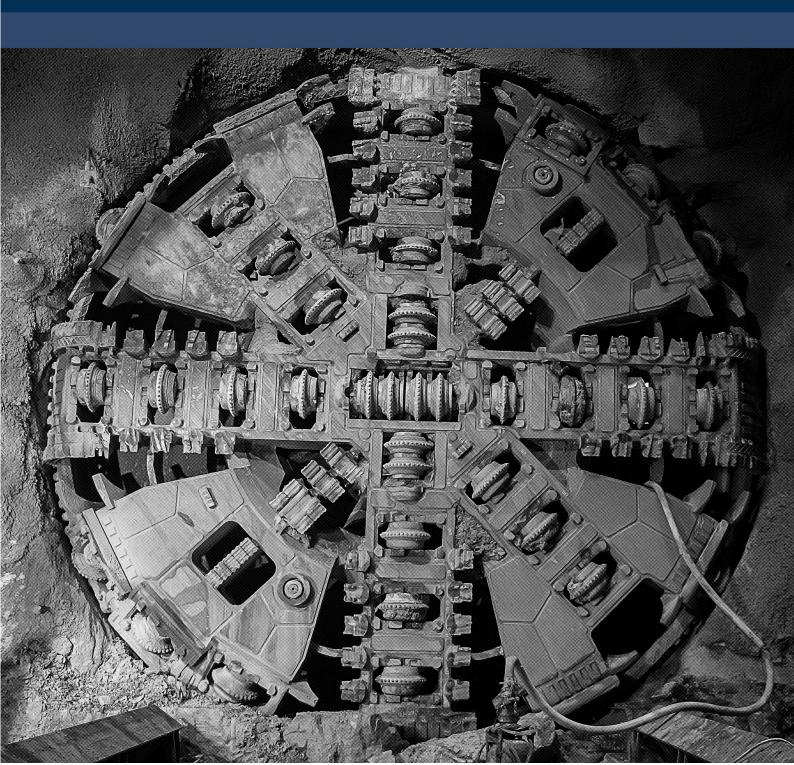


# Construction Traffic Management Plan

Hunter Street – Tower Crane Installation Rev 01





# **Construction Traffic Management Plan**

**Hunter Street - Tower Crane Installation** 

Project number	7040
Document number	SMWSTETP-JCG-SCB-SN100-TF-PLN-002273

# **Document approval**

Rev	Date	Prepared by	Reviewed by	Comments	Approved by
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# **Definitions**

Table 1: Definitions and abbreviations

Abbreviation	Definition
CJP	Customer Journey Planning
CoA	Condition of Approvals
CoS	City of Sydney
CTMF	Construction Traffic Management Framework
CTMP	Construction Traffic Management Plan
DA	Development Application
DPE	Department of Planning and Environment
EIS	Environmental Impact Assessment
EPA	Environmental Protection Authority
JCG JV	John Holland, CPB Contractors and Ghella Joint Venture
HRV	Heavy Rigid Vehicle (12.5m in length)
LTC	Local Traffic Committee
OSOM	Oversize and / or Overmass
PMP	Pedestrian Movement Plan
REMMs	Revised Environmental Management Measures
RMS	(Former) Roads and Maritime Services
RTS	Response to Submissions Report
SSI	State Significant Infrastructure
TCaWS	Traffic Control at Work Site
TCG	Traffic Control Group
TfNSW	Transport for NSW
TGS	Traffic Guidance Scheme
TMC	Transport Management Centre
TMP	Traffic Management Plan
TTLG	Traffic and Transport Liaison Group
VMP	Vehicle Movement Plan
VMS	Variable Message Sign



# Part A: Overview

#### 1. Introduction

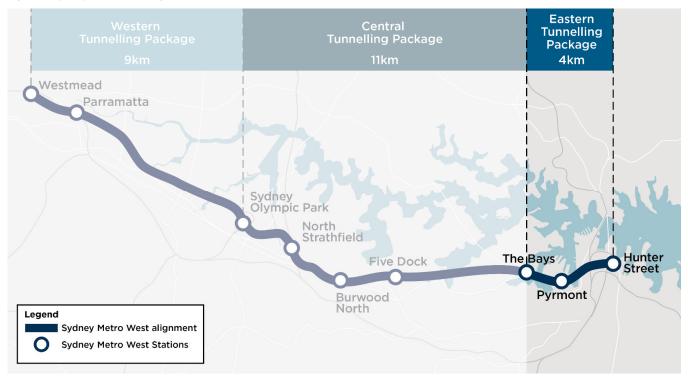
# 1.1. Project overview

Sydney Metro West forms part of the broader Sydney Metro network. The first project, the Metro Northwest Line is now operational, running between Rouse Hill in Sydney's Northwest and Chatswood. The second project, Sydney Metro City & Southwest which runs from Chatswood to Bankstown in Sydney's Southwest, is currently in the delivery stage and is expected to be operational in 2024.

The Sydney Metro West, Eastern Tunnelling Package (ETP) involves the delivery of:

- Enabling works such as demolition, utility supply to construction sites, utility adjustments and modifications to the existing transport network
- Mined crossover cavern construction east of The Bays Station
- 4.2km of TBM Tunnel excavation, 650m of mined tunnels and 7 cross passage excavation, from The Bays to Sydney CBD
- Excavation for two new underground metro stations at Pyrmont and Hunter Street
- Construction of a turnback, crossover tunnels and caverns at the eastern end of the tunnel section
- A concrete segment facility for use during construction located at Eastern Creek.

Figure 1: Sydney Metro West alignment



#### 1.2. Sydney Metro's objectives

Sydney Metro West will be Sydney's next underground railway connecting Greater Parramatta and the Sydney CBD. This infrastructure investment will transform Greater Sydney, doubling rail capacity between the two CBDs, linking new communities to rail services, and supporting employment growth and housing supply.

The new metro rail will become the easiest and fastest journey between Parramatta and the Sydney CBD, with a travel time target between the two centres of about 20 minutes.

Sydney Metro West will:

- Relieve the congested T1 Western Line, T9 Northern Line and T2 Inner West and Leppington Line
- Provide travel time savings for customers in Western Sydney and along the Greater Parramatta to Sydney CBD corridor
- Reduce station crowding at some stations



- Provide rail transport to areas where it is currently not available
- Connect Greater Parramatta and the Sydney CBD to support the vision for a metropolis of three cities
- Support delivery of the '30-minute city' as identified in the Future Transport 2056 strategy
- Reinforce the role of Greater Parramatta as the Western River City
- Improve connectivity to major attractions and key precincts located along the corridor, including Sydney Olympic Park and The Bays Precinct
- Support urban renewal and increased housing supply
- Increase accessibility across Sydney and provide customers with a new world-class metro service.

The project infrastructure, when fully completed, will include underground metro tunnels and rail infrastructure, new rolling stock, signalling and train control systems, rail and line-wide systems and a depot, operation and maintenance, and stations, including integrated station and precinct developments at some station locations.

# 1.3. Our objectives

The primary objectives and principles of this TMP are:

Table 2 - Primary Objectives and Principles

Objectives	Targets	Key Performance Indicators
Minimising the impacts on traffic delays and road safety		
Minimising disruption to private properties and local businesses	No avoidable complaints associated with traffic disruption to private properties and local businesses	Number of avoidable complaints associated with traffic disruption to private properties and local businesses
Minimising impacts on existing pedestrian footpaths, cycleways, and nearby parking facilities.	No impacts which would result in a delay of more than 5 mins	Number of impacts resulting in a delay of more than 5 minutes
Ensuring coordination between Sydney Metro West and Transport for NSW (TfNSW) through Traffic and Transport Liaison Group (TTLG) and Traffic Control Group (TCG) to manage any cumulative impacts with surrounding projects.	No unforeseen cumulative impacts with surrounding projects	Number of unforeseen cumulative impacts
Ensuring traffic impacts are within the scope permitted by TfNSW, Sydney Metro West and associated councils	No traffic impacts outside the scope permitted by TfNSW, Sydney Metro and associated Councils	Number of traffic impacts outside the scope permitted by TfNSW, Sydney Metro and associated Councils
Meet the requirements of the Project brief, Project Specifications, CoA, REMMs, and TfNSW Traffic Control at Work Sites (TCaWS) Manual	Meet all requirements of the Project brief, Project Specifications, CoA, REMMs, and TfNSW Traffic Control at Work Sites (TCaWS) Manual	No breaches of the requirements of the Project brief, Project Specifications, CoA, REMMs, and TfNSW Traffic Control at Work Sites (TCaWS) Manual
Ensure full compliance with relevant legislative requirements, CoA and revised	Full compliance with relevant legislative requirements, CoA and	No breaches associated with the relevant legislative requirements, CoA and



environmental management measures (REMMs).	revised environmental management measures (REMMs)	revised environmental management measures (REMMs)
Manage construction traffic and movements to and from construction support sites to ensure pedestrian, cyclist and motorist safety.	No incidents or accidents associated with construction traffic movements	Number of incidents or accidents associated with construction traffic movements
Minimise disruptions on the road network within the vicinity of the construction support sites.	Disruptions on the road network within the vicinity of the construction support sites kept as low as reasonably practical	Number of disruptions on the road network within the vicinity of the construction support sites

# 1.4. Plan structure

Table 3: Plan structure

Part	<b>Details</b>
Part A: Overview	This section clearly defines:  Project overview Proposed work methodology Assessment of traffic and transport impacts Proposed mitigation measures
Part B: Annexure	Further documents and information that support this Plan include:  Vehicle specifications  Swept path analysis  Traffic guidance scheme  Variable message signage  Road safety audit report



# 2. Project Overview

# 2.1. Background

The New South Wales (NSW) Government through TfNSW is implementing Sydney's Rail Future, a plan to transform and modernise Sydney's rail network to accommodate the growth of city population and meet the future travel demand.

Sydney Metro is a standalone rail network identified in Sydney's Rail Future. The Sydney Metro network consists of Sydney Metro Northwest, Sydney Metro City & Southwest, Sydney Metro West and Sydney Metro Western Sydney Airport.

The proposed Sydney Metro West runs between Hunter Street in the Sydney CBD and Westmead in Western Sydney. The project comprises underground metro stations, stabling maintenance facilities, signalling, access tracks / paths and other ancillary components.

One of the metro stations for Sydney Metro West is proposed in the Sydney CBD on Hunter Street. Two construction sites, namely Hunter Street East and Hunter Street West, will be established to undertake the proposed construction works. The construction program for Hunter Street East station comprises three stages, including tunnel excavation, demolition, and shaft excavation and TBM removal.

This TMP has been developed to account for the installation of the tower cranes at the Hunter Street East and Hunter Street West site. The works will be undertaken by John Holland, CPB Contractors and Ghella Joint Venture (JCG JV).

# 2.2. Project Scope

This Traffic Management Plan (TMP) relates to the temporary closure of Hunter Street between George Street and Pitt Street, and Hunter Street between O'Connell Street and Bligh Street.

The closure of Hunter Street between O'Connell Street and Bligh Street is required to be closed to accommodate the establishment of a mobile crane for the installation of a tower crane, associated with the Sydney Metro West project at the Hunter Street East site in Sydney CBD.

The closure of Hunter Street between George Street and Pitt Street is required to be closed to accommodate the establishment of a mobile crane for the installation of a tower crane, associated with the Sydney Metro West project at the Hunter Street West site in Sydney CBD.

This TMP assesses the traffic, public transport, local access, pedestrian and parking implications associated with the proposed closure of Hunter Street and provides mitigation measures, where necessary, to ensure minimal impacts on the surrounding road network.

The scope of this Hunter Street TMP is to describe how JCG JV will manage the potential traffic, worker parking, transport and access, public transport, and active transport impacts during the tower crane assembly at the Hunter Street East and Hunter Street West construction site. Operational and construction impacts and measures do not fall within the scope of this Plan.

#### 2.3. Project Phasing

Reflecting the outcomes of a detailed environmental risk assessment, the ETP Works will be delivered through a phased approach. This approach, detailed in the Phasing Report, includes Low Impact Works as defined under the SSI 19238057 Infrastructure Approval and the activity-based phases for construction (Table 5).



Table 4 - Overview of ETP Works phasing

Phase	Description	Indicative timing	Environmental documentation	Consultation and approvals
Low Impact Works	Activities defined as Low Impact Works under SSI 19238057 Infrastructure Approval, including survey work, investigations, utility relocations, installation of environmental controls and initial demolition works	Project award to May 2023	<ul> <li>Low Impact Works         Plan</li> <li>Low Impact Works         applications</li> <li>DNVIS¹</li> </ul>	<ul><li>Sydney Metro Review</li><li>ER and AA endorsement</li></ul>
Preliminary Works	Including works within the existing Hunter Street East acoustic shed, and critical enabling works which are required to be conducted outside of standard hours	March to May 2023	<ul> <li>PCEMP</li> <li>Environmental Procedures</li> <li>DNVISs<sup>1</sup></li> </ul>	<ul> <li>Sydney Metro Review</li> <li>Stakeholder consultation</li> <li>ER and AA endorsement</li> </ul>
Tunnelling, Excavation and Associated Works (addressed in this Sub-plan)	Including the Preliminary Works (not completed prior to approval of the final CEMP), demolition of existing industrial premises, site establishment, piling and shaft excavation, tunnelling, and decommissioning	March 2023 to September 2025	<ul> <li>CEMP</li> <li>Sub-plans</li> <li>Environmental Procedures</li> <li>DNVISs (TBA)</li> </ul>	<ul> <li>Sydney Metro Review</li> <li>Stakeholder consultation</li> <li>ER and AA endorsement</li> <li>Planning Secretary approval</li> </ul>

#### Notes:

 DNVISs are allocated a title that is deemed to be appropriate at the time of preparation (e.g. Low Impact Works DNVIS). It is noted that the scope of works captured within the CEMP may be included in a DNVIS prepared for an earlier phase.

# 2.4. Purpose of this Plan

The overall principles of traffic management during the construction works include:

- manage access to/from adjacent properties;
- manage and control construction vehicle activity in the vicinity of the site;
- provide an appropriate and convenient environment for pedestrians and cyclists;
- minimise impact on pedestrian movements;
- provide alternative detour routes;
- maintain appropriate public transport access; and
- maintain bus service reliability and minimise bus service delay.



# 3. Legal and Other Requirements

# 3.1. Legislation

According to Roads Act 1993 – Section 138, it is required that a person obtains 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.

TfNSW 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 TfNSW for the duration of the proposed works for the Sydney Metro West – Eastern Tunnelling Project.

#### 3.2. Guidelines

The following guidelines and standards have been used during the development of this TMP:

- Traffic Control at Worksites Manual v6-1
- Relevant Australian Standards, including but not limited to AS1742.3 and AS1743
- Austroads Guidelines and RMS Supplements
- RMS Guide to Traffic Generating Development (2002)
- TfNSW Guidelines for Road Safety Audit Practice (2011)
- TfNSW QA Specifications
- Construction Traffic Management Framework
- Sydney Metro Principal Contractor Health and Safety V6

The report has been prepared and checked by qualified engineers who hold the RMS Prepare a Work Zone Traffic Management Plan.



# 4. Existing Environment

#### 4.1. Site Context

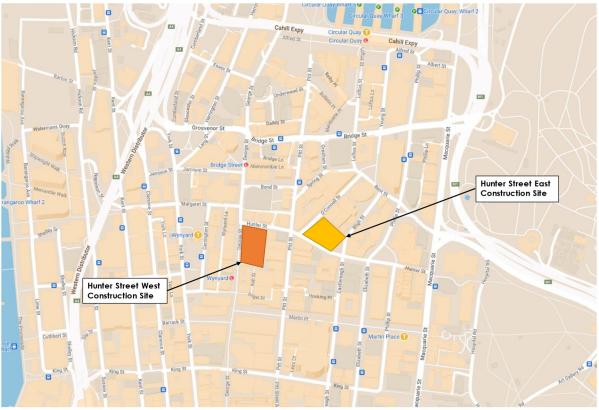
The Hunter Street East construction site is in the Sydney CBD bounded by O'Connell Street, Bligh Street and Hunter Street.

The Hunter Street West construction site is located on the southeast corner of Hunter Street and George Street.

Both construction sites are surrounded by mixed land uses, with majority of the surroundings being high-rise buildings, comprising commercial office / retail land uses. Notably, Circular Quay is located to the north, Royal Botanic Garden Sydney is located to the east and Wynyard Park and the Sydney Light Rail track line on George Street are located to the west.

A map of the locality of the Hunter Street West Site and Hunter Street East Site and its surrounds is shown in Figure 2.

Figure 2: Subject Site and Surrounding Road Network



Basemap source: Google Maps

#### 4.2. Abutting Road Network

The road network surrounding the subject site comprises local streets in the CBD road network having a 40 km/h speed zone. These streets are described herein.

**Hunter Street** is a four-lane, two-way road in the CBD road network, extending between George Street in the west to Macquarie Street in the east. The section of the road between George Street and Pitt Street provides loading zones, taxi zones and four-hour restricted parking along the kerbside of the road. Hunter Street intersects with George Street, Pitt Street and Castlereagh Street via signalised junctions with marked pedestrian crossings on all approaches of the intersections. The section of the road between Pitt Street and Macquarie Street offers restricted on-street parking within the kerbside lane. Hunter Street intersects with O'Connell Street and Bligh Street/ Castlereagh Street via signalised junctions with marked foot crossings on all approaches of the intersection, except for the eastern leg at the O'Connell Street intersection.



**George Street** between Grosvenor Street and Ultimo Road is pedestrianised with the Sydney light rail track running down the centre of roadway. Vehicle access on George Street is restricted to local residents and tenants where vehicular access to existing buildings along George Street are retained. Parking along both sides of George Street are prohibited in the near vicinity of the site.

**Pitt Street** extends between Alfred Street to the north and Lee Street / George Street to the south. In the vicinity of the site, Pitt Street is a two-lane, one-way road in the southbound direction with kerbside parking prohibited to the north of Hunter Street. To the south of Hunter Street, kerbside parking and loading zones are available, with one trafficable southbound lane. An on-road cycle path is available adjacent to the traffic lanes on Pitt Street.

**O'Connell Street** is a two-lane, one-way road in the southbound direction extending, between Bent Street and Hunter Street. Indented parking is provided on the eastern side of the road and a kerbside parking lane is available on the western side of the street. Bus layovers zone are located on both sides of O'Connell Street along with loading zones, a mail zone, a pickup / drop-off area. Footpaths are located on both sides of the road which are approximately 3m in width. There is a Telstra phone booth kiosk situated along the western frontage of the site.

**Castlereagh Street** operates as a one-way road in the southbound direction from Hunter Street to Hay Street. It has four trafficable lanes with two kerbside lanes for parking and two middle lanes for through traffic movements. One of the middle traffic lanes operates as a bus lane. Pedestrian footpaths are located on both sides of the street.

**Bligh Street** is a two-lane, one-way road in the southbound direction, extending between Bent Street to the north and Hunter Street to the south. Indented kerb side parking is provided on both sides of the road. Bus zone layover facilities and loading zones are located on both sides of the road. Footpaths are available on both sides of Bligh Street which are approximately 4m in width and widens to approximately 15m from the end of the bus layover on the western side of Hunter Street.

# 4.3. Active Transport Infrastructure

Well established pedestrian paths are provided on both sides of all roads in the vicinity of both subject sites. The paths surrounding the subject site provide a good level of connectivity in the area and vary in width between 4m and 5.5m.

Signalised pedestrian crossing facilities are provided at the intersections immediately surrounding the East and West sites, respectively, as follows:

#### **Hunter Street East Site**

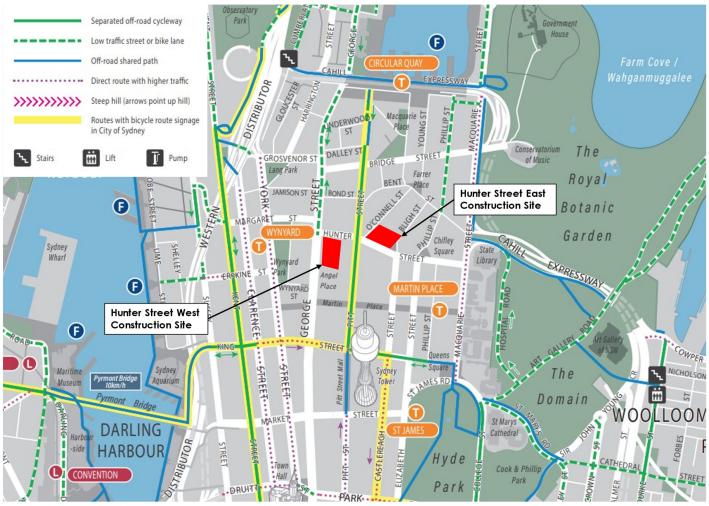
- Hunter Street with O'Connell Street;
- Hunter Street with Pitt Street; and
- Hunter Street with Bligh Street / Castlereagh Street.

#### **Hunter Street West Site**

- Hunter Street with Pitt Street; and
- Hunter Street with George Street.

Surrounding the site, the nearest bicycle routes are located on Pitt Street shown in Figure 3. The Pitt Street separated off-road cycleway runs between the sites, however the proposed road closures are on either side of this cycleway so it will remain unimpacted.

Figure 3: Cycle Infrastructure and Routes Surrounding Hunter Street Site



Source: City of Sydney, viewed online 31/03/2023

# 4.4. Public Transport Infrastructure

The Hunter Street site is surrounded by extensive public transport services due to its location within the Sydney CBD and being in close proximity to various commercial offices, retail and hospitality buildings, and shopping centres. Public transport services around the site vicinity include trains, buses, light rails and ferries.

#### **Train Services**

Train stations in close vicinity of the subject site include Wynyard, Circular Quay and Martin Place station. These train stations are serviced by multiple train lines, including T2 Inner West, T8 Airport and South, T1 North Shore and Western, T9 Northern Line and Central Coast & Newcastle, T4 Eastern Suburbs and Illawarra train lines. These train lines provide connections across the Sydney Greater Metropolitan Area and throughout the Sydney CBD.

#### **Light Rail**

Light rail services can be accessed at the nearby Bridge Street and Wynyard light rail stops. Both of these light rail stops are serviced by L2 Randwick Line and L3 Kingsford Line, which provide connection between the Sydney CBD, Surry Hills, Moore Park, Kingsford and Randwick.

#### **Bus Services**

Bus stops are extensively available across the Sydney CBD, consolidating along York Street, Carrington Street, Clarence Street, Kent Street, Bridge Street, Phillip Street and Macquarie Street. The buses running through the Sydney CBD and servicing these bus stops provide connections to a number of suburbs and suburban hubs across the Greater Sydney Metropolitan Area. Night bus services are



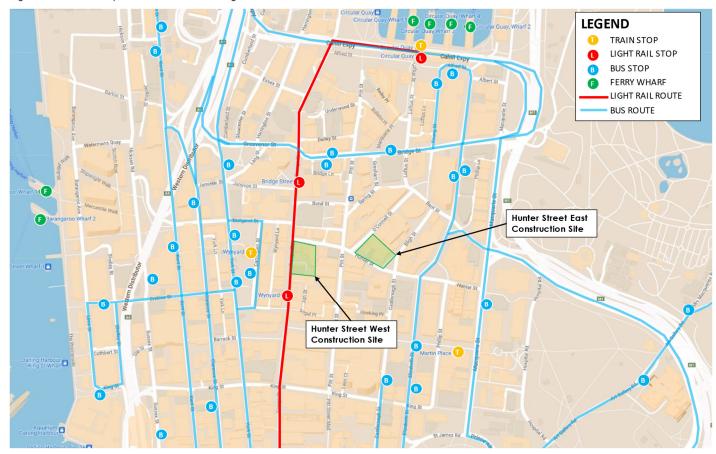
also available at some of these bus stops to accommodate the night travel demand induced by the surrounding licenced and entertainment venues within the Sydney CBD.

#### **Ferry Services**

Ferry services can be accessed at Circular Quay, which is located at approximately 650m walking distance (8-minute walk) from the Hunter Street East construction site. The F1 Manly, F2 Taronga Zoo, F3 Parramatta River, F4 Pyrmont Bay, F5 Neutral Bay, F6 Mosman Bay, F7 Double Bay, F8 Cockatoo Island and F9 Watson Bay ferry lines service the Circular Quay wharfs, which provide connection between Circular Quay and multiple suburbs along the Sydney Harbour.

The public transport network facilities and services in the vicinity of the Hunter Street construction sites are shown in Figure 4.

Figure 4: Public Transport Services Surrounding Hunter Street Construction Sites



#### 4.5. Existing Traffic Volume

A summary of the 2021 traffic volumes in the AM and PM peak hours on the surrounding road network of the Hunter Street West construction site as documented in EIS is provided in Table 5.

The EIS Technical Report 1 – Traffic and Transport (Section 3.3) outlines that a comparison was undertaken between the existing traffic volumes for pre COVID-19 conditions in March 2019 and post COVID-19 conditions in March 2021 to determine the effects of the COVID-19 pandemic on modelled traffic. The comparison showed that changes in traffic volume were minimal between a typical traffic month of 2021 and 2019 (less than five per cent). As a result, it is considered that the existing traffic volumes collected in March 2021 accurately represent traffic conditions regardless of the impacts of and can be concluded that the March 2021 traffic survey data accurately represent traffic conditions.



Table 5: Existing Peak Hour Traffic Volume on the Surrounding Road

Road Section	Direction	AM Peak Hour Volume (vehicles per hour)	PM Peak Hour Volume (vehicles per hour)
Grosvenor Street east of Harrington	Eastbound	610	610
Street	Westbound	270	560
Bridge Street west of Macquarie Street	Eastbound	460	790
	Westbound	730	320
Margaret Street east of Clarence Street	Eastbound	170	160
	Westbound	480	280
Hunter Street west of Macquarie Street	Eastbound	370	350
	Westbound	570	310
O'Connell Street north of Hunter Street	Northbound	-	-
	Southbound	90	70
Bens Street west of Macquarie Street	Eastbound	320	460
	Westbound	570	430
Macquarie Street north of Bent Street	Northbound	980	880
	Southbound	880	1,300
George Street north of Margaret Street	Northbound	110	90
	Southbound	-	-
Clarence Street north of Margaret	Northbound	370	680
Street	Southbound	-	-

Table 6: Existing Peak Hour Surrounding Intersection Performance

Intersection	Peak Hour	Demand Flow (vehicles per hour)	Average Delay (seconds per vehicle)	Level of Service
Macquarie Street and Bridge Street	AM	2,176	26	В
Macquaile Street and Bridge Street	PM	2,655	25	В
Macquarie Street, Bent Street and	AM	3,383	29	С
Shakespeare Place	PM	3,875	32	С
Macquaria Street and Hunter Street	AM	2,213	31	С
Macquarie Street and Hunter Street	PM	2,073	23	В
Hunter Street and Elizabeth Street	AM	1,936	26	В
Hunter Street and Elizabeth Street	PM	1,843	22	В
Hunter Street and Castlereagh	AM	1,191	11	А
Street	PM	900	9	Α
Hunter Street, Pitt Street and	AM	1,016	21	В
O'Connell Street	PM	753	22	В
Pont Street and Phillip Street	AM	1,349	26	В
Bent Street and Phillip Street	PM	1,729	30	С
Pont Stroot and Pligh Stroot	AM	643	9	А
Bent Street and Bligh Street	PM	726	9	А
Hunter Street, George Street and	AM	526	20	В
Margaret Street	PM	427	27	В
Margaret Street and York Street	AM	1,578	14	А



	PM	1,227	20	В
Margaret Street and Clarence	AM	939	41	С
Street	PM	1,165	51	D
Clearance Street and Jamison	AM	645	12	Α
Street	PM	1,013	12	А

The modelled intersection performance shows that most of the intersections currently perform satisfactorily at LoS C or better with the exception of the Margaret Street and Clarence Street intersection operating at LoS D in the PM peak hour. This is due to high volumes of traffic on all approaches with queues extending past adjacent intersections.

# 4.6. George Street North Pedestrianisation

TfNSW and City of Sydney Council temporarily closed George Street between Hunter Street and Bridge Street from Monday 9 January 2023, with aims to introduce the changes permanently.

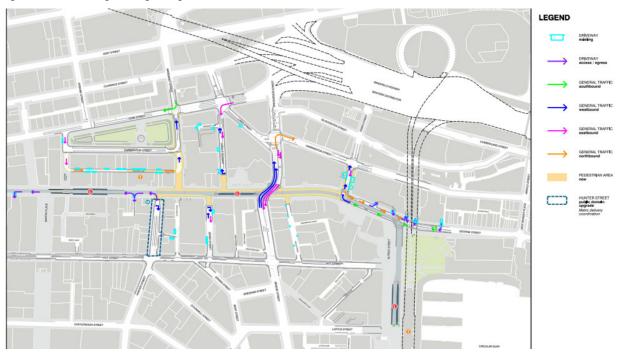
The pedestrianisation creates 5,900m<sup>2</sup> of new pedestrian space with wider footpaths by restricting through traffic on George Street.

The pedestrianisation involves the following traffic changes:

- closing the remaining northbound and southbound traffic lanes on George Street, between Hunter Street and Grosvenor Street
- closing the intersections of Margaret Street, Bond Street and Jamison Street with George Street
- banning the right turn from Hunter Street into George Street, only allowing left turn movements for local access into De Mestre Place
- changing traffic direction from one-way to two-way on Bond Street and Jamison Street
- changing the direction of vehicular flow at Wynyard Lane from southbound to northbound
- changing traffic direction from two-way to one-way eastbound on Wynyard Street, between York Street and Wynyard Lane
- changing traffic direction from two-way to one-way westbound on Margaret Street, between York Street and Wynyard Lane
- removing right-turn restrictions from Margaret Street (eastbound) into York Street
- introducing a left turn into Jamison Street from York Street.

Figure 5 displays the above traffic movement changes as part of the George Street North Pedestrianisation project.

Figure 5: Traffic Changes along George Street North Pedestrianisation



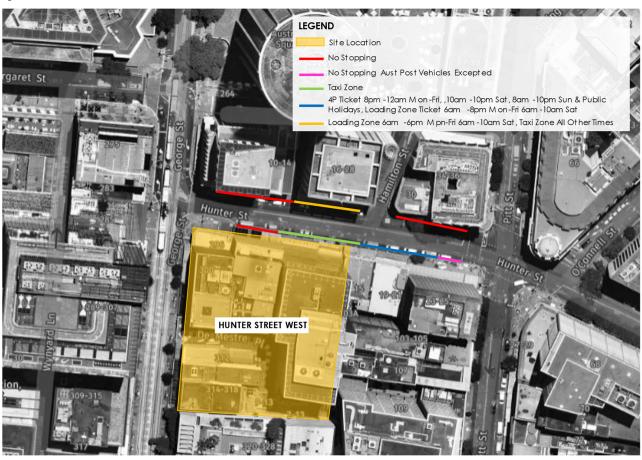
The pedestrianisation of George Street would reduce the overall general traffic on Hunter Street due to the partial closure of the George Street and Hunter Street intersection that disconnects the previous travel route between Hunter Street and Margaret Street via George Street.

# 4.7. Existing Kerbside Use

A summary of kerbside uses surrounding the Hunter Street West and East Site and time restrictions pertaining to parking and loading on these streets are shown in Figure 6 and Figure 7, respectively. Figure 6: Hunter Street East Site Kerbside Uses



Figure 7: Hunter Street West Site Kerbside Uses



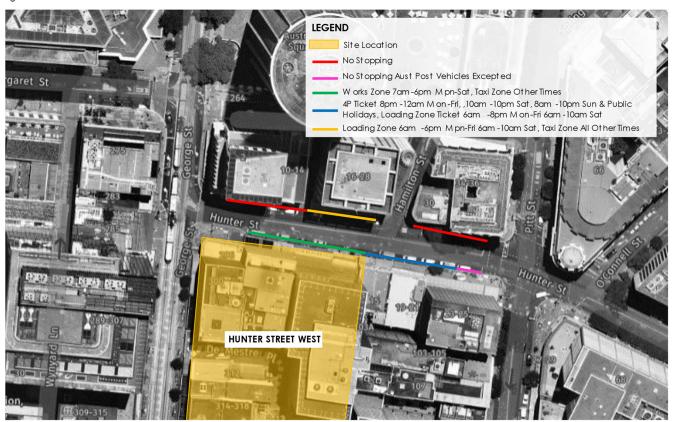
It is noted that JCG JV intend to change the kerbside restrictions at the site before the works take place to include 'Works Zones' to the frontage of both sites. The future kerbside restrictions are presented in Figure 8 and Figure 9.

Figure 8: Hunter Street East Site Future Kerbside Uses





Figure 9: Hunter Street West Site Future Kerbside Uses





# 5. Work Methodology

# 5.1. Description of Construction Activities

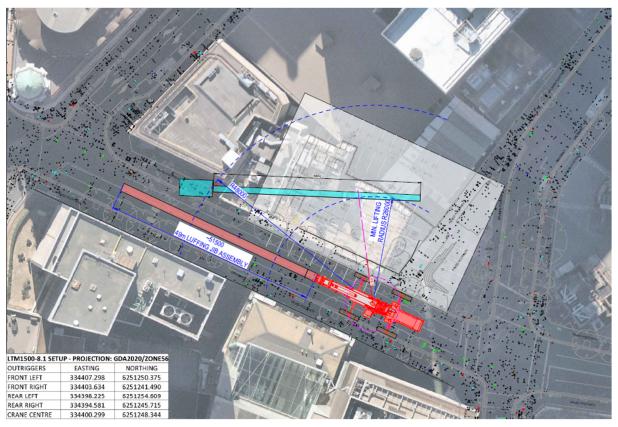
This TMP relates to the proposed establishment of mobile cranes within the Hunter Street road corridor, for the installation of tower cranes associated with the Sydney Metro West sites; Hunter Street East and Hunter Street West.

#### **Hunter Street East**

Hunter Street is required to be closed between O'Connell Street and Bligh Street/Castlereagh Street.

A site layout plan of the crane operation works is shown in Figure 10

Figure 10: Crane Operation Works - Hunter Street East Site Layout

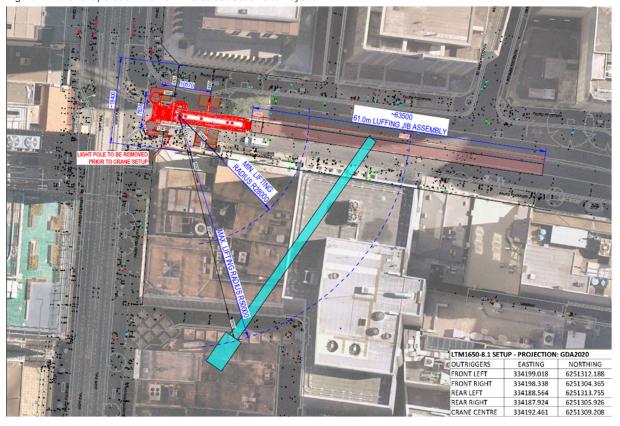


#### **Hunter Street West**

Hunter Street is required to be closed between George Street and Pitt Street. Access will be retained for vehicles using the residential and business driveways on Hamilton Street.

A site layout plan of the crane operation works is shown in Figure 11.

Figure 11: Crane Operation Works - Pitt Street South Site Layout



#### 5.2. Hours of Work

The crane works are proposed to take place over a duration of 56 hours, commencing Friday 23 June 2023 at 21:00pm until Monday 26 June at 5:00am.

Contingency dates for the closure are proposed as:

- Friday 30 June 2023 at 21:00pm until Monday 3 July at 5:00am.
- Friday 7 July 2023 at 21:00pm until Monday 10 July at 5:00am.

#### 5.3. Construction Traffic Generation

Table 7 provides a summary of the anticipated traffic volume for the crane operation activities for each site.

Table 7: Construction Traffic Generation

Vehicle Type	Task	Total No.
19m semi-trailer	Deliver tower crane, counterweights, fly sections	21
Oversize 19m semi-trailer (wide load)	Deliver tower crane	1
Oversize float	Deliver boom	1
17.5m long mobile crane	Assemble tower crane	1
Escort vehicle	Escort	3
Total		27

Based on Table 7, the crane activities for each subject site are expected to generate a maximum of 27 trucks during the scheduled crane activities (i.e. a total for 54 trucks across the two Hunter Street sites).

The longest construction vehicle to be used as part of the works will be a 19m long semi-trailer. One vehicle will be 2.8m wide and all other vehicles will be 2.5m wide or less.



The 2.8m wide semi-trailer is classified as over-sized and a special permit for this vehicle will be part of a separate application.

The vehicle specifications are provided in Appendix A.

# 5.4. Proposed Haulage Routes

JCG JV recognise that effective management of haulage operations is not only critical to the success of the project, but it is also necessary to minimise the impacts on the road network and increase pedestrian safety. The proposed haulage routes have been selected on the basis that trucks are to utilise State and Regional Roads, where possible, before travelling on local roads. Sensitive areas such as schools, aged care facilities and child care facilities have been avoided, where possible.

The construction vehicles would originate from the crane company's yard located in Somersby, Central Coast. The vehicles would travel to the CBD from the Central Coast via the M1 Motorway, NorthConnex and the M2 Motorway. Both motorways are nominated heavy vehicle routes for use by construction vehicles.

The proposed haulage routes will be communicated and adhered to by drivers through the implementation of a Drivers Code of Conduct, which would be made available to the relevant personnel during the site induction training. All drivers will undergo the mandatory project-specific induction training provided by JCG JV.

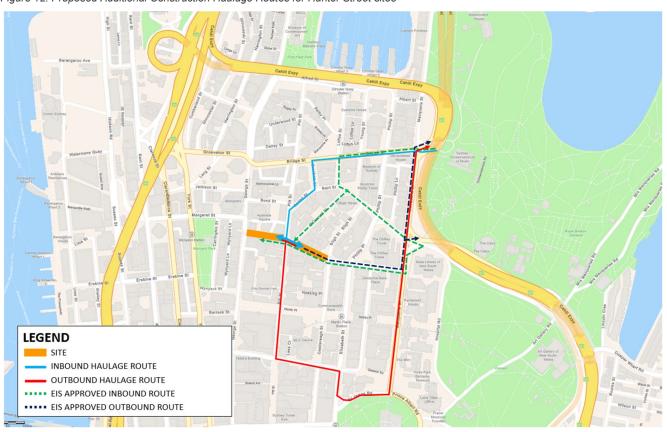
It is understood that oversize and/or overmass (OSOM) will be required to deliver bulky items/ machineries and the City of Sydney Council could approve the access of these vehicles on the road network. Relevant permits would be obtained through permit application process prior to the operations of any OSOM vehicles on the road network.

The mobile crane contractor, has reviewed the nominated haul routes and has advised JCG JV that they are acceptable for the crane vehicle which is commonly used on construction sites throughout the CBD.

Swept path analysis has been provided in Appendix D for the largest vehicle, a 19.5m long semi-trailer.

The proposed routes are shown in Figure 12.

Figure 12: Proposed Additional Construction Haulage Routes for Hunter Street sites





When approaching/ exiting the CBD area, construction vehicles would use the respective appropriate routes as described below.

#### 5.4.1. Arrival Route

The proposed primary heavy vehicle arrival routes to be adopted for the Hunter Street site to minimise traffic disruptions, and can be summarised as follows:

- All construction vehicles to come from the east via Cahill Expressway
- Continue straight onto Bridge Street
- Turn left onto Gresham Street
- Turn right onto Spring Street
- Turn left onto Pitt Street
- Hunter Street West: Turn left onto Hunter Street and reverse back across Pitt Street to site (under police control)
- Hunter Street East: Turn right onto Hunter Street and reverse back across Pitt Street to site (under police control)

#### 5.4.2. Departure Route

The proposed departure heavy vehicle routes to be adopted for the Hunter Street site to minimise traffic disruptions and can be summarised as follows:

- All construction vehicles to turn left or right into Hunter Street into Pitt Street (under police control)
- Turn left onto King Street
- Turn right into Elizabeth Street
- Turn left onto St James Road
- Turn left onto Macquarie Street
- Turn right onto Cahill expressway northbound

#### 5.5. Construction Site Access/Egress

Access for construction vehicles into the respective work site will be via construction access gates.

Up to 27 trucks are anticipated during the crane activities per site. This number of vehicles would generate 54 truck movements per site during the construction period, which equates to an average of two truck movements per hour per site during the 56-hour construction period and is deemed to have a minor impact.

Construction vehicles will be parked in the enclosed section of the Hunter Street work sites.

Swept path analysis for vehicles entering and exiting the site are provided in Appendix D.

#### 5.6. Construction Worker Parking

Construction worker parking will not be provided in the Hunter Street West construction site. Construction workers must not to park in any on-street parking spaces and make use of the extensive public transport network available and commercial parking facilities in the vicinity of the site to minimise the parking impacts on the surrounding road network. Where public transport is not feasible, carpooling combined with the use of commercial carparks will be strongly encouraged amongst construction workers to minimise the number of vehicles on the road network.



#### 5.7. Rollback Plans & Contingencies

Assuming the Road Occupancy Licence is granted between 9pm Friday night and 5am Monday morning, there are 56 hours of allowable occupation. The construction program from implementation of the road closure through to demobilisation of the road closure, is programmed to require 28hrs, therefore providing 28hrs of contingency.

The Program of Works included in Appendix G details four hold points, or Go/No Go points, where the progress of works will be confirmed and the weather forecast checked to confirm the work can be completed safely and within the allowable ROL period.

Should there be any delays beyond the nominated Go/No Go points, the tower crane installation will be made safe, the mobile crane and associated road closure demobilised. This strategy will ensure the road is opened no later than the time permitted by the ROL.



# 6. Proposed Conditions

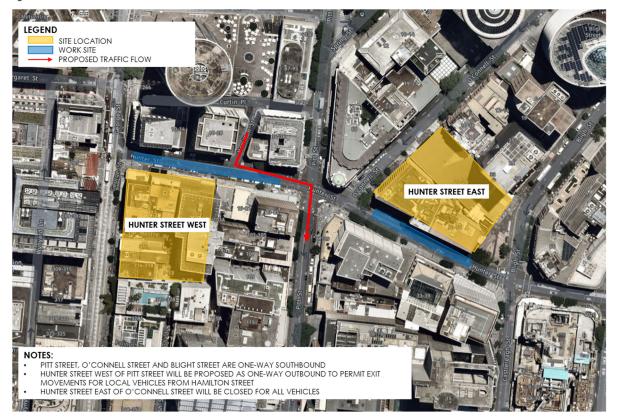
#### 6.1. Road Closures

JCG JV will be undertaking crane activities in Hunter Street which will require the occupation of all four traffic lanes on Hunter Street. As such, Hunter Street between Bligh Street and O'Connell Street, and Hunter Street between George Street and Pitt Street will be closed to all traffic except, construction vehicles and vehicles exiting Hamilton Street to Pitt Street via Hunter Street.

The above listed closures require City of Sydney Local Traffic Committee approval, which are subject of a separate submission to council.

Police will control the signalised intersection of O'Connell Street/Hunter Street/Pitt Street. Figure 13 shows the simplified access arrangement plan. The signals will be changed to amber for the duration of the works.

Figure 13: Hunter Street Local Access Plan



A Traffic Guidance Scheme (TGS) has been prepared indicating traffic movements, vehicle access arrangements and pedestrian movements on Hunter Street during the road closure period. The TGS is provided in Appendix B.

Access to the commercial driveway of 68 Pitt Street which is situated on Hunter Street will be blocked for the duration of the works. In addition, the exit of 1 Castlereagh Street will be blocked by the works, however the entrance on Castlereagh Street will be retained.

Communication will be made with building management and relevant stakeholders for both sites notifying that the accesses will be blocked during the works periods.

The Hunter Street exclusion plans are provided for the Hunter Street West site in Figure 14

Figure 14 and the Hunter Site East site in Figure 15.

As evident in the exclusion plans, egress from Hamilton Street onto Hunter Street is to remain open at all times. The Hunter Street northern footpath west of Pitt Street is to remain open at all times, and the southern footpath is to remain open between Pitt Street and the Hunter Street West construction site



boundary. The Hunter Street southern footpath between Pitt Street and Castlereagh Street is to remain open at all times.

A minimum of 5m clearance is to be maintained between the work area and the light rail.

Figure 14: Hunter Street West Exclusion Plan

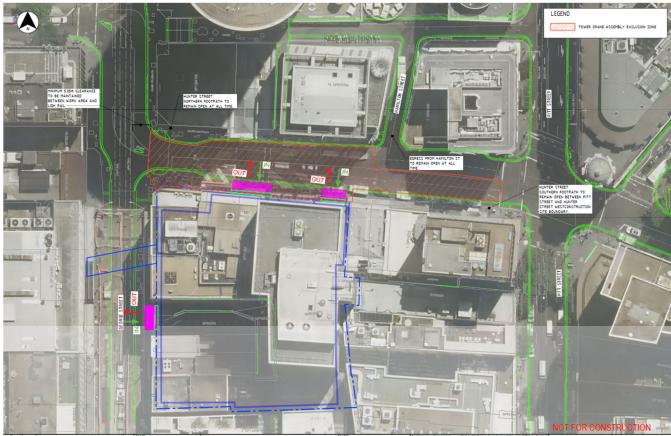
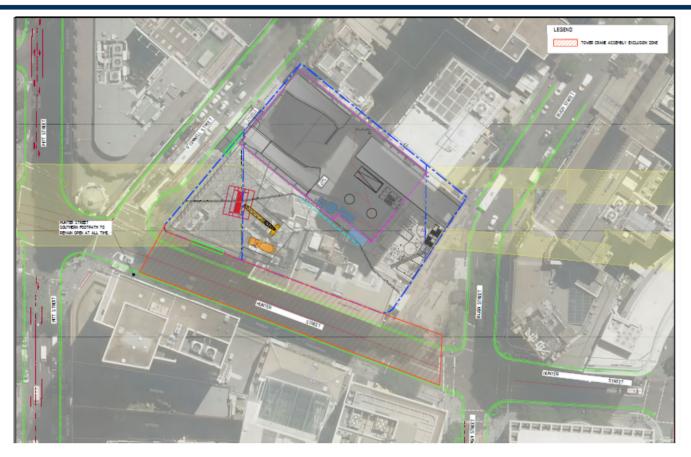


Figure 15: Hunter Street East Exclusion Plan





# 6.2. Impact on Traffic Flow

Due to the Hunter Street road closure, the following turning movements will not be permitted for general traffic:

- Right-turn movement into Hunter Street from Bligh Street
- Through movement from Hunter Street westbound
- Left-turn movement into Hunter Street from O'Connell Street
- Left-turn movement into Hunter Street from Pitt Street
- Through movement from Hunter Street eastbound
- Left turn movement out of Hunter Street into George Street

Figure 16 shows the existing traffic flow and turning movements for vehicles travelling in the area and Figure 17 shows the proposed traffic flow and turning movements during the road closure.

Figure 16: Existing Traffic Flow and Turning Movements



Figure 17: Proposed Traffic Flow and Turning Movements



Vehicles heading eastbound on Hunter Street at Pitt Street are usually restricted to through movements only. This movement will be replaced to right turn only under the control of police.

Vehicles heading southbound on O'Connell Street at Hunter Street are usually restricted to left-turn movements only. This movement will be replaced by a right turn followed immediately by a left turn movement to Pitt Street southbound under the control of police.

Traffic will be detoured, as follows:

- South on Castlereagh Street for traffic east of the closure, or south on Pitt Street for traffic west of the closure
- East on King Street
- North on Elizabeth Street
- West on Bent Street

A detour TGS plan is provided in Appendix B.



JCG JV proposes to close Hunter Street on Friday 23 June at 9:00pm until Monday 25 June at 5:00am when traffic volumes are reduced, outside the weekday peak periods.

The closure of Hunter Street will have moderate traffic impacts.

# 6.3. Impact on Public Transport

The proposed dates coincide with the Sydney Light Rail shutdown, however if the contingency dates are required there should be no impact to light rail services.

The road closures on Hunter Street are not designated bus routes in the CBD. Therefore, the crane activities in Hunter Street should not directly affect bus routes. However, it is noted that O'Connell Street and Bligh Street are used as bus layover zones, allowing up to 15-minute stops.

Bus operators will be notified that Hunter Street will be closed to traffic on O'Connell Street over the proposed weekend period and a alternative route via Bligh St will be used. This will allow bus operators to shift the buses to the layover zones provided on Bligh Street which will not be impacted. JCG JV has been liaising with TfNSW Buses regarding the proposed Hunter St closures.

Traffic Controllers will be stationed at the intersection of Bent St / Bligh St and O'Connell St, directing layover buses to Bligh St and stopping buses entering down O'Connell St.

All buses will be overlaying on Bligh Street, which would involve all available parking restrictions along Bligh Street to be changed to 'Bus Zone Route Service Buses Lay Over 15 minute Limit' restrictions during the Hunter Street road closure.

#### 6.4. Impact on Pedestrians

Pedestrian crossings will be retained on all approaches of the surrounding signalised intersections at Hunter Street – O'Connell Street, Hunter Street – Bligh Street/Castlereagh Street, Hunter Street – Pitt Street, and Hunter Street – George Street.

#### 6.4.1. Hunter Street East site

The pedestrian footpath will be closed on the northern side of Hunter Street within the work site area as shown in Figure 18. The footpath on the southern side of Hunter Street will remain open to pedestrians under the management of traffic controllers.

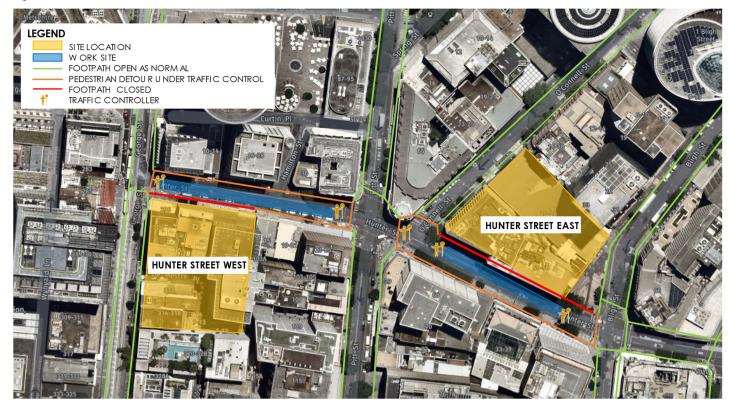
Pedestrian access on Hunter Street between O'Connell Street and Bligh Street would be detoured to the southern side of Hunter Street. Traffic controllers would be positioned on-site to guide pedestrians along the detour route as shown in Figure 18.

#### 6.4.2. Hunter Street West site

The pedestrian footpath will be closed on the southern side of Hunter Street within the work site area as shown in Figure 18. The footpath on the northern side of Hunter Street will remain open to pedestrians under the management of traffic controllers.

Pedestrian access on Hunter Street between George Street and Pitt Street would be detoured to the northern side of Hunter Street. Traffic controllers would be positioned on-site to guide pedestrians along the detour route as shown in Figure 18.

Figure 18: Hunter Street Pedestrian Access



# 6.5. Impact on Cyclists

The proposed tower crane installation activities will not result in any major impacts on cyclist movements in close proximity to the construction site. The Pitt Street cycle route will be maintained for the duration of the proposed works. Cyclists travelling through Hunter Street on the Pitt Street cycle route will travel through this intersection under police control along with all other traffic. The proposed outbound route interfaces with the King Street cycleway, particularly where the haulage route turns from Pitt St to King St (under signal control). This interface has been further considered in the HVLR.

# 6.6. Impact on Emergency Service and Access

Due to the width of the mobile crane, emergency service vehicles will not be able to travel through the work site, as shown in the Traffic Guidance Scheme (TGS) in Appendix B.

JCG JV has been liaising with all relevant emergency services regarding the proposed Hunter St closures. Further communication will be made once the proposal is approved, and dates are confirmed.



#### 7. Environmental Control Measures

# 7.1. General Traffic Management Measures

Effective traffic and transport management enables the provision of a safe road environment, which contributes to the success of the Project. The following management measures in Table 8 are proposed to minimise the impacts of the proposed works.

Table 8: Traffic Management Measures

Management and Mitigation Measures	Responsibility
Traffic controllers with approved clothing shall be provided to guide and control pedestrians on the footpath while trucks are entering/exiting the site.	Traffic and Transport Manager Site Project Manager
Nominated haulage route would be communicated to truck drivers and adhered to. Where practicable, these routes shall involve using major arterial roads, before using local roads.	Traffic and Transport Manager Site Project Manager
Material haulage would be managed to maximise vehicle loads and minimise vehicle movements, where practicable.	Site Project Manager
Detour signage and VMS will be provided to guide traffic past the site and provide alternate routes.	Site Project Manager
All traffic guidance schemes shall comply with AS1742.3:2002 Traffic Control Devices for Works on Roads and Roads and Maritime's Traffic Control at Work Sites.	Traffic and Transport Manager Environmental Officer
General public access to surrounding areas including commercial, retail and residential properties would be maintained during works.	Traffic and Transport Manager Site Project Manager
Nominated construction haulage route would be communicated to truck drivers and adhered to. Where practicable, these routes shall involve using major arterial roads, before using local roads.	Traffic and Transport Manager Site Project Manager
Material haulage would be managed to maximise vehicle loads and minimise vehicle movements, where practicable.	Site Project Manager
All traffic control plans shall comply with AS1742.3:2002 Traffic Control Devices for Works on Roads and Roads and Maritime's Traffic Control at Work Sites.	Traffic and Transport Manager Environmental Officer

#### 7.2. Traffic Guidance Scheme / Vehicle Movement Plans

Traffic guidance scheme or TGS (previously known as Traffic Control Plan (TCP)) and details the arrangement of signage and traffic devices to manage traffic at and around the construction site. The preparation of TGSs generally considers the following:

- Warning signage for vehicles and pedestrians at the site access to alert them of the presence of heavy vehicle traffic, warn/ inform drivers of changes to the usual road conditions, and to guide drivers through the construction site area.
- Qualified traffic controllers to manage pedestrian and control activities at the existing site accesses.
- Pedestrians and all passing vehicles will have the right of way at all times.
- The site would be separated from pedestrians and general traffic
- All traffic signage would be clean, clearly visible and not obscured
- All vehicle movements generated by the proposed works would be minimised during the peak hours, where possible.



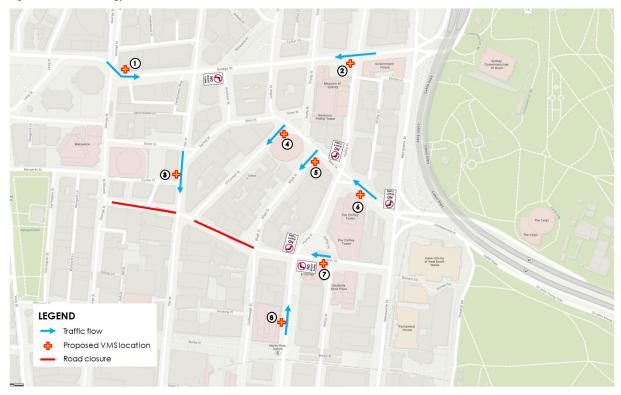
The TGS is provided in Appendix B.

# 7.3. Variable Message Signage Plan

Variable Message Signs (VMS) will be used to detour traffic around each respective work site and advise motorists of the Hunter Street road closure. VMS will be installed 10 days prior to the start of work.

VMS will be located on approach to the Hunter Street road closure, generally located as shown in Figure 19.

Figure 19: VMS Strategy



The proposed placement of the VMS ensures that traffic on all local approaches to the abovementioned intersections will intercept message boards. Further details of the VMS messages and their location are contained in Appendix C.

#### 7.4. Live Traffic NSW Website and Mobile App

Through the submission and approval process of this TMP, TfNSW will be informed of the construction works and proposed road closure. At TfNSW's discretion, the temporary traffic changes in Hunter Street be published on the TfNSW's Live Traffic NSW website and mobile app which would assist motorists plan their journey ahead of time and reduce the traffic impact in the vicinity.



# 8. Compliance Management

# 8.1. Training and Competency

All construction workers, contractors and utility staff will undergo site induction training for traffic and transport and access management issues. During the induction training, the following items will be communicated:

- Existence and requirements associated with this CTMP
- Relevant legislation and guidelines
- Nominated construction transport routes
- Construction parking and access / egress requirements

# 8.2. Complaints

The comments and complaints received from all relevant stakeholders will be recorded in the Complaints Register. JCG JV team will work toward addressing the complaints to minimise the impacts of the identified issues and increase stakeholders satisfaction. A copy of the Complaints Register will be provided to TfNSW and relevant stakeholders.

# 8.3. Road Safety Auditing

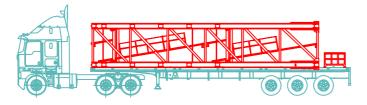
Road Safety Audits (both internal and external) will be undertaken to assess the effectiveness of the proposed management measures, compliance with this site-specific CTMP, CoA and other relevant approvals, license and guidelines. The audits will be undertaken by independent road safety auditors to assess the safety performance of new or modified local road, parking, pedestrians and cycle infrastructure (including ancillary facilities) to ensure the requirements of relevant design, engineering and safety guidelines are met.

The audit will be undertaken by an appropriately qualified and experienced road safety auditors during the detailed design development (audits of plans) and audits findings. Recommendations must be actioned prior to the commencement of the construction of the relevant infrastructure.



# Part B Annexures Appendix A Vehicle Specifications

# TRUCK 1 40/45FT FLAT TOP

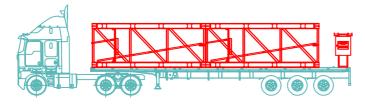


#### **TOTAL WEIGHT 15 TONNE**

- · 1x HD23 26.12 (14t)
- 1x BOLT BOX (1T)

WIDEST LOAD - 2276mm

TRUCK 2 40/45FT FLAT TOP



#### **TOTAL WEIGHT 13 TONNE**

• 2 x HD23 26.6 (6.5t/each)

WIDEST LOAD - 2276mm

TRUCK 3 40/45FT FLAT TOP

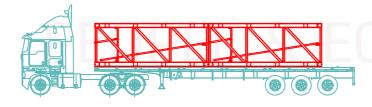


**TOTAL WEIGHT 9.8 TONNE** 

• 2 x HD23 22.6 (4.9t/each)

WIDEST LOAD - 2276mm

TRUCK 4 40/45FT FLAT TOP

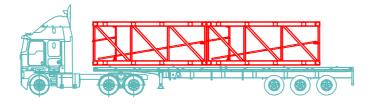


**TOTAL WEIGHT 9.8 TONNE** 

· 2 x HD23 22.6 (4.9t/each)

WIDEST LOAD - 2276mm

TRUCK 5 40/45FT FLAT TOP

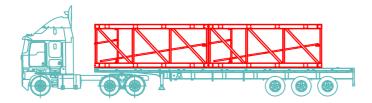


**TOTAL WEIGHT 9.8 TONNE** 

· 2 x HD23 22.6 (4.9t/each)

WIDEST LOAD - 2276mm

TRUCK 6 40/45FT FLAT TOP



**TOTAL WEIGHT 9.8 TONNE** 

· 2 x HD23 22.6 (4.9t/each)

WIDEST LOAD - 2276mm

TEREX CTI 430-24, JIB LENGTH 50m, No. Towers 11



HUNTER STREET WEST
CORNER HUNTER STREET & GEORGE
SYDNEY CBD

LOADING DETAILS - TC2 INSTALL

 Project Number
 Drawing Number
 Date

 230223MANN
 LD101
 23/02/23

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#### TRUCK 7 40/45FT FLAT TOP

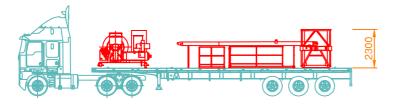


#### **TOTAL WEIGHT 15.9 TONNE**

- · CAB (1.6t)
- · SLEW MOUNT (11.6t)
- · SLEW A-FRAME (2.0t)
- · HOOK (0.7t)

WIDEST LOAD - 2290mm

#### TRUCK 8 40/45FT FLAT TOP



#### **TOTAL WEIGHT 6.1 TONNE**

- · BASKET + ARM (1.6t)
- PLATFORMS (0.5t)
- · LUFF WINCH (4.0t)

WIDEST LOAD - 2460mm

#### TRUCK 9 45FT STEP DECK

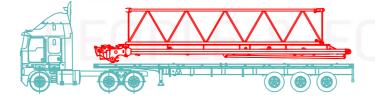


#### **TOTAL WEIGHT 18.2 TONNE**

- · REAR DECK (11.2t)
- · PLATFORMS (0.5t)
- · HOIST WINCH (6.5t)

WIDEST LOAD - 2450mm

#### TRUCK 10 40/45FT FLAT TOP WIDE LOAD

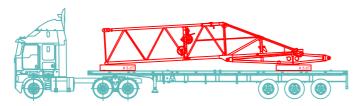


#### **TOTAL WEIGHT 7.5 TONNE**

- A FRAME (6.0t)
- 10m JIB SECTION 2 (1.5t)

WIDEST LOAD - 2800mm

#### TRUCK 11 40/45FT FLAT TOP

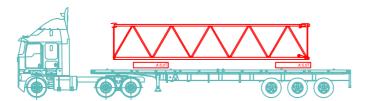


#### **TOTAL WEIGHT 17.7 TONNE**

- · 10m JIB BUTT SECTION 1 (2.7t)
- 3 x A COUNTERWEIGHTS (5.0t/each)

WIDEST LOAD - 1940mm

#### TRUCK 12 40/45FT FLAT TOP



#### **TOTAL WEIGHT 3.0 TONNE**

- 10m JIB SECTION 3 (1.5t)
- · 3 x A COUNTERWEIGHTS (5.0t/each)

WIDEST LOAD - 1910mm

TEREX CTI 430-24, JIB LENGTH 50m, No. Towers 11



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HUNTER STREET WEST
CORNER HUNTER STREET & GEORGE
SYDNEY CBD

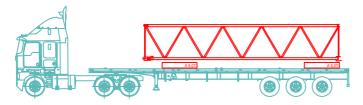
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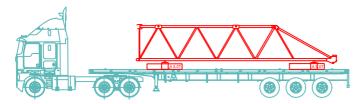
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#### TRUCK 13 40/45FT FLAT TOP



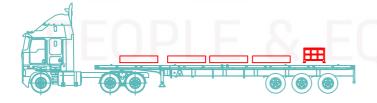
#### TRUCK 14 40/45FT FLAT TOP



### TRUCK 15 40/45FT FLAT TOP



#### TRUCK 16 45FT FLAT TOP



#### **TOTAL WEIGHT 3.0 TONNE**

- 10m JIB SECTION 5 INVERTED (1.5t)
- 2 x A COUNTERWEIGHTS (10t)

WIDEST LOAD - 1910mm

#### **TOTAL WEIGHT 12.0 TONNES**

- 10m JIB SECTION 6 (1.7t)
- 2 x A COUNTERWEIGHTS (10t)
- · JIB PENDANT BARS

WIDEST LOAD - 1910mm

#### **TOTAL WEIGHT - 2.1 TONNES**

- · AUX GEAR MAN BOX (0.4t)
- · AUX GEAR BLOCK CAGE (0.3t)
- · AUX GEAR RESCUE CAGE (0.7t)
- · AUX GEAR KIBBLE (0.7t)

#### **TOTAL WEIGHT - 13.9 TONNES**

- · COMMISSIONING WEIGHTS (13.5t)
- · COMMISSIONING GANG BOX (0.4t)

TEREX CTI 430-24, JIB LENGTH 50m, No. Towers 11



HUNTER STREET WEST
CORNER HUNTER STREET & GEORGE
SYDNEY CBD

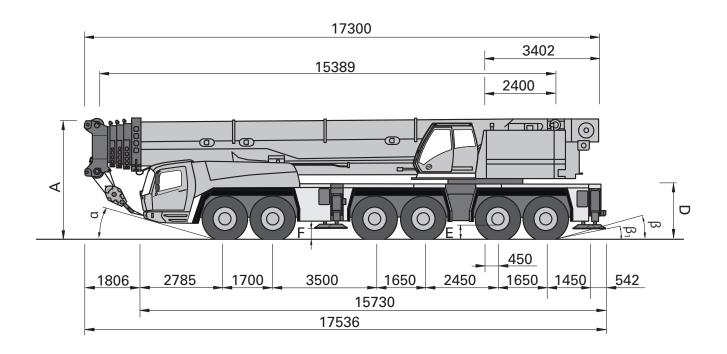
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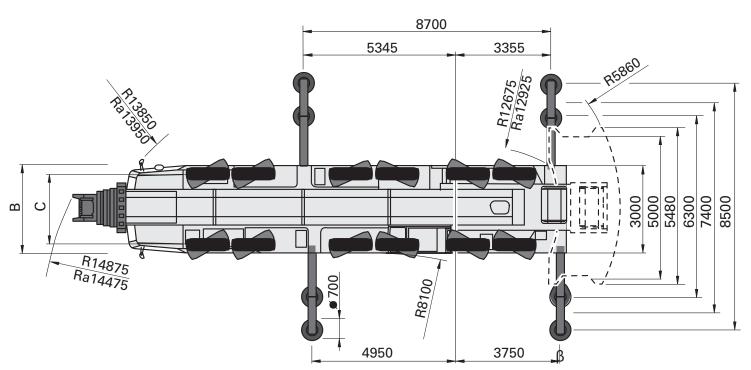
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## GMK6400 - DATA AND DIMENSIONS

## Dimensions • Abmessungen • Encombrement Dimensiones • Dimensioni • Размеры





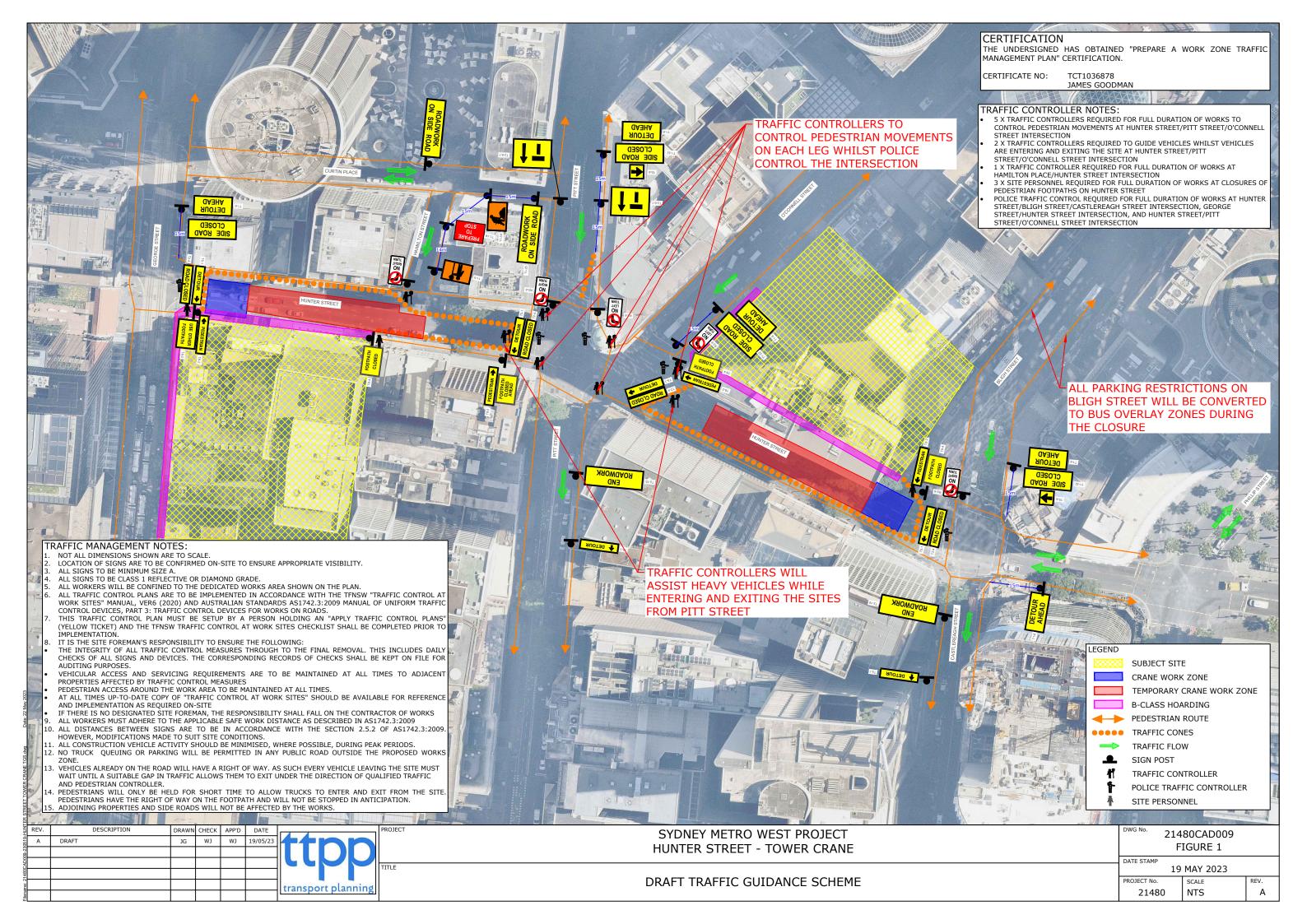
Ra = Radius all wheels steered • Radius allradgelenkt • Rayon toutes les roues directrices • Radio de giro con todas las ruedas giradas • Raggio di curva con tutte le ruote sterzate • Радиус поворота при управлении всеми колесами

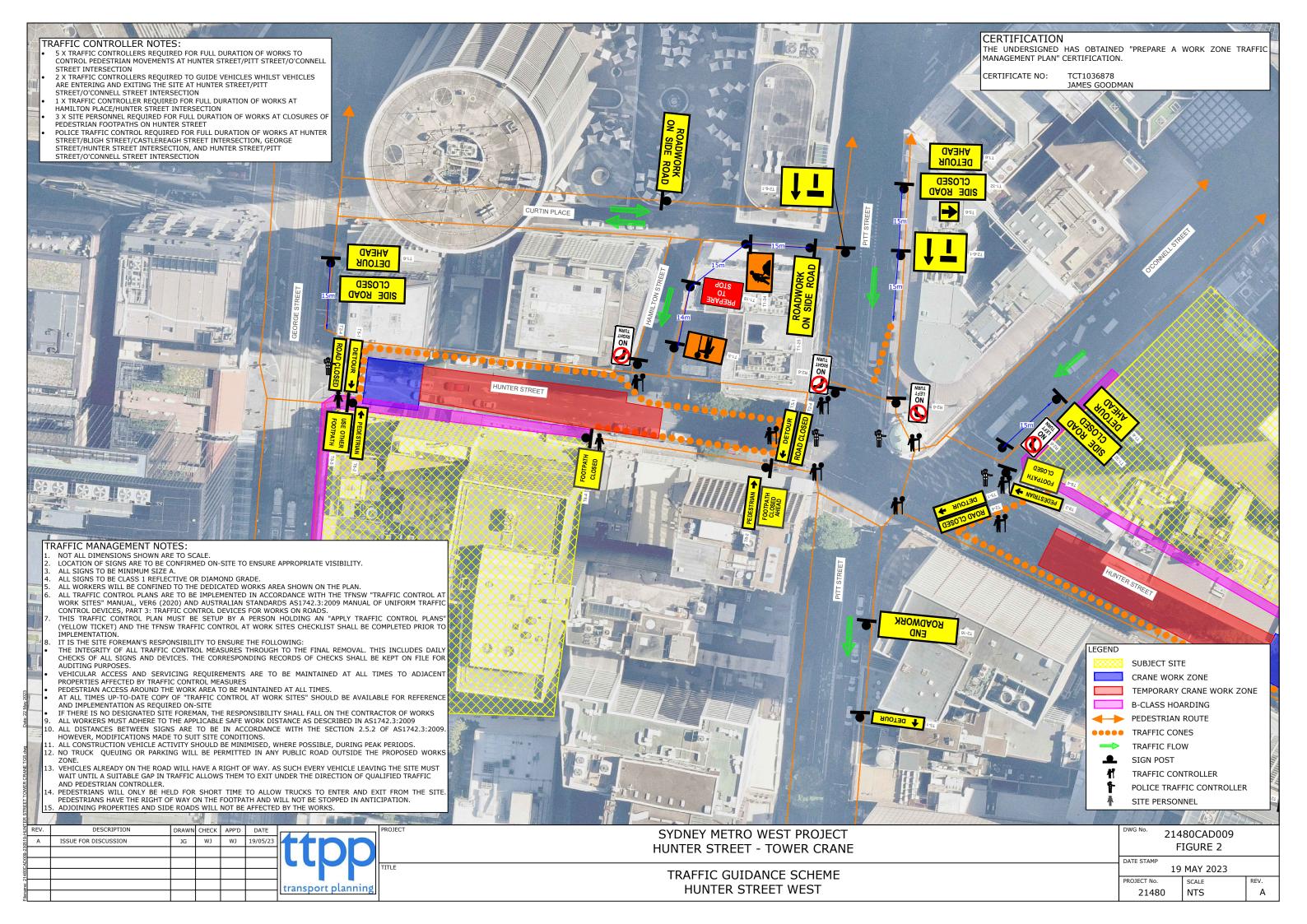
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20.5 R25	4000	3870	3070	2530	1865	450	260	16	13	10

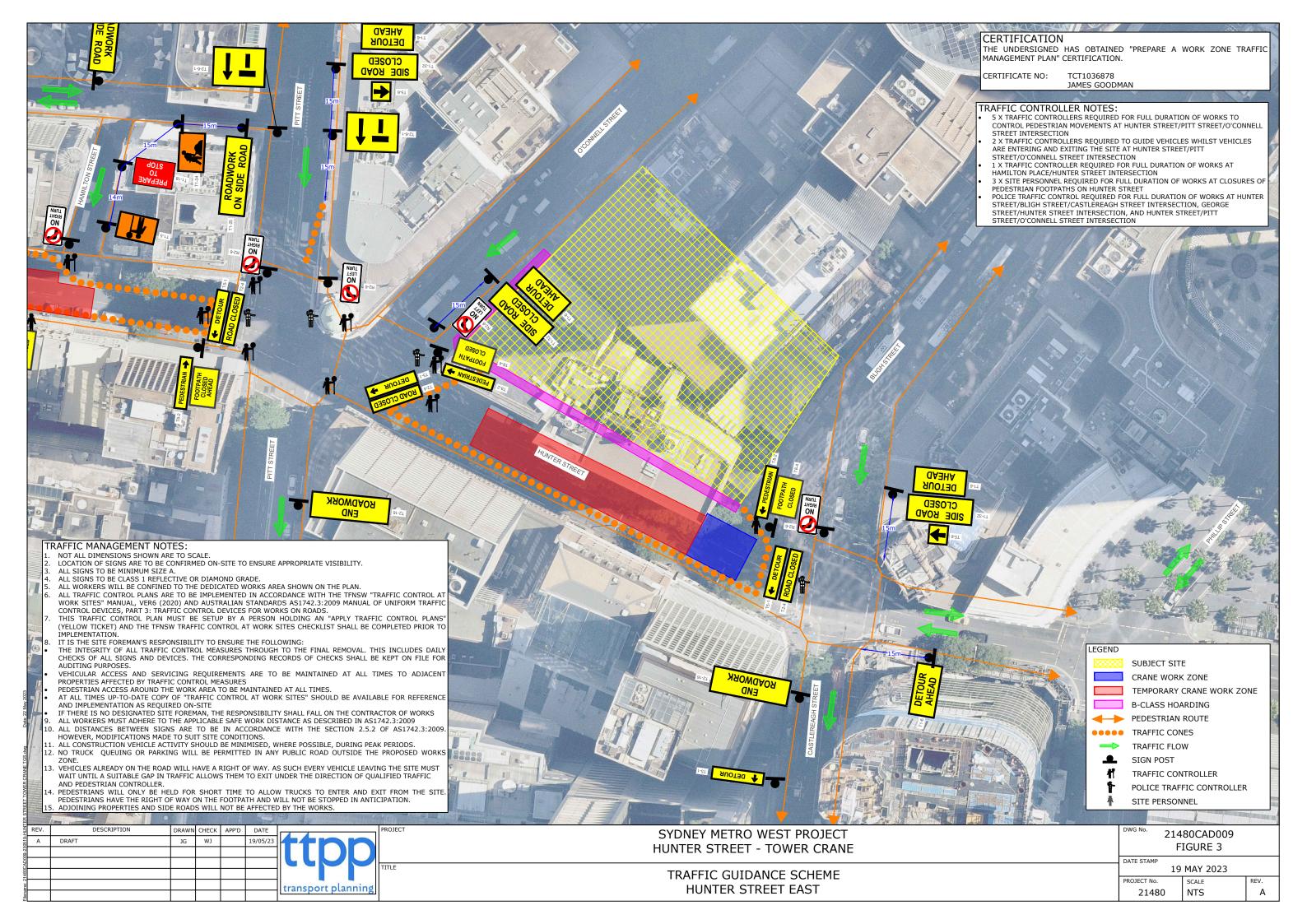
<sup>\*\*</sup> Lowered • Abgesenkt • Surbaissée • Rebaja • Abbassato • Сниженный

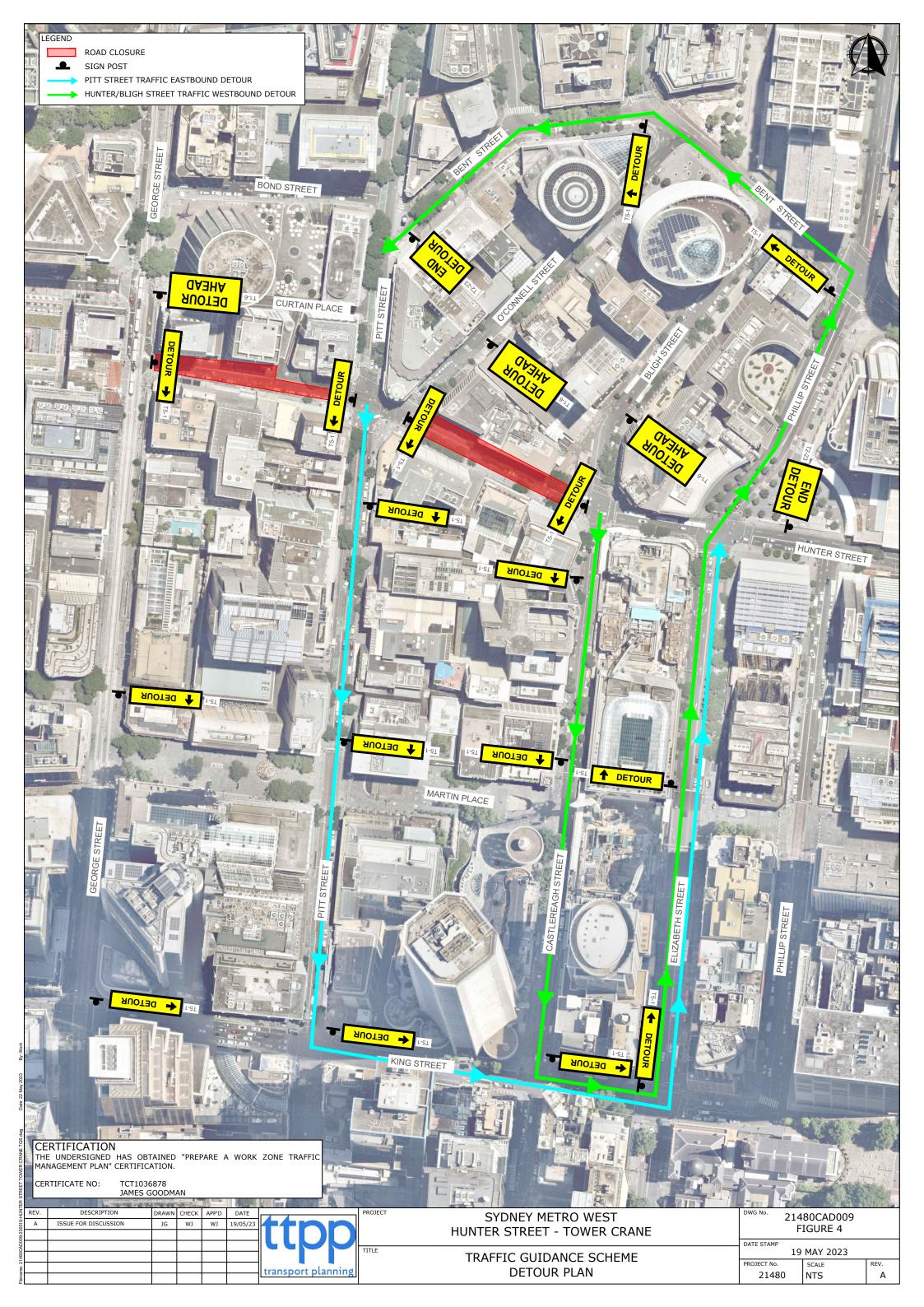


## Appendix B Traffic Guidance Scheme (TGS)











## Appendix C Variable Message Signage (VMS) Plan

# Portable VMS Strategy

Hunter Street, Sydney

Name of Possession: Hunter Street

Strategy Dates: Friday 23 June 2023 – Monday 26 June 2023

VMS Deployment Date: 16 June 2023

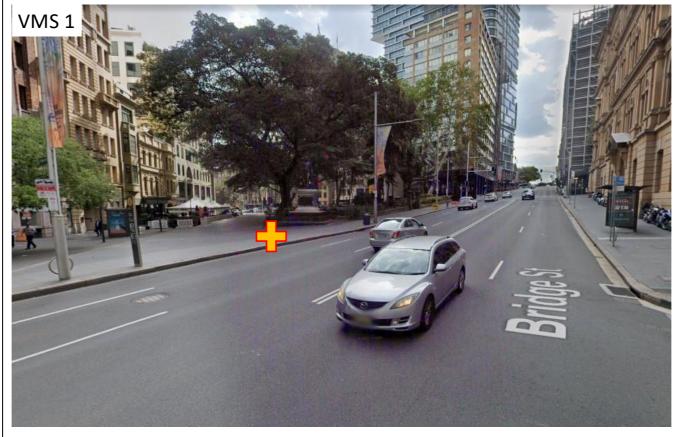
### PORTABLE VMS STRATEGY



Figure 1 – Portable VMS Locations (Displayed as yellow and red cross symbol).

#### 1. Bridge Street, eastbound, approaching Loftus Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER ROADWORK** STREET 9PM FRI **CLOSURE** -5AM MON During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 1 Message 2 **HUNTER** CITY EAST STREET VIA **BRIDGE ST CLOSED**

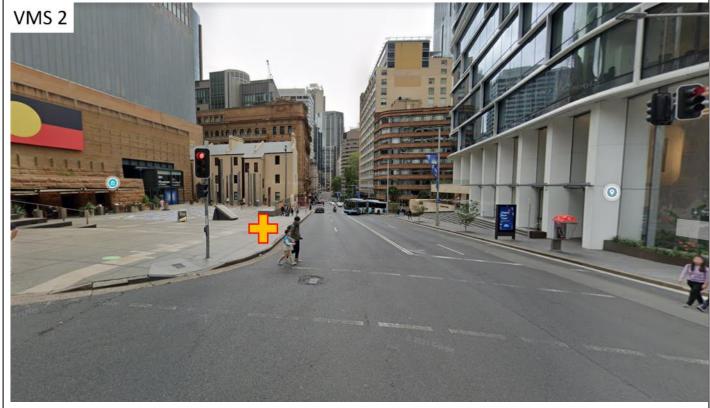
#### **Location Photo:**



**Notes:** Size B VMS Board. Place on the northern side of Bridge Street on footpath, east of George Street traffic signals. Facing eastbound traffic.

#### 2. Bridge Street, westbound, approaching Young Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER ROADWORK** STREET 9PM FRI -5AM MON **CLOSURE** During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 2 Message 1 **HUNTER** CITY WEST STREET VIA **BRIDGE ST** CLOSED

#### **Location Photo:**



**Notes:** Size B VMS Board. Place on the southern side of Bridge Street on footpath, west of Phillip Street traffic signals. Facing westbound traffic.

#### 3. Pitt Street, southbound, approaching Hunter Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER ROADWORK STREET** 9PM FRI **CLOSURE** -5AM MON During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 1 Message 2 **HUNTER FOLLOW** STREET MARKED **CLOSED DETOUR**

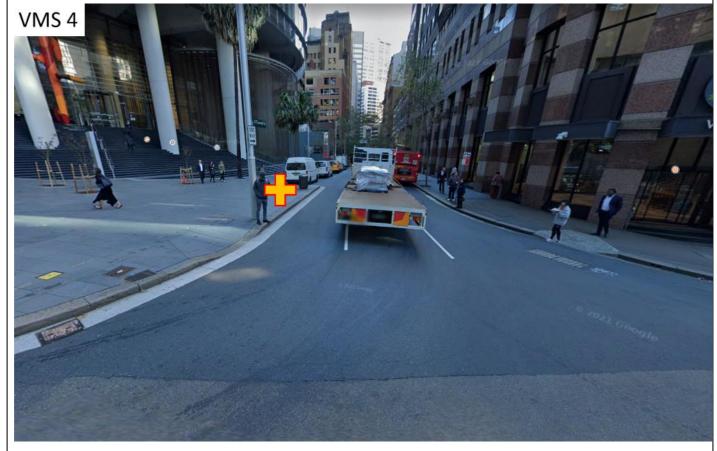
#### **Location Photo:**



**Notes:** Size B VMS Board. Place on the western side of Pitt Street on footpath, north of Curtin Place intersection. Facing southbound traffic.

#### 4. O'Connell Street, southbound, approaching Hunter Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER ROADWORK STREET** 9PM FRI **CLOSURE** -5AM MON During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 2 Message 1 **HUNTER** NO **ENTRY** STREET **CLOSED BUSES**

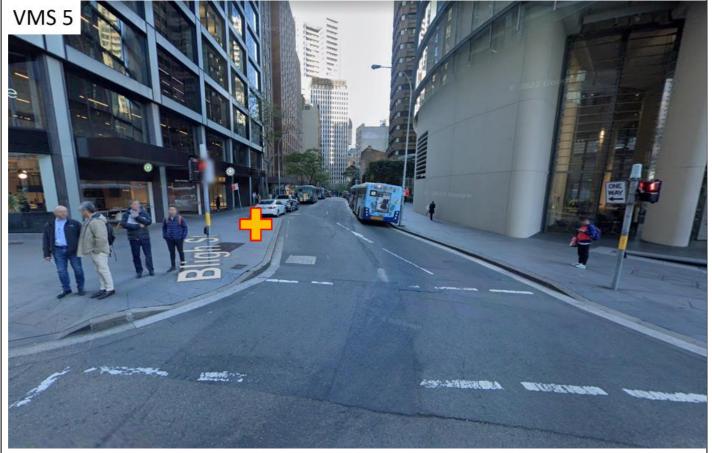
#### **Location Photo:**



**Notes:** Size B VMS Board. Place on the eastern side of O'Connell Street on footpath, prior to on-street parking zone. Facing southbound traffic.

5. Bligh Street, southbound, approaching Hunter Street, CBD					
Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023					
Message 1	Message 2				
HUNTER	ROADWORK				
STREET	9PM FRI				
CLOSURE	-5AM MON				
During Road Works: 21:00 F	riday 23/06/2023 - 05:00 Monday 26/06/2023				
Message 1	Message 2				
HUNTER	FOLLOW				
STREET	MARKED				
CLOSED	DETOUR				





**Notes:** Size B VMS Board. Place on the eastern side of Bligh Street on footpath, prior to onstreet parking zone. Facing southbound traffic.

#### 6. Bent Street, westbound, approaching Phillip Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER** ROADWORK STREET 9PM FRI -5AM MON **CLOSURE** During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 2 Message 1 **HUNTER** CITY WEST STREET VIA **CLOSED BRIDGE ST**

#### **Location Photo:**



**Notes:** Size A VMS Board. Place on the southern side of Bent Street on footpath, prior to on-street parking zone. Facing westbound traffic.

#### 7. Hunter Street, westbound, approaching Elizabeth Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER ROADWORK** STREET 9PM FRI **CLOSURE** -5AM MON During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 1 Message 2 **HUNTER FOLLOW** STREET MARKED **CLOSED DETOUR**

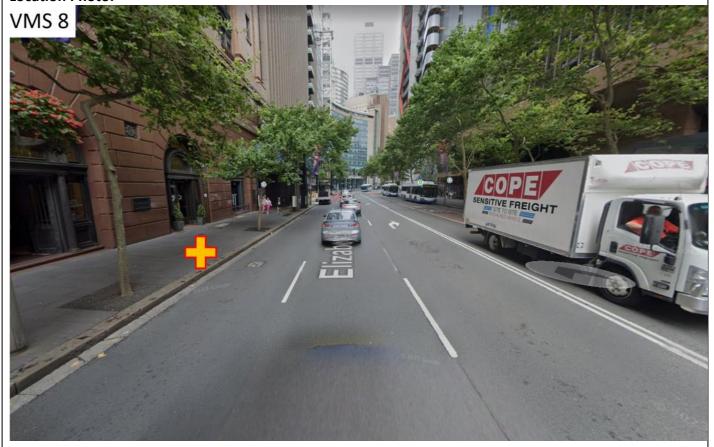
#### **Location Photo:**



**Notes:** Size A VMS Board. Place on the southern side of Hunter Street on footpath west of Phillip Street intersection. Facing westbound traffic.

#### 8. Elizabeth Street, northbound, approaching Hunter Street CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER** ROADWORK **STREET** 9PM FRI **CLOSURE** -5AM MON During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 2 Message 1 **HUNTER CITY WEST STREET** VIA **CLOSED BRIDGE ST**

#### **Location Photo:**

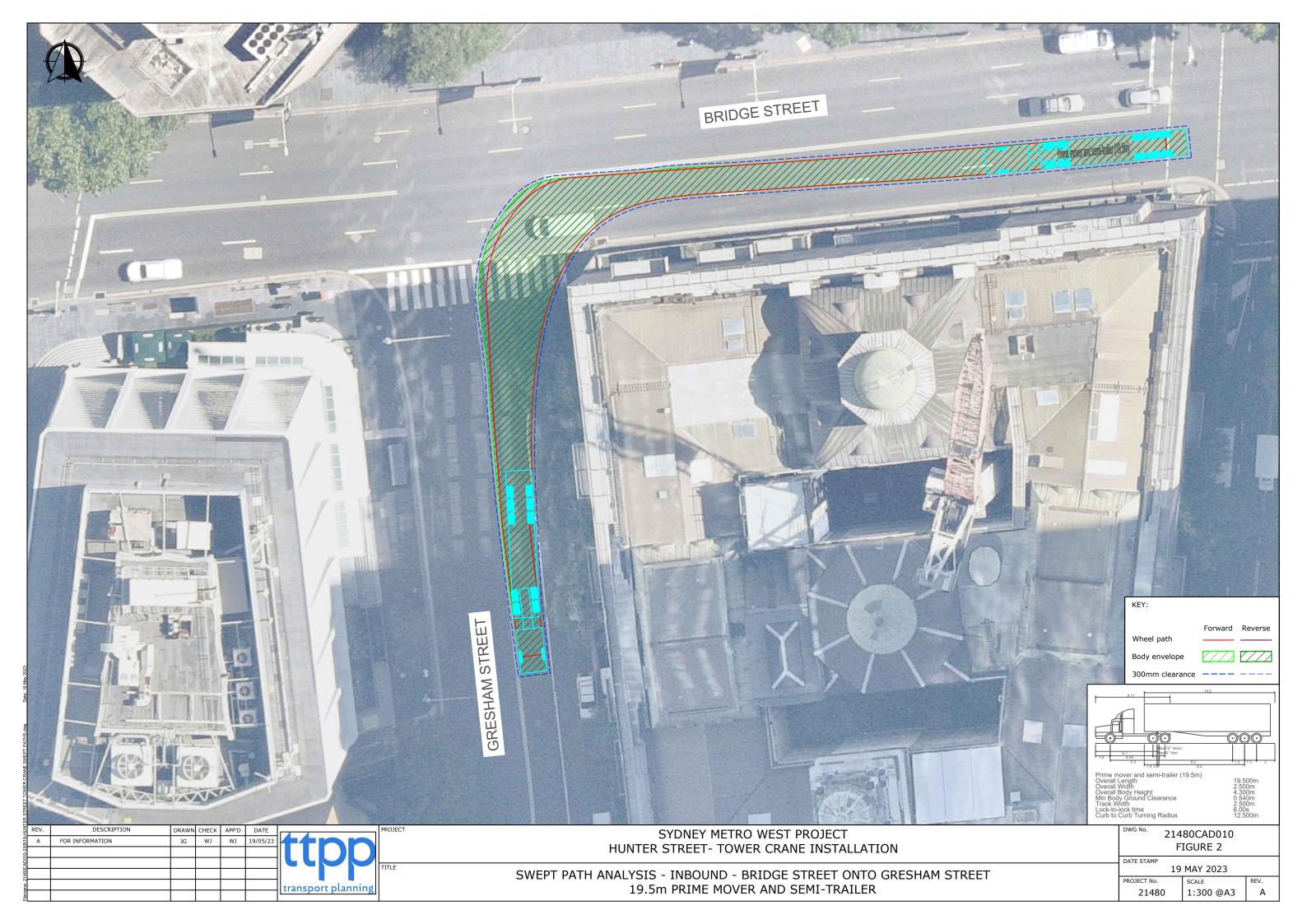


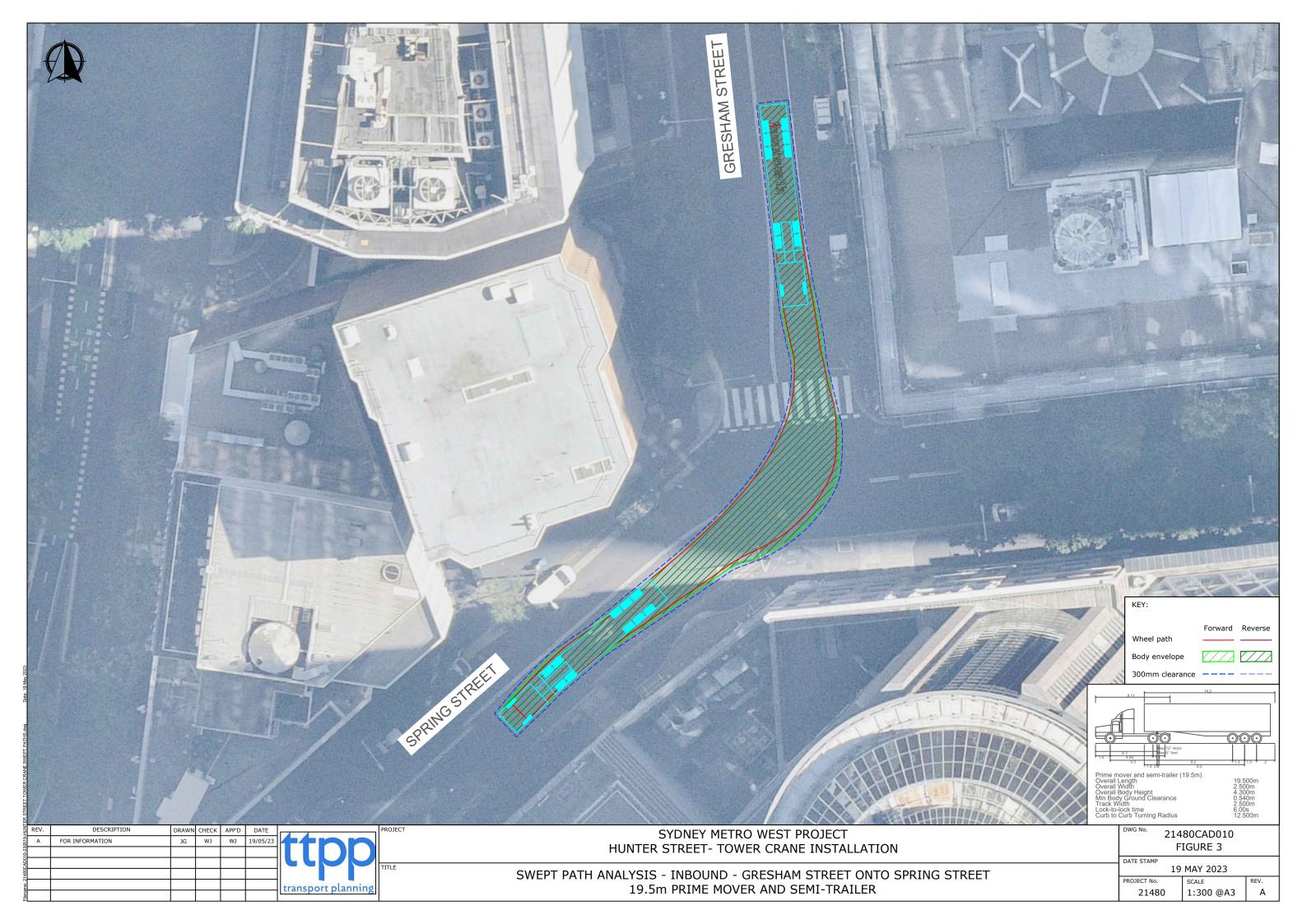
**Notes:** Size A VMS Board. Place on the western side of Elizabeth Street on footpath, south of bus stop. Facing northbound traffic.

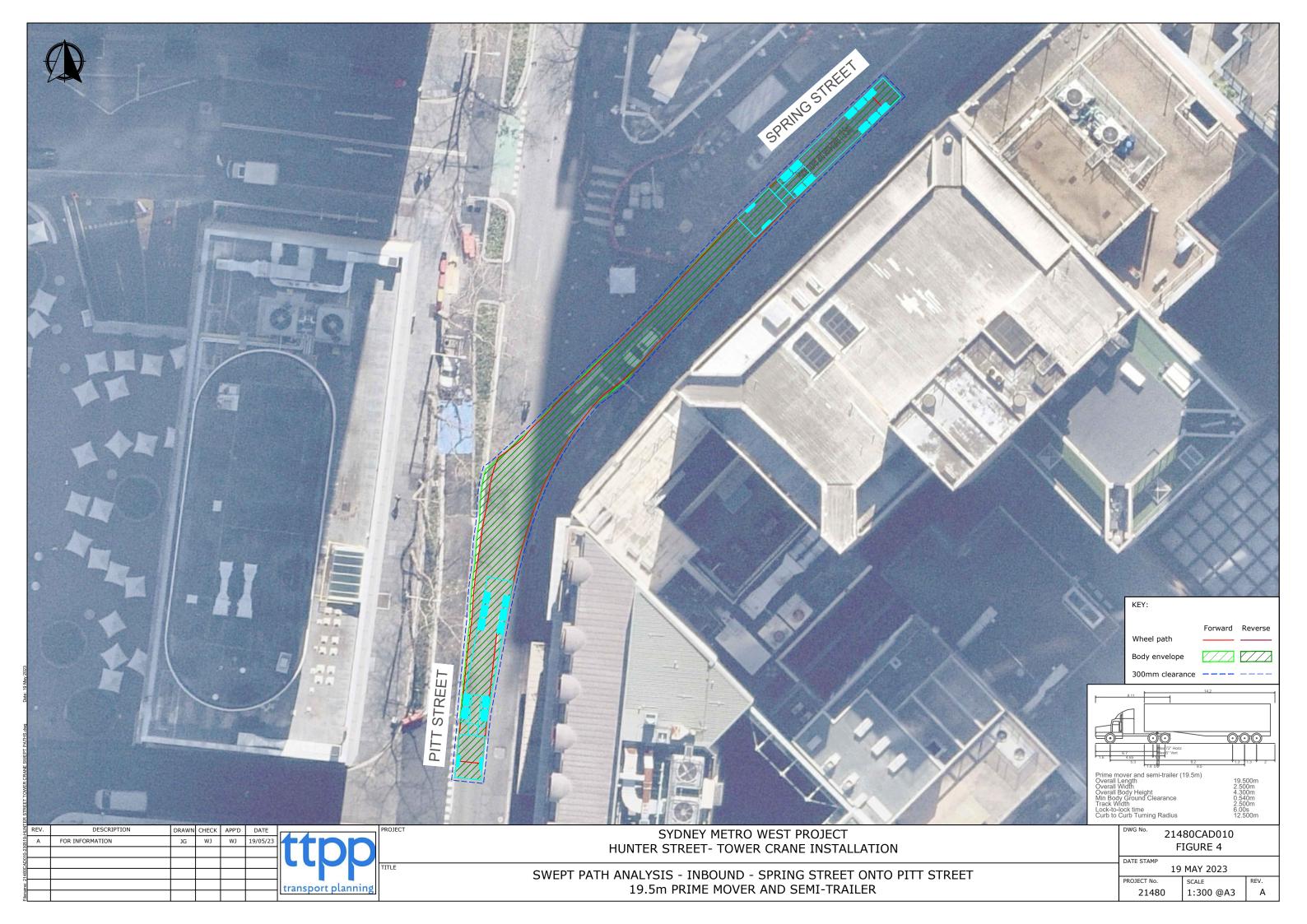


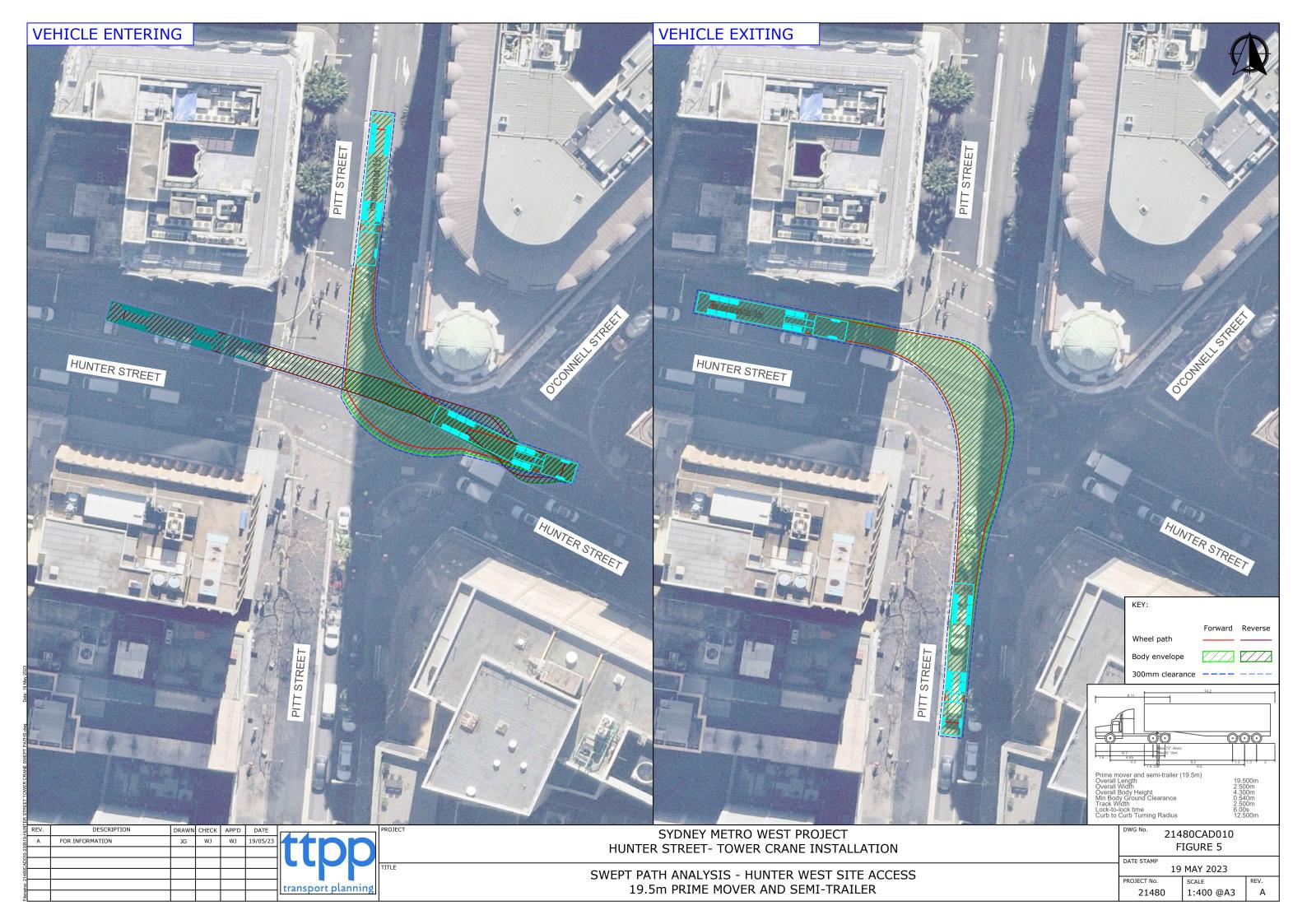
## Appendix D Swept Path Analysis



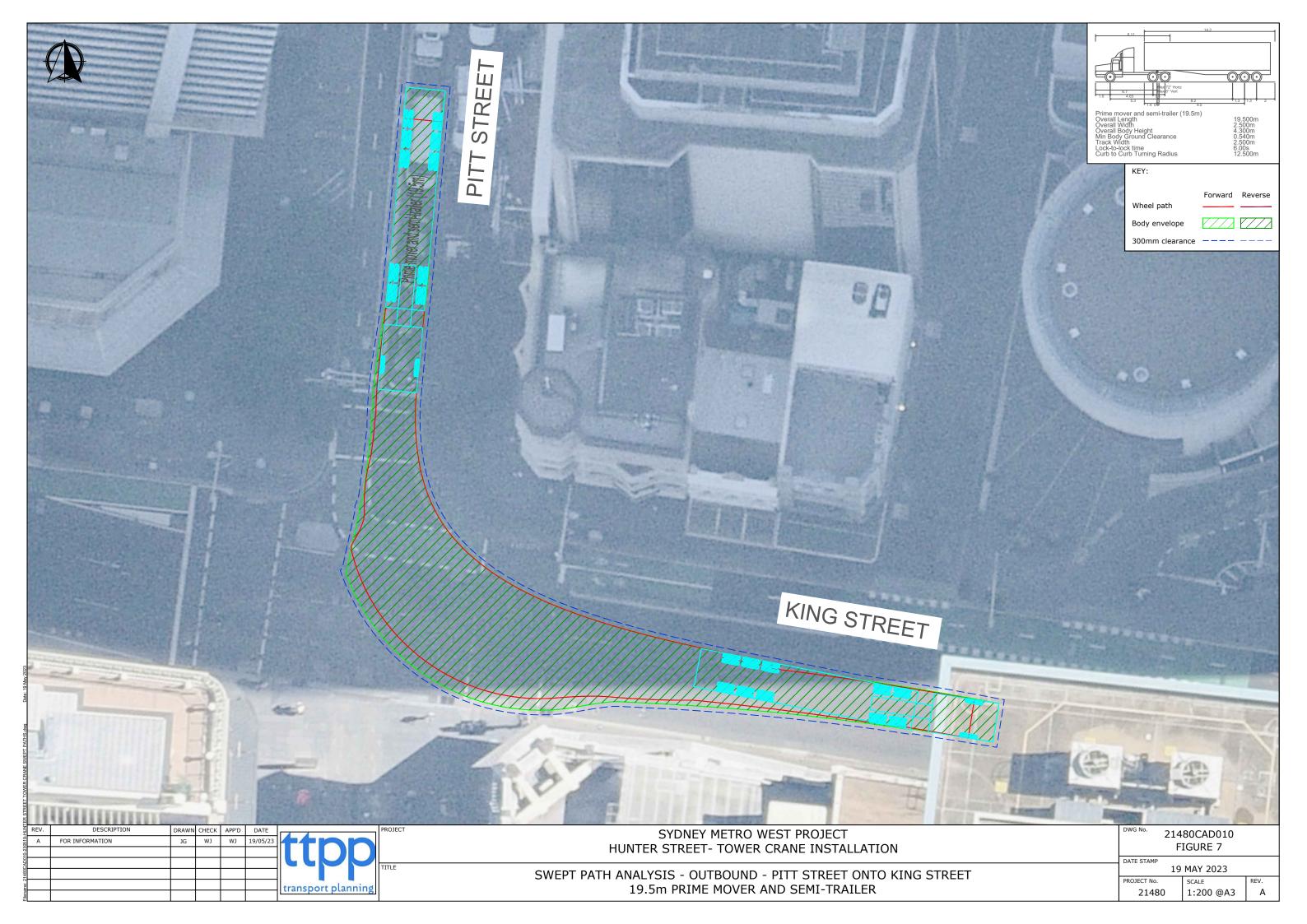


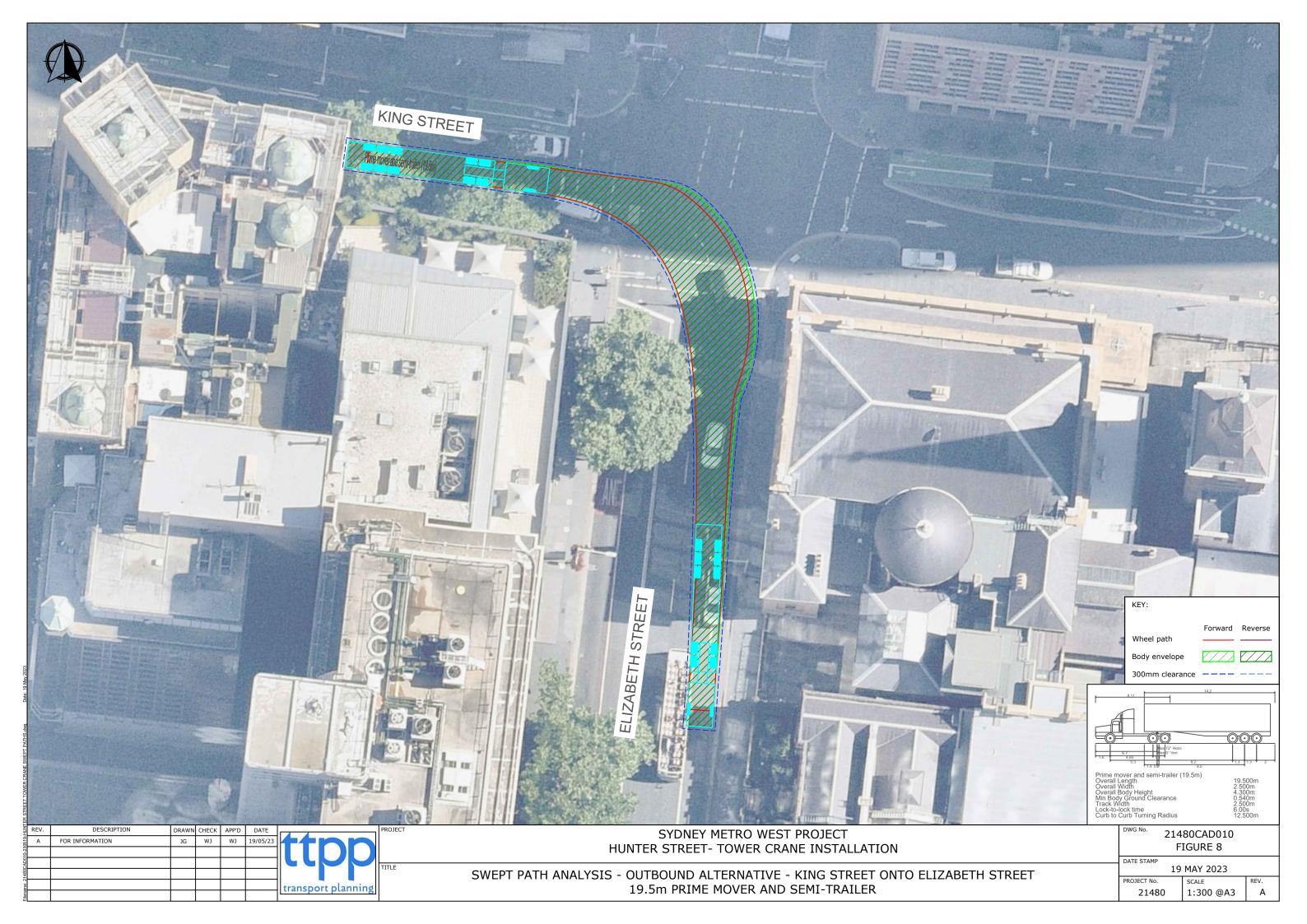


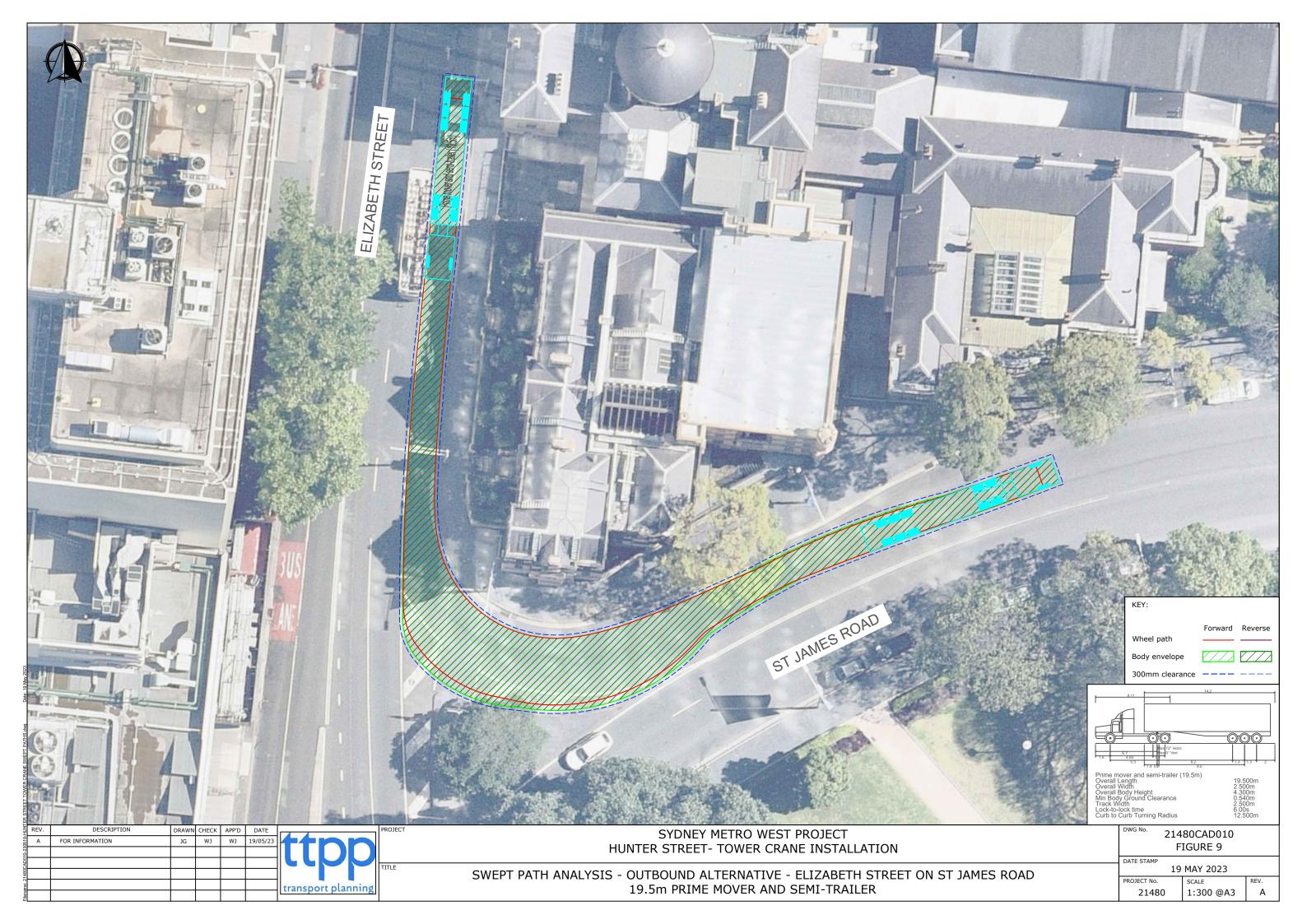


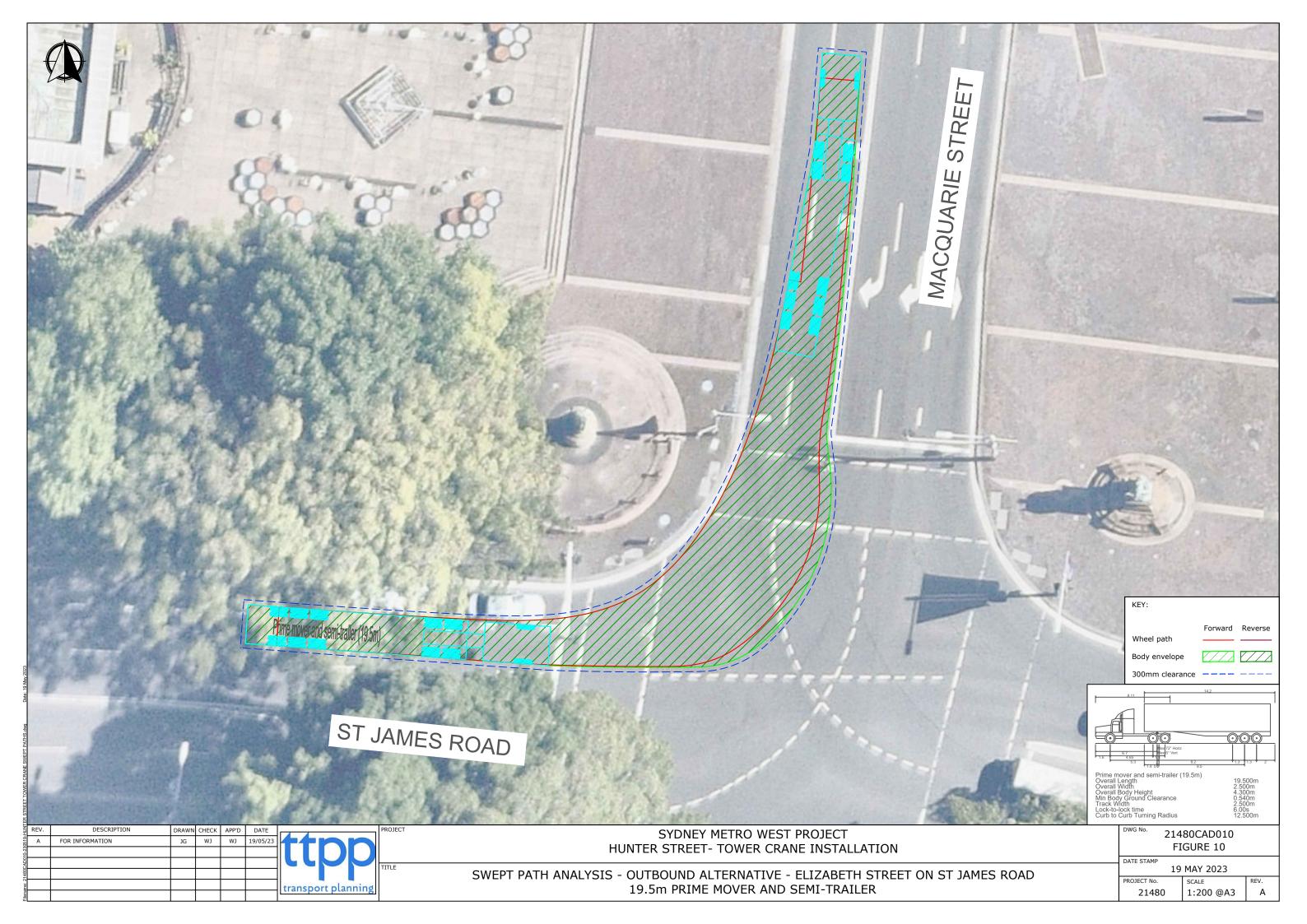


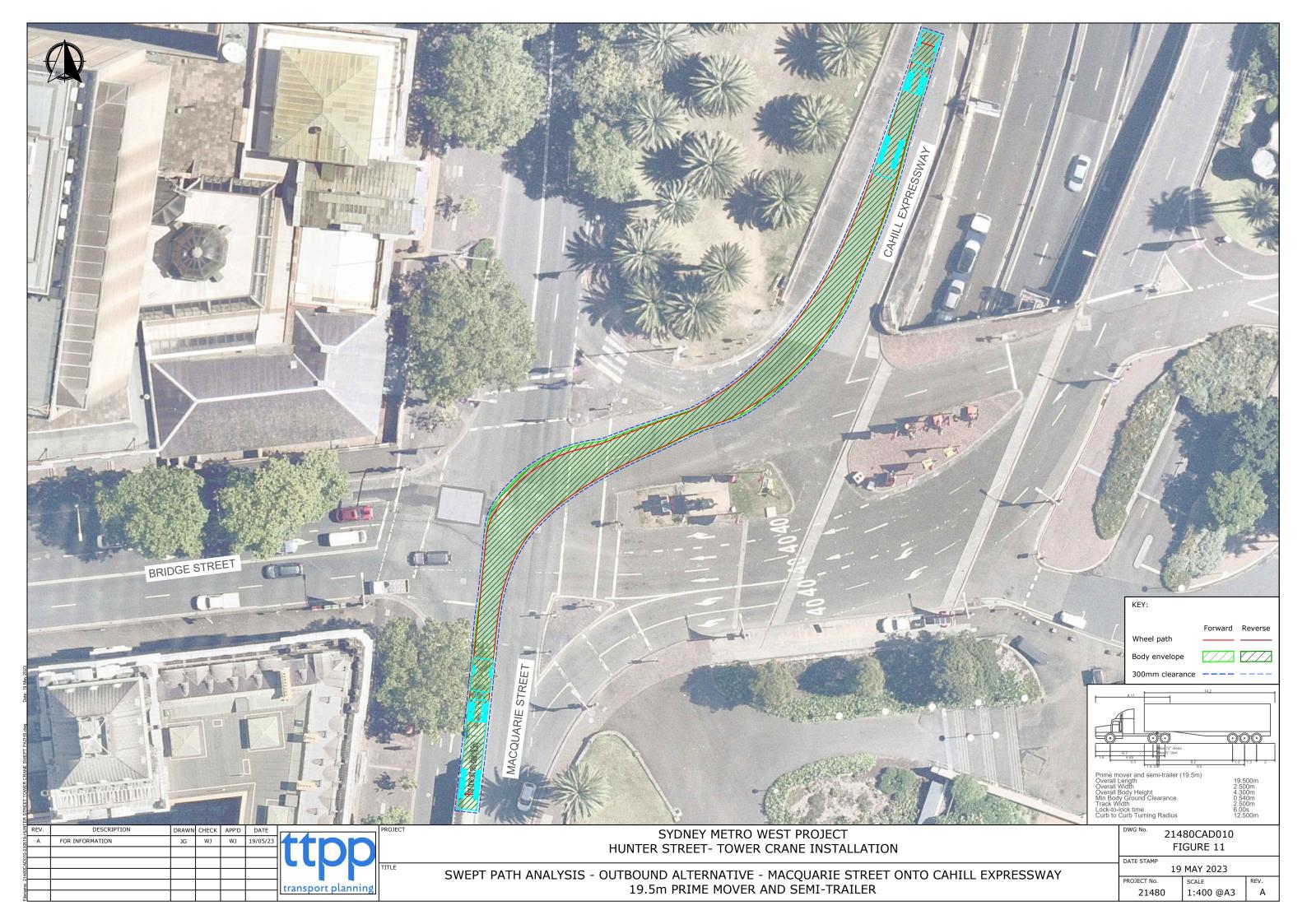














## Appendix E Road Safety Audit



## Hunter Street Temporary Road Closure Road Safety Audit

Prepared for:

JCG JV

19 May 2023

The Transport Planning Partnership



## Hunter Street Temporary Road Closure Road Safety Audit

Client: JCG JV

Version: V02

Date: 19 May 2023

TTPP Reference: 21480

#### **Quality Record**

Version	Date	Prepared by	Reviewed by	Approved by	Signature
V01	27/04/2023	Adeline Sim	Ashish Tamhane	Wayne Johnson	WEhm
V01	19/05/2023	Adeline Sim	Ashish Tamhane	Wayne Johnson	WEhm



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## **APPENDICES**

- A. TRAFFIC GUIDANCE SCHEME
- B. SWEPT PATH ASSESSMENT
- C. PORTABLE VMS STRATEGY



## 1 Road Safety Audit Summary

Audited project: Hunter Street Temporary Road Closure

Client: JCG JV

Project manager: Nathan Bryant

Email address: <a href="mailto:nathan.bryant@jcgjv.com.au">nathan.bryant@jcgjv.com.au</a>

Telephone: 0451 794 182

Audit Team: Ashish Tamhane (level 3 lead road safety auditor)

Adeline Sim (level 2 road safety auditor)

Audit type: Roadworks

Commencement meeting: N/A

Audit date: 24 April 2023

Completion meeting: Not required



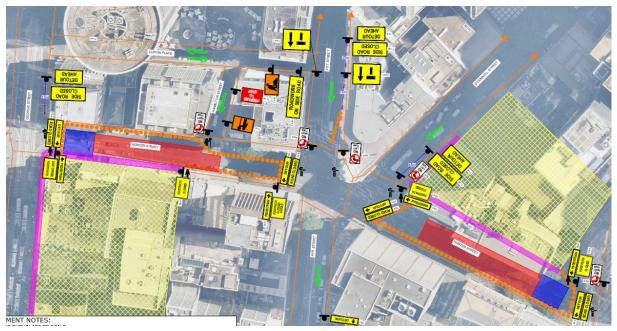
# 2 Introduction

## 2.1 Background

This report has been prepared on behalf of JCG JV to present road safety audit findings that have been identified from the proposed temporary road closure of Hunter Street for the crane installation works associated with the construction of the Hunter East and West metro stations as part of the Sydney Metro West Eastern Tunnelling Package.

The proposed locations of the temporary road closure are indicated in Figure 2.1.





The road closure is proposed to take place along Hunter Street between George Street and Pitt Street for the Hunter West site and between O'Connell Street and Bligh Street/ Castlereagh Street for the Hunter East site.

# 2.2 Audit Objective

The objective of this audit is to examine the road safety issues associated with the proposed temporary road closure along Hunter Street.

### 2.3 Procedures and Reference Material

The procedures used are described in the following guidelines:

- Roads and Maritime Services' 2011 Guidelines for Road Safety Audit Practices
- Austroads Guide to Road Safety 2022: Part 6 Road Safety Audits



Following information was supplied and referenced prior to undertaking Road safety Audit:

Table 2.1: Information Supplied

Documentation	Date	Document Reference
SYDNEY METRO WEST PROJECT, HUNTER STREET – TOWER CRANE	18 APRIL 2023	21480CAD006-230419-HUNTER STREET TOWER CRANE.pdf (4 sheets)
SYDNEY METRO WEST HUNTER STREET – TOWER CRANE INSTALLATION, SWEPT PATH ANALYSIS	19 APRIL 2023	21480CAD007-230419-HUNTER STREET TOWER CRANE SWEPT PATH.pdf (14 sheets)
PORTABLE VMS STRATEGY		

## 2.4 Audit Team

The RSA was carried out by the following team:

- Ashish Tamhane (RSA-02-1607) level 3 road safety auditor (lead auditor)
- Adeline Sim (RSA-02-1527) level 2 road safety auditor (team member)

Ashish and Adeline are registered road safety auditors with the TfNSW Register of Road Safety Auditors and are experienced in traffic engineering and design/inspection of traffic management schemes. Both auditors are independent of the road design process.



# 3 Road Safety Audit Program

# 3.1 Commencement Meeting

A formal meeting was not held.

## 3.2 Site and Field Audit

A site inspection was carried out on Monday 24 April 2023 in fine weather conditions from 1:00pm – 2:00pm, and 6:00 pm – 7:00 pm for day and night time inspections. The proposed road closure segments along Hunter Street were walked over to identify possible road safety concerns. Video footage was taken during the site visit.

# 3.3 Completion Meeting

Not required.



# 4 Road Safety Audit Findings

## 4.1 Introduction

Table 4.1 provides specific details of the road safety deficiencies and a risk rating as extreme, high, medium, low, or negligible. The risk ratings have been based on the risk matrix presented in Table 4.1, which has been adopted from Figure 10.2 of Guide to Road Safety part 6 – Road Safety Audit.

Table 4.1: Risk Matrix

					Severity		
			Insignificant	Minor	Moderate	Serious	Fatal
			Property damage	Minor first aid	Major first aid and/or presents to hospital (not admitted)	Admitted to hospital	Death within 30 days of the crash
	Almost Certain	One per quarter	Medium	High	High	Extreme (FSI)	Extreme (FSI)
osure)	Likely	Quarter to 1-year	Medium	Medium	High	Extreme (FSI)	Extreme (FSI)
Likelihood (includes exposure)	Possible	1 to 3 years	Low	Medium	High	High (FSI)	Extreme (FSI)
Lil	Unlikely	3 to 7 years	Negligible	Low	Medium	High (FSI)	Extreme (FSI)
	Rare	7 years+	Negligible	Negligible	Low	Medium (FSI)	High (FSI)
					Safe Syst outcome	em crash threshold	

The terms in Table 4.1 are described below.

#### Likelihood:

- Almost certain occurrence once per quarter
- Likely occurrence once per quarter to once per year
- Possible occurrence once per year to once every three years
- Unlikely occurrence once every three years to once every seven years
- Rare occurrence less than once every seven years.



#### Severity:

- Insignificant property damage
- Minor minor first aid
- Moderate major first aid and/or presents to hospital (not admitted)
- Serious admitted to hospital
- Fatal at scene or within 30 days of the crash.

#### Priority:

- Negligible no action required
- Low should be corrected or the risk reduced if the treatment cost is low
- Medium should be corrected or the risk significantly reduced, if the treatment cost is moderate, but not high
- High should be corrected or the risk significantly reduced, even if the treatment cost is high
- Extreme must be corrected regardless of cost.

## 4.2 Responding to the Audit Report

As set out in the road safety audit guidelines, the responsibility for the road rests with the project manager, not with the auditor. The project manager is under no obligation to accept the audit findings. Neither is it the role of the auditor to agree to or approve the project manager's responses to the audit.

The audit provides the opportunity to highlight potential road safety problems and have them formally considered by the project manager in conjunction with all other project considerations.

# 4.3 Road Safety Audit Findings

The audit findings are documented in Table 4.2 which provides:

- specific details of the road safety issues identified during the audit
- a risk level rating for each of the road safety audit findings.

It should be acknowledged that positive attributes of the audited road section have not been discussed. Deficiencies that do not cause a safety problem are also not listed.

In-line with TfNSW's best practice recommendations have not been included in the road safety audit findings.



Table 4.2: Road Safety Audit Findings

Item No.	Location	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating	Designer Response
1.	Little Hunter Street	There is no signage proposed on the Little Hunter Street approach to indicate the road closure ahead at Hunter Street. Pedestrians or cyclists may access Hunter Street from Curtin Place via Little Hunter Street which potentially exposes them to the hazards associated with construction activities.	Little Hunter St.	Rare	Insignificant	Negligible	Construction activities will be separated from the footpath.
2.	Bligh Street southbound approach	The "Side Road Closed" sign without directional arrow does not indicate the road closure west of Bligh Street. Vehicles intending to turn left may misinterpret the sign and make a last-minute lane change, resulting in side swipe type crashes and minor injuries.	THE TOTAL OF THE T	Possible	Insignificant	Low	Directional arrows added.



Item No.	Location	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating	Designer Response
3.	Spring Street – Pitt Street	Construction vehicles turning left from Spring Street onto Pitt Street, while looking right waiting for a gap to turn left may potentially overlook pedestrians or cyclists crossing on the left at the southern kerb, resulting in incidents with pedestrians / cyclists potentially causing minor to moderate injury. It is it is acknowledged that it is an existing operation, however construction trucks are relatively 'high' vehicles compared with light vehicles which could present the risk identified above.	PITT STREET	Possible	Minor	Medium	Cyclists will primarily be using the cycleway on the other side of Pitt Street and are unlikely to cross at a pedestrian crossing on the footpath. Due to the width of the road, heavy vehicles will need to slow down to manoeuvre onto Pitt Street from Spring Street.  Heavy vehicles will queue over the pedestrian crossing when turning left to make sure there is an adequate gap for them to attempt the manoeuvre, whilst they are queued the pedestrian crossing will be blocked.
4.	King Street – Elizabeth Street	The swept path of a construction vehicle turning left from King Street on to Elizabeth Street shows that the right and though shared lanes are used to turn with wheels mounting the kerb west of Elizabeth Street. This may possibly result in conflict with vehicles in turning left from the kerb side lane leading to side swipe type crashes and minor injury, as well as potential damage to road furniture.		Possible	Insignificant	Low	The swept paths have been amended to show that vehicles do not mount the kerb.



Item No.	Location	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating	Designer Response
5.	Bridge Street  – Gresham  Street	The swept path shows the construction vehicle is likely to cross over the centre line on Gresham Street. This may possibly result in conflict with oncoming vehicles resulting in head-on type crashes and minor injury.	GRESHAM STREET	Possible	Insignificant	Low	The swept paths have been amended to show that vehicles do not cross over the centreline.
6.	Bridge Street  - Cahill Expressway	The swept path shows the construction vehicle is likely to occupy two through lanes to travel through to Bridge Street. This may possibly result in conflict with vehicles waiting at the signals resulting in side swipe type crashes and minor injury.		Possible	Insignificant	Low	Vehicles travelling in this direction diverge just before this point, allowing heavy vehicles to occupy both lanes at the lights.  Vehicles will not be able to pass them.
7.	Pitt Street – King Street	The swept path of a construction vehicle turning left from Pitt Street onto King Street indicates the vehicle body hitting the traffic light pole located near to the kerb. This presents risks of property damage, as well as chances of hitting pedestrians standing close to the edge of the kerb, which may result in minor injury.	KING STREET	Possible	Insignificant	Low	The swept paths have been amended to show that vehicles do not hit the traffic lights.



Item No.	Location	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating	Designer Response
8.	St James Road – Macquarie Street	The swept path of a construction vehicle turning left from St James Road on to Macquarie Street shows the wheels mounting the kerb, resulting in damage to roadside furniture. The vehicle is also possibly going over the centreline on Macquarie Street, resulting in side swipe type crashes with a large vehicle in the right turning lane in the opposite direction.	MACQUARIE STREET	Possible	Insignificant	Low	The swept path shows that the wheels enter the gutter but do not mount the kerb. The clearance envelope remains on the centreline and does not cross over.
9.	St James Rd – Macquarie St	The swept path of a construction vehicle turning left from St James Road onto Macquarie Street shows the construction vehicle is using the right turning lane to turn left onto Macquarie Street. This may result in conflict with vehicles turning left from the kerbside lane leading to side swipe type crashes and minor injury.	ST JAMES ROAD	Possible	Insignificant	Low	Heavy vehicles will occupy both lanes when turning so that light vehicles can not turn with them. The swept paths have been amended to reflect this.



Item No.	Location	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating	Designer Response
10.	George Street – Hunter Street	George Street on approach to Hunter Street is currently blocked for vehicular access. Consequently, the detour signage is not required. It is however noted that an additional set of signage at this location may help with informing local access drivers to maintain road safety.	O'CHANGE AND A CONTROL OF THE PARTY OF THE P	-	-	Note Only	This is for local access drivers.
11.	Curtin Place	Traffic flow arrows are shown in wrong directions.	CURTIN PLACE	-	-	Note Only	Amended.
12.	Hamilton Street and Curtin Place	The TGS signage along Hamilton Street and Curtin Place appears to deviate from guidelines. The spacing distance between the signs along Hamilton Street and Curtin Place are also missing on the plan.  Non-standard signage may not provide adequate information for motorists to be aware of the nearby construction activities.	COUNTY OF THE PARTY OF THE PART	-	-	Note Only	The spacing distance has been provided.



Item No.	Location	Descriptions of Findings	Photo	Likelihood	Severity	Risk Rating	Designer Response
13.	Curtin Place  – Hamilton Street	A "Road Works on Side Road" sign is missing on the Curtin Place approach to the intersection with Hamilton Street. Motorists on the Curtin Place approach may not be informed prior to turning onto Hamilton Street which could result in confusion and erratic driver behaviour.	CURTIN PLACE  CURTIN PLACE  DOIS OF THE PLACE OF THE PLAC	-	-	Note Only	Added.
14.	Exit lane at Pitt Street and Castlereagh Street	"End of Road Work" signs are missing on the departure side of Pitt Street and Castlereagh Street to inform the end of construction zone.	PIT STRETT	-	-	Note Only	Added.
15.	Hunter Street east of Phillip Street	No "End detour" sign is provided for the "Pitt Street traffic eastbound detour route."	HANTER STREET	-	-	Note Only	Added.



# 5 Concluding Statement

The findings and opinions in the report are based on the examination of the specific road and environments and might not address all concerns existing at the time of the audit.

The auditors have endeavoured to identify features of the road that could be modified in order to improve safety, although it must be recognised that safety cannot be guaranteed since no road can be regarded as absolutely safe.

While every effort has been made to ensure the accuracy of this report, it is made available strictly on the basis that anyone relying on it does so at their own risk without any liability to the Auditors.

Ashish Tamhane

Level 3 Lead Road Safety Auditor

The Transport Planning Partnership

Adeline Sim

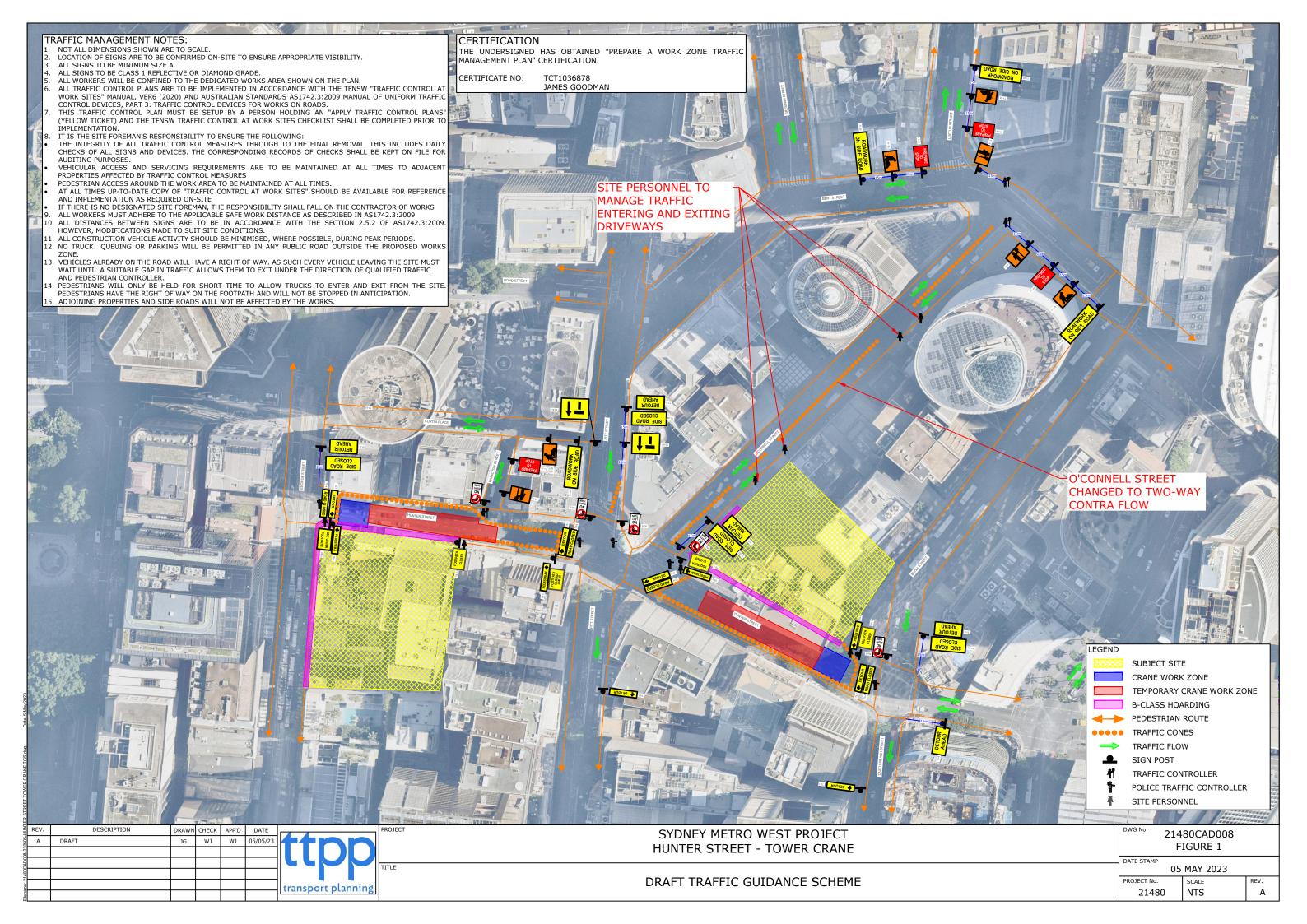
Level 2 Road Safety Auditor

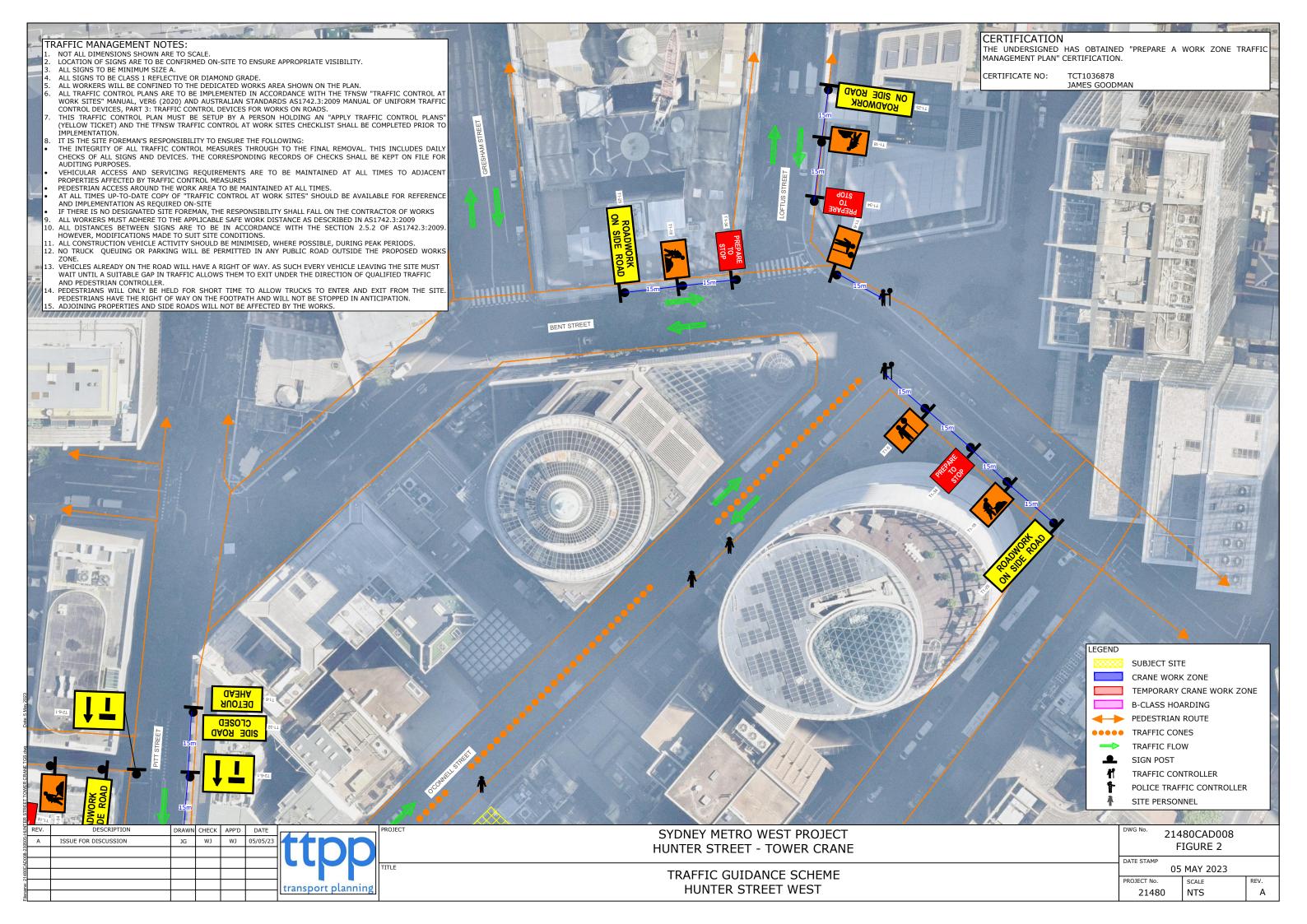
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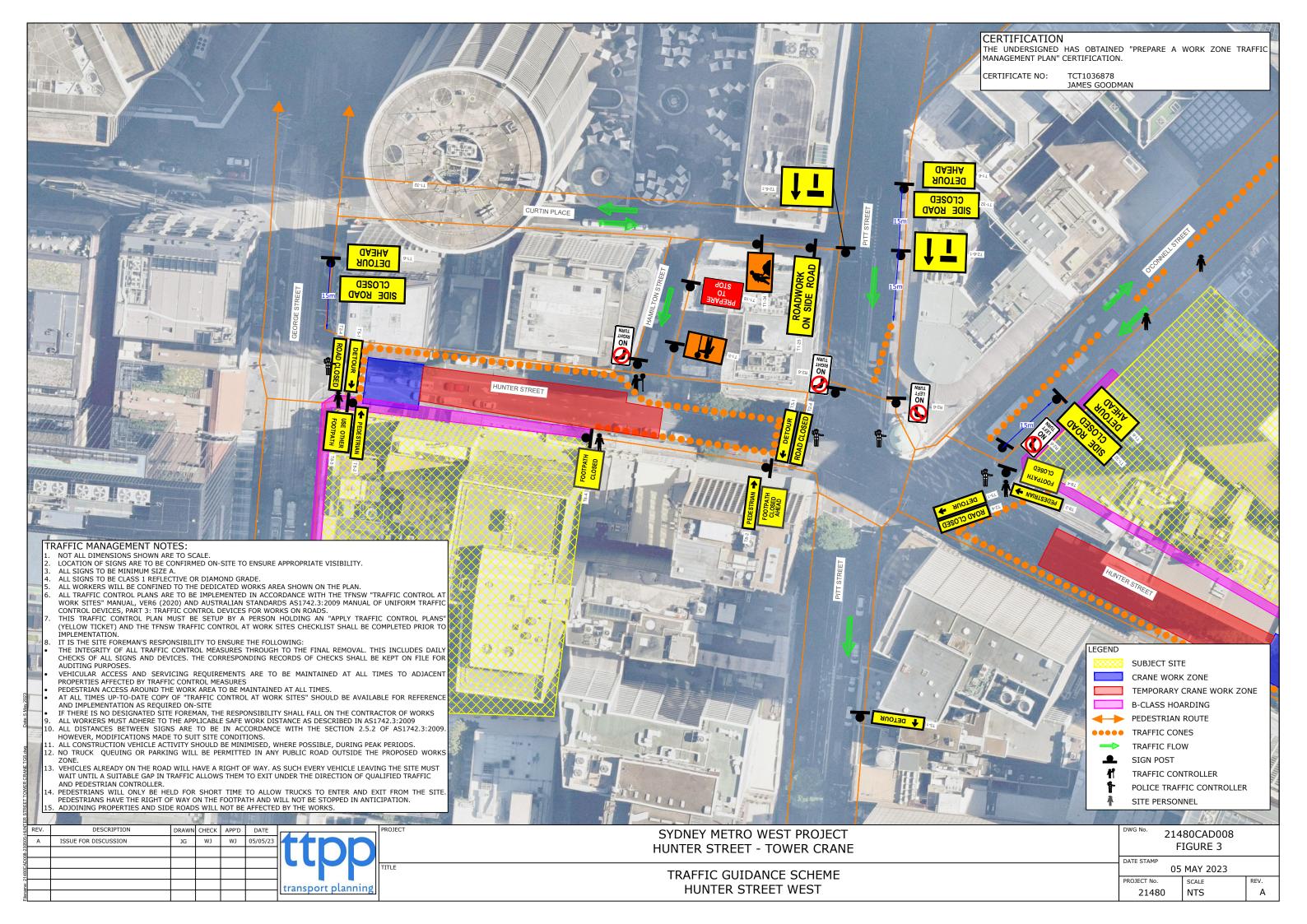


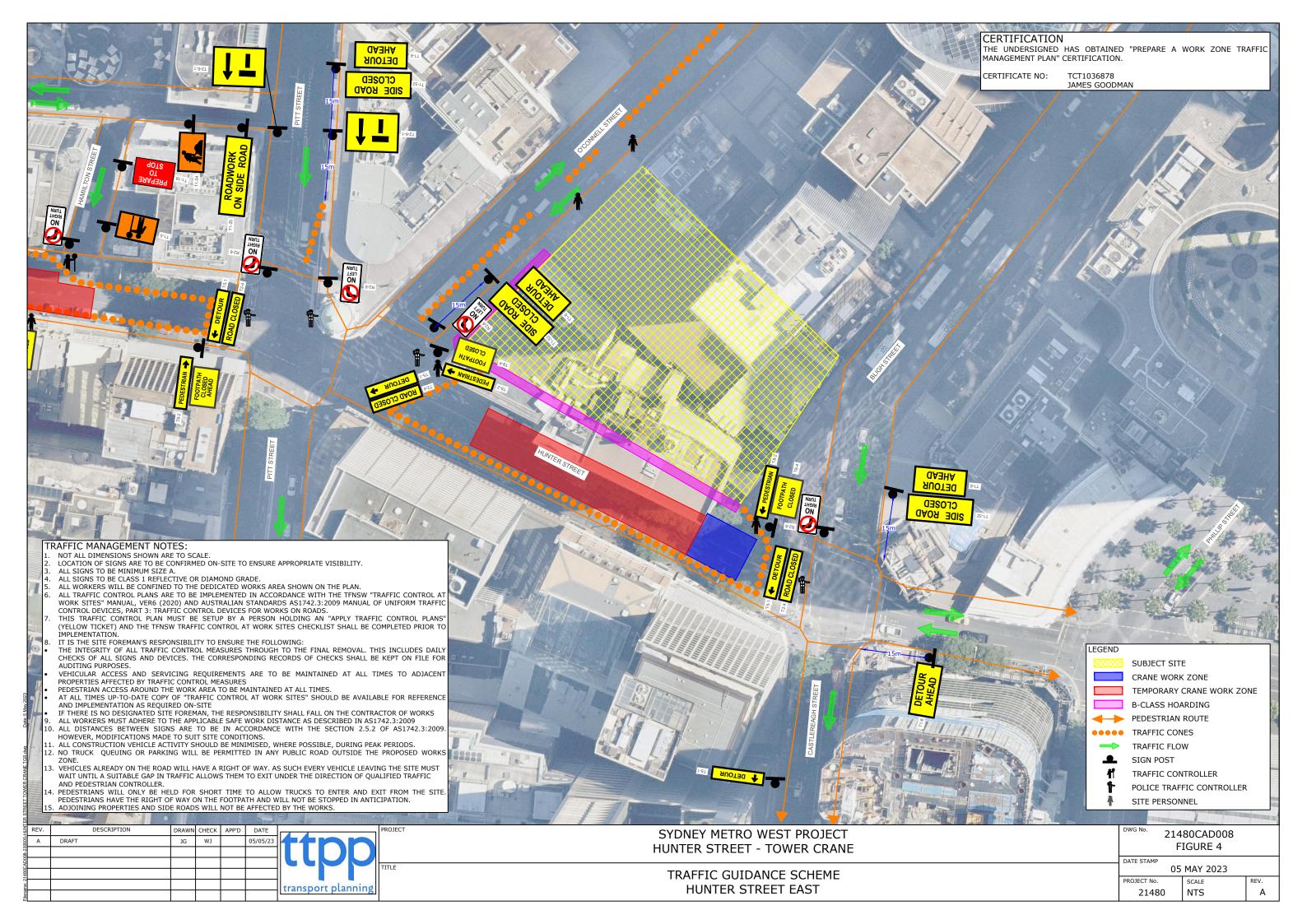
# Appendix A

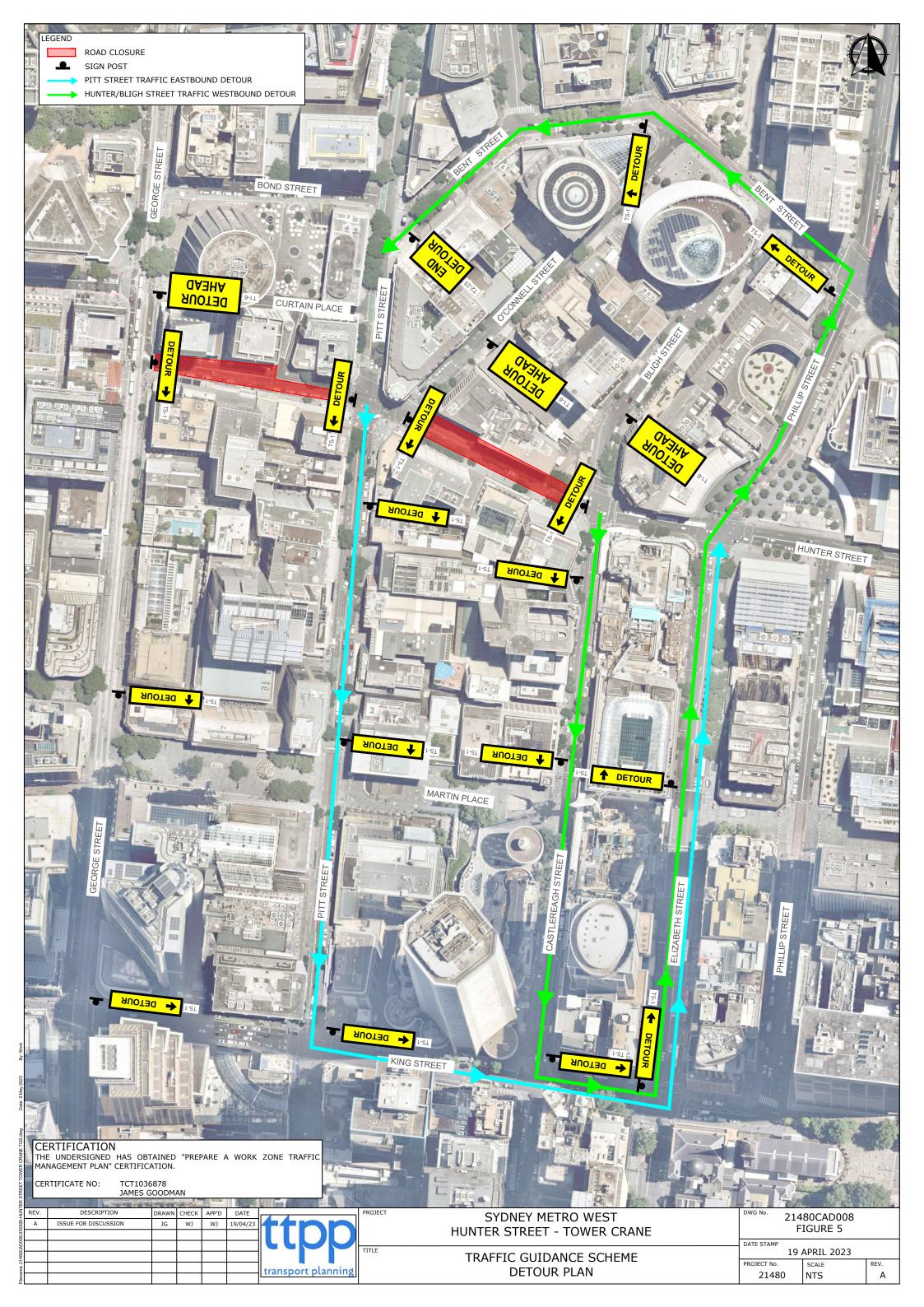
Traffic Guidance Scheme









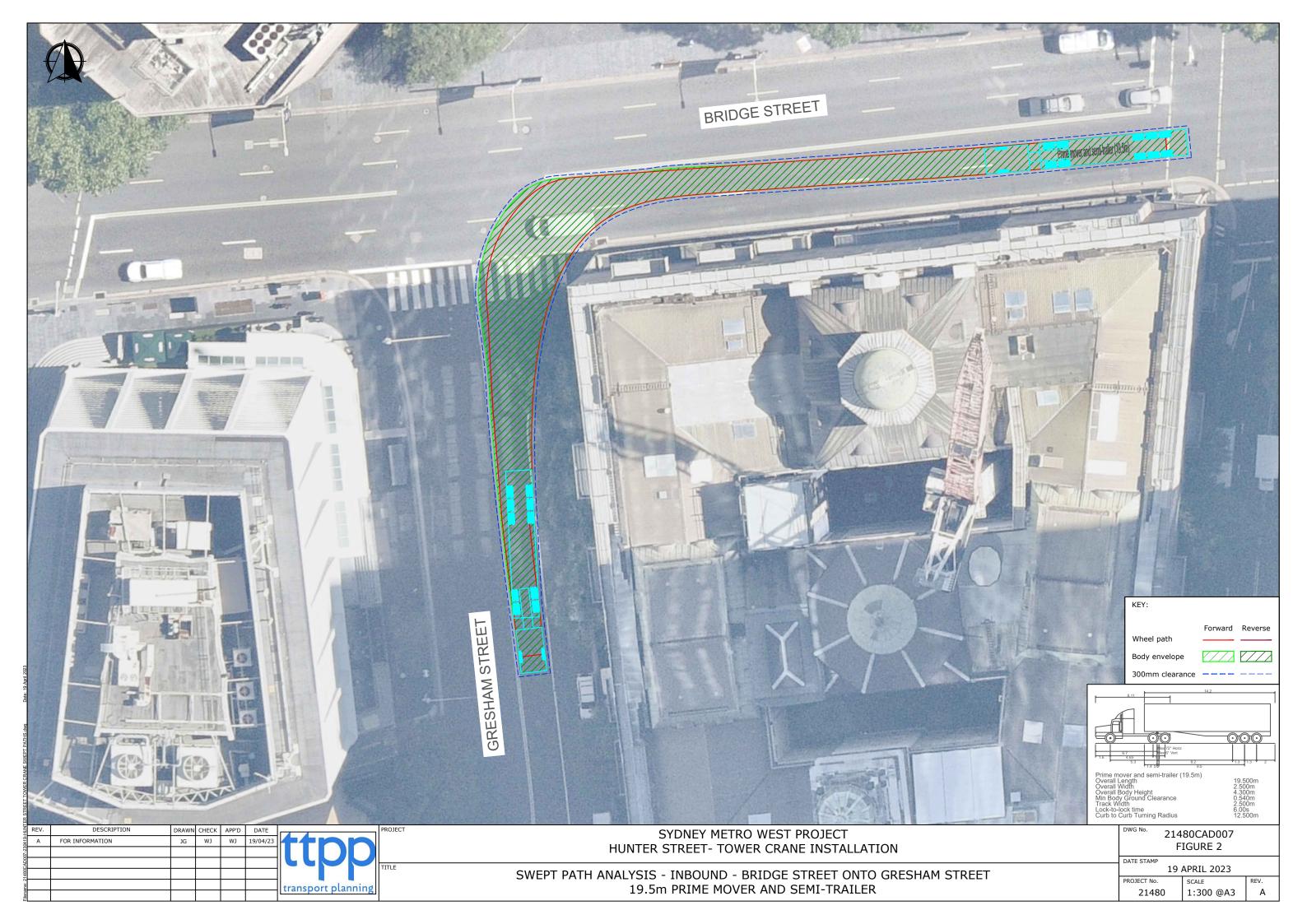


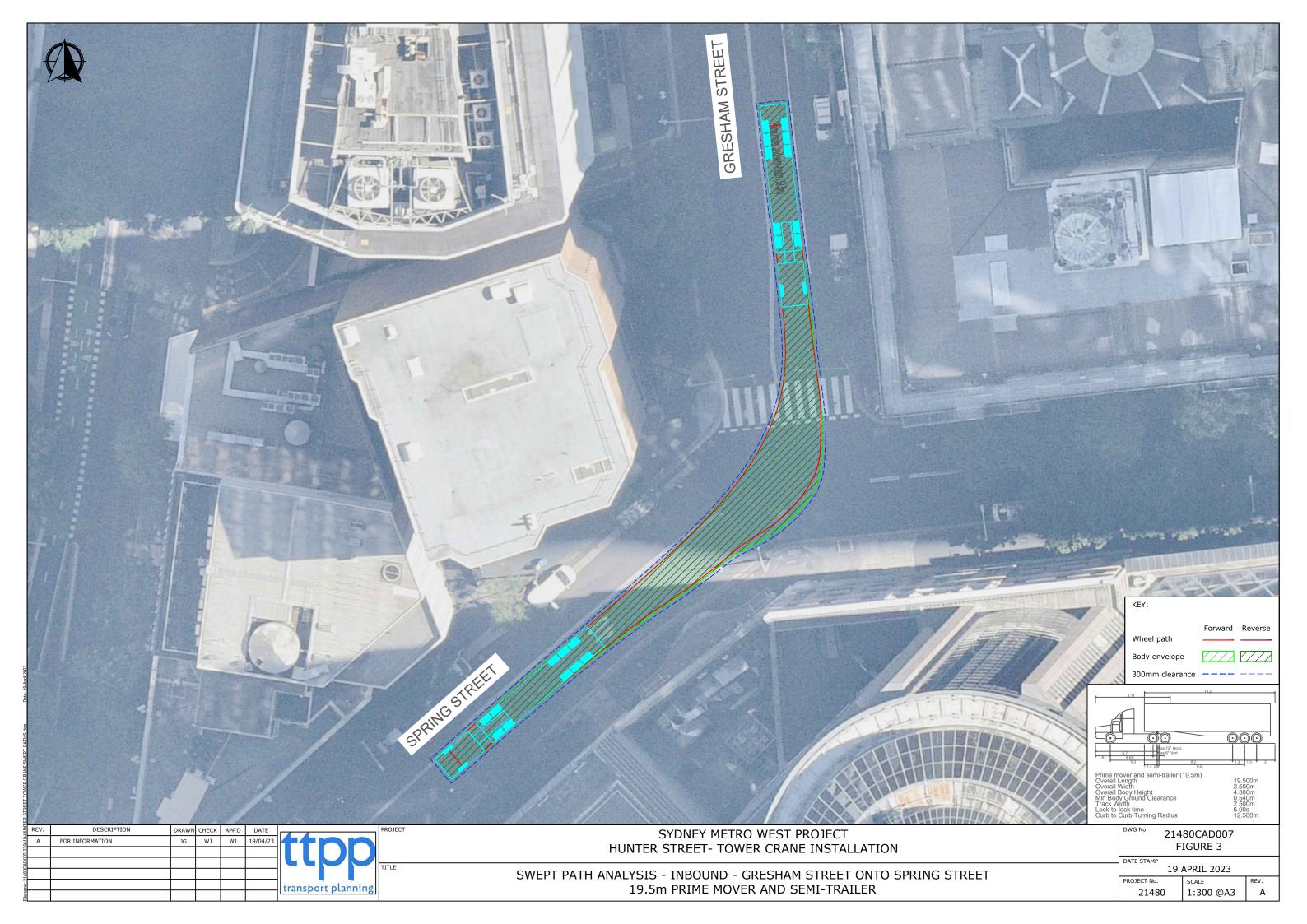


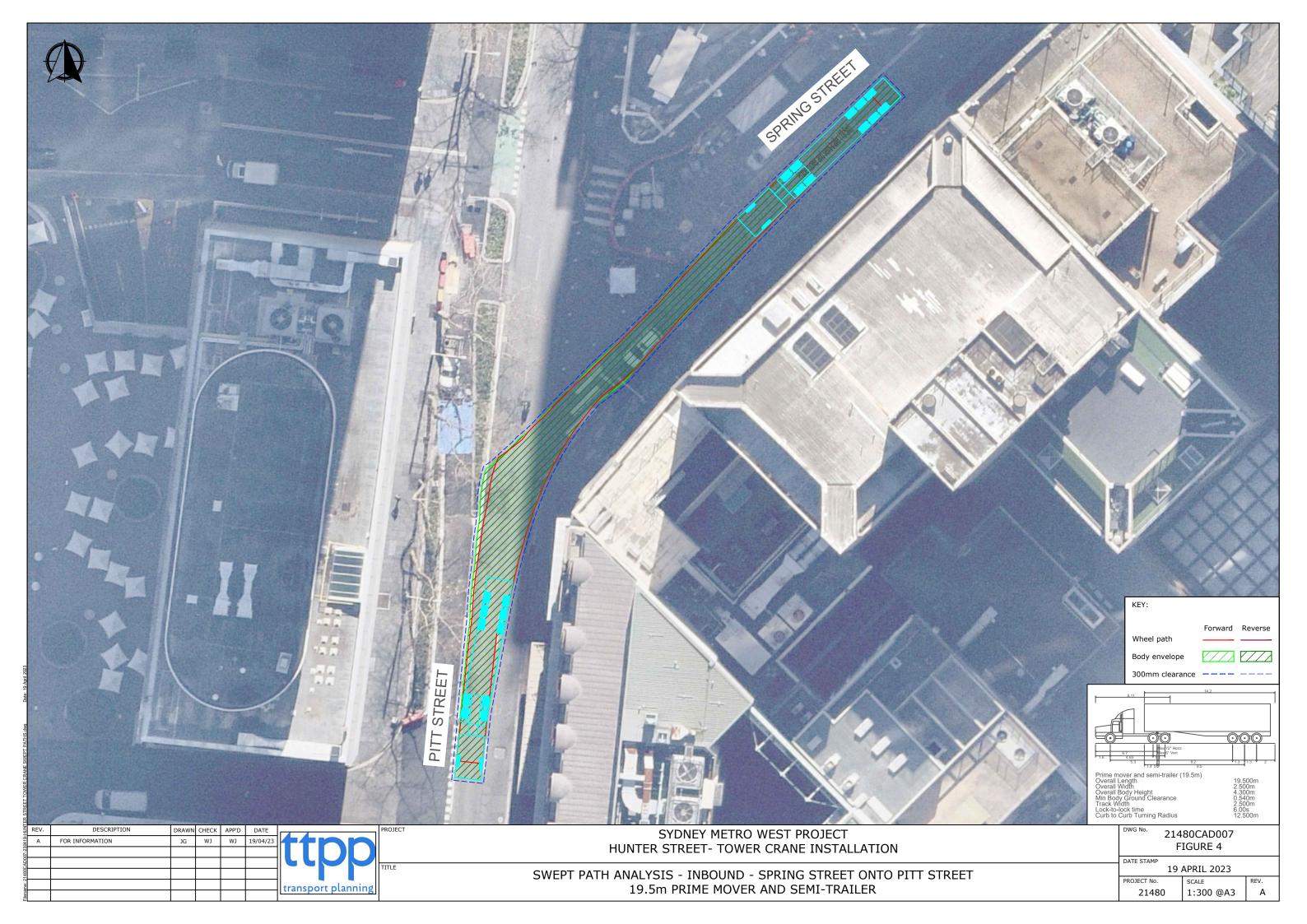
# Appendix B

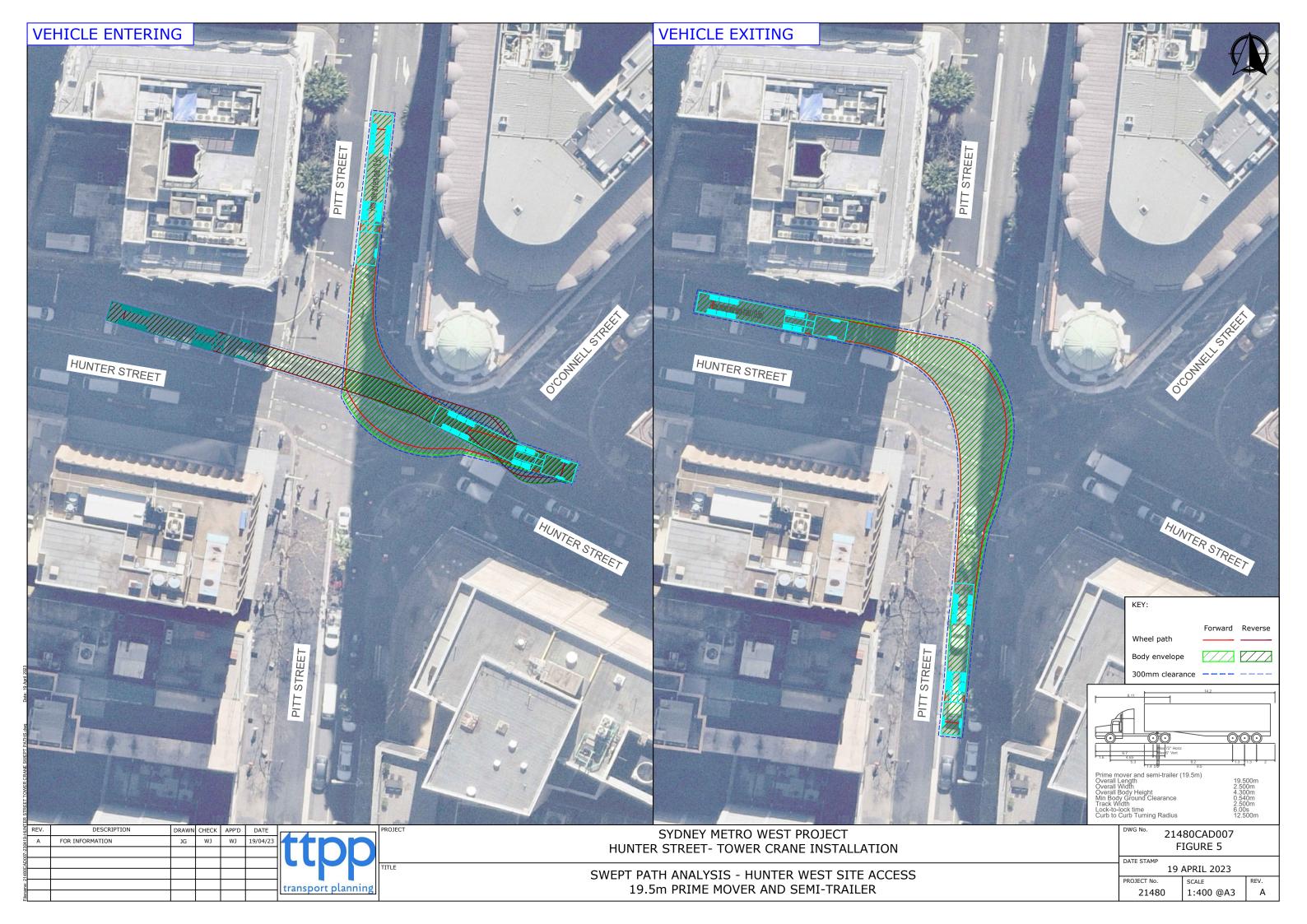
Swept Path Assessment



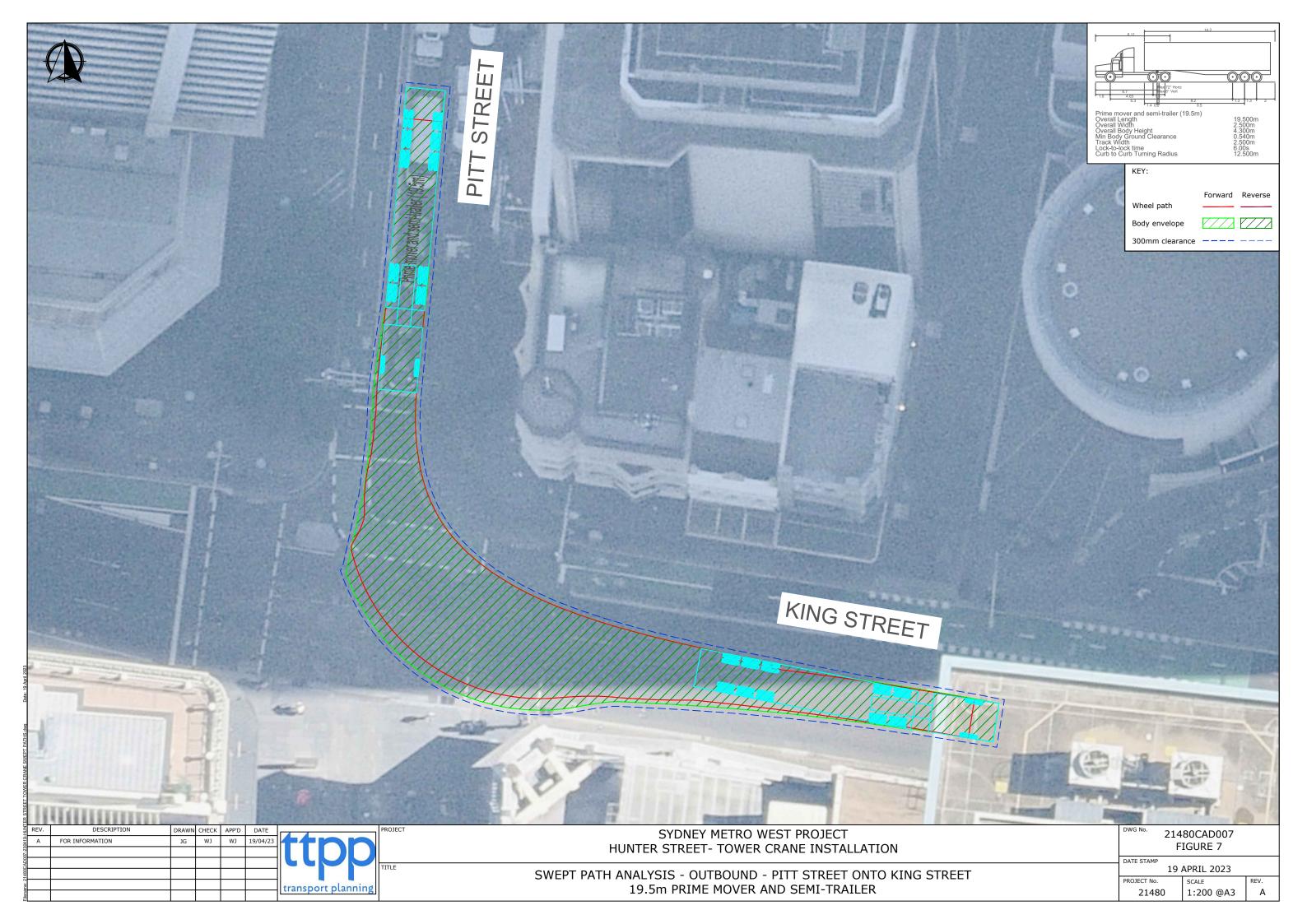




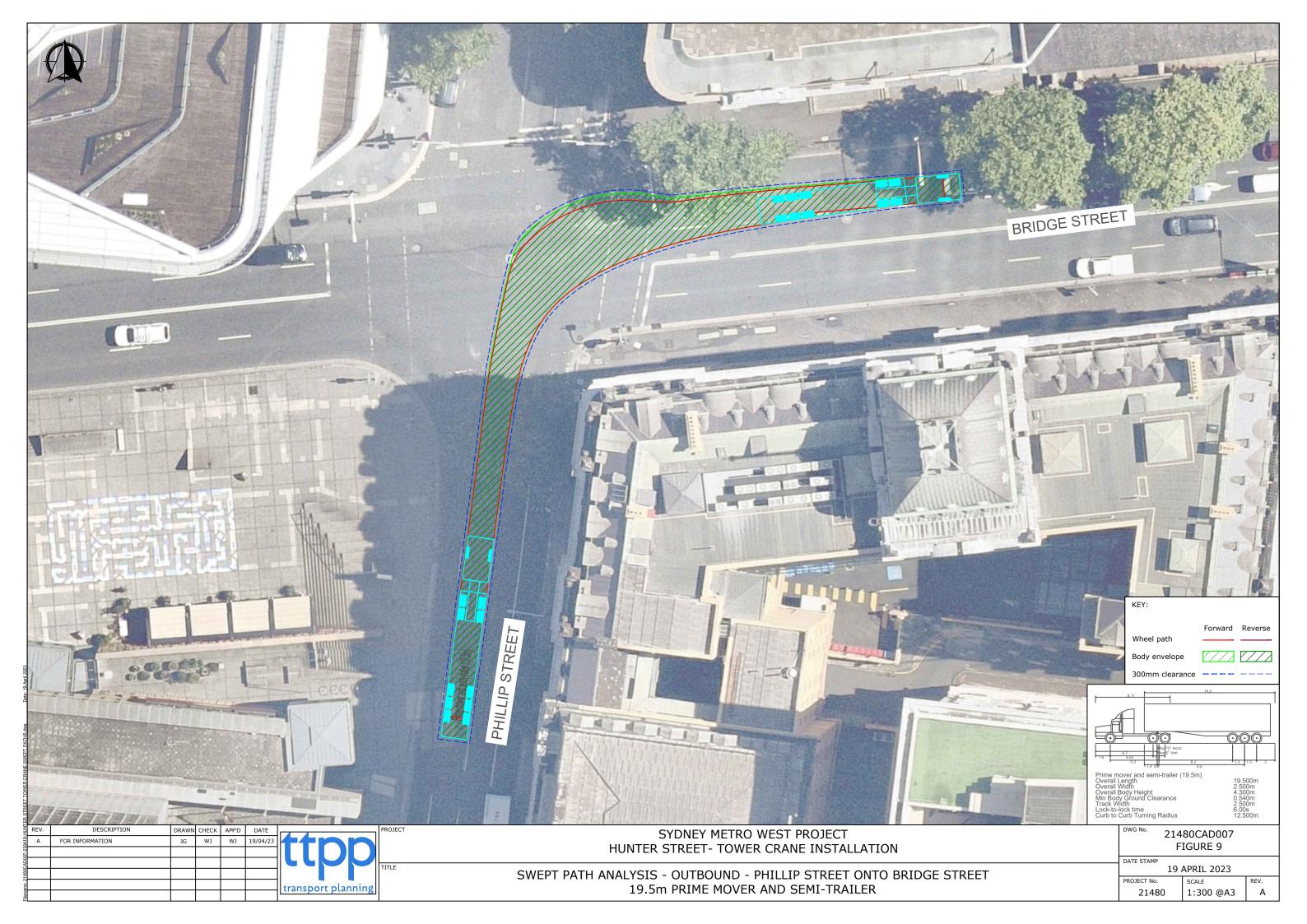


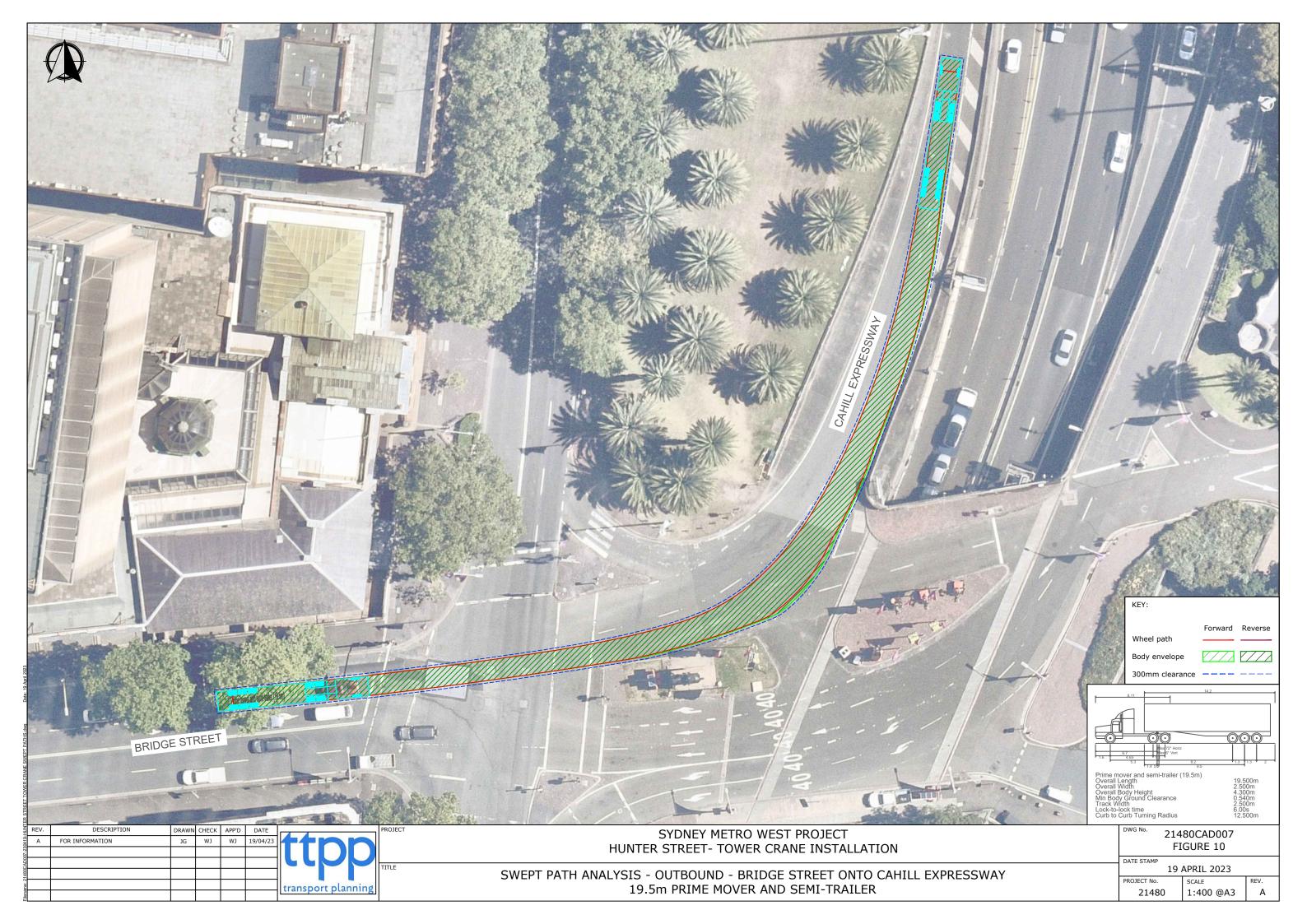


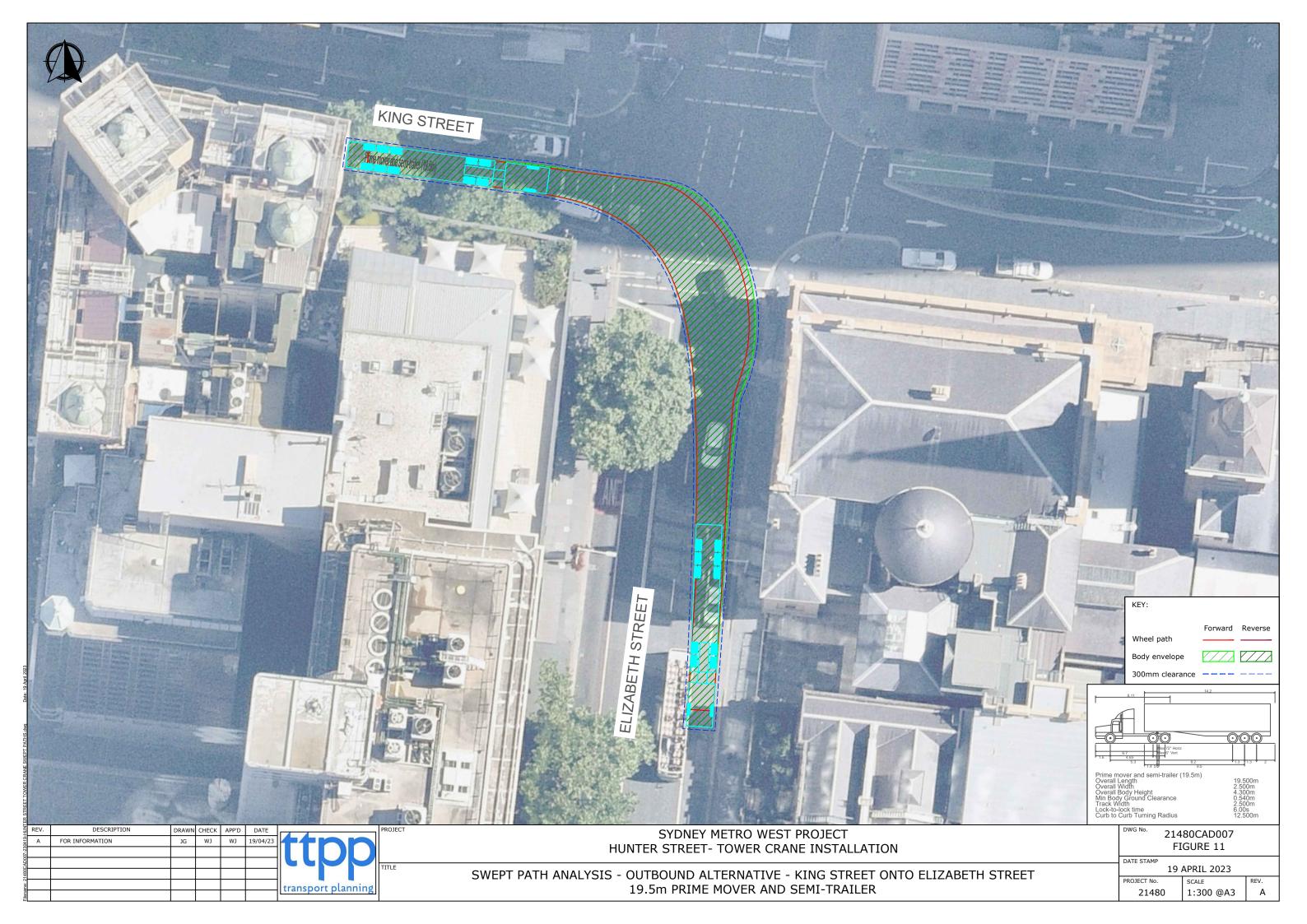


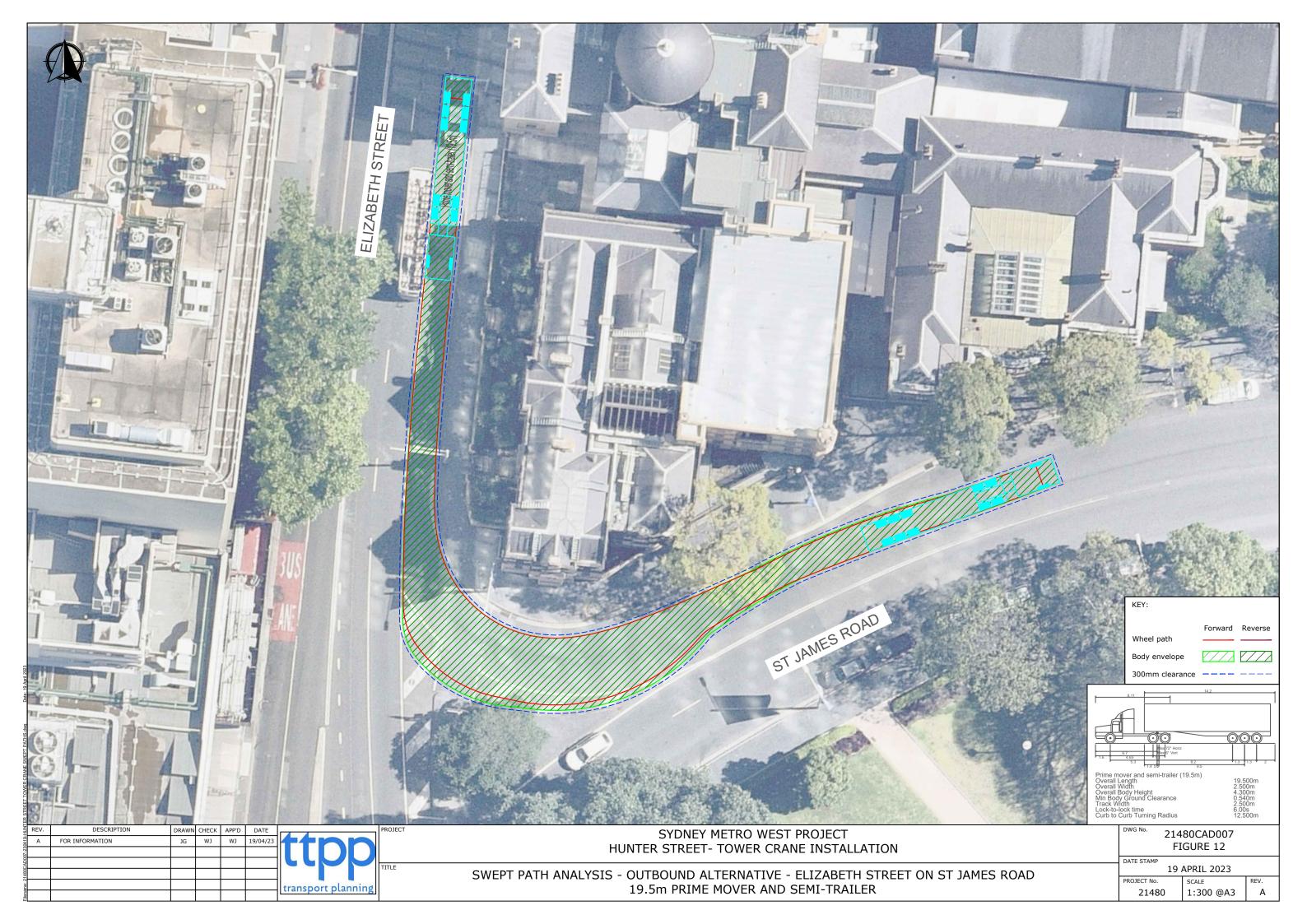


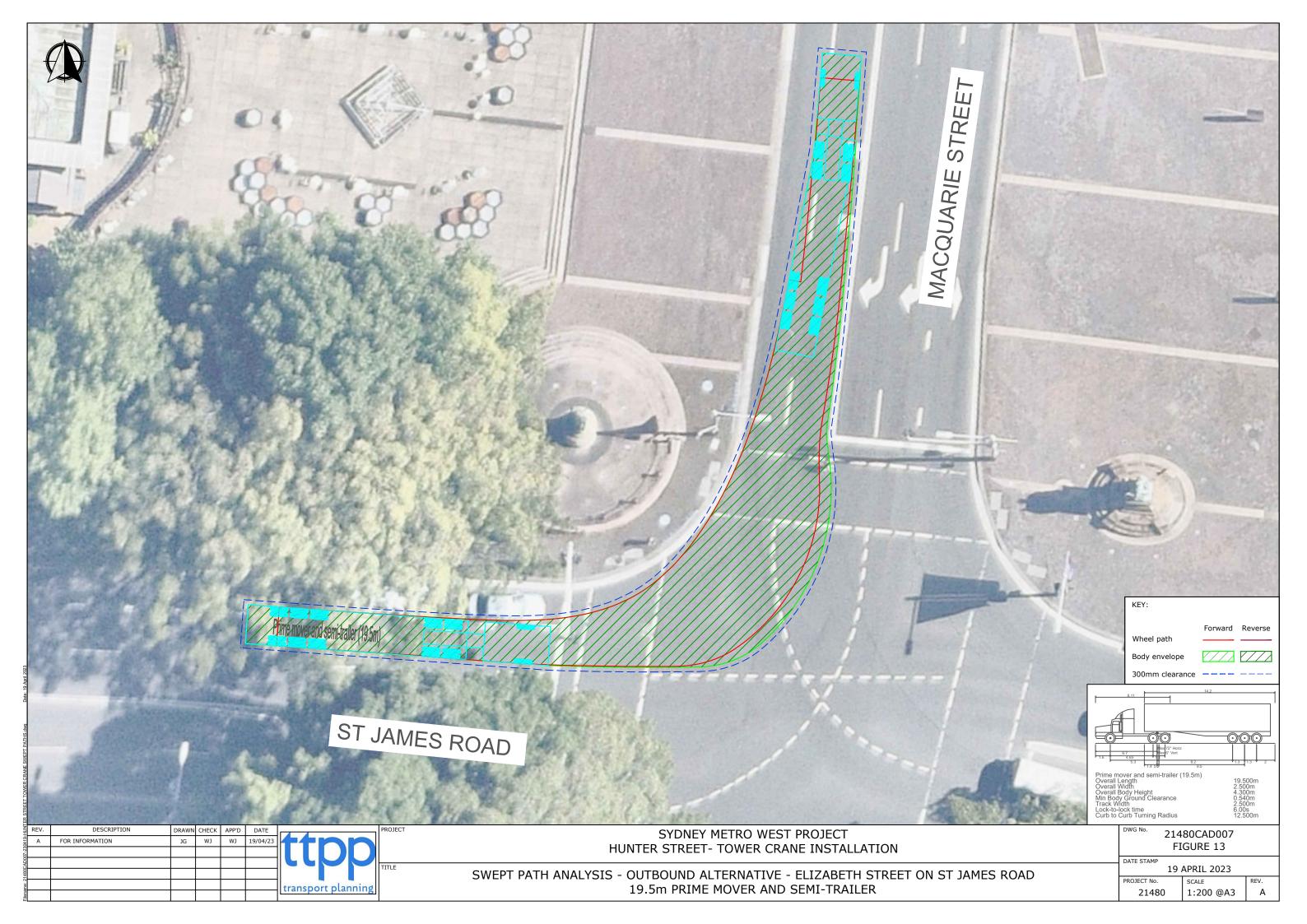


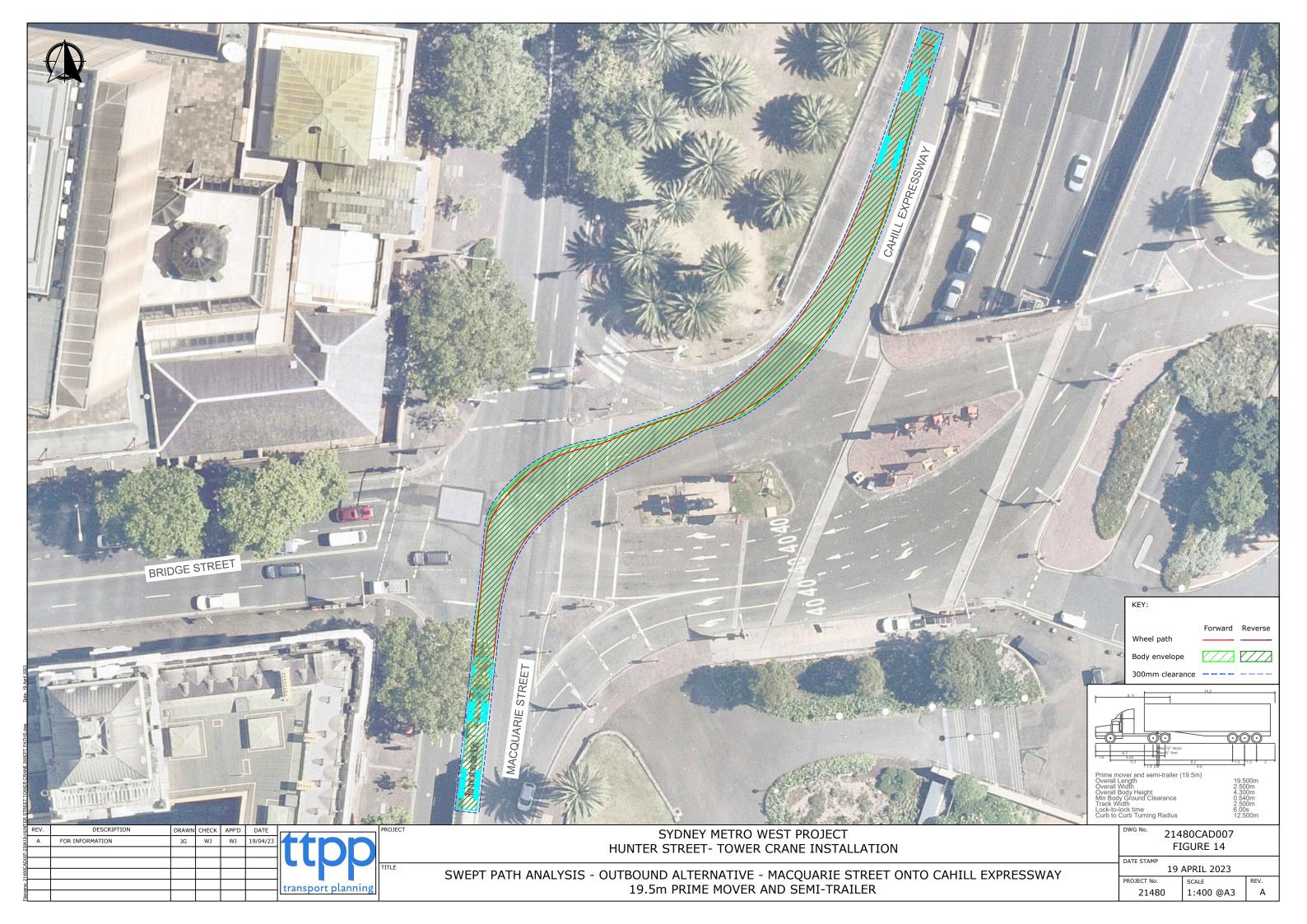














# Appendix C

Portable VMS Strategy

# Portable VMS Strategy

Hunter Street, Sydney

Name of Possession: Hunter Street

Strategy Dates: Friday 23 June 2023 – Monday 26 June 2023

VMS Deployment Date: 16 June 2023

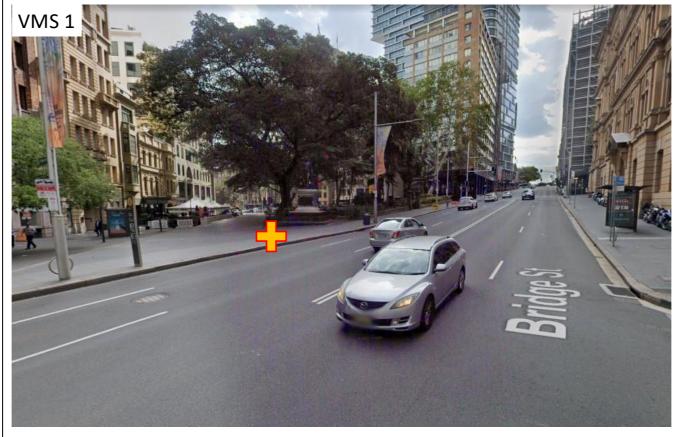
## PORTABLE VMS STRATEGY



Figure 1 – Portable VMS Locations (Displayed as yellow and red cross symbol).

### 1. Bridge Street, eastbound, approaching Loftus Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER ROADWORK** STREET 9PM FRI **CLOSURE** -5AM MON During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 1 Message 2 **HUNTER** CITY EAST STREET VIA **BRIDGE ST CLOSED**

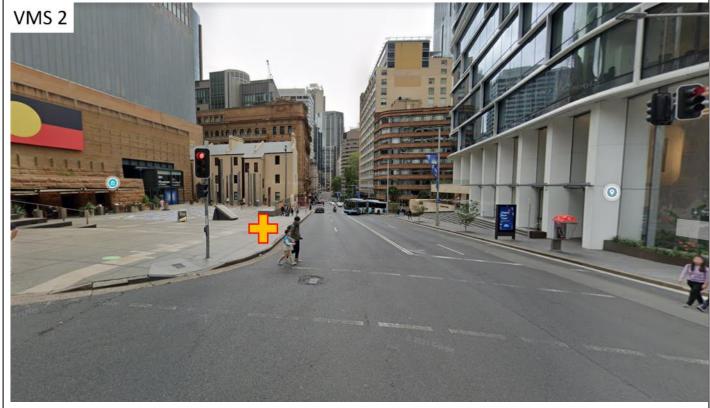
## **Location Photo:**



**Notes:** Size B VMS Board. Place on the northern side of Bridge Street on footpath, east of George Street traffic signals. Facing eastbound traffic.

### 2. Bridge Street, westbound, approaching Young Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER ROADWORK** STREET 9PM FRI -5AM MON **CLOSURE** During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 2 Message 1 **HUNTER** CITY WEST STREET VIA **BRIDGE ST** CLOSED

## **Location Photo:**



**Notes:** Size B VMS Board. Place on the southern side of Bridge Street on footpath, west of Phillip Street traffic signals. Facing westbound traffic.

### 3. Pitt Street, southbound, approaching Hunter Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER ROADWORK STREET** 9PM FRI **CLOSURE** -5AM MON During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 1 Message 2 **HUNTER FOLLOW** STREET MARKED **CLOSED DETOUR**

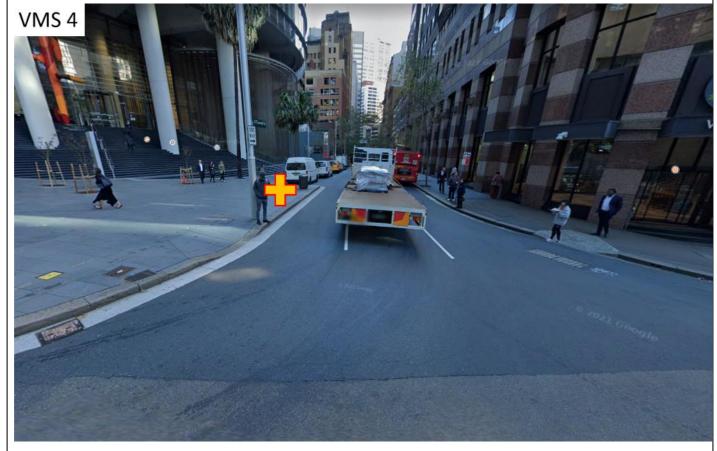
## **Location Photo:**



**Notes:** Size B VMS Board. Place on the western side of Pitt Street on footpath, north of Curtin Place intersection. Facing southbound traffic.

### 4. O'Connell Street, southbound, approaching Hunter Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER ROADWORK STREET** 9PM FRI **CLOSURE** -5AM MON During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 2 Message 1 **HUNTER** NO **ENTRY** STREET **CLOSED BUSES**

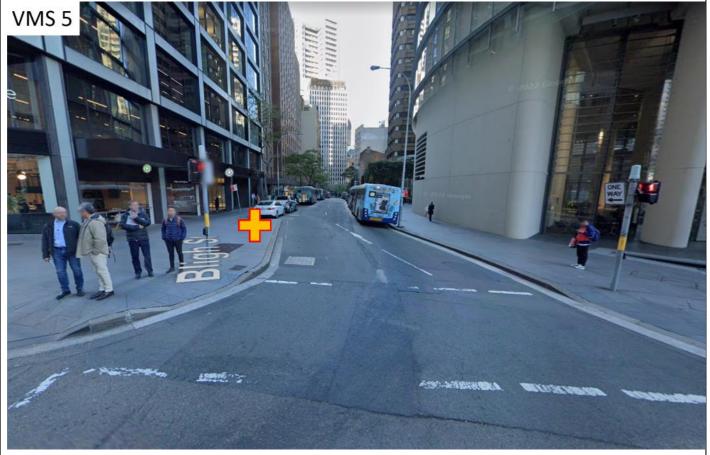
## **Location Photo:**



**Notes:** Size B VMS Board. Place on the eastern side of O'Connell Street on footpath, prior to on-street parking zone. Facing southbound traffic.

5. Bligh Street, southboun	5. Bligh Street, southbound, approaching Hunter Street, CBD							
Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023								
Message 1	Message 2							
HUNTER	ROADWORK							
STREET	9PM FRI							
CLOSURE	-5AM MON							
During Road Works: 21:00	Friday 23/06/2023 - 05:00 Monday 26/06/2023							
Message 1	Message 2							
HUNTER	FOLLOW							
STREET	MARKED							
CLOSED	DETOUR							

**Location Photo:** 



**Notes:** Size B VMS Board. Place on the eastern side of Bligh Street on footpath, prior to onstreet parking zone. Facing southbound traffic.

### 6. Bent Street, westbound, approaching Phillip Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER** ROADWORK STREET 9PM FRI -5AM MON **CLOSURE** During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 2 Message 1 **HUNTER** CITY WEST STREET VIA **CLOSED BRIDGE ST**

## **Location Photo:**



**Notes:** Size A VMS Board. Place on the southern side of Bent Street on footpath, prior to on-street parking zone. Facing westbound traffic.

### 7. Hunter Street, westbound, approaching Elizabeth Street, CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER ROADWORK** STREET 9PM FRI **CLOSURE** -5AM MON During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 1 Message 2 **HUNTER FOLLOW** STREET MARKED **CLOSED DETOUR**

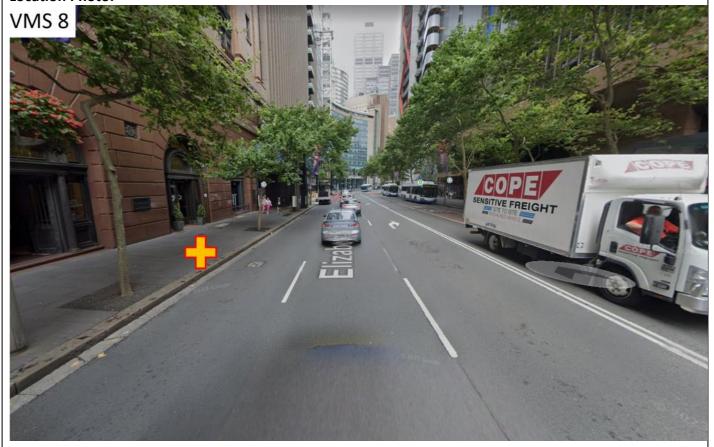
## **Location Photo:**



**Notes:** Size A VMS Board. Place on the southern side of Hunter Street on footpath west of Phillip Street intersection. Facing westbound traffic.

### 8. Elizabeth Street, northbound, approaching Hunter Street CBD Prior to Road Works: 21:00 Friday 16/06/2023 - 21:00 Friday 23/06/2023 Message 1 Message 2 **HUNTER** ROADWORK **STREET** 9PM FRI **CLOSURE** -5AM MON During Road Works: 21:00 Friday 23/06/2023 - 05:00 Monday 26/06/2023 Message 2 Message 1 **HUNTER CITY WEST STREET** VIA **CLOSED BRIDGE ST**

## **Location Photo:**



**Notes:** Size A VMS Board. Place on the western side of Elizabeth Street on footpath, south of bus stop. Facing northbound traffic.

The Transport Planning Partnership Suite 402 Level 4, 22 Atchison Street St Leonards NSW 2065

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## Appendix F HVLR Report

DOCUMENT TO BE APPENDED FOLLOWING APPROVAL BY DPE



## Appendix G Program of Works

	Ta	:Task Name	Duration	Start	Finish	
	Mo	d				Sur 20/05
0						Sat 24/06   7   8   9   10   11   12   3   4   5   6   7   8   9   10   11   12   3   4   5   6   7   8   9   10   11   12   1   2   3   4   5   6   7   8
1		Tower Crane Installation	58 hrs	Fri 23/06/23 6:00 PM	Mon 26/06/23 4:00 AM	
2	-4	0,	3 hrs	Fri 23/06/23 6:00 PM	Fri 23/06/23 9:00 PM	
3	-4	Implement ROL	2 hrs	Fri 23/06/23 9:00 PM	Fri 23/06/23 11:00 PM	
4	-4	HOLD POINT Weather and Traffic Control Safety Check	0 hrs	Fri 23/06/23 11:00 PM	Fri 23/06/23 11:00 PM	23 June 2023 11:00 PM
5	-4	Mobile Crane Set up	6 hrs	Sat 24/06/23 12:00 AM	Sat 24/06/23 6:00 AM	
6	-5	Mobile Cranes Arrive	1 hr	Sat 24/06/23 12:00 AM	Sat 24/06/23 1:00 AM	
7	-5	Boom Installation	2 hrs	Sat 24/06/23 1:00 AM	Sat 24/06/23 3:00 AM	
8	-5	Counter weight install	1 hr	Sat 24/06/23 3:00 AM	Sat 24/06/23 4:00 AM	
9	-5	Fly install and reeving	2 hrs	Sat 24/06/23 4:00 AM	Sat 24/06/23 6:00 AM	
10	-5	Shift change Over	1 hr	Sat 24/06/23 6:00 AM	Sat 24/06/23 7:00 AM	
11	-5	HOLD POINT Weather and Progress Check	0.25 hrs	Sat 24/06/23 7:00 AM	Sat 24/06/23 7:15 AM	
12	-5	PONR 1 - Tower Install	3.25 hrs	Sat 24/06/23 7:15 AM	Sat 24/06/23 10:30 AM	
13	-5	Install Base - HD23 26.12	0.5 hrs	Sat 24/06/23 7:15 AM	Sat 24/06/23 7:45 AM	h h
14	-5	Install 2x Towers - HD23 26.6	0.5 hrs	Sat 24/06/23 7:45 AM	Sat 24/06/23 8:15 AM	
15	-5	Install Upper towers x 8 - HD23 22.6	2.25 hrs	Sat 24/06/23 8:15 AM	Sat 24/06/23 10:30 AM	
16	-5	Tower Completion Go/No Go Point	0 hrs	Sun 25/06/23 1:30 PM	Sun 25/06/23 1:30 PM	25 June 2023 1:30 PM
17	-5	HOLD POINT Weather and Progress Check	0.25 hrs	Sat 24/06/23 10:30 AM	Sat 24/06/23 10:45 AM	The state of the s
18	-4	PONR 2 - JIB and A Frame	4.25 hrs	Sat 24/06/23 10:45 AM	Sat 24/06/23 3:00 PM	
19	-5	Install Slew Mount	1.25 hrs	Sat 24/06/23 10:45 AM	Sat 24/06/23 12:00 PM	
20	-4	Install Mini A-Frame	0.5 hrs	Sat 24/06/23 12:00 PM	Sat 24/06/23 12:30 PM	
21	-4	Install Cabin	1 hr	Sat 24/06/23 12:30 PM	Sat 24/06/23 1:30 PM	
22	-4	Install Rear Deck with Ballast Basket	0.5 hrs	Sat 24/06/23 1:30 PM	Sat 24/06/23 2:00 PM	
23	-4	Install Winches	0.5 hrs	Sat 24/06/23 2:00 PM	Sat 24/06/23 2:30 PM	
24	-4	Install A Frame	0.5 hrs	Sat 24/06/23 2:30 PM	Sat 24/06/23 3:00 PM	
25	-4	Jib and A Frame Complete Go/No Go Point	0 hrs	Sun 25/06/23 6:00 PM	Sun 25/06/23 6:00 PM	25 June 2023 6:
26	-4	HOLD POINT Weather and Progress Check	0.25 hrs	Sat 24/06/23 3:00 PM	Sat 24/06/23 3:15 PM	The state of the s
27	-5	PONR 3 - BOOM and Reeving	2.75 hrs	Sat 24/06/23 3:15 PM	Sat 24/06/23 6:00 PM	
28	Ą	Install boom	1.25 hrs	Sat 24/06/23 3:15 PM	Sat 24/06/23 4:30 PM	
29	-5	Reeve Tower Crane	1.5 hrs	Sat 24/06/23 4:30 PM	Sat 24/06/23 6:00 PM	
30	-5	Demobilise Mobile Cranes	7 hrs	Sat 24/06/23 6:00 PM	Sun 25/06/23 1:00 AM	
31	-4	Remove rope and Winch	0.5 hrs	Sat 24/06/23 6:00 PM	Sat 24/06/23 6:30 PM	
32	-5	Remove Fly	1 hr	Sat 24/06/23 6:30 PM	Sat 24/06/23 7:30 PM	
33	-5	Remove Counterweights	2 hrs	Sat 24/06/23 7:30 PM	Sat 24/06/23 9:30 PM	
34	-5	Remove Boom	2 hrs	Sat 24/06/23 9:30 PM	Sat 24/06/23 11:30 PM	
35	-5	Mobile Cranes Leave Site	1 hr	Sun 25/06/23 12:00 AM	Sun 25/06/23 1:00 AM	
36	-5	Latest Crane Demobilisation Start	7 hrs	Sun 25/06/23 9:00 PM	Mon 26/06/23 4:00 AM	
37	-5	Traffic Control Demobilise	2 hrs	Sun 25/06/23 1:00 AM	Sun 25/06/23 3:00 AM	
38	-5	Road Occupancy Complete	0 hrs	Sun 25/06/23 3:00 AM	Sun 25/06/23 3:00 AM	<b>₹</b> 25 June 2023 3:00 AM
39	-5	Tower Crane Commissioning	10 hrs	Sun 25/06/23 8:00 AM	Sun 25/06/23 6:00 PM	
40	-5	Road Occupancy Contingency	28 hrs	Sun 25/06/23 1:00 AM	Mon 26/06/23 5:00 AM	<u>★</u>
	· · · · · · · · · · · · · · · · · · ·	Task	Proje	ect Summary	Manual Task	Start-only E Deadline
•		tall Hr by Hr Split		ive Task	Duration-only	Finish-only Progress ———
vate: Tue	23/0	05/23 9:55 AM Milestone •		ive Milestone	Manual Summary Rollup	·
		Summary	Inact	ive Summary	Manual Summary	External Milestone



## Appendix H Authority Consultation



# **REVIEW COMMENTS SHEET**



DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	CLOSED OUT
SMWSTETP-JCG-SCB- SN100-TF-PLN-002273	Sydney Metro West - ETP - Construction Traffic Management Plan - Hunter Street - Tower Crane Installation	00.01	S3	01	26/04/2023	SMD	FVANDENBRI				No Comments		Y
				02	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	· Missing content.		Provide a detailed program of works for each site, with specific hold points shown.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Missing content.		Program of works included in Appendix G	Observation	N
				03	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Missing content.		Please provide all contingencies, rollback plans etc that will be in place to ensure that the road is opened by Monday morning.		N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Missing content.		New section 5.7 added to detail the rollback plans and contingencies	Observation	N
				04	26/04/2023	sco	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Clause 5.4 & 5.4.2	-	The proposed egress route via Elizabeth St / Phillip St is not supported due to the number of buses utilising this corridor. The route via Macquarie St is preferred.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Clause 5.4 & 5.4.2	-	The egress route via Elizabeth St/ Phillip St has been removed. All outbound vehicles will travel by Macquarie St.	Observation	N
				05	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	· Clause 6.2		The TCS at Hunter St / O'Connell St & Pitt St can not remain operational during this closure as the right turn from O'Connell St into Hunter/Pitt is not permitted and would conflict with the southbound Pitt St movement. As such the TCS must be disabled, and all movements controlled by Traffic Controllers / Police during the road closures.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	· Clause 6.2		Section 6.1 indicates, Police will control the signalised intersection of O'Connell Street/Hunter Street/Pitt Street. Figure 13 shows the simplified access arrangement plan. The signals will be changed to amber for the duration of the works.	Observation	N
				06	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	· Clause 6.3		Additional bus layover area will be required in Bligh St between Bent St and Hunter St to compensate for the loss of layover area in O'Connell St.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	· Clause 6.3		Section 6.3 updated to indicate All buses will be overlayed on Bligh Street, which would involve all available parking restrictions along Bligh Street to be changed to 'Bus Zone Route Service Buses Lay Over 15 minute Limit' restrictions during the Hunter Street road closure.	Observation	N
				07	26/04/2023	sco	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	· Clause 6.3		A traffic controller will need to be stationed at the intersection of Bent St and O'Connell St to stop route buses entering O'Connell St.		N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	· Clause 6.3		Section 6.3 updated to show, Traffic Controllers will be stationed at the intersection of Bent St / Bligh St and O'Connell St, directing layover buses to Bligh St and stopping buses entering down O'Connell St.	Observation	N
				08	26/04/2023	sco	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix B	-	There are not enough traffic controllers provided to safely control all pedestrian and vehicle movements.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix B		Extra TC have been added on the TGS to assist guide pedestrians.	Observation	N
				09	26/04/2023	sco	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix B		Include the TCSs required to get the heavy vehicles into and out of the closure areas.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix B		Extra TC have been added on the TGS to assist guide HV movements	Observation	N
				10	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		All portable VMS messages should be limited to 2 frames with each frame consisting of 3 lines of 8 characters.	Observation	N
						<u>L</u>		SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		As per the phone discussion, messages have been updated	Observation	N

DOCUMENT NO.	TITLE	VER STA	TUS NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	CLOSED OUT
			11	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		Lead in messages should begin 7 days prior to the closure.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		VMS strategy updated to show message should begin 7 days prior to the closure.	Observation	N
			12	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		A 'week of' message should be included (from Mon) which specifies days & times rather that dates. E.g. HUNTER/ST/CLOSURE//ROADWORK/9PM FRI/- 5AM MON	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		VMS messages updated to days and times as indicated in the comments	Observation	N
			13	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		Location 1 wont be discernible by drivers as its too close to the intersection.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		VMS 1 location has been amended	Observation	N
			14	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		Location 2 has plenty of footway width so a type B or C VMS can be utilised.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		VMS size has been changed to Type B	Observation	N
			15	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		Location 3: there is room for a type B VMS using both the shoulder and footway	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		VMS size has been changed to Type B	Observation	N
			16	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		Location 4 has plenty of footway width so a type B or C VMS can be utilised.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		VMS size has been changed to Type B	Observation	N
			17	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		Location 4 Message 3: second from should be used to tell buses not to enter.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		Message 3 is updated to show no entry for buses	Observation	N
			18	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		Location 5 has plenty of footway width so a type B or C VMS can be utilised.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix C		VMS size has been changed to Type B	Observation	N
			19	26/04/2023	SCO	PKEYES	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix D		What is the largest size vehicle that can turn from O'Connell St into Pitt St? Vehicles larger than this should be prevented from entering O'Connell St at Bent St.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix D		The OSOM vehicle will be coming down Pitt St and not be entering O'Connell St from Bent St.	Observation	N
			20	26/04/2023	SMD	PBROGAN	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	General	CTMF	Please clarify in the document whether any aspect of the works triggers the need for referral via the Local Traffic Committee bearing in mind this CTMF extract: "Matters that may need to be considered by the Local Traffic Committee include: establishment of a kerbside work zone on a local or Regional road, CTMP's if regulatory signposting is proposed to be changed, changes to parking restrictions and road closures."	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	General	CTMF	The proposed road closures and the change in parking restriction has been referred to CoS LTC. This confirmation has been provided in section 6.1.	Observation	N
			21	28/04/2023	TFN	LWILBY	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	4.2 Abutting Road Network	i NA	This section states that all surrounding roads are 40km/h speed limit - however George Street has a speed limit of 20km/h. Please update the text to reflect this.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	4.2 Abutting Road Network	i NA	George St is not proposed to be used by the Tower Crane installation vehicles.	Observation	N

DOCUMENT NO.	TITLE	VER STATUS	S NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	CLOSED OUT
			22	28/04/2023	TFN	LWILBY	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	5.4 Haulage routes	NA	Please outline or show on Figure 12 how these routes compare to the EIS approved routes. If they are different, please include an outline of why different routes are needed and what mitigation measures have been added to ensure safety for other road users along these routes.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	5.4 Haulage routes	NA	Figure 12 is updated and a HVLR report added in the appendices explaining the EIS approved routes and the proposed haulage routes for the weekend.	Observation	N
			23	28/04/2023	TFN	LWILBY	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	6.5 Impact on cyclists	NA	Cyclists along the King St cycleway will also potentially be impacted as the haulage route runs along King Street and turns across the cycleway (under signalised control). Please update text to capture this.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	6.5 Impact on cyclists	NA	Section 6.5 updated to capture the comment	Observation	N
			24	28/04/2023	TFN	LWILBY	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	8.3 Road Safety Auditing	CTMF Framework requirements	Please attach a completed road safety audit to this TMP that considers the proposed movements (including longer vehicles), haulage routes and traffic control set up so that the appropriateness and effectiveness of the controls implemented to address risks raised can be assessed.	Actual Non-Compliance	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	8.3 Road Safety Auditing	CTMF Framework requirements	RSA attached in the appendices.	Actual Non-Compliance	N
			25	28/04/2023	TFN	LWILBY	002273	Appendix D - Swept Paths Gresham onto Spring		The swept path for the 19.5m vehicle turning from Gresham Street onto Spring Street crosses the centre line on Spring Street - increasing the risk of head on collisions and side swipe collisions as the available space for a vehicle approaching the pedestrian crossing narrows considerably. Please consider this risk and demonstrate how it will be managed SFAIRP.	Minor Non-Compliance	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix D - Swept Paths Gresham onto Spring	Other road users safety clause	The swept paths have been amended to show that vehicles do not cross over the centreline.	Minor Non-Compliance	N
			26	28/04/2023	TFN	LWILBY	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix D - Swept Paths Pitt onto King	Other road users safety clause	The swept path for the 19.5m vehicle turning from Pitt Street onto King Street crosses into the cycleway through the intersection. This presents a collision risk to any cyclists using that area as storage before proceeding through the intersection. Although cyclists should not be storing there, some users will make mistakes and we should cater for this where we reasonably can. Please consider what warnings can be given to cyclists about the presence of long heavy vehicles through this intersection to reduce the risk of a serious crash occurring SFAIRP.	Minor Non-Compliance	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix D - Swept Paths Pitt onto King	Other road users safety clause	Pitt / King St is a signalised intersection controlling vehicle, cyclist and pedestrian movement. Cyclist should not be parked in the middle of the intersection. Intersection operation would be no different to any other times. All HV drivers will be toolboxed and made aware of pedestrian and cyclist movements within the CBD.	Minor Non-Compliance	N
			27	1/05/2023	CSC	TMITCHELL	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	N/A	TGS should show traffic controllers in the same location of the police. The police are only there to assist the controllers in their role of managing the closure and traffic movements.	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	INI/A	Police will be in control of the intersection, not assisting the traffic controllers. Traffic controllers will assist Police by controlling and guiding pedestrians at and around the intersection.	Observation	N
			28	1/05/2023	CSC	JFAULL	002273	002273	N/A	CoS feel it would be beneficial to run O'Connell St as 2 way during the closure for your own trucks to get back out. This would be under traffic control and will reduce the impact to Pitt St and Kings St which will already be at capacity.	Observation	N
							SCB-SN100-TF-PLN- 002273	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	N/A	Additional information has been provided and this issue is now closed out. The traffic management will remain as per the original CTMP submission.	Observation	N
			29	1/05/2023	SMD	ASTYPEL	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Table 5	N/A	A. Styple: Table 5 requires update in line with the CEMP	Observation	N
							SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Table 5	N/A	Overview of ETP works phasing has been added in Section 2.3 (Table 4)	Observation	N

DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	CLOSED OUT
				30	1/05/2023	SMD	ASTYPEL	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix	N/A	A. Styple: Add an appendix in preparation for "approval" eg JCG approval	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix	N/A	Appendix I has been added for approval documents	Observation	N
				31	2/05/2023	RMS	MTITA				No Comments		Y
													Υ
				32	3/05/2023	RMS	HYOUSAF	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Figure 7	NA	Is current parking use outside the Western site No Stopping? It seems like loading zone as the vehicles are parked there behind kerb extension.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Figure 7	NA	It is a No Stopping zone, vehicles ignore parking restrictions. This section of Hunter St will be closed to general traffic.	Observation	N
				33	3/05/2023	RMS	HYOUSAF	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Section 5.4.1	NA	For Hunter East, why do we need vehicles to perform reverse movement? Can they just do a normal left turn from Pitt Street to Hunter Street for inbound movement? For outbound movement can they just continue along Hunter Street and turn left on Macquarie St?		N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Section 5.4.1	NA	Hunter St just west of Bligh St will be fully closed due to the 650t mobile crane set up. The suggested movement is not physically possible.	Observation	N
				34	3/05/2023	RMS	HYOUSAF	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Section 5.4	NA	Why are we not using EIS approved routes/roads? What is the reason for not using King St>Elizabeth St>Hunter St>Macquarie St as outbound route?	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Section 5.4	NA	Hunter St just west of Bligh St will be fully closed due to the 650t mobile crane set up. The EIS route implementation is not possible	Observation	N
				35	3/05/2023	RMS	HYOUSAF	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Section 5.4.2	NA	Alternate outbound route using St James route not supported. Please remove this route.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Section 5.4.2	NA	See comment 04 above. Therefore, It is proposed to use the alternative route via St James/ Macquarie St.	Observation	N
				36	3/05/2023	RMS	HYOUSAF	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Section 6.3	NA	Communication and agreement with bus operators regarding the bus layover changes to be made part of the CTMP.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Section 6.3		Section 6.3 has been updated to address the comment.	Observation	N
				37	3/05/2023	RMS	HYOUSAF	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Figure 15	NA	Traffic arrangements on O'Connell street shown by red arrows are incorrect. It is left only at the moment.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Figure 15	NA	Figure 15 amended, red arrows removed	Observation	N
				38	3/05/2023	RMS	HYOUSAF	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	General	NA	Communication with all other stakeholders like emergency services, SLR etc or any others being affected to be made part of this CTMP.	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	General	NA	Section 6.6 updated	Observation	N
				39	9/05/2023	SMD	SCLARKE	SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix B - TGS	N/A	It is noted that O'Connell Street is currently 2 lanes towards Hunter Street The TGS does not outline proposed if there is any management of traffic lane configuration on O'Connell Street into Pitt Street. is it intended to have both the two lanes from O'Connell turning right into Hunter / Pitt? Whilst there are two lanes southbound in Pitt (the intended path from O'Connell St), there is risk during the dogleg manoeuvre between O'Connell into Pitt St may have the risk of side impact crashes	Observation	N
								SMWSTETP-JCG- SCB-SN100-TF-PLN- 002273	Appendix B - TGS	N/A	Currently there is only one lane out of O'Connell, normally left turn only, which will be converted to one lane right turn during the closure. Police will be controlling the blacked out intersection, Plan is updated to reflect this.		N



## Appendix I Approval





## **General Correspondence**

Reference No: SMWSTETP-SMD-GEN-000118
Project Title: Sydney Metro West Project Delivery

Contract No: ETP - 00013/13102 - Eastern Tunnel Package

Sub Contract:

Orig Ref No:

DLM:

Date: 29 May 2023, 05:12 PM Response required by:

From: Nicole Johnson (Sydney Metro)

To: Hedie Masanga (John Holland CPB Ghella JV)

Frank Van den Brink (Sydney Metro); Andrew Kouros (Sydney Metro); Ash Jarvis (Sydney Metro);

Cc: Sean Clarke (Sydney Metro); Shay Kurz (Sydney Metro); Shome Sikdar (Sydney Metro);

David Huynh (Sydney Metro)

Subject: RE: Sydney Metro West - ETP - Construction Traffic Management Plan - Hunter Street - Tower

Crane Installation - Rev 01 - Approval from Customer Journey Planning (CJP)

This mail item is received via EMAIL from Nicole Johnson on 29-05-23 05:08:48 PM +10:00 and processed by Nicole Johnson of Sydney Metro on 2023-05-29 5:10:31 PM +10:00.

From: Nicole Johnson<Nicole.Johnson@transport.nsw.gov.au>

**Sent:** Monday, 29 May 2023 05:08:44 PM

To: Hedie Masanga<hildelita.masanga@jcgjv.com.au>

Cc: Frank Van den brink<Frank.Vandenbrink2@transport.nsw.gov.au>, Andrew

Kouros<Andrew.Kouros@transport.nsw.gov.au>, Ash Jarvis<Ash.Jarvis2@transport.nsw.gov.au>, Sean Clarke<Sean.Clarke@transport.nsw.gov.au>, Shay Kurz<Shay.Kurz@transport.nsw.gov.au>, Shome Sikdar<Shome.Sikdar@transport.nsw.gov.au>, David Huynh<David.Huynh@transport.nsw.gov.au>,

SMWST1@tbupload.com

**Subject:** RE: Sydney Metro West - ETP - Construction Traffic Management Plan - Hunter Street - Tower Crane Installation - Rev 01 - Approval from Customer Journey Planning (CJP)

Hi Hedie,

### References:

(1) Contractor's Transmittal no SMWSTETP-JCG-TX-000624 – 25 May 2023.

Please see below the approval from Customer Journey Planning.

Will issue the formal acceptance via transmittal.

Kind Regards,

### **Nicole Johnson**

**Document Control** 

Eastern Tunnel Package (ETP) Sydney Metro West

E nicole.johnson@transport.nsw.gov.au I M 0475 924 200

### sydneymetro.info

Level 43, 680 George Street, Sydney NSW 2000

PO Box K659, Haymarket NSW 1240



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I acknowledge the traditional owners of the land on which I work and pay my respects to their Elders, past and present.

\_\_\_\_\_

From: Peter Keyes <Peter.KEYES@transport.nsw.gov.au>

Sent: Monday, 29 May 2023 7:16 AM

To: Sean Clarke < Sean.Clarke@transport.nsw.gov.au >

Cc: Vidushi Sahni < Vidushi.Sahni@transport.nsw.gov.au >; Darren Crowly < Darren.Crowly@transport.nsw.gov.au >; James

Suprain < <u>James.SUPRAIN@transport.nsw.gov.au</u>>

Subject: FW: Sydney Metro West - ETP - Construction Traffic Management Plan - Hunter Street - Tower Crane Installation

- Rev 01 - Issued for Review and Comment Close Out

Hi Sean,

Transport for NSW, Customer Journey Planning, Project & Service Changes hereby approve the following Construction Traffic and Transport Management Plan:

Project:	Sydney Metro West – Eastern Tunnelling Package
Title:	Hunter Street – Tower Crane Installation
Document Number:	SMWSTETP-JCG-SCB-SN100-TF-PLN-002273

Revision: 01

This approval is subject to the following requirements being met:

- Apply to and obtain approval from TMC for ROLs for any required lane closures and/or Speed Zone Authorisations as part of the ROL;
- All temporary lane closures to be implemented in accordance with Transport for NSW Traffic Control at Worksites Technical Manual Issue No.6;
- Conduct a Road Safety Audit post implementation of the road closure and address any issues identified in the Road Safety Audit and Risk Assessment
- Regularly monitor the implemented traffic arrangements, traffic queues and road conditions along
  the adjacent road network, to identify any operational/safety issues and rectify in consultation with
  stakeholders, including CJP and TMC as required;
- Approval of this CTTMP does not constitute approval of the Traffic Guidance Schemes therein.
- Ensure close liaison with CJP post implementation of the road closures to allow for a coordinated management of traffic impacts; and
- Ensure the requirements of the Communication Strategy in the TMP, in consultation with CJP, are fulfilled prior to the implementation of the TMP.
- addressing any issues raised by Council, STA, Taxi Council, residents/businesses or Emergency Services in the CTMP approval process;
- addressing the requirements arising as an outcome of the Local Traffic Committee meeting.

### **Pete Keyes**

Operations Manager | Project & Service Changes

Customer Journey Planning | Greater Sydney

### **Transport for NSW**

M 0477 302 205 E peter.keyes@transport.nsw.gov.au



From: Hedie Masanga via InEight Document <system@teambinder.com>

Sent: Thursday, 25 May 2023 9:07 AM

**To:** Nicole Johnson <Nicole.Johnson@transport.nsw.gov.au>

**Subject:** Sydney Metro West - ETP - Construction Traffic Management Plan - Hunter Street - Tower Crane Installation - Rev 01 - Issued for Review

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# **Document Transmittal**

Transmittal No: SMWSTETP-JCG-TX-000624

Contract No: ETP - 00013/13102 - Eastern Tunnel Package

Sub Contract: ETP

**Date:** 25 May 2023, 09:06 AM

Issued	Name
Ву	Hedie Masanga (John Holland CPB Ghella JV)

Is	sued	Name
To	0	Peter Brown (Sydney Metro); Shome Sikdar (Sydney Metro); Sean Clarke (Sydney Metro); Ari Stypel (Sydney Metro); Philip Brogan (Sydney Metro)
С	С	Transmittal SMD OpenAccess (Sydney Metro); Demi Tascas (Sydney Metro); Nicole Johnson (Sydney Metro); Tom Murray (Sydney Metro); Shay Kurz (Sydney Metro); Ash Jarvis (Sydney Metro); Todd Solomon (Sydney Metro); Emre Denk (Sydney Metro); Frank Van den Brink (Sydney Metro); Nathan Bryant (John Holland CPB Ghella JV); Hedie Masanga (John Holland CPB Ghella JV)

Reason for Issue	Issued for Review					
Respond By Message	Your Approval is required by	Respond By Date	01 June 2023			
Subject	Sydney Metro West - ETP - Constructio Installation - Rev 01 - Issued for Review		ter Street - Tower Crane			

Dear Sydney Metro,

Please find attached the ETP- Construction Traffic Management Plan - Hunter Street Tower Crane Install - Rev 01.

This document is submitted for review and closeout of comments (5-day review cycle), in accordance with the CTMF.

Regards,

Hedie Masanga Document Controller Sydney Metro West – Eastern Tunnelling Package John Holland CPB Ghella Joint Venture

Sent on behalf of Nathan Bryant Construction Integration Manager

Click here to download all Transmittal files.

Item	Document No	Title	Rev	Sts	Туре	Design Lots	Alt Doc No
11 1		Sydney Metro West - ETP - Construction Traffic Management Plan - Hunter Street - Tower Crane Installation	01.01	S3	PLN		SMWSTETP-JCG-SCB- SN100-TF-PLN-002273

TeamBinder Transmittal Reference: {6E39C6CA-BEA8-491F-B7A8-E5CA1E3B8DA5}

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