



Overarching Construction Traffic Management Plan

Western Sydney Airport – Surface and Civil Alignment Works

Project Name	Sydney Metro – Western Sydney Airport, Surface and Civil Alignment Works
Project Number	N81150
Revision Date	29/09/2022
Revision	01
Document Number	SMWSASCA-CPU-1NL-NL000-TF-PLN-000001

Document Approval

Rev.	Date	Prepared by	Reviewed by	Approved by	Remarks
А	01/06/2022				First draft
В	05/08/2022				See Revision Table below
С	30/08/2022				See Revision Table below
01	29/09/2022				Issued For Construction
Signature					





Distribution and Authorisation

Document Control

The CPBUIJV Project Director is responsible for ensuring this plan is reviewed and approved. The Construction Manager is responsible for updating this plan to reflect changes to the project, legal and other requirements, as required.

The controlled master version will be maintained on TeamBinder. All circulated hard copies are deemed to be uncontrolled.

Amendments

The implementation of this Plan is under the authority of the CPBUIJVDelegated Authority Matrix. All Contract personnel will perform their duties in accordance with this Plan, supporting plans, and related procedures.

Revision Details

Rev.	Details
А	First draft
В	Revision based on comments received
С	Revised based on comments received and removal of Elizabeth Drive gates 7&8
01	Issued For Construction (All Sydney Metro review comments closed)





Table of contents

		tions and definitions	
Part	A Ov	verview	1
1.		oduction	
	1.1.	Project Scope	1
		1.1.1. Package scope	1
2.		ıcture of this Plan	
	2.1.		
	2.2.	L. C.	
		2.2.1. Construction Traffic Contract Requirements	4
	2.3.	Plan Revisions	4
	2.4.	Plan approval and distribution	4
	2.5.	Interface with other management plans	5
	2.6.	Legislation and guidelines	7
	2.7.	Management Strategy	8
Part	B Imp	plementation Plan	9
3.		es and responsibilities	
		Traffic Manager	
	3.2.	Consultation groups	9
		3.2.1. Traffic and Transport Liaison Group	
		3.2.2. Traffic Control Group	10
4.	Communication		
	4.1.	3.3.	
	4.2.	Stakeholders	
	4.3.	Notification of traffic changes or disruptive works	
	4.4.	and the second s	
	4.5.	Emergency Services	12
	4.6.	Roadside messaging	12
	4.7.	Truck Aware decals	12
5.	Appı	provals	
	5.1.		
	5.2.	Road Occupancy Licences and Inspections	
	5.3.	Speed zone authorisation	15
	5.4.	Traffic Control Devices	15
	5.5.	Traffic Guidance Schemes	16
	5.6.	Variable Message Signs	16
	5.7.	Special event coordination	16
	5.8.	Adjustments to traffic signals	16
	5.9.	Over-size or Over-mass vehicle permits	16
	5.10.). Adjustments to public transport	17
	5.11.	. Adjustments to active transport users	17





	5.12	. Adjustments to Australia Post mailboxes or other roadside furniture	17		
	5.13	. Local Traffic Committees (LTC)	17		
	5.14	. Utility and property access	17		
	5.15	. Ministerial Conditions of Approval	19		
		5.15.1. Heavy Vehicle Local Road report	19		
		5.15.2. Road dilapidation report	19		
6.	Man	agement of construction traffic	20		
	6.1.	Managing Construction Traffic	20		
	6.2.	Road Network	20		
	6.3.	Impacts of Construction Traffic	21		
	6.4.	Haulage routes	22		
	6.5.	Management of heavy vehicle movements	24		
	6.6.	Access for over dimension vehicles	25		
	6.7.	Vehicle Movement Plans	26		
	6.8.	Other plans	26		
7.	Con	struction site traffic management requirements	27		
	7.1.	Traffic control at construction sites	27		
		7.1.1. Frequency of inspections	27		
	7.2.	Emergency incident planning	27		
		7.2.1. Emergency Services	27		
	7.3.	Traffic controllers and temporary traffic signals	27		
8.		operations			
9.		agement of construction sites			
		Site Access Management			
		Site Access Points			
	9.3.	Site security, site access and signage	32		
		Management of risks to vulnerable road users			
10.		d safety audits			
	_	pendices			
		A – Compliance Matrix			
App	endix	B – Review comments	40		
Lis	t of	figures			
Figu	re 1: S	Surface and Civil Alignment Works	2		
Figu	re 2 –	SCAW Project Management Systems	6		
Figu	re 3 -	Truck aware decals	12		
_	Figure 4 – SCAW proposed Haul Routes with typical import and export directions				
_		Overview of SCAW worksites	28		
_		Communication channels Working Around Live Treffic. Short term works	33		
_		Working Around Live Traffic - Short term works Working Around Live Traffic - Long Term Traffic Management	35 36		
1 19U		Tronking Albana Livo Franco Long Form Franco Managorilon	30		





List of tables

Table 1 – Abbreviations and definitions	V
Table 2 – CTMP's	13
Table 3: Proposed CTMP	13
Table 4: Dilapidation surveys locations	19
Table 5 – Road classification	21
Table 6 – Haulage routes	24
Table 7: Heavy vehicle requirements	24
Table 8: Site operations	28





Abbreviations and definitions

Refer to Definitions and Interpretation, Sydney Metro – Western Sydney Airport Surface Civil and Alignment Works, Request for Tender – Volume 1.

Table 1 – Abbreviations and definitions

Abbreviation	Description
CJP	Customer Journey Planning (formerly SCO)
СРВ	CPB Contractors Pty Ltd
CPBUIJV	CPB Contractors Pty Limited and United Infrastructure Pty Limited Joint Venture
CTMP	Construction Traffic Management Plan
HML	Higher Mass Limit
HVNL	Heavy Vehicle National Law
IAP	Intelligent Access Program
LTC	Local Traffic Committees
OSOM	Oversize and/or over mass
PedMP	Pedestrian Management Plan
PMP	Project Management Plan
PMS	Project Management System
PkMP	Parking Management Plan
QR	Quick Response
RAV	Restricted Access Vehicle
ROL	Road Occupancy Licence
RSA	Road Safety Audit
SBT	Sydney Metro – Western Sydney Airport, Station Boxes and Tunnelling package
SCAW	Western Sydney Airport Surface and Civil Alignment Works package
SCO	Sydney Coordination Office (now CJP)
SSTOM	Sydney Metro – Western Sydney Airport, Stations, Systems, Trains, Operations and Maintenance package
SWTC	Scope of Work and Technical Criteria
TCG	Transport Coordination Group
TCP	Traffic Control Plan now known as Traffic Guidance Scheme
TfNSW	Transport for New South Wales
TGS	Traffic Guidance Scheme (formerly TCP)
TTLG	Traffic and Transport Liaison Group
UI	United Infrastructure Pty Limited
VMP	Vehicle Movement Plan
VMS	Variable message signs
WSA	Western Sydney Airport
WSI	Western Sydney International





Part A Overview

1. Introduction

Through aligned values, CPBUIJV will partner with Sydney Metro to deliver the Western Sydney Airport (WSA) Surface and Civil Alignment Works (SCAW). We will establish strong foundations and create seamless interfaces to pave the way for the successful completion of Sydney Metro – Western Sydney Airport (SMWSA), on Darug Country as part of the future Western Parkland City.

1.1. Project Scope

The SMWSA Project involves the construction and operation of a new 23km metro rail line that extends from the existing Sydney Trains suburban T1 western line (at St Marys) in the north to the Aerotropolis (at Bringelly) in the south. The alignment includes a combination of tunnels and civil structures, including viaducts, bridges, and surface and open-cut troughs between the two tunnel sections. The Project also includes six new metro stations, and a stabling and maintenance facility and operational control centre at Orchard Hills. The SCAW package is the second major contract package to be procured for the Project. The successful and timely completion of the SCAW package is critical to the subsequent construction activities and ultimate completion of the entire Project.

1.1.1. Package scope

The scope for the SCAW package includes approximately 10.6km of alignment up to the underside of track formation from Orchard Hills to the WSI airport. This includes approximately:

- 3.6km of viaduct
 - 400m of viaduct over Blaxland Creek
 - 660m of viaduct over the Patons Lane area and un-named creek
 - 2.5km of viaduct in the Luddenham Road area including across the Warragamba pipeline, at Luddenham Station, across Luddenham Road and across Cosgrove Creek
- 205m of bridges
 - An over rail bridge, approximately 180m long, over the proposed M12 Motorway
 - An over rail bridge, approximately 25m long, over the drainage swale on the WSI airport site
- 6.9km of at-grade alignment
 - 600m at Orchard Hills, south of Lansdowne Road
 - 1.6km alongside the stabling maintenance facility in Orchard Hills
 - 900m to the north of the Warragamba pipelines
 - 1.1km north of the proposed M12 motorway
 - 1.4km south of the proposed M12 Motorway on Elizabeth Derive
 - 1.3km within the Airport site from the northern boundary to the Airport Business Park Station
- Temporary and permanent access roads.

The scope of works can be seen on Figure 1, noting that the tunnel and station works are by others.





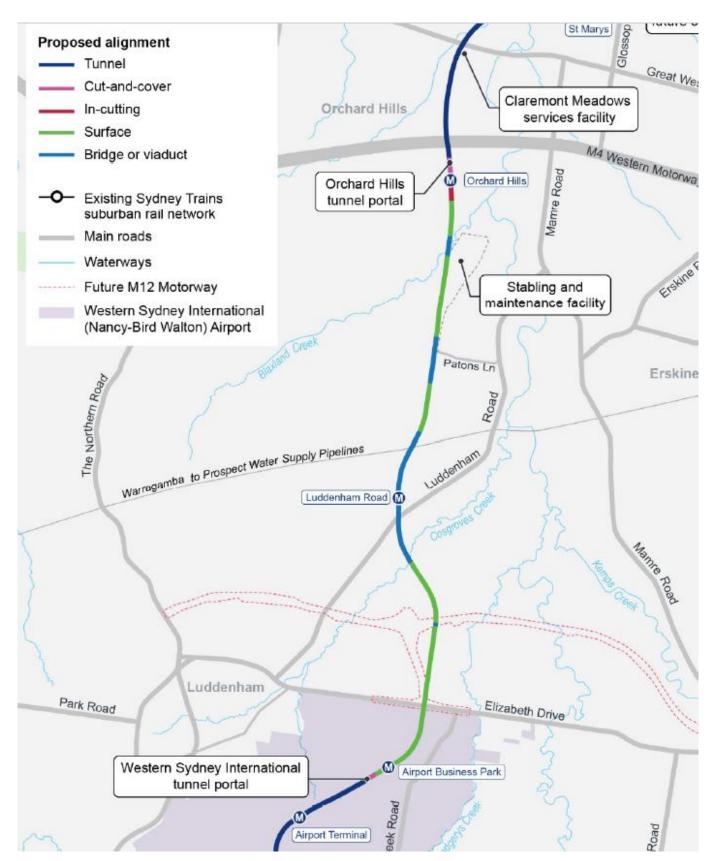


Figure 1: Surface and Civil Alignment Works





2. Structure of this Plan

2.1. Plan Purpose and Objectives

The overarching Construction Traffic Management Plan (CTMP) forms part of the Project Management System (PMS). It is part of a suite of plans that together outline how SCAW requirements will be managed to ensure an integrated approach to meeting Approval and contract requirements.

The purpose of this plan is to document how CPBUIJV will engage with stakeholders, manage the works and deliver value to the community by minimising the traffic impact to the existing road network. The CTMP outlines the traffic management approvals process identifies overarching traffic arrangements to be implemented to manage impacts associated with the SCAW. Site-specific CTMPs will be developed progressively prior to commencement of construction in the relevant area.

The key objectives of this plan are to ensure:

- The provision of a safe environment for road users, pedestrians, cyclists and workers
- Any impact on road users is kept to a minimum
- Access is maintained for the local community, transport operators and commercial developments
- Works are staged on key parts of the network to maintain levels of service
- The SCAW package is represented as a proactive member of relevant local traffic coordination groups
- Road users, local businesses, local Councils, Emergency Services, stakeholders and local communities are informed to changed traffic conditions, and
- There is sufficient advance warning of changes to normal traffic conditions.

CPBUIJV will achieve these objectives by implementing the applicable requirements of the:

- Deed and General Specification
- Sydney Metro Construction Traffic Management Framework (CTMF)
- SMWSA Infrastructure Approval (SSI 10051) (the Project Planning Approval),
- Desired performance outcomes from the Submissions report and
- Interface Agreements.

Compliance with the applicable requirements is identified in **Error! Reference source not found.**.

In addition to the Project Management Plan, other Project Plans that interface with the Construction Traffic Management Plan include:

- Quality Management Plan
- Contract Management Plan
- Project Health and Safety Risk Governance Plan
- Construction and Site Management Plan
- Construction Environmental Management Plan and Sub-Plans
- Risk Management Plan
- Chain of Responsibility Management Plan





This plan has the following structure:

Part A: Overview	This section clearly defines: Introduction Purpose, scope and objectives of this plan SCAW specific requirements Overall Traffic Management and Procedures
Part B: Implementation Plan	This section outlines the key aspects for managing works on the SCAW including: Management and compliance with Project elements and expectations Responsibilities for each expectation Procedures and deliverables for each expectation
Part C: Appendices	This section includes appendices and annexures providing additional detail that support this plan.

2.2. Compliance with the Deed

This Construction Traffic Management Plan is a nominated Plan under the terms of the General Specifications and Deed and is provided, and will be implemented, in accordance with Specifications and Planning Approvals.

In accordance with the Deed, this plan will be resubmitted to the Principal's Representative at least 30 calendar days prior to any SCAW Contractor's Activities and annually until completion of the last Portion to achieve Completion.

The requirements detailed in 5.1.12.2 of Schedule C1 of Volume 4A (General Specifications) have been copied verbatim in Table 2, and the relevant section of this Plan is referenced where it addresses these requirements.

2.2.1. Construction Traffic Contract Requirements

Table 2 – Construction Traffic Contract Requirements

Contract Requirement	Plan Section
(a)The SCAW Contractor must prepare a Construction Traffic Management Plan (CTMP). The CTMP must align with the requirements in the Construction Traffic Management Framework (CTMF). [SM-WSA-SCAW-GS-1859]	This Plan

2.3. Plan Revisions

This Plan has been prepared in accordance with the Particular Specification

This Construction Traffic Management Plan is the plan that has been developed by the CTMF. Where required, this plan will be reviewed where changes to the construction methodology are proposed.

2.4. Plan approval and distribution

The Construction Traffic Management Plan will be authorised for implementation by the CPBUIJV Project Director.

All personnel engaged on the Project, including consultants, subcontractors or suppliers, will perform their duties in accordance with the requirements of this Plan, and in compliance with CPBUIJV systems, procedures and any specific Project instructions.

The Construction Traffic Management Plan is a controlled document and registered copies must be distributed and revised in accordance with the Quality Plan. CPBUIJV will advise of any amendments to this Plan and controlled copyholders are responsible for keeping their copies up to date.

The Project Director, Senior Project Managers and Traffic Manager will monitor this Plan and review the need for change or improvement. All changes are to be approved by the Project Director.





2.5. Interface with other management plans

The Project Management Plan (PMP) provides an overview of the Project and its overarching management systems. Supporting Project Plans are focused on implementation activities and responsibilities. This Plan forms part of the PMP and details how CPBUIJV will comply with the works requirements of the Deed. Figure 2 shows the Project Plan hierarchy and interface with other plans.





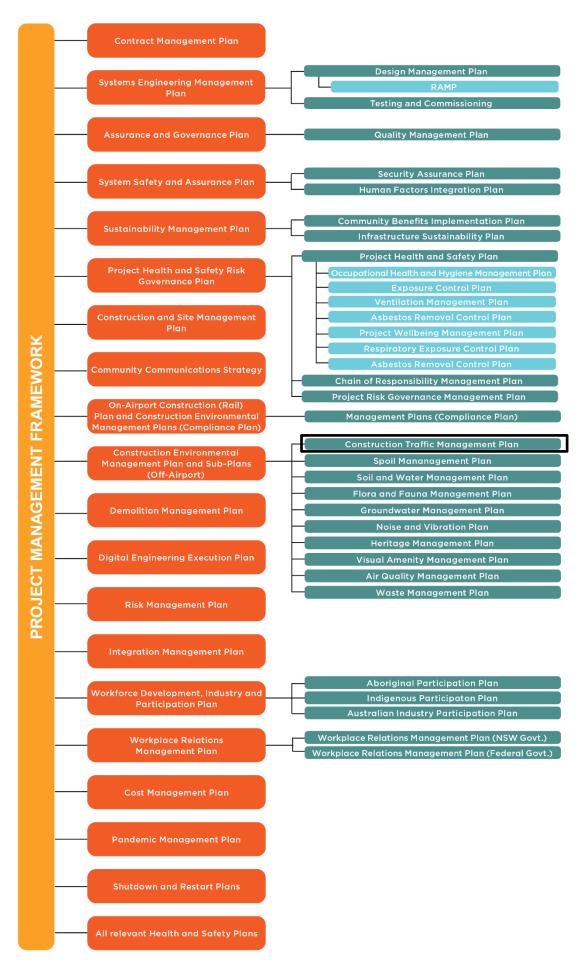


Figure 2 - SCAW Project Management Systems





2.6. Legislation and guidelines

Legislation and regulations of relevance to this CTMP are:

- Roads Act 1993 Section 138 requires that a person obtain the consent of the appropriate Roads Authority for the erection of a structure, or the carrying out of a work in, on or over a public road, or the digging up or disturbance of the surface of a public road. If the applicant is a Public Authority, the Roads Authority must consult with the applicant before deciding whether or not to grant consent or concurrence.
- RMS has the power, under the Roads Act 1993 Division 3 Section 62 to take Roads Authority powers from relevant local councils. This power may be exercised by RMS, for the duration of the Works.

Other identified regulatory requirements are:

- An approved and valid Road Occupancy Licence (ROL).
- An approved relevant Speed Zone Authorisation (SZA).
- Australian Road Rules form the basis for state and territory road rules.
- Roads Act 1993 (NSW) sets out rights along a public road, establishes procedures for a public road and provides the classification of roads.
- Heavy Vehicle National Act 2013 and Regulation, 2013 (NSW)
- Heavy Vehicle (Adoption of National Law) Act, 2013 (NSW)
- Dangerous Goods (Road and Rail Transport) Act, 2008
- Road and Rail Transport (Dangerous Goods) (Road) Regulation, 1998
- Australian Code for the Transport of Dangerous Goods by Road and Rail (National Transport Commission, 2008)
- Dangerous Goods (Road and Rail Transport) Regulation, 2014
- Australia Code for the Transport of Dangerous Goods by Road and Rail Edition 7.7 (National Transport Commission, 2020)
- Environmental Planning and Assessment Act, 1979 under which the project approval was granted.

Legislation relevant to traffic management also includes the *Environmental Planning and Assessment Act 1979* (EP&A Act), under which the project approval was granted. Relevant provisions of the EP&A Act are explained in the register of legal and other requirements included in the CEMP.

Guidelines and standards relating to the management of traffic on the SCAW Works include:

- Sydney Metro Western Sydney Airport EIS– Appendix G Construction Traffic Management Framework and the subsequent amendment of the CTMF in April 2022.
- Sydney Metro Principal Contractor Health and Safety Standard
- TfNSW Traffic Control at Worksites Manual, 2022 v6.1
- AUSTROADS Cycling Aspects of Austroads Guides, 2017
- AUSTROADS Guide to Traffic Management, 2020 Parts 1-13
- AUSTROADS Guide to Road Design, 2013-2021 Parts 1-7
- AUSTROADS Guide to Road Safety, -2019 -2021 Parts 1-7
- AS 1742.3 Manual of Uniform Traffic Control Devices Part 3 Traffic control for works on roads (2019)
- Roads & Traffic Authority NSW Guide to Traffic Generating Developments, 2002 and further updates as provided
- AS 1742.9 Manual of Uniform Traffic Control Devices, Part 9 Bicycle Facilities (2018)TfNSW Cycleway Design Toolbox – Designing for cycling and micromobility (2020)
- Roads and Maritime NSW Speed Zoning Guidelines, 2011.
- TfNSW Traffic Control at Worksites Manual, 2022 v6.1
- Transport for NSW, NSW Sustainable Design Guidelines Version 4.0, 2017





Third Party agreements with:

- Penrith City Council
- Liverpool City Council
- Western Parkland City Authority Interface Agreement
- TfNSW Road Interface Deed
- Western Sydney Airport Corporation under the Airport Rail Integration Deed

2.7. Management Strategy

CPBUIJV will clearly communicate the objectives of this plan to all parties who undertake the SCAW so that best practice construction traffic management and safety strategies are applied throughout delivery. The CTMP will be further developed and strategies refined by collaboration with key stakeholders, including:

- Sydney Metro Western Sydney Airport
- TfNSW
- Transport Management Centre (TMC)
- Customer Journey Planning Group (CJP)
- Penrith City Council
- Liverpool City Council

CPBUIJV will regularly monitor, review, develop and update this CTMP as required in response to incidents, feedback from key stakeholders or changes to the construction program or staging.





Part B Implementation Plan

3. Roles and responsibilities

The CPBUIJV Project Director has authority for all aspects of the SCAW. The delivery team will design, install and manage traffic management. The traffic team, under the leadership of the Traffic Manager, will provide technical advice and construction traffic management throughout the entire process, will be responsible for implementation of this plan. The Traffic Manager responsibilities are outlined below.

3.1. Traffic Manager

CPBUIJV will engage a full-time Traffic Manager. This role requires the representatives to be qualified, as a minimum, in the TfNSW Prepare a Work Zone Traffic Management Plan, and a minimum of 10 years recent experience in traffic management on road construction sites of equipment complexity to the Project.

The role incorporates the following responsibilities:

- Experience and competent in traffic engineering, management and operations, including operational knowledge, and an understanding of the Roads and Maritime SCATS traffic signal system
- Manage the planning, development, implementation, revisions, and approvals with the relevant authorities and stakeholders of this Plan, Construction Traffic Management Plans (CTMPs) and Traffic Guidance Schemes (TGS')
- Advise construction engineers to ensure traffic management measures are planned in accordance with the Deed and Planning Approvals, including relevant safety regulations and standards
- Advise construction personnel to ensure traffic management measures are planned in accordance with requirements of relevant stakeholders
- Liaise, generate and maintain a productive relationship with TfNSW, CJP, local councils, NSW Police, emergency service agencies and other stakeholders on traffic and incident related issues
- Attend all traffic management meetings, including TTLG's and TCG's, and related working group meetings to coordinate road occupancy requirements
- Manage, document, administer, audit and review the projects ROL compliance
- Prepare the construction traffic staging plans with the construction team
- Ensure Temporary Works drawings are in accordance with the relevant standards
- Monitor and evaluate the ongoing effectiveness of traffic management activities of the SCAW, including road user delays and where necessary suggest corrective actions
- Manage the Project's Road Safety Audit process, and direct the construction team to implement resultant corrective actions and maintain detailed records
- Advise the construction team on any issues raised as part of short and long-term Traffic Management Inspections.

3.2. Consultation groups

3.2.1. Traffic and Transport Liaison Group

CPBUIJV will actively participate in the established Traffic and Transport Liaison Group (TTLG). The TTLG will be made up of a variety of attendees approved by the Principal, as per the CTMF section 4.1. The Traffic Manager will provide information and documentation required to meet its obligations, and act as the authorised representative for the SCAW in matters related to traffic and transport.

The focus of the group will be to disseminate relevant project information, gather stakeholder feedback and incorporate community needs when proposing traffic and transport solutions. Coordination with Western Sydney Airport and Transport for NSW would be undertaken through the Traffic and Transport Liaison Group to manage potential cumulative construction traffic impacts with M12 Motorway and Elizabeth Drive works.

Supplementary analysis and modelling as required by TfNSW and / or the Traffic and Transport Liaison Group(s) will be undertaken to demonstrate that construction traffic can be managed to minimise

CPBUIJV_SMWSA_SCAW | Overarching Construction Traffic Management Plan

Page 9 of 40





disruption to traffic network operations including changes to and the management of pedestrian, bicycle and public transport networks, public transport services, and pedestrian and cyclist movements. Revised traffic management measures will be incorporated into the site specific CTMP(s), where relevant.

3.2.2. Traffic Control Group

CPBUIJV will actively participate, on a regular schedule (weekly/fortnightly/or as agreed), in the established Transport Coordination Group (TCG) meeting as a technical forum to discuss Project Works. This group is separate to the Traffic and Transport Liaison Group and representation would include:

- Sydney Metro
- TfNSW
- TMC
- CJP
- Emergency Services
- Penrith City Council (as required)
- Liverpool City Council (as required)
- External Project Representatives (SBT, SSTOM, M12, WSA) (as required)
- Western Parkland City Authority (as required).

As required, relevant construction personnel, communication team members, local Council representatives, and external contractors and government stakeholders will attend to discuss specific or technical matters that may arise. In general, the TCG will be the forum to dissect issues and obtain approvals.





4. Communication

4.1. Stakeholder Engagement Strategy

An extensive consultation and stakeholder engagement strategy will be implemented as site accesses, lane configurations and heavy vehicle movements change over the course of construction. The stakeholder engagement strategy outlines how stakeholder engagement will be managed to ensure the Projects stakeholder obligations relating to stakeholder consultation, provision of information to stakeholders, compliance with the Projects requirements and notification procedures are met.

Owners and operators of affected properties and in the surrounding area will be consulted throughout project delivery regarding works that may potentially disrupt access to their properties or impacts on the road network. CPBUIJV will prioritise, as much as practicable, maintaining safe access for pedestrians and vehicles and minimising disruptions to property accesses.

Activity specific notifications will be developed and issued if there will be a direct impact to any property or business from the project work prior to work commencing.

4.2. Stakeholders

SCAW is a major project with multiple, complex stakeholder sensitives. Early and ongoing engagement with affected stakeholders and communities is critical to creating a clear understanding of the likely impacts and the options that may be available to minimise these impacts.

There are many stakeholders that are impacted by or have an interest in the Project. Key interface stakeholders are outlined in the Interface Management section of Requirement 3.3C. Additional key stakeholders, including businesses and community members, have been identified as being impacted by the Project Works and will also be consulted and engaged with, post approval of the site specific CTMP by CJP, including:

- Penrith City Council and Liverpool City Council
- Active Transport and Accessibility Groups including Bicycle NSW
- Local businesses/retailers operating along the Project alignment including private development sites
- Public and private transport operators and their customers (bus, taxi, ride share Uber and other services, car hire)
- Local communities, motorists, residents and sensitive stakeholders around the Orchard Hills area.

The stakeholder lists will be regularly reviewed and updated as new stakeholders are identified.

4.3. Notification of traffic changes or disruptive works

Regular traffic updates and notifications about changed traffic conditions will be distributed to ensure stakeholders, local communities, businesses, motorists, active transport users, freight operators, service providers, industry groups and other relevant parties receive timely accurate information about any traffic changes being implemented by the Project and the duration of these impacts.

To achieve this, our traffic management and construction teams will work closely with the Community and Stakeholder Relations Team to prepare and distribute timely communication about planned changes to traffic conditions and any likely disruptions to all road and active transport users. Information relating to day and night time traffic impacts will include, but is not limited to:

- Lane closures
- Traffic detours
- Access changes
- Speed limit changes.

Our strategy is to maximise the information flow, using a variety of complementary communication tools and channels. Wide dissemination of information will be achieved by engaging with key stakeholders, local businesses, community members, local councils, transport operators and related industry associations to extend the audience reach of issued updates and notifications.

Communication methods may include, but are not limited to:

Distribution of leaflets and paper notifications





- Electronic notifications and updates to email distribution groups
- Community update newsletters
- Major impacts communication (print, radio and social media)
- Quick Response (QR) codes on site hoarding or project signage
- VMS and static signage and other traffic control measures
- Stakeholder and community forums.

All traffic communication will be uploaded to the Project website. Stakeholders will be encouraged to use the existing Sydney Metro websites as an important resource for project information and updates.

4.4. Responsibilities

CPBUIJV understands, from direct experience on major road projects in Western Sydney, the benefits and improvement in project outcomes of incorporating an active, collaborative approach with local stakeholders. The Traffic Manager will lead the liaison with key stakeholders with input from relevant Project construction, community and safety staff.

These regular, structured stakeholder engagement forums will be used to ensure stakeholders are well informed, issues are addressed, and innovative solutions are developed to minimise project traffic and transport impacts.

4.5. Emergency Services

Emergency services agencies provide a vital service to the community, and they need to have up to date information of any changed road and traffic conditions and any potential delays that may be experienced on the road network and specific routes.

CPBUIJV SCAW Traffic Manager will ensure all emergency services are regularly consulted about proposed traffic conditions, and are included in the TTLG forums.

4.6. Roadside messaging

Variable message signs (VMS) will be installed along Luddenham Road to advise motorists during the staged construction of Luddenham Road roundabout. VMS will also be installed along Elizabeth Drive and other key project locations to inform motorists of any traffic changes, planned work activities and expected disruptions. The placement and messaging on VMS will be detailed in the site specific Construction Traffic Management Plan(s), where relevant

4.7. Truck Aware decals

TfNSW have also implemented a <u>Be truck aware</u> campaign which aims to show road users, the challenges that truck drivers face every day. Where an existing driveway crosses a footpath truck awareness decals, as noted on Figure 3 will be installed either side of the driveway. The details of the placement of truck aware decals will be included within the site specific CTMP.



Figure 3 - Truck aware decals





5. Approvals

5.1. Construction traffic management plans approval process

CPBUIJV understands the constraints in relation to TfNSW/TMC Timeframes and has programmed the below durations when considering submission and approval of any critical CTMP:

Table 2 – CTMP's

CTMPs	Timeframe
Distribute draft CTMP prior to TCG	5 days
TCG presentation of CTMP	1 day
Update CTMP as per TCG feedback	5 days
Submit CTMP	1 day
Review and comment process up to 10 business days	10 days
Discuss at next TCG (up to 2 weeks between TCG's)	10 days
Submitted updated CTMP	5 days
Comment close-out (5 days per review cycle, typically 1-2 cycles to close out)	10 days
Submit final CTMP	1 day
Approval (10 business days)	10 days
Send approved/final CTMP to the Planning Secretary for Information	1 day
CTMP review and approval timeframe	Approx. 59 business days
ROL applications (2 weeks)	10 working days

A number of CTMPs will be developed over the life of the project.

Table 3: Proposed CTMP1

CTMP	Covering	Expected submission
Compound access – Gate 1	Lansdowne Road	October 2022
Compound access – Gate 2	Patons Lane	August 2022
Compound access _ Gate 3	Luddenham Road	October 2022
Compound access _ Gates 4 & 5	Luddenham Road	August 2022
Compound access _ Gate 6	Elizabeth Drive	January 2024
Compound access _ Gate 9	Badgerys Creek Road	January 2023
Luddenham Road	Roundabout construction	January 2023
Luddenham Road	Closure for viaduct structure	May 2023

5.2. Road Occupancy Licences and Inspections

A Road Occupancy is any activity that will or is likely to delay, including obstruct, restrict, close, interfere with, slow or stop, the free flow of traffic on:

Any lane or shoulder of the existing road network

¹ There may be an amalgamation of the nominated CTMPs where possible CPBUIJV_SMWSA_SCAW | **Overarching Construction Traffic** Management Plan





- Any Temporary Works being used by existing road network traffic
- Any part of the Project Works opened to traffic.

A Road Occupancy Licence (ROL) is a licence granted by TMC and local councils authorising the occupation of a portion of the road network that would normally be available for traffic. CPBUIJV will obtain the necessary ROLs from the TMC and councils prior to conducting any short-term works on roads.

The road authorities responsible for roads affected by the Project include Local Councils, CJP and TfNSW. CPBUIJV would liaise with these authorities and relevant stakeholders (if required) during construction.

CPBUIJV acknowledges that a ROL scheme applies on all roads and understands the benefits of managing the cumulative impact of delays at separate and multiple work sites. Consequently, except in the case of an emergency, or when directed by Police or Emergency Services, CPBUIJV will obtain an ROL for traffic management on all roads prior to the commencement of any short term traffic control (works) which:

- Slows, stops or otherwise delays traffic
- Diverts traffic from its normal course along the road carriageway, including lane closures, turning restrictions, detours and diversions
- Occupies any portion of a local road that is normally available as a trafficable lane.

Obtaining an ROL approval for short term works, on all roads will follow the existing ROL process. If an ROL is required on a regional or local road however, (road controlled by a Local Council) an ROL application process will need to be agreed with the Local Council.

CPBUIJV acknowledges that all road occupancies will be subject to the specific period of operation stated on the approved licence and conditions on obtaining the other necessary approvals.

For any works that involve an occupation of the road/ footpath, a Road Occupancy License (ROL) will be sought from the Transport Management Centre (TMC) will be applied for prior to the submission of a ROL from the relevant council(s). ROL through the TMC will be applied for a minimum of 10 business days from the proposed start date. Electronic lodgement of the ROL will be undertaken using TfNSW's OpLinc system.

Council permits will be lodged electronically in accordance with the relevant council requirements.

For any road opening required, the relevant Road Opening Permit (ROP) will be applied for through the existing council's website. The ROP will also be accompanied by a ROL..

A register of permits/ licenses will be maintained through the works period and can be tabled at the TCG, if requested.

It should be noted road occupancy requests must comply with the various road safety and traffic management principles, objectives and targets outlined in this Overarching TMP.

It is the responsibility of CPBUIJV to ensure the validity of each approved lane closure and road occupancy, therefore regular monitoring of approval expiry dates is essential. The Traffic Manager will maintain a database containing details of road occupancy approvals to assist with this process. Generally, CJP will apply conditions to the approvals, which may include:

- Maximum traffic stoppage times and maximum queue lengths
- Maximum travel time delays
- Measures to provide information to road users
- Records detailing the date and time of the road occupancy, and the location of all signs, and any other relevant information associated with the traffic control, must be kept.

CJP has the power to revoke an ROL at any time due to unforeseen volumes or other network performance issues, not just for breaches of associated conditions. Generally, in accordance with TMC's requirements, the responsibility for implementation, coordination, and compliance with the lane closure and road occupancy approvals remains with CPBUIJV and specifically, the Traffic Team and Construction Team. CJP's granting of the approval does not:

 Constitute approval by TMC or RMS of any actions that relate to traffic safety, occupational health and safety, or environmental issues and management





- Relieve CPBUIJV or any person of their responsibility for compliance with legislation, regulations, or established operational procedures
- Change any management accountability or responsibility.

Long term traffic control does not usually require an ROL and is subject to discussions with Sydney Metro, CJP, TfNSW, Local Council (as required) and TTLG, for development of a site specific CTMP.

Frequency of inspections of both short term and long term Traffic Control Plans supported by an approved ROL will be in accordance with TfNSW Traffic Control at Worksites manual.

5.3. Speed zone authorisation

Temporary roadwork speed limits, short and long term, are one of many traffic controls that would be implemented to manage the speed of traffic approaching and passing through and/or past the work sites. CPBUIJV acknowledges that roadwork speed zones must be logical and credible, as well as enforceable.

In line with the general specification, CPBUIJV will comply with standards and guidelines listed below when utilising temporary roadwork speed limits:

- TfNSW 'Traffic Control at Work Sites' manual
- TfNSW 'NSW Speed Zoning Guidelines'
- Australian Standard AS 1742.3 'Manual and Uniform traffic control devices.

AS 1742.3 states that roadwork speed zones must:

- Only be used where they are self-enforcing or would be enforced
- Not be used alone but with other traffic control signs and devices
- Not be used in place of more effective traffic controls
- Only be used while road work is in progress or where lower standard road conditions exist, and
- Meet clearance and lane width requirements of Australian Standard 1742.3.

5.4. Traffic Control Devices

Traffic control devices are all signs, traffic signals, road markings, pavement markers, traffic islands, and/or other devices placed or erected to regulate, inform, warn and/or guide road users. The function of a traffic control device is to:

- Promote orderly traffic flow
- Regulate traffic (assign right of way, and indicate regulations in force)
- Warn road users of hazards or regulatory controls ahead (in particular they also warn of temporary hazards that could endanger road users or workers at roadwork sites)
- Guide traffic (e.g. guide signs to inform road users of directions to destinations, identify routes, and pavement markings to guide the travel path of vehicles).

CPBUIJV recognises the important of the correct use of traffic control devices on SCAW to:

- Warn and inform road users of changes in road conditions
- Guide and control road users to safely negotiate the road ahead
- Efficiently navigate to key transport hubs in the precinct
- Ensure the signs and their structures are not a hazard in themselves
- Provide drivers with sufficient information to ensure no surprises along their path of travel
- To provide data in a controlled and consistent way to avoid information overload.

CBPUIJV recognises the value of providing road users with timely, clear and consistent messages and CPBUIJV will ensure all signs, road markings and devices installed during the construction are:

- Assessed for use in accordance with the appropriate RMS guidelines and/or Australian Standard/s
- Manufactured and installed in accordance with the requirements of the Australian Standard/s
- Installed in accordance with the relevant guides and standards
- Not contradictory to existing signs or markings





- When no longer required, covered or removed
- Regularly maintained and repaired/replaced when damaged or lose reflectivity.

All sign posting installed will comply with the requirements outlined in the TfNSW Traffic Control at Worksites Manual, the TfNSW Delineation Manual, AUSTROADS Guide to Traffic Engineering Practice, Part 8 – Traffic Control Devices and the relevant Parts of Australian Standard 1742.

5.5. Traffic Guidance Schemes

Traffic Guidance Schemes (TGS) formerly known as Traffic Control Plans (TCPs) will be developed to illustrate all temporary traffic arrangements, including the various traffic control signs, road markings and devices to be installed. A TGS is a diagram showing signs and devices arranged to warn and inform traffic and guide it around, past or, if necessary through, a work site or temporary hazard. TGS are mainly used for short term work and all TGS' will be developed with the aim of:

- Warning drivers of changes to the usual road conditions,
- Informing drivers about changed conditions,
- Guiding drivers through the work site, and
- Safety for workers, motorists, pedestrians and cyclists.

5.6. Variable Message Signs

During construction, CPBUIJV will utilise portable temporary VMS to enhance advanced warning sign posting and provide changed traffic condition information to road users. The use of VMS will be planned, implemented and monitored to ensure the maximum serviceability of the road network during the projects work. This will include:

- Compliance with all SWTC requirements
- Maximum advance warning for road users
- Significant wayfinding messaging to make clear the routes
- Messaging, information and updates specifically to active transport users
- Remote programming for all VMS in conjunction with live monitoring to create a site wide dynamic messaging system.

The use of VMS and the appropriate message/s would be incorporated within a site specific CTMP and/or site specific TGS'.

5.7. Special event coordination

It is recognised that allowance for Special and Major events will be important to successful project delivery and these will be considered at all stages of traffic planning. CPBUIJV will implement the following strategies to mitigate the impacts of Project Works on events in the Western Sydney precinct:

- Incorporate known events into the project delivery program
- Active stakeholder engagement strategies
- Participate in regular forums with event organisers, TMC, Penrith City Council, and Liverpool City Council
- Minimise the impact on the surrounding road network using multiple strategies as outlined in Section
 1.

5.8. Adjustments to traffic signals

Not applicable – no signalised intersections on the surrounding road network. If identified will be detailed in the site specific CTMP(s).

5.9. Over-size or Over-mass vehicle permits

Oversize and/or over mass (OSOM) vehicles and loads are defined as Class 1 vehicles under the Heavy Vehicle National Law (HVNL). A vehicle or vehicle combination is considered to be OSOM if it exceeds any general access height, weight, length, or width limits.





The movement of OSOM vehicles requires a permit controlled by the National Heavy Vehicle Regulator (HVNR) Unit. The TfNSW Additional Access Conditions – Oversize and over mass heavy vehicles and loads (2020) outlines the various operating permit, requirements, conditions and restrictions.

All movement requiring OSOM vehicles will be minimised as much as practicable by CPBUIJV. Deliveries requiring over OSOM vehicles will be undertaken by permitted specialist haulage subcontractors. Some permits may require coordination with the NSW Police.

All short-term traffic control with an ROL approval would:

- Consider movement of heavy vehicles and over-dimension loads
- Limit restrictions on the road and when required provide alternatives to maintain access for transport operators
- Liaise with NSW Police, permit authorities and operators.
- Provide up-to-date information of any obstructions that may impact on movement of over dimension vehicles
- Have traffic controllers coordinate the movement of over-dimension vehicles through the work site
- If required, arrange the removal and re-instatement of roadside furniture and traffic control devices that impede over-dimension vehicle movements.

5.10. Adjustments to public transport

Not applicable – No bus routes have been identified that would be impacted by the works. Where identified in the site specific CTMP, CPBUIJV understand that a lead time of 28 days is required.

5.11. Adjustments to active transport users

Details on the impacts on active transport users will be provided in the site specific CTMPs. At present no impacts have been identified. Where changes are required as identified in the site specific CTMP, due consideration will be provided to accommodate active transport users including compliance to the relevant standards and guidelines.

5.12. Adjustments to Australia Post mailboxes or other roadside furniture

Not applicable - No post boxes have been identified..

5.13. Local Traffic Committees (LTC)

Local council traffic committees typically held once per month for both the local council areas, Penrith City Council and Liverpool City Council.

Typically, the two Council areas traffic committees will meet on the first Monday of every month, with approvals duration expected to be approximately two months.

5.14. Utility and property access

Access to all utilities and properties will be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier. Where CPBUIJV works restricts a property's access to a public road, CPBUIJV will, until their primary access is reinstated, provide the property with temporary alternate access to an agreed road decided through consultation with the landowner, at no cost to the property landowner, unless otherwise agreed with the landowner.

Any property access physically affected by the works will be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier. Property access will be reinstated within one (1) month of the work that physically affected the access is completed or in any other timeframe agreed with the landowner or occupier.

During construction, all reasonably practicable measures will be implemented to maintain pedestrian, cyclist and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions will be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian, cyclist and vehicular access, and parking arrangements will be developed in consultation with affected businesses and landowners and implemented before the





disruption. Adequate signage and directions to businesses will be provided before, and for the duration of, any disruption.





5.15. Ministerial Conditions of Approval

5.15.1. Heavy Vehicle Local Road report

Generally, the heavy vehicle routes will be via arterial roads/ freeway/ tollways. Where possible the routes will consider the requirements of the Environmental Impact Statement (EIS). Where the routes differ from those proposed in the EIS and the use of local roads is proposed, the Planning Secretary will be provided with a report detailing:

- a) A swept path analysis
- b) Demonstration that the use of local roads by Heavy Vehicles for the project will not compromise the safety of pedestrians and cyclists of the safety of two way traffic flow on two way roadways
- c) Details as to the date of completion of the road dilapidation surveys for the subject local roads and
- d) Measures that will be implemented to avoid where practicable the use of local roads past schools, agreed care facilities and child care facilities during their peak operation times

The report will be reviewed by an appropriately qualified professional on the suitability of the proposed heavy vehicle route which takes into account the items above. This report will be submitted to the Planning Secretary for approval and once approved will be incorporated into the relevant CTMP(s).

The site specific CTMPs will include the Heavy Vehicle Local Road report, where relevant. Consultation on routes will be undertaken with the relevant road authorities. Local roads proposed to be used by

5.15.2. Road dilapidation report

Before any local road is used by Heavy Vehicles, a road dilapidation report will be prepared. A copy of that report will be provided to the relevant council within three (3) weeks of completion of the survey and no later than one (1) month before the road used by heavy vehicles associated with the project.

Any damage to roads that occur as a direct result of our operation will result in either CPBUIJV rectifying the damage to restore the road back to its condition as noted in the road dilapidation report or compensate the relevant road authority, subject to the road authority's discretion.

Local road dilapidation surveys will be undertaken at the locations as noted in Table 4.

Table 4: Dilapidation surveys locations

Road name	Start	Finish	Road Authority
Kent Road	M4 Motorway Overpass	Lansdowne Road	Penrith City Council
Lansdowne Road	Kent Road	Samuel Marsden Road	Penrith City Council





6. Management of construction traffic

6.1. Managing Construction Traffic

Construction vehicle movements to and from site, and throughout the road network include the following activities:

- Delivery of materials, plant and equipment to site/s
- Removal of spoil through mass haulage operations
- Import of material for earthworks construction
- Delivery of precast viaduct segments
- Delivery of concrete from batching plant/s to site location/s
- Regular trips by construction personnel in work trucks and utes.

All drivers employed on the project, whether direct employees or not, have a responsibility to drive safely, and comply with State Road regulations, the Australian Road Rules, Heavy Vehicle National Law and any other directives issued by CPBUIJV.

The following practices will ensure construction traffic is controlled and managed:

- Vehicles involved in the works will only enter, operate within, or exit from a traffic flow in a manner that will not endanger the public, and under suitably designed and implemented traffic control measures.
- Accesses to and from the construction site will be designed to minimise potential risk associated with the movement of the vehicles using the accesses.
- Site compounds and work areas will be accessed from the current road network, with gate signage installed prior to early works. Advance warning signs will be provided in accordance with approved TMPs.
- Gate Information Plans will be incorporated in all start-up packs and posted on notice boards at various compounds.
- Gate access/egress protocols and delivery routes will be developed and included in Gate Information Plans that will be forwarded to suppliers and subcontractors in advance of deliveries to minimise errant traffic movements.
- Intersections where vehicles enter and leave the construction site, and existing intersections where traffic volumes are increased due to CPBUIJV's work, will satisfy the following requirements:
 - Capacities of intersections within the existing highway and temporary works replacement intersections will be maintained at existing levels (prior to construction) for the duration of the project.
 - Access to the main site compound will be subject to the same requirements as an intersection.
 - Design intersections and access points in accordance with AUSTROADS Part 5 Intersections at Grade and the RMS Road Design Guide
- A gateman will be provided in high construction volume areas and where uncontrolled access or egress may have an impact on traffic flow.
- Initial Induction and regular briefing for transportation companies on the Project with a focus on HVNI
- Ensure intersection configuration has capacity to accommodate traffic generated by construction.
- Where practicable, separate pedestrians from site access points.
- Provide areas on-site for trucks prior to accessing the site and at loading/unloading points, such as staging or layover areas to prevent trucks queuing on public roads adjacent to construction sites.
- Where necessary, provide personnel at site gates to meter the dispatch of trucks onto the external road network to break-up slow moving truck convoys that may results in road user delays.

6.2. Road Network

Existing surrounding road network classification is detailed in Table 5 and as follows.





- State Roads:
 - Elizabeth Drive TfNSW State Road (classification Main Road)
 - M4 Motorway TfSNW State Road (classification Sydney Motorway)
 - The Northern Road TfNSW State Road (classification Main Road)
 - Mamre Road TfNSW State Road (classification Main Road).
- Local Council Roads:
 - Luddenham Road Penrith City Council (classification Regional Road)
 - Badgerys Creek Road Liverpool Council (classification Regional Road)
- WSA Co
 - Badgerys Creek Road

Table 5 - Road classification

Classified Roads (pursuant to Road Act 1993)		Unclassified Roads (pursuant to Administrative Agreement)	
Road number	Class	Road number Class	
1-31	Highway (HW) (Previously State Highway (SH))	7000	Unclassified Regional Roads
51-694	Main Road (MR)		
2001-2114	Secondary Road (SR)		
4000-4056	Tourist Road (TO)		
8001-8011	Transitway (TW)		

6.3. Impacts of Construction Traffic

CPBUIJV aims to minimise user impacts and delays to existing traffic flows of roads in close proximity to SCAW and maintain access for transport operators. Traffic management and traffic impacts from construction activities will be considered during pre-construction planning in the following ways:

- The capacity of roads (number of traffic lanes) during peak times is to be maintained in each direction to minimise traffic delays.
- Works requiring lane occupancies during the day where practicable it would be nominally after 10am and prior to 3pm and at night nominally after 8pm and prior to 5am when traffic volumes are lower and traffic arrangements may be implemented with minimal traffic disruption. Occupancies of traffic lanes shall be subject to ROL conditions of approval issued by the TMC and relevant local council.
- Understanding the cumulative impacts of adjacent projects

Some traffic impacts are however unavoidable during the construction stage and the potential restrictions may require:

- One lane alternate (stop/slow) operations which may result in temporary delays and increased travel times
- Haulage operations and over-dimension vehicle movements may create temporary traffic hazards for other vehicles in the vicinity of haulage operations.

Minimising the impact to the amenity of local residents in the vicinity of the construction works is necessary, and various environmental and traffic management measures may include:

- Considering the access requirement of adjacent properties when determining site access points
- Minimising queuing of construction vehicles in the local road network
- Using major arterial roads and regional roads wherever practicable for haulage routes
- Minimising heavy vehicle movements through operating school zones
- Providing parking facility on site for personnel





- Review potential property access issues during site inspections and implement corrective actions if issues identified
- Advise of changes through the TTLG.
- Coordinate works with adjoining contractors

Other major construction projects planned during the same period as SCAW may impact the road network in a manner outside CPBUIJV's control.

6.4. Haulage routes

Haul and delivery truck routes to and from construction sites and access points will be developed in key consideration of minimising impact on local streets and maximising use of arterial roads using Higher Mass Limit (HML) routes as outlined by TfNSW as part of their Intelligent Access Program (IAP) and Restricted Access Vehicle (RAV) routes. Heavy vehicles will access the arterial network as soon as practicable on route to, and immediately after leaving a construction site

TfNSW has roads and zones throughout Sydney that are approved for RAV and HML for certain heavy vehicles to travel along. Relevant local councils and/or TfNSW permission is required should construction vehicles greater than the allowable load limit require access to roads containing restrictions.

A substantial number of trucks entering the site will be from the Patons Lane Access Gate. The trucks will have the capability turn around within work area to depart the site and return to Patons Lane in a forward direction, which will further reduce the impact on the local road network. The details of truck movements and swept paths will be provided in the site specific Construction Traffic Management Plan(s).

If local roads are to be used that have not been previously identified in the EIS or supplementary documents. These haulage routes must be approved by the DPE following consultation with TfNSW, local councils and Customer Journey Planning (formerly Sydney Coordination Office),





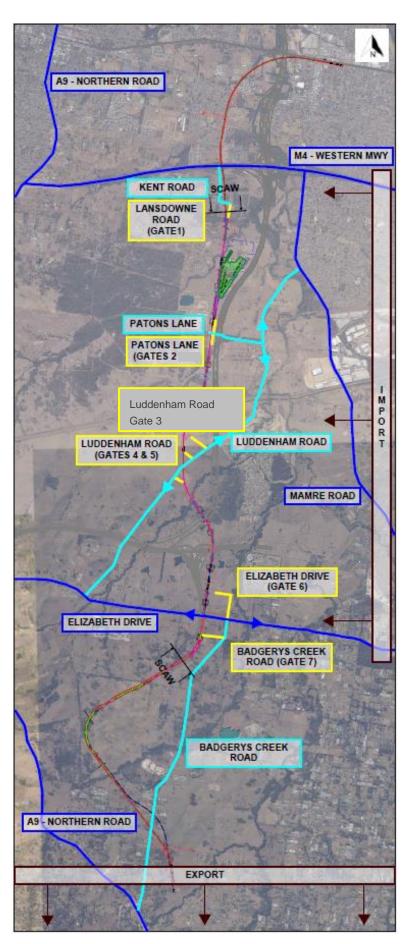


Figure 4 – SCAW proposed Haul Routes with typical import and export directions





Table 6 provides a Haul Route Human Impact Route Assessment (HIRA), previously undertaken by Sydney Metro Western Sydney Airport.

Table 6 - Haulage routes

HIRA workshop haul route ID	Haul route description	HIRA route rating
02	Inbound to WSA, westbound on Elizabeth Drive, then southbound into Badgerys Creek Road	Good
04	Northbound/ southbound along Luddenham Road (including Patons Lane) from Elizabeth Drive to Mamre Road and Great Western Highway	Good
05	Inbound/ outbound from Orchard Hills tunnelling and station site – Lansdowne Road to Kent Road (including Gipps Street)j to Great Western Highway	Good

CPBUIJV has reviewed the HIRA haul route rating system and will endeavour to comply with the preferred route rating.

6.5. Management of heavy vehicle movements

The following practices will be used to promote scheduling measures for minimising road-user delays:

- Initial induction and regular briefing for transportation companies on site specific and project wide risks
- Provide areas on-site for trucks prior to accessing the site and at loading/unloading points, such as staging or layover areas, to prevent trucks queuing on public roads adjacent to construction sites
- Where necessary, providing personnel at site gates to meter the dispatch of trucks onto the external road network to break up slow moving truck convoys that may result in road user delays
- The location of heavy vehicles used for spoil haulage will be monitored in real-time
- Ensure spoil is ready for the truck numbers scheduled.

Trucks to be used on the project will be compliant with NSW legislation, Sydney Metro's Principal Contractor Health and Safety Standard, relevant Australian Design Rules and vehicle standards and the Heavy Vehicle National Legislation. All heavy vehicle operations will be conducted in accordance with CPBUIJV's Chain of Responsibility (CoR) Management Plan, including monitoring of compliance with nominated haulage routes. CPBUIJV is committed to safety for all aspects of the project with road safety being paramount to the success of the project. To demonstrate this commitment the requirements listed in Table 7 will be implemented. For further information on CPBUIJV's Chain of Responsibility Management Plan.

Table 7: Heavy vehicle requirements

Requirement(s)	Purpose	Managed by
Ensure all heavy vehicles are registered and comply with the Australian Design Rules	Ensure compliance with legislative requirements	Checking prior to attendance at site through subcontractor engagement
Blind spot elimination or minimise front, side and rear blind spots, including Class V and VI mirrors as per ADR14.02 where blind spots cannot be permanently eliminated The prohibition of accessories that restrict the forward field of vehicles including opaque or chrome bug deflectors	Ensure compliance with SWTC and increase visibility of active transport users	Checking prior to attendance at site through subcontractor engagement





Requirement(s)	Purpose	Managed by
 Side underrun protection fitted to both sides of the vehicle: Between the front and rear axle of all rigid (SU) trucks and Between the front axle/ landing legs and rear axle of trailers forming part of a combination 	Improved protection for active transport users	Checking prior to attendance at site through subcontractor engagement
Signage placed on heavy vehicles including: Rear warning signs alerting other roads users to the dangers of overtaking and Front nearside signs warning pedestrians about walking close to the front of a moving or stationary heavy vehicle	Increasing road safety awareness for all users	Checking prior to attendance at site through subcontractor engagement
Full body line and contour conspicuity markings and reflective markings fitted to the drawbar of all trailers	Increasing visibility of heavy vehicles	Checking prior to attendance at site through subcontractor engagement
Heavy vehicle drivers to complete the Sydney Metro Safe Heavy Vehicle Driver Induction program or similar	Training and induction to address safety of pedestrians/ cyclists along street frontages	Training and induction process
All heavy vehicles used for spoil haulage must be clearly marked on the sides and rear with the project name and application number to enable immediate identification by a person viewing the heavy vehicle standing 20m away	Compliance with MCoA	Checking prior to attendance at site through subcontractor engagement
The locations of all Heavy Vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one (1) year following the completion of construction.	Compliance with MCoA	Checking prior to attendance at site through subcontractor engagement Ongoing monitoring throughout the project Maintenance of records

6.6. Access for over dimension vehicles

In addition to the permanent construction traffic management strategies, it is acknowledged that short-term traffic control may be required from time to time to facilitate the movement of over-dimension vehicles. These short-term controls may include:

- Truck warning signs in advance of access points
- Traffic controllers at access points to facilitate entry and exit movements
- ROLs.

Permits for vehicles greater than 4.5t are through the National Heavy Vehicle Regulator (NHVR). This applies to particular special purpose vehicles (SPV) such as mobile cranes and other oversize/ over mass (OSOM) vehicles. TfNSW is currently undertaking this permit issue.

For over dimensional vehicles generally vehicles that are greater than 25m in length of 3.5m wide require a pilot(s). Extremely long or wide vehicles will require an escort, fee payable. Permits are generally applied for by the transport operator.





6.7. Vehicle Movement Plans

A site vehicle movement plan (VMP) will be produced by construction engineers to identify the movement of all site traffic, both heavy and light vehicles, within a local area of works within the construction boundaries.

This document will clearly detail the movement of vehicles, all major plant and how they interact in this area. These plans will be updated and will be the subject of toolbox sessions when updates are made to reflect long-term vehicle movement changes.

Site signage and barricading together with plan mark-ups will document the constant changes/developments on a daily basis.

6.8. Other plans

Other plans that may require development during the works are Pedestrian Management Plan(s) (PedMP) and Parking Management Plan(s) (PkMP).





7. Construction site traffic management requirements

7.1. Traffic control at construction sites

All employees working onsite will be instructed to park in the designated parking area stipulated on the VMP. Each employee will be given a copy of the VMP, during induction or during initial toolbox talks. Personal vehicles will be able to be parked in the site compound.

All vehicles are to ingress and egress site in a forward direction. If vehicles are to reverse traffic control will be implemented under an approved ROL.

All drivers will be provided with a detailed VMP and be instructed to follow the plan during initial induction. Heavy vehicles will follow the NHVR route planner to facilitate movement to and from site.

Pedestrian pathways will be provided in nominated locations with a clear delineation of pathway from worksite using temporary fencing.

7.1.1. Frequency of inspections

A Road Safety Audit (RSA) will be undertaken for both daytime and night-time conditions. The RSA will be completed post implementation of the traffic staging including the Luddenham Road lateral shifts and installation of barriers on shoulder of carriageway, for the staging of the new roundabout construction, in accordance with G10 requirements.

A further daily risk assessment should be conducted when changes to the current risk assessment have been observed or where further hazards have been identified.

7.2. Emergency incident planning

CPBUIJV will provide traffic control by qualified traffic controllers for emergencies such as accidents and spillages on the maintained network, adjusting TGS as needed to suit the site conditions or any Standard TGS from TfNSW's Traffic Control at Worksites Manual.

7.2.1. Emergency Services

Access through the area maintained throughout the project with priority access given to emergency vehicles as per normal procedure.

7.3. Traffic controllers and temporary traffic signals

All traffic controllers who attend site must hold a current traffic controller and Implement Traffic Guidance Schemes (TGS) cards as a minimum. All traffic controllers must wear appropriate PPE for the time of day or night.

Traffic controllers are required to complete all inductions and toolbox talks and read and sign onto the traffic control specific SWMS as required. TGS's must be suitable for the works to be carried and any modifications to TGS's are to be signed off by a supervisor holding no less than implement traffic control ticket. Traffic control devices must be in place before traffic controllers are to conduct traffic control.

Portable traffic signals are currently not required. If staging is modified and they become required than the portable traffic signals must be approved for use under RMS Equipment Specification PTS/3 - Part A (Revision 1): General Requirements Portable Traffic Light Signals.





8. Site operations

The sites are shown on Figure 5 and have been designed to minimise their impact on the surrounding roads and communities.

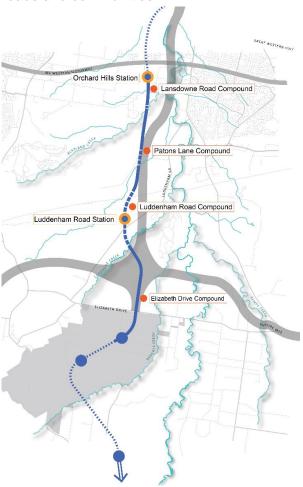


Figure 5: Overview of SCAW worksites

An overview of site operations at each compound is provided in Table 8

Table 8: Site operations

Construction site operations		
Lansdowne Road Compound -Gate 1	December 2022 to December 2024	
Access and egress	Access and egress will be via Lansdown Road	
Active transport users	No footpaths are currently available for use The bridge being built by the SBT contractor will provide for new footpaths The M4 shared path is located on Kent Road and there will be no impact on this for the SCAW works	
Public transport	No public transport operates in the area	
Motorists	There will be no changes required by SCAW works to the surrounding road network	
Parking	Onsite parking will accommodate the workforce	
Construction route to and from site	As per the EIS, vehicles will access/ egress the site from Lansdowne Road	





Construction site operations	
Works	All works are undertaken within the site including viaduct construction and earthworks
Other	NA
Patons Lane Compound – Gate 2	August 2022 to December 2024
Access and egress	Access and egress to the site will be via Patons Lane, which is closed to the public and this will be a shared access with BINGO
Active transport users	No footpaths are provided and the public cannot gain access to the site
Public transport	No public transport operates in the area
Motorists	The area is currently closed to the public
Parking	All parking will be provided for onsite
Construction route to and from site	As per the EIS, vehicles will access/ egress the site from Patons Lane via Luddenham Road
Works	All works are undertaken within the site including viaduct construction and earthworks
Other	NA
Luddenham Road Compound – Gate 3	January 2023 to February 2025
Access and egress	Via the existing gate on Luddenham Road between the two pipelines
Active transport users	No footpaths are provided and the public cannot gain access to the site
Public transport	No public transport operates in the area
Motorists	The area is currently closed to the public
Parking	All parking will be provided for onsite
Construction route to and from site	As per the EIS, vehicles will access/ egress the site from Patons Lane via Luddenham Road
Works	Minor works to upgrade the existing access to a more suitable access point for heavy vehicles. Installation of temporary signposting All other works are contained within the site and include viaduct construction and earthworks
Other	NA
Luddenham Road Station Site - Gate 4	October 2022 to February 2025
Access and egress	Via the existing access road off Luddenham Road
Active transport users	No footpaths are provided An on road cycleway is delineated through the intersection for cyclists travelling northbound on Luddenham Road
Public transport	No public transport operates in the area
Motorists	The intersection updgrade has provided dedicated left and right turns into site. There is a dedicated seagull treatment to allow for a right turn out of the site. Dedicated turn lanes are provided on the access road onto Luddenham Road
Parking	All parking will be provided for on site
1 driving	7 in parking will be provided for our site





Construction site operations	
Construction route to and from the site	As per the EIS vehicles will access/ egress the site from Luddenham Road
Works	All works associated with the Luddenham Station site including viaduct installation
Luddenham Road Station Site – Gate 5	October 2022 to February 2025
Access and egress	Via the existing access road off Luddenham Road
Active transport users	No footpaths or cycle routes are provided
Public transport	No public transport operates in the area
Motorists	There will be no changes required by SCAW works to the surrounding road network
Parking	All parking will be provided for on site
Construction route to and from the site	As per the EIS vehicles will access/ egress the site from Luddenham Road
Works	Viaduct and surface works
Elizabeth Drive Gate 6	July 2024 to December 2024
Access and egress	Via the existing roundabout on Elizabeth Drive
Active transport users	No footpaths or cycle routes are provided
Public transport	Routes 801 (Badgerys Creek to Liverpool Station PM peak hours only), 9624 (Prairie Wood -Kemps Creek mid afternoon only M-F), 9615 (Cecil Hills-Badgerys Creek 3-4PM M-F) and 9616 (Cecil Hills-Badgerys Creek 3-4PM M-F) all operate along Elizabeth Drive – services or stops will not be impacted
Motorists	There will be no changes required by SCAW works to the surrounding road network
Parking	All parking will be provided for on site
Construction route to and from the site	As per the EIS vehicles will access/ egress the site from Elizabeth Drive
Works	Surface works
Badgerys Creek Road Gate 9	March 2023 to June 2024
Access and egress	Access/ egress via Badgerys Creek Road/ Pitt Street roundabout
Active transport users	Footpaths are provided along sections of Badgerys Creek Road. SCAW works will not impact on active transport users
Pubic transport	Routes 801 (Badgerys Creek to Liverpool Station PM peak hours only), 2017 (Bringelly PS to





Construction site operations		
	Rossmore School PM only), 2053 (Magdellan HS to Leppington School PM only). Services/ stops will not be impacted by SCAW	
Motorists	There will be no changes required by SCAW works to the surrounding road network	
Parking	All parking will be provided for on site	
Construction route to and from the site	As per the EIS vehicles will access/ egress the site from Badgerys Creek Road	
Works	Surface works	





9. Management of construction sites

9.1. Site Access Management

CPBUIJV's strategy to facilitate movement of construction traffic (light and heavy vehicles) to, from and between construction sites will focus on minimising movements and impacts on the surrounding road network and maintaining pedestrian, cyclists and motorists safety and be in accordance with the Construction Traffic Management Framework. We will achieve this through:

- Maximising internal site access routes to keep movements between work sites off public roads
- Reducing the amount of vehicles movements to and from the site during peak periods
- The provision of on-site truck staging areas, away from sensitive receivers, that will eliminate trucks
 queueing at site entry points and the need for further marshalling areas
- The provision of parking areas for both light and heavy vehicles required on the project to ensure that vehicles are not parking or idling on the public road system
- Ensuring that vehicles are able to pull directly into site and therefore not block existing shared use paths or footpaths

Phasing of truck movements exiting from the site to eliminate 'convoys' of vehicles

- Worker and staff parking provided on-site at site office locations
- Segregation of worker 'non-business' parking area from the construction area.

9.2. Site Access Points

The most hazardous movement for construction vehicles occurs when entering or exiting site. To provide a safe entry and exit to the work site from safe access points CPBUI JV will:

- Keep the number of access points to an optimal number providing adequate site access and minimising impacts to road users
- Ensure new construction access points be designed to minimise impacts so far as practicable, on existing intersections, traffic facilities or traffic generating developments
- Only install access points that are visible and have adequate sight distance
- Design intersections and access points in accordance with AUSTROADS Part 5 Intersections at Grade and the RMS Road Design Guide
- Ensure intersection configuration has capacity to accommodate traffic generated by construction.
- Where practicable separate pedestrians from site access points
- Implement traffic safety barriers, security fences and gates to maintain sight lines
- Ensure access points are visible to approaching traffic and signposted accordingly
- Ensure that access points are sealed to minimise dirt and debris transfer to external roads

The AUSTROADS Guide to Traffic Engineering and the RMS Road Design Guide provide guidance on design of intersections and access points.

Short term traffic control may be required from time to time to facilitate short-term major haulage and the movement of over-dimension vehicles particularly during site establishment.

Temporary traffic controls that may be installed include:

- Truck warning signs in advance of access points (in line with TfNSW Traffic Control at Worksite Manual)
- Traffic controllers at access points to facilitate entry and exit movements.

Project offices and site access points will be signposted on the approaches and at the access with a unique identification number.

9.3. Site security, site access and signage

ATF fencing as well as existing 1.8m boundary fences will be used to enclose the work area and will be maintained for the duration of the construction works. The fencing is to ensure that only authorised personal can enter the site. Street Lighting on Luddenham Road is not sufficient for night works and light





towers will need to be installed for all night works. Variable Message Boards will be positioned near the work site to inform drivers of the construction works and will display related messages.

9.4. Management of risks to vulnerable road users

A Communication Strategy will be established by CPBUIJV to inform residents in the area, schools and businesses of the proposed construction works. The table below outlines the communication strategy to ensure that adequate communication with key stakeholders have been met.

No resident access will be affected during construction works.

Risk	Strategy	Communication Channel
Wider Traffic	Wider Community and Stakeholders informed	
Disruption	through local and wider advertising as well as	
	letter box drops	
Construction	Ensure that Heavy Construction Vehicles use	Letter to Residents/ Businesses
Related	routes as identified in the CTMP	
Traffic		Email Notification to
	and	Emergency Services and Bus
		Companies
	Ensure that residents in the area are notified in	
	advance to any traffic changes that may	
	affect them	

Figure 6 – Communication channels

Pedestrians will be separate from the work areas construction and boundary fences. Signage on fences will be installed to show that pedestrians are prohibited from entering the site.





10. Road safety audits

AUSTROADS defines a road safety audit as a formal examination of a future road or traffic project or an existing road, in which an independent, qualified auditor(s) reports on the roads crash potential and safety performance. There are various types of audits conducted, from feasibility audits through to preopening audits. Audits are also conducted to assess the safety of existing roads and temporary traffic arrangements implemented for roadwork.

These audits will be conducted in accordance with the following guidelines, as per the SWTC:

- AUSTROADS Road Safety Audit Guide
- RMS Guidelines for Road Safety Audit Practices
- The TfNSW Centre for Road Safety Technical Direction Policy for Road Safety Audits of Construction and Reconstruction Projects
- TfNSW Centre for Road Safety Guidelines for Road Safety Audit Practices.
- CPBUIJV will undertake RSA's as per Sydney Metro CTMF which outlines:
- Detailed design stage
 - At this stage, the geometric design, traffic signage scheme, line-marking plans, lighting plans and landscaping plans will be reviewed in in relation to the operation of the road.
- Pre-opening stage
 - Prior to the opening of a site, an inspection will be made for all relevant conditions during both the night and day for all likely road users, to ensure that the construction has addressed earlier audit concerns and to check for any hazardous conditions that were not apparent at the feasibility or design stages.
- Road safety audits of Construction Traffic Management Plans
 - Road Safety Audits will be undertaken for site-specific CTMPs, to be submitted with the CTMP to stakeholders. A response to address all RSA comments will be included before endorsement of the CTMP by Transport Coordination and approval by TfNSW.
 - Regular safety audits of work zones will also be undertaken to ensure all construction site safety arrangements are in place. These audits will be additional to the daily inspections by the site staff. Attention will be given to WHS guidelines, work areas adjacent to the road, movement of construction traffic, vehicle speeds and all warning devices or systems.
- Road safety audit procedure
 - All Road Safety Audits will be undertaken in accordance with the Guidelines for Road Safety Audit Practices (RMS, 2011), with reference to current practices outlined in
 - Guide to Road Safety Part 6, Road Safety Audit (Austroads, 2009) and Sydney Metro Principal Contractor Health and Safety Standard.

CPBUIJV will organise external road safety audits to be undertaken by two suitably qualified, road safety and traffic engineering auditors and provide the opportunity for Sydney Metro to attend.

The lead auditor will have Road Safety Auditor Level 3 Certification, have undergone road safety audit training, and received certification under the Public Works Engineering Australia Ltd (NSW Division) Accreditation Scheme. The other auditor would be, at least, highly experienced in traffic management.

CPBUIJV Quality Systems and the project Quality Management Plan will ensure that any findings of the RSA are appropriately actioned and records issued to all project stakeholders. Subsequent to closing out any RSA actions, the Traffic Manager will be responsible for updating the CTMP if required.





CPBUIJV's safety standards and safe working distances for live traffic will be as per Figure 7 for Working Around Live Traffic - Short term works (1 shift) working under a lane closure standard.

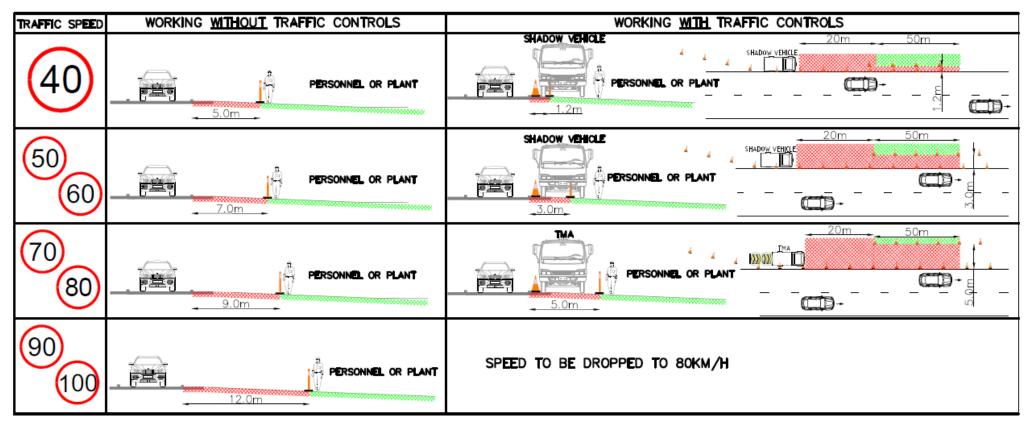
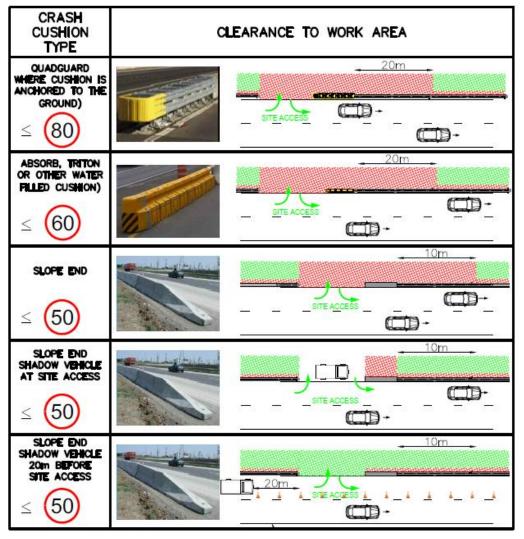


Figure 7 – Working Around Live Traffic - Short term works





CPBUIJV's safety standards and safe working distances for live traffic will be as per Figure 8 for Working Around Live Traffic – Long Term Traffic Management standards.



BARRIER CLEARANCE BEHIND BARRIER TO WORK AREA TYPE DBSO CONCRETE OR STATE BARRIER 60 (II)-DB80 CONCRETE OR STEEL BARRIER 80 (II) -ARMOR ZONE WATER FILL 50 (III) -W-BEAM BARRER **-**WIRE ROPE 100 (III) -

Figure 8 – Working Around Live Traffic – Long Term Traffic Management





Part C Appendices

Appendix A – Compliance Matrix

Sydney Metro Western Sydney Airport CSSI Infrastructure Approval (SSI 10051)

Project	Planning Approval (SSI 10051)	,
E103	Construction Traffic Management Plans (CTMPs) must be prepared in accordance with the Construction Traffic Management Framework. A copy of the CTMPs must be submitted to the Planning Secretary for information before the commencement of any construction in the area identified and managed within the relevant CTMP.	Section 2.6
E104	The locations of all Heavy Vehicles used for spoil haulage must be monitored in real time and the records of monitoring be made available electronically to the Planning Secretary and the EPA upon request for a period of no less than one (1) year following the completion of construction.	Table 7
E105	Local roads proposed to be used by Heavy Vehicles to directly access ancillary facilities / construction sites that are not identified in the documents listed in Condition A1 must be approved by the Planning Secretary and be included in the CTMP.	Section 5.15.1
E106	All requests to the Planning Secretary for approval to use local roads under Condition E105 above must include the following: (a) a swept path analysis; (b) demonstration that the use of local roads by Heavy Vehicles for the CSSI will not compromise the safety of pedestrians and cyclists of the safety of two-way traffic flow on two-way roadways; (c) details as to the date of completion of the road dilapidation surveys for the subject local roads; and (d) measures that will be implemented to avoid where practicable the use of local roads past schools, aged care facilities and child care facilities during their peak operation times; and (e) written advice from an appropriately qualified professional on the suitability of the proposed Heavy Vehicle route which takes into consideration items (a) to (d) of this condition.	Section 5.15.1
E107	Before any local road is used by a Heavy Vehicle for the purposes of construction of the CSSI, a Road Dilapidation Report must be prepared for the road. A copy of the Road Dilapidation Report must be provided to the Relevant Road Authority(s) within three (3) weeks of completion of the survey and at no later than one (1) month before the road being used by Heavy Vehicles associated with the construction of the CSSI.	Section 5.15.2
E108	If damage to roads occurs as a result of the construction of the CSSI, the Proponent must either (at the Relevant Road Authority's discretion): (a) compensate the Relevant Road Authority for the damage so caused; or (b) rectify the damage to restore the road to at least the condition it was in pre-work as identified in the Road Dilapidation Report.	Section 5.15.2
E109	Vehicles associated with the project workforce (including light vehicles and Heavy Vehicles) must be managed to: (a) minimise parking on public roads; (b) minimise idling and queueing on state and regional roads; (c) not carry out marshalling of construction vehicles near sensitive use	Section 9.1 and Table 7





Project F	Planning Approval (SSI 10051)	
	(d) not block or disrupt access across pedestrian or shared user paths at any time unless alternate access is provided; and(e) ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the CTMP.	
E110	Access to all utilities and properties must be maintained during works, unless otherwise agreed with the relevant utility owner, landowner or occupier.	Section 5.1.4
E111	The Proponent must maintain access to properties during the entirety of works unless an alternative access is agreed in writing with the landowner(s) whose access is impacted by the CSSI works.	Section 5.14
E112	Where construction of the CSSI restricts a property's access to a public road, the Proponent must, until their primary access is reinstated, provide the property with temporary alternate access to an agreed road decided through consultation with the landowner, at no cost to the property landowner, unless otherwise agreed with the landowner.	Section 5.14
E113	Any property access physically affected by the CSSI must be reinstated to at least an equivalent standard, unless otherwise agreed by the landowner or occupier. Property access must be reinstated within one (1) month of the work that physically affected the access is completed or in any other timeframe agreed with the landowner or occupier.	Section 5.14
E114	During construction, all reasonably practicable measures must be implemented to maintain pedestrian, cyclist and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian, cyclist and vehicular access, and parking arrangements must be developed in consultation with affected businesses and landowners and implemented before the disruption. Adequate signage and directions to businesses must be provided before, and for the duration of, any disruption.	Section 5.14
E115	Safe pedestrian and cyclist access must be maintained around the St Marys construction site during construction. In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, a proximate alternate route which complies with the relevant standards, must be provided and signposted before the restriction or removal of the impacted access.	Not applicable to the SCAW scope of works
E116	A Traffic and Transport Liaison Group(s) must be established in accordance with the Construction Traffic Management Framework to inform the development of CTMP.	Sydney Metro will establish the TTLG Section 3.2.1
E117	Supplementary analysis and modelling as required by TfNSW and / or the Traffic and Transport Liaison Group(s) must be undertaken to demonstrate that construction and operational traffic can be managed to minimise disruption to traffic network operations including changes to and the management of pedestrian, bicycle and public transport networks, public transport services, and pedestrian and cyclist movements. Revised traffic management measures must be incorporated into the CTMP.	Section 3.2.1
E118	As part of Condition E117 the Traffic and Transport Liaison Group(s) is to identify opportunities to improve the intersection performance during operation at: a) Queen Street/Great Western Highway/Mamre Road in St Marys;	Not applicable to the SCAW scope of works





Project	Project Planning Approval (SSI 10051)		
	b) Glossop Street/ Forrester Road in St Marys; and		
	c) Glossop Street / Great Western highway in St Marys.		
	Identified improvements must be implemented prior to the		
	commencement of operation.		

Sydney Metro Western Sydney Airport Environmental Impact Statement

Revised Environmental Management Measures (REMMs)			
T1	Construction Traffic Management Plans would be prepared in accordance with the Construction Traffic Management Framework	Section 2.1	
T2	The Construction Traffic Management Plan for St Marys would be developed in consultation with the Traffic and Transport Liaison Group to ensure existing transport interchange infrastructure continues to operate effectively within the St Marys station precinct.	Not applicable to the SCAW scope of works	
Т3	Coordination with Western Sydney Airport and Transport for NSW would be undertaken through the Traffic and Transport Liaison Group to manage potential cumulative construction traffic impacts with M12 Motorway and Elizabeth Drive	Section 3.2.1	
T4	Road Safety Audits would be carried out to address vehicular access and egress, and pedestrian, cyclist and public transport safety. Road Safety Audits would be carried out as per the guidelines outlined in Section 10 of the Construction Traffic Management Framework	Section 10	
T5	Maintain access for pedestrians and cyclists around construction sites as per the guidelines outlined in the Construction Traffic Management Framework. Appropriate signage and line marking would be provided to guide pedestrians and cyclists past construction sites and on the surrounding network to allow access to be maintained	Section 5.14	
T6	Access for construction vehicles to be planned as per the guidelines outlined in the Construction Traffic Management Framework. Construction site traffic would be managed to minimise movements during peak periods. Vehicle access to and from construction sites would be managed to maintain pedestrian, cyclist and motorist safety	Section 9.1 Section 9.2	

Sydney Metro Western Sydney Airport Revised performance outcomes

Revised Performance outcomes - Transport				
Network connectivity, safety and efficiency of	Safe and efficient routes are provided for pedestrians, cyclists and road users at/ near construction sites	Section 5.11		
the transport system in the vicinity of the project are managed to minimise	Access to the existing St Marys Station is maintained while train services are operating	Not applicable to the SCAW scope of works		
impacts. The safety of transport system customers is maintained . impacts on network	Safe access to properties and businesses is maintained during construction, unless alternatives are agreed with property owners and businesses	Section 5.14		
capacity and the level of service are effectively managed	Heavy vehicles access the arterial network as soon as practicable on route to, and immediately after leaving a construction site	Section 6.4		
	The local community and relevant authorities are informed of transport, access and parking changes/impacts to minimise inconvenience to the public	Section 4		





Appendix B – Review comments