social EPRs are considered to be required.

#### **4.3.8 Assumption and Limitations**

It is assumed that further assessments such as vibration, ground movement and cultural heritage will be undertaken to minimise impact on heritage buildings and the associated social value of these buildings. This assumption is based on the obligation outlined in the EPRs, specifically NV3 and NV4 set specific modelling and monitoring requirements for noise and vibration throughout the design and construction phase, while NV11 specifically set management actions and guidelines related to Vibration Dose Values (VDV) for human comfort. Ground Movement EPRs GM3 and GM4 seek to identify, monitor and mitigate any potential impacts; and cultural heritage EPRs CH3 provides requirements for condition assessments of heritage buildings and CH7 requires an investigation into archaeological management.

## 4.4 CBD South Station

### 4.4.1 Project Components

The project components of relevance to this assessment include:

- realignment of four sections of the tunnel outside of approved Project Land
- two sections of additional ground support structures at the CBD South Station outside of approved Project Land
- a pedestrian adit linking CBD South Station with Federation Square
- a pedestrian adit (emergency egress) linking CBD South Station to City Square
- a construction adit under St.Paul's Cathedral grounds, on the eastern side of Swanston Street
- addition of access mid-platform at Flinders Street Station.

Activities in this area include operation of the excavation, cross passage excavation, installation of ground support structures, haulage, fit out, reinstatement and the operation and maintenance of trains.

Changes to the approved Project Land will be both at surface and below ground. The additional strata (underground) is required for ground support structures to support pedestrian adits, as well as the new tunnel alignment.

Above ground changes occur at Flinders Street Station as the design changes require an extension to include the middle section of Flinders Street Station platforms one to nine and the Degraes Street Subway.

### 4.4.2 Existing Conditions

Social and business impacts that could arise from tunnel realignment, additional ground support structures and a pedestrian adit relate to:

- land use restrictions, specifically below ground development such as basements.
- decreased amenity such as increased dust and noise from construction.
- vibration impacts, particularly on heritage buildings.
- visual impacts of haulage vehicles and other construction activity.
- changes in access to workplaces, retail, social infrastructure or residences.
- changes in commuter and pedestrian accessibility and experience.

Relevant existing conditions therefore relate to the nature of the land use of affected properties and the types of community and business activities surrounding additional construction areas.

#### Precinct overview

The CBD South Station project component covers the area south of Little Collins Street to the Yarra River. The western side of Swanston Street between Flinders Street and Collins Street is part of the CBD retail core and therefore comprises retail and commercial uses. Uses along Flinders Street comprise a mix of retail, hospitality and commercial.

This precinct includes a number of buildings that are listed on the Victorian Heritage Register including Flinders Street Station, St Paul's Cathedral, Melbourne Town Hall, the Manchester Unity Building, Capitol House, Nicholas Building and Young and Jackson Hotel. Flinders Street Station is the oldest capital city train station in Australia and the busiest station in Melbourne's existing public transport network.

Other significant uses include the highly utilised Federation Square on the corner of Swanston and Flinders Streets, as well as the Melbourne Visitor Centre. There is also the Melbourne Town Hall on the corner of Collins Street and Swanston Streets, the Westin Hotel and the City Square hotel and apartment complex.

A number of tram routes travel along Swanston Street, connecting the south eastern and northern suburbs. A tram super stop is located just north of Flinders Lane. Tram routes are also located on Collins Street and Flinders Street.

#### Affected privately owned residential dwellings

No privately owned residential properties are newly affected by the proposed change in Project Land area.

There is no change in the extent of the effect on privately owned residential properties already considered in the EES and PSA processes.

#### Newly affected social/community uses

The additional Project Land area will intercept the following buildings (at strata):

- Flinders Street Station (listed on the Victorian Heritage Register)
- Federation Square
- St Paul's Cathedral (listed on the Victorian Heritage Register)
- Melbourne Council House



### Newly affected businesses

The additional Project Land area will intercept the following businesses (at strata):

- Commonwealth Bank, Westpac, a number of currency exchangers
- Restaurants: KFC, Subway, Lord of the Fries, Sushi Hub, Krispy Kream, Cha time, Boost Juice, Sushi Sushi, Cabinet
- Retail: a number of souvenir shops, Arthur Daily, 7-11, EB Games, Femme Fashion, Roxanne, 7 Angels, Rocash, Dangerfield, Opal, Virgin Mobile, Hype, Off ya tree, Platypus, Dotti, Foot Locker, Micheal Hill Jewellers, Vodaphone, Rochs Opals, Salmas, Paul Bram
- Pharmacies
- Woolworths Metro

### 4.4.3 Review of Government Policy

Commonwealth and State Government policy and legislation summarised in Section 3 provided context for the impact assessment.

### 4.4.4 Risk Assessment

The below ground changes mean there will be minimal risks to business operations and functionality. The initial and residual business impacts are considered to be low or very low.

The most significant risk with regard to social infrastructure is likely to be the addition of mid-platform lifts at Flinders Street Station. However, when applying the consequence rating criteria, the changes are short-term of less than one year and are recoverable. Combined with EPRs SC4 and T2 which will ensure timely information provision and appropriate management of disruption, the residual risk is considered to be low.

Furthermore, construction and operation has the potential to impact heritage registered buildings including St.Paul's Cathedral, Flinders Street Station and Manchester House and therefore their community value. This will need to be considered further as part of the Heritage EPR CH2 (development of a HMP).

TABLE 11: SOCIAL AND BUSINESS RISK PATHWAYS FOR CBD SOUTH STATION

			Initial Risk				Residual Risk		
Aspect	Impact Pathway	Project phase	Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
Excavation									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Possible	Negligible	Low	Addressed by EPR B1, B2 & B3	Unlikely	Negligible	Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Possible	Negligible	Low	Addressed by EPR SC1, SC2, SC3, SC4, SC6 & SC10	Unlikely	Negligible	Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Possible	Negligible	Low	Addressed by EPR SC1, SC2, SC3, SC4, SC6 & SC10	Unlikely	Negligible	Low
Cross passage excavation									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Possible	Negligible	Low	Addressed by EPR B1, B2 & B3	Rare/ Remote	Negligible	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Rare/ Remote	Minor	Very Low	Not relevant to works to at CBD South Station	Rare/ Remote	Negligible	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Possible	Minor	Low	Addressed by EPR SC2, SC3, SC4, SC6, SC7, SC10 and SC11	Rare/ Remote	Minor	Very Low
Ground support structures									

			Initial Risk				Residual Risk		
Aspect	Impact Pathway	Project phase	Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Unlikely	Negligible	Low	Addressed by EPR B1, B2 & B3	Rare/Remote	Minor	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Unlikely	Minor	Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Rare/Remote	Minor	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Unlikely	Minor	Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Rare/Remote	Minor	Very Low
<b>Haulage</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Possible	Negligible	Low	Addressed by EPR B1, B2 & B3	Rare/Remote	Negligible	Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Possible	Negligible	Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Rare/Remote	Negligible	Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Possible	Negligible	Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Rare/Remote	Negligible	Low
<b>Fit out</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation,	Construction	Unlikely	Minor	Low	Addressed by EPR B2 & B3	Unlikely	Negligible	Very Low



			Initial Risk				Residual Risk		
Aspect	Impact Pathway	Project phase	Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
	amenity, deliveries, waste removal, access, foot traffic)								
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Unlikely	Minor	Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Rare/ Remote	Minor	Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Unlikely	Minor	Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Rare/ Remote	Minor	Low
Reinstatement									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Unlikely	Negligible	Low	Addressed by EPR B2	Unlikely	Negligible	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Construction	Likely	Minor	Medium	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Unlikely	Minor	Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Construction	Unlikely	Minor	Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Unlikely	Minor	Low
Operation									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Operation	Rare/ Remote	Minor	Very Low	Addressed by EPR B2 & B3	Rare/ Remote	Negligible	Very Low

			Initial Risk				Residual Risk		
Aspect	Impact Pathway	Project phase	Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Operation	Rare/ Remote	Minor	Very Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Rare/ Remote	Negligible	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Operation	Rare/ Remote	Minor	Very Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Rare/ Remote	Negligible	Very Low
<b>Maintenance</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Operation	Rare/ Remote	Negligible	Very Low	Addressed by EPR B2 & B3	Rare/ Remote	Negligible	Very Low
Social and community	Impacts on ability to access workplace, recreational facilities, open space, residences, retail and/or services	Operation	Rare/ Remote	Negligible	Very Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Rare/ Remote	Negligible	Very Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy workplace, recreational facilities, open space, residences, retail and or/services	Operation	Rare/ Remote	Negligible	Very Low	Addressed by EPR SC1, SC3, SC4, SC6 & SC10	Rare/ Remote	Negligible	Very Low

#### 4.4.5 Impact Assessment

A benefit of the proposed CYP design changes in this project component is the construction of two pedestrian adits. One adit will link CBD South Station with Federation Square. The other will provide access to CBD South Station from City Square. This will provide commuters with direct underground access between CBD South Station and Flinders Street Station, Federation Square and City Square. Benefits include:

- allowing commuters to switch easily between the Metro Tunnel and City Loop train services
- reducing pedestrian congestion along Swanston Street and at the Flinders Street/Swanston Street pedestrian crossing
- enabling efficient commuter movement, particularly during peak hours
- providing more entry and exit points at CBD South Station.
- access between Flinders Street Station and CBD South Station will also be improved as a result of the design changes, with lifts being installed mid-platform. This will provide more direct all abilities access and provide mobility impaired commuters with an alternative route.

From a social impact perspective, these benefits are likely to save commuters some time by increasing efficiency of movement.

The addition of lifts at Flinders Street Station has the potential to be very disruptive to commuters during construction, however the changes will create long term access and movement benefits for commuters. EPRs SC1 and T2 will help to mitigate commuter disruptions.

The *Land Use Impact Assessment* concluded that the additional Project Land and associated works in this precinct should not cause any detrimental impact to land uses. Therefore, there is unlikely to be any detrimental social or business impacts resulting from restrictions on property use and development potential.

Construction and operation has the potential to impact heritage registered buildings including St.Paul's Cathedral, Flinders Street Station and Manchester House and therefore their community value. A HMP will be prepared to ensure potential impacts are limited or mitigated, as well as vibration and ground movement modelling.

There is likely to be some increase in noise and dust from construction, however these impacts will be managed through the relevant Noise and Vibration EPRs, as well as Social and Community EPRs SC1 and SC10.

Visual impacts from haulage vehicles are likely during construction, however this precinct already has a significant amount of activity and vehicular movement. Therefore, the impact of the change in addition to the existing environment is not likely to cause large decreases in perceptions of amenity.

#### 4.4.6 Stakeholders

Refer to Section 4.2.6.

#### 4.4.7 Environmental Performance Requirements

No additional business or social EPRs are considered to be required.

#### 4.4.8 Assumption and Limitations

It is assumed that further assessments such as vibration, ground movement and cultural heritage will be undertaken to minimise impact on heritage buildings and the associated social value of these buildings. This assumption is based on the obligation outlined in the EPRs, specifically NV3 and NV4 set specific modelling and monitoring requirements for noise and vibration throughout the design and construction phase, while NV11 specifically set management actions and guidelines related to Vibration Dose Values (VDV) for human comfort. Ground Movement EPRs GM3 and GM4 seek to identify, monitor and mitigate any potential impacts; and cultural heritage EPRs CH3 provides requirements for condition assessments of heritage buildings and CH7 requires an investigation into archaeological management.



## 4.5 Additional road surface works

### 4.5.1 Project Components

All temporary and legacy road surface works are relevant to this assessment. A full description of the works is provided in Section 1.1 Project Description.

All temporary and legacy road works and tram works will be surface works.

### 4.5.2 Existing Conditions

#### Arden Street

North Melbourne Football Club and the North Melbourne Recreation Centre are located on the northern side of the required section of Arden Street. There are only pedestrian entrances to these facilities located on Arden Street. On-street parking and a cycle path are located in front of the facilities.

Located on the southern side of the street is the Nick Theodossi Prestige Cars dealership and several car-related businesses. Most of these businesses have vehicular entrances from Arden Street. This side of Arden Street also has off-street car parking and a cycle path.

#### Royal Parade

Located on the western side of the required section of Royal Parade is the University High School's oval. A vehicular entrance gate to the oval is located on Royal Parade. This is likely to be used for oval maintenance.

A bus-stop for Route 505 is located in front of the oval.

Just outside the southern end of the required western section is a vehicular entrance to the carparks of Melbourne Private Hospital and the Walter and Eliza Hall Institute of Medical Research.

On the eastern side of the required section is Genetics Lane and a lane between the Melbourne Conservatorium of Music and the Grainger Museum. These lanes only have service and emergency vehicle access.

Both sides of the required section of Royal Parade have off-street car parking bays and a cycle path.

#### Grattan Street

The main Melbourne University campus runs the length of the northern side of the required section of Grattan Street. There is a service entrance to the campus just south of the Bouverie Street intersection.

Little Grattan Street is a laneway that runs off the southern part Grattan Street and provides access to car parks for the properties adjacent to it. There is another laneway that services the same purpose between Little Grattan Street and Bouverie Street. Both lanes can also be accessed via Church Street which runs off Bouverie Street.

Both sides of this section of Grattan Street have on-street car parking bays.

#### Cardigan Street

RMIT University buildings are located on the eastern side of the required section of Cardigan Street. The carpark of the building located on the corner of Cardigan and Victoria Streets is accessed from Cardigan Street.

On the western side of this section of Cardigan Street is the Dracula's Cabaret Restaurant (on the corner of Cardigan and Victoria Streets), and the entrance to a five storey RMIT permit car park.

On street parking is located on both sides of the street and there are also parking bays in the middle of the street.

#### Flinders Lane between Elizabeth Street and Swanston Street

Flinders Lane between Swanston and Elizabeth Streets is comprised of retail, hospitality, commercial, community, residential and government (Police) uses. A number of lanes run off Flinders Lane which provide service and car park access for buildings fronting Flinders Lane. There are also some on-street parking bays.

#### Flinders Lane between Swanston Street and Russell Street

Flinders Lane between Swanston and Russell Streets is comprised of retail, hospitality and commercial uses. A number of lanes run off Flinders Lane which provide service and car park access for buildings fronting the street. There are also some on-street parking bays.

#### Flinders Street

The southern side of the required section of Flinders Street is abutted by Flinders Street Station. A Metro Trains service road with access to Flinders Street Station is located approximately half way between Elizabeth Street and Queen Street. Three on street car parking bays are located near the service road.

On the northern side of the road, Flinders Court provides service access for retail and hospitality businesses. Further along towards Queen Street, there is an entrance to a public car park, and guest drop off and pick up access for the Rendezvous Hotel.

Bond Street runs off this section of Flinders Street. It provides service and car park access for adjacent commercial buildings. There is also a public carpark located on Bond Street. There is no alternative access to Bond Street other than from Flinders Lane as half of the street is one way.

There are five on-street car parking bays on this section of Flinders Street, just east of Bond Street.

The Flinders Street Station tram stop is located in the middle of Flinders Street near the corner of Elizabeth Street. Pedestrian access to the tram stop is from the Elizabeth/Swanston Street intersection or at the western end of the platform. This end of the platform does not have a marked or signalised pedestrian crossing.

### **Kings Way**

The eastern side of the required portion of Kings Way has a slip road which provides car park access for residential and commercial buildings. There are also on street car parks on the slip road.

The other side of Kings Way provides access to a BP petrol station, as well as the car park of a commercial building and a residential building.

### **Albert Road**

The northern side of the required portion of Albert Road has a slip road which provides service and car park access for a number of commercial buildings. The slip road also has on-street parking bays.

The southern side of the road is a slip road that has a number of parking bays as well as access to Albert Road Drive which provides access to Mac Robertson Girls High School.

### **Toorak Road**

The required section of Toorak Road comprises retail, hospitality, tourism and commercial uses. Toorak Road access to these business is pedestrian only.

South Yarra Station is located on the northern side of Toorak Road, approximately half way between Darling and Claremont Streets. There is a signalised pedestrian crossing across Toorak Road.

## **4.5.3 Review of Government Policy**

Commonwealth and State Government policy and legislation summarised in Section 3 provided context for the impact assessment.

## **4.5.4 Risk Assessment**

The same consequence criteria have been applied to the impact assessments for the proposed changes outside of approved Project Land as those for the EES and PSA processes.

The business consequence criteria for the Melbourne Metro project are based on the loss of business income. Criteria range from negligible consequence at 0-5 per cent business income loss per annum, to severe consequence at greater than 20 per cent business income loss per annum.

Whilst there is likely to be some disruption to business function due to road surface works, the timeframes and nature of traffic management required is unlikely to result in loss of business profit beyond 0-5%. This translates into a negligible consequence for business impacts according to the consequence criteria. EPRs B2 and B3 will ensure that businesses are consulted within adequate timeframes, and EPR T2 will ensure transport management plans apply appropriate mitigation measures. The residual risk is therefore low.

Access restrictions to social infrastructure, recreational assets or changes in their operation is likely to be short-term. There are a number of alternative options in the precincts in which the road surface works will be required. The surface road works will also be in areas which are busy, frequently evolving places. Whilst there will be some amenity impacts, they will be short term, reversible and it is likely that the community will adapt easily to the temporary changes given the existing environment. Residual social risks are therefore considered to be low.

TABLE 12: SOCIAL AND BUSINESS RISK PATHWAYS FOR ROAD SURFACE WORKS

			Initial Risk			Residual Risk			
Aspect	Impact Pathway	Project phase	Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
Site establishment									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Possible	Negligible	Low	Addressed by EPR B2 & B3	Unlikely	Negligible	Low
Social and community	Impacts on ability to access residences, workplace, recreation and leisure opportunities, open space, retail and/or services	Construction	Possible	Minor	Low	Addressed by EPR SC1, SC2 SC3, SC4, SC6, SC8 & SC10	Unlikely	Minor	Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy residences, workplace, recreation and leisure activities, open space, retail and or/services	Construction	Possible	Minor	Low	Addressed by EPR SC1, SC2 SC3, SC4, SC6, SC8 & SC10	Unlikely	Minor	Low
Haulage									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Possible	Negligible	Low	Addressed by EPR B1, B2 & B3	Unlikely	Negligible	Low
Social and community	Impacts on ability to access residences, workplace, recreation and leisure opportunities, open space, retail and/or services	Construction	Possible	Minor	Low	Addressed by EPR SC1, SC2 SC3, SC4, SC6, SC8 & SC10	Unlikely	Minor	Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy residences, workplace, recreation and leisure activities, open space, retail and or/services	Construction	Possible	Minor	Low	Addressed by EPR SC1, SC2 SC3, SC4, SC6, SC8 & SC10	Unlikely	Minor	Low
Roadworks									

Aspect	Impact Pathway	Project phase	Initial Risk			Residual Risk			
			Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Possible	Negligible	Low	Addressed by EPR B2 & B3	Possible	Negligible	Low
Social and community	Impacts on ability to access residences, workplace, recreation and leisure opportunities, open space, retail and/or services	Construction	Possible	Minor	Low	Addressed by EPR SC1, SC2 SC3, SC4, SC6, SC8 & SC10	Possible	Minor	Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy residences, workplace, recreation and leisure activities, open space, retail and or/services	Construction	Possible	Minor	Low	Addressed by EPR SC1, SC2 SC3, SC4, SC6, SC8 & SC10	Possible	Minor	Low
<b>Tramworks</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Possible	Negligible	Low	Addressed by EPR B2 & B3	Possible	Negligible	Low
Social and community	Impacts on ability to access residences, workplace, recreation and leisure opportunities, open space, retail and/or services	Construction	Possible	Minor	Low	Addressed by EPR SC1, SC2 SC3, SC4, SC6, SC8 & SC10	Possible	Minor	Low
Social and community	Impacts on amenity reducing ability to utilise and enjoy residences, workplace, recreation and leisure activities, open space, retail and or/services	Construction	Possible	Minor	Low	Addressed by EPR SC1, SC2 SC3, SC4, SC6, SC8 & SC10	Possible	Minor	Low
<b>Reinstatement</b>									
Business	Business operation disrupted affecting function and/or profitability (e.g. relocation, amenity, deliveries, waste removal, access, foot traffic)	Construction	Possible	Negligible	Low	Addressed by EPR B2 & B3	Possible	Negligible	Low
Social and community	Impacts on ability to access residences, workplace, recreation and leisure opportunities, open space, retail and/or services	Construction	Possible	Minor	Low	Addressed by EPR SC1, SC2 SC3, SC4, SC6, SC8 & SC10	Possible	Minor	Low



Aspect	Impact Pathway	Project phase	Initial Risk			Residual Risk			
			Likelihood	Consequence	Inherent Risk Rating	Relevant Discipline EPRs	Likelihood	Consequence	Residual Risk Rating
Social and community	Impacts on amenity reducing ability to utilise and enjoy residences, workplace, recreation and leisure activities, open space, retail and or/services	Construction	Possible	Minor	Low	Addressed by EPR SC1, SC2 SC3, SC4, SC6, SC8 & SC10	Possible	Minor	Low

#### 4.5.5 Impact Assessment

Additional surface road works may result in temporary disruption in access to properties along the required roads. Traffic management is likely to be for periods of up to seven months.

Temporary impeded access to businesses will be the key impact as a result of the additional road surface works. The extent of traffic management is likely to vary from day to day but has the potential to cause disruption to businesses along the affected roads. Legacy road work periods will be more disruptive than temporary traffic management. In most cases short-term road occupations will be required.

The Flinders Street/Elizabeth Street tram curve works will require the most significant traffic management with legacy works likely to take up to seven months. This area of the CBD is a thoroughfare for all transport modes, therefore impacts are unavoidable, however EPRs SC6 and T2 will help to minimise impacts through information provision and consultation. The legacy road works will also create a long-term benefit of the project, reducing delays on the 19, 57 and 59 trams and allowing more trams onto the tram network overall.

Businesses on Arden Street and both of the required sections of Flinders Lane are likely to be impacted if access is restricted as a result of traffic management. Clients access car service related businesses on the southern side of Arden Street directly from the street and do not have alternative access points if access is blocked. A number of laneways running off Flinders Lane provide entrances to car parks and services (waste and deliveries) for businesses fronting Flinders Lane. EPRs B2 and B3 will not entirely mitigate the impact on businesses but will help to provide timely information and consider individual business requirements for mitigation.

It is also possible that both car users and pedestrians may avoid areas with traffic management, disadvantaging businesses through the loss of passing traffic and cyclists. This impact is likely to be greatest on Toorak Road and Flinders Lane where there are number of hospitality venues and retail shops.

All of the required roads are busy traffic thoroughfares. Flinders Lane, Flinders Street, Toorak Road and Grattan Street are also highly utilised by pedestrians. The entrance to South Yarra Station is on the required section of Toorak Road and Flinders Street Station abuts the required section of Flinders Street. Although pedestrians and road users are accustomed to the required roads being busy environments, traffic management may decrease perceptions of amenity through visual impacts from aspects such signage, the movement of construction vehicles and potentially increased congestion.

Whilst being disruptive in the short term, legacy road works will provide public realm improvements through landscaping and improvements to road surfaces which will benefit cyclists.

#### 4.5.6 Stakeholders

Refer to Section 4.2.6.

#### 4.5.7 Environmental Performance Requirements

No additional business or social EPRs are considered to be required.

#### 4.5.8 Assumption and Limitations

The nature or duration of day to day traffic management measures were not available at the time of the assessment, therefore impacts on business operation and function could not be assessed in greater detail. It is assumed that other assessments and modelling will be undertaken, particularly around transport management to ensure minimal disruption and impacts on pedestrian, public transport and private transport movements. This is based on the obligations of the EPR T2, which requires the Traffic Management Plan to be prepared based on traffic modelling, and agreed upon with the TTWG.

## 5 Conclusion

The social and business impacts from the construction and operation of the Melbourne Metro have been assessed in relation to proposed CYP changes to the approved Project Land. The CYP changes predominately relate to the provision of underground support structures, additional station connections and temporary road occupations that affect surface land.

There are a range of changes related to the change in approved Project Land that have the potential to generate social and business impacts during the construction and operational phases of the project.

Similar to the approach undertaken by MMRA for the initial EES and PSA processes, CYP have undertaken a robust and transparent environmental risk assessment process for the project, based on the requirements of Risk Management Standards AS/NZS ISO 31000:2009. Following this risk assessment, the majority of these residual risks were determined to be low to very low. However due to the limited design information available at the time, this social and business impact assessment has been carried out.

The social assessment considers the impacts of the proposed CYP design and construction changes on private residential property owners and occupiers and the operators and users of affected social infrastructure. It also considers the potential new or additional impacts on amenity, the social fabric of the community and recreational values. Additionally a number of businesses are affected by the CYP design and construction changes relating to the rail tunnel alignment, additional underground support structures, as well as along roads that will be required for construction phase traffic management and legacy road works. The business assessment considers the impacts of the design and construction changes on affected businesses, specifically business operation and access restrictions.

The methodology for the Business and Social impact assessment considers the impacts arising from CYP's design and construction changes for Melbourne Metro. Specifically, impacts arising from changes in:

- Land use restrictions on private residential and business properties.
- Access to residential properties by owners and occupiers.
- Amenity for residents and the community.
- Community access to valued places.
- Operation and access to social infrastructure.
- Business operations.
- Client access to businesses.

Following the impact assessment, it has been determined that the design and construction changes resulting from CYPs design are unlikely to create detrimental social or business impacts as a result of the implementation of the existing EPRs and objectives set as part of the EES and PSA processes. Some level of disruption in access to social infrastructure and businesses may occur, however it is likely to be short term.