

Construction Traffic Management Plan

Northern Dive Site Operations

Line-wide Works Contract Sydney Metro City & Southwest

Project number: C600

Document number: SMCSWLWC-SYC-DCH-TF-PLN-002505

Revision date: 18 October 2023

Revision: 5

Document Approval

Rev.	Date	Prepared by	Reviewed by	Recommended by	Approved by	Remarks
Α	13 Mar 2020	Mong Sim	Kia Arbabi	Simon Tibbett	Scott Hunter	Initial submittal.
В	24 Apr 2020	Mong Sim	Jason Bitmanis	Simon Tibbett	Scott Hunter	General comments from stakeholder.
С	8 May 2020	Mong Sim	Jason Bitmanis	Simon Tibbett	Scott Hunter	General comments from stakeholder.
0	26 May 2020	Mong Sim	Jason Bitmanis	Simon Tibbett	Scott Hunter	Approval.
1	3 July 2020	Mong Sim	Jason Bitmanis	Simon Tibbett	Scott Hunter	Additional comments.
2	3 Mar 2021	Mong Sim	Jason Bitmanis	Simon Tibbett	Scott Hunter	Usage of an existing light vehicles gate at Mowbray Road.
3	11 Aug 2022	Mong Sim	Omar Alfahem	Kia Arbabi	Scott Hunter	Appendix E added for utilities work at Mowbray Road
4	12 Sept 2023	Matthew Keswick	Jason Austin	Kia Arbabi	Adrian Wuillemin	Appendix F added for Redundant Shed Removal
5	18 October 2023	Matthew Keswick	Jason Austin	Kia Arbabi	Adrian Wuillemin	Appendix F redrafted in response to comments from stakeholders

Signature: 2007	!Keswick J Austin	Kia Arbabi	Allh.	
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Details of Revision Amendments

Document Control

The Project Director is responsible for ensuring that this plan is reviewed and approved. The Project Traffic Manager is responsible for updating this plan to reflect changes to legal and other requirements.

Amendments

Any revisions or amendments must be approved by the Project Director and/or client before being distributed/implemented.

Revision Details

Revision	Details
Α	Issued to for stakeholder review.
В	Comments from SCO, Transport NSW, Sydney Metro and Council incorporated into the CTMP.
С	Revised start date and minor revision to Section 3.6. Removal of 3D rendering diagram per SM request.
0	No further comments from TfNSW provided all other stakeholders comments are satisfactorily addressed.
1	Sydney Metro additional comments.
2	Reopening of an existing gate (closest to Pacific Highway) at Mowbray Road to segregate light and heavy vehicles from using the same entry and exit gate currently used. The proposed gate usage is subject to TfNSW instruction and/or conditions. Update on Figure 2, reworking on Section 2.1, Section 3.2., Figure 6A, Table 1.
3	Appendix E added to include utilities work at Mowbray Road.
4	Appendix F added to include shed dismantlement along Nelson Street and Pacific Highway
5	Appendix F redrafted in response to comments from stakeholders

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1. PART A – Management Systems, Compliance and CTMP Overview

1.1. Structure of this Plan

This Construction Traffic Management Plan (CTMP) describes Systems Connect traffic management planning and compliance during the construction stage for the Sydney Metro City & Southwest.

Part A: Overview	This section clearly defines: Project Overview, Objectives, Management and Compliance Overall project summary and overview
Part B: Implementation	This section outlines in detail the key aspects for Traffic Management on the Project including: Implementation Details Traffic Impact Assessment Transport Management Communications
Part C: Appendices	This section provides the following Appendices: Design/Staging drawings Costruction vehicles route Copy of correspondence Compliance matrix

This Construction and Traffic Management Plan (CTMP) forms part of the Systems Connect Integrated Management Systems.

1.2. Management and Planning Strategy

This CTMP dictates the overall traffic management plan including resources, processes and procedures during construction of Sydney Metro Chatswood to Bankstown works.

This Plan aims to address the following objectives:

- Local road staging and traffic management plan
- Obtaining relevant approvals, whether from Local Council, Transport for NSW, Customer Journey Planning (CJP), Sydney Metro
- Specific community / stakeholder consultation process and community relations strategies for managing changed traffic conditions
- Potential road network impacts and the mitigation and management of them
- Auditing, inspections and monitoring the road network
- Fulfill the requirements of Principal's G10 Specification Traffic and Transport Management
- Meet the contractual requirements
- Management of incidents
- Provide and facilitate a mechanism for the monitoring, ongoing regular review and updating of this CTMP.

1.3. Compliance

This CTMP has been developed to address Planning Approval and Frameworks requirements as applicaabl by location . They are:

- Critical State Significant Infrastructure (CSSI 7400) and Revised Environment Mitigation Measure
- Critical State Significant Infrastructure (CSSI 8256) and Revised Environment Mitigation Measure
- Sydney Metro City and Southwest Construction Environment Management Framework
- Sydney Metro City and Southwest Construction Traffic Management Framework

A Planning Approval and REMM compliance matrix is provded in Appendix D

1.4. Relevant Legislation

The key legislation relevant to traffic management includes:

- Environmental Planning and Assessment Act (EPA) 1979 Act
- The Roads Act 1993.
- Heavy Vehicle National Law 2014
- Work Health and Safety (WHS) Act 2011
- Principal's General Specification G10 Traffic and Transport Management
- Traffic Control at Worksites Manual
- Relevant Australian Standards (AS) and Ausroads Guidelines

1.5. LW Project Overview and Scope

Line-wide Works (LW) is delivered by Systems Connect, a CPB Contractors and UGL Engineering Joint Venture. Systems Connect is delivering LW in four distinct portions as follows, and as described in detail in Section 1.3.

- Portion 1 SMTF (Tallawong) expansion works
- Portion 2 SMTF South (Marrickville) stabling yard
- Portion 3 Chatswood to Sydenham works
- Portion 4 Sydenham to Bankstown works

The Sydney Metro City & Southwest (SMCSW) project will extend the current Sydney Metro Northwest which stops at Chatswood, to the CBD and to Bankstown.

The SMCSW project is being delivered through a series of contracts for the tunnels, stations, line-wide infrastructure and systems.

Line-Wide Works to be constructed by Systems Connect include:

- Tunnel works between Chatswood and Sydenham, comprising:
 - Tunnel track slab and rails;
 - o High voltage reticulation, traction power and power control systems;
 - o Earthing and bonding, electrolysis control and lightening protection measures;
 - o Tunnel ventilation system;
 - o Tunnel mechanical and electrical services;
- Northern Dive track slab and rails;
- Northern Dive Service Building works Chatswood;
- Artarmon Substation Service Building works;
- Southern Dive Service Building works Sydenham;
- Station civil works between Chatswood and Sydenham;
- Extension of the existing Sydney Metro Trains Facility Tallawong;
- Construction of a new Sydney Metro Trains Facility (South) Sydenham;
- Northern Connection works, tying the new Metro lines into the T1 North Shore Line Chatswood.

LW is a key component of the SMCSW project, with works taking place over the full length of the project as shown in Figure 1 between Chatswood and Bankstown.

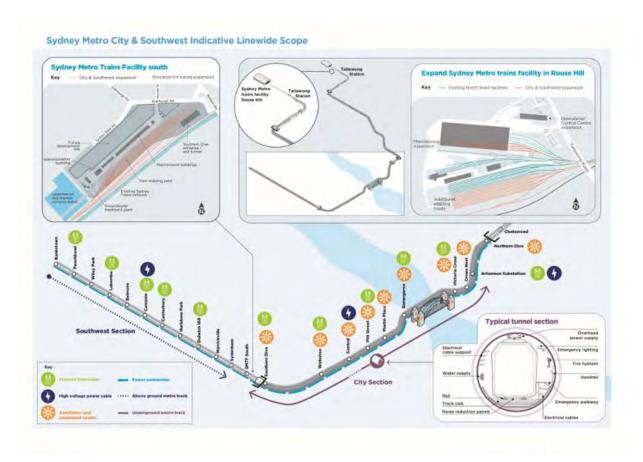


Figure 1. Line-wide Works Line Diagram (Latest diagram)

2. PART B - Implementation

2.1. Northern Dive building site description

The northern dive building site is located approximately within the perimeter of Nelson Street - Pacific Highway – Mowbray Road and adjacent to the T1 Northshore line rail corridor at Chatswood. The northern dive building site is shown on Figure 2.

The northern dive building site works are listed below and not limited to:

- a service building construcion
- water storage tank building including a pump room
- landscaping and other civil/mehanical works (fencing, plumbing, etc)
- removal of temporary signalised access off Mowbray Road (the signalised intersection maybe retained as a permanent asset, asset owner to advise final option)
- new driveway off Nelson Street
- logistics delivery point for tunnel fitting materials, equipment and components

During metro tunnel fitout works the site will operate as a logistics and maintenance depot, northern tunnel access point, and site compound with welfare facilities for construction and maintenance personnel. Typical deliveries will include rail, concrete, precast elements and mechanical and electrical tunnel components.

Access into the work site is via an existing angled entry and existing signalised exit (intersection) off Mowbray Road only. There is an existing gate off Pacific Highway which is not to be used as general construction access. The gate off Pacific Highway is unlikely to be used through the course of construction phase. Any use of this gate requires an agreement by Customer Journey Planning (CJP) and/or Transport for NSW. An existing gate off Mowbray Road that is not currently used at Mowbray Road is proposed to be reopened as shown on Figure 2. The reopening of this gate allows seperation of light vehicles from heavy vehicles that both currently share the same entry and exit. The proposed gate is both as an entry and exit for light vehicles only. The gate will be used between 20 to 30 light (office staff) vehicles. The movement is mostly between 6am – 9am and 4pm – 6pm.

Northern dive building construction site work will begin from November 2020 till mid 2023.

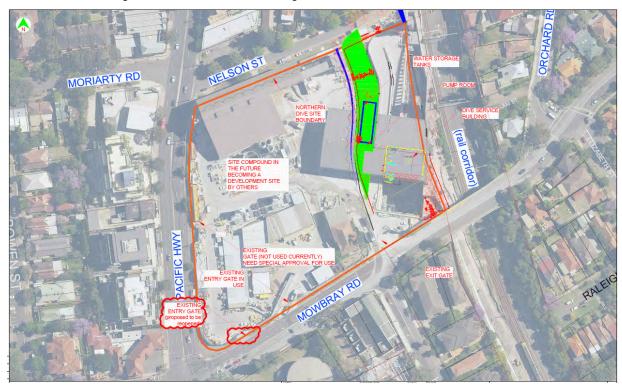


Figure 2 – Locality map of the northern dive works. Refer to Appendix A.

(Figure 3 removed)

All existing temporary traffic signs, median, pavement marking installed previous by contractor will be retained.

3. Traffic and Transport Management

3.1. Parking

Pacific Highway between Fullers Road and Mowbray Road is within the Sydney Clearways Program that was rolled out in stages from circa 2018. The clearway is signposted Monday – Friday from 6am to 7pm, clearway from 9am to 6pm Saturday, Sunday and public holiday. This section along Pacific Highway southbound is signposted "No Parking" outside Clearway hours.

Limited construction staff only parking is available within the compound boundary. Construction staff are expected to take advantage of the site close proximity to Chatswood and Artarmon train station to use the train as the chosen mode of transportation to and from work. Construction staff are not recommended to use side streets parking in the area.

3.2. Pedestrians/Cyclists

Footpath is not impacted nor closed at anything stage during the work. Existing and new pedestrian guide signs are maintained/added till end of construction. There are no dedicated cycle routes along the area and thus no immediate impact. Cyclists to adhere to standard road rules. Removal of the high fencing may require temporary footpath closure during the endstate. Details of removal is yet to be finalised depending on final design phase that is on going at the time of CTMP development.



Figure 4 – Existing pedestrian management signs to be maintained (looking east from Mowbray Road)



Figure 5 – Existing pedestrian management signs to be maintained during construction (looking east from Mowbray Road)



Figure 6 – Existing entry and exit gate off Mowbray Road. (looking towards west from Mowbray Road)



Figure 6A – Proposed reopening of the existing gate at Mowbray Road with pedestrian warning signs on both sides of the driveway

3.3. Businesses / Residents Access

The work site is not adjacent to any immediate busineses nor residential establishments.

3.4. Bus Operations

The closest bus stop within the perimeter of the work area along Pacific Highway soutbound bus stop # 206747 located between Nelson Street and Mowbray Road. The bus stop is not impacted during the operations of the building site.



Figure 7 – Bus stop # 206747 along Pacific Highway. (looking south from Pacific highway)

3.5. Emergency Services

Emergency services are not impacted from the works as there are no road closures in place during the operations of the building site.

3.6. Construction Vehicles Route

Routes for construction vehicles nominated are the most direct to the site. Building and tunnels materials delivery route by 12m long or greater vehicles (see Figure 4) is via all the major arterial roads – Pacific Highway and M2.

Concrete delivery route (Figure 5) is originating from Artamon indusrial area (for instance Boral concrete plant located at 88 Reserve Road, Artamon). The nominated delivery route is within an industrial route via Campbell Street - Pacific Highway – Mowbray Road - with no usage of local residential roads. Return route is the same except empty concrete trucks turn off at Dickson Avenue to take advantage of the signalised intersection of Dickson Avenue and Reserve Road for a safer and controlled merging.



Figure 8 – Vehicles over 12m long nominated routei. Refer to Appendix B.

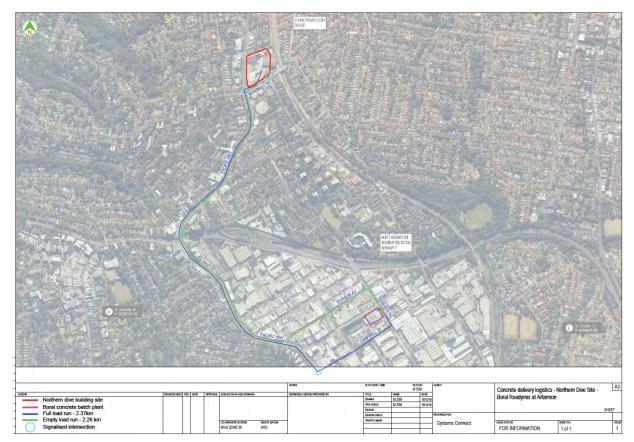


Figure 9 – Concrete delivery route. Refer to Appendix B.

Construction traffic generated from the northern dive building works are as shown on Table 1.

Time	Time	Light (arrival only)	Heavy	Max Heavy
7:00	10:00	2-30	2	6
10:00	12:00	10	30	30
12:00	14:00	10	30	30
14:00	15:00	30	30	30
15:00	16:00	30	2	6
16:00	18:00	2	2	6
18:00	7:00	2-30	2-8	6 - 8

Table 1. EIS Vehicle movements

Truck movements in actual operation are unlikely to match the peak of the EIS value due to the nature of the work. EIS movements are the maximum movements for the construction site as a whole.

The site will be shared between Line-Wide and in future stage TSOM until practical contract completion.

4. Systems Connect and Stakeholder Key Contacts

Systems Connect and key stakeholders contacts below for the overall integration of the CTMP.

Name	Role	Contact Details
Carl Mella	Transport for NSW – Integration Leader	13 22 13
Jake Coles	Sydney Coordination Office - Operations Manager – CBD	0466 454 819
Stephen Brown	Sydney Coordination Office - Precinct Project Manager	0457 809 028
Phil Brogan / Ken Hind	Sydney Metro – Traffic Advisors	0401 719 632 0416 797 029
Gordon Farelly	Willoughby Council – Traffic & Transport Team Leader	02 9707 9000
Matt Billings	Systems Connect – Environment Manager	0428 781 599
Simon Tibbett	Systems Connect – Project Manager	0457 761 648
Craig Godwin	Systems Connect – Safety Manager	0458 498 107
Svetlana Paunovic	Systems Connect – Community Manager	0438 540 245
Scott Francis	Systems Connect – Superintendent	0429 901 489
Mong Sim	Systems Connect – Traffic Engineer	0448 378 883

5. Communications and Community Strategy

Systems Connect will meet the reasonable needs and desires of the community for information on any changed traffic conditions, cyclist and pedestrian impacts and property access arrangement. Systems Connect will ensure that the public and other key stakeholders are informed of planned traffic arrangements, including any activities which may result in delays.

Communications, consultation and the dissemination of information associated with traffic and access will be undertaken as outlined in this section.

The aim of consultation and broad communication on traffic and access matters is to:

- Facilitate community feedback regarding traffic issues
- Recommend alternative and appropriate travel patterns during periods of change
- · Manage traffic impacts to protect affected residential and business amenity
- Provide timely, accurate and comprehensive traffic information using all available media to inform road users and the community of the project's traffic impact mitigation measures.

Ongoing consultation with stakeholders will ensure that effective traffic management measures are developed and implemented to minimise disruption and inconvenience.

Systems Connect will coordinate engagement with Sydney Metro and the members of the TTLG to enable the local community and other stakeholders to receive timely and accurate information associated traffic and transport issues.

Tool	Purpose	Frequency
Traffic alert emails	Email alerts to Transport for NSW , Transport Management Centre, Council, transport operators and emergency services to advise of major traffic changes including road or lane closures and detours, incidents or undue congestion	5 business days prior to changes if applicable As soon as practicable following incidents or undue congestion
Advertisements	To inform of significant traffic changes, detours and traffic disruptions as required to comply with approvals; in local newspapers, radio and/or project website	5 business days prior to changes
Letterbox notifications	Notification letters to inform local residents and businesses potentially affected by planned traffic changes	7 business days prior to changes
Community emails	To inform and update the community of project progress, milestones, activities planned for the following	As required

Tool	Purpose	Frequency
	month, current and upcoming traffic changes	
Community information line	Information to the project details with message service via an 1800 number	As required
TfNSW Sydney Metro website	Systems Connect will provide information in electronic format suitable to be uploaded onto the TfNSW Sydney Metro website, including copies of advertisements, traffic alerts, notification letters and other public material related to the works	As required
Systems Connect website	Information about the northern dive building site construction activities will be placed on the Systems Connect website including information about traffic changes, and executive summaries of publicly available reports relating to the project activities.	As required

The table above provides a guide to inform the community of changes to road and traffic conditions. It also provides a summary of the purpose and frequency of each method of communication.

6. Working Hours

The standard working hours 7am – 6pm on weekdays and 8am – 1pm on Saturdays. Some activities will need to be undertaken outside of these hours. Refer to out of hour application for additional details as required.

Construction Activity	Construction Hours / Comments		
Standard construction hours	Monday to Friday: Saturdays: Sundays & Public Holidays:	7am – 6pm 8am to 1pm No work	
Standard out of hours	Saturday afternoons: Sundays:	1pm – 5pm 8am – 5pm	
24 hour construction where applicable	(Refer to condition E48)		

7. Manage Emergencies

Systems Connect acknowledge the inevitable nature of emergencies and their potentially significant social, economic and environmental consequences. Accordingly, we are aware that the NSW Government has enacted the State Emergency & Rescue Management Act 1989 to support emergency management activities.

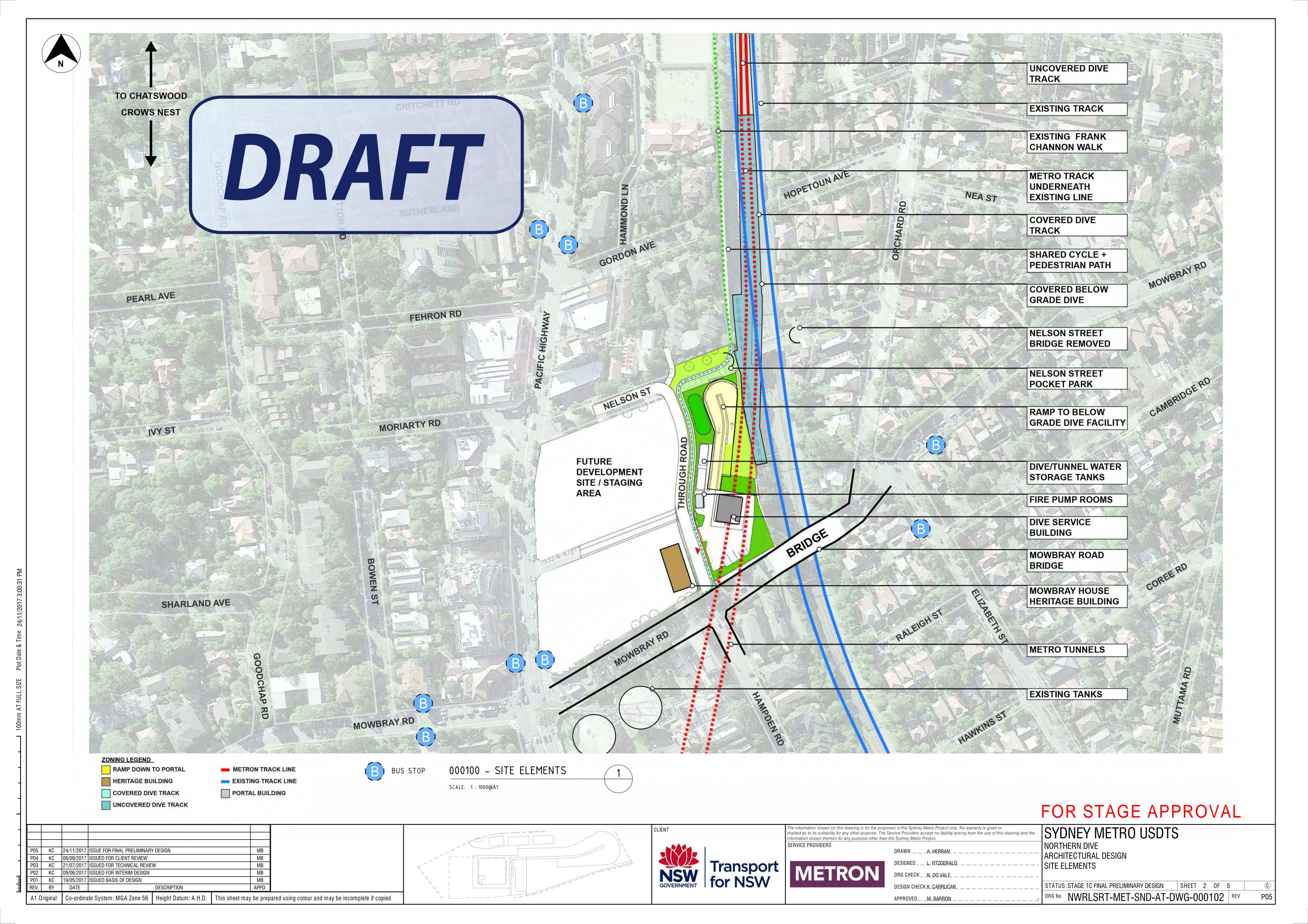
In NSW, the agencies primarily responsible for controlling hazards/emergencies are:

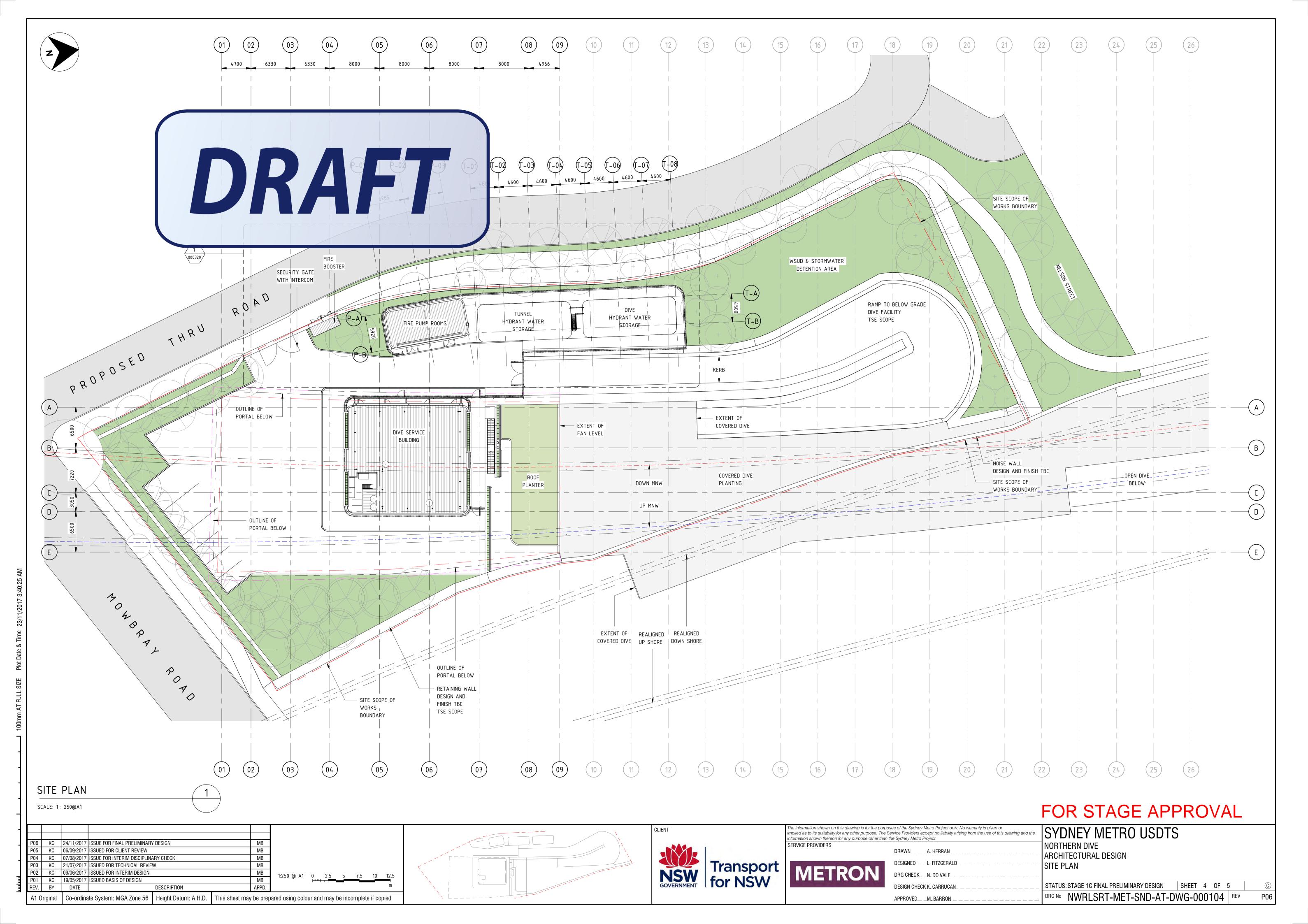
Unplanned Incident Agency Responsibility		
Law Enforcement / Emergencies	NSW Police	
Fire	Fire and Rescue NSW	
Hazardous Materials	Fire and Rescue NSW	
Flood, storm or any natural disaster	NSW State Emergency Service	

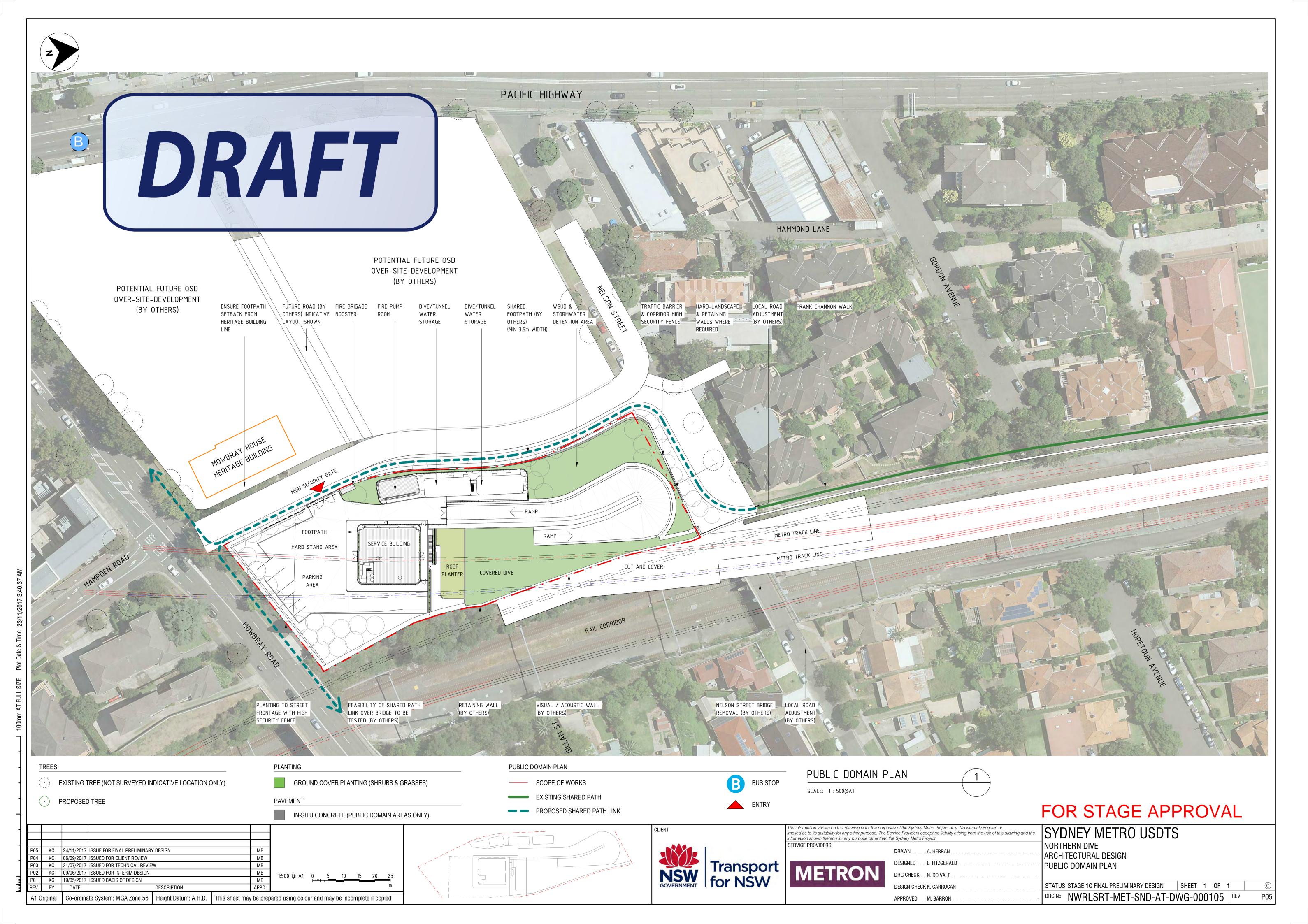
PART C - Appendices

Appendix A. Concept Design Drawings (design still in progress)

(drawing removed)

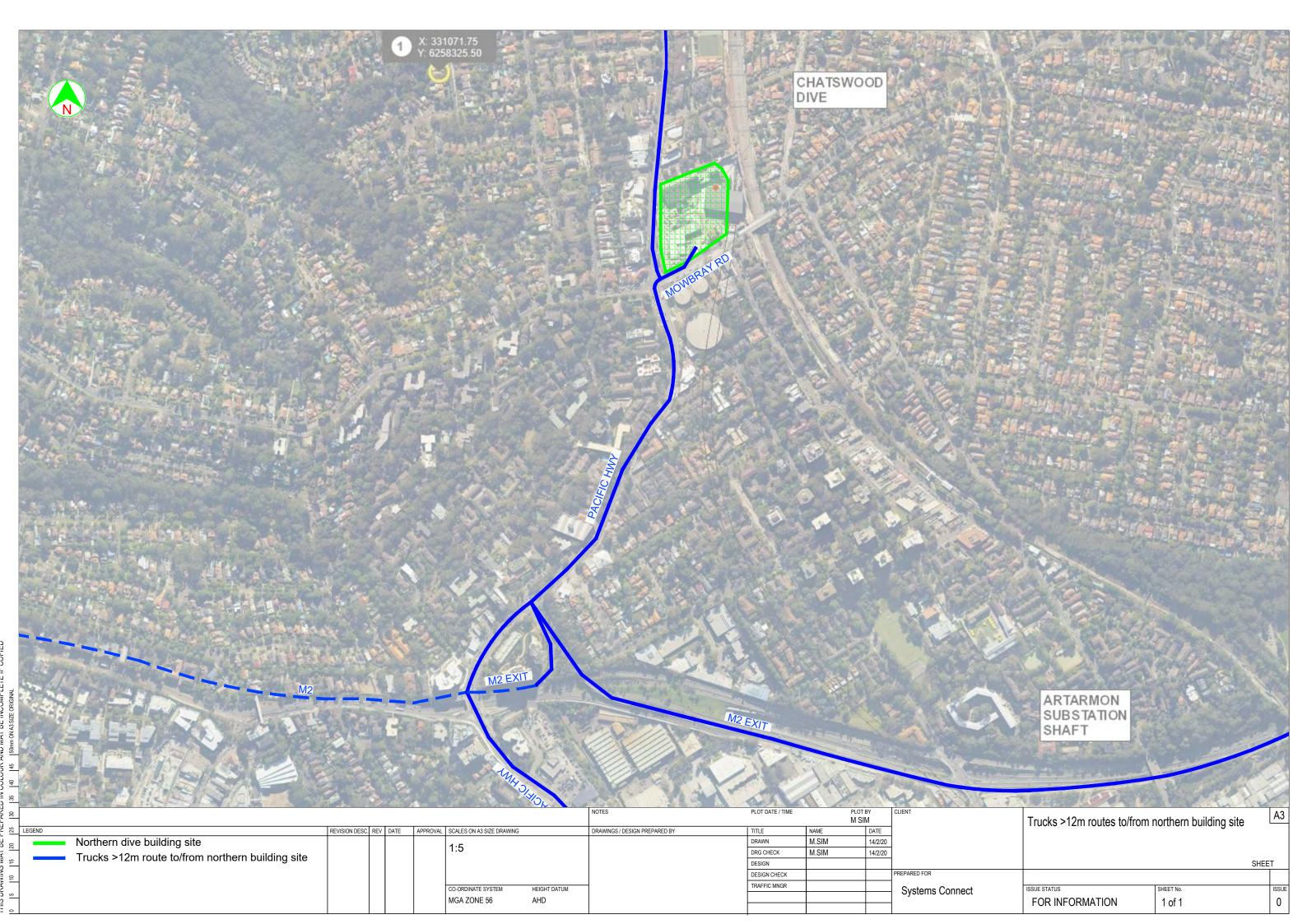


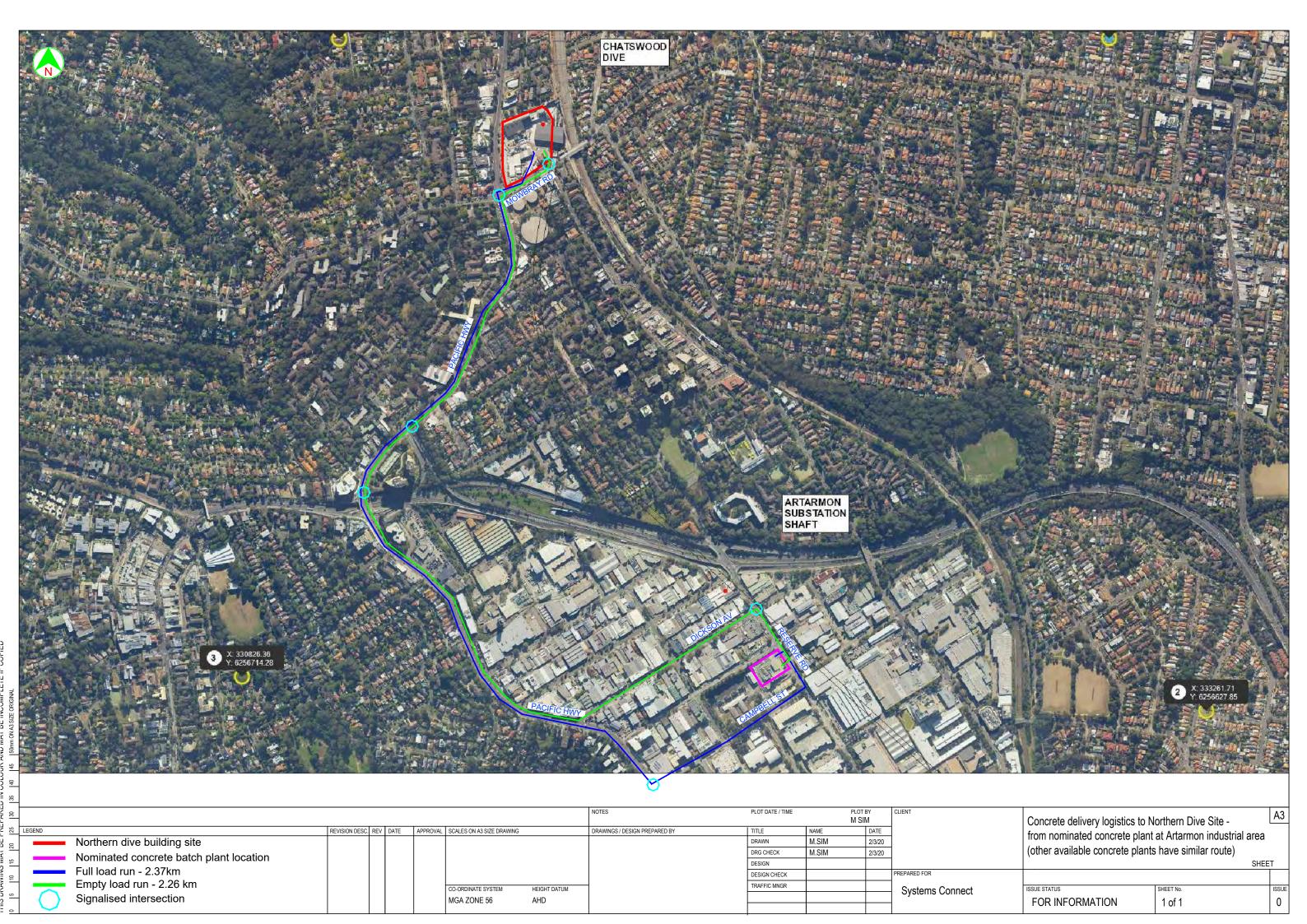




(drawing removed)

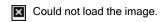
Appendix B. Construction Vehicles Rou	Appendix	Constructio	n Vehicles	Route
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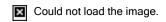
(drawing removed)

Appendix C. General correspondence et	c (attach when available)	



LWC General Correspondence

Reference No:	SMCSWLWC-RMS-LWC-GEN-000022				
Project Title:					
Contract No: Sub Contract:	LWC - Line Wide Contracts				
Orig Ref No: DLM:	-				
Date:	26 May 2020, 04:19 PM		Response required by:		
From:	Quac Minh LA (Roads and Ma	ritime Services	(part of TfNSW division))		
То:	o: Susan Dai (Systems Connect)				
Cc:	(Sydney Metro); Phil Brogan (Deepak Shahani (Sydney Met Coordination Office); Carl Mell David Tawadros (Roads and Manager (Sydney Metro); James Porter; Hayden Wright (Sydney Metro) (Systems Correct); Kirimaru Foransfer (Systems Connect);	(Sydney Metro) (ro); Errol Pathe (ra); Errol Pathe (ra) (Roads and It (Maritime Service (Sydney Metro (ro); Transmittal (nnect); Mark Ma (Friscan (Systen (Paul Ryan (Systen)	ey Metro); JOSE ARGUETADOMINGUEZ; Nathan Hoffmeister (Sydney Metro); er (Sydney Metro); Jake Coles (Sydney Maritime Services (part of TfNSW division)); es (part of TfNSW division)); Hugh Chapman (Sydney Coordination Office SM OpenAccess (Sydney Metro); erriott (Sydney Metro); Jill Downing (Sydney Metro); LWC Systems Connect (Systems Connect); Helena Orel (Systems ect); Mong Sim (Systems Connect)		
Subject: Construction Traffic Management Plan - Northern Dive Site Operation - TfNSW RMS) comments					
Hi Susan,					
In response to yo	our transmittal SMCSWLWC-SY	C-TX-002461 d	ated 14/05/20.		
	MS) has no further comments ar comments from all other stakeho		is can be submitted for approval, pending actorily addressed.		
regards, Minh					
	De	sign Series:			
Discipline:	De	sign Lots:	Location:		



LWC General Correspondence

Reference No: SMCSWLWC-RMS-LWC-GEN-000024

Project Title: Sydney Metro City & Southwest - LWC, TSOM

Contract No: LWC - Line Wide Contracts

Sub Contract:

Orig Ref No: SMCSWLWC-SYC-TX-002677

DLM:

Date: 10 June 2020, 10:19 AM Response required by:

From: Carl Mella (Roads and Maritime Services (part of TfNSW division))

To: Susan Dai (Systems Connect)

Chris Berg (Sydney Metro); Ken Hind (Sydney Metro); JOSE ARGUETADOMINGUEZ (Sydney Metro); Phil Brogan (Sydney Metro); Nathan Hoffmeister (Sydney Metro); Deepak Shahani (Sydney Metro); Errol Pather (Sydney Metro); Quac Minh LA (Roads and Maritime Services (part of TfNSW division)); Jake Coles (Sydney Coordination Office); David Tawadros (Roads and Maritime Services (part of TfNSW division)); Hugh Chapman

Cc: (Sydney Metro); Ali Faniad (Sydney Metro); Oscar Wang (Sydney Metro); Hayden Wright (Sydney Metro); Transmittal SM OpenAccess (Sydney Metro);

Mathew Billings (Systems Connect); Mark Marriott (Sydney Metro); Jill Downing (Systems Connect); Kirimaru Friscan (Systems Connect); LWC Systems Connect Transfer (Systems Connect); Paul Ryan (Systems Connect); Helena Orel (Systems Connect); Mathew Johnston (Systems Connect); Mong Sim (Systems Connect);

John Grant (Systems Connect)

Subject: Construction Traffic Management Plan - Northern Dive Site Operation - TfNSW (former

RMS) Approval

Susan,

In accordance with Schedule C1 Appendix A.9 Section 2.1 (c) and 2.2 (c) of the Principal's General Specifications G10 – Traffic and Transport Management and Minister's Condition of Approval E82 for the Sydney Metro City & South West, Transport for NSW - Greater Sydney - Planning and Programs, and the Sydney Coordination Office approve the Sydney Metro City & South West Construction Traffic Management Plan – Line Wide Works Northern Dive Site Operations - SMCSWLWC-SYC-DCH-TF-PLN-002505.00.INF.00.01 subject to the following requirements:

- obtaining Road Occupancy Licenses (RoLs) from the Transport Management Centre as required;
- complying with construction vehicle routes as approved by SCO/TfNSW and shown in Appendix B of the CTMP.
- addressing any safety issues identified within the Road Safety Audit review for this CTMP, in advance of any works commencing;
- 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;
- promptly addressing any SCO and/or TMC and/or TfNSW issue that eventuates during the works

Regards,

Carl

Sim, Mong

From: Philip Brogan < Philip.Brogan@transport.nsw.gov.au>

Sent: Friday, 12 June 2020 10:41 AM

To: Sim, Mong

Cc: Nathan Hoffmeister; Ben Hodgson-armstrong; Kenneth Hind

Subject: Linewide CTMP

Attachments: SMCSWLWC-SYC-DCH-TF-PLN-002505.00.INF.00.01.pdf; Linewide CTMP

Chatswood Approval Notification 10 June 2020.pdf

Importance: High

CAUTION: This email originated from outside of the Organisation.

Mong,

Attached is the approved Linewide CTMP for the Northern Dive site Operations and a PDF copy of the 10 June 2020 CTMP approval. The document requires amendment and resubmission to Transport Coordination for endorsement and Planning and Programs for approval. The document, in its current form does not satisfy the Metro planning approval requirements. The document (Section 1.3) refers to the incorrect planning approval for this site. Additionally:

- 1. The overall quality of the document requires improvement.
- 2. Section 1.3, second bullet point, needs to clarify which CSSI or REMMs are being referred to.
- 3. Section 2.1, this section reads like the site will be used as an Ancillary Facility, but it is not clear how this aligns with A16-17.
- 4. Figure 7 description states picture is looking north from Pacific Highway, while in fact it is looking south.
- 5. Part C, Appendix A the concept design drawing refers to a 'Through Road' between Nelson St and Mowbray Rd which has to my knowledge not been assessed or approved.
- 6. Part C, Appendix A the second concept design drawing refers to a 'Thru Road' which requires clarification.

Before I advise Transport Coordination and Planning and Programs of the need to amend and resubmit, can you please confirm that this does not create works issues for the Linewide contractor.

Regards

Philip Brogan Consultant Operations, Customer & Placemaking Sydney Metro

T 0401 719 632 Level 40, 680 George Street, Sydney 2000



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Consider the environment. Please don't print this e-mail unless really necessary.

	Design Series:	
Discipline:	Design Lots:	Location:

Appendix D. Compl	iance Mat	rix Ci	1ecklist
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Marcian Marc	Relevant c	onditions of approval.			
Part			SC Notes	Ref.	Compliance
Company Comp	E75	and proposed road and related transport networks and minimising adverse changes to the safety, efficiency and, accessibility of the networks, and facilitate an improved level of service in relation to permanent and operational changes. Detailed design and assessment of related traffic, parking, pedestrian and cycle accessibility impacts and changes shall be undertaken:		2.1	Υ
The content and public residence from the content of the content	E75(a)		Refer to E81.	5	Υ
Comment of the content of the cont	E75(b)	in consideration of existing and future demand, connectivity (in relation to permanent changes),	The work site does not involve any changes to existing road conditions	n/a	n/a
Secretary and event streams target anglement per and selection from the common to the secretary and per anglement anglement anglement angl					
Section and selection of CTMP decologements. Section 20 and 10 a	E75(d)			_	n/a
Page of the first state and make the production plane and bill the admitted in the admitted	F75(e)			1.4	Y
The proposed control and provided process of the pr			No new proposed signal on this CTMP.	n/a	n/a
The Engineer and the Name options. The Proposed to Manus members to an annual control and control and annual control and control and annual control annual control and annual control annual con		to pedestrians, cyclists, and public transport users must be subject to safety audits demonstrating consistency with relevant design, engineering and safety standards and guidelines. Safety audits must be prepared in consultation with the Traffic and Transport Liaison Group before the completion and use of the subject infrastructure and must be made available to the Secretary upon	published "Great effort has been taken by road authorities to provide adequate safety by the development of worksite safety manuals and roadworks code of practice. It may considered that these practices provide sufficient safety without the need for audits of temporary traffic arrangement." RSA on a temporary traffic management may not be providing any beneficial value. The	1.2	Υ
Section Process Proc	E79	restricted road by heavy vehicles.			n/a
CELL 19 CELL 1	E80	Peak periods are 7am to 10am and 4pm to 7pm Monday to Friday.	·		n/a
Presidence Automated, Automated, Secretary and Presidence and BMS requirements 1/2 1/2	E81	(CTMF). The CTMF must be prepared in consultation with TTLG(s) and submitted to the Secretary for approval no later than one (1) month before the commencement of construction (or within any other timeframe agreed with the Secretary). The CTMF will set out the approach to managing	Refer to E82.	1.3	Υ
State Stat	E81(a)		Entry and exit to site are existing conditions.	n/a	n/a
Sale of the section of the contraction which consistency and contraction and contraction and contraction which consistency are set to the contraction which contraction of the contraction of the contraction of the contraction which contra	E81(b)		No such structures are proposed.	n/a	n/a
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Billiphi the retention and reinstatement of emergency and property access) Access is maintained. No modification to any access or driveways. Size	E81(I)	special event management;	n/a along Pacific Hwy or Mowbray Road.	n/a	n/a
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	E90 E91 E91(a) E91(b)	marshalling and logistics facility located within close proximity to the Sydney and North Sydney CBDS. The facility must be operational in advance of tunnel spoil generation. Details of the facility must be documented in the Ancillary Facilities Management Plan required by Condition A16. A Road Dilapidation Report must be prepared for local roads proposed to be used by heavy vehicles for the purposes of the CSSI before the commencement of use by such vehicles. Copies of the Road Dilapidation Report must be provided to the Relevant Council within three (3) weeks of completing the surveys and no later than one (1) month before the use of local roads by heavy vehicles. If damage to roads occurs as a result of construction of CSSI, the Proponent must either (at the landowner's discretion): compensate the landowner for the damage so caused. The amount of compensation may be agreed with the landowner; or rectify the damage so as to restore the road to at least the condition it was before construction commenced as identified in the Road Dilapidation Report(s). Ongoing consultation would be carried out with (as relevant to the location) the CBD Coordination Office, Roads and Maritime Services, Sydney Trains, NEW Port Authority of NSW, Barangaroo Delivery Authority, local councils, emergency services and bus operators in order to minimise traffic and transport impacts during construction.	Not applicable. Routes to northern dive building site does not utilise local roads. E91 is subject to E90. E91(a) is subject to E90. E91(b) is subject to E90.	n/a n/a n/a	n/a n/a n/a

Т3	Directional signage and line marking would be used to direct and guide drivers and pedestrians past construction sites and on the surrounding network. This would be supplemented by Variable Message Signs to advise drivers of potential delays, traffic diversions, speed restrictions, or alternate routes.	Not applicable as no pavement realignment is to be completed.	1.2	Y
T4	In the event of a traffic related incident, co-ordination would be carried out with the CBD Coordination Office and / or the Transport Management Centre's Operations Manager.	Report traffic related incident to TMC command centre not to "CBD Coordination Office".	7	Y
T5	The community would be notified in advance of proposed road and pedestrian network changes through media channels and other appropriate forms of community liaison.	Community notification is in the early progress.	5	Υ
Т6	Vehicle access to and from construction sites would be managed to ensure pedestrian, cyclist and motorist safety. Depending on the location, this may require manual supervision, physical barriers, temporary traffic signals and modifications to existing signals or, on occasions, police presence.		3.3	,
T8	Access to existing properties and buildings would be maintained in consultation with property owners.	Existing temporary signal is in operations.		T
10	All trucks would enter and exit construction sites in a forward gear, where feasible and reasonable.	No properties are impacted from this site operations.	3.3	Υ
T9	All trucks would enter and exit construction sites in a forward gear, where reasone and reasonable.	Entry and exit gate available.		Υ
T12	Construction sites would be managed to minimise construction staff parking on surrounding streets. The following measures would be implemented: LEncouraging staff to use public or active transport Encouraging ride sharing Provision of alternative parking locations and shuttle bus transfers where feasible and reasonable. Transport for NSW would work with local councils to minimise adverse impacts of construction on parking and other kerbside use in local streets, such as loading zones, bus zones, taxi zones and coach zones.	The northern dive site has some parking capacity. The close proximity of Chatwwood and Artarmon train stations automatically promote the use of public transportation and in effect eliminates off street parking.	Арр В.	Y
T13	Construction site traffic would be managed to minimise movements in the AM and PM peak periods.	Trucks are adjusted to take advantage of the lesser traffic conditions from 7pm to 5am time where trucks are generating better average speed, better fuel management and have less idle and stationary time as shown on the table.	3.6	Y
T14	Construction site traffic immediately around construction sites would be managed to minimise movements through school zones during pick up and drop off times.	No schools immediately within the work area.	n/a	n/a
T19	Where existing parking is removed to facilitate construction activities, alternative parking facilities would be provided where feasible and reasonable.	No modifications to existing conditions.	n/a	n/a
T21	The potential combined impact of trucks from multiple construction sites would be further considered during the development of Construction Traffic Management Plans.	TSE work is to be completed before mobilisation. If there is a potential of overlap between groups during the transition (handing over), the TSE is at the the end state of the their work peak and does not generate trucks volume that is significant.	5	Y
T22	Where existing footpath routes used by pedestrians and / or cyclists are affected by construction, a condition survey would be carried out to confirm they are suitable for use (eg suitably paved and lit), with any necessary modifications to be carried out in consultation with the relevant local council.	Not applicable for this site	n/a	n/a

Appendix E. Traffic Management Plan – Mowbray Road Utilities Work



Appendix E. Traffic Management Plan – Mowbray Road Utilities Work

1.1. Introduction

The Northern Connection site is near completion and utilities commissioning and connectivity phase is soon underway. The new connection of watermain and sewerage services to the site requires tapping into the source of supply (water and sewer runoffs) from the existing underground services network located under Mowbray Road eastbound carriageway. The work will need traffic management to channel through traffic away from the excavation pit. The work should take approximately 14 night shifts to complete. Road plates will be used to temporarily cover the opening for the subsequent night shifts.

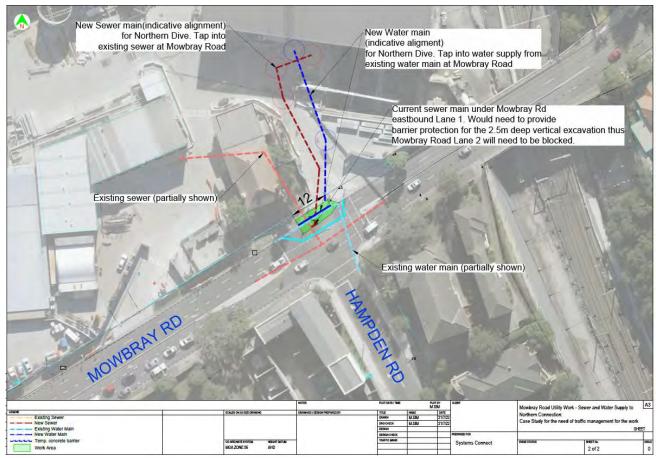


Figure 1. Locality of the work area at Mowbray Road, Chatswood

To reach the location of the sewer and watermain at approximately 2.5m under Mowbray Road eastbound road, there are three (3) traffic management options that were considered for enabling the work. All the options have its advantages and disadvantages. Due to the depth of the excavation, Lane 2 Mowbray Road eastbound is recommended to be closed. Refer to Section 1.3.

An early work to investigate and verify the underground utilities will need to be undertaken prior to actual excavation. Refer to Section 1.2.





1.2. Traffic Management for early work survey

A combination of TGS for a standard lane closure and/or a mobile work may be applied to enable survey of the underground utilities prior to the actual excavation work. The surveying work may best be completed under a mobile work due to the survey work itself is highly mobile and short occupancy of any point/grid of the area surveyed.

1.3. Traffic Management for actual excavation

The 3 traffic management options for the excavation work are summarised below:

Options	Pros	Cons	Notes / Conclusion
Option A – detour.	Maximum working area and total seperation from external traffic. Traffic is "free flowing" despite the detour as no traffic are held up at the slow point.	Inconvenience to general westbound traffic as the detour is not straight forward especially for traffic coming from Elizabeth St. Approval for detour could take many weeks Detour route has the potential to conflict witht the other work area (Brand St drainage detour) depending on timing	Best for constructibility but weighting on community impact, scope of work etc it does not appear to warrant the necessity of a detour. It will be the least preferred option.
Option B – contraflow.	Through traffic for all directions for Mowbray Road are maintained albeit reduced to one lane each directions	Mowbray Road westbound where the contraflow is 6.5m wide providing 3.25m each lanes. Access into property # 342 and # 346 will be not be possible due eastbound traffic is being merged to the left thus not possible to make the right turn into the property. Right turn traffic into Hampden Road will require to take a short detour to avoid interruption to Mowbray Road on both directions	Second preferred option. TCS needs to be switched to flashing whilst this traffic management setup is in place. Westbound Mowbray Road needs to be merged to one lane. At the proposed time of work – night time, Hampden St movement would be low and should be manageable
Option C – crossover into intended lane.	Through traffic for all directions are maintained with westbound traffic returns to intended side of the road	This option depends on the actual excavation width on site. If the opening is towards the east, the crossover back to the eastbound carriageway maybe too sharp. Access into property # 342 and # 346 will be not be possible due to the quick subsequent change of direction in a very short span Right turn traffic into Hampden Road will require to take a short detour to avoid interruption to Mowbray Road on both directions	First preferred option provided the excavation area could be shortened. TCS needs to be switched to flashing whilst this traffic management setup is in place. Westbound Mowbray Road still needs to be merged to one lane. At the proposed time of work, Hampden St movement would be low and should be manageable

Option C is the preferred option.

1.4. Traffic Impact Summary

Traffic management will start from the hour where bulk of traffic volume begin to ease from typically 10pm (or earlier on somedays eg Sunday) and work will be demobilised before traffic volume begins to saturate from 5am or later. Completing the work within this time frame reduce significantly any risk of causing major traffic impact.

1.4.1 Buses

There are no known bus routes along Mowbray Road between Pacific Highway and Stanley Street within the work area.

1.4.2 Residents

Any entry attempt to enter property # 342 and 344 driveway from Mowbray Road eastbound may cause queuing and potential rear end collision if anyone attempt to turn right into the driveway coming from either the contraflow or the crossover options. To eliminate this risk, access into these 2 address from Mowbray Road eastbound will be temporarily disallowed during the work. All residents will be informed of this work and the no

right hand turn movement into the property. All residents would need to come from Mowbray Road westbound direction in order to enter the property. On the contrary, it is not expected there shall be much movements between these working hours at late at night, into the properties.

1.4.3 Pedestrians

Pedestrians footpath on Mowbray Road eastbound between Pacific Highway and the site would need to be closed during the work. Pedestrains would need to use the other footpath parallel to the Mowbray Road and return to the next intersection at Hampden Road. There will traffic controllers on both ends of the closed footpath to assist as required.

1.4.4 Emergency Services

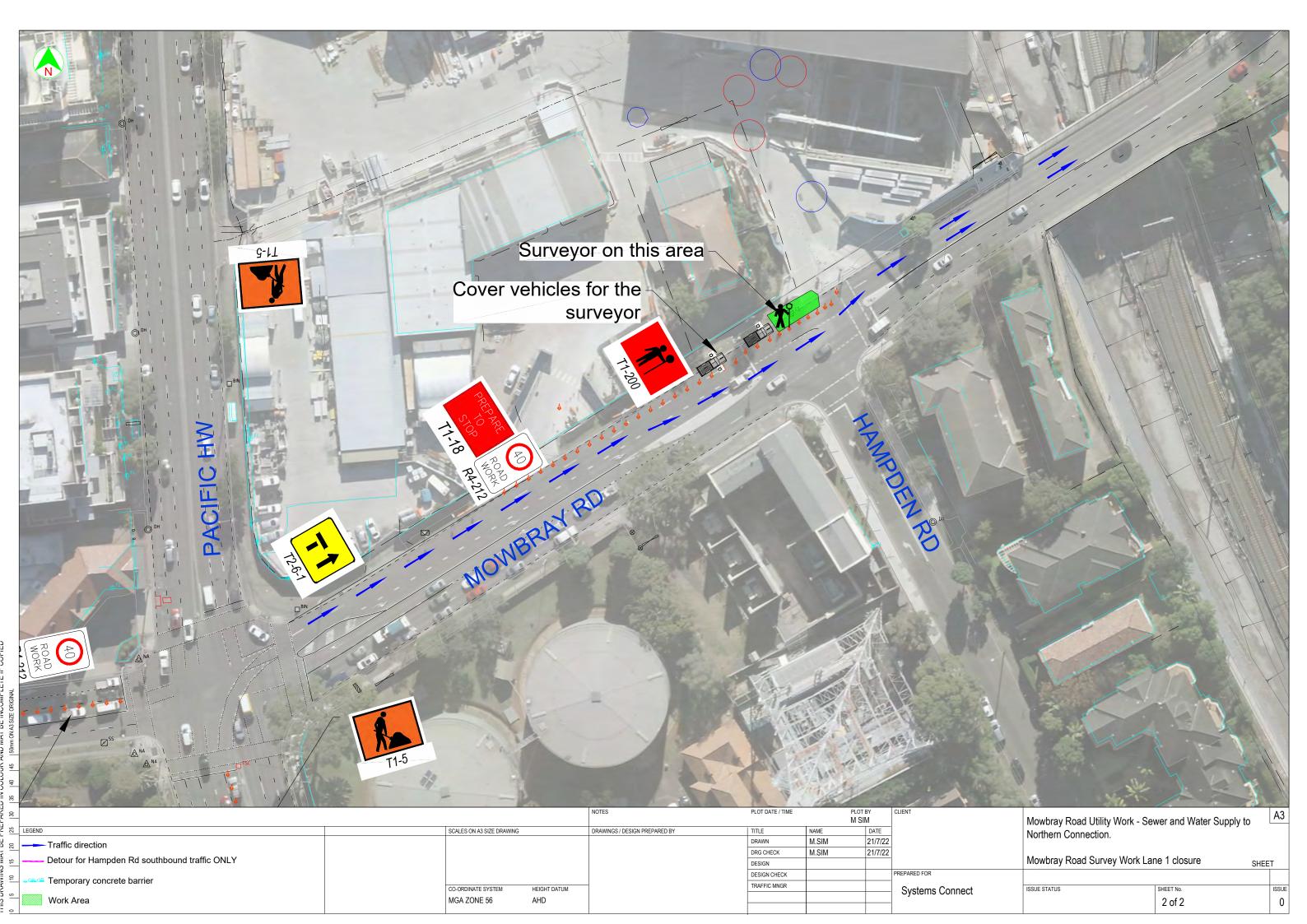
Traffic management crew and work crew to priortise all emergency vehicles that may be encountered during the road work. No road are closed on for the work.

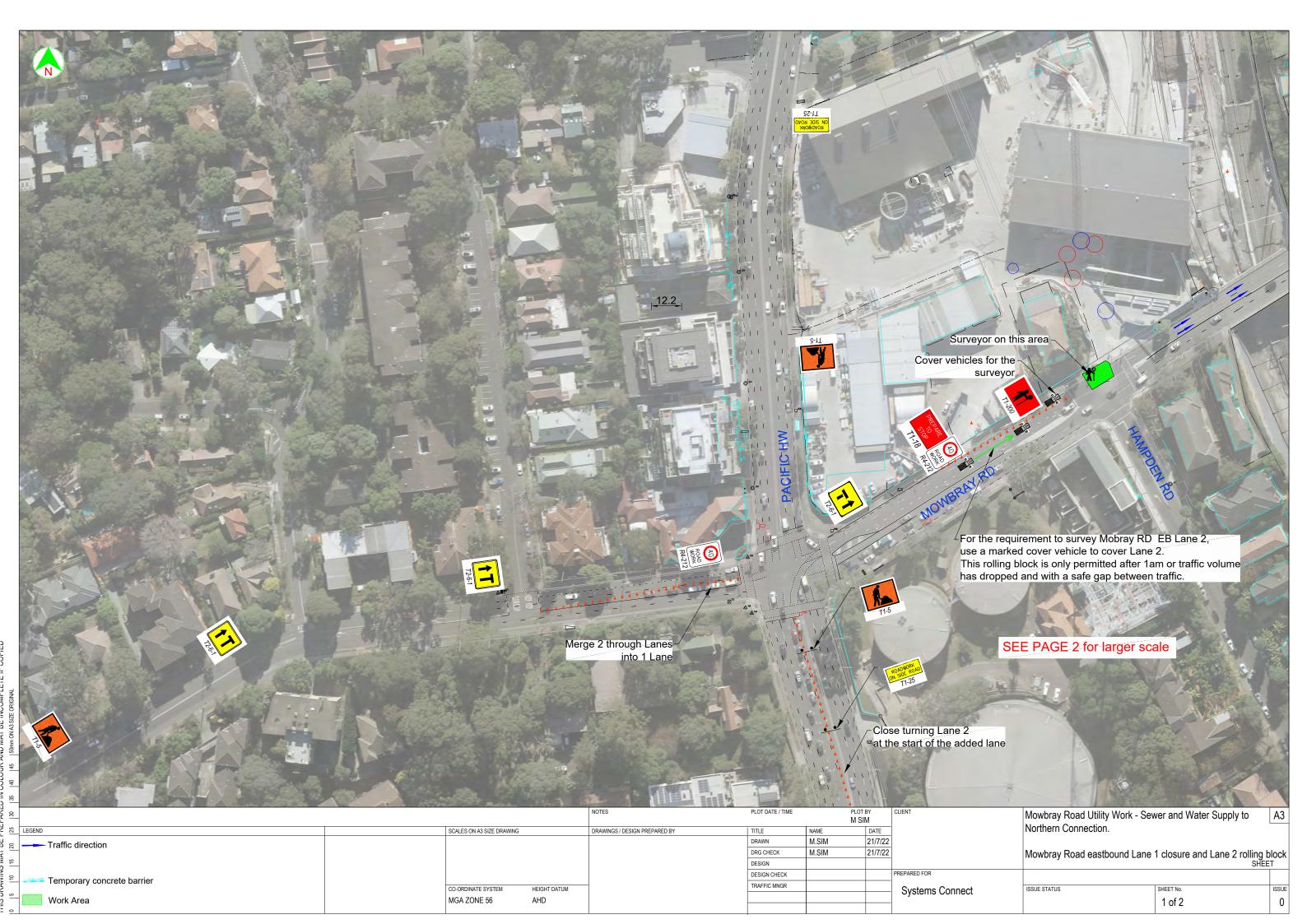
1.5. Work Program

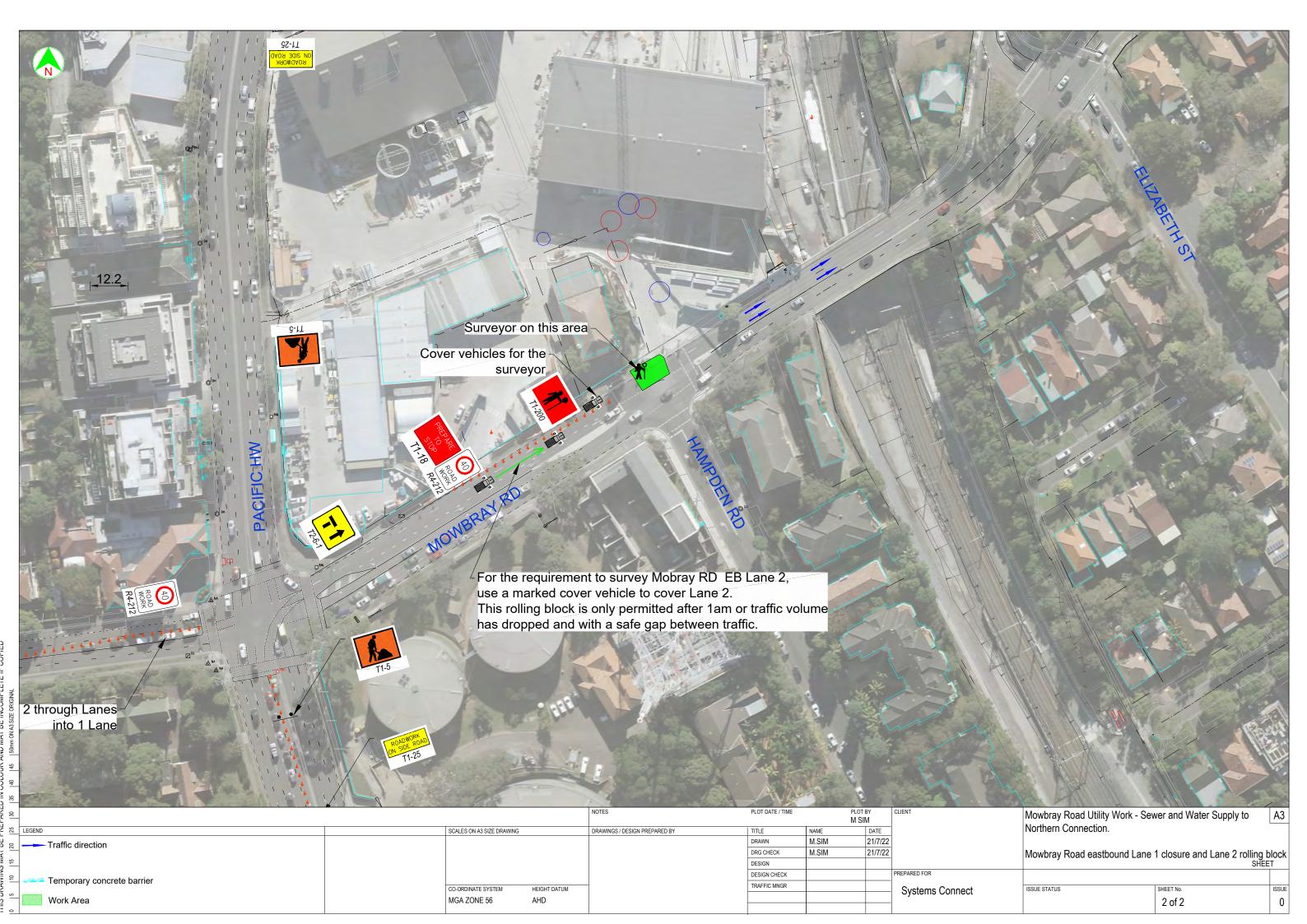
Mowbray Road Utilties Connection																												
	Monday, 19 September 2022	Tuesday, 20 September 2022	Wednesday, 21 September 2022	Thursday, 22 September 2022	Friday, 23 September 2022	Saturday, 24 September 2022	Sunday, 25 September 2022	Monday, 26 September 2022	Tuesday, 27 September 2022	Wednesday, 28 September 2022	Thursday, 29 September 2022	Friday, 30 September 2022	Saturday, 1 October 2022	Sunday, 2 October 2022	Monday, 3 October 2022	Tuesday, 4 October 2022	Wednesday, 5 October 2022	Thursday, 6 October 2022	Friday, 7 October 2022	Saturday, 8 October 2022	Sunday, 9 October 2022	Monday, 10 October 2022	Tuesday, 11 October 2022	Wednesday, 12 October 2022	Thursday, 13 October 2022	Friday, 14 October 2022	Saturday, 15 October 2022	Sunday, 16 October 2022
Survey of existing services	х	x																									ĺ	
Update design model		2	х	х	х			х		х	х	х															ĺ	
Begin work - first week															х	х	х	х	х	?	?							
Continue work - second week																						х	х	х	x	х	?	`
Date subject to change.																												
May not work continously every night																												
May include Sat and Sun work																												

- 1.6. Attachments TGSs, design drawings
 - 1.6.1 Survey Work TCPs (Lane 1 closure and Lane 2 mobile work)

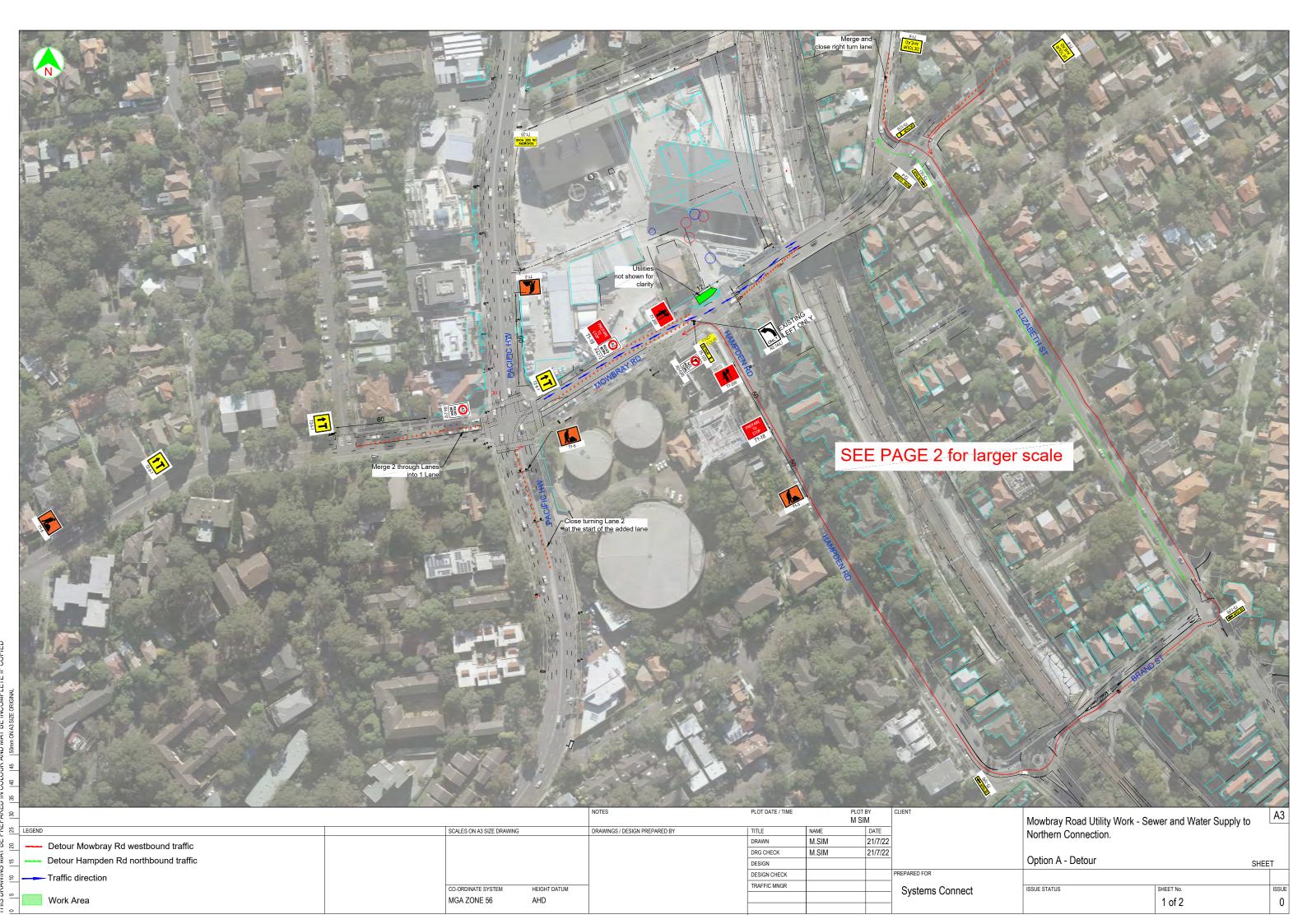


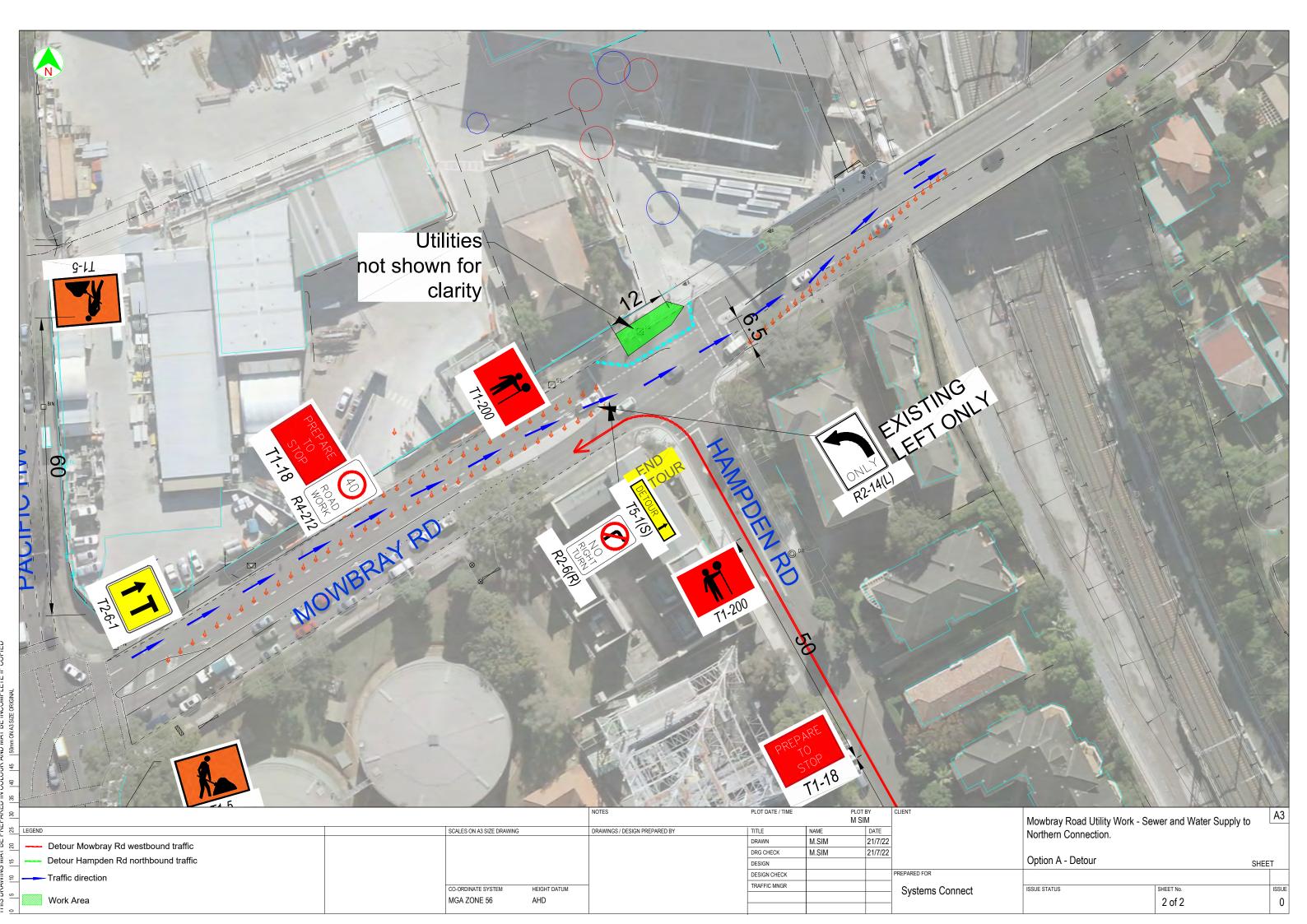




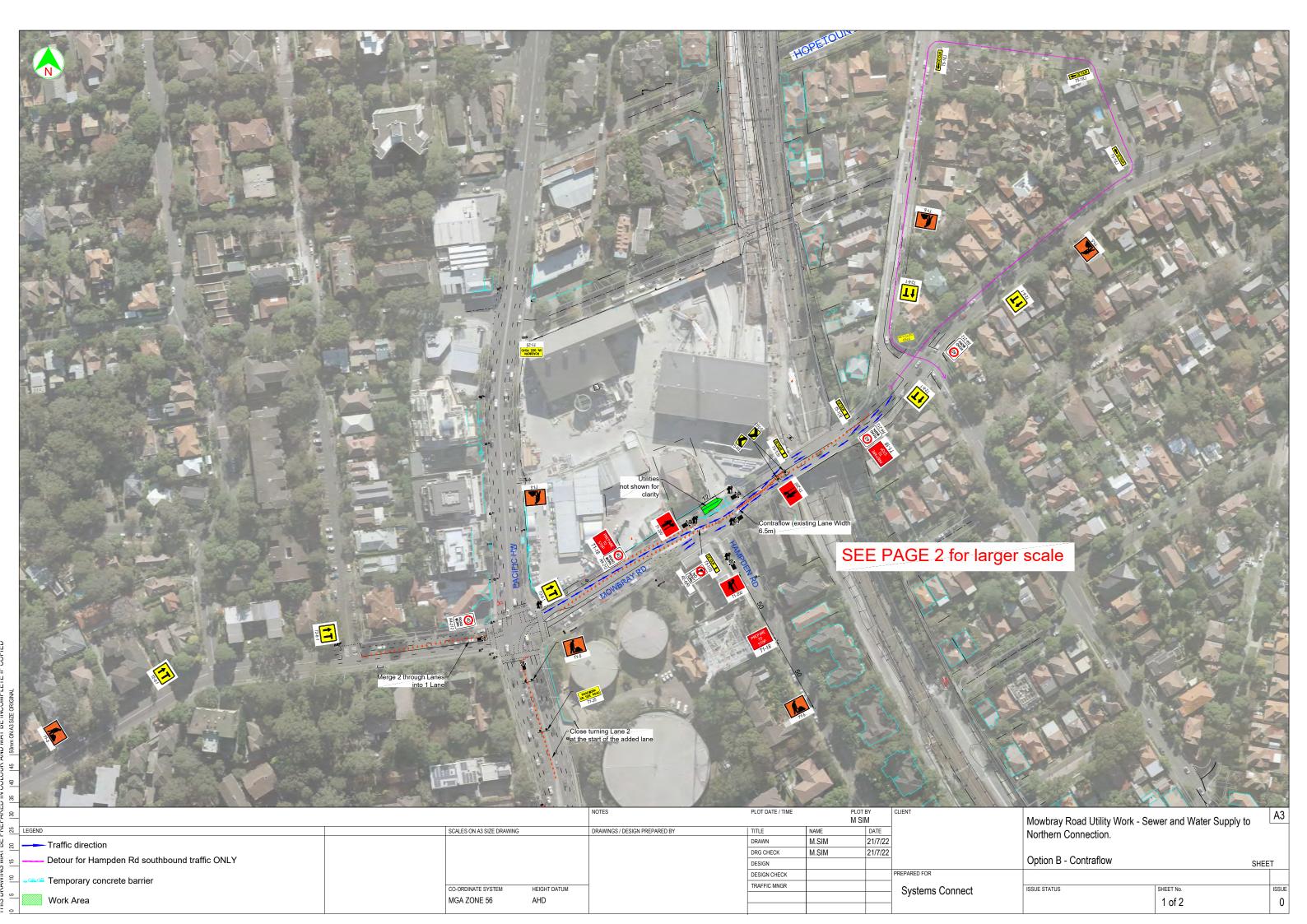


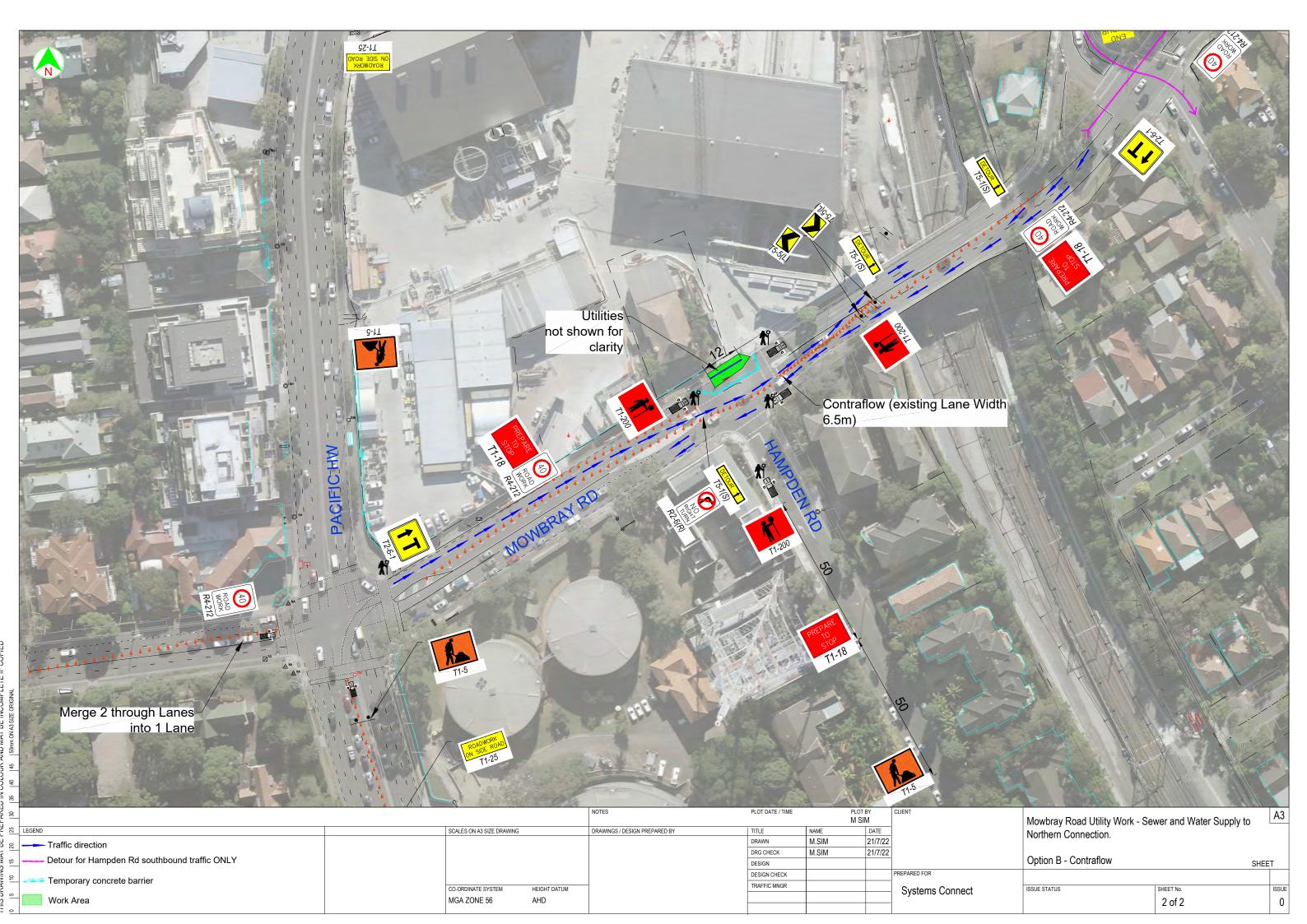
1.6.2 **Option A**





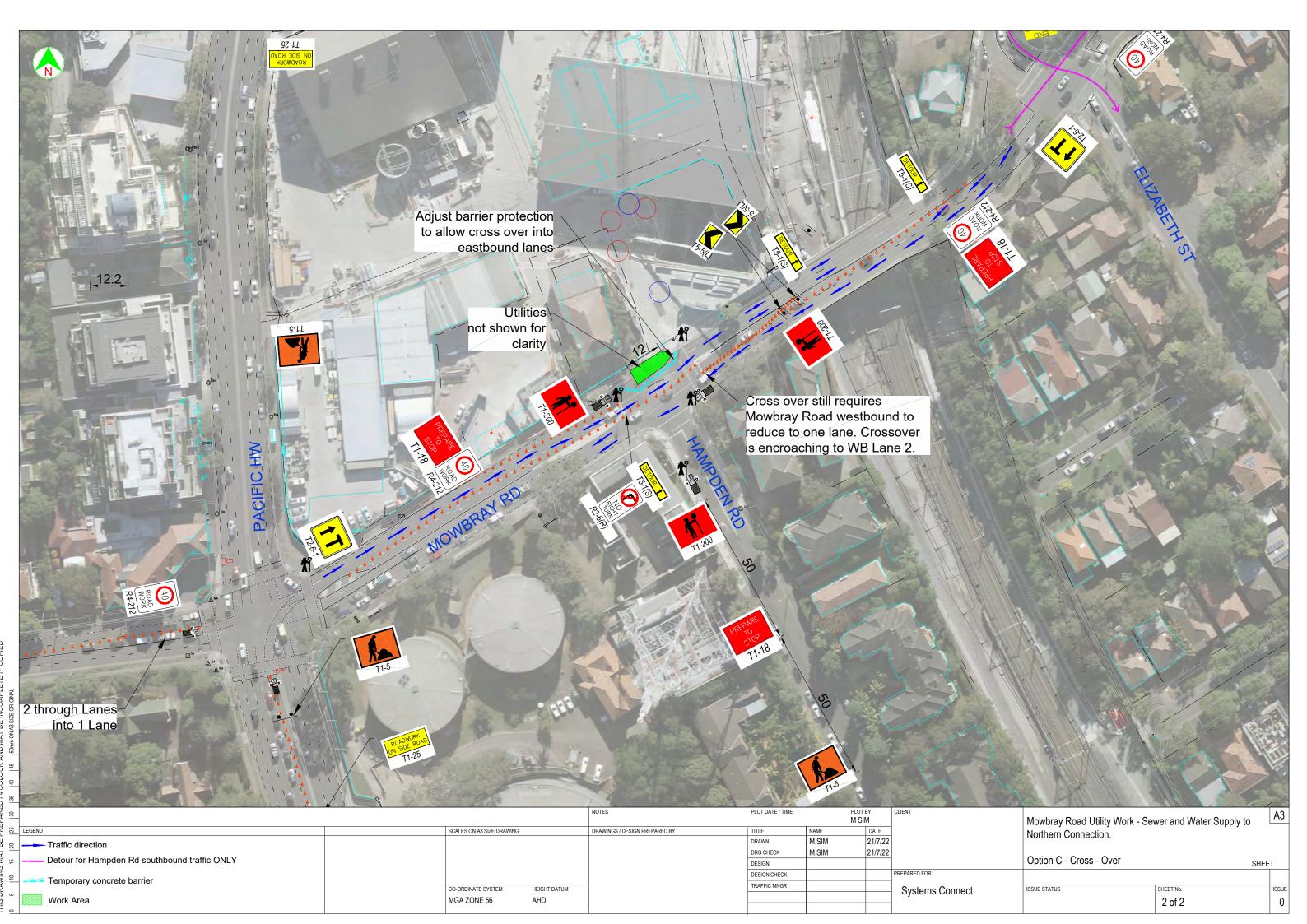
1.6.3 Option B



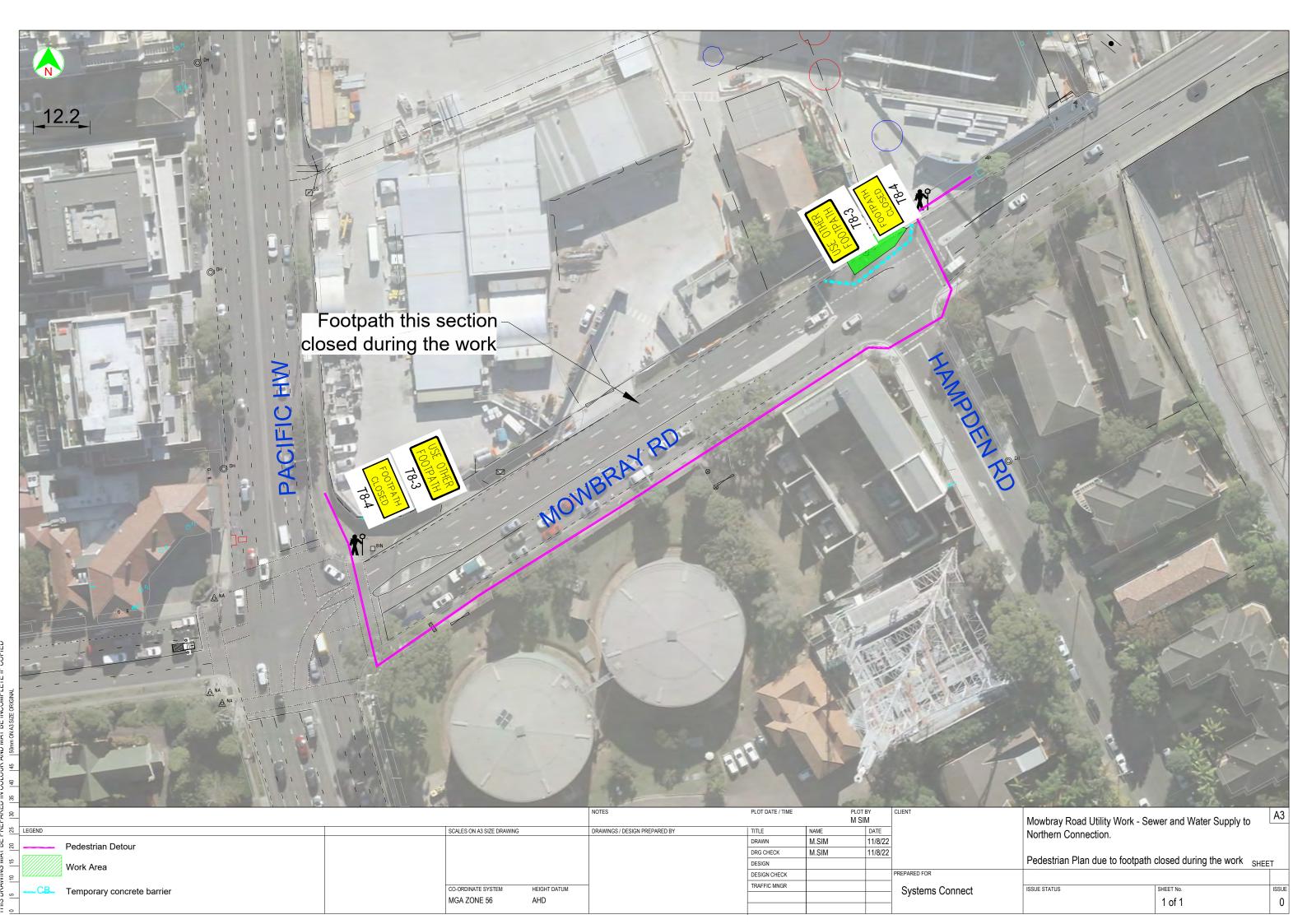


1.6.4 **Option C**

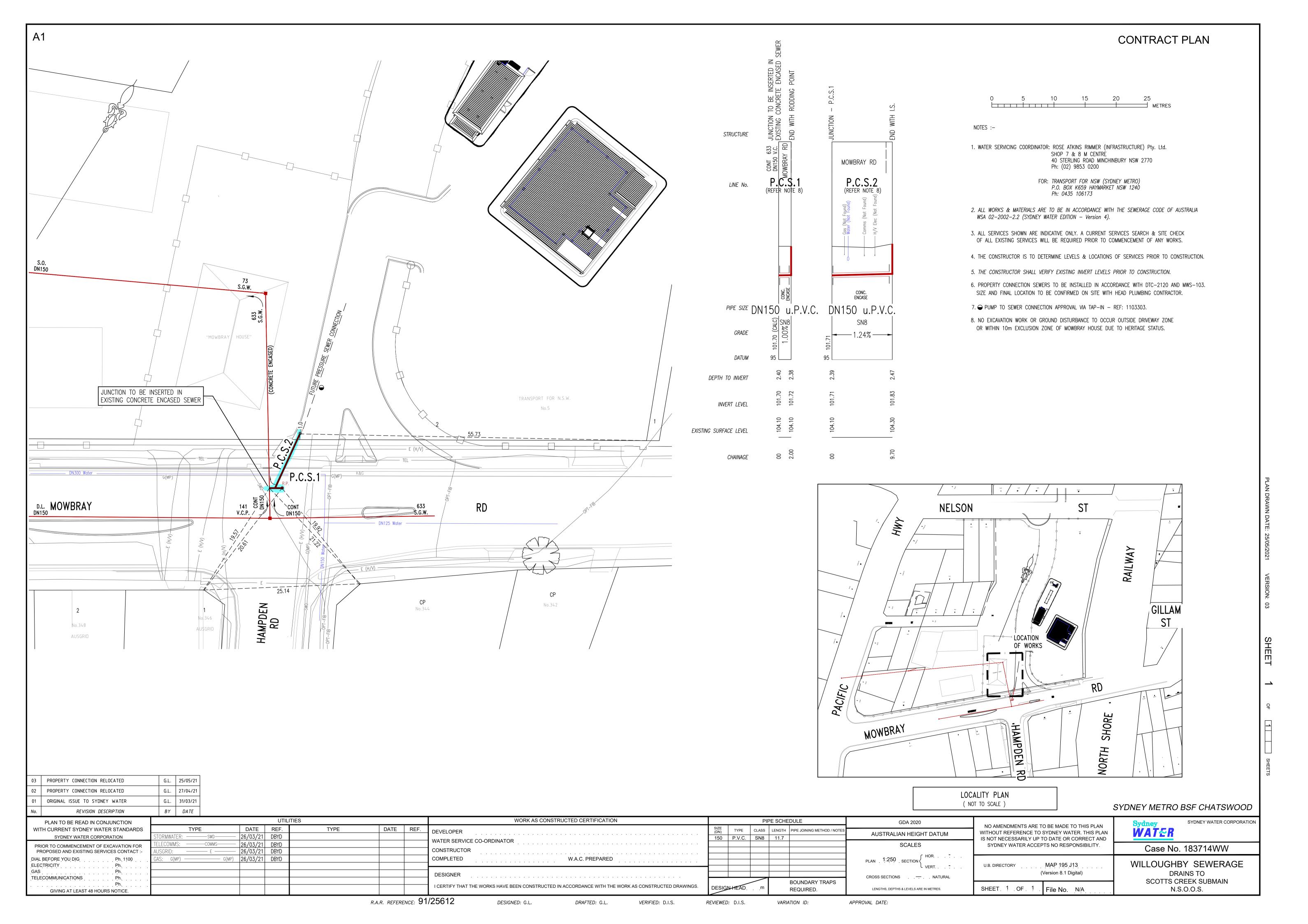


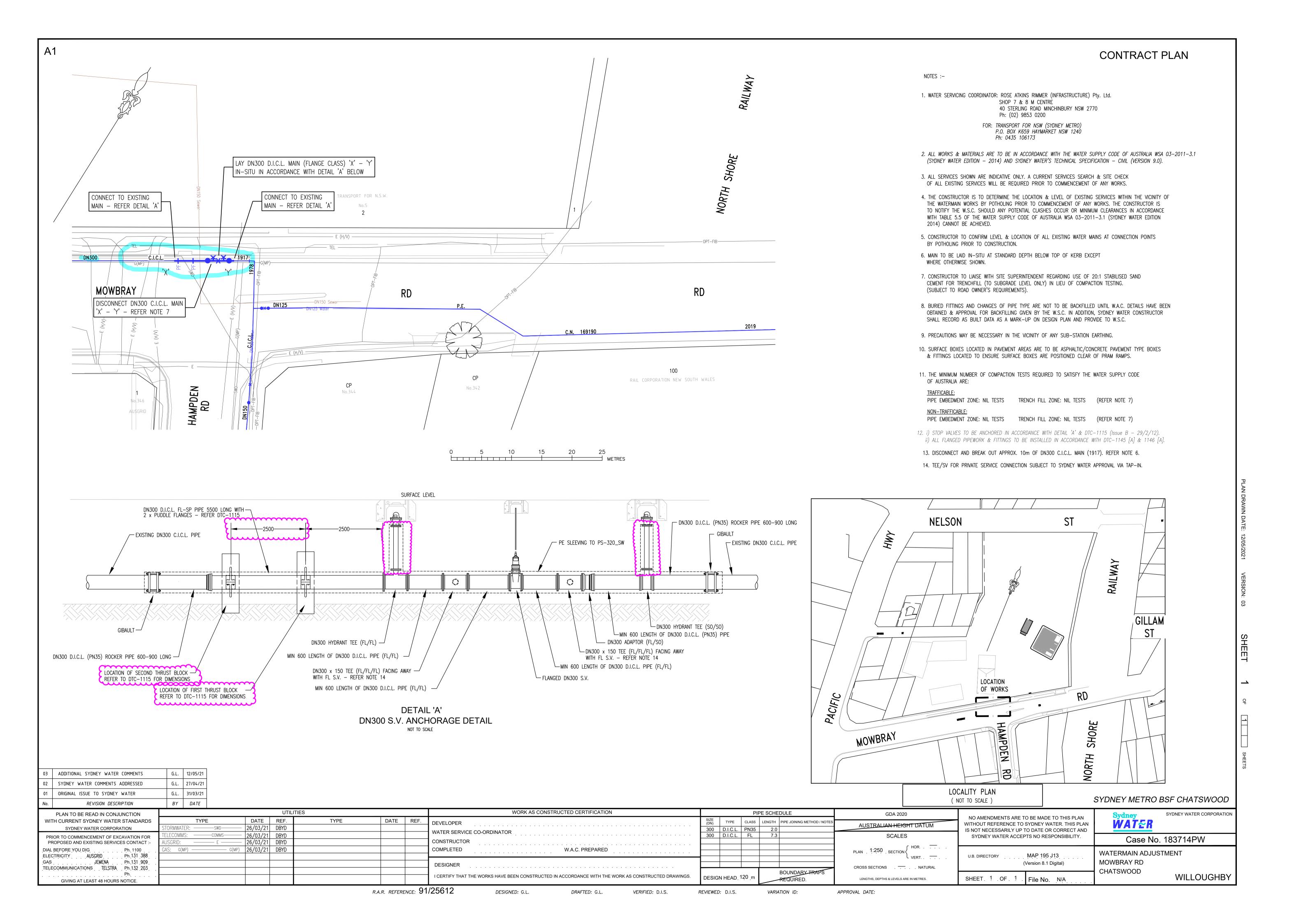


1.6.5 Pedestrian Plan



1.6.6 Design Drawings





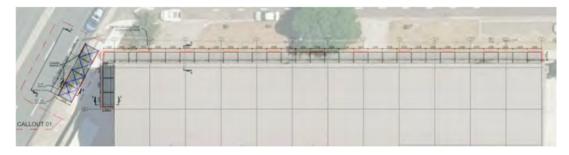
Appendix F. Traffic Management Plan – Redundant Spoil/ Logistics Shed Dismantler	nent Work



Appendix F. Traffic Management Plan – Spoil Shed Removal Works

1.1 Introduction

The Northern Dive site is being demobilised and in order to facilitate the removal of the temporary spoil shed on the north-western corner of the site a scaffold encapsulating the spoil shed will be installed. This is necessary to eliminate the risk to the public of falling debris and will require traffic management on Nelson Street and on Pacific Highway as discussed below.



These works will affect Nelson Street for around two months and the Pacific Highway on two separate occasions of 1 to 3 nights duration when Class B hoarding is erected and 1 to 3 nights duration to remove the Class B hoarding.

The purpose of the scaffolding is to provide a screen between the dismantlement works and the general public outside of the site. Construction vehicles removing material from the redundant building will access the site through the existing site access and egress locations on Mowbray Road (please see below excerpt from page 7 of this document). These vehicles will be a mixture of rigid and articulated heavy vehicles that will not differ from the classes of vehicles currently attending the Northern Dive site.

Willoughby Council and Sydney Buses have been consulted during planning for these works, their responses are attached in this appendix

The different traffic arrangements are provided later in this appendix. There are three different arrangements:

- Pacific Highway Night works to erect and remove Class B hoarding this will take place on two separate occasions of maximum 3 nights each.
- Nelson Street Occupying southern side of Nelson Street, closure of footpath and occupation
 of car parks along street frontage of the site shed to be dismantled and occupation of four car
 parks in the indented car parking area during erection and stripping of scaffold.
- Nelson Street Occupying southern side of Nelson Street, closure of footpath and occupation
 of four car parks in the indented car parking area on the southern side of Nelson Street this
 would occur during demolition works













1.2 Traffic Management for Nelson Street

Occupation of the footpath on the southern side of Nelson Street, temporary removal of parking on the southern side of Nelson Street. Traffic controllers will direct pedestrians from the Frank Channon walk to the footpath on the northern side of Nelson Street. Pedestrian access from Nelson Street to the Pacific Highway will be maintained through this route. Traffic along Nelson Street would have a reduced speed limit of 40km/h and would maintain 2way/ 2 lane. The temporary removal of parking



would be by a council permit and jersey barriers blocking the spaces. Sydney Metro signs would be in place informing the public of the temporary restrictions.

The works would not affect the cul-de-sac at the end of Nelson Street and the existing turning circle will be maintained.

1.3 Traffic Management Pacific Highway

Through traffic for northbound lanes would not be affected by this work. Occupation of one southbound lane on the Pacific Highway would maintain free-flowing traffic at all times in the remaining two lanes.

1.4 Traffic Impact Summary

Traffic management on the Pacific Highway will start from the hour where traffic volumes begin to ease from typically 10pm and work will be demobilised before traffic volumes begin to saturate from 5am. Completing the work within this time frame will reduce significantly the any risk of causing major traffic impacts. These impacts will be assessed further during application for the ROLs, and works will occur during the approved hours.

1.5 Residents

Access would be maintained at all times to all properties. The road occupation of the southern side of Nelson Street affects the frontage of the Sydney Metro site only. The cul-de-sac at the end of Nelson Street will be maintained at all times, access for garbage trucks and delivery trucks will not be affected. The project only seeks to occupy the parking areas on the southern side of Nelson Street. And the carriageways would remain as existing. Therefore, any vehicle currently accessing Nelson Street will continue to have this access. This includes garbage trucks, delivery vehicles and other vehicles that service the residents and businesses in Nelson Street

1.6 Pedestrians

Regarding Nelson Street, pedestrian use of the Northern side of Nelson Street is unaffected by the work. Traffic controllers will direct pedestrians from the Frank Channon Walk to the Pacific Highway by this route. Regarding Pacific Highway, where pedestrians or dismounted cyclists need to pass through the work area, works will temporarily cease and traffic controllers will escort the people through

1.7 Emergency Services



The traffic management crew and work crew will prioritise all emergency vehicles that may be encountered during the road work. During the works there will be two lanes open at all times. Emergency vehicles' access to the site will be unchanged

1.8 Cyclists

Nelson Street is bounded two shared paths, the Frank Channon Walk at the eastern end of Nelson Street and the shared path along the eastern side of the Pacific Highway. The cycle path between the Frank Channon Walk and the Pacific Highway is along the carriageway of Nelson Street. During the works, the southern side of Nelson Street would be closed. This will not affect cyclists on Nelson Street as the carriageways will not be reduced in width. During the night works on the Pacific Highway, the shared path on the eastern side of the Pacific Highway will be occupied for a maximum of three nights while the Class-B hoarding is erected and three nights at a later period during Class-B hoarding dismantlement. During these periods, similarly to pedestrians, dismounted cyclists will be escorted through the work area after work temporarily pauses.



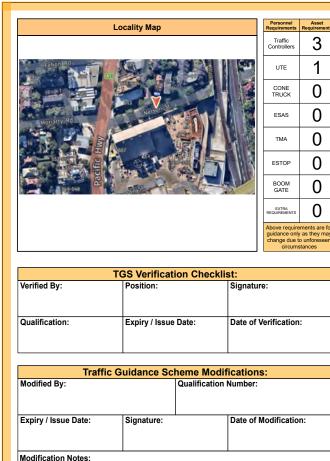
- 1.8 Indicative Works Program, TGS's, Design Drawings, and Stakeholder Consultation
 - 1.8.1 Indicative Works Program

Indicative Program of Shed Demolition Works

																_						_											_																	
<u>Task</u>										Da	y Day	Day	Day	Day	Day	Day	Day	Day	Day	Day D	ay D	ay Da	y Day	Day	Day	Day (Day D	Day D	Day Da	Day	Day	Day	Day	Day	Day [Day Da	Day	Day	Day	Day	Day	Day D	ay Da	y Day	Day	Day	Day	Day f	Day D	ay Day
Step				Day 2 Da	y 3 Day	4 Day 5	Day 6	Day 7	Day 8	Day 9 10	11	<u>Day</u>	13	14	15	16		18	19	<u>20</u> 2	1 2	2 23	24	25	<u>Day</u> 26	27	Day D 28 2	19 3	0 31	32	33	<u>Day</u> 34	35	<u>Day</u> 36	37	8 39	<u>Day</u>	41	<u>Day</u> 42	<u>Day</u> 43	44	45 4	6 47	48	49	50	<u>Day</u> 1	52 5	53 54	Day Day 4 55
		Erect Main Scaffold - TGS	6																																													.		
Step 1		Nelson St A																																														لـــــا		
		Erect Class B Hoarding -																																														.		
Step 2	TGS 3	TGS Pacific Highway																																														لب		
Step 3	TGS 2	Demolition Works																																														لب		
Step 4	TGS 1	Strip Top Scaffold																																														لب		
Step 5	TGS 2	Demolition Works																																														لب		
Step 6	TGS 1	Strip Middle Scaffold																																														لب		
Step 7	TGS 2	Demoltion Works																																														لب		
Step 8	TGS 1	Strip Bottom Scaffold																																																
Step 9	TGS 3	Strip Class B Hoarding																																																



1.8.2.1 TGS for Nelson Street During Scaffold Work – TGS 1



Traffic Guidance Scheme Installation:

Signature:

Qualification Number:

Amendment Description

Original Size A3

Date of Installation:

TGS Name & Number:

Installed By:

Expiry / Issue Date:

Issue Desg Appd Date & Time

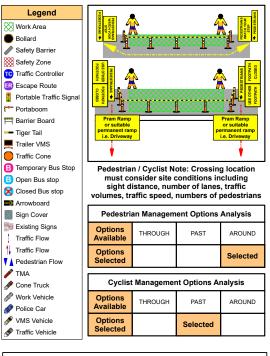
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04

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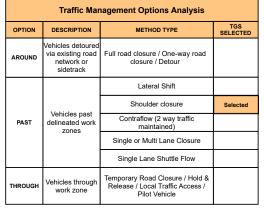


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Edge Clearances

Clearance must be measured to the traffic side edge of the delineating device

Edge Clearence

0.5 m for traffic speeds less than 65 km/h 1.0 m for traffic speeds greater than 65 km/h

0.3 m for traffic speeds less than 45 km/h 0.5 m for traffic speeds 45 to 65 km/h

1.0 m for traffic speeds 65 to 85 km/h 2.0 m for traffic speeds greater than 85 km/h

PWZTMP: TCT0039102

Exp: N/A

Signature:

Edge of traffic lane to:

Line of traffic cones or bollards Barrier boards, temporary guide

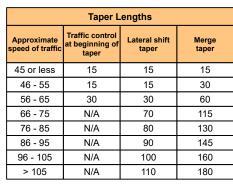
posts or temporary hazard

markers

Road safety barrier system

Installation & Removal of Signs & Devices

Multi-lane roads:



metres

metres

Dimension "D" (Main Roads)

Dimension "D" (Minor Roads)

Speed (km/h)	Distance between tapers (m)								
45 or less	10								
46 to 55	25								
56 to 65	70								
Greater than 65	1.5 x Speed Limit (D)								
Dolino	Delineation Spacing								

	Delineation Spacing	
Purpose & Usage	Speed zone of device location km/h	Maximum Spacing m
On approach to a traffic controller position (center line or edge line)	All cases	4
Merge Tapers	55 to 75 Greater than 76	9 12
Lateral shift tapers	55 to 75 Greater than 76	12 18
Protecting freshly painted lines	56 to 75 Greater than 76	24 60
All other puporses	less than or equal to 55 26 to 75 greater than 76	4 12 18

	greater than 76 18							
<u>s</u>	Sign spacing requirem	<u>ents</u>						
Number of signs	Approac	d						
	less than 65 km/h	65 km	/h or greater					
One advanced sign	D		2D					
Multiple advanced signs	D		D					

ALTERNATE SIGN SPACING Dimension 'D': AGTTM: A distance expressed in metres, determined in										
accordance with Table 2.2 and used for considered if TCAWS dimension '	ccordance with Table 2.2 and used for positioning of advance signs. To be considered if TCAWS dimension "D" cannot be provided due to site conditions.									
Speed of Traffic - km/h	Dimension - m									
55 or less	15									
56 to 65	45									

End of Queue Management	If queue distance exceeds 4D, Prepare to stop sign is required	
<u> </u>	→ Primary PTS sign	
X Control	Point Predicted end of longest quoue	
Estimated end of quer	ue lengths to be noted here:	

Two-lane, two-way roads:

	1: Install the termination signs when initially leaving work reinstatement (affected direction). 2: Use the existing road network to turn where safe to do: 3 to: 7: Place approach signs in unaffected direction, inclu to remain with the PTCD). 8: Install "End Road Work/speed reinstatement" (unaffecte 9: Use the existing road network to turn where safe to do: 10 to 14: Place approach signs in the affected direction, in controller to remain with PTCD). 15 and 16: Traffic controller/s to stop traffic and taper/lane 17: ITCP qualified person completes drive around to confi	so. ding the PTCD (traffic controller d direction). so. cluding the PTCD (traffic	1: Locate advance warning vehicle and TMA to shadow sign installation vehicle. 2 to 5: Install advance warning signs in unaffected lane. 6: Install "End Roadwork'/speed reinstatement. 7: Use the existing road network to turn where safe to do so. 8: Locate advance warning vehicle and TMA to shadow sign installation vehicle. 9 to 12: Install advance warning signs in obstructed (affected) lane. 13: Install "Flashing Arrow" and delineation devices on approach to start of taper. 14: Position TMA in travel lane to shadow installation of taper. 14 and 15: Install taper and delineation devices to form taper, safety buffer and past installation the safe to do so. 18: TMA positioned to shadow work area. 19: ITCP qualified person completes drive around to confirm TGS is installed as de
]	(1) (1) (2) (3) (4)	0 2	
	- O		-
	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	7 6 6 4 3	

The sequence of installation should be as illustrated in the following order:

1: Install the termination signs when initially leaving work area, 'End Road Work/speed

nted. ed.	16: Install 'En 17: Use the ex 18: TMA posit	d Roadw cisting ro tioned to	ork'/speed reins and network to tu shadow work are	tatement. rn where safe to dea.	aper, safety buffer and p do so. nfirm TGS is installed as	
2	7 8 9	0	11 12			16
-	→		13	10	(8)	
	1 2	3	4			6

TGS Designed By: Karisa Dwyer

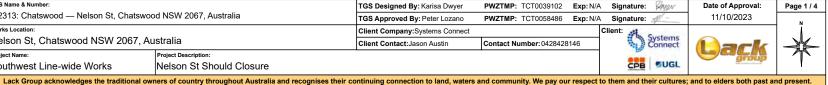
The sequence of installation should be as illustrated in the following order: 1: Locate advance warning vehicle and TMA to shadow sign installation vehicle.

	considered if TCAWS dimension "D" cannot be provided due to site conditions.									
	Speed of Traffic - km/h	Dimension - m								
	55 or less	15								
	56 to 65	45								
	Greater than 65	speed of traffic, in Km/h								
,										

Date of Approval:

Dayer

62313: Chatswood - Nelson St, Chatswood NSW 2067, Australia 11/10/2023 Exp: N/A KD PL 10.10.23 - 1:45am Original Issue TGS Approved By: Peter Lozano PWZTMP: TCT0058486 Signature: Client Company: Systems Connec Systems Nelson St, Chatswood NSW 2067, Australia Client Contact: Jason Austin Contact Number: 0428428146 Project Name Project Description: CPB SUGL Southwest Line-wide Works Nelson St Should Closure



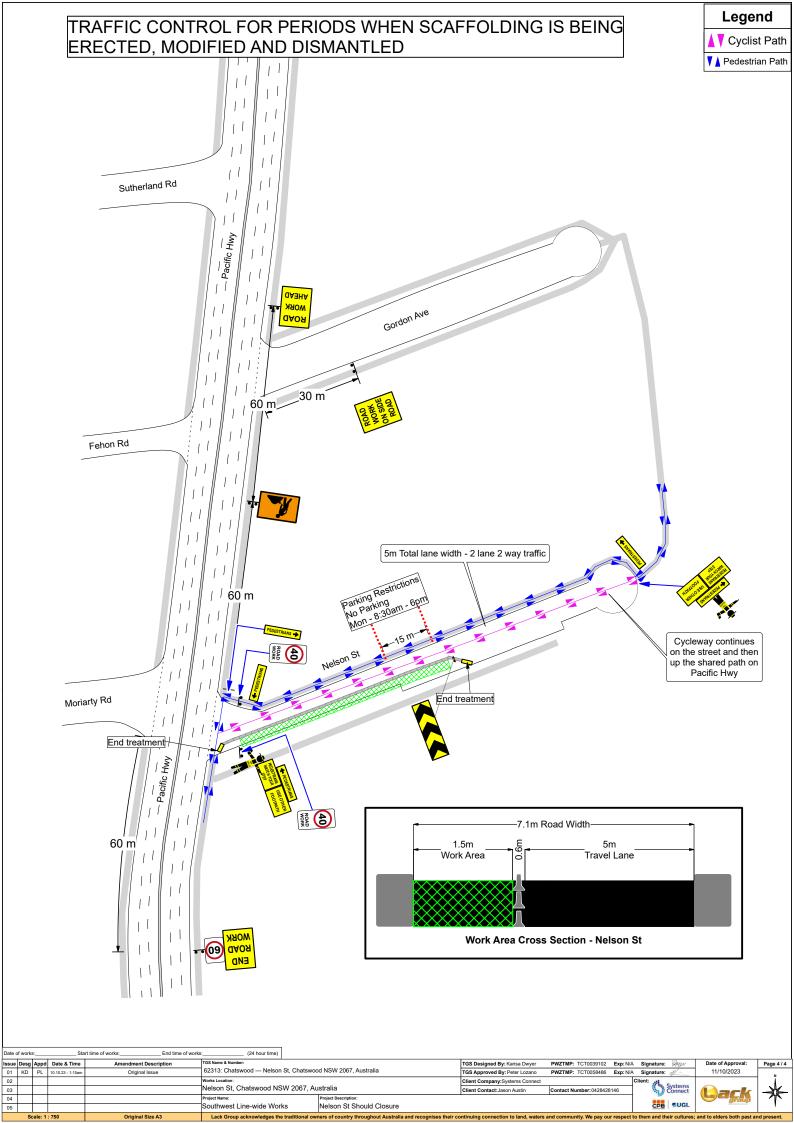
	Hierarc	hv of Co	ontrols	_	TGS	S Ris	sk A	Assessi	ment				Item #	Worksite Compon	nent	Potential Hazard	Initia	I Risk	Present	Control Measures	_	sidual R	_
	Hierarchy of Controls 1. Eliminate the hazard altogether. eg Road dosures Effective					Step 1	1 - Consequence (impact)		1									Always:					
l I	eg. Road closures. 2. Substitute the hazard with a safer alternative. eg. Using PTCDs instead of stop bats. 3. Isolate the hazard from anyone who could be harmed. eg. Drop zones for clients works in elevated work zones. 4. Use engineering controls to reduce the risk. eg. The use of traffic control devices to protect work area. 5. Use administrative controls to reduce the risk. eg. Ensure personnel are trained in their field.		 		Negligible (1)		Minor (2)	Moderate (3)	Major (4)	Severe (5) Fatality	Health & Safe	п 34	After care		Inadequate signage resulting in motorist loosing control and crashing or motorist becomes		4 20	N	 Install RWA (T1-1) if diverting traffic along a sidetrack, detour, or unexpected conditions, such as loose stones or the absence of line markin - Cover any signs that are not applicable 		3	12	
] 				First Aid Treatment Very minor injury that requires no treatment or simple first aid		Injur	Medical Treatment / / illness, which requires dical treatment and may porarily restrict a persons	Lost Time Injury Injury / Illness, which temporarily renders a person unfit to work in any capacity	Permanent Impairment Injury Injury / illness, which permanently alters a persons future (eg. Spinal injury,				Allel care		frustrated due to inappropriate signage			-"	- Erect Condition signs in accordance with TCWS Manual - Provide delineation or temporary line marking - Aftercare speed limit to suit road conditions				
				no reament of simple lifst and			capacity to work	unfit to work in any capacity	amputation or death)		fety	Ш							Always: - Install RW 1km Ahead if approach speed is > 85km/h or sight distance is less than 150m				
i I				Short term damage		Lit	nited but medium term damage	Significant but recoverable ecological damage	Heavy ecological damage, costly restoration	Permanent widespread ecological damage		3.5	Poor sight distance or sy compliance or Approach sy 85km/h, or multi lane roac traffic volume > 10,000	h speed > to	to react and fails to negotiate merge	5 4	4	Y	less ulan rouni - Use 700mm cones where traffic speed is greater than 75km/h - Use 900mm cones on high speed to high volume roads (e.g., expressway) or on any work site where increased visibility is required - Duplicate Lane status sign.	4	2	14	
	6. Use PPE. gg. Wearing gloves while manual	while manual handling.		Less Effective	Brief delay / slight impact on service delivery		Local or worksite specific impact on service delivery or customer satisfaction		Temporary impact on service delivery or customer satisfaction at a local event / project level	Serious impact on service delivery or customer satisfaction at a state client or large project level		Long term or very severe impact on service delivery or customer satisfaction resulting in loss of business nationally							ľ	Consider: Installing RWA (T1-1) Increasing taper lengths			
	Almost Certain (5) The threat can be expected to occur 75% - 99% Common / Frequent Occurance More than 1 event month		t More than 1 event per month		Moderate (8)		High (16)	High (18)	High (21)	Extreme (25)									Increasing the number of advance warning signage installed Increasing the size of signage installed Need for duplication of signs.	Ш			
žii d	Likely The threat will quite commonly occur 50% - 75%		o occur or "it has Moned regularly"	ore than 1 event per year		derate (7)		Moderate (10)	High (17)	High (20)	High (24)		3.6	Side Roads		Vehicles enters work site from a side road and collides with workers	3 4	4 17	Υ	- Always install advance warning signage for vehicles entering from side road in advance of the work site.	3	2	11
Prob	Possible (3) The threat may occur occasionally 25% - 50%		cur or "I've heard happening" 1 ev	rent per 1 to 10 years		Low (3)		Moderate (9)	Moderate (12)	High (19)	High (23)									Ensure speed zones are designed in accordance with TCAWS, AS1742.3 and AGTTM. Ensure speed zoning is consistent with the work activity and road.			
en 2 -	Unlikely The threat could infrequently occur (2) The threat could infrequently occur often (10% - 25% occur) and the threat may occur in the threat may occur in the threat may occur. Conneivable but only in		ot likely to occur very 1 event per 10 to 100 often years		Low (2)			Low (5)	Moderate Moderate (11) (14)	High (22)		3.7	Temporary Speed Zone	one	e Motorist travelling too fast for the conditions causing MVA	5 4	4 24		 environment. Consider the use of speed radar VMS to monitor traffic speeds and advise motorists. 	4	2	14	
i i				than 1 event per 100 years	Low (1)			Low (4)	Low (6)	Moderate (13)	Moderate (15)							Щ	Transition	- Review the TGS and adjust where possible to enhance traffic calming through the work site.	Ш	Ш	
	(1) occasionally 0% - 10%	<u> </u>			:		The ris		11	e and the probabil										Always: - Install taper lengths and cones in accordance with TCAWS Manual	Т		
Item	Worksite Component		Potenti	al Hazard	Initial Ris		Pres	ent	Control Measures			idual Ris		Lane closure	١,	Motorist fails to negotiate taper and				Install & duplicate/repeat Lane Status Sign (T2-6-1 or 2) on multi lane roads - Use a minimum of 2 temporary hazard markers (T5-4 or 5) on tapers			
-					C P R		Acceptar	nce			C		R 4.0			collides with worker, vehicle or plant		4 24	Y	- Install a 30m minimum buffer zone at the end of tapers - Check setup before commencing work	4	2	14
	TGS Drawn / implement	TGS Drawn / implemented by TGS Drawn / implemented by		implemented by	,		Γ.	AGTTM.	implement TGS in accordance with TCAWS, AS1742.3 a											Consider using a shadow vehicle (or vehicles) with flashing lights to protect workers Ensure appropriate site distance to start of taper			
1.0	unqualified person or organ			son or organization		3 23	Y	and implemen	ntation of the TGS are	nent personnel involved certified as competent p s they are required to u	persons to	1	13						Work Area	- Design and implement TGS in accordance with TCAWS, AS1742.3 and		Ħ	
							Departu	res	rm the traffic management tasks they are required to undertake. Insider use of shadow vehicles if practical, or other type of static hard				Traffic Control		Motorist not concentrating or speeding collides with end of queue or traffic controller	5 4	4 24	Y	AGTTM. Ensure all relevant traffic management personnel involved in the design and implementation of the TGS are certified as competent persons to				
			Traffic controller hit by vehicle		nicle 5 4 24			cover availab - Ensure best	consider use of snadow variations in practical, or other type or static hard over available (i.e. safety barrier) Ensure best possible escape route considered when allocating control oint on TGS - to be reassessed onsite continuously					5.0					s	perform the traffic management tasks they are required to undertake. - Conduct regular inspections in accordance with TCAWS, AS1742.3 and AGTTM.	4	2	14
2.0	Stop bat used instead of	PTCD					24 Y	 Ensure best be possible, r 	line of sight where pra epeater signs in advan	ctical. Should the best ce warning to be used.	,	2	14							Rectify any deficiencies as a matter of urgency. Review traffic controls to suit changes in site conditions.			
	VMS Motorist collides with VMS, m confused by VMS						 Traffic controller to always remain clear from travelled p Ensure appropriate speed signage has been installed a and maximum length requirements. 												Always: - Install workman T1-5 sign if workers on road - Space cones in accordance with TCAWS Manual				
			es with VMS, motorist sed by VMS 4 4 20			4 4 20 N		e VMS behind an appro	oved safety barrier or a	od cuitable		5.1	Working adjacent to trave	el lane	lane Motorist collides with worker, vehicle or plant	e 4 4	4 20	Y	- Check setup before commencing work - Reduce speed based on lateral clearance between the work area and travel lane Consider: - Using a shadow vehicle(s) with flashing lights to protect workers	4	2	14	
3.0								ocumented risk assess is to be confirmed by I	ment. Risk Assessment	3	2	11											
3.1	Long Term Works			torist collides with orker	h 4	4 20	N	- Consider us	all RWA (T1-1) on long- ing VMS's	term road work sites	3	3	12						General	- Using spotters with workers - Using safety barriers		Ш	
								 Use two-wa 		ved and appropriate R0 rucks and give them pr			6.0	Night work		Due to poor visibility motorist collides with end of queue, worker,	5 4	4 20	Y	- Consider providing portable lighting to ensure traffic controllers are visible and ensure the positions of any temporary lighting are clearly shown on the	4	2	14
								possible - Monitor qu - Install addi		ional traffic controllers o	or stop work and					vehicle or plant Rain/fog reduces visibility and causes road to be slippery increasing risk of a				TGS & always use applicable night PPE. - Always monitor weather and traffic - Always regularly check setup to ensure signs are visible. If visibility has		++	
3.2	Delays or Queue extends beyo				eue 4	4 20	V	Clear traffic if Give emerg Consider: Working ou	end of queue extends I	s beyond the advance wa loads priority (i.e. stop w	arning signs	2	6.1	Wind / Rain / Fog / Obstru	ructions road to be slippery increasing risk of a collision with workers, plant or other traffic Wind blows over signs Vehicle parks in front of sign		5	4 20	Y	been obstructed, consider shifting signs, duplication, or repetition. Consider additional advance warning signage Liaise with client to reconsider setup or continuation of works	3	3	12
	advanced warning signs	signs		,					side peak periods TMC for assistance w	ith traffic signal phasing	3									Always: - Ensure positive communications			
								 Notifying en Use of flash 	nergency services	d to advance warning s	ignage		6.2	Vehicle Movements	s P	Plant collides with motorist, workers, or other plant	4 :	3 19	Υ	Consider: - Using Traffic Control and/or Spotters to manage work vehicles - Installation of exclusion Zones	3	3	12
								 Use of queu Ensure TGS where require 		cater for the predicted	queue lengths		_							Preparing a VMP where required. Ensure TGS design caters for all road users including pedestrians and cyclists.		++	
										along a sidetrack, det										Always clearly delineate the work area. Do not obstruct pedestrian and cyclists travel paths with traffic control signs and devices.			
	Changed traffic condition Slippery surface, no lines, o	bonned	inged or attempts a banned man			4 4 20		 Erect Condi Provide deli 	tion signs in accordanc neation or temporary lir	e stones or the absence e with TCAWS Manual ne marking and ensure	this is clearly		6.3	Pedestrians and Cycli		Pedestrian and/or cyslist enters the work zone or travel lane and is hit		5 21	Υ	Consider the use of additional warning and guidance signage for pedestrians, cyclist and motorists. Comply with shoulder and lane width criteria in the design of the TGS.	4	2	14
3.3	line marking, banned tu movements, detours	rning					N	 Use Traffic (nged traffic conditions v		2	11	,	by vehicle or plant					Consider the use of traffic control at crossing points especially where contra-flow arrangements are in place. Consider the use of additional traffic controllers to monitor and assist pedestrian and covolist movements where required.			
								- Ensure appi - Speed redu - Consider us	opriate permission for ction installed to suit ro ing VMS's	any detours ad conditions										- Ensure the use of existing or temporary ramps for crossing points. - Undertake consultation to determine existing travel paths, desire lines, volumes, and types of users.	1		
loous 5	esg Appd Date & Tim		A	adment Des	intia		тес	Name & Number:						I	TGS Dr	signed Bus Kories Dunier	D\A/77*	MD: T	CT003910			En:	2/4
	SD PL 10.10.23 - 1:15			Original Issue	•				ood — Nelson St	, Chatswood NS	W 2067, Austral	ia		-		, ,			CT003910 CT005848	117/-	+	rage	je 2 / 4
02				-				ks Location:	atewood NCM	2067 Austral	ia				Client Co	ompany:Systems Connect				Client: Systems			ا رآ
03								ect Name:	aiswood NSVV	2067, Austral	t Description:				Client Co	ontact:Jason Austin	Contac	t Num	nber: 0428	428146 Connect	2	\rightarrow	
05									e-wide Works		on St Should	Clos	ure							CPB SUGL	-		1
	Scale: 1 : 750		0	Priginal Size A	13			Lack Group ac	knowledges the tr	aditional owners of	f country through	out Au	stralia a	nd recognises their cor	ntinuing	connection to land, waters ar	nd com	munit	y. We pay	our respect to them and their cultures; and to elders both pa	st and	d pres	ent.

	tem Worksite Component Potential Hazard Initial Risk				Present	resent Control Measures Residual Risk				k	NOTES: GENERAL NOTES										
	#	TO Raite Component	i otential Hazaru	C P	R	. resent			P	P R	2	SENERAL NOTES This Traffic Guidance Scheme (TGS) is to be used in conjunction with the Traffic Management Plan (TMP) and associated road authority permits and management plans, including Road Occupancy Licence (ROL), vehicle movement plan (VMP) and pedestrian movement plan (PMP) where applicable.									
						į	 Consider notifying bus companies that operate in the Always provide adequate provision for buses or care when buses aren't operating 	ne area rry out work at night				2. This TGS has been produced by a Prepare Work Zone Traffic Management Plan (PWZTMP) qualified person in accordance with the requirements of the TfNSW Traffic Control at Work Sites manual, Issue 6.1 dated 28 February 2022 (TCAWS 6.1) and with reference to AS1742.3 and AUSTROADS Guide to Temporary Traffic Management									
	6.4	Bus stops	Bus unable to pull up safely causing MVA	3 3	12		when buses aren't operating · Where temporary bus stops are created, ensure bus the curb	ses are able to meet 2	2	2 5	5	Parts 1 – 10, version 1.1 dated September 2021 (AGTTM). 3. This TGS is suitable for@fort term/ leng-term works.									
							Ensure TGS clearly shows affected stops Traffic controllers to manage and assist where safe	and possible				APPROVALS APPROVALS APPROVALS APPROVALS									
	6.5 F	Property accesses - commercial or private	Collisions due to propertie acess restrictions	3 4	17		Consider staging work outside of business hours Create physical barrier to prevent traffic entering sit	,	2	2 5	5	5. The TGS must be approved for use before implementation. 6. Ensure all road authority approvals and associated conditions of approval are met prior to implementing the TGS.									
							For excavations shallower than 0.5m and within 3m ane, delineate the excavation with plastic mesh fenci	of the edge of traffic				TGS VERIFICATION 7. Prior to use on site, the selected or designed TGS must be verified to ensure it is suitable for the works and location by undertaking an inspection of the work site where									
							placed perpendicular to the traffic flow or cones/bolla For excavations deeper than 0.5m and within 3m of	ards. f the edge of traffic				the TGS will be implemented. The TGS verification must be completed in accordance with TCAWS 6.1, Section 8.1.2 by an Implement Traffic Control Plan (ITCP) or PWZTMP qualified person. Refer Page 1 of this TGS for Site Verification sign-off.									
	6.6	Excavations within work area	Errant vehicle drives into excavation	5 4	25		ane, a temporary safety barrier must be installed. Wi than 3m from the excavation, the requirement for a te	emporary safety barrier 4	2	2 14	4	RISK ASSESSMENT 8. A desktop risk assessment has been undertaken in developing this TGS. However, when implementing this TGS on site, the site supervisor should undertake a site									
						-	should be considered based on a documented risk as Where the excavation is deeper than 200mm, is op- weeks and the distance from the edge of traffic lane i	en for more than 2				specific risk assessment to ensure that the TGS has considered and mitigated all identified hazards and risks. INSTALLATION AND REMOVAL OF SIGNS AND DEVICES									
						6	60km/h, 6m for 80km/h and 9m for 100km/h, a tempo must be installed.					9. All traffic management signs and devices prescribed for use in this TGS are in accordance with TCAWS 6.1 with reference to AS1742.3 and AGTTM. 10. The TGS must be installed, maintained and removed in a planned and safe manner. The implementation must only be undertaken by an ITCP qualified person.									
	6.7	Parking	Parked vehicle or worker exiting vehicle hit by passing vehicle	4 4	20		Always check adequate parking is available for work Consider providing safe parking within the work are		2	2 14	4	11. All signage shown on this TGS is not to conflict with any long-term existing signage arrangements in the area. If this occurs, cover all conflicting road signage where required.									
	6.8	Concurrent Works	Motorist confused by conflicting	3 4	17		Always establish communication with other site if po Always cover any conflicting signs and adjust TGS a	ossible as necessary 3	3	3 12	2	PLACEMENT OF SIGNS AND DEVICES 12. Signs must be properly displayed and securely mounted at all times and within the line of sight of the intended road user. Regulatory and detour signs must be located									
-	\dashv		signs causing MVA			-	Complete conflict checks where required Comply with shoulder and lane width criteria in the		+		4	nearest to the travel edge of the lane. Signs must not: Be obscured from view, such as by vegetation or parked cars; Obscure other devices from the line of sight of the intended road users; Create a hazard to road workers and road users, including pedestrians and cyclists; Be a hazard that deflects traffic into an undesirable path; Restrict									
						t	During the design of the TGS, check vehicle swept to ensure the largest known vehicle travelling through	path where necessary				sight distance for drivers entering from side roads or streets, or private driveways; and Be installed using supports that could be a hazard if struck by a vehicle. 13. Signs mounted on frames for short-term works should be mounted a minimum 200mm from the ground to the lower edge of the sign.									
	6 g L	eavy Vehicles and OSOM Vehicles	HV cannot travel past work site	4 4	20	r	negotiate the changed traffic conditions. Traffic controllers to communicate with heavy vehicle	le and OSOM drivers	2	2 14	4	14. Signs mounted on posts for long-term works in open road situations, the underside of the sign must be at least 1.5m above the level of the nearest edge of the travelled path. When installed on a kerb or footpath, the underside of the sign must be at least 2.2m above the level of the nearest edge of the travelled path.									
	J.J 11	car, remotes and Occivi vehicles	without knocking over delineation			ľ	to warn and guide them through the work site as requestraffic control to monitor heavy vehicle movements	and if required, make	_	_ [ORIENTATION OF SIGNS 15. On the outside of a curve, the sign face must be at 0 degrees, or 'normal to traffic'. On a straight, the sign face must be angled at approximately 5 degrees normal to proposition to the light of a curve, the sign face must be angled at approximately 5 degrees normal to									
							adjustments to the signs and devices within approved significant changes are required, liaise with Client/Su for TGS to be reviewed and modified by the designer	pervisor and arrange				oncoming traffic and on the inside of a curve, the sign face must be angled at approximately 5 degrees normal to oncoming traffic at 200m preceding the sign. TOLERANCES 16. Local constraints may not allow signage and devices to be placed in accordance with this TGS. Unless stated otherwise on the TGS, the tolerances on the positioning of									
	_		<u> </u>		Dynar	nic Works						16. Local constraints may not allow signage and devices to be placed in accordance with this TGS. Unless stated otherwise on the TGS, the tolerances on the positioning of signs, length of tapers or pavement markings detailed in the TGS is a minimum 10% less and a maximum 25% more than the distances or lengths stated and for the spacing of delineation devices a maximum 10% more than the spacing detailed in the TGS.									
							 Consider use of TMA on higher speed roads >85km Use speed reduction best suited to work activity and 	n				Tr. Any variation to the positioning of signs and devices within the approved tolerances must be marked and initalled on the TGS held on site, with the name of the person making the changes shown on the TGS.									
			Motorists speeding / not				 Use applicable AW signage displayed on AWV Ensure sight distances between AWV, shadow vehice 					MODIFYING TGS 18. Modifications to a Site Specific or Site Suitable TGS must be approved by a person holding the PWZTMP qualification and must be supported by a TMP or risk									
	7.0	General Traffic	concentrating / tired / distracted. Not having enough time to merge causing MVA	5 5	25	NA	abelled on TGS Ensure 20-40m buffer zone between shadow vehicl ess than 40m when using a TMA as a shadow vehicl	le and work vehicle. No	2	2 14	4	assessment to ensure that the TGS has considered and mitigated all identified site specific conditions and risks. 19. If it is identified that by implementing the TGS with modifications outside of the approved tolerances it will generate risks, then the works must be stopped (including the									
			oadsing WVA				Positive communications to be held at all times Workers to remain shadowed at all times					implementation of the TGS), the site must be made safe and an updated TGS must be provided by a PWZTMP qualified person prior to works recommencing. Any concerns regarding the suitability of the TGS must be raised with the Site Manager and your immediate Supervisor.									
						i	Monitor traffic queues on all road configurations, co f required until traffic has cleared	nvoy to clear roadway	L			TRAFFIC CONTROLLERS 20. The implementation of traffic control must be conducted in line with the hierarchy of controls with the elimination of harm to workers and the travelling public considered									
_											irst instance. nere traffic control is required, a portable traffic control device (PTCD) must be used rather than using a manual traffic controller when the existing permanent speed										
	Item Additional Control Measures								limit is greater than 45 km/h. 22. TCAWS 6.1, Section 5.4 provides the conditions under which a manual traffic controller may be used.												
	8.0										23. Where PTCDs or traffic controllers are used, approach speeds of traffic must be reduced to less than 65 km/h. 24. All persons operating a portable traffic control device or performing manual traffic control must be qualified with 'Traffic Control' training; and authorised by the relevant read authority.										
-										road authority. ROAD USER MANAGEMENT 25. The needs of specific road users, including travel paths and desire lines, must be considered and managed for the extent of the works to ensure safety and access is											
	9.0										25. The needs of specific road users, including travel paths and desire lines, must be considered and managed for the extent of the works to ensure safety and access is maintained. Specific road user groups to be considered include: Pedestrians including high-risk pedestrians such as persons with a disability, children, the elderly or persons using mobility aid devices; Cyclists; Motorcyclists; Heavy Vehicles, including oversize overmass vehicles; Public transport; and Emergency services. The needs of these										
	10.0										using mobility aid devices; Cyclists; Motorcyclists; Heavy Vehicles, including oversize overmass vehicles; Public transport; and Emergency services. The needs of these specific road users have been considered in the design of this TGS, however the needs of all road users should be considered in the site specific risk assessment before implementing the TGS to ensure the TGS is appropriate.										
	11.0									implementing the TGS to ensure the TGS is appropriate. 26. Road users are to be monitored for the duration of the works. If additional signage and/or devices are required to manage the needs of specific road users, such as pedestrians and cyclists, this would be subject to following the procedure for modifying a TGS.											
	lta										pedestrians and cyclists, this would be subject to following the procedure for modifying a TGS. ACCESS MANAGEMENT 27. Access to properties located within the extent of works must be maintained at all times.										
	Item											28. Property access impacted by the works should be identified and addressed in the TGS. Consultation with the property owner/resident must be undertaken prior to implementing the TGS if required.									
	12.0										INCIDENT MANAGEMENT 29. The site contractor is to determine the appropriate procedure for incident management where appropriate.										
	13.0											30. If an incident occurs within the extent of the traffic control arrangement: Call fic control, if necessary, relocate the traffic control station to a suitable location clear of any incident courses within the extent of the traffic control arrangement: Call fic control, if necessary, relocate the traffic control station to a suitable location clear of any									
	14.0											further danger; and Record sufficient notes of the incident, including observations, to complete an incident report. INSPECTIONS									
												31. Temporary traffic management monitoring activities must be undertaken in all instances where work is being performed or aftercare is in place. This includes day and night times as required. The type of inspections and frequency are to be in accordance with TCAWS 6.1, Section 8.1.1.									
			Dep	oarture	es Si	gn Off	f (CLIENT):					REVIEW OF TGS 32. Generic TGSs must be reviewed by a PWZTMP qualified person every 12 months so that they remain appropriate. Once reviewed the date and details of the PWZTMP									
	01:	No.										person must be updated on the TGS to ensure persons selecting can confirm currency. 33. All active site specific and site suitable TGS are designed for the nominated work activity and are only valid for the time period of works specified on the TGS. They must									
	Client	Name:										be reviewed as part of the weekly inspections as detailed in TCAWS 6.1, Section 8.1. If the work activity is intended to be longer than 12 months, then the TGS musty be formally reviewed by a PWZTMP qualified person at least every 12 months and issued with the review date and the details of the person undertaking the review.									
	Clion	nt Signature: Date:								RECORD KEEPING 34. Supervisory personnel are to keep daily records of the TGS implementation including: Site specific risk assessments; Approved TGS used, including versions where											
	onem	Signature: Date:							modifications or updates have been made; Completed inspection checklists that have been undertaken; Records of traffic related incidents that occurred during the works; and Any other relevant document generated by the process of completing the temporary traffic management works.												
Issu	e Des	g Appd Date & Time	Amendment Description	on		TGS Nam	e & Number:					TGS Designed By: Karisa Dwyer PWZTMP: TCT0039102 Exp:N/A Signature: Dugw Date of Approval: Page 3 / 4									
01		No. No.				62313: Chatswood — Nelson St, Chatswood NSW 2067, Australia						TGS Approved By: Peter Lozano PWZTMP: TCT0058486 Exp: N/A Signature: 11/10/2023									
02						Works Location: Nelson St. Chatswood NSW 2067, Australia						Client Company: Systems Connect Client: Systems									
03		+ + - +				Project N	, - , , , , , , , , , , , , , , , , , ,	Project Description:				Client Contact: Jason Austin Contact Number: 0428428146									
05			Southwes				vest Line-wide Works Nelson St Should Closure					CPB SUGL									

Lack Group acknowledges the traditional owners of country throughout Australia and recognises their continuing connection to land, waters and community. We pay our respect to them and their cultures; and to elders both past and present.

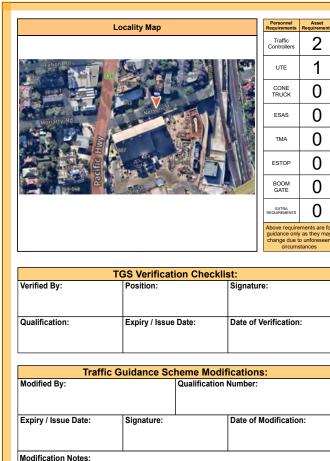
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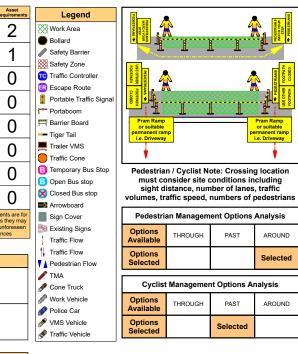
Original Size A3

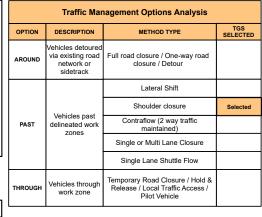


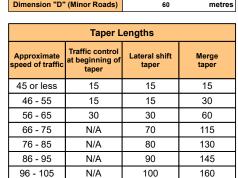


TGS for Nelson Street During Demolition Work - TGS 2









110

Distance between tapers (m)

25

70

1.5 x Speed Limit (D)

N/A

metres

180

Dimension "D" (Main Roads)

> 105

Edge Clearances	Speed (F	(m/h)
	45 or le	ess
	46 to	55
**************************************	56 to	65
Clearance must be measured to the traffic side edge of the delineating device	Greater th	nan 65
The cage of the defined thing device		D
	Purpose & Usage	Sį

Delineation Spacing							
Purpose & Usage	Speed zone of device location km/h	Maximum Spacing m					
On approach to a traffic controller position (center line or edge line)	All cases	4					
Merge Tapers	55 to 75 Greater than 76	9 12					
Lateral shift tapers	55 to 75 Greater than 76	12 18					
Protecting freshly painted lines	56 to 75 Greater than 76	24 60					
A II - 4h	less than or equal to 55	4					

Edge of traffic lane to:	Edge Clearence	
Line of traffic cones or bollards	- 0.5 m for traffic speeds less than 65 km/h - 1.0 m for traffic speeds greater than 65 km/h - 1.0 m	
Barrier boards, temporary guide posts or temporary hazard markers		
Road safety barrier system	- 0.3 m for traffic speeds less than 45 km/h - 0.5 m for traffic speeds 45 to 65 km/h - 1.0 m for traffic speeds 65 to 85 km/h - 2.0 m for traffic speeds greater than 85 km/h	

Lateral shift tapers	55 to 75 Greater than 76	12 18					
Protecting freshly painted lines	56 to 75 Greater than 76	24 60					
All other puporses	less than or equal to 5 26 to 75 greater than 76	4 12 18					
Sign spacing requirements							
Number of signs	Approac	h Spee	d				
	less than 65 km/h	m/h or greater					
One advanced	D	2D					

Number of signs	Approac	h Speed
	less than 65 km/h	65 km/h or greater
One advanced sign	D	2D
Multiple advanced signs	D	D

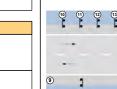
ALTERNATE SIGN SPACING Dimension 'D': AGTTM'. A distance expressed in metres, determined in accordance with Table 2.2 and used for positioning of advance signs. To be considered if TCAWS dimension "D" cannot be provided due to site conditions.						
Speed of Traffic - km/h	Dimension - m					
55 or less	15					
56 to 65	45					
Greater than 65	speed of traffic, in Km/h					

Signature:

Signature:

Dones

Systems



TGS Name & Number:

Project Name

End of Queue Management

Two-lane, two-way roads:

to remain with the PTCD).

einstatement' (affected direction).

controller to remain with PTCD).

Control Point

Estimated end of queue lengths to be noted here

2: Use the existing road network to turn where safe to do so.

62313-2: Chatswood — Nelson St, Chatswood NSW 2067, Australia

Nelson St, Chatswood NSW 2067, Australia

8: Install 'End Road Work/speed reinstatement' (unaffected direction)
9: Use the existing road network to turn where safe to do so.

(h) (f) (g)				1	2
-	(B) (7)					
9 8		7	6	5	4	3

Project Description:

The sequence of installation should be as illustrated in the following order:

1: Install the termination signs when initially leaving work area, 'End Road Work/speed

3 to 7: Place approach signs in unaffected direction, including the PTCD (traffic controller

15 and 16: Traffic controller/s to stop traffic and taper/lane closure delineation implemented

17: ITCP qualified person completes drive around to confirm TGS is installed as designed

10 to 14: Place approach signs in the affected direction, including the PTCD (traffic

Prepare to stop sign is required

nted. ed.	16: Install 'End 17: Use the exi 18: TMA position	Roadw sting ro oned to	ork'/speed reinstat oad network to turn shadow work area	tement. where safe to do s	o. n TGS is installed as	
2	7 8 9	10	11 12			16
			13		(15)	
	-					
)	1 2	3	4			5

TGS Designed By: Karisa Dwyer

TGS Approved By: Peter Lozano

Client Company: Systems Connec

Client Contact: Jason Austin

The sequence of installation should be as illustrated in the following order: 1: Locate advance warning vehicle and TMA to shadow sign installation vehicle.

: Locate advance warning vehicle and TMA to shadow sign installation vehicle.

9 to 12: Install advance warning signs in obstructed (affected) lane. 13: Install 'Flashing Arrow' and delineation devices on approach to start of taper.

2 to 5: Install advance warning signs in unaffected lane. 6: Install 'End Roadwork'/speed reinstatement.

: Use the existing road network to turn where safe to do so.

14: Position TMA in travel lane to shadow installation of taper.

Traffic Guidance Scheme Installation:							
nstalled By:		Qualification	Number:				
Expiry / Issue Date:	Signature:		Date of Installation:				

Amendment Description

Original Issue

Issue Desg Appd Date & Time

PL 10.10.23 - 1:55am

KD

02

03

04

05

PWZTMP: TCT0039102 Exp: N/A

PWZTMP: TCT0058486

Contact Number: 0428428146

Exp: N/A

4 and 15: Install taper and delineation devices to form taper, safety buffer and past work area.

Date of Approval:

11/10/2023	N
açk	*

Page 1 / 4

CPB SUGL Southwest Line-wide Works Nelson St Should Closure Original Size A3 Lack Group acknowledges the traditional owners of country throughout Australia and recognises their continuing connection to land, waters and community. We pay our respect to them and their cultures; and to elders both past and present. Scale: 1:750

Installation & Removal of Signs & Devices

Multi-lane roads:

Specification by Specific Community Programmed Specific Community	VA (T1-1) if diverting traffic along a sidetrack, detour, or d conditions, such as loose stones or the absence of line marking y signs that are not applicable didtions signs in accordance with TCWS Manual elineation or temporary line marking speed limit to suit road conditions V 1km Ahead if approach speed is > 85km/h or sight distance is 50m mo cones where traffic speed is greater than 75km/h mm cones on high speed to high volume roads (e.g., expressway) work site where increased visibility is required Lane status sign. 4 EWW (T1-1) g taper lengths g the number of advance warning signage installed g the size of signage installed g the size of signage installed duplication of signs. Stall advance warning signage for vehicles entering from side ance of the work site. 3 ance of the work site. 9 seed zones are designed in accordance with TCAWS, AS1742.3 M, epeed zoning is consistent with the work activity and road nt. the use of speed radar VMS to monitor traffic speeds and advise he TGS and adjust where possible to enhance traffic calming a work site. 9 ser lengths and cones in accordance with TCAWS Manual duplicate/repeat Lane Status Sign (T2-6-1 or 2) on multi lane nimum of 2 temporary hazard markers (T5-4 or 5) on tapers form minimum bffer zone at the end of tapers tup before commencing work using a shadow vehicle (or vehicles) with flashing lights to ricks propriate site distance to start of taper	2 2 2	112 14 14 14 14 14 14 14 14 14 14 14 14 14
Read sources. No. Secretaria Secretar	d conditions, such as loose stones or the absence of line marking yeigns that are not applicable didtion signs in accordance with TCWS Manual elielineation or temporary line marking speed limit to suit road conditions 1 1 km Ahead if approach speed is > 85km/h or sight distance is 50m mr cones where traffic speed is greater than 75km/h mm cones on high speed to high volume roads (e.g., expressway) work site where increased visibility is required Lane status sign. 1 2 km/A (T1-1) g taper lengths g the number of advance warning signage installed g the size of signage installed duplication of signs. stall advance warning signage for vehicles entering from side vance of the work site. 3 2 km/A (T3-1) g taper lengths groups are designed in accordance with TCAWS, AS1742.3 M. peed zoning is consistent with the work activity and road nt. the use of speed radar VMS to monitor traffic speeds and advise her TGS and adjust where possible to enhance traffic calming e work site. 2 beer lengths and cones in accordance with TCAWS Manual duplicate/repeat Lane Status Sign (T2-6-1 or 2) on multi lane nimum of 2 temporary hazard markers (T5-4 or 5) on tapers tup before commencing work using a shadow vehicle (or vehicles) with flashing lights to rickers propropriate site distance to start of tapers	2 2 2	11 11 14
After care carefully of minimal part and part above the manage of the carefully of minimal part and pa	d conditions, such as loose stones or the absence of line marking yeigns that are not applicable didtion signs in accordance with TCWS Manual elielineation or temporary line marking speed limit to suit road conditions 1 1 km Ahead if approach speed is > 85km/h or sight distance is 50m mr cones where traffic speed is greater than 75km/h mm cones on high speed to high volume roads (e.g., expressway) work site where increased visibility is required Lane status sign. 1 2 km/A (T1-1) g taper lengths g the number of advance warning signage installed g the size of signage installed duplication of signs. stall advance warning signage for vehicles entering from side vance of the work site. 3 2 km/A (T3-1) g taper lengths groups are designed in accordance with TCAWS, AS1742.3 M. peed zoning is consistent with the work activity and road nt. the use of speed radar VMS to monitor traffic speeds and advise her TGS and adjust where possible to enhance traffic calming e work site. 2 beer lengths and cones in accordance with TCAWS Manual duplicate/repeat Lane Status Sign (T2-6-1 or 2) on multi lane nimum of 2 temporary hazard markers (T5-4 or 5) on tapers tup before commencing work using a shadow vehicle (or vehicles) with flashing lights to rickers propropriate site distance to start of tapers	2 2 2	11 11 14
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Step 3 - The risk rating is where the consequence and the probability intersect Initial Risk Worksite Component Potential Hazard Initial Risk Present Control Measures Residual Risk C P R	Juplicate/repeat Lane Status Sign (T2-6-1 or 2) on multi lane nimum of 2 temporary hazard markers (T5-4 or 5) on tapers 30m minimum biffer zone at the end of tapers 1up before commencing work using a shadow vehicle (or vehicles) with flashing lights to richer size of the propriets site distance to start of taper	2	
tom # Worksite Component Potential Hazard	Juplicate/repeat Lane Status Sign (T2-6-1 or 2) on multi lane nimum of 2 temporary hazard markers (T5-4 or 5) on tapers 30m minimum biffer zone at the end of tapers 1up before commencing work using a shadow vehicle (or vehicles) with flashing lights to richer size of the propriets site distance to start of taper	2	
## Worksite Component Potential Hazard C P R Present Control Measures C P R 4.0 Lane closure Motorist fails to negotiate taper and collides with worker, vehicle or plant 5 4 24 Y Use a range of the consideration of the TGS prawn / implemented by unqualified person or organization TGS Drawn / implemented by unqualified person or organization TGS Drawn / implementation of the TGS are certified as competent persons to perform the traffic management person to provide the traffic management person to perform the traffic management person to provide the traffic management person to perform the traffic management person to provide the traffic managem	10m minimum buffer zone at the end of tapers tup before commencing work using a shadow vehicle (or vehicles) with flashing lights to rkers ppropriate site distance to start of taper	2	
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	nd implement TGS in accordance with TCAWS, AS1742.3 and	т т	
AGTTM.	Il relevant traffic management personnel involved in the design		
Consider use of shadow vehicles if practical, or other type of static hard Motorist not concentrating or and imple	nentation of the TGS are certified as competent persons to		
Ensure best possible escape route considered when allocating control or traffic controller Conduct	e traffic management tasks they are required to undertake. regular inspections in accordance with TCAWS, AS1742.3 and	2	14
	ny deficiencies as a matter of urgency.		
be possible, repeater signs in advance warning to be used. - Traffic controller to always remain clear from travelled path. Always:	affic controls to suit changes in site conditions.		_ /
- Ensure appropriate speed signage has been installed and meets minimum	rkman T1-5 sign if workers on road		
Advanced Warning Check s	nes in accordance with TCAWS Manual tup before commencing work		
2.0 VALS Motorist collides with VMS, motorist A A 20 N the edge of traffic lane as is practical in a position determined suitable 2 2 4 5.1 vvorking adjacent to traver lane or plant 4 4 20 Y travel lan	speed based on lateral clearance between the work area and 4	2	14
Confused by VMS based on a documented risk assessment.	hadow vehicle(s) with flashing lights to protect workers		
Confused motorist collides with A A So N - Always install RWA (T1-1) on long-term road work sites	otters with workers lety barriers		
Always: General			
Use two-way communication with trucks and give them priority whenever 6.0 Night work collides with end of queue, worker, 5 4 20 Y and ensu	providing portable lighting to ensure traffic controllers are visible the positions of any temporary lighting are clearly shown on the 4	2	14
Monitor queue lengths	ays use applicable night PPE.		
Install additional signs or use additional traffic controllers or stop work and road to be slippery increasing risk of a Always	egularly check setup to ensure signs are visible. If visibility has	3	12
Delays or Queue extends beyond Motorist cellidae with and of queue 1 and	additional advance warning signage		12
advanced warning signs with Find of queue 4 4 4 6 Always Always Always Liaising with TMC for assistance with traffic signal phasing	h client to reconsider setup or continuation of works		
Using VMS's	ositive communications		
- Volum greine general	affic Control and/or Spotters to manage work vehicles on of exclusion Zones	3	12
- Use of queue monitors - Ensure TGS has been designed to cater for the predicted queue lengths - Preparit	g a VMP where required.	1	
- Always ci	S design caters for all road users including pedestrians and cyclists. arly delineate the work area.		
Install RWA (T1-1) if diverting traffic along a sidetrack, detour, or	truct pedestrian and cyclists travel paths with traffic control signs and		
Changed traffic conditions (en Pedestrian and/or cyslist enters the And motor)	ne use of additional warning and guidance signage for pedestrians, cyclists		
3.3 Slippery surface, no lines, changed through a phone of the post of the pos	th shoulder and lane width criteria in the design of the TGS. the use of traffic control at crossing points especially where contra-flow ts are in place.	2	14
movements, defours) causing MVA Les Traffic Control to manage changed traffic conditions where required. - Chandler - Chandler - Chandler	us are in place. The use of additional traffic controllers to monitor and assist pedestrian and ments where required.		
- Ensure appropriate permission for any detours - Sepect reduction installed to suit road conditions Understand	use of existing or temporary ramps for crossing points. consultation to determine existing travel paths, desire lines, volumes, and		
- Consider using VMS's lypes of us	rs.		
Issue Desg Appd Date & Time Amendment Description TGS Name & Number: TGS Designed By: Karisa Dwyer PWZTMP: TCT0039102 Exp	N/A Signature: Dugy Date of Approval:	Page	2/4
2024 2. Chatavard Notice of Notice o	N/A Signature: 11/10/2023	. age	
02 Works Location: Client Company: Systems Connect	Client:	'	i
Nelson St, Chatswood NSW 2067, Australia Client Contact: Jason Austin Contact Number: 0428428146	Systems		
04 Project Name: Project Description:	- Lack		
O5 Southwest Line-wide Works Nelson St Should Closure	CPB ØUGL		1
Scale: 1:750 Original Size A3 Lack Group acknowledges the traditional owners of country throughout Australia and recognises their continuing connection to land, waters and community. We pay our responsible to the continuing connection to land, waters and community.	ect to them and their cultures; and to elders both past an	nd pres	ent.

T,	tem					Res	dual	Risk			
ľ	#	Worksite Component	Potential Hazard	С	Р	R	Present	Control Measures	С	Р	R
	6.4	Bus stops	Bus unable to pull up safely causing MVA	3	3	12	Y	-Consider notifying bus companies that operate in the area -Always provide adequate provision for buses or carry out work at night when buses aren't operating -Where temporary bus stops are created, ensure buses are able to meet the curb -Ensure TGS clearly shows affected stops -Traffic controllers to manage and assist where safe and possible		2	5
T	6.5	Property accesses - commercial or private	Collisions due to propertie acess restrictions	3	4	17	Υ	Consider staging work outside of business hours Create physical barrier to prevent traffic entering site & driveways	2	2	5
	6.6	Excavations within work area	Errant vehicle drives into excavation	5	4	25	Y	For excavations shallower than 0.5m and within 3m of the edge of traffic lane, delineate the excavation with plastic mesh fencing, barrier boards placed perpendicular to the traffic flow or cones/bollards. For excavations deeper than 0.5m and within 3m of the edge of traffic lane, a temporary safety barrier must be installed. When traffic is greater than 3m from the excavation, the requirement for a temporary safety barrier should be considered based on a documented risk assessment. Where the excavation is deeper than 200mm, is open for more than 2 weeks and the distance from the edge of traffic lane is less than 3m for 60km/h, 6m for 80km/h and 9m for 100km/h, a temporary safety barrier must be installed.	4	2	14
	6.7	Parking	Parked vehicle or worker exiting vehicle hit by passing vehicle	4	4	20	Υ	Always check adequate parking is available for workers and visitors Consider providing safe parking within the work area	4	2	14
	6.8	Concurrent Works	Motorist confused by conflicting signs causing MVA	3	4	17	Υ	Always establish communication with other site if possible Always cover any conflicting signs and adjust TGS as necessary Complete conflict checks where required	3	3	12
	6.9	Heavy Vehicles and OSOM Vehicles	HV cannot travel past work site without knocking over delineation	4	4	20	Υ	- Comply with shoulder and lane width criteria in the design of the TGS During the design of the TGS, obeck vehicle sweep path where necessary to ensure the largest known whole travelling through the work site can negotiate the changed traffic conditions Traffic controllers to communicate with heavy vehicle and OSOM drivers to warm and guide them through the work site as required Traffic control to monitor heavy vehicle movements and if required, make adjustments to the signs and devices within approved tolerances. If more significant changes are required, liaise with Client/Supervisor and arrange for TGS to be reviewed and modified by the designer.	4	2	14
ļ	_		I			Dyn	amic Work	1			
	7.0	General Traffic	Motorists speeding / not concentrating / tired / distracted. Not having enough time to merge causing MVA	5	5	25	NA	Always use a minimum 1 AWV and consider the use of a 2nd AWV. Consider use of TMA on higher speed roads >95km Use speed reduction best suited to work activity and road environment Use applicable AW signage displayed on AWV Ensure sight distances between AWV, shadow vehicles are clearly labelled on TCS. Ensure 20-40m buffer zone between shadow vehicle and work vehicle. No less than 40m when using a TMA as a shadow wehicle Positive communications to be held at all times Workers to remain shadowed at all times Monitor traffic queues on all road configurations, convoy to clear roadway if required until traffic has cleared	4	2	14
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	Iter	n	Add	ditic	ona	l Co	ontrol (Control Measures			
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Item	Departures: State the departure and reason for departure							
12.0	12.0							
13.0								
14.0								
Departures Sign Off (CLIENT):								
Client I	Client Name:							

Nelson St, Chatswood NSW 2067, Australia

Issue I

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Scale: 1:750

NOTES:

GENERAL NOTES

- 1. This Traffic Guidance Scheme (TGS) is to be used in conjunction with the Traffic Management Plan (TMP) and associated road authority permits and management plans.
- including Road Occupancy Licence (ROL), vehicle movement plan (VMP) and pedestrian movement plan (PMP) where applicable. 2. This TGS has been produced by a Prepare Work Zone Traffic Management Plan (PWZTMP) qualified person in accordance with the requirements of the TfNSW Traffic Control at Work Sites manual, Issue 6.1 dated 28 February 2022 (TCAWS 6.1) and with reference to AS1742.3 and AUSTROADS Guide to Temporary Traffic Management
- 3. This TGS is suitable for short term/ long term works.
- 4. Lack Group does not accept responsibility for this TGS if it is implemented or modified by external parties.

APPROVALS

5. The TGS must be approved for use before implementation.

Parts 1 - 10, version 1.1 dated September 2021 (AGTTM).

6. Ensure all road authority approvals and associated conditions of approval are met prior to implementing the TGS.

7. Prior to use on site, the selected or designed TGS must be verified to ensure it is suitable for the works and location by undertaking an inspection of the work site where the TGS will be implemented. The TGS verification must be completed in accordance with TCAWS 6.1, Section 8.1.2 by an Implement Traffic Control Plan (ITCP) or PWZTMP qualified person, Refer Page 1 of this TGS for Site Verification sign-off.

8. A desktop risk assessment has been undertaken in developing this TGS. However, when implementing this TGS on site, the site supervisor should undertake a site

specific risk assessment to ensure that the TGS has considered and mitigated all identified hazards and risks.

INSTALLATION AND REMOVAL OF SIGNS AND DEVICES

9. All traffic management signs and devices prescribed for use in this TGS are in accordance with TCAWS 6.1 with reference to AS1742.3 and AGTTM.

10. The TGS must be installed, maintained and removed in a planned and safe manner. The implementation must only be undertaken by an ITCP qualified person. 11. All signage shown on this TGS is not to conflict with any long-term existing signage arrangements in the area. If this occurs, cover all conflicting road signage where required

PLACEMENT OF SIGNS AND DEVICES

- 12. Signs must be properly displayed and securely mounted at all times and within the line of sight of the intended road user. Regulatory and detour signs must be located nearest to the travel edge of the lane. Signs must not: Be obscured from view, such as by vegetation or parked cars; Obscure other devices from the line of sight of the intended road users; Create a hazard to road workers and road users, including pedestrians and cyclists; Be a hazard that deflects traffic into an undesirable path; Restrict sight distance for drivers entering from side roads or streets, or private driveways; and Be installed using supports that could be a hazard if struck by a vehicle. 13. Signs mounted on frames for short-term works should be mounted a minimum 200mm from the ground to the lower edge of the sign.
- 14. Signs mounted on posts for long-term works in open road situations, the underside of the sign must be at least 1.5m above the level of the nearest edge of the travelled

path. When installed on a kerb or footpath, the underside of the sign must be at least 2.2m above the level of the nearest edge of the travelled path ORIENTATION OF SIGNS

15. On the outside of a curve, the sign face must be at 0 degrees, or 'normal to traffic'. On a straight, the sign face must be angled at approximately 5 degrees normal to oncoming traffic and on the inside of a curve, the sign face must be angled at approximately 5 degrees normal to oncoming traffic at 200m preceding the sign.

16. Local constraints may not allow signage and devices to be placed in accordance with this TGS. Unless stated otherwise on the TGS, the tolerances on the positioning of

signs, length of tapers or pavement markings detailed in the TGS is a minimum 10% less and a maximum 25% more than the distances or lengths stated and for the spacing of delineation devices a maximum 10% more than the spacing detailed in the TGS. 17. Any variation to the positioning of signs and devices within the approved tolerances must be marked and initalled on the TGS held on site, with the name of the person

- 18. Modifications to a Site Specific or Site Suitable TGS must be approved by a person holding the PWZTMP qualification and must be supported by a TMP or risk assessment to ensure that the TGS has considered and mitigated all identified site specific conditions and risks.
- 19. If it is identified that by implementing the TGS with modifications outside of the approved tolerances it will generate risks, then the works must be stopped (including the implementation of the TGS), the site must be made safe and an updated TGS must be provided by a PWZTMP qualified person prior to works recommencing. Any concerns regarding the suitability of the TGS must be raised with the Site Manager and your immediate Supervisor.

TRAFFIC CONTROLLERS

- 20. The implementation of traffic control must be conducted in line with the hierarchy of controls with the elimination of harm to workers and the travelling public considered in the first instance
- 21. Where traffic control is required, a portable traffic control device (PTCD) must be used rather than using a manual traffic controller when the existing permanent speed
- 22. TCAWS 6.1, Section 5.4 provides the conditions under which a manual traffic controller may be used.
- 23. Where PTCDs or traffic controllers are used, approach speeds of traffic must be reduced to less than 65 km/h.
- 24. All persons operating a portable traffic control device or performing manual traffic control must be qualified with 'Traffic Control' training; and authorised by the relevant

ROAD USER MANAGEMENT

25. The needs of specific road users, including travel paths and desire lines, must be considered and managed for the extent of the works to ensure safety and access is maintained. Specific road user groups to be considered include: Pedestrians including high-risk pedestrians such as persons with a disability, children, the elderly or persons using mobility aid devices; Cyclists; Motorcyclists; Heavy Vehicles, including oversize overmass vehicles; Public transport; and Emergency services. The needs of these specific road users have been considered in the design of this TGS, however the needs of all road users should be considered in the site specific risk assessment before implementing the TGS to ensure the TGS is appropriate.

26. Road users are to be monitored for the duration of the works. If additional signage and/or devices are required to manage the needs of specific road users, such as pedestrians and cyclists, this would be subject to following the procedure for modifying a TGS.

ACCESS MANAGEMENT

- 27. Access to properties located within the extent of works must be maintained at all times.
- 28. Property access impacted by the works should be identified and addressed in the TGS. Consultation with the property owner/resident must be undertaken prior to implementing the TGS if required

INCIDENT MANAGEMENT

- 29. The site contractor is to determine the appropriate procedure for incident management where appropriate.
- 30. If an incident occurs within the extent of the traffic control arrangement: Call for assistance if incident requires (emergency services 000 or 112); Notify the work site supervisor or Team Leader immediately of any incident: Maintain effective traffic control, if necessary relocate the traffic control station to a suitable location clear of any further danger; and Record sufficient notes of the incident, including observations, to complete an incident report

INSPECTIONS

31. Temporary traffic management monitoring activities must be undertaken in all instances where work is being performed or aftercare is in place. This includes day and night times as required. The type of inspections and frequency are to be in accordance with TCAWS 6.1, Section 8.1.1.

REVIEW OF TGS

- 32. Generic TGSs must be reviewed by a PWZTMP qualified person every 12 months so that they remain appropriate. Once reviewed the date and details of the PWZTMP person must be updated on the TGS to ensure persons selecting can confirm currency.
- 33. All active site specific and site suitable TGS are designed for the nominated work activity and are only valid for the time period of works specified on the TGS. They must be reviewed as part of the weekly inspections as detailed in TCAWS 6.1, Section 8.1. If the work activity is intended to be longer than 12 months, then the TGS musty be formally reviewed by a PWZTMP qualified person at least every 12 months and issued with the review date and the details of the person undertaking the review.

DECODO KEEDING

Contact Number: 0428428146

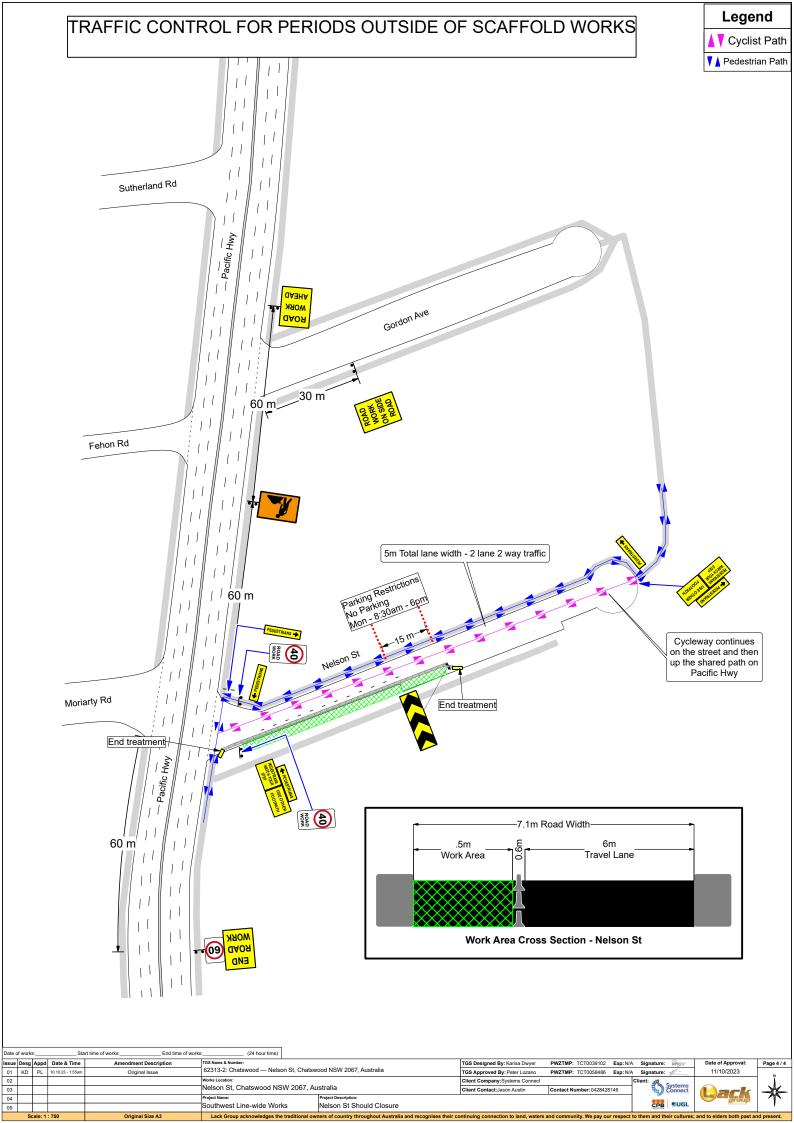
Client Signature: Date:		34. Supervisory personnel are to keep daily records of the TGS implementation including: Site specific risk assessments; Approved TGS used, including versions where modifications or updates have been made; Completed inspection checklists that have been undertaken; Records of traffic related incidents that occurred during the works; and Any other relevant document generated by the process of completing the temporary traffic management works.									
			4								
e l	Jesg	Appd	Date & Time	Amendment Description	TGS Name & Number:	!	TGS Designed By: Karisa Dwyer	PWZTMP: TCT0039102 Exp:N	I/A Signature: Payer	Date of Approval:	Page 3 / 4
T	KD	PL	10.10.23 - 1:55am	Original Issue	62313-2: Chatswood — Nelson St, Chatswood NSW 2067, Australia		TGS Approved By: Peter Lozano	PWZTMP: TCT0058486 Exp:N	I/A Signature: 4/-	11/10/2023	N
Т	\neg	\neg	,	Ţ	Works Location:		Client Company:Systems Connect		Client: ***		. Ï [ˈ

roject Description



CPB UGL Southwest Line-wide Works Nelson St Should Closure Original Size A3 Lack Group acknowledges the traditional owners of country throughout Australia and recognises their continuing connection to land, waters and community. We pay our respect to them and their cultures; and to elders both past and present.

Client Contact: Jason Austin





1.8.2.3 TGS for Pacific Highway – TGS 3



Position:

Verified By:

Qualification:

Issue Desg Appd Date & Time

Scale: 1:750

01.09.23 - 0702

06.09.23 - 1408

12.09.23 - 1132

28.09.23 - 0642

10.10.23 - 1:55am

KD PL

02 PL KD

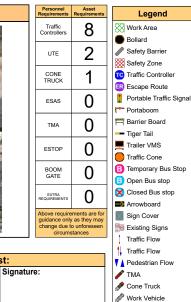
03 PL KD

04 PLKD

05 KD ΡI

Personnel Requirements	Asset Requirements
Traffic Controllers	8
UTE	2
CONE TRUCK	1
ESAS	0
TMA	0
ESTOP	0
BOOM GATE	0
EXTRA REQUIREMENTS	0
guidance only change due t	ements are for y as they may to unforeseen stances

Date of Verification:



Police Car

Traffic Vehicle

Two-lane, two-way roads:

to remain with the PTCD).

TGS Name & Number

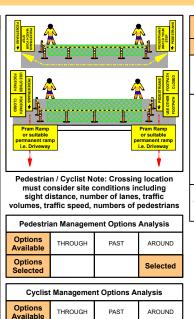
Southwest Line-wide Works

Project Name

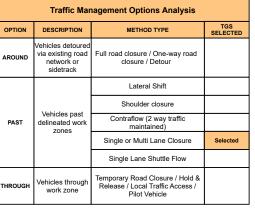
einstatement' (affected direction).

2: Use the existing road network to turn where safe to do so.

8: Install 'End Road Work/speed reinstatement' (unaffected direction)
9: Use the existing road network to turn where safe to do so.



Selected



Edge Clearances

Clearance must be measured to the traffic side edge of the delineating device

The sequence of installation should be as illustrated in the following order: 1: Locate advance warning vehicle and TMA to shadow sign installation vehicle.

: Locate advance warning vehicle and TMA to shadow sign installation vehicle.

9 to 12: Install advance warning signs in obstructed (affected) lane.
13: Install 'Flashing Arrow' and delineation devices on approach to start of taper.
14: Position TMA in travel lane to shadow installation of taper.

4 and 15: Install taper and delineation devices to form taper, safety buffer and past work area

2 to 5: Install advance warning signs in unaffected lane. 6: Install 'End Roadwork'/speed reinstatement.

6: Install 'End Roadwork'/speed reinstatement

: Use the existing road network to turn where safe to do so.



	Taper Lengths					
	Approximate speed of traffic	Traffic control at beginning of taper	Lateral shift taper	Merge taper		
	45 or less	15	15	15		
	46 - 55	15	15	30		
	56 - 65	30	30	60		
	66 - 75	N/A	70	115		
	76 - 85	N/A	80	130		
	86 - 95	N/A	90	145		
	96 - 105	N/A	100	160		
	> 105	N/A	110	180		
	> 105	N/A	110	180		

Speed (km/h)	Distance between tapers (m)
45 or less	10
46 to 55	25
56 to 65	70
Greater than 65	1.5 x Speed Limit (D)

Purpose & Usage	Speed zone of device location km/h	Maximum Spacing m	
On approach to a traffic controller position (center line or edge line)	All cases	4	
Merge Tapers	55 to 75 Greater than 76	9 12	
Lateral shift tapers	55 to 75 Greater than 76	12 18	
Protecting freshly painted lines	56 to 75 Greater than 76	24 60	
All other puporses	less than or equal to 55 26 to 75 greater than 76	4 12 18	

Sign spacing requirements					
Number of signs	Approac	Approach Speed			
	less than 65 km/h	65 km/h or greater			
One advanced sign	D	2D			
Multiple advanced signs	D	D			

Dimension 'D': AGTTM: A distance expressed in metres, determined i accordance with Table 2.2 and used for positioning of advance signs. To considered if TCAWS dimension 'D' cannot be provided due to site conditions.			
Speed of Traffic - km/h	Dimension - m		
55 or less	15		
56 to 65	45		
Greater than 65	speed of traffic, in Km/h		

ALTERNATE SIGN SPACING

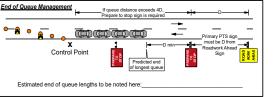
t t	t t	6		56 to 65
0 2	3 4	6		Greater than 6
	TGS Designed By: Karisa Dwyer	PWZTMP: TCT0039102	Exp: N/A	Signature:
8 - R4	TGS Approved By: Peter Lozano	PWZTMP: TCT0058486	Exp: N/A	Signature:
	Client Company:Systems Connect			Client: **

Client Contact: Jason Austin

Modified By: Qualification Number: Expiry / Issue Date: Signature: Date of Modification:	Traffic Guidance Scheme Modifications:					
Expiry / Issue Date: Signature: Date of Modification:	Modified By:		Qualification Number:			
	Expiry / Issue Date:	Signature:		Date of Modification:		

TGS Verification Checklist:

Expiry / Issue Date:



The sequence of installation should be as illustrated in the following order:

1: Install the termination signs when initially leaving work area, 'End Road Work/speed

3 to 7: Place approach signs in unaffected direction, including the PTCD (traffic controller

10 to 14: Place approach signs in the affected direction, including the PTCD (traffic controller to remain with PTCD).

15 and 16: Traffic controller/s to stop traffic and taper/lane closure delineation

LGP - TGS - 49876 - Nelson St & Pacific Hwy, Chatswood NSW 2067, Australia - 003

Project Description:

Nelson St & Pacific Hwy, Chatswood NSW 2067, Australia

Options

Selected

D -1	Edge of traffic lane to:	Edge Clearence			
Primary PTS sign	Line of traffic cones or bollards	- 0.5 m for traffic speeds less than 65 km/h - 1.0 m for traffic speeds greater than 65 km/h			
must be D from Roadwork Ahead Sign	Barrier boards, temporary guide posts or temporary hazard markers	- 1.0 m			
	Road safety barrier system	0.3 m for traffic speeds less than 45 km/h 0.5 m for traffic speeds 45 to 65 km/h 1.0 m for traffic speeds 65 to 85 km/h 2.0 m for traffic speeds greater than 85 km/h			
Installation & Removal of Signs & Devices					

Traffic	Guidance S	cheme Insta	allation:
Installed By:		Qualification	Number:
Expiry / Issue Date:	Signature:		Date of Installation:

Amendment Description

Original Issue

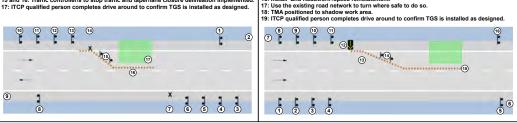
Amended as requested

Amended as requested

Amended as requested

Amended as requested

Original Size A3



Multi-lane roads:

10/10/2023 Systems CPB UGL

Date of Approval:

Page 1 / 6

1 of 3 lane Takeout - Footpath Closure Lack Group acknowledges the traditional owners of country throughout Australia and recognises their continuing connection to land, waters and community. We pay our respect to them and their cultures; and to elders both past and present.

Contact Number: 0428428146

				(3)					
-					79111111	 15		-	
1	2	3	4				6		
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		Hiera	irchy of C	Controls	T	3 <u>S</u>	Ris	k A	ssess	<u>ment</u>				It	tem	Worksite Component	Potential Hazard	\vdash	nitial Ris	_	Present	Control Measures	_	sidual R	
l l	1. Elin	minate the hazard altoget		More Effective					Step 1	- Consequence (i	mpact)	1		-				+-				Always:	-		
l l		load closures.	6 14		ı	Negligi	ble (1)		Minor (2)	Moderate (3)	Major (4)	Severe (5)		ر ا ۔		A. G	Inadequate signage resulting in motorist loosing control and	١.	١. ا	00		 Install RWA (T1-1) if diverting traffic along a sidetrack, detour, or unexpected conditions, such as loose stones or the absence of line marking 			40
	eg. Us	bstitute the hazard with a Ising PTCDs instead of st	top bats.	ative.		First Aid T	reatment		Medical Treatment	Lost Time Injury	Permanent Impairment Injury		Health		3.4	After care	crashing or motorist becomes frustrated due to inappropriate signage	4	4	20	N	Cover any signs that are not applicable Erect Condition signs in accordance with TCWS Manual Provide delineation or temporary line marking	3	3	12
إا	eg. Dr	plate the hazard from any prop zones for clients work	ks in elevated	d work zones.	Very i	ninor inju atment or	y that require simple first ai	es med id temp	/ illness, which requires ical treatment and may orarily restrict a persons capacity to work	Injury / illness, which temporarily renders a person unfit to work in any capacity	Injury / illness, which permanently alters a persons future (eg. Spinal injury, amputation or death)	Fatality	& Safety				Signage					Allercare speed limit to suit road conditions Always: Install RW 1km Ahead if approach speed is > 85km/h or sight distance is		H	
	4. Use eg. Th	e engineering controls to he use of traffic control de	reduce the ri evices to prot	risk. stect work area.				Lieu	ited but medium term	Significant but recoverable	Heavy ecological damage,	Permanent widespread	_	,								less than 150m - Use 700mm cones where traffic speed is greater than 75km/h			
	eg. Er	Use administrative controls to reduce the risk. eg. Ensure personnel are trained in their field.			Short term	damage		damage	ecological damage	costly restoration	ecological damage	wiro		3.5	Poor sight distance or speed compliance or Approach speed >	Speeding vehicle doesn't have time to react and fails to negotiate merg		4	24	Υ	Use 900mm cones on high speed to high volume roads (e.g., expressway or on any work site where increased visibility is required - Duplicate Lane status sign.	y) 4	2	14	
	eg. W	e PPE. Vearing gloves while man		Less Effective	Brief	delay / sli service (ght impact on selivery	impa	al or worksite specific ct on service delivery or ustomer satisfaction	Temporary impact on service delivery or customer satisfaction at a local event / project level	Serious impact on service delivery or customer satisfaction at a state client or large project level	Long term or very severe impact on service delivery o customer satisfaction resulti in loss of business national	ng la			85km/h, or multi lane roads with traffic volume > 10,000vpd	taper					Consider: - Installing RWA (T1-1) - Increasing taper lengths - Increasing the number of advance warning signage installed			
	(Almost	cour	mmon / Frequent Occurance More than 1 event per month		Mode (8			High (16)	High (18)	High (21)	Extreme (25)					Vehicles enters work site from a					Increasing the size of signage installed Need for duplication of signs. Always install advance warning signage for vehicles entering from side		Ш	
Probability		Likely Commonly occurred to the common o		w to occur or "it has pened regularly" More than 1 event per year		Mode (7			Moderate (10)	High (17)	High (20)	High (24)		3	3.6	Side Roads	side road and collides with workers	s 3	4	17	Υ	road in advance of the work site. - Ensure speed zones are designed in accordance with TCAWS, AS1742.3	3	2	11
		Possible (3) The threat may o occasionally 25% - 50%		occur or "Tve heard fit happening" 1 event per 1 to 10 years	3	Lo (3			Moderate (9)	Moderate (12)	High (19)	High (23)					Motorist travelling too fast for the					and AGTTM. - Ensure speed zoning is consistent with the work activity and road environment.			
Sten 2 -	u u	Unlikely The threat countries infrequently on 10% - 25%	cur INOLIII	ikely to occur very 1 event per 10 to 100 often years		Lo (2			Low (5)	Moderate (11)	Moderate (14)	High (22)		3	3.7	Temporary Speed Zone	conditions causing MVA	5	4	24	Y	Consider the use of speed radar VMS to monitor traffic speeds and advis motorists. Review the TGS and adjust where possible to enhance traffic calming	e 4	2	14
		Rare (1) The threat may occurrent Executional circumsta The threat may occurrent Occasionally 0% - 10%		eivable but only in fonal circumstances Less than 1 event per 100 years	0	Lo (1			Low (4)	Low (6)	Moderate (13)	Moderate (15)								Tra	nsition	through the work site.			
		0.4-10.4				Ste	ep 3 - T	he risk	rating is whe	re the consequenc	e and the probabil	ity intersect										Always: - Install taper lengths and cones in accordance with TCAWS Manual			
Item	Ι,	Worksite Comp	onent	Potential Hazard			al Risk	Prese	ent	Control	Measures			al Risk			Motorist fails to negotiate taper and	Ч				Install & duplicate/repeat Lane Status Sign (T2-6-1 or 2) on multi lane roads - Use a minimum of 2 temporary hazard markers (T5-4 or 5) on tapers			
#				1 0101111111111111111111111111111111111		С	P R	cceptan	ce			С	Р	P R	4.0	Lane closure	collides with worker, vehicle or plan		4	24	Υ	- Install a 30m minimum buffer zone at the end of tapers - Check setup before commencing work	4	2	14
						Т		,		implement TGS in acco	rdance with TCAWS, A	AS1742.3 and	Τ									Consider using a shadow vehicle (or vehicles) with flashing lights to protect workers Ensure appropriate site distance to start of taper			
1.0		TGS Drawn / implement equalified person or or		TGS Drawn / implemented unqualified person or organiza		5	3 23	Y	- Ensure all re and implemen	elevant traffic managem ntation of the TGS are o	ertified as competent p	persons to	1	13	_			+		Wo	rk Area		+	=	
							Di	epartur		raffic management tasks	s they are required to u	ındertake.										 Design and implement TGS in accordance with TCAWS, AS1742.3 and AGTTM. Ensure all relevant traffic management personnel involved in the design 			
									- Consider us	e of shadow vehicles if le (i.e. safety barrier)	practical, or other type	of static hard	T		5.0	Traffic Control	Motorist not concentrating or speeding collides with end of queue	e 5	4	24	Υ	and implementation of the TGS are certified as competent persons to perform the traffic management tasks they are required to undertake.	4	2	14
					.			ν,	 Ensure best point on TGS 	possible escape route - to be reassessed ons	ite continuously						or traffic controller					Conduct regular inspections in accordance with TCAWS, AS1742.3 and AGTTM.			
2.0	8	Stop bat used instead	of PTCD	Traffic controller hit by vehic	cle	5	4 24	Y	be possible, r	t line of sight where prac repeater signs in advanc oller to always remain o	ce warning to be used.	•	2	2 14								Rectify any deficiencies as a matter of urgency. Review traffic controls to suit changes in site conditions. Always:		Ш	
									 Ensure appr and maximum 	ropriate speed signage n length requirements.												- Install workman T1-5 sign if workers on road - Space cones in accordance with TCAWS Manual			
	Τ			Motorist collides with VMS, mo	otorict	Т	Advar	nced Wa	- Always plac	e VMS behind an appro affic lane as is practical	ved safety barrier or a	od cuitable	Т		5.1	Working adjacent to travel lane	Motorist collides with worker, vehicle	le 4	4	20	Υ	- Check setup before commencing work - Reduce speed based on lateral clearance between the work area and	4	2	14
3.0		VMS		confused by VMS	Jionsi	4	4 20	N	based on a de	ocumented risk assessr is to be confirmed by F	nent.	a suitable	2	2 11			or plant					travel lane Consider: - Using a shadow vehicle(s) with flashing lights to protect workers			
3.1		Long Term Wor	rks	Confused motorist collides v worker	with	4	4 20	N	- Always insta - Consider us	all RWA (T1-1) on long-ting VMS's	erm road work sites	3	3	12								- Using spotters with workers - Using safety barriers			
										ordance with the appro-					Т		Due to poor visibility motorist	Т		Ge	eneral	Consider providing portable lighting to ensure traffic controllers are visible			
									possible - Monitor que						6.0	Night work	collides with end of queue, worker vehicle or plant Rain/fog reduces visibility and causes		4	20	Y	and ensure the positions of any temporary lighting are clearly shown on the TGS & always use applicable night PPE. Always monitor weather and traffic	e 4	2	14
									clear traffic if	onal signs or use additi end of queue extends be ency vehicles & wide lo	eyond the advance wa	arning signs		6	6.1	Wind / Rain / Fog / Obstructions	road to be slippery increasing risk of a collision with workers, plant or other	5	4	20	Υ	- Always regularly check setup to ensure signs are visible. If visibility has been obstructed, consider shifting signs, duplication, or repetition.	3	3	12
3.2	De	elays or Queue exten- advanced warning		Motorist collides with end of qu	ueue	4	4 20	Y	Consider: - Working out	side peak periods		4	2	14			traffic Wind blows over signs Vehicle parks in front of sign					Consider additional advance warning signage Liaise with client to reconsider setup or continuation of works Always:		Ш	
									- Using VMS'	n TMC for assistance wi s nergency services	th traffic signal phasing					Vehicle Movements	Plant collides with motorist, workers	s	3		Υ	- Ensure positive communications Consider:		3	12
										ing beacon to be added ie monitors	I to advance warning si	ignage		,	6.2	venicie wovernents	or other plant	*	*	19	1	- Using Traffic Control and/or Spotters to manage work vehicles - Installation of exclusion Zones	3	*	
									- Ensure TGS where require	S has been designed to ed.	cater for the predicted	queue lengths										Preparing a VMP where required. Ensure TGS design caters for all road users including pedestrians and cyclists.		H	
										(T1-1) if diverting traffic												Always clearly delineate the work area. Do not obstruct pedestrian and cyclists travel paths with traffic control signs and devices.			
		Changed traffic condi		, Motorist loses control, is confu	lised				- Erect Condi	conditions such as loose tion signs in accordance neation or temporary lin	e with TCAWS Manual	- 1				Dedectrions and Coultry	Pedestrian and/or cyslist enters the			24	Υ	Consider the use of additional warning and guidance signage for pedestrians, cyclis and motorists. Comply with shoulder and lane width criteria in the design of the TGS.	ts 4		14
3.3	Clinnani aurface na linea chana	turning	or attempts a banned manoer		4	4 20	N	shown on the	TGS Control to manage char	-	3	2	2 11 5	6.3	Pedestrians and Cyclists	work zone or travel lane and is hit by vehicle or plant	4	5	21	ĭ	Consider the use of traffic control at crossing points especially where contra-flow arrangements are in place. Consider the use of additional traffic controllers to monitor and assist pedestrian and		2	14	
		movements, deto	uis)						 Check setup Ensure approximation 	before commencing w ropriate permission for a ction installed to suit roa	ork any detours	,										cyclist movements where required. Ensure the use of existing or temporary ramps for crossing points.			
	L					\perp		L	- Speed redu - Consider us		au conunions		L		\perp			L				 Undertake consultation to determine existing travel paths, desire lines, volumes, and types of users. 	"	Ш	
Issue C	esg	Appd Date & T	Time	Amendment Des	cripti	on			Name & Number:								Designed By: Karisa Dwyer	PW	ZTMP:	тст	003910	2 Exp: N/A Signature: Day Date of Approval:	:	Pag	je 2 / 6
-	KD	PL 01.09.23 -		Original Issu	ue					876 - Nelson St 8	Pacific Hwy, Ch	natswood NSW	206	67, Aust	tralia	a - 003 - R4 TGS A	Approved By: Peter Lozano	PW	ZTMP:	TCT	005848				N
	PL	KD 06.09.23 -		<u>_</u>	Amended as requested Amended as requested Nelson St & Pacific Hwy, Chatswood NSW 2067, Australia Client Company: Systems Connect Client Company: Systems Connect Client Contact Number: 0428428146				,	_															
-	PL PL	KD 12.09.23 - KD 28.09.23 -		Amended as req Amended as req	_				ect Name:	23.110 i ivi y, Oii		t Description:	anu			Client	t Contact:Jason Austin	Cor	itact Ni	umbe	er: U428	428146 Connect		7	
-	KD	PI 10.10.23 - 1	-	Amended as req	_			So	uthwest Lir	ne-wide Works	1 of	3 lane Takeo	ut -	Footp	oath	n Closure						CPB ØUGL			1
	S	scale: 1 : 750		Original Size	A3				Lack Group ac	knowledges the tra	aditional owners of	f country through	out	Australi	ia an	d recognises their continuir	ng connection to land, waters a	and c	ommu	nity. \	We pay	our respect to them and their cultures; and to elders both pa	st and	d pres	sent.

#	C P R				С	Р	R			
6.4	Bus stops	Bus unable to pull up safely causing MVA	3	3	12	Υ	Consider notifying bus companies that operate in the area Always provide adequate provision for buses or carry out work at night when buses aren't operating Where temporary bus stops are created, ensure buses are able to meet the curb Ensure TGS clearly shows affected stops Traffic controllers to manage and assist where safe and possible	2	2	5
6.5	Property accesses - commercial or private	Collisions due to propertie acess restrictions	3	4	17	Υ	Consider staging work outside of business hours Create physical barrier to prevent traffic entering site & driveways	2	2	5
6.6	Excavations within work area	Errant vehicle drives into excavation	5	5 4 25 Y		Υ	For excavations shallower than 0.5m and within 3m of the edge of traffic lane, delineate the excavation with plastic mesh fencing, barrier boards placed perpendicular to the traffic flow or cones/bollards. For excavations deeper than 0.5m and within 5m of the edge of traffic ane, a temporary safety barrier must be installed. When traffic is greath an 3m from the excavation, the requirement for a temporary safety barrier should be considered based on a documented risk assessment Where the excavation is deeper than 200mm, is open for more than 2 weeks and the distance from the edge of traffic lane is less than 3m for 60km/h, 6m for 80km/h and 9m for 100km/h, a temporary safety barrier must be installed.	4	2	14
6.7	Parking	Parked vehicle or worker exiting vehicle hit by passing vehicle	4	4	20	Υ	Always check adequate parking is available for workers and visitors Consider providing safe parking within the work area	4	2	14
6.8	Concurrent Works	Motorist confused by conflicting signs causing MVA	3	4	17	Y	- Always establish communication with other site if possible - Always cover any conflicting signs and adjust TGS as necessary - Complete conflict checks where required	3	3	12
6.9	Heavy Vehicles and OSOM Vehicles	HV cannot travel past work site without knocking over delineation	- Comply with shoulder and lane width criteria in the design of the TGS During the design of the TGS, check vehicle swept path where necessive to ensure the largest known vehicle travelling through the work site can negotiate the changed traffic conditions Traffic controllers to communicate with heavy vehicle and OSOM driver to warm and guide them through the work site as required Traffic controller to monitor heavy vehicle movements and if required, mal adjustments to the signs and devices within approved tolerances. If morn significant changes are required, liaise with Clent/Supervisor and arrang for TGS to be reviewed and modified by the designer.		4	2	14			
					Dyn	amic Wo				
7.0	General Traffic	Motorists speeding / not concentrating / tired / distracted. Not having enough time to merge causing MVA	5	5	25	NA	Always use a minimum 1 AWV and consider the use of a 2nd AWV. Consider use of TIMA on higher speed roads >85km Use speed reduction best suited to work activity and road environment Use applicable AW signage displayed on AWV Ensure sight distances between AWV, shadow vehicles are clearly labelled on TGS Ensure 20-40m buffer zone between shadow vehicle and work vehicle. No less than 40m when using a TIMA as a shadow vehicle Positive communications to be held at all times Workers to remain shadowed at all times	4	2	14
Itei	n	Ado	ditic	ona	l Co	ontrol	Control Measures			
8.0										\dashv
9.0										\dashv
10.										\dashv
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12.						- p- # V				
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		De	par	ture	es S	Sign C	Off (CLIENT):			
Clie	nt Name:									
Clie	nt Signature:						Date:			

TGS Name & Number

Southwest Line-wide Works

LGP - TGS - 49876 - Nelson St & Pacific Hwy, Chatswood NSW 2067, Australia - 003 - R4

Nelson St & Pacific Hwv. Chatswood NSW 2067. Australia

Amendment Description

Original Issue

Amended as requested

Amended as requested

Amended as requested

Amended as requested

Original Size A3

Worksite Component

Issue Desg Appd Date & Time

Scale: 1:750

01.09.23 - 0702

06.09.23 - 1408

12 09 23 - 1132

28 09 23 - 0642

10.10.23 - 1:55am

KD PL

02 PL KD

03 PL KD

04 PL KD

05 KD PI **Potential Hazard**

NOTES:

Residual Risk

Control Measures

GENERAL NOTES

- 1. This Traffic Guidance Scheme (TGS) is to be used in conjunction with the Traffic Management Plan (TMP) and associated road authority permits and management plans.
- including Road Occupancy Licence (ROL), vehicle movement plan (VMP) and pedestrian movement plan (PMP) where applicable. 2. This TGS has been produced by a Prepare Work Zone Traffic Management Plan (PWZTMP) qualified person in accordance with the requirements of the TfNSW Traffic Control at Work Sites manual, Issue 6.1 dated 28 February 2022 (TCAWS 6.1) and with reference to AS1742.3 and AUSTROADS Guide to Temporary Traffic Management
- 3. This TGS is suitable for short term/ long term works.

Parts 1 - 10, version 1.1 dated September 2021 (AGTTM).

4. Lack Group does not accept responsibility for this TGS if it is implemented or modified by external parties.

APPROVALS

5. The TGS must be approved for use before implementation.

6. Ensure all road authority approvals and associated conditions of approval are met prior to implementing the TGS.

7. Prior to use on site, the selected or designed TGS must be verified to ensure it is suitable for the works and location by undertaking an inspection of the work site where the TGS will be implemented. The TGS verification must be completed in accordance with TCAWS 6.1, Section 8.1.2 by an Implement Traffic Control Plan (ITCP) or PWZTMP qualified person, Refer Page 1 of this TGS for Site Verification sign-off.

required

8. A desktop risk assessment has been undertaken in developing this TGS. However, when implementing this TGS on site, the site supervisor should undertake a site

INSTALLATION AND REMOVAL OF SIGNS AND DEVICES

specific risk assessment to ensure that the TGS has considered and mitigated all identified hazards and risks.

9. All traffic management signs and devices prescribed for use in this TGS are in accordance with TCAWS 6.1 with reference to AS1742.3 and AGTTM.

10. The TGS must be installed, maintained and removed in a planned and safe manner. The implementation must only be undertaken by an ITCP qualified person. 11. All signage shown on this TGS is not to conflict with any long-term existing signage arrangements in the area. If this occurs, cover all conflicting road signage where

PLACEMENT OF SIGNS AND DEVICES

- 12. Signs must be properly displayed and securely mounted at all times and within the line of sight of the intended road user. Regulatory and detour signs must be located nearest to the travel edge of the lane. Signs must not: Be obscured from view, such as by vegetation or parked cars; Obscure other devices from the line of sight of the intended road users; Create a hazard to road workers and road users, including pedestrians and cyclists; Be a hazard that deflects traffic into an undesirable path; Restrict sight distance for drivers entering from side roads or streets, or private driveways; and Be installed using supports that could be a hazard if struck by a vehicle.
- 13. Signs mounted on frames for short-term works should be mounted a minimum 200mm from the ground to the lower edge of the sign. 14. Signs mounted on posts for long-term works in open road situations, the underside of the sign must be at least 1.5m above the level of the nearest edge of the travelled

path. When installed on a kerb or footpath, the underside of the sign must be at least 2.2m above the level of the nearest edge of the travelled path ORIENTATION OF SIGNS

15. On the outside of a curve, the sign face must be at 0 degrees, or 'normal to traffic'. On a straight, the sign face must be angled at approximately 5 degrees normal to oncoming traffic and on the inside of a curve, the sign face must be angled at approximately 5 degrees normal to oncoming traffic at 200m preceding the sign.

16. Local constraints may not allow signage and devices to be placed in accordance with this TGS. Unless stated otherwise on the TGS, the tolerances on the positioning of signs, length of tapers or pavement markings detailed in the TGS is a minimum 10% less and a maximum 25% more than the distances or lengths stated and for the spacing of delineation devices a maximum 10% more than the spacing detailed in the TGS.

17. Any variation to the positioning of signs and devices within the approved tolerances must be marked and initalled on the TGS held on site, with the name of the person

- 18. Modifications to a Site Specific or Site Suitable TGS must be approved by a person holding the PWZTMP qualification and must be supported by a TMP or risk assessment to ensure that the TGS has considered and mitigated all identified site specific conditions and risks.
- 19. If it is identified that by implementing the TGS with modifications outside of the approved tole rances it will generate risks, then the works must be stopped (including the implementation of the TGS), the site must be made safe and an updated TGS must be provided by a PWZTMP qualified person prior to works recommencing. Any concerns regarding the suitability of the TGS must be raised with the Site Manager and your immediate Supervisor.

TRAFFIC CONTROLLERS

- 20. The implementation of traffic control must be conducted in line with the hierarchy of controls with the elimination of harm to workers and the travelling public considered in the first instance
- 21. Where traffic control is required, a portable traffic control device (PTCD) must be used rather than using a manual traffic controller when the existing permanent speed
- 22. TCAWS 6.1, Section 5.4 provides the conditions under which a manual traffic controller may be used.
- 23. Where PTCDs or traffic controllers are used, approach speeds of traffic must be reduced to less than 65 km/h
- 24. All persons operating a portable traffic control device or performing manual traffic control must be qualified with 'Traffic Control' training; and authorised by the relevant

ROAD USER MANAGEMENT

25. The needs of specific road users, including travel paths and desire lines, must be considered and managed for the extent of the works to ensure safety and access is maintained. Specific road user groups to be considered include: Pedestrians including high-risk pedestrians such as persons with a disability, children, the elderly or persons using mobility aid devices; Cyclists; Motorcyclists; Heavy Vehicles, including oversize overmass vehicles; Public transport; and Emergency services. The needs of these specific road users have been considered in the design of this TGS, however the needs of all road users should be considered in the site specific risk assessment before implementing the TGS to ensure the TGS is appropriate.

26. Road users are to be monitored for the duration of the works. If additional signage and/or devices are required to manage the needs of specific road users, such as pedestrians and cyclists, this would be subject to following the procedure for modifying a TGS.

ACCESS MANAGEMENT

- 27. Access to properties located within the extent of works must be maintained at all times.
- 28. Property access impacted by the works should be identified and addressed in the TGS. Consultation with the property owner/resident must be undertaken prior to implementing the TGS if required

INCIDENT MANAGEMENT

- 29. The site contractor is to determine the appropriate procedure for incident management where appropriate.
- 30. If an incident occurs within the extent of the traffic control arrangement: Call for assistance if incident requires (emergency services 000 or 112); Notify the work site supervisor or Team Leader immediately of any incident; Maintain effective traffic control, if necessary, relocate the traffic control station to a suitable location clear of any further danger; and Record sufficient notes of the incident, including observations, to complete an incident report

INSPECTIONS

31. Temporary traffic management monitoring activities must be undertaken in all instances where work is being performed or aftercare is in place. This includes day and night times as required. The type of inspections and frequency are to be in accordance with TCAWS 6.1, Section 8.1.1.

REVIEW OF TGS

- 32. Generic TGSs must be reviewed by a PWZTMP qualified person every 12 months so that they remain appropriate. Once reviewed the date and details of the PWZTMP person must be updated on the TGS to ensure persons selecting can confirm currency.
- 33. All active site specific and site suitable TGS are designed for the nominated work activity and are only valid for the time period of works specified on the TGS. They must be reviewed as part of the weekly inspections as detailed in TCAWS 6.1, Section 8.1. If the work activity is intended to be longer than 12 months, then the TGS musty be formally reviewed by a PWZTMP qualified person at least every 12 months and issued with the review date and the details of the person undertaking the review.

RECORD KEEPING

1 of 3 lane Takeout - Footpath Closure

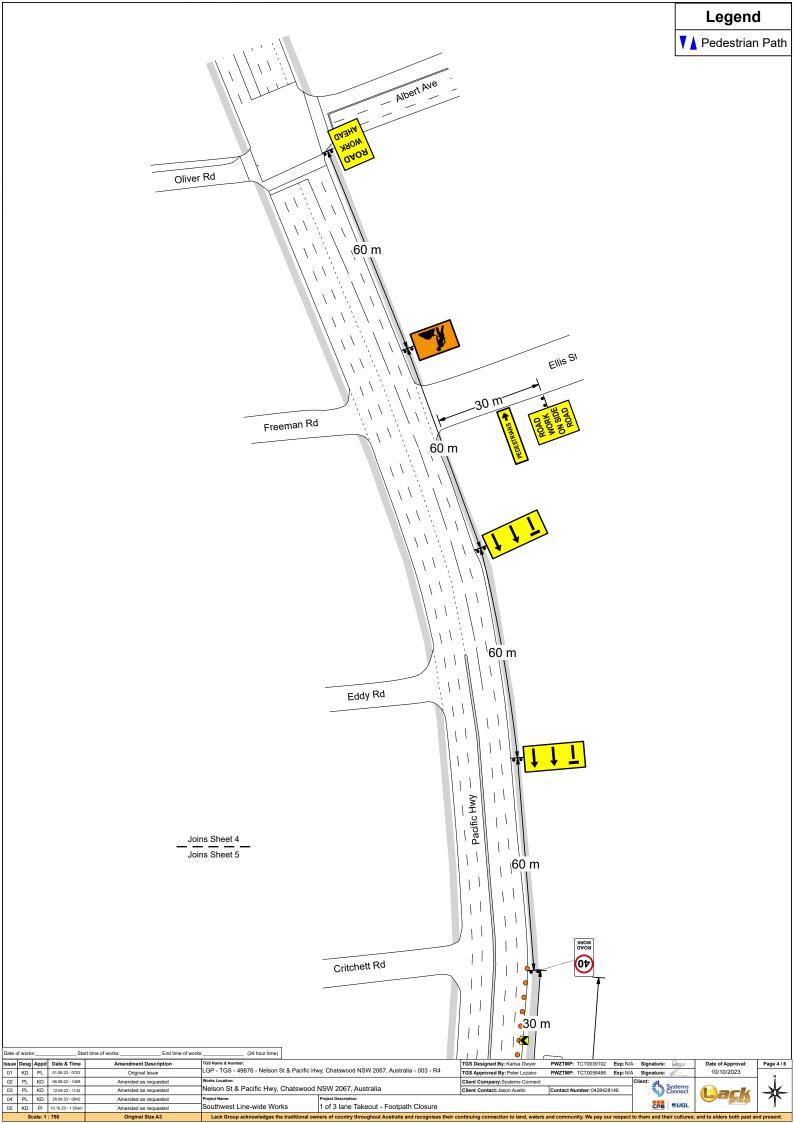
34. Supervisory personnel are to keep daily records of the TGS implementation including: Site specific risk assessments; Approved TGS used, including versions where modifications or updates have been made. Completed inspection checklists that have been undertaken: Records of traffic related incidents that occurred during the works: and Any other relevant document generated by the process of completing the temporary traffic management works.

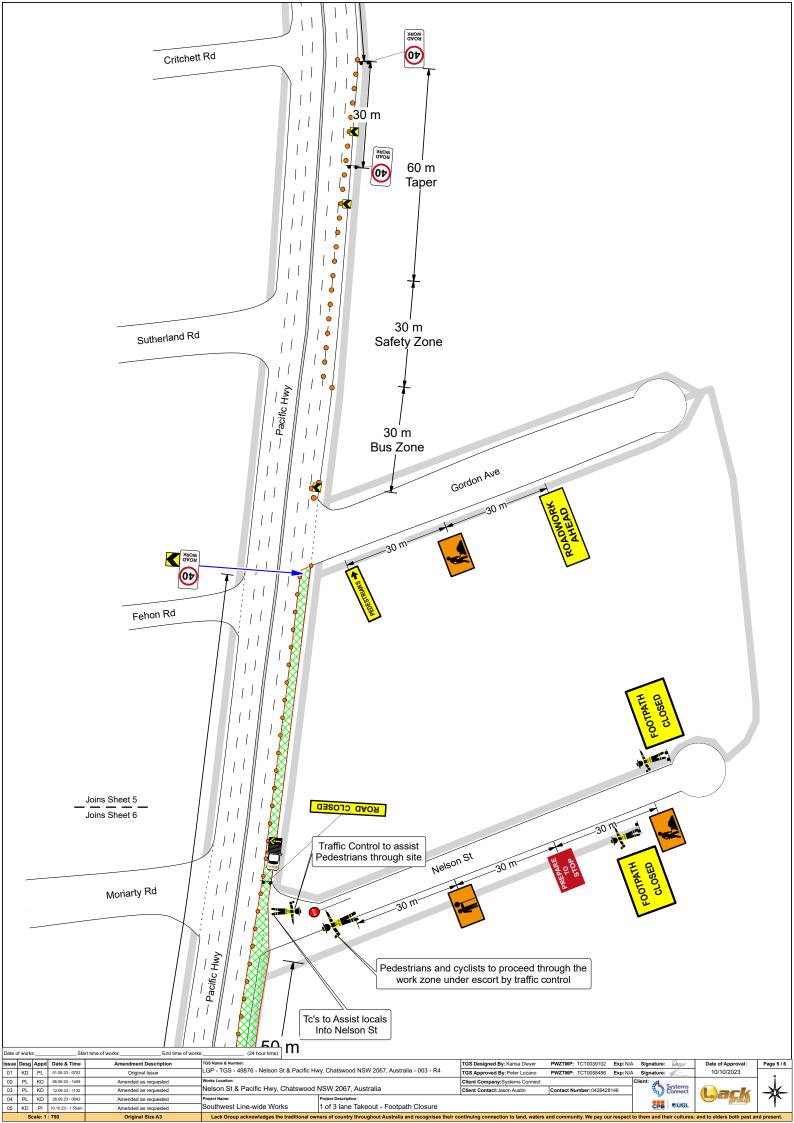


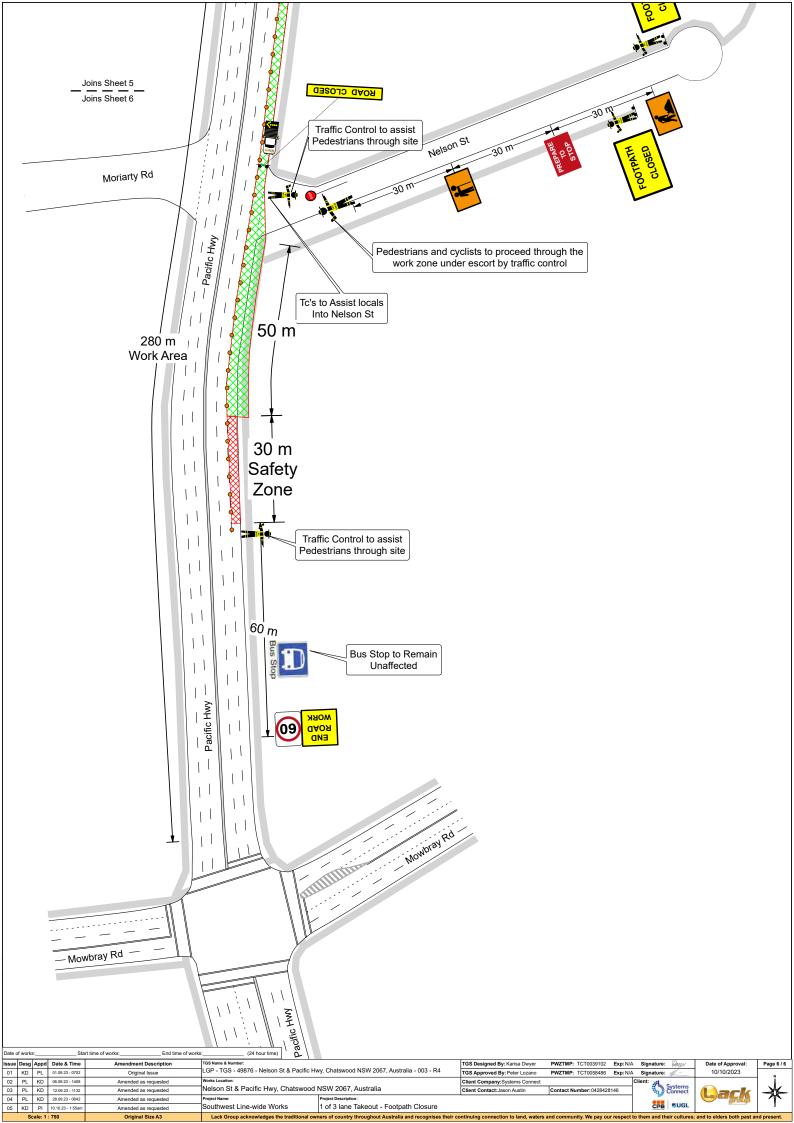


Page 3 / 6

Lack Group acknowledges the traditional owners of country throughout Australia and recognises their continuing connection to land, waters and community. We pay our respect to them and their cultures; and to elders both past and present.



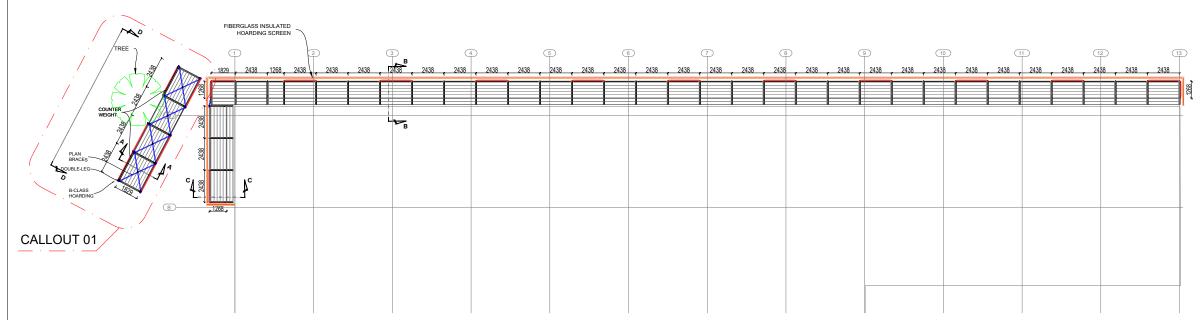




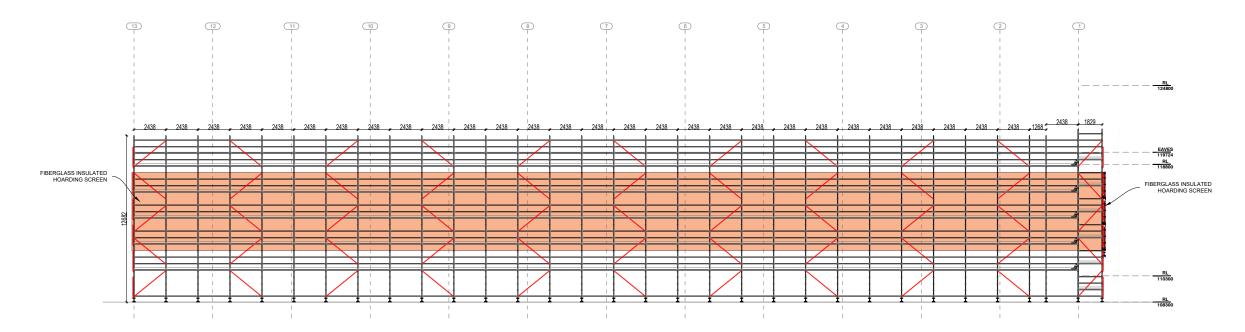


1.8.3 Design Drawings

NOTE: SOME DETAILS ARE LEFT OUT FOR CLARITY.
FOR GENERIC DETAILS REFER TO KNG-GEN-DET-01.
KWIKSTAGE SCAFFOLDING SYSTEM IS USED.
HEAVY DUTY (675 kg) IS APPLIED ON ONE WORKING DECK PER BAY.



 $\frac{01}{08}$ PLAN VIEW



02 08

NORTH ELEVATION

Scaffold Details (AS/NZS 1576.1):

-One working platform per bay

Heavy duty 6.6kN/bay, includes one 2 kN concentrated load, Min 900mm platform

-Medium duty 4.4kN/bay, includes one 1.5 kN concentrated load, Min 675mm platform -Light duty 2.2kN/bay, includes one 1.2 kN concentrated load, Min 450mm platform -Load action on Hop-ups is limited to light duty loading

-A clear access of not less than 450mm shall be maintained on all platforms

-Clear headroom shall be a minimum of 1.85m

-Loading platform rating indicates overall load per one working platform at a time.

General Notes: (Notes on drawings supersede these general notes)

-Refer to Safe Work NSW & Australia Standards Guidelines for safe use of scaffold -This design relates to components supplied by the scaffolding company, named below

-Consult with Kingle designer for any changes -Signage and higher solidity cladding require additional measures

-Soleboard (Min 0.5mx0.225m) to be used where required to distribute the load

-It is the Client's responsibility to provide adequate foundation/ supporting structure/ compacted soil

-Avoid undermining or excavation in the vicinity of the scaffold

-DO NOT alter the scaffold or remove the ties without permission from Kingle Pty Ltd
-Where required, it is the client's responsibility to provide vehicle impact protection

-Typical imposed working loads of up to 6kN horizontal per tie, and up to 20kN vertical load per leg have been considered in the design

-Nominal gap from scaffold platform to building face 100mm to $\,$ 225mm unless internal

edge protection is provided

-Max 4m of scaffold is permitted above the highest row of ties

-Max 2m of shade cloth is permitted above the highest row of ties

-Screw-tightened couplers, should be tightened to a torque of $60\mbox{Nm}$

-Scaffolds of 3m lift should be boxed at 2m height

-Load limit on drilled-in anchors 6kN

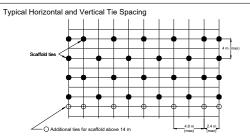
-When screwing concrete screws always use the lowest setting on the drill

-Refer to the below diagrams for ties and braces setup

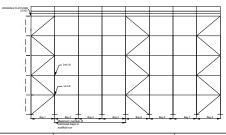
-This is not a final works as executed drawing, site conditions may require this drawing to change.

-These drawings are not certification of design as built.

-Engineer certificates are required for each engineered scaffold prior to use



Typical Heel-and-Toe Bracing of Bays (AS/NZS 1576.6)



	scande fun	
REVISION	DESCRIPTION	DATE
REVISION 00	INITIAL DESIGN	07/09/2023
REVISION 01	CHANGING DESIGN	18/09/2023

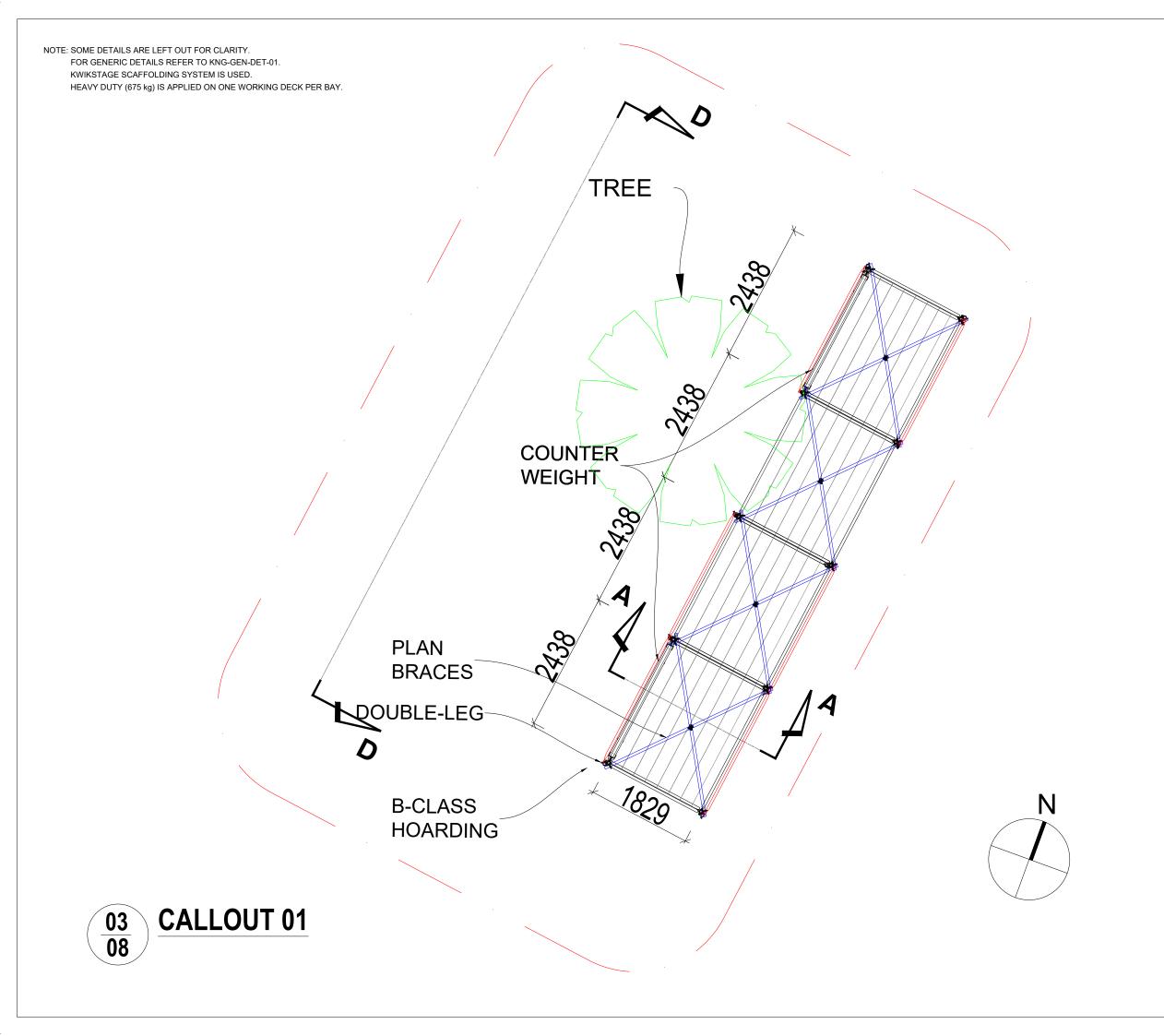




UNLESS OTHERWISE SPECIFIED:	DEVICION 04
DIMENSIONS ARE IN MILLIMETERS	REVISION 01
SCAFFOLDING COMPANY:	
BAYSIDE SCAFFOLDING SERVICES	
CLIENT: PERFECT CONTRACTING PTY LIMITED	DO NOT SCALE DRAWING

TITLE: PERIMETER SCAFFOLD
ADDRESS: 607 PACIFIC HIGHWAY, CHATSWOOD

	NAME	DATE	
DRAWN	A.L.	18/09/2023	
APPROVED	18/09/2023		
DRAWING NO	:: BAY-PRC-6289-01	A3	
DATE: 18/09/2	023	SHEET:01/05	



Scaffold Details (AS/NZS 1576.1):

-One working platform per bay

-Heavy duty 6.6kN/bay, includes one 2 kN concentrated load, Min 900mm platform

-Medium duty 4.4kN/bay, includes one 1.5 kN concentrated load, Min 675mm platform -Light duty 2.2kN/bay, includes one 1.2 kN concentrated load, Min 450mm platform

-Load action on Hop-ups is limited to light duty loading
-A clear access of not less than 450mm shall be maintained on all platforms

-Clear headroom shall be a minimum of 1.85m

-Loading platform rating indicates overall load per one working platform at a time.

General Notes: (Notes on drawings supersede these general notes)

-Refer to Safe Work NSW & Australia Standards Guidelines for safe use of scaffold

-This design relates to components supplied by the scaffolding company, named below

-Consult with Kingle designer for any changes

-Signage and higher solidity cladding require additional measures

-Soleboard (Min 0.5mx0.225m) to be used where required to distribute the load -It is the Client's responsibility to provide adequate foundation/ supporting structure/ compacted soil

-Avoid undermining or excavation in the vicinity of the scaffold

-DO NOT alter the scaffold or remove the ties without permission from Kingle Pty Ltd
-Where required, it is the client's responsibility to provide vehicle impact protection

-Typical imposed working loads of up to 6kN horizontal per tie, and up to 20kN vertical load per leg have been considered in the design

-Nominal gap from scaffold platform to building face 100mm to 225mm unless internal

edge protection is provided

-Max 4m of scaffold is permitted above the highest row of ties

-Max 2m of shade cloth is permitted above the highest row of ties

-Screw-tightened couplers, should be tightened to a torque of 60Nm

-Scaffolds of 3m lift should be boxed at 2m height

-Load limit on drilled-in anchors 6kN

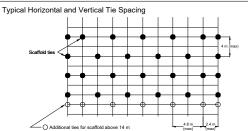
-When screwing concrete screws always use the lowest setting on the drill

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-Engineer certificates are required for each engineered scatfold prior to use



Typical Heel-and-Toe Bracing of Bays (AS/NZS 1576.6)

WORKING PLATFORM LEVEL							
	2 and Lift						
	Set Lift						
and and	l iny 2	Bay 3	Bay 4	Bays	Bayl	- Bw7 -	
L_ Bay 1	Maximum numb unbraced bays i scaffold run	er of n	Bay 4	Say 5	Baye	L Bay?	Say it

REVISION	DESCRIPTION	DATE		
REVISION 00	INITIAL DESIGN	07/09/2023		
REVISION 01	CHANGING DESIGN	18/09/2023		



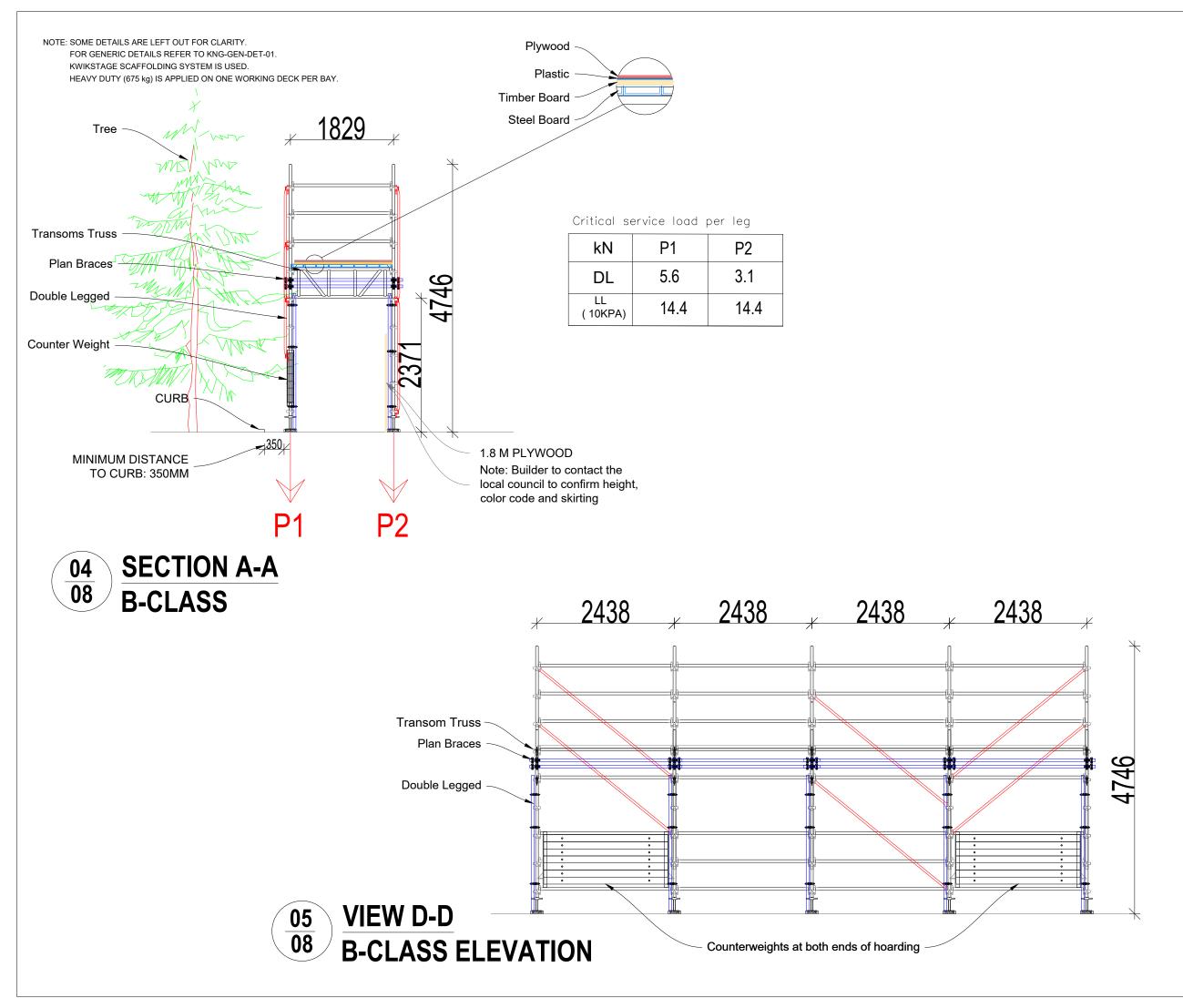


UNLESS OTHERWISE SPECIFIED:	DEVICION 04
DIMENSIONS ARE IN MILLIMETERS	REVISION 01
SCAFFOLDING COMPANY: BAYSIDE SCAFFOLDING SERVICES	
CLIENT: PERFECT CONTRACTING PTY LIMITED	DO NOT SCALE DRAWING

TITLE: PERIMETER SCAFFOLD

ADDRESS: 607 PACIFIC HIGHWAY, CHATSWOOD

	NAME	DATE
DRAWN	A.L.	18/09/2023
APPROVED	B.H.	18/09/2023
DRAWING NO.: BAY-PRC-6289-01		A3
DATE: 18/09/2	SHEET:02/05	



Scaffold Details (AS/NZS 1576.1):

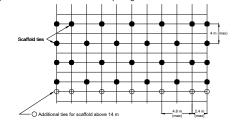
-One working platform per bay

- -Heavy duty 6.6kN/bay, includes one 2 kN concentrated load, Min 900mm platform
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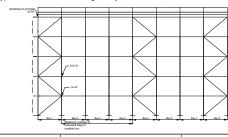
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Typical Horizontal and Vertical Tie Spacing



Typical Heel-and-Toe Bracing of Bays (AS/NZS 1576.6)



REVISION	DESCRIPTION	DATE
REVISION 00	INITIAL DESIGN	07/09/2023
REVISION 01	CHANGING DESIGN	18/09/2023



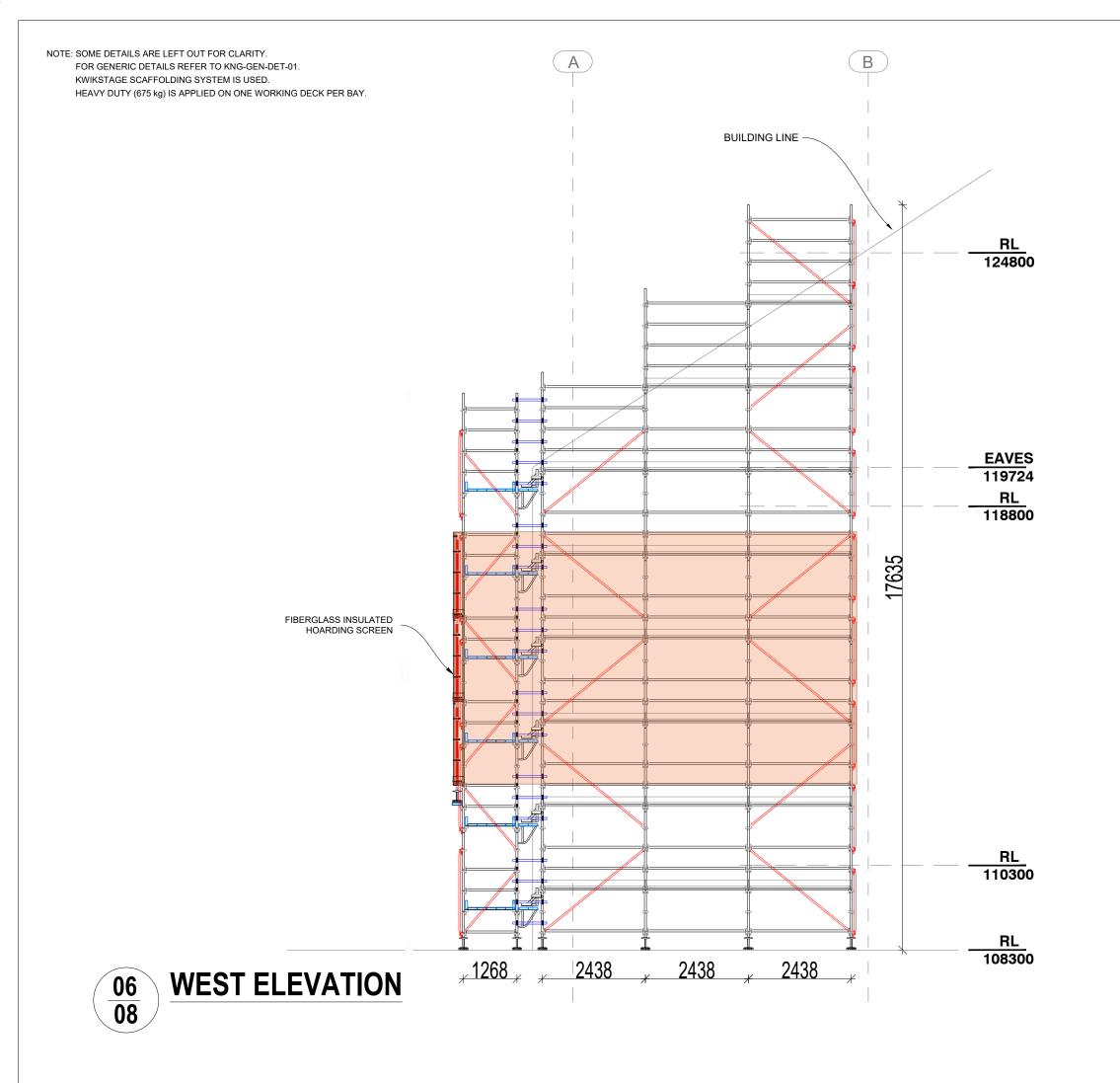


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DIMENSIONS ARE IN MILLIMETERS	REVISION UT
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	APPROVED	B.H.	18/09/2023
	DRAWING NO.: BAY-PRC-6289-01		А3
	DATE: 18/09/2023		SHEET:03/05



Scaffold Details (AS/NZS 1576.1):

-Load action on Hop-ups is limited to light duty loading

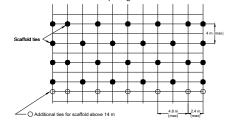
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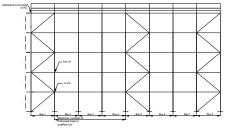
General Notes: (Notes on drawings supersede these general notes)

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- -This design relates to components supplied by the scaffolding company, named below
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 -Where required, it is the client's responsibility to provide vehicle impact protection
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- -Max 4m of scaffold is permitted above the highest row of ties
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Typical Horizontal and Vertical Tie Spacing



Typical Heel-and-Toe Bracing of Bays (AS/NZS 1576.6)



	REVISION	DESCRIPTION	DATE	
	REVISION 00	INITIAL DESIGN	07/09/2023	
	REVISION 01	CHANGING DESIGN	18/09/2023	



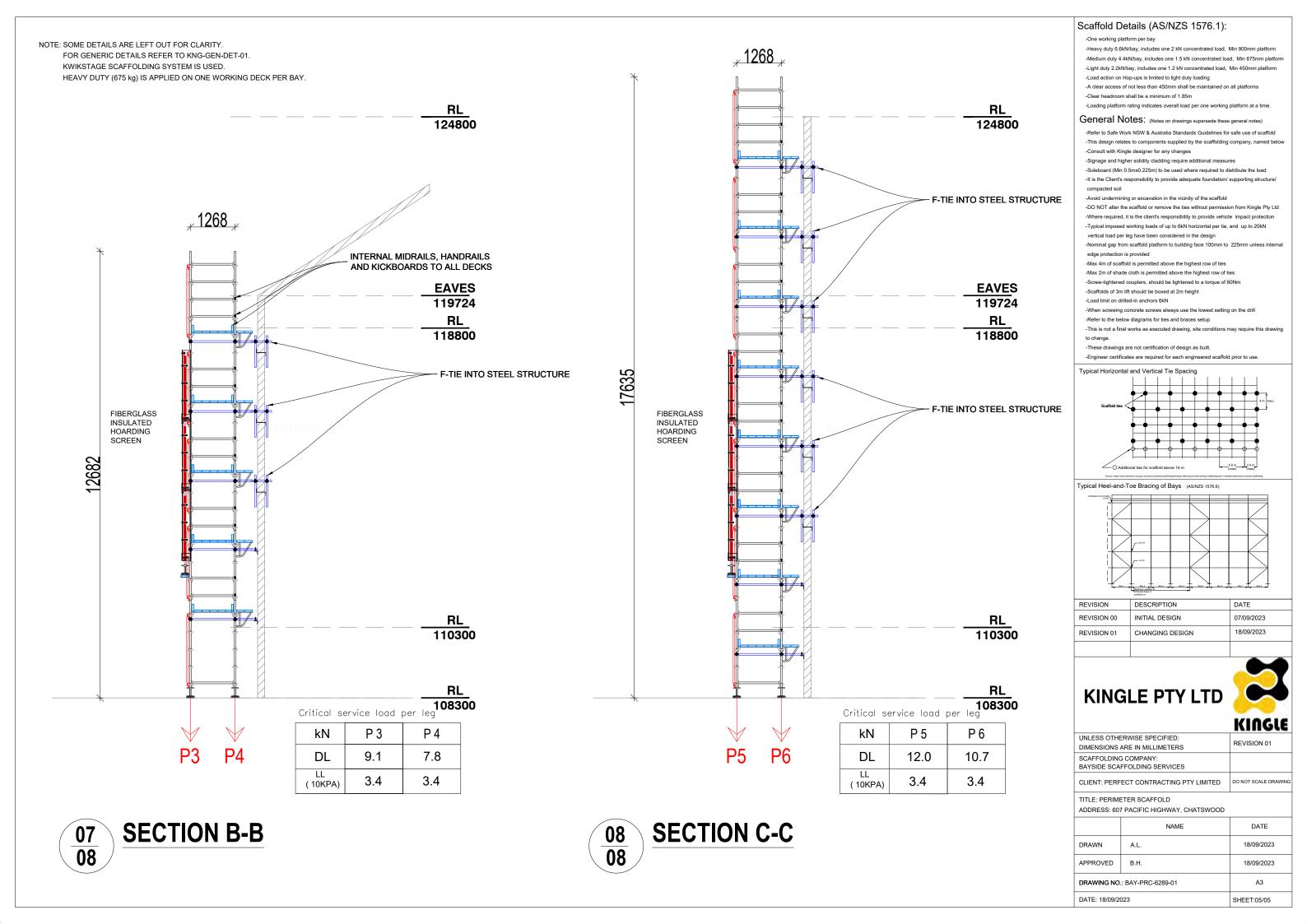


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		NAME	DATE
	DRAWN	A.L.	18/09/2023
Γ,	APPROVED	B.H.	18/09/2023
	DRAWING NO.: BAY-PRC-6289-01		А3
	DATE: 18/09/2023		SHEET:04/05





1.8.4.1 Willoughby Council Consultation

Keswick, Matthew

From: Sim, Adeline <Adeline.Sim@Willoughby.nsw.gov.au>

Sent: Tuesday, 17 October 2023 11:09 AM

To: Keswick, Matthew

Cc: Sui, Daniel; Gill, John; Sim, Mong; Austin, Jason

Subject: RE: Teambinder Update - Northern Dive CTMP Update

CAUTION: This email originated from outside of the Organisation.

Hi Matthew,

All good now for the TGS, please ensure the adjacent residents are notified prior starting the work. I have also included the comments/requirements from our Tree Section:

The Arboricultural Assessment undertaken by Urban Tree Management, dated 15 October 2023, has been reviewed. The proposed pruning to facilitate the installation of the hording and to ensure crown protection for both trees equates to less than 10% of each individual trees crown. The tree section has no objection to the proposed pruning subject to the following:

- The works are to be undertaken as per the recommendations in the Arboricultural Assessment.
- The works are to be completed at Sydney Metro's cost by a minimum AQF Level 3 Arborist.

Regards, Adeline

From: Keswick, Matthew < Matthew. Keswick@sclww.com.au>

Sent: Tuesday, 17 October 2023 10:45 AM

To: Sim, Adeline <Adeline.Sim@Willoughby.nsw.gov.au>

Cc: Sui, Daniel <Daniel.Sui@Willoughby.nsw.gov.au>; Gill, John <John.Gill@Willoughby.nsw.gov.au>; Sim, Mong

<Mong.Sim@cpbdownerjv.com.au>; Austin, Jason <Jason.Austin@sclww.com.au>

Subject: RE: Teambinder Update - Northern Dive CTMP Update

Hi Adeline,

Thanks for your response. The lane closure on Pacific Highway will be assessed by TfNSW at the time we apply for the ROL

We will cover the requirement for a VMS board at this time

Regards,

Matt

From: Sim, Adeline <Adeline.Sim@Willoughby.nsw.gov.au>

Sent: Monday, October 16, 2023 7:58 AM

To: Keswick, Matthew < Matthew.Keswick@sclww.com.au

Cc: Sui, Daniel < Daniel. Sui@Willoughby.nsw.gov.au >; Gill, John < John. Gill@Willoughby.nsw.gov.au >; Sim, Mong

<Mong.Sim@cpbdownerjv.com.au>; Austin, Jason <Jason.Austin@sclww.com.au>

Subject: RE: Teambinder Update - Northern Dive CTMP Update

CAUTION: This email originated from outside of the Organisation.

Hi Matt,

The CTPM doesn't go in to traffic committee.

The VMS wouldn't need for the closure of Nelson St. I was referring to the segment of lane closure along Pacific Hwy that needs VMS. Has that been separately assessed and advised by TfNSW?

Regards, Adeline

From: Keswick, Matthew < Matthew. Keswick@sclww.com.au>

Sent: Friday, 13 October 2023 3:55 PM

To: Sim, Adeline <Adeline.Sim@Willoughby.nsw.gov.au>

Cc: Sui, Daniel < Daniel.Sui@Willoughby.nsw.gov.au; Sim, Mong

<<u>Mong.Sim@cpbdownerjv.com.au</u>>; Austin, Jason <<u>Jason.Austin@sclww.com.au</u>>

Subject: RE: Teambinder Update - Northern Dive CTMP Update

Hi Adeline,

Thanks for that. Please see attached response we have had from the buses.

Regarding the VMS boards, we believe a VMS is not necessary as Nelson Street is a dead end road and we will separately carry out notification of residents through our communications team

Also, could you please confirm that these works do not need to go in front of the traffic committee?

Thanks for your help

Regards,

Matt

From: Sim, Adeline < Adeline.Sim@Willoughby.nsw.gov.au >

Sent: Friday, October 13, 2023 12:12 PM

To: Keswick, Matthew < Matthew.Keswick@sclww.com.au>

Cc: Sui, Daniel < Daniel.Sui@Willoughby.nsw.gov.au >; Gill, John < John.Gill@Willoughby.nsw.gov.au >

Subject: RE: Teambinder Update - Northern Dive CTMP Update

CAUTION: This email originated from outside of the Organisation.

Hi Matthew,

TGS looks fine. Do you plan to deploy VMS? If so please indicate your plan and position for locations for VMS. Can you please inform bus operators on the date and duration, and let them know the arrangement near bus stops around the lane closure area.

Regards, Adeline

Adeline Sim - Senior Transport Engineer

WILLOUGHBY CITY COUNCIL
PO Box 57 Chatswood NSW 2057
P +61 2 9777 7705 | M +61409907678

Council acknowledges the Gamaragal People as the Traditional Owners of these lands. We pay our respects to their Elders past and present.



From: Sui, Daniel < Daniel.Sui@Willoughby.nsw.gov.au>

Sent: Tuesday, 10 October 2023 4:47 PM

To: Sim, Adeline < Adeline.Sim@Willoughby.nsw.gov.au >; Gill, John < John.Gill@Willoughby.nsw.gov.au >

Cc: Matthew. Keswick@sclww.com.au

Subject: Fw: Teambinder Update - Northern Dive CTMP Update

Hi Adeline

Can you please review the CTMPs and provide comments to Matthew

John - what is the process for Out of hours application?

Thanks, Daniel

Daniel Sui - Traffic and Transport Team Lead

WILLOUGHBY CITY COUNCIL

PO Box 57 Chatswood NSW 2057 P +61 2 9777 7750 | M +61409785819

E Daniel.Sui@Willoughby.nsw.gov.au

willoughby.nsw.gov.au | visitchatswood.com.au | theconcourse.com.au

Securing Willoughby's future: Have your say on four rate rise options before 5 November

Council acknowledges the Gamaragal People as the Traditional Owners of these lands. We pay our respects to their Elders past and present.

From: Keswick, Matthew < Matthew.Keswick@sclww.com.au>

Sent: Tuesday, 10 October 2023 4:24 PM

To: Sui, Daniel < Daniel.Sui@Willoughby.nsw.gov.au>

Cc: Arbabi, Kiavash < Kiavash. Arbabi@sclww.com.au >; Austin, Jason < Jason. Austin@sclww.com.au >

Subject: RE: Teambinder Update - Northern Dive CTMP Update

Hi Daniel,

Please see attached proposed TCPs that relate to the works on Nelson Street, these are in the process of being updated but they show the allowances for cyclists and for the parking on the northern side of Nelson Street

For the proposed TCP for work at night on the Pacific Highway we can accommodate pedestrians and dismounted cyclists by having a traffic controller escort them through the work area

Could you please let me know if this answers the concerns and if so, I'll update the CTMP accordingly

Thanks for your help

Regards,

Matt

From: Keswick, Matthew

Sent: Wednesday, September 20, 2023 12:19 PM **To:** Sui, Daniel <Daniel.Sui@Willoughby.nsw.gov.au>

Cc: Arbabi, Kiavash <Kiavash.Arbabi@sclww.com.au>; Austin, Jason <Jason.Austin@sclww.com.au>

Subject: FW: Teambinder Update - Northern Dive CTMP Update

Hi Daniel.

Please see below link to the updated CTMP for the Sydney Metro Northern Dive Site in Chatswood

My apologies your name wasn't on the transmittal list last week

TMP Northern Dive Site Operations Rev 4-KA.pdf

Regards,

Matt

1.8.4.2 Sydney Buses Consultation

Keswick, Matthew

Frankie Passarelli <Frankie.PASSARELLI@transport.nsw.gov.au>

Sent: Tuesday, 10 October 2023 2:19 PM

To: Keswick, Matthew

Cc: Sim, Mong; Elizabeth Harrison; Jim Niahos; Steven Blight; Rabih Bekdache; James

Makasiale; Ben Cantor

Subject: RE: Systems Connect - Northern Dive Service Buildings - Upcoming Night Works on

Pacific Highway Chatswood

Attachments: LGP - TGS - 49876 - Nelson St & Pacific Hwy, Chatswood NSW 2067, Australia - 003

- R5.pdf

CAUTION: This email originated from outside of the Organisation.

Matt,

Thanks for the email.

As per Rabih"s initial advice, I have no objections to:

- Night works as per setup attached :
 - Sunday to Thursday 2200 0500;
 - o no works Friday or Saturday nights
- No works during special events (VIVID et al)

I have included the local operator representatives for any final commentary.

Regards,

Frankie Passarelli

A/ Manager Alternate Transport Planning

Transport Planning Project Manager

Customer Journey Planning – Short Term & Temporary Transport Planning

Greater Sydney | Transport for NSW

E: Frankie.PASSARELLI@transport.nsw.gov.au

T: 0447 174 312

231 Elizabeth St | Sydney NSW 2000





I acknowledge the Aboriginal people of the country on which I work, their traditions, culture and a shared history and identity. I also pay my respects to Elders past and present and recognise the continued connection to country.

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OFFICIAL

From: Keswick, Matthew < Matthew. Keswick@sclww.com.au>

Sent: Tuesday, 10 October 2023 1:45 PM

To: Frankie Passarelli <Frankie.PASSARELLI@transport.nsw.gov.au>

Cc: Sim, Mong <Mong.Sim@cpbdownerjv.com.au>; Elizabeth Harrison <Elizabeth.Harrison@transport.nsw.gov.au>; Jim Niahos <Jim.Niahos@transport.nsw.gov.au>; Steven Blight <Steven.Blight2@transport.nsw.gov.au>; Rabih Bekdache <Rabih.Bekdache@transport.nsw.gov.au>

Subject: RE: Systems Connect - Northern Dive Service Buildings - Upcoming Night Works on Pacific Highway Chatswood

You don't often get email from matthew.keswick@sclww.com.au. Learn why this is important

CAUTION: This email is sent from an external source. Do not click any links or open attachments unless you recognise the sender and know the content is safe.

Hi Frankie,

We have taken a closer look at the controls on the Pacific Highway to try to reduce our impacts on everyone

We have marked up the location of the bus stop 206747 on the Pacific Highway and can confirm that our works will not affect it

I also confirm that the hoarding will be minimum 800mm set back from the kerb

If acceptable, could you please confirm this any and conditions required

Thanks for your help

Regards,

Matt

OFFICIAL

From: Rabih Bekdache < Rabih. Bekdache@transport.nsw.gov.au >

Sent: Wednesday, October 4, 2023 1:21 PM

To: Keswick, Matthew < Matthew. Keswick@sclww.com.au>

Steven Blight < Subject: RE: Systems Connect - Northern Dive Service Buildings - Northern Buildings - Northern

CAUTION: This email originated from outside of the Organisation.

Hello Mathew

No issues with the bus zone being blocked.

Please confirm dates so we can advise the operators.

Regards

Rabih Bekdache

Transport Planning Project Manager
Customer Journey Planning – Short Term & Temporary Transport Planning
Transport for NSW

M 0415 472 898 E rabih.bekdache@transport.nsw.gov.au

transport.nsw.gov.au

231 Elizabeth Street Sydney NSW 2000



Transport for NSW



I acknowledge the Aboriginal people of the country on which I work, their traditions, culture and a shared history and identity. I also pay my respects to Elders past and present and recognise the continued connection to country.

Please consider the environment before printing this email.

OFFICIAL

From: Rabih Bekdache

Sent: Wednesday, 4 October 2023 10:22 AM

To: 'Keswick, Matthew' < Matthew.Keswick@sclww.com.au>

Cc: Frankie Passarelli < Frankie.PASSARELLI@transport.nsw.gov.au>; Sim, Mong < Mong.Sim@cpbdownerjv.com.au>; Elizabeth Harrison < Elizabeth.Harrison@transport.nsw.gov.au>; Jim Niahos < Jim.Niahos@transport.nsw.gov.au>; Rabih Bekdache < Rabih.Bekdache@transport.nsw.gov.au>; Steven Blight < Steven.Blight2@transport.nsw.gov.au> **Subject:** RE: Systems Connect - Northern Dive Service Buildings -

Hello Keswick

I have no issues with the works and lane closure with the following conditions

- Works between Sun to Thur 2200 0500 no works Fri or Sat Night
- No works during a special event
- A minimum of 14 days' notice from a confirmed start date

With regards to the bus zone on our systems it doesn't look like its used but I have asked the local operators for advise if it is used and I will get back to you.

Also the class b Hoarding we require that it is set back a minimum of 600mm from the kerb face but prefer 800mm could you please confirm.

Regards

Rabih Bekdache

Transport Planning Project Manager
Customer Journey Planning – Short Term & Temporary Transport Planning
Transport for NSW

transport.nsw.gov.au

231 Elizabeth Street Sydney NSW 2000



Transport for NSW



I acknowledge the Aboriginal people of the country on which I work, their traditions, culture and a shared history and identity. I also pay my respects to Elders past and present and recognise the continued connection to country.

Please consider the environment before printing this email.

From: Keswick, Matthew < Matthew. Keswick@sclww.com.au>

Sent: Friday, 29 September 2023 9:14 AM

To: Rabih Bekdache < <u>Rabih.Bekdache@transport.nsw.gov.au</u>>

Cc: Frankie Passarelli < Frankie.PASSARELLI@transport.nsw.gov.au >; Sim, Mong < Mong.Sim@cpbdownerjv.com.au >

Subject: Systems Connect - Northern Dive Service Buildings -

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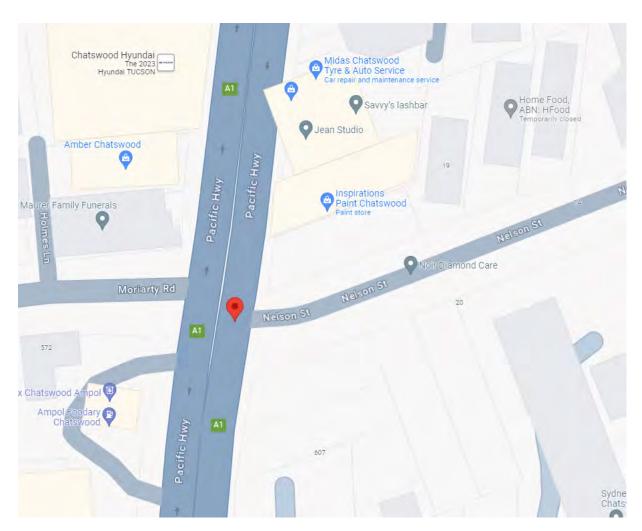
CAUTION: This email is sent from an external source. Do not click any links or open attachments unless you recognise the sender and know the content is safe.

Hi Rabih,

Please see attached proposed TCPs for Systems Connect to carry out the demolition of the redundant spoil sheds at the Sydney Metro Chatswood Dive site

One TCP is for a lane closure on Pacific Highway, this will take place at night. The day of the week and the times are TBC but we anticipate something like 10pm to 5am for a maximum of two consecutive nights for erection of class B hoarding. Two months later we will need another two consecutive nights to dismantle it

We have noticed a Bus Zone on Pacific Highway that doesn't have a bus stop attached to it (please see below screenshots from Google street view. Could you please let us know if this Bus Zone is in use during the night? We would like to position a shadow vehicle in this zone if possible





Thanks for your help

Regards,

Matt

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