



Tetra Tech Coffey – Geotech Scope North Construction Traffic Management Plan

Sydney Metro Western Sydney Airport Station Boxes and Tunnelling Works

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Revision	Rev 02

Document approval

Rev	Date	Prepared by	Reviewed by	Approved by
А	11/04/2022			
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02	05/04/2023			
Signa	ture			



Subject:

FW: Conditional Approval: SMWSA - SBT - Geotech Scope North (Addendum - Appendix 5)

Hi Phil / Berin,

Transport for NSW Customer Journey Planning approve the following Construction Traffic and Transport Management Plan:

Project: Sydney Metro Western Sydney Airport – Station Boxes and Tunnelling

Title: Geotech Scope North – Addendum, Appendix 5
Document Number: SMWSASBT-CPG-STM-SN100-TF-RPT-293046

Revision: B

This approval is subject to the following requirements being met:

- Apply to and obtain approval from TMC for ROLs for any required lane closures, pedestrian management and/or Speed Zone Authorisations as part of the ROL;
- All temporary lane closures and traffic control arrangements are to be implemented in accordance with Transport for NSW Traffic Control at Worksites Technical Manual Issue No.6;
- Conduct a Road Safety Audit post implementation and address any issues identified in the Road Safety Audit and Risk Assessment;
- All barrier systems and site setups must comply with the relevant standards, including TCWS and TfNSW Barrier Systems. Any noncompliance must be reviewed and addressed with a Road Safety Audit signed off and accepted by Sydney Metro / TfNSW;
- Regularly monitor the implemented arrangements, traffic queues, and road conditions to identify any operational/safety issues and rectify in consultation with all relevant stakeholders as required, including CJP;
- Ensure close liaison with CJP post implementation of this TMP addendum to allow for a coordinated management of traffic impacts;
- Ensure the requirements of the Communication Strategy in the TMP, in consultation with CJP, are fulfilled prior to implementation;
- Ensure all required permits and/or approvals are obtained from Local Council; and
- Address any issues raised by stakeholders (e.g. TfNSW, CJP, Local Council, businesses etc.) as part of the CTMP process.

Kind Regards,



Working days: Monday to Thursday, with flexible working hours



Transport for NSW



Subject:

FW: Sydney Metro WSA - SBT – SBT Geotech North Construction Traffic Management Plan Revision 02 – Updated to include Appendix 5 covering additional borehole locations - SM's Comments and CJP Approval

Reason for Issue	Issued for Information
Subject	Sydney Metro WSA - SBT – SBT Geotech North Construction Traffic Management Plan Revision 02 – Updated to include Appendix 5 covering additional borehole locations - SM's Comments and CJP Approval

Dear CPBG.

Further to the SBT Contractor's transmittal, TeamBinder reference SMWSASBT-CPG-TX-001858, dated 11 April 2023. The Principal attaches the approval email notice received via email from Customer Journey Planning (CJP) for the Sydney Metro WSA - SBT – Construction Traffic Management Plan (CTMP) -- SBT Geotech North Construction Traffic Management Plan Revision 02 – Updated to include Appendix 5 covering additional borehole locations.

Note: The approved email notice is attached in **Comment No. 95** within the comment sheet in TeamBinder.



Click here to download all Transmittal files.

Item	Document No	Title	Rev	Sts	Туре	Design Lots	Alt Doc No
1	SMWSASBT-CPG-SWD-SW000-TF-PLN- 000002	Sydney Metro WSA - SBT – Construction Traffic Management Plan (CTMP) Tetra Tech Coffey – Geotech Scope North	02.01	S3	PLN		

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TeamBinder Transmittal Reference: {BB1FF55E-C2D0-46FC-B8D1-1FD45C001B54}





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 construction, legal and other requirements, as required.

Amendments

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

Revision Details

Revision	Details
A.01	For external stakeholder review
B.01	For approval
C.01	For approval
D.01	Submitted for review with additional borehole locations
E.01	For approval
00	Approved version for construction
01	Addendum added to the existing Tetra Tech Coffey – Geotech Scope North Construction Traffic Management Plan with inclusion of Appendix 5 to cover installation of additional boreholes on Queen Street.
02	Addendum added to the existing Tetra Tech Coffey – Geotech Scope North Construction Traffic Management Plan with inclusion of Appendix 5 to cover installation of additional boreholes on Queen Street. Issued for Approval.





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Appendix 5 Addendum to the existing Tetra Tech Coffey – Geotech Scope North Construction Traffic Management Plan with inclusion of Appendix 5 to cover installation of **b**oreholes on Queen Street.



1.Introduction

1.1. Project and location

The Project forms part of the broader Sydney Metro network. It involves the construction and operation of a 23km new metro rail line that extends from the existing Sydney Trains suburban T1 Western Line (at St Marys) in the north and the Aerotropolis (at Bringelly) in the south. The

alignment includes a combination of tunnels and civil structures, including viaduct, bridges, surface and open-cut troughs between the two tunnel sections (Figure 2).

The Project will be delivered through a number of works packages including the Station Boxes and Tunnelling Works (SBT Works). The SBT Works includes the design and construction of:

 Two sections of twin tunnels with a total combined length of approximately 9.8km, plus associated portal structures, one from Orchard Hills to St Marys and the other under Western Sydney International (WSI) airport to the new Aerotropolis Station in New South Wales (NSW)

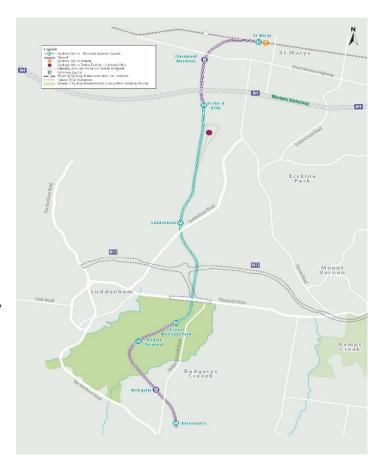


Figure 1: Project location

- Excavations at either end to enable trains to turn back and stub tunnels to enable future extensions
- Station box excavations with temporary ground support for four stations at St Marys, Orchard Hills, Airport Terminal and Aerotropolis
- Excavations for two intermediate service facilities, one in each of the tunnel sections at Claremont and Bringelly.

1.2. Purpose

This Construction Traffic Management Plan (CTMP) has been prepared by Tetra Tech Coffey for CPBG JV to support the Sydney Metro Western Sydney Airport Station Boxes and Tunnelling Works (SBT Works). Tetra Tech Coffey have been engaged by CPB and Ghella Joint Venture (CPBG JV) to conduct the geotechnical site investigations for SBT works.







This plan sets out the traffic management initiatives that will be deployed to minimise disruption and ensure the safety of the wide range of stakeholders potentially affected by the geotechnical investigations associated with SBT works including but not limited to motorists, pedestrians, cyclists, public transport users, local residents, property owners, business owners and workers/ staff.

This plan has been prepared in accordance with the Construction Traffic Management Framework, SSI 10051 Planning Approval Condition E103 and will be submitted to the Planning Secretary of the NSW Department of Planning and Environment for information.





2.Locality and existing conditions

The geotechnical boreholes located within the council roads reserve are summarised in Table 1. The holes that have been completed as part of the previous CTMP submission are highlighted in grey in Table 1. This submission details 7 additional locations.

Table 1: Geotechnical investigation sites located within council roads reserve

Borehole ID	Address	Road Type	Activity
SBT-GW-1005	5 Lethbridge Street, St Marys	Council Road	Borehole drilling
SBT-BH-1213	1 Station Street, St Marys	Council Road	Borehole drilling
SBT-BH-1215	1 Station Street, St Marys	Council Road	Borehole drilling
SBT-BH-1214	1 Station Street, St Marys	Council Road	Borehole drilling
SBT-BH-1212	3 Station Street St Marys	Council Road	Borehole drilling
SBT-BH-1211	2 Station Street St Marys	Council Road	Boreholes drilling
SBT-GW-1015	1 – 5 Queen Street, St Marys	Council Road	Borehole drilling
SBT-CM-1022	76 Carinya Avenue, St Marys	Council Carpark	Borehole drilling
SBT-GW-1008	Harris Street Carpark, North St Marys	Council Carpark	Borehole drilling
SBT-GW-1037	77-81 Kent Road, Orchard Hills	Council Road	Borehole drilling
SBT-BH-1053	114-122 Kent Road, Orchard Hills	Council Road	Borehole drilling
SBT-BH-1054	114-122 Kent Road, Orchard Hills	Council Road	Borehole drilling
SBT-BH-1055	34-38 Lansdowne Road, Orchard Hills	Council Road	Borehole drilling
SBT-BH-1056	28-32 Lansdowne Road, Orchard Hills	Council Road	Borehole drilling
SBT-GW-1016	34 Queen St, St Marys NSW 2760	Council Road	Borehole drilling
SBT-BH-1023	Corner of Gipps St and Werrington Rd, Werrington NSW 2747	Council Road	Borehole drilling
SBT-CM-1029	Corner of Gipps St and Gipps St, Claremont Meadows NSW 2747	Council Road	Borehole drilling
SBT-BH-1032	30-31 Falcon Cres, Claremont Meadows NSW 2747	Council Road	Borehole drilling
SBT-BH-1033	57 Blackwood Street, Claremont Meadows NSW	Council Road	Borehole drilling
SBT-GW-1063	114 Samuel Marsden Road, Orchard Hills NSW	Council Road	Borehole drilling
SBT-GW-4023	190 Badgerys Creek Road, Bringelly NSW	Council Road	Borehole drilling





All the investigations sites included in Table 1 (excluding SBT-GW-4023) are located within the Penrith City Council Local Government Area (LGA) (SBT-GW-4023 is in the City of Liverpool Local Government Area). Figure 2 to Figure 14 shows the extent of this CTMP and relevant site locations associated with planned site investigation works.



Figure 2: Aerial view of SBT-GW-1005 borehole location

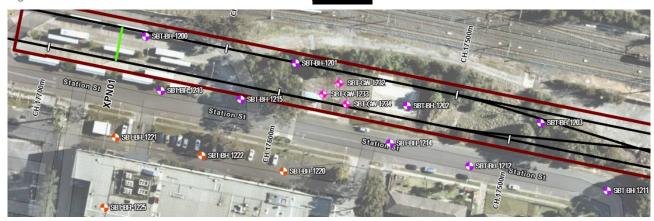


Figure 3: Aerial view of SBT-BH-1211 to SBT-BH-2015



Figure 4: Aerial view of SBT-CM-1022 (SBT-CM-1020 and SBT-GW-1015)







Figure 5: Aerial view of SBT-GW-1008 borehole location



Figure 6: Aerial view of SBT-GW-1037 borehole location



Figure 7: Aerial view of Lansdowne Road site extents







Figure 8: Aerial view of Queen Street site extents



Figure 9: Aerial view of corner of Gipps Street and Werrington Road site extents



Figure 10: Aerial view of corner of Gipps Street and Gipps Street site extents







Figure 11: Aerial view of Falcon Cres site extents



Figure 12: Aerial view of Blackwood Street site extents



Figure 13: Aerial view of Samuel Marsden Road site extents









Figure 14: Aerial view of Badgerys Creek Road site extents



2.1. Road Characteristics

2.1.1. Lethbridge Street (SBT-GW-1005)

Lethbridge Street is a local street which falls under the care and control of Penrith City Council. Lethbridge Street is an asphalt surface, and the current speed limit is 50 km/h. Parking is available along Chesham and Lethbridge streets. There are also footpaths available on both streets. For the proposed investigations works, only the southbound parking lane will be used for the compound setup. This compound is expected to be set up within the parking lane for between 2-4 days.



Figure 15: Street view of Lethbridge Street (Northbound) showing proposed investigation location

2.1.2. Station Street (SBT-BH-2011, SBT-BH-2012, SBT-BH-2015, SBT-BH-2014, SBT-BH-2013)

Station Street is a local road which falls under the care and control of Penrith City Council. It commences at Lethbridge Street and terminates at Queen Street. Station Street is closed, by others to the east of the temporary bus interchange with access to the eastern side via Lethbridge Street and western side via Queen Street. The current speed limit is 50km/hr from Lethbridge Street and encompasses the existing residential properties at the eastern end of Station Street. A 40km/hr speed limit is in place west of the 50km/hr, due to high pedestrians activity around the St Mary train and bus interchange and existing retail facilities SBT-BH-2011, SBT-BH-2012 and SBT-





BH-2014 will be conducted within ROL approved hours and will occupy the eastbound parking lane. Traffic will remain open during operations.



Figure 16: Street view of Station Street (Eastbound) showing proposed investigation location

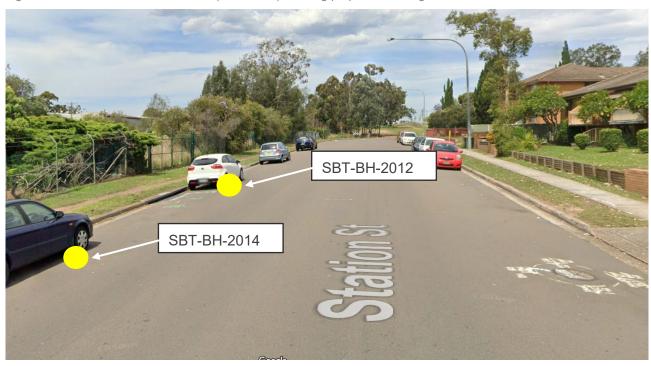


Figure 17: Street view of Station Street (Eastbound) showing proposed investigation location







Figure 18: Street view of Station Street (Eastbound) showing proposed investigation location



Figure 19: Street view of Station Street (Eastbound) showing proposed investigation location

2.1.3. Queen Street (SBT-GW-1015)

Queen Street Lane is a local road which falls under the care and control of Penrith City Council. Queen Street is an asphalt surface and the current speed limit is 40 km/h. The northern end of Queen Street is a cul-de-sac and parking is not permitted after Station Street intersection. There is also a footpath available on both sides. The proposed investigation site is located towards the end of Queen Street (i.e. near the dead end). For these works, only the northbound lane will be used for the compound setup.









Figure 20: Street view of Queen Street (Northbound) showing proposed investigation location

2.1.4. Carinya Avenue northern Carpark (SBT-CM-1022) -

Carinya Avenue northern car park is a commuter carpark which falls under the care and control of Penrith City Council. The carpark is an asphalt surface. There are also footpaths available. The proposed investigation site is located at the north of the carpark. For these works, several car parking spaces will be used within the north end of the car park. The disabled parking spots adjacent to the investigation location will remain open.









Figure 21: Street view of Harris Street Carpark (looking east) showing proposed investigation location

2.1.5. <u>Harris Street Comm</u>uter Carpark (SBT-GW-1008) –

Harris Street Carpark is a commuter carpark which falls under the care and control of Penrith City Council. The carpark is an asphalt surface. There are also footpaths available. The proposed investigation site is located at the southeast corner of the carpark. For these works, only 10 car parking spaces will be used within the southeast corner of the car park.



Figure 22: Street view of Harris Street Carpark (looking east) showing proposed investigation location





2.1.6. Kent Road (SBT-GW-1037)

Kent Road is a local road which falls under the care and control of Penrith City Council. Kent Road is an asphalt surface with unsealed shoulders. The current speed limit is 70 km/h. Parking is not available along Kent Road. There is also no footpath available. For the proposed investigations works, only the northbound shoulder will be used for the compound setup.



Figure 23: Street view of Kent Road (Northbound) showing proposed investigation location

2.1.7. Lansdowne Road (SBT-BH-1053 to SBT-BH-1056) -

Lansdowne Road is a local road which falls under the care and control of Penrith City Council. Lansdowne Road is an asphalt surface with unsealed shoulders. The current speed limit is 70 km/h. Site investigation locations are planned to be installed along the side of the roads with trafficable lane remaining open.

2.1.7.1. Lansdowne Road (SBT-BH-1053 and SBT-BH-1054)

For SBT-BH-1053 and SBT-BH-1054 investigations works, only the eastbound shoulder will be used for the compound's setup with both east and westbound lanes remaining open.

2.1.7.2. Lansdowne Road (SBT-BH-1055 to SBT-BH-1056)

For SBT-BH-1055 and SBT-BH-1056 investigations works, the westbound traffic lane will be used for the compound setups. For each borehole, a separate compound setup will be established in the





westbound traffic lane. Contraflow will be installed around the site along the eastbound lane to maintain traffic flow.



Figure 24: Street view of Lansdowne Road (Westbound) showing proposed investigation locations. Locations on road due to clearance from powerlines



Figure 25: Street view of Lansdowne Road (Eastbound) showing proposed investigation locations





2.1.8. **Queen Street (SBT-GW-1016)**

Queen Street is a local road which falls under the care and control of Penrith City Council. Queen Street is an asphalt surface and the current speed limit is 40 km/h. Wide footpaths accommodate pedestrians to access stores on both sides of the street. The proposed investigation site is in a southbound parking lane just before Phillip Street.



Figure 26: Street view of Queen Street showing proposed investigation location

2.1.9. Corner of Gipps St and Werrington Rd (SBT-BH-1023)

This location lies adjacent to local roads which fall under the care and control of Penrith City Council. The roads are within a school zone and the speed limit is 40 km/h during school hours and 60 km/h otherwise. The compound will be setup on the verge and traffic will only be affected during entry and exit of vehicles from the compound on Gipps Street only.









Figure 27: Street view of Gipps Street (westbound towards Wollemi College) showing proposed investigation location

2.1.10. Corner of Gipps St and Gipps St (SBT-CM-1029)



This location lies at the intersection of two roads both named Gipps Street. The Gipps Street running north to south is an RMS road and the other is a local road under the care and control of Penrith City Council. The local road was recently opened to the RMS road, Figure 28 captures the intersection during the opening phase. The local road is closed off to public access from the RMS road and only construction vehicles may enter from this direction. The compound will be built on the verge of the local road and the traffic on the RMS road will not be impacted.



Figure 28: Street view of Gipps Street (local road) from Gipps Street (RMS road) showing proposed investigation location







2.1.11. 30-31 Falcon Crescent (SBT-BH-1032)

Falcon Crescent is a local road which falls under the care and control of Penrith City Council. Falcon Crescent is an asphalt surface and the current speed limit is 50 km/h. The proposed investigation location is on a large nature strip between two properties. Traffic control will be setup to maintain two ways of traffic, boom gates will be ready should they be required during site establishment or demobilisation. The temporary compound will be built completely on the nature strip, maintaining regular flow of traffic outside work hours.



Figure 29: Street view of proposed investigation location on Falcon Crescent

2.1.12. 57 Blackwood Street (SBT-BH-1033)

Blackwood Street is a local road which falls under the care and control of Penrith City Council. Blackwood Street is an asphalt surface and the current speed limit is 50 km/h. A footpath runs the western length of the street for pedestrians. The northbound lane will be occupied during investigation works. The compound is to be collapsed and pushed into the kerb during afterhours period.









Figure 30: Street view of proposed investigation location on Blackwood Street

2.1.13. 114 Samuel Marsden Road (SBT-GW-1063)

Samuel Marsden Road is a local road which falls under the care and control of Penrith City Council. It is an asphalt surface and the current speed limit is 50 km/h. The eastern side of the proposed investigation location comprises residential buildings and the western side opens to largely empty lots. The compound will be setup on the council nature strip and traffic setup to maintain two ways of traffic. Boom gates will be ready should they be required during site establishment and demobilisation.



Figure 31: Street view of proposed investigation location on Samuel Marsden Road





2.1.14. 190 Badgerys Creek Road (SBT-GW-4023)

190 Badgerys Creek Road is on a regional road which falls under the care and control of the City of Liverpool local government areal. Badgerys Creek Road is asphalt surface and the current speed limit is 80 km/h. For these works, the compound will be built in the northbound shoulder. A stop-start will be setup in the southbound lane and traffic controllers with boom gates will guide traffic one direction at a time.



Figure 32: Street view of proposed investigation location on Badgerys Creek Road

3. Description of Works / Hours of Operation

3.1. Works Required

The works will initially comprise mobile worksite comprising traffic cones, tiger tails and signage setup at each site for the purpose of initial service locating including Non Destructive Digging (NDD) and potholing where required. Following the completion of service locating, a temporary compound would be setup for each borehole. Station Street holes will be completed within provided ROL hours and no overnight set up will be required. For all other sites the compound will remain in place 24 hours a day for 2-4 days for borehole drilling at each investigation site. The compound will comprise of cones, signage, ATF fencing and plastic bollards where necessary for on road fencing and delineation. The compound would be demobilized at the completion of each borehole.







The works at each investigation location will take approximately 2-4 days to complete and would be undertaken within working hours of 7am to 6pm with the traffic control measures mobilised / demobilised off road where possible at the start and end of each shift. Required aftercare signage and relevant controls will remain in place after hours as needed to maintain advanced warning.

3.1.1. Lethbridge Street (SBT-GW-1005)

Following the completion of initial service locating, the temporary compound would be setup within the southbound parking lane of Lethbridge Street near the intersection of Chesham Street. Boom gates on each side of the compound will be installed and would only be used only if required to stop traffic in the case of an emergency. The footpath will always remain operational. The workers onsite will remain 1.5 m from live traffic. The site will be clearly delineated with appropriate traffic barriers in place. A Traffic Guidance Scheme (TGS) attached in Appendix 1 shows our proposed traffic management plan for the site.

3.1.2. Station Street (SBT-BH-2013 and SBT-BH-2015)

Following the completion of initial services locating undertaken using stop slow, a temporary compound will be set up within the trafficable lane. Each hole will be completed within the provided ROL hours and not include an overnight compound. TGSs proposed for this site are detailed in Appendix 1.

3.1.3. Station Street (SBT-BH-2011, SBT-BH-2012, SBT-BH-2014) -

Following the completion of initial services locating, a temporary compound will be set up within the parking lane along station street. Each hole will be completed within the provided ROL hours and not include an overnight compound. TGS's proposed for this site are detailed in Appendix 1.

3.1.4. **Queen Street (SBT-GW-1015)**

Following the completion of initial services locating, a temporary compound will be set up within the traffic lane along Queen Street. Each hole will be completed within the provided ROL hours and not include an overnight compound. TGSs proposed for this site are detailed in Appendix 1.

3.1.5. Harris Street Carpark (SBT-GW-1008) and Carinya Avenue Northern Carpark (SBT-CM1022 –

Following the completion of initial service locating, the temporary compound would be setup at the southeast corner of the carpark. The compound setup is expected to take up 8-10 parking spaces







in the southeast corner of the carpark. TGS's attached in Appendix 1 shows our proposed traffic management plan for the site.

3.1.6. Kent Road (SBT-GW-1037)

After the completion of initial service locating undertaken using stop slow the temporary compound would be setup within the northbound shoulder on Kent Road. This compound setup doesn't require any traffic lane closure as the compound setup is only confined to the shoulder. The workers onsite will remain 1.5 m from live traffic. The site will be clearly delineated with appropriate traffic barriers in place. A TGS attached in Appendix 1 shows our proposed traffic management plan for the site.

3.1.7. Lansdowne Road (SBT-BH-1053 and SBT-BH-1054) -

After the completion of initial service locating, the temporary compound would be setup within the eastbound shoulder on Lansdowne Road near the intersection of Kent Road. This compound setup doesn't require any traffic lane closure as the setup is only confined to the road shoulder. The workers onsite will remain 1.5 m from live traffic. The site will be clearly delineated with appropriate traffic barriers in place. A TGS attached in Appendix 1 shows our proposed traffic management plans for these two sites.







3.1.8. <u>Lansdowne</u> Road (SBT-BH-1055 and SBT-BH-1056) –

Following the completion of initial service locating, the temporary compound would be setup within the westbound traffic lane of Lansdowne Road near the intersection of Kent Road. Traffic management will be used to effectively contraflow the traffic movement. Operating zones of each compound will be installed to maintain a 1.5 m distance from geotechnical staff from live traffic. A TGS attached in Appendix 1 shows our proposed traffic management plans for these two sites.

3.1.9. **Queen Street (SBT-GW-1016)**

Following the completion of initial service locating, the temporary compound would be setup in the southbound parking lane of Queen Street just before Phillip Street. Operating zones of each compound will be installed to maintain a 1.5 m distance from geotechnical staff from live traffic. TGS's attached in Appendix 1 shows our proposed traffic management plan for the site.

3.1.10. Corner of Gipps St and Werrington Rd (SBT-BH-1023)

Following the completion of initial service locating, the temporary compound would be setup on the verge of Gipps Street. Traffic on Werrington Road will not be impacted by the works with traffic on Gipps Street only being stopped when trucks are turning. Operating zones of each compound will be installed to maintain a 1.5 m distance from geotechnical staff from live traffic. TGS's attached in Appendix 1 shows our proposed traffic management plan for the site.

3.1.11. Corner of Gipps St and Gipps St (SBT-CM-1029)

Following the completion of initial service locating, the temporary compound would be setup on the verge of Gipps Street (local road). Traffic on Gipps Street (RMS road) will not be impacted by the works. Public access to the local road from the RMS road is restricted to construction vehicles only, hence the public will not be impacted. Operating zones of each compound will be installed to maintain a 1.5 m distance from geotechnical staff from live traffic (construction vehicles). TGS's attached in Appendix 1 shows our proposed traffic management plan for the site.

3.1.12. 30-31 Falcon Crescent (SBT-BH-1032)

Following the completion of initial service locating, the temporary compound would be setup on the nature strip between 30 and 31 Falcon Crescent. The compound will be established entirely on the nature strip ensuring regular flow of traffic afterhours. Operating zones of each compound will be installed to maintain a 1.5 m distance from geotechnical staff from live traffic. During working hours, two ways of traffic will also be maintained with boom gates available if required. Driveways will be always accessible. TGS's attached in Appendix 1 shows our proposed traffic management plan for the site.







3.1.13. 57 Blackwood Street (SBT-BH-1033)

Following the completion of initial service locating, the temporary compound will be established in the northbound lane and traffic control with boom gates established to direct traffic in one direction at a time during work hours. Part of the compound will mount the kerb and take up part of the walkway. A Pedestrian Management Plan is provided in Appendix 1 to guide locals around the compound. The compound is to be collapsed and pushed into the kerb during afterhours period. Operating zones of each compound will be installed to maintain a 1.5 m distance from geotechnical staff from live traffic. TGS's attached in Appendix 1 shows our proposed traffic management plan for the site.

3.1.14. 114 Samuel Marsden Road (SBT-GW-1063)

Following the completion of initial service locating, the temporary compound would be setup on the nature strip of 114 Samuel Marsden Road. The compound will be established entirely on the nature strip ensuring two-way flow of traffic, boom gates will be setup and utilised if required during establishment and demobilisation. Operating zones of each compound will be installed to maintain a 1.5 m distance from geotechnical staff from live traffic. TGS's attached in Appendix 1 shows our proposed traffic management plan for the site.

3.1.15. 190 Badgerys Creek Road (SBT-GW-4023)

Following the completion of initial service locating, the temporary compound would be setup on the northbound shoulder lane of Badgerys Creek Road. For these works, the compound will be built in the northbound shoulder. A contraflow will be setup in the southbound lane and traffic controllers with boom gates will guide traffic. Operating zones of each compound will be installed to maintain a 1.5 m distance from geotechnical staff from live traffic. TGS's attached in Appendix 1 shows our proposed traffic management plan for the site.





4.Implementation

Statewide Roads & Traffic Pty Ltd has prepared TGS's relevant to each site within this CTMP. These Plans are available in Appendix 1 and are summarised in Table 2.. The planned start and completion dates for each borehole are also included.

Table 2: Traffic control plan summary

Borehole ID	Start Date	Finish Date	Status	Road Closure Type	TGS Plan. No
SBT-GW-1005	25/07/2022	28/07/2022	Completed	Southbound parking lane closure	WSA010
SBT-GW-1037	02/08/2022	04/08/2022	Deleted	Northbound shoulder closure	WSA032
SBT-BH-1053	12/07/2022	14/07/2022	Completed	Eastbound shoulder closure	WSA004
SBT-BH-1054	14/07/2022	18/07/2022	Completed	Eastbound shoulder closure	WSA004
SBT-BH-1055	18/07/2022	26/09/2022	Completed	Westbound traffic lane closure	WSA003
SBT-BH-1056	26/09/2022	21/07/2022	Completed	Westbound traffic lane closure	WSA003
SBT-GW-1008	Deleted	Deleted	Deleted	Harris Street Commuter Carpark	WSA002
SBT-BH-1213	12/07/2022	12/07/2022	Completed	Station Street trafficable lane	WSA036
SBT-BH-1215	07/06/2022	07/06/2022	Completed	Station Street trafficable lane	WSA037
SBT-BH-1214	15/07/2022	15/07/2022	Completed	Station Street shoulder closure	WSA038
SBT-BH-1212	15/07/2022	15/07/2022	Completed	Station Street shoulder closure	WSA038
SBT-BH-1211	15/07/2022	15/07/2022	Completed	Station Street shoulder closure	WSA039
SBT-CM-1022	13/07/2022	14/07/2022	Completed	Carinya Avenue northern Commuter Carpark	WSA041
SBT-GW-1015	05/09/2022	07/09/2022	Yet to commence	Queen Street trafficable Lane	WSA043
SBT-GW-1016	07/09/2022	12/09/2022	Yet to commence	Queen Street parking lane	WSA071







Borehole ID	Start Date	Finish Date	Status	Road Closure Type	TGS Plan. No
SBT-BH-1023	12/09/2022	17/09/2022	Yet to commence	Gipps Street westbound shoulder closure	WSA063
SBT-CM-1029	17/09/2022	19/09/2022	Deleted	Gipps Street - single westbound turning lane	WSA064
SBT-BH-1032	05/09/2022	07/09/2022	Yet to commence	Eastbound shoulder closure	WSA065
SBT-BH-1033	07/09/2022	09/09/2022	Yet to commence	Northbound lane closure	WSA066 and WSA070
SBT-GW-1063	09/09/2022	14/09/2022	Yet to commence	Northbound shoulder closure	WSA067
SBT-GW-4023	14/09/2022	17/09/2022	Yet to commence	Northbound breakdown lane closure	WSA068 WSA082





5. Operating Conditions

5.1. Impact on traffic flow

- Lethbridge Street (SBT-GW-1005) Local traffic on Lethbridge Street will still be able to travel Northbound and Southbound with minimal disruption as only the parking lane will be occupied day & night where the compound is located.
- Kent Road (SBT-GW-1037) The traffic on Kent Road will still be able to travel
 Northbound and Southbound with minimal disruption as only the road shoulder will be
 occupied day & night where the compound is located.
- Lansdowne Road (SBT-BH-1053 and SBT-BH-1054) The traffic on Lansdowne Road
 will still be able to travel Eastbound and Westbound with minimal disruption as only the
 road shoulder will be occupied day & night where the compound is located.
- Lansdowne Road (SBT-BH-1055 and SBT-BH-1055) The traffic on Lansdowne Road will still be able to travel Eastbound and Westbound. Traffic controllers 24 hours per day on each side of the temporary compound will guide the safe passage of the vehicles.
- Harris Street Carpark (SBT-GW-1008) Approximately eight parking spaces will be impacted during the site investigations works. Other traffic destructions are expected to be minimal as the rest of the carpark will remain operation at all times.
- Queen Street (SBT-GW-1016) Local traffic on Queen Street will still be able to travel
 Eastbound and Westbound with minimal disruption as only the parking lane will be
 occupied day & night where the compound is located.
- Corner of Gipps St and Werrington Rd (SBT-BH-1023) Local traffic on Gipps Street
 and Werrington Road will not be impacted by works on the verge except
 possibly when trucks are turning into the compound. In this case boom gates
 on Gipps Street will temporarily stop and direct traffic (Werrington Road will
 not be impacted).
- Corner of Gipps St and Gipps St (SBT-CM-1029) Local traffic on Gipps Street (RMS road) will not be impacted by works. A single Westbound turning lane on Gipps Street (local road) will be occupied during work hours. This road however is already closed off and access to only construction vehicles is permitted.
- 30-31 Falcon Crescent (SBT-BH-1032) Local traffic on Falcon Crescent will be maintained in both directions except possibly when establishing and







demobilising. In this case boom gates on Falcon Crescent will temporarily stop and direct traffic.

- 57 Blackwood Street (SBT-BH-1033) Local traffic will be directed in one direction at a time during work hours using the southbound lane. The compound is to be collapsed and pushed into the kerb during afterhours period such that two way flow is maintained.
- Samuel Marsden Road (SBT-GW-1063) The traffic on Samuel Marsden Road will still
 be able to travel Northbound and Southbound with minimal disruption as only the nature
 strip will be occupied day & night where the compound is located. Boom gates will possibly
 temporarily restrict the flow of traffic during establishment and demobilisation.
- 190 Badgerys Creek Road (SBT-GW-4023) The traffic on Badgerys Creek Road will still
 be able to travel Northbound and Southbound with minimal disruption as only the
 Northbound breakdown lane will be occupied day & night where the compound is located.
 Boom gates will possibly temporarily restrict the flow of traffic during establishment and
 demobilisation.

The compound at each investigation location will be clearly visible to all traffic and signage will be implemented in the correct locations at the TGS's recommended Distances. The speed limit will be reduced to 40 km/h.

5.2. Impact on active transport users

- Lethbridge Street (SBT-GW-1005) The existing footpaths will remain operational during the works. No dedicated cyclists facilities will be impacted by the works. Cyclists will be managed by the same methods as general traffic
- Queen Street (SBT-GW-1015) The existing footpaths will remain operational during the
 works and it is expected public transport will not be impacted. No dedicated cyclists
 facilities will be impacted by the works. Cyclists will be managed by the same methods as
 general traffic
- Harris Street Carpark (SBT-GW-1008) The existing footpath will remain operational during the works. No dedicated cyclists facilities will be impacted by the works. Cyclists will be managed by the same methods as general traffic
- Carinya Avenue northern Carpark (SBT-CM-1022) The existing footpath will remain
 operational during the works and vehicle access/exit will be maintained at all times. No
 dedicated cyclists facilities will be impacted by the works. Cyclists will be managed by the
 same methods as general traffic







- Queen Street (SBT-GW-1016) The existing footpath will remain operational during the
 works with traffic controllers available as per the Pedestrian Management Plan in Appendix
 1, to guide locals around the compound. Vehicle access/exit will be maintained at all times.
 No dedicated cyclists facilities will be impacted by the works. Cyclists will be managed by
 the same methods as general traffic
- Corner of Gipps St and Werrington Rd (SBT-BH-1023) The existing footpath will remain operational during the works and vehicle access/exit will be maintained at all times.
 No dedicated cyclists facilities will be impacted by the works. Cyclists will be managed by the same methods as general traffic
- Corner of Gipps St and Gipps St (SBT-CM-1029) No Impact on active transport users is anticipated.
- 30-31 Falcon Crescent (SBT-BH-1032) Pedestrians will be directed with the aid of traffic
 controllers where necessary. Vehicle access/exit will be maintained at all times. No
 dedicated cyclists facilities will be impacted by the works. Cyclists will be managed by the
 same methods as general traffic
- 57 Blackwood Street (SBT-BH-1033) The existing footpath will remain operational
 during the works and vehicle access/exit will be maintained at all times. No dedicated
 cyclists facilities will be impacted by the works. Cyclists will be managed by the same
 methods as general traffic.
- Samuel Marsden Road (SBT-GW-1063) Pedestrians will be directed with the aid of traffic controllers where necessary. Vehicle access/exit will be maintained at all times. No dedicated cyclists facilities will be impacted by the works. Cyclists will be managed by the same methods as general traffic
- 190 Badgerys Creek Road (SBT-GW-4023) Pedestrians will be directed with the aid of traffic controllers where necessary. Vehicle access/exit will be maintained at all times. No dedicated cyclists facilities will be impacted by the works. Cyclists will be managed by the same methods as general traffic

5.3. Impact on Public Transport

Access to public transport will not be impeded during the site investigation works.







5.4. Impact on property access

Access to the resident-rural properties will be retained during the site investigation works as detailed in the attached TGS's found in Appendix 1.

5.5. Road occupation and openings

For any works that involve an occupation of the road/ footpath, a Road Occupancy License (ROL) will be sought from the Transport Management Centre (TMC) which will be applied for. ROL through the TMC will be applied for a minimum of 10 business days from the proposed start date. Electronic lodgement of the ROL will be undertaken using TfNSW's OpLinc system. ROL approval will also be sought from WSACo for SBT-BH-4023 on Badgerys Creek Road.

Council permits will be lodged in accordance with the City of Penrith and City of Liverpool Councils (where each is applicable) requirements.

For any road opening required, the relevant Road Opening Permit (ROP) will be applied for through the existing City of Penrith Council or City of Liverpool Council processes. The ROP will also be accompanied by a ROL. Details on the permits required are found at <u>Penrith City Council permits</u> and Roads, Traffic and Parking | Liverpool City Council (nsw.gov.au).

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







6. Vehicle / Plant Details & Movements

At each site, several vehicles & plant will be required to conduct works such as service locating vehicles, and pothole (vacuum) trucks as well as drill rigs and their support utes and trucks. Periodically, support vehicles may need access to perform works in and around traffic management compounds. These instances will be controlled by onsite traffic control.

6.1. Heavy / Light vehicle movements

Vehicles entering and egressing from site must do so with the direction of traffic to reduce the impact of traffic flow. Positive radio communication must be made to traffic controllers when approaching site with warning beacons on to organise compound access and/or parking due to limited space on site on certain sites. There will be no reversing without a spotter and all plant movements must be communicated to onsite traffic control.

6.2. Staff parking and transportation to site

It is anticipated that there will be 3-4 personnel on each site excluding traffic controllers each day. Sites are designed to ensure adequate room for crews to safely operate within this area. Staff parking will be assessed on a site by site basis.

6.3. Traffic Guidance Scheme/ Road Occupancy License identified works

Works that have been identified as requiring a Traffic Guidance Scheme (TGS) are listed below:

Geotechnical site works at various locations.

6.4. Required Council approvals

Works that have been identified as requiring Council approval include:

- 1. Road Reserve Opening Permit
- 2. Temporary Road Reserve Occupancy Permit

6.5. Permits for Over Dimensional vehicles

Permits for vehicles with a Gross Vehicle Mass (GVM) greater than 42.5 tonnes are through the National Heavy Vehicle Regulator (NHVR). This applies to particular special purpose vehicles (SPV) such as mobile cranes and other oversize/ over mass (OSOM) vehicles. TfNSW is currently undertaking this permit issue.

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







generally applied for by the transport operator. There are no oversize or over mass vehicles required for these works.







7. Other matters

7.1. Road Safety Audit

Road safety audits will be undertaken during the development and implementation of the CTMP. The audit will be undertaken as noted in the section 10 of the Construction Traffic Management Framework. A copy of the road safety audit is provided in Appendix 3.

7.2. Communications and the community

CPBG will be responsible for the dissemination of information to the community including affected residents, relevant Councils, businesses, and the public.

7.2.1. Proposed communications

Table 3 provides the proposed communications to be implemented by CPBG for this CTMP.

Table 3: Proposed communications

Notification	Geotechnical Investigations
Community Notice	Yes
Precinct update/ e-update	Yes
Email	Yes
Internet	Yes
Print advertising	No
Advance warning sign	No

7.2.2. Travelling public

Where the SBT works will impact on the travelling public, CPBG will undertake the following communications:

- Public transport interruptions will be communicated via on site signage
- Motoring public will be forewarned of any changes including road closures, road changes and lane changes in advance using appropriate signs.
- Active transport users will be provided with advance warning signs.

7.3. Incident Reporting and Management

7.3.1. Incident Management

Tetra Tech Coffey will notify CPBG JV of all incidents including but not limited to incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident. A completed Project Incident Report Form is to be provided to the CPBG JV site representative in prescribed timeframes.







NOTE: CPBG JV is required to notify its client immediately on becoming aware of the incident.

Incidents are classified and managed in accordance with the CPBG JV Emergency Response Plan. In the event of an incident, the project Emergency Response Plan (attached in Appendix 2) which includes the Pollution Incident Response Management Plan required under the Protection of the Environment Operations Act will be implemented.

7.3.2. Traffic Incident Plan

The traffic control Team Leader is the personnel responsible for dealing with traffic incidents reporting at the work site and is responsible for contacting emergency services if required.

Following any traffic-related incident on site, the following steps will be undertaken:

- Works to stop until safe to continue (Traffic Team Leader and Tetra Tech Coffey Field Manager to assess).
- If required, emergency services will be contacted.
- The site will immediately be made safe where required to ensure the flow of traffic around the site is maintained.
- Traffic Team Leader to record details of vehicles and people involved in the incident.
- Tetra Tech Project Manager to be notified to communicate incident to CPBG
 JV and Sydney Metro.
- Team Leader is to do an onsite assessment to ensure the site is set up correctly.
- Checking that the traffic control measures in place are in accordance with this TMP and its component plans, and ROL conditions.
- Team Leader is to carry out a "drive through" and get a passenger to get a video recording of the roadway, including the location where the incident has taken place.
- Team Leader is to assess if the TGS needs amendments (see Appendix 1).
- An incident report must be completed, and Team Leader is to inform
 Platinum Management as soon as possible. The Team Leader is also to inform Tetra Tech Coffey if not already aware of the incident.





7.4. Stakeholders

There are a number of stakeholders consulted during the development of this CTMP. Table 4 provides an overview of the consultation undertaken for this CTMP. The review comments are provided in Appendix 4.

Table 4: Consultation undertaken

Stakeholder	Consultation type	Date
Traffic Control Group	Presentation	24 February 2022
Traffic and Transport Liaison Group	Presentation	3 March 2022
Customer Journey Planning	Submission of CTMP	11 April 2022
Sydney Metro project team	Submission of CTMP	11 April 2022
Penrith City Council	Submission of CTMP	11 April 2022
Customer Journey Planning	Resubmission of CTMP	28 April 2022
Sydney Metro project team	Resubmission of CTMP	28 April 2022
Penrith City Council	Resubmission of CTMP	28 April 2022
Customer Journey Planning	Resubmission of CTMP	16 May 2022
Sydney Metro project team	Resubmission of CTMP	16 May 2022
Penrith City Council	Resubmission of CTMP	16 May 2022
Traffic Control Group	Presentation of additional boreholes	28 July 2022
Customer Journey Planning	Resubmission of CTMP	5 August 2022
Sydney Metro project team	Resubmission of CTMP	5 August 2022
Penrith City Council	Resubmission of CTMP	5 August 2022
Liverpool City Council	Resubmission of CTMP	5 August 2022
Customer Journey Planning	Resubmission of CTMP	26 August 2022
Sydney Metro project team	Resubmission of CTMP	26 August 2022
Penrith City Council	Resubmission of CTMP	26 August 2022
Liverpool City Council	Resubmission of CTMP	26 August 2022

7.4.1. Traffic and Transport Liaison Group

The Traffic and Transport Liaison Group (TTLG) has been established by Sydney Metro Western Sydney Airport for the project, as required under MCoA E116. The TTLG consists of members from Sydney Metro Western Sydney Airport, Liverpool City Council, Penrith City Council, Customer







Journey Planning, Western Sydney Airport Corporation (WSA Co), other contractors associated with the project and Emergency Services.

Further development of this CTMP will occur in consultation with this group. It is noted that the TTLG meets monthly.

Supplementary analysis and modelling as required by Sydney Metro Western Sydney Airport and/ or the TTLG will be undertaken to demonstrate that construction traffic can be managed to minimise disruption to traffic network operations including changes to the management of pedestrians, cyclists and public transport networks and services. Any revised traffic management measures will be incorporated into the CTMP.







7.4.2. Traffic Control Group

The Traffic Control Group (TCG) has been established by Sydney Metro Western Sydney Airport for the project. The TCG consists of members from Sydney Metro Western Sydney Airport, Liverpool City Council, Penrith City Council, Customer Journey Planning, Western Sydney Airport Corporation (WSA Co), Western Parkland City Authority (WPCA), other contractors associated with the project. The TCG meets fortnightly.

The purpose of the TCG is for open and honest technical discussion on contractor proposed works methodologies and traffic management plans. The TCG will:

- Provide feedback on proposals.
- Guide CTMP and other document finalisation prior to submission for review/ approval.
- Guide coordination of works and traffic management activities on and off-airport (local, regional and state roads).
- · Assist in transport impact mitigation.

7.5. Special events

When planning the works, CPBG will identify special events which directly impact the worksites or haulage activities and will continue to interrogate event websites that provide details on forthcoming events such as:

- NSW and Sydney Events Destination NSW
- NSW Events and Festivals Visit NSW and
- Upcoming Events Penrith City Council

7.6. Training

CPBG will ensure that all personnel, including sub-contractors are aware of the specific requirements of TfNSW customers, general public, residents and businesses, prior to attending site through the induction process and regular updates through tool-box talks.

7.7. Inspections and monitoring

The site will be monitored by the site supervisor. Any changes to signs and lines that impact on the public will be recorded. Daily monitoring will be undertaken during site operating hours.

Traffic control used for pedestrian management, lane closures etc will need to provide records of the traffic control implemented. Any changes required to the traffic control set up will be authorised by a holder of a SafeWork NSW "Prepare a Work Zone Traffic Management Plan" or equivalent.







7.8. Environmental maintenance

All works will be undertaken in accordance with the SBT works NSW Site Establishment
Management Plan and associated procedures and the Construction Environmental Management
Plan and associated sub plans. The SBT works are regulated by the NSW Environment Protection
Authority and works to be undertaken outside of standard construction hours will need to comply
with the requirements of the Environmental Protection License (EPL)

7.9. Site contacts

Table 5 provides the contact details for the works identified in this CTMP.

Table 5: Site Contacts

Name	Position	Contact details







Appendix 1 Traffic Guidance Schemes (TGS's)



This site specific TCP is based on TCAWS V6 & Austroads Guide and is to be setup and packed up by qualified traffic controllers with current Introduction to Traffic Control at Roadwork's Traffic Controller Ticket Implement Traffic Plan modifications made to this site specific TGS should made by qualified personnel with current Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number. Plan shown is the property of Statewide Roads and Traffic Pty

RECOMMENDED TAPER LENGHTH VIMATE | TRAFFIC | ATERAL ME

SPEED OF TRAFFIC KM/H	CONTROL AT BEGINNING OF TAPER	SHIFT TAPER	TAPER
45 OR LESS	15	0	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

DIMENSON "D"

SPEED OF TRAFFIC	DIMINESON "D"
KM/H	M
45 OR LESS	15m
46 - 55	15m
56 - 65	45m
GREATER THAN	EQUAL TO
65 KM/H	POSTED SPEED

TOLERANCES

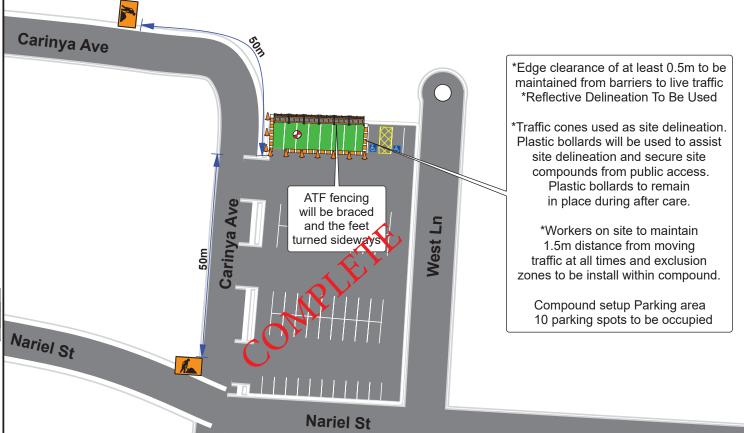
POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

PEDESTRIANS

For works on and around footpath a minimum width of 1.2m shall be maintained at all times for pedestrians to pass unhindered. Pedestrians shall not be directed onto roadway unless traffic controllers are used to control site and proper measures are put in place to conform with AS 1742.3

Date: 27/5/2022

ROAD/SUBURB:



TCAWS SEC8.1: TTM monitoring activities must be undertaken in all instances where work is being performed or aftercare is in place. This includes during the day and at night times. the following amounts of site visits must be completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection.

Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted "Waterfilled barriers and ATF to remain in place during aftercare. if driveways or access to public/households is obstructed, TC's to actively manage access and CPBG JV Community team to consult with local residents

Traffic cones used as site delineation. Plastic bollards will be used to assist site delineation and secure site compounds from public access. Plastic bollards to remain in place during after care.

Comments: The Author has drawn this TCP based on the information provided by the client. Prior to implementation of TCP a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Management Plans - RIIWHS3032D training. Modifications to this TGS must comply with the requirements from the Austroad's Section 3 - static worksites manual & RMS Traffic Control at Work Sites Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads.

This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6.1 - 2022.

*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route.

Pedestrians will be assisted by work crew to follow alternative route.

PEDESTRIAN TRAVEL PATH PLAN NOT DRAWN TO SCALE WORK AREA Proiect: SBT-CM-1020 - 1022 | CLIENT: Tetra Tech Coffey PLAN No: WSA001 Prepared & Signed by Carinya Ave Carpark - SBT-CM-1020 - 1022 - WSA001 - V4 Rev: V4

CROSS STREET: ROAD SPEED Shared Zone **ROAD TYPE:** Carpark

Nariel St

OPERATION: Dayworks AUTHOURITY: Penrith City Council

The Statewide Roads and Traffic Ptv Ltd (SWRT) accepts no liability for the implementation or execution of this TCP unless implemented by authorized (SWRT) personnel. This TCP maintains the property of (SWRT) and is not transferable unless express permission is granted by management of (SWRT).





PEDESTRIANS SIGNS TO BE INSTALLED

IF NEEDED









This site specific TCP is based on TCAWS V6.1 & Austroads

Guide and is to be setup and packed up by qualified traffic controllers with current Introduction to Traffic Control at Roadwork's *Traffic Controller Ticket *Implement Traffic Plan modifications made to this site specific TGS should made by qualified personnel with current *Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number. Plan shown is the property of Statewide Roads and Traffic Pty

RECOMMENDED TAPER LENGHTH

APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	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

DIMENSON "D"		
SPEED OF TRAFFIC	DIMINESON "D'	•
KM/H	M	
45 OR LESS	15m	
46 - 55	15m	
56 - 65	45m	_
GREATER THAN	EQUAL TO	Τ
65 KM/H	POSTED SPEE	

TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

For works on and around footpath a minimum width of 1.2m shall be maintained at all times for pedestrians to pass unhindered. Pedestrians shall not be directed onto roadway unless traffic controllers are used to control site and proper measures are put in place to conform with AS 1742.3

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Date: 4/8/2022

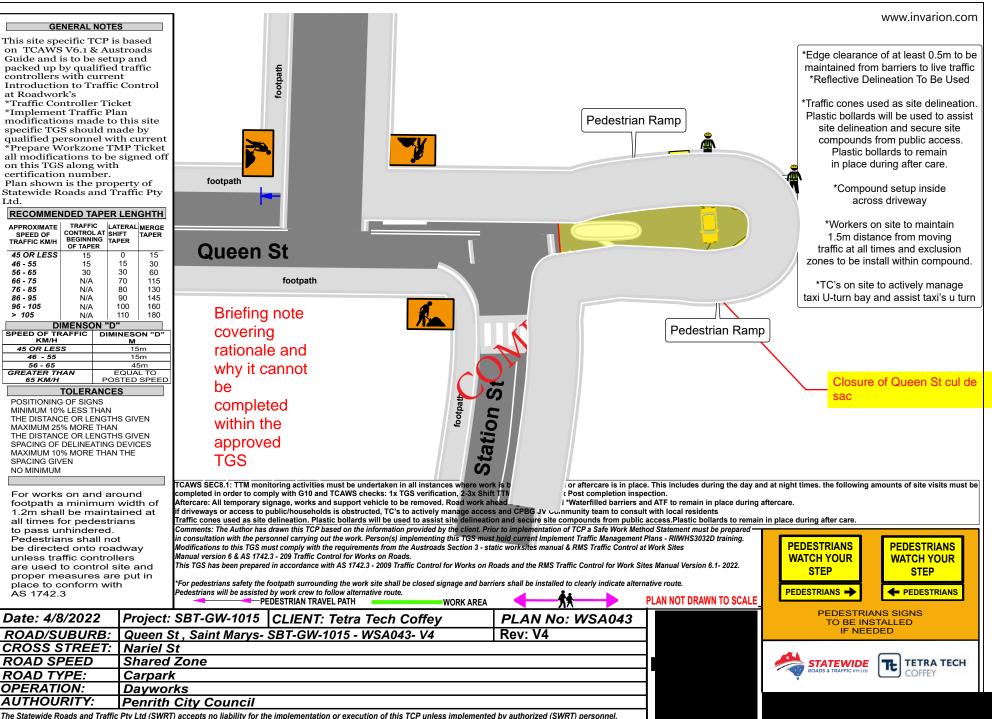
ROAD SPEED

ROAD TYPE:

OPERATION:

AUTHOURITY:

ROAD/SUBURB:



GENERAL NOTES This site specific TCP is based

on TCAWS V6 & Austroads Guide and is to be setup and packed up by qualified traffic controllers with current Introduction to Traffic Control at Roadwork's Traffic Controller Ticket Implement Traffic Plan modifications made to this site specific TGS should made by qualified personnel with current Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number. Plan shown is the property of Statewide Roads and Traffic Pty

RECOMMENDED TAPER LENGHTH				
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45 OR LESS	15	0	15	
46 - 55	15	15	30	
56 - 65	30	30	60	
66 - 75	N/A	70	115	
76 - 85	N/A	80	130	
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96 - 105	N/A	100	160	
> 105	N/A	110	180	

Ltd

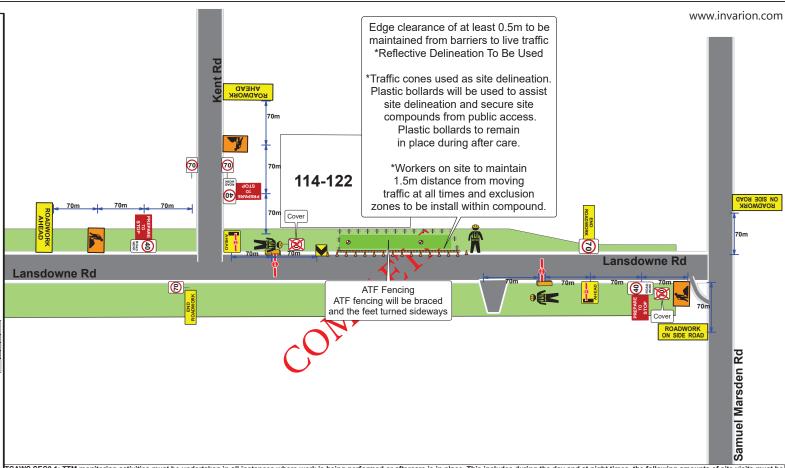
DIMENSON "D"			
SPEED OF TRAFFIC DIMINESON "			
45 OR LESS	15m		
46 - 55	15m		
56 - 65	45m		
GREATER THAN	EQUAL TO		
65 KM/H	POSTED SPEED		

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TCAWS SEC8.1: TTM monitoring activities must be undertaken in all instances where work is being performed or aftercare is in place. This includes during the day and at night times. the following amounts of site visits must be completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection. Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare.

if driveways or access to public/households is obstructed. TC's to actively manage access and CPBG JV Community team to consult with local residents

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Comments: The Author has drawn this TCP based on the information provided by the client, Prior to implementation of TCP a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Management Plans - RIIWHS3032D training. Modifications to this TGS must comply with the requirements from the Austroad's Section 3 - static worksites manual & RMS Traffic Control at Work Sites Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads.

This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6.1 - 2022.

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PEDÉSTRIAN TRAVEL PATH WORK AREA Project: SBT-BH-1054 - 1053 | CLIENT: Tetra Tech Coffey Date: 28/4/2022 PLAN No: WSA004 ROAD/SUBURB: SBT-BH-1054 - 1053 - 28-32 Lansdowne Rd. Orchard Hills - WSA004 - V6 CROSS STREET: Kent Rd ROAD SPEED 70km ROAD TYPE: 2 Lane 2 Wav **OPERATION: Davworks AUTHOURITY:** Penrith City Council The Statewide Roads and Traffic Pty Ltd (SWRT) accepts no liability for the implementation or execution of this TCP unless implemented by authorized (SWRT personnel.

PEDESTRIANS SIGNS TO BE INSTALLED IF NEEDED



PEDESTRIANS

WATCH YOUR

STEP

PEDESTRIANS -

TETRA TECH

PEDESTRIANS

WATCH YOUR

STEP

← PEDESTRIANS

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on TCAWS V6 & Austroads

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45 OR LESS	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
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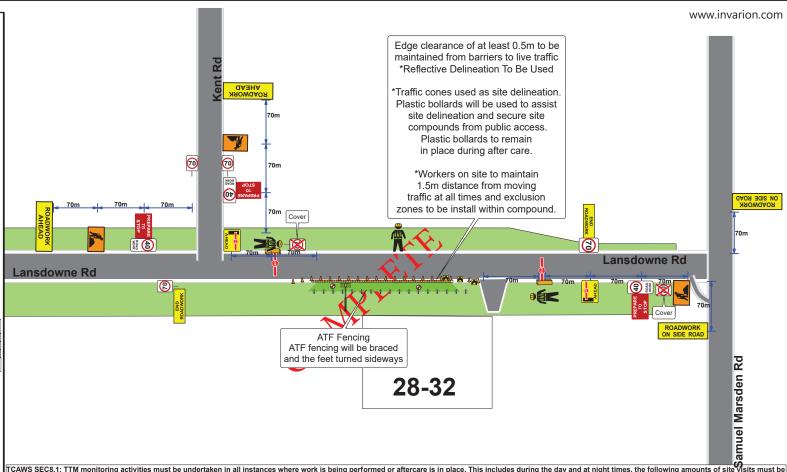
DIMENSON "D"			
SPEED OF TRAFFIC	DIMINESON "D" M		
45 OR LESS	15m		
46 - 55	15m		
56 - 65	45m		
GREATER THAN	EQUAL TO		
65 KM/H	POSTED SPEED		

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PEDESTRIAN TRAVEL PATH WORK AREA Project: SBT-BH-1056 - 1055 | CLIENT: Tetra Tech Coffey Date: 27/5/2022 PLAN No: WSA003 ROAD/SUBURB: SBT-BH-1056 - 1055 - 28-32 Lansdowne Rd. Orchard Hills - WSA003 - V5 CROSS STREET: Kent Rd ROAD SPEED 70km ROAD TYPE: 2 Lane 2 Wav **OPERATION: Davworks AUTHOURITY:** Penrith City Council The Statewide Roads and Traffic Pty Ltd (SWRT) accepts no liability for the implementation or execution of this TCP unless implemented by authorized (SWRT personnel.

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← PEDESTRIANS







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Traffic Controller Ticket Implement Traffic Plan modifications made to this site specific TGS should made by qualified personnel with current Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number. Plan shown is the property of Statewide Roads and Traffic Pty Ltd.

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APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER	
45 OR LESS	15	0	15	
46 - 55	15	15	30	
56 - 65	30	30	60	
66 - 75	N/A	70	115	
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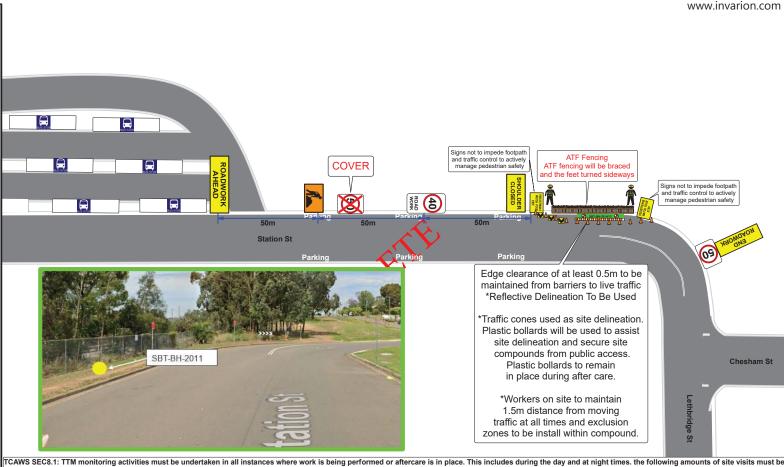
DIMENSON "D"		
SPEED OF TRAFFIC DIMINESON "D"		
KM/H	M	
45 OR LESS	15m	
46 - 55	15m	
56 - 65 45m		
GREATER THAN	EQUAL TO	
65 KM/H	POSTED SPEED	

TOLERANCES

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PEDESTRIAN TRAVEL PATH WORK AREA Date: 27/5/2022 Proiect: SBT-BH-2011 PLAN No: WSA039 CLIENT: Tetra Tech Coffey ROAD/SUBURB: SBT-BH-2011 - Station St. St Marvs WSA039 - V3 Rev: V3 CROSS STREET: Chesham St ROAD SPEED 50km ROAD TYPE: 2 Lane 2 way **OPERATION: Davworks** AUTHOURITY: Penrith City Council

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APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	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

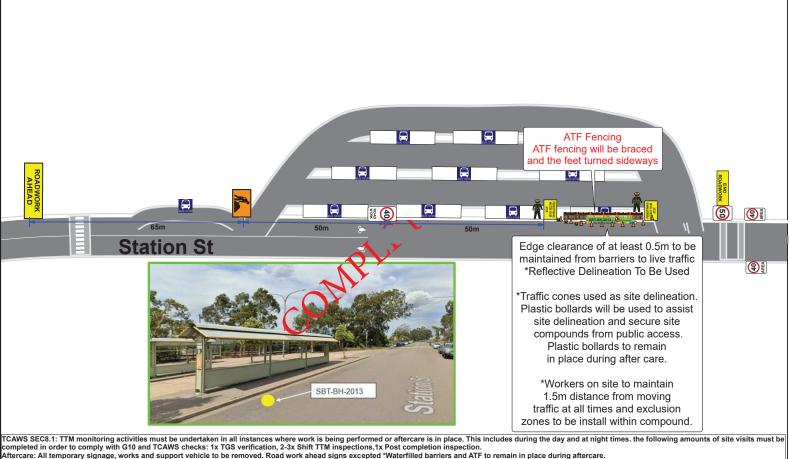
DIMENSON "D"			
SPEED OF TRAFFIC DIMINESON "D"			
KM/H	M		
45 OR LESS	15m		
46 - 55	15m		
56 - 65	45m		
GREATER THAN	EQUAL TO		
65 KM/H	POSTED SPEED		

TOLERANCES

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PEDESTRIANS

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Pedestrians will be assisted by work crew to follow alternative route. -PEDESTRIAN TRAVEL PATH PLAN NOT DRAWN TO SCALE

		PEDESTRIAN TRAVEL PATH WORK AREA	JΛ
Date: 27/5/2022	Project: SBT-BH-2013	CLIENT: Tetra Tech Coffey	PLAN No: WSA036
ROAD/SUBURB:	SBT-BH-2013 - Station	St, St Marys WSA036 - V2	Rev: V2
CROSS STREET:	Nariel St		
ROAD SPEED	50km		
ROAD TYPE:	2 Lane 2 way	•	
OPERATION:	Dayworks		
AUTHOURITY:	Penrith City Council		

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← PEDESTRIANS





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RECOMMENDED TAPER LENGHTH			
APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
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96 - 105	N/A	100	160
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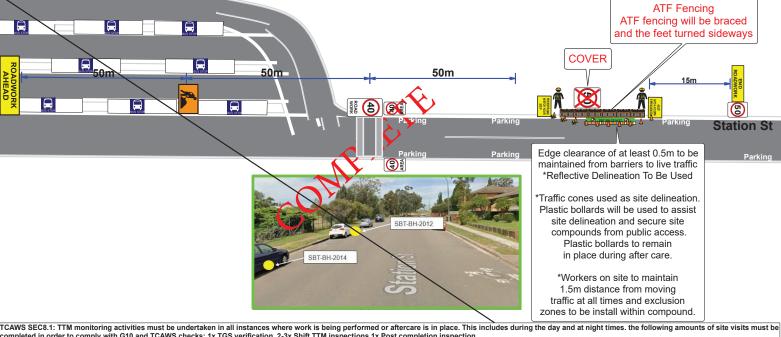
DIMENSON "D"			
SPEED OF TRAFFIC DIMINESON "D			
KM/H	M		
45 OR LESS 15m			
46 - 55	15m		
56 - 65	45m		
GREATER THAN	EQUAL TO		
65 KM/H	POSTED SPEED		

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completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection.

Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare. f driveways or access to public/households is obstructed, TC's to actively manage access and CPBG JV Community team to consult with local residents

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			7//
Date: 27/5/2022	Project: SBT-BH-2014	4/12 CLIENT: Tetra Tech Coffey	PLAN No: WSA038
ROAD/SUBURB:	SBT-BH-2014/12 -	- Station St, St Marys WSA038 - V3	Rev: V3
CROSS STREET:	Nariel St		
ROAD SPEED	50km		
ROAD TYPE:	2 Lane 2 way		
OPERATION:	Dayworks		
AUTHOURITY:	Penrith City Coul	ncil	
The Statewide Roads and Traffic	Ptv Ltd (SWRT) accepts no liab	pility for the implementation or execution of this TCP unless im	plemented by authorized (SWRT_personnel.

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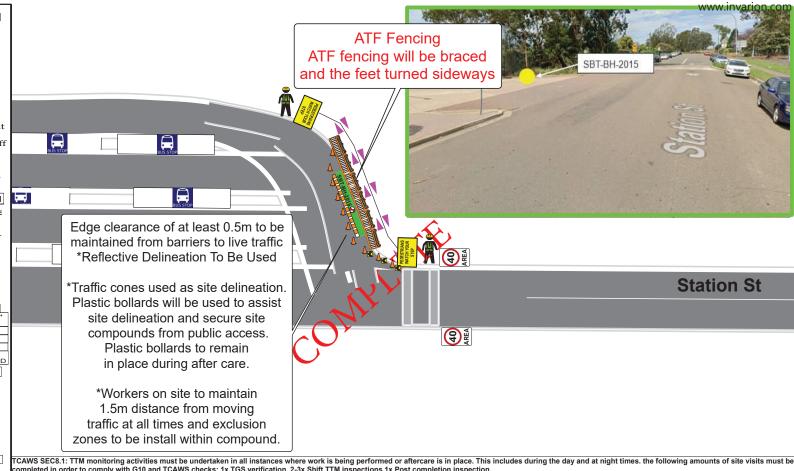
DIMENSON "D"			
SPEED OF TRAFFIC DIMINESON "D			
KM/H	M		
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PEDESTRIAN TRAVEL PATH WORK AREA Date: 27/5/2022 Proiect: SBT-BH-2015 PLAN No: WSA037 CLIENT: Tetra Tech Coffey ROAD/SUBURB: SBT-BH-2015 - Station St, St Marys WSA037 - V3 Rev: V3 CROSS STREET: Nariel St ROAD SPEED 50km ROAD TYPE: 2 Lane 2 way **OPERATION: Davworks AUTHOURITY:** Penrith City Council

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PLAN NOT DRAWN TO SCALE



← PEDESTRIANS







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RECOMMENDED TAPER LENGHTH

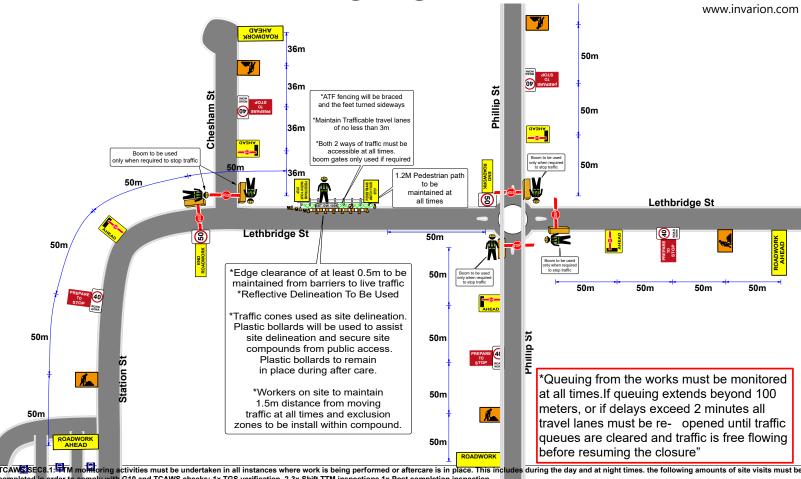
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SPEED OF TRAFFIC	DIMINESON "D"
KM/H	М
45 OR LESS	15m
46 - 55	15m
56 - 65	45m
GREATER THAN	EQUAL TO
65 KM/H	POSTED SPEED

TOLERANCES

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Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted "Waterfilled barriers and ATF to remain in place during aftercare. if driveways or access to public/households is obstructed, TC's to actively manage access and CPBG JV Community team to consult with local residents

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Comments: The Author has drawn this TCP based on the information provided by the client. Prior to implementation of TCP a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Management Plans - RIIWHS3032D training. Modifications to this TGS must comply with the requirements from the Austroads Section 3 - static worksites manual & RMS Traffic Control at Work Sites Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads.

This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6.1 - 2022.

*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route. Pedestrians will be assisted by work crew to follow alternative route.

PEDESTRIAN TRAVEL PATH WORK AREA Date: 27/5/2022 Proiect: SBT-GW-1005 CLIENT: Tetra Tech Coffey PLAN No: WSA010 ROAD/SUBURB: SBT-GW-1005, 5 Lethbridge Street, St Marys - WSA010 - V4 Rev: V4 CROSS STREET: | Phillip St ROAD SPEED 50km **ROAD TYPE:** 2 Lane 2 way OPERATION: **Davworks** AUTHOURITY: Penrith City Council

The Statewide Roads and Traffic Pty Ltd (SWRT) accepts no liability for the implementation or execution of this TCP unless implemented by authorized (SWRT) personnel. This TCP maintains the property of (SWRT) and is not transferable unless express permission is granted by management of (SWRT).





PLAN NOT DRAWN TO SCALE



This site specific TCP is based on TCAWS V6 & Austroads Guide and is to be setup and packed up by qualified traffic controllers with current Introduction to Traffic Control at Roadwork's

Traffic Controller Ticket Implement Traffic Plan modifications made to this site specific TGS should made by qualified personnel with current Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number. Plan shown is the property of

Plan shown is the property of Statewide Roads and Traffic Pty Ltd.

RECOMMENDED TAPER LENGHTH			
APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	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

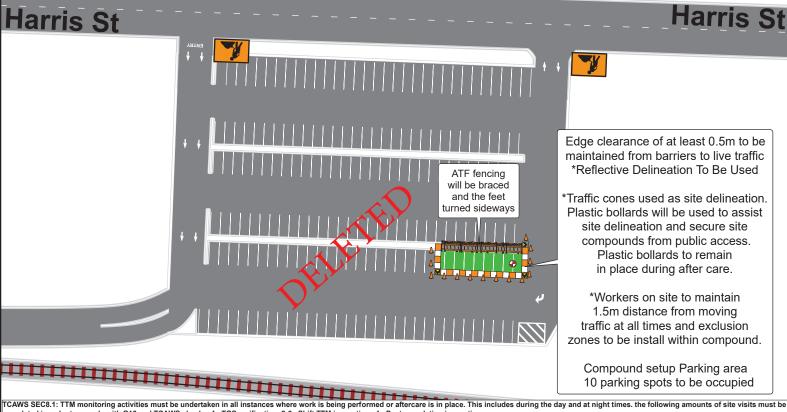
DIMENSON "D"			
SPEED OF TRAFFIC KM/H	DIMINESON "D" M		
45 OR LESS	15m		
46 - 55	15m		
56 - 65	45m		
GREATER THAN	EQUAL TO		
SE KM/H	DOSTED SPEED		

TOLERANCES

POSITIONING OF SIGNS
MINIMUM 10% LESS THAN
THE DISTANCE OR LENGTHS GIVEN
MAXIMUM 25% MORE THAN
THE DISTANCE OR LENGTHS GIVEN
SPACING OF DELINEATING DEVICES
MAXIMUM 10% MORE THAN THE
SPACING GIVEN
NO MINIMUM

PEDESTRIANS

For works on and around footpath a minimum width of 1.2m shall be maintained at all times for pedestrians to pass unhindered. Pedestrians shall not be directed onto roadway unless traffic controllers are used to control site and proper measures are put in place to conform with AS 1742.3



TCAWS SEC8.1: TTM monitoring activities must be undertaken in all instances where work is being performed or aftercare is in place. This includes during the day and at night times. the following amounts of site visits must be completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection.

Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted "Waterfilled barriers and ATF to remain in place during aftercare.

Autoricate. An employary synglage, works and support venture to be removed, rocket work areas significance united by the control of the contr

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This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6 - 2019.

*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route.

Pedestrians will be assisted by work crew to follow alternative route.

PEDESTRIAN TRAVEL PATH WORK AREA Date: 27/5/2022 Project: SBT-GW-1008 CLIENT: Tetra Tech Coffey PLAN No: WSA002 ROAD/SUBURB: SBT-GW-1008 - Harris St Carpark, Nth St Marys - WSA002 - V4 CROSS STREET: Foresters Rd ROAD SPEED Shared Zone ROAD TYPE: Carpark OPERATION: **Davworks AUTHOURITY:** Penrith City Council

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PLAN NOT DRAWN TO SCALE



PEDESTRIANS SIGNS

IF NEEDED

TO BE INSTALLED





This cite specific TCP is based on TCAWS V6 & Austroads Guide and is to be setup and packed up by qualified traffic controllers with current Introduction to Traffic Control at Roadwork's Traffic Controller Ticket Implement Traffic Plan modifications made to this site specific TGS should made by qualified personnel with current Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number. Plan shown is the property of Statewide Roads and Traffic Pty Ltd.

	Ц	RECOMMENDED	TAPER	LENGH
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APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	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

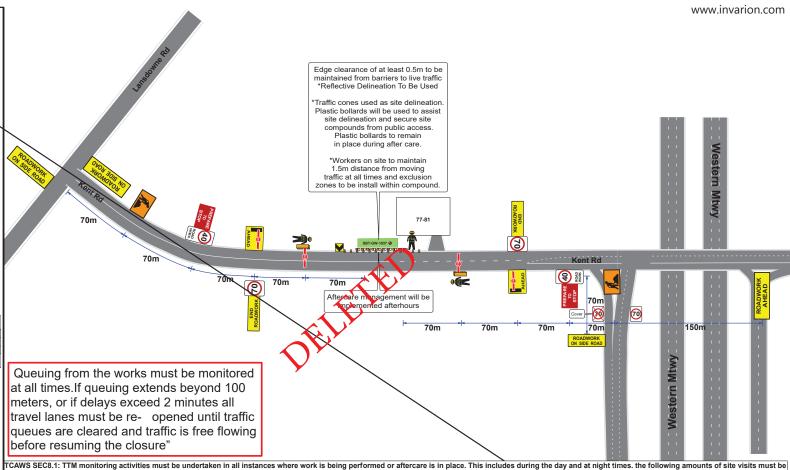
DIMENSON "D"		
SPEED OF TRAFFIC	DIMINESON "D"	
KM/H	M	
45 OR LESS	15m	
46 - 55	15m	
56 - 65	45m	
GREATER THAN	EQUAL TO	
65 KM/H	POSTED SPEED	

TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

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This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6.1 - 2022.

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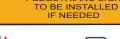
			WORKER	///
Date: 27/5/2022	Project: S	BT-GW-1037	CLIENT: Tetra Tech Coffey	PLAN No: WSA032
			Road, Orchard Hills - WSA032 - V3	Rev: V3
CROSS STREET:	Lansdo	wne Rd		
ROAD SPEED	70km			
ROAD TYPE:	2 Lane	2 Way		
OPERATION:	Daywor	ks		
AUTHOURITY:	Penrith	City Council		
The Statewide Peads and Traffic Pty Ltd (SWPT) accepts no liability for the implementation or execution of this TCP unless implemented by authorized (SWPT) personnel				

he Statewide Roads and Traffic Ptv Ltd (SWRT) accepts no liability for the implementation or execution of this TCP unless implemen This TCP maintains the property of (SWRT) and is not transferable unless express permission is granted by management of (SWRT.





PEDESTRIANS PEDESTRIANS SIGNS







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*Traffic Controller Ticket *Implement Traffic Plan modifications made to this site specific TGS should made by qualified personnel with current *Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number.

Plan shown is the property of Statewide Roads and Traffic Pty

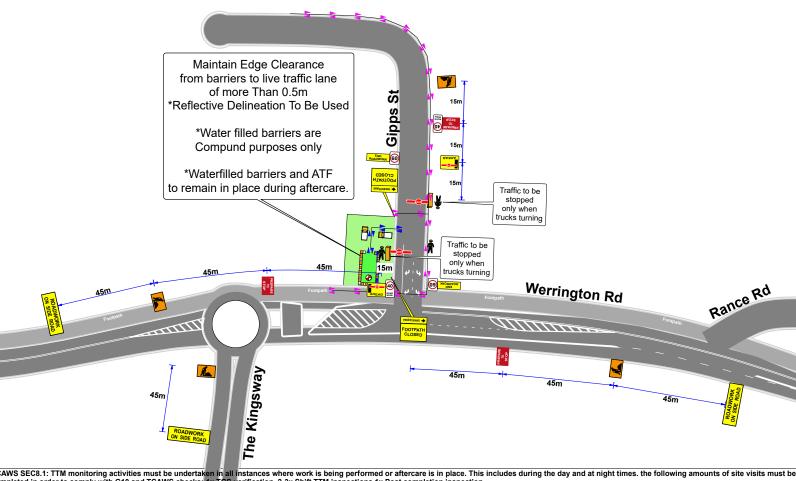
RECOMMENDED TAPER LENG			
APPROXIMATE SPEED OF TRAFFIC KM/H		LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
86 - 95	N/A	90	145
96 - 105	N/A	100	160
> 105	N/A	110	180

DIMENSON "D"		
SPEED OF TRAFFIC DIMINESON "D		
KM/H	М	
45 OR LESS	15m	
46 - 55	15m	
56 - 65	45m	
GREATER THAN	EQUAL TO	
65 KM/H	POSTED SPEED	

TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

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Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare. *PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

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WORK AREA

Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads. This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6 - 2019.

PEDESTRIAN TRAVEL PATH

*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route. Pedestrians will be assisted by work crew to follow alternative route

Project: SBT-BH-1023 Date: 7/7/2022 CLIENT: Tetra Tech Coffey PLAN No: WSA063 ROAD/SUBURB: SBT-BH-1023, Gipps St and Werrington Rd, Werrington - WSA063 - V4 CROSS STREET: The Kingsway ROAD SPEED 60km ROAD TYPE: 2 Lane 2 way OPERATION: **Davworks AUTHOURITY:** Penrith City Council The Statewide Roads and Traffic Ptv Ltd (SWRT) accepts no liability for the implementation or execution of this TCP unless implemented by authorized (SWRT) personnel.

This TCP maintains the property of (SWRT) and is not transferable unless express permission is granted by management of (SWRT).



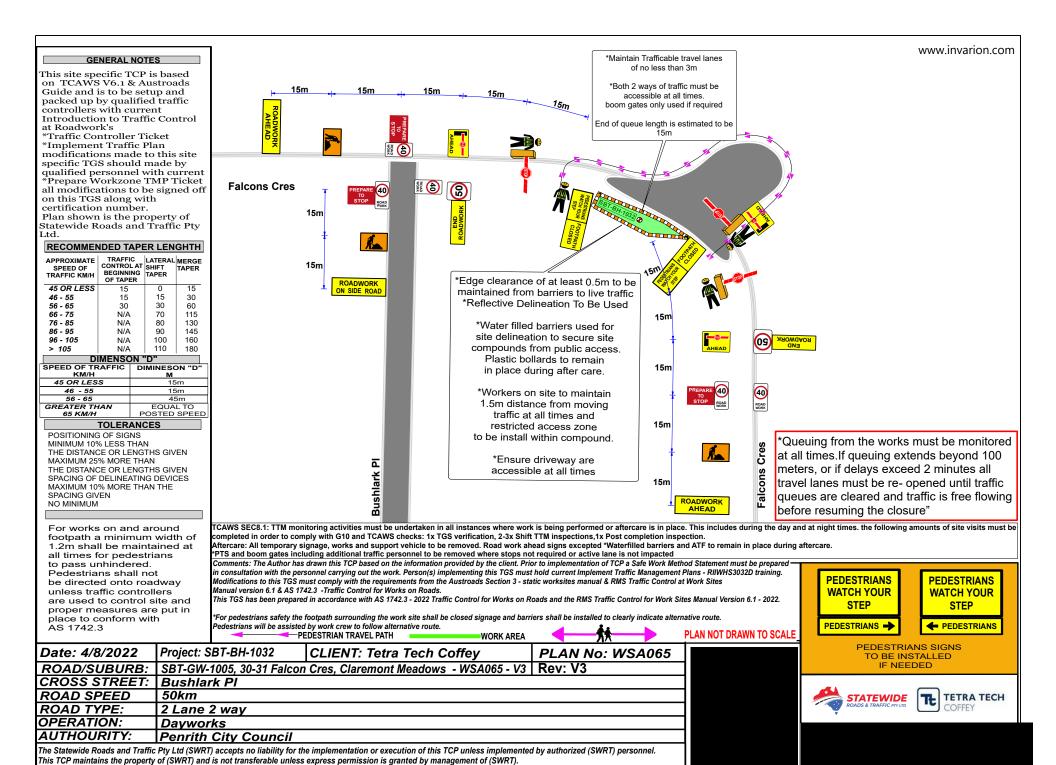
PLAN NOT DRAWN TO SCALE



PEDESTRIANS







This site specific TCP is based on TCAWS V6 & Austroads Guide and is to be setup and packed up by qualified traffic controllers with current Introduction to Traffic Control at Roadwork's *Traffic Controller Ticket *Implement Traffic Plan modifications made to this site specific TGS should made by

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RECOMMENDED TAPER LENGHTH

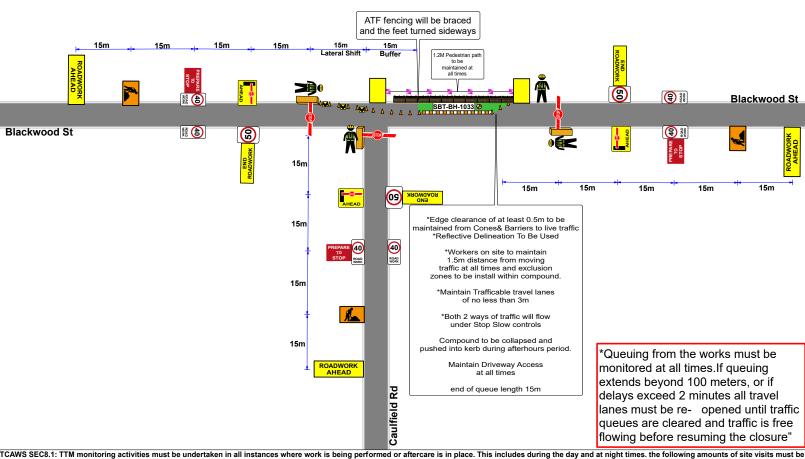
APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
86 - 95	N/A	90	145
96 - 105	N/A	100	160
> 105	N/A	110	180

DIMENSON "D"		
SPEED OF TRAFFIC KM/H	DIMINESON "D" M	
45 OR LESS	15m	
46 - 55	15m	
56 - 65	45m	
GREATER THAN	EQUAL TO	
65 KM/H	POSTED SPEED	

TOLERANCES

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Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare. PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

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WORK AREA

*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route.

Pedestrians will be assisted by work crew to follow alternative route. PLAN NOT DRAWN TO SCALE PEDESTRIAN TRAVEL PATH

Date: 5/8/2022 Project: SBT-BH-1033 PLAN No: WSA066 CLIENT: Tetra Tech Coffey SBT-BH-1033, 57 Blackwood Street, Claremont - WSA066 - V3 ROAD/SUBURB: Rev: V3 CROSS STREET: Caulfield Rd ROAD SPEED 50km ROAD TYPE: 2 Lane 2 way OPERATION: **Davworks AUTHOURITY:** Penrith City Council

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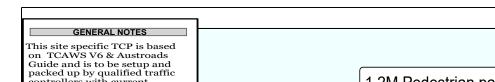












controllers with current Introduction to Traffic Control at Roadwork's *Traffic Controller Ticket *Implement Traffic Plan modifications made to this site specific TGS should made by qualified personnel with current *Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number.

Plan shown is the property of Statewide Roads and Traffic Ptv

RECOMMENDED TAPER LENGHTH

APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	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

DIMINESON "D KM/H 45 OR LESS 15m 46 - 55 15m 56 - 65 45m

DIMENSON "D' GREATER THAN FOLIAL TO 65 KM/H

POSITIONING (MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN

T

NO MINIMUM

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Housing 1.2M Pedestrian path to be ATF fencing will be braced maintained at PEDESTRIANS WATCH YOUR and the feet turned sideways all times 유민 **Footpath Footpath** mmmm SBT-BH-1033 🕹 0000000

Blackwood St Blackwood St

TCAWS SEC8.1: TTM monitoring activities must be undertaken in all instances where work is being performed or aftercare is in place. This includes during the day and at night times. the following amounts of site visits must be completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection.

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PEDÉSTRIAN TRAVEL PATH WORK AREA Project: SBT-BH-1033 Date: 16/7/2022 PLAN No: WSA070 CLIENT: Tetra Tech Coffey ROAD/SUBURB: SBT-BH-1033, 57 Blackwood Street, Claremont - Pedestrian Plan - WSA070 - V1 Rev: V1 CROSS STREET: Caulfield Rd ROAD SPEED 50km ROAD TYPE: 2 Lane 2 wav **OPERATION: Dayworks** AUTHOURITY: Penrith City Council

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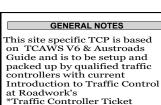
PEDESTRIANS WATCH YOUR STEP

PEDESTRIANS

www.invarion.com







*Implement Traffic Plan modifications made to this site specific TGS should made by qualified personnel with current *Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number. Plan shown is the property of

Statewide Roads and Traffic Pty

RECOMMENDED TAPER LENGHTH

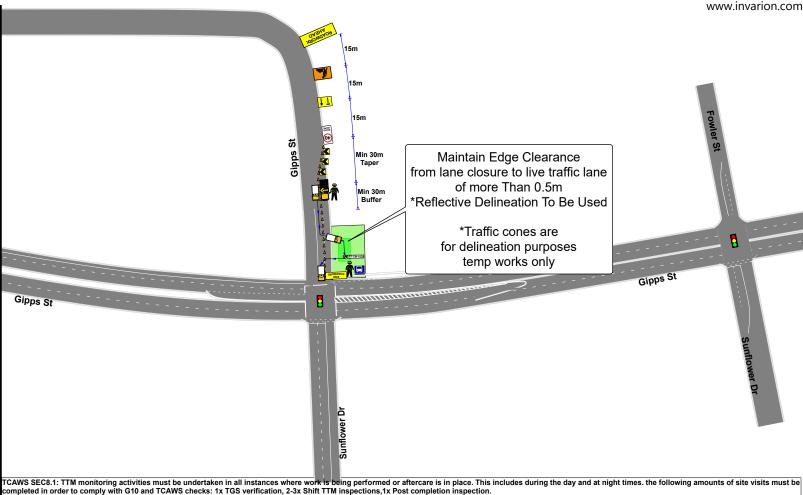
APPROXIMATE SPEED OF TRAFFIC KM/H		LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
86 - 95	N/A	90	145
96 - 105	N/A	100	160
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DIMENSON "D"			
SPEED OF TRAFFIC DIMINESON "D			
KM/H	М		
45 OR LESS	15m		
46 - 55	15m		
56 - 65	45m		
GREATER THAN	EQUAL TO		
65 KM/H	POSTED SPEED		

TOLERANCES

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Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted

PLAN NOT DRAWN TO SCALE

PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

Comments: The Author has drawn this TCP based on the information provided by the client. Prior to implementation of TCP a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Management Plans - RIIWHS3032D training.

WORK AREA

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Pedestrians will be assisted by work crew to follow alternative route.

Date: 28/7/2022 | Project: SBT-CM-1029 CLIENT: Tetra Tech Coffey PLAN No: WSA064 ROAD/SUBURB: SBT-CM-1029 Gipps St, Claremont Meadows - WSA064 - V2 Rev: V2 CROSS STREET: Sunflower Dr ROAD SPEED 70km **ROAD TYPE:** Multilane OPERATION: **Dayworks AUTHOURITY:** Penrith City Council

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PEDESTRIAN TRAVEL PATH





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RECOMMENDED TAPER LENGHTH

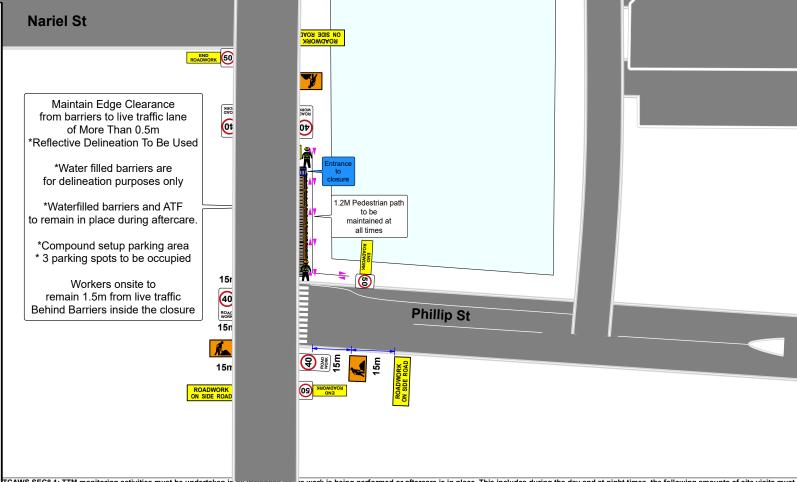
APPROXIMATE SPEED OF TRAFFIC KM/H		LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
86 - 95	N/A	90	145
96 - 105	N/A	100	160
> 105	N/A	110	180

DIMENSON "D"			
SPEED OF TRAFFIC	DIMINESON "D"		
KM/H	M		
45 OR LESS	15m		
46 - 55 15m			
56 - 65	45m		
GREATER THAN	EQUAL TO		
65 KM/H	POSTED SPEED		

TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

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Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare. *PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

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*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route. Pedestrians will be assisted by work crew to follow alternative route.

WORK AREA PLAN No: WSA071 Project: SBT-GW-1016 CLIENT: Tetra Tech Coffey Date: 25/8/2022 ROAD/SUBURB: SBT-GW-1016, Queen St, St Marys - WSA071 - V4 Rev: V4 CROSS STREET: Phillip St ROAD SPEED 50km ROAD TYPE: 2 Lane 2 wav OPERATION: **Davworks** AUTHOURITY: Penrith City Council

PEDESTRIAN TRAVEL PATH

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RECOMMENDED TAPER LENGHTH APPROXIMATE TRAFFIC LATERAL MERGE CONTROL AT SHIFT TAPER OF TAPER SPEED OF TRAFFIC KM/H 45 OR LESS 15 46 - 55 15 15 30 56 - 65 30 30 60 N/A 70 115 66 - 75 80 76 - 85 N/A 130 86 - 95 N/A 90 145 100 160 96 - 105 N/A

Ltd.

> 105

DIMENSON "D"		
SPEED OF TRAFFIC DIMINESON "		
KM/H	M	
45 OR LESS	15m	
46 - 55	15m	
56 - 65	45m	
GREATER THAN	EQUAL TO	
65 KM/H	POSTED SPEED	

N/A

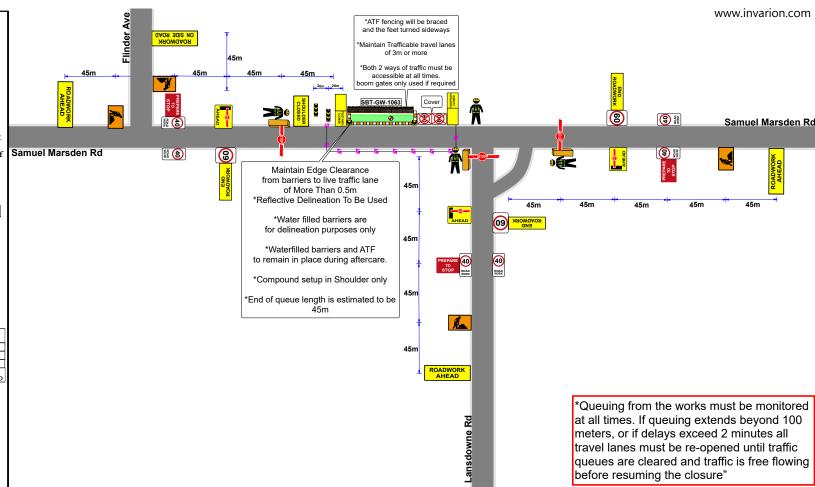
110

180

TOLERANCES

POSITIONING OF SIGNS
MINIMUM 10% LESS THAN
THE DISTANCE OR LENGTHS GIVEN
MAXIMUM 25% MORE THAN
THE DISTANCE OR LENGTHS GIVEN
SPACING OF DELINEATING DEVICES
MAXIMUM 10% MORE THAN THE
SPACING GIVEN
NO MINIMUM

For works on and around footpath a minimum width of 1.2m shall be maintained at all times for pedestrians to pass unhindered. Pedestrians shall not be directed onto roadway unless traffic controllers are used to control site and proper measures are put in place to conform with AS 1742.3



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Comments: The Author has drawn this TCP based on the information provided by the client. Prior to implementation of TCP a Safe Work Method Statement must be prepared

Comments: The Author has crawn this 10-P based on the information provided by the client. Prior to implementation of 10-P a Safe work method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Management Plans - RIWHX5032D training. Modifications to this TGS must comply with the requirements from the Austroads Section 3 - static worksites manual & RMS Traffic Control at Work Sites Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads.

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*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route.

Pedestrians will be assisted by work crew to follow alternative route.

PEDESTRIAN TRAVEL PATH WORK AREA Date: 28/7/2022 | Project: SBT-GW-1063 CLIENT: Tetra Tech Coffey PLAN No: WSA067 ROAD/SUBURB: SBT-GW-1063, 114 Samuel Marsden Road, Orchard Hills - WSA067 - V4 Rev: V4 CROSS STREET: Lansdowne Rd ROAD SPEED 60km ROAD TYPE: 2 Lane 2 way OPERATION: **Davworks AUTHOURITY:** Penrith City Council

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RECOMMENDED TAPER LENGHTH

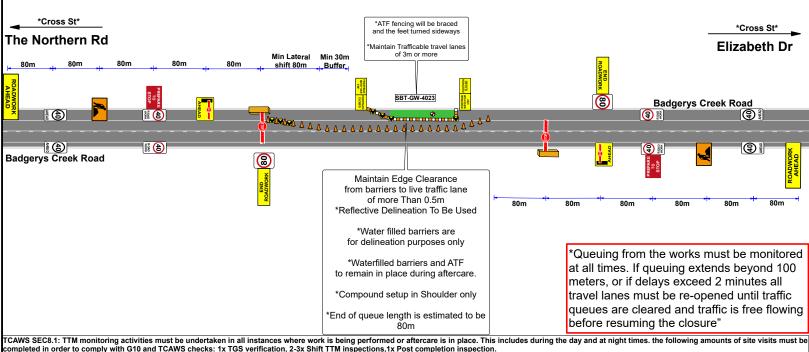
APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER	
45 OR LESS	15	0	15	
46 - 55	15	15	30	
56 - 65	30	30	60	
66 - 75	N/A	70	115	
76 - 85	N/A	80	130	
86 - 95	N/A	90	145	
96 - 105	N/A	100	160	
> 105	N/A	110	180	

DIMENSON "D"		
SPEED OF TRAFFIC DIMINESON "E		
KM/H	M	
45 OR LESS	15m	
46 - 55	15m	
56 - 65	45m	
GREATER THAN	EQUAL TO	
65 KM/H	POSTED SPEED	

TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMI IM

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Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare.

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This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6 - 2019.

*PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

Modifications to this TGS must comply with the requirements from the Austroads Section 3 - static worksites manual & RMS Traffic Control at Work Sites

*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route.

Pedestrians will be assisted by work crew to follow alternative route. PLAN NOT DRAWN TO SCALE PEDESTRIAN TRAVEL PATH WORK AREA Date: 26/8/2022 Proiect: SBT-GW-4023 CLIENT: Tetra Tech Coffey PLAN No: WSA068 ROAD/SUBURB: SBT-GW-4023, 190 Badgerys Creek Road, Bringelly - WSA068 - V5 Rev: V5 CROSS STREET: The Northern Rd

ROAD SPEED 80km ROAD TYPE: 2 Lane 2 way

OPERATION: **Davworks**

AUTHOURITY: Liverpool City Council

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Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads.



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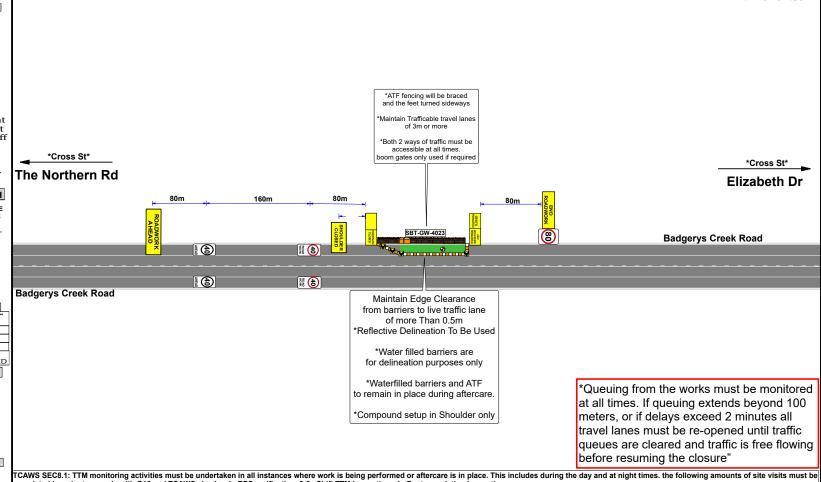
APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER	
45 OR LESS	15	0	15	
46 - 55	15	15	30	
56 - 65	30	30	60	
66 - 75	N/A	70	115	
76 - 85	N/A	80	130	
86 - 95	N/A	90	145	
96 - 105	N/A	100	160	
> 105	N/A	110	180	

DIMENSON "D"			
SPEED OF TRAFFIC	DIMINESON "D"		
KM/H	M		
45 OR LESS	15m		
46 - 55 15m			
56 - 65	45m		
GREATER THAN	EQUAL TO		
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MINIMUM 10% LESS THAN
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PEDESTRIAN TRAVEL PATH WORK AREA Date: 28/7/2022 | Project: SBT-GW-4023 CLIENT: Tetra Tech Coffey PLAN No: WSA082 ROAD/SUBURB: SBT-GW-4023, 190 Badgerys Creek Road, Bringelly - Aftercare - WSA068 - V1 Rev: V1 CROSS STREET: The Northern Rd ROAD SPEED 80km ROAD TYPE: 2 Lane 2 way OPERATION: **Davworks** AUTHOURITY: Liverpool City Council

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Appendix 2 Emergency Response Plan







SITE INVESTIGATION EMERGENCY RESPONSE

Date: 15/03/2022 Prepared By: Geotechnical Engineer/Tetra Tech Coffey

Describe the type of work:

Work Area Location: Western Sydney Airport – Station Boxes and Tunnelling Works

Specific Work Task: Emergency response to injury, fire or other emergency

EMERGENCY RESPONSE

1. Initial assessment and response provided by CREW, e.g. First aid, CPR, defibrillator, fire extinguishers.

2. Call clearly state:

"EMERGENCY EMERGENCY EMERGENCY"

- 3. Stay calm; do not put yourself or others at risk:
 - State your name
 - Location of incident
 - Type of incident (Fire, fall, medical etc.)
 - Hazards present (chemicals, electrical, fuel, secondary effluent, etc.)
 - Number of people involved and injured (if known) and their condition
 - Standby for further instruction
 - Do not leave injured personnel unattended
 - Do not move injured persons unless they are at-risk of further harm

4. HSSE will then:

- i. Immediately call **000** and advise that the CPBG construction site has had an incident, detail site location and inform that it requires immediate assistance. Relay applicable information (from above).
- ii. Contact Site Construction Superintendent response, alerted 000). He may provide further advice.
- iii. If incident involves traffic or road impacts HSSE to contact Traffic Manager of incident response and emergency traffic control requirements implemented.
- iv. Contact Project HSSE Manager and advise on action taken so far (first response, alerted 000). HSSE Manager may provide further advice and will contact relevant SHL and CPBG personnel.
- v. Initiate STAND DOWN
- 5. Continue to carry out first response while waiting for emergency services. In the case of fire, if extinguishers have been expended and fire continues, or if fire escalates, withdraw to muster point.
- 6. HSSE / Supervisor to travel with/follow IP to hospital / doctor/ medical centre.
- 7. For further details and scenario response plans, see CPBG Emergency Response Management Plan.

Closest hospital: Nepean Hospital – Derby St, Kingswood 4734 2000

Blacktown Hospital - 18 Blacktown Rd, Blacktown 9881 8000

ON SITE REPRESENTATIVES CONTACT DETAILS - OVER PAGE





SITE INVESTIGATION EMERGENCY RESPONSE

ON SITE REPRESENTATIVES			
CPBG Superintendent	Site Investigations Project Manager	Site Investigations Field Manager	CPBG HSE Advisor





Appendix 3 Road Safety Audit report

Sydney Metro – Western Sydney Airport Geotechnical Works

Roadworks (Pre-Implementation) Road Safety Audit

Prepared for:

CPG JV

2 August 2022

The Transport Planning Partnership



Sydney Metro – Western Sydney Airport Geotechnical Works

Roadworks (Pre-Implementation) Road Safety Audit

Client: CPG JV

Version: V01

Date: 2 August 2022

TTPP Reference: 22075

Quality Record

Version	Date	Prepared by	Reviewed by	Approved by	Signature
V01	2/8/2022				



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Appendices

A. DESIGN DRAWINGS



1 Road Safety Audit Summary

Audited project: Sydney Metro – Western Sydney Airport Geotechnical Works Client: CPG JV Project manager: Email address: Telephone: Audit Team: Audit type: Roadworks (Pre-Implementation) N/A Commencement meeting: Audit date: 29 July 2022 Completion meeting: N/A



2 Introduction

2.1 Background

Sydney Metro - Western Sydney Airport forms part of the broader Sydney Metro network. It involves the construction and operation of a 23km new metro rail line that extends from the existing Sydney Trains suburban T1 Western Line (at St Marys) in the north and the Western Sydney Airport Aerotropolis (at Bringelly) in the south.

Drilling of boreholes will be undertaken as part of the geotechnical site investigations at the following locations where long term occupancy of travel/parking lane or shoulder will be required:

- 1. Lethbridge Street southbound parking lane closure (WSA010)
- 2. Queen Street trafficable lane closure (WSA043)
- 3. Gipps Street west shoulder closure (WSA063)
- 4. Gipps Street single westbound turning lane closure (WSA064)
- 5. Falcon Crescent shoulder closure (WSA065)
- 6. Blackwood Street northbound lane closure (WSA066)
- 7. Samuel Marsden Road shoulder closure (WSA067)
- 8. Badgerys Creek Road northbound breakdown lane closure (WSA068)
- 9. Blackwood Street northbound lane closure Pedestrian plan (WSA070)
- 10. Queen Street parking lane closure (WSA071).

It is understood that the works at each work site will take approximately 2 to 4 days to complete and would be undertaken within working hours of 7am to 6pm with the traffic control measures mobilised /demobilised off road where possible at the start and end of each shift. Required aftercare signage and relevant controls will remain in place after hours as needed to maintain advanced warning.

This Road Safety Audit examined the road safety issues in the Traffic Guidance Schemes (TGS) for the lane occupancies at 10 work sites where geotechnical works will be undertaken.

2.2 Audit Objective

The objective of this Audit is to examine the road safety issues associated with the lane occupancies and the associated traffic control measures at 10 work sites.



2.3 Procedures and Reference Material

The procedures used are described in the following guidelines:

- Roads and Maritime Services' 2011 Guidelines for Road Safety Audit Practices
- Austroads Guide to Road Safety 2019: Part 6A Implementing Road Safety Audits.
- Austroads Guide to Road Safety 2022: Part 6 Road Safety Audits.

Other guidelines that were considered during the preparation of this audit included:

- TfNSW Traffic control at work sites Technical Manual Version 6.1 (2022)
- Austroads Safe System Assessment Framework 2016
- Austroads Guide to Traffic Management Part 13: Safe System Approach to Transport Management
- Austroads Guide to Temporary Traffic Management Part 10: Supporting Guidance.

2.4 Audit Team

The RSA was carried out by the following team:



All auditors involved in this project are registered road safety auditors with the NSW Centre for Road Safety and are experienced in traffic engineering and design/ inspection of temporary traffic management schemes.



3 Road Safety Audit Program

3.1 Commencement Meeting

A formal meeting was not held.

3.2 Site and Field Audit

The desktop audit was undertaken on 29 July 2022.

3.3 Completion Meeting

A completion meeting is not required.



4 Road Safety Audit Findings

4.1 Introduction

Table 4.1 provides specific details of the audit findings and a risk rating as high, medium or low. The risk ratings have been based on the risk matrix presented in Table 4.1, which has been adopted from the standard Austroads Risk Matrix.

Table 4.1: Risk Matrix

Likelihood Severity	Highly probable	Occasional	Improbable	
Major	High	High	Medium	
Moderate		Medium	Low	
Minor	Medium	Low	Low	

The terms in Table 4.1 are described below.

Likelihood:

- Highly probable: It is likely that more than one crash of this type could occur within a five-year period.
- Occasional: It is likely that less than one crash of this type could occur within a fiveyear period.
- Improbable: Less than one crash of this type could occur within a 10-year period.

Severity:

Major: The crash is likely to result in a fatality or serious injuries

For example, high/medium speed vehicle collision, high/medium speed collision with a fixed object, pedestrian struck at high speed, and cyclist hit by car.

 Moderate: The crash is likely to result in minor injuries or large scale of property damage

For example, some slow speed vehicle collisions, cyclist falls, and rear end crashes.

 Minor: The crash is likely to result in minor property damage or many near miss crash events

For example, some slow speed collisions, pedestrian walks into object (no head injury), and car reverses into post.

Priority:

- High: Very important, and needs to be addressed urgently.
- Medium: Important, and needs to be addressed as soon as possible.



Low: Needs to be considered as part of regular maintenance/planning program.

4.2 Responding to the Audit Report

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

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

4.3 Road Safety Audit Findings

The audit findings are documented in Table 4.2 which provides:

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

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

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



Table 4.2: Road Safety Audit Findings – Lethbridge Street Southbound Parking Lane Closure (WSA010)

Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA010-1 Completed	Lethbridge Street between Chesham Street and Phillip Street	Lethbridge Street is approximately 77m between Chesham Street and Phillip Street and is insufficient to accommodate the proposed signs within the block as shown in the TGS which is not drawn to scale. The actual available queueing space between the portable boom barrier and the upstream intersection is less than what is shown in the TGS to accommodate traffic queue. As a result, a traffic queue may extend past the upstream pedestrian crossing or intersection. This may lead to potential conflicts with other road users.	ATF fencing will be braced and interference of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used **Tedge clearance of at least 0.5m to be used	Improbable	Minor	Low	No longer required, hole completed under different TGS
WSA010-2 Completed	Lethbridge Street	The TGS does not provide a safety buffer of at least 30m between the merge taper and the work area. Absence of a safety buffer prior to the work area would not provide a forgiving environment for an errant vehicle to correct, slow or stop before entering the work area.	Aff flaceting will be lisraed and the best from discharge for the best from discharge for the best from the best f	Improbable	Moderate	Low	No longer required, hole completed under different TGS



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA010-3 Completed	Lethbridge Street and Chesham Street	The 40km/h roadworks speed limit sign is not duplicated and is not compliant with TCaWS Section 4.5.5. The roadworks speed limit sign may be obstructed by kerbside parking if not duplicated. Failure to observe the roadworks speed limit may result in motorists not slowing down when travelling past the work site to suit the changed traffic conditions and may also affect the safety of the construction workers on the roadside.	15m	Improbable	Moderate	Low	No longer required, hole completed under different TGS



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA010-4 Completed	Lethbridge Street Work Site	TGS does not show the location of the vacuum truck and other support vehicles within the site to ensure the extent of the site can fully accommodate the required vehicles and plant machinery.	*ATF fencing will be braced and the feet turned sideways "faintain Trafficable travel lanes of no less than 3m "Both 2 ways of traffic must be accessible at all times. boom gates only used if required as the state of the state	-	-	Note only	No longer required, hole completed under different TGS
WSA010-5 Completed	Chesham Street	The TGS does not show any End Work Zone and 50km/h speed zone sign in Chesham Street.	15m	-	-	Note only	No longer required, hole completed under different TGS
WSA010-6 Completed	General	TCaWs requires TGS to show the predicted end-of-queue length but this is not provided in accordance with TCaWS Section 7.4.1.	-	-	-	Note only	No longer required, hole completed under different TGS



Table 4.3: Road Safety Audit Findings – Queen Street Trafficable Lane Closure (WSA043)

Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA043-1	Queen Street	No advanced warning is provided for the lane occupancy in Queen Street. Motorists may not be prepared to make the turning movement earlier than usual in the turning area. This may result in additional manoeuvres being required to turn around in the turning area. Reverse movement in this area may affect the safety of other road users.	Partion St Processes Proce	Improbable	Minor	Low	
WSA043-2	Queen Street	 The work area has not been designed in accordance with TCaWS as follows: The length of lateral shift taper not specified A safety buffer of at least 30m is not provided between the taper and work areas. Absence of a safety buffer prior to the work area would not provide a forgiving environment for an errant vehicle to correct, slow or stop before entering the work area. 	footpath 50m	Improbable	Moderate	Low	



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA043-3	Queen Street	Review of the Streetview indicates general vehicles use the taxi rank to drop off/pick up passengers given this location is immediately adjacent to St Marys train station. The proposed lane occupancy reduces the number of vehicles that can park on the kerbside and may result in double parking in Queen Street. Consequently, this would increase potential conflicts between road users.	Station-St	Improbable	Minor	Low	Cul-de-sac is restricted to taxis only. Vehicle is street view is unlawful using cul-de-sac and aerial view shows taxis only



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA043-4	West side of Queen Street	The TGS does not acknowledge the existing kerb ramp on the west side of Queen Street. Closure of the kerb ramp would make it difficult for wheelchair and pram access to taxis or other vehicles. Given the subject location is adjacent to St Mary train station, the lack of a kerb ramp would not fully cater for pedestrians with wheelchairs and prams.	tpath	-	-	Note only	
WSA043-5	Queen Street Work Site	The TGS does not show a vacuum truck and other support vehicles within the site to ensure the extent of the site can fully accommodate the required vehicles and plants.	Contents Coopen Coop	-	-	Note only	



Table 4.4: Road Safety Audit Findings – Gipps Street West Shoulder Closure (WSA063)

Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA063-1	Gipps Street northbound	TCaWs requires TGS to show the predicted end-of-queue length but this is not provided in accordance with TCaWS Section 7.4.1. A school is located at the end of Gipps Street and therefore the traffic volume would be relatively high before and after school hours. Portable boom barriers are located a short distance from the Werrington Road intersection. If the rear of the queue extends into the intersection, this may be clipped by a passing vehicle.	ftercare. Traffic to be stopped only when trucks turning	Highly probable	Minor	Low	
WSA063-2	Gipps Street	The 40km/h roadworks speed limit sign is not duplicated and is not compliant with TCaWS Section 4.5.5.	ftercare. Traffic to be stopped only when trucks turning	-	-	Note only	



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA063-3	Gipps Street	There is no provision of an End Road Work sign and 50km/h speed zone sign on Gipps Street and is not compliant with TCaWS Section 4.5.5.	earance traffic lane n 0.5m n To Be Used iers are ses only s and ATF ing aftercare. Traffic to be stopped only when trucks turning Werrington			Note only	



Table 4.5: Road Safety Audit Findings – Gipps Street Single Westbound Turning Lane Closure (WSA064)

Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA064-1 Deleted	Gipps Street	The 40km/h roadworks speed limit sign is not duplicated and is not compliant to TCaWS Section 4.5.5.	15m 15m 15m 15m Min 30i Taper Min 30 Buffe	-		Note only	Location has been deleted, no longer required
WSA064-2 Deleted	Gipps Street	The TGS does not provide a pre- existing 50km/h speed limit sign on Gipps Street prior to or adjacent to the End Roadwork sign, in accordance with TCaWS Section 4.5.5.	Min 30m Taper Min 30m Buffer	-	-	Note only	Location has been deleted, no longer required



Table 4.6: Road Safety Audit Findings – Falcon Crescent Shoulder Closure (WSA065)

Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA065-1	Falcons Crescent	Sight distance is impeded by the curved road alignment at the crossing points where pedestrians are redirected to cross the road before the footpath closure. Deficiency in sight distance may increase the likelihood of collisions involving pedestrians.	*Maintain Trafficable travel lanes of no less than 3m *Both 2 ways of traffic must be accessible at all times. boom gates only used if required ance of at least 0.5m to be from barriers to live traffic Delineation To Be Used	Improbable	Moderate	Low	
WSA065-2	Falcons Crescent and Bushlark Place	The 40km/h roadworks speed limit sign is not duplicated and is not compliant with TCaWS Section 4.5.5. The roadworks speed limit sign may be obstructed by kerbside parking if not duplicated. Failure to observe the roadworks speed limit may result in motorists not slowing down when travelling past the work site to suit the changed traffic conditions and may also affect the safety of the construction workers on the roadside.	Falcons Cres (8) 15m 15m 15m 15m 15m 15m 15m 15	Improbable	Moderate	Low	
WSA065-3	General	TCaWs requires TGS to show the predicted end-of-queue length but this is not provided in accordance with TCaWS Section 7.4.1.	-	-	-	Note only	



Table 4.7: Road Safety Audit Findings – Blackwood Street Northbound Lane Closure (WSA066)

Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA066-1	Blackwood Street and Caulfield Road	The 40km/h roadworks speed limit sign is not duplicated and is not compliant with TCaWS Section 4.5.5. The roadworks speed limit sign may be obstructed by kerbside parking if not duplicated. Failure to observe the roadworks speed limit may result in motorists not slowing down when travelling past the work site to suit the changed traffic conditions and may also affect the safety of the construction workers on the road.	ATF faccing will be inceed and the best formed schedules of the best forme	Improbable	Moderate	Low	
WSA066-2	Blackwood Street	TGS does not provide a safety buffer of at least 30m between the merge taper and work area. Absence of a safety buffer prior to the work area would not provide a forgiving environment for an errant vehicle to correct, slow or stop before entering the work area.	The months and has based and the feet turned distances of the feet turned	Improbable	Moderate	Low	
WSA066-3	General	TCaWs requires TGS to show the predicted end-of-queue length but this is not provided in accordance with TCaWS Section 7.4.1.	-	-	-	Note only	



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA066-4	59 Blackwood Street	The work site impedes driveway access to property 59 Blackwood Street, located just north the Blackwood Street and Caulfield Road intersection. There is no mention in the TGS nor the CTMP how property access is to be managed. It is unclear how motorists will enter and exit a residential home located within the work area.	ATF fencing will be braced and the feet turned sideways 1.2M Pedestrian path to be maintained at all times SBT-BH-1033 Gaulfield Rd			Note only	The compound will be located between the two driveways indicated. Access for residents will be maintained at all times Note already included that drivewys will not b blocked in current TGS



Table 4.8: Road Safety Audit Findings – Samuel Marsden Road Shoulder Closure (WSA067)

Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA067-1	Samuel Marsden Road	The TGS shows the existing 60km/h sign would be covered in the southbound direction, but not the other 60km/h sign in the northbound direction. The 60km/h sign is contradictory to the 40km/h roadworks speed. Motorists not slowing down when travelling past the work site to suit the changed traffic conditions may affect the safety of the construction workers on the roadside.	SBT-GW-1063 Cover Huracood Minduscial Mindu	Improbable	Medium	Low	TGS updted - other 60 sign covered



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA067-2	Samuel Marsden Road	Pedestrians are re-directed to the west side of Samuel Marsden Road but the verge seems unsuitable for pedestrian access as undulation may result in falls and trips. While pedestrian activities on Samuel Marsden Road are expected to be low, it is possible that pedestrians may walk on the roadway instead of the verge. This may result in vehicle and pedestrian conflicts.	*Both 2 ways of traffic must be accessible at all times. boom gates only used if required Cover SBT-GW-1063 SBT-GW-1063 COVER SBT-GW-1063 COVER SBT-GW-1063	Improbable	Medium	Low	There is nowhere else to send pedestrians. We may have to cut the grass or have a dedicated pedestrian walkway fabricated. Pedestrians must not walk on the road. Traffic controllers will be present to direct



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA067-3	Samuel Marsden Road	TGS does not provide two temporary hazard makers 20m and 40m prior to the closed shoulder and is inconsistent with the typical layout stipulated in the TCaWS as shown in the screenshot on the right.	and the feet turned sideways *Maintain Trafficable travel lanes of no less than 3m *Both 2 ways of traffic must be accessible at all times. become gates only used if required from barriers to live traffic lane of no More Than 0.5m *Reflective Delineation To Be Used **Reflective Delineation To Be Used	-		Note only	Chevrons added in new TGS



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA067-4	Samuel Marsden Road and Lansdowne Road	The 40km/h roadworks speed limit sign is not duplicated and is not compliant with TCaWS Section 4.5.5.	Samuel Marsden Rd Samuel Marsden Rd Samuel Marsden Rd Samuel Marsden Rd 45m 45m 45m 45m 45m 45m 45m 45			Note only	Signs duplicated in nev
WSA067-5	General	TCaWs requires TGS to show the predicted end-of-queue length but this is not provided in accordance with TCaWS Section 7.4.1.	-	-	-	Note only	End of queue added in new TGS



Table 4.9: Road Safety Audit Findings – Badgerys Creek Road Northbound Breakdown Lane Closure (WSA068)

Item No.	Location	Descriptions of Findings	Design	Likelihood		Risk Rating	CPG JV Response
WSA068-1	General	TCaWs requires TGS to show the predicted end-of-queue length but this is not provided in accordance with TCaWS Section 7.4.1.	-	-	-	Note only	End of queue addedd in new TGS

Table 4.10: Road Safety Audit Findings – Blackwood Street Northbound Lane Closure – Pedestrian Plan (WSA070)

Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA070-1	Blackwood Street	Pedestrians may not see the ATF that occupies part of the footpath during the night time when visibility is low. This may result in trips and falls with possible injury to the pedestrian.	1.2M Pedestrian path to be maintained at all times Footpath SBT-BH-1033 ◆	Improbable	Minor	Low	We will use reflective flagging or tape to increase visibility at night



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA070-2	Blackwood Street	The work site impedes driveway access to property 59 Blackwood Street, located just north the Blackwood Street and Caulfield Road intersection. There is no mention in the TGS nor the CTMP how property access is to be managed. It is unclear how motorists will enter and exit a residential home located within the work area.	ATF fencing will be braced and the feet turned sideways 12M Pedestrian path to be maintained at all times SBT-BH-1033 2 SBT-BH-1033 2 Footpath Footpath Footpath	-		Note only	The compound will be located between the two driveways indicated. Access for residents will be maintained at all times



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA070-3	Blackwood Street	TGS incorrectly shows two-way traffic flow on Blackwood Street. By contrast, WSA066 indicates contraflow would be in place during occupancy of the northbound lane on Blackwood Street.	Footpath SBT-BH-1033 12M Pedestrian path to be maintained at all times 12M Pedestrian path to be maintained at all times 12M Pedestrian path to be maintained at all times SBT-BH-1033 SBT-BH-1033	-	-	Note only	This is a zoomed-in pedestrian managemen plan. It will not be used for management of vehicular traffic



Table 4.11: Road Safety Audit Findings – Queen Street Parking Lane Closure (WSA071)

Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA071-1	Queen Street	Work vehicles and the set up of the work area may impede the pedestrian sight distance from the north-eastern corner of the Queen Street and Phillip Street intersection towards the north along Queen Street. Deficiency in sight distance may increase the likelihood of collisions involving left turning vehicles and pedestrians.	15m 15m Total adis NO NRIOMOVON NRIOMOVON 15m Total adis	Improbable	Moderate	Low	Only the existing parking lane will be occupied A short, tight access rig will most likely be used for this location Traffic controllers will be present onsite to assist
			Phillip St				



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA071-2	Queen Street	The 40km/h roadworks speed limit sign is not duplicated and is not compliant with TCaWS Section 4.5.5. The roadworks speed limit sign may be obstructed by kerbside parking if not duplicated. Failure to observe the roadworks speed limit may result in motorists not slowing down when travelling past the work site to suit the changed traffic conditions and may also affect the safety of the construction workers on the road.	Maintain Edge Clearance from barriers to live traffic lane of no More Than 0.5m *Reflective Delineation To Be Used *Water filled barriers are for delineation purposes only *Waterfilled barriers and ATF to remain in place during aftercare. *Compound setup parking area * 3 parking spots to be occupied Workers onsite to remain 1.5m from live traffic Behind Barriers inside the closure	Improbable	Moderate	Low	Updated in new TGS
WSA071-3	Queen Street	There is no provision of an End Road Work sign and 50km/h speed zone sign on Queen Street.	Maintain Edge Clearance from barriers to live traffic lane of no More Than 0.5m *Reflective Delineation To Be Used *Water filled barriers are for delineation purposes only *Waterfilled barriers and ATF to remain in place during aftercare. *Compound setup parking area * 3 parking spots to be occupied Workers onsite to remain 1.5m from live traffic Behind Barriers inside the closure	-	-	Note only	End of roadwork adder



Item No.	Location	Descriptions of Findings	Design	Likelihood	Severity	Risk Rating	CPG JV Response
WSA071-4	Queen Street	The TGS does not show the extent of the residual footpath that can be maintained for pedestrian access.	Maintain Edge Clearance from barriers to live traffic lane of no More Than 0.5m *Reflective Delineation To Be Used *Water filled barriers are for delineation purposes only *Waterfilled barriers and ATF to remain in place during aftercare. *Compound setup parking area * 3 parking spots to be occupied Workers onsite to remain 1.5m from live traffic Behind Barriers inside the closure	-		Note only	Updated in new TGS

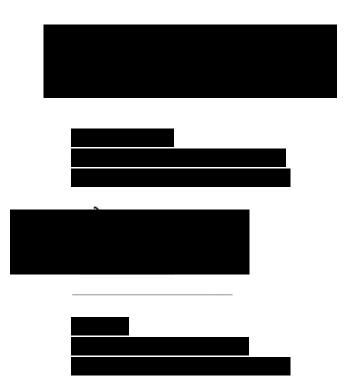


5 Concluding Statement

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

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

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





Appendix A

Design Drawings

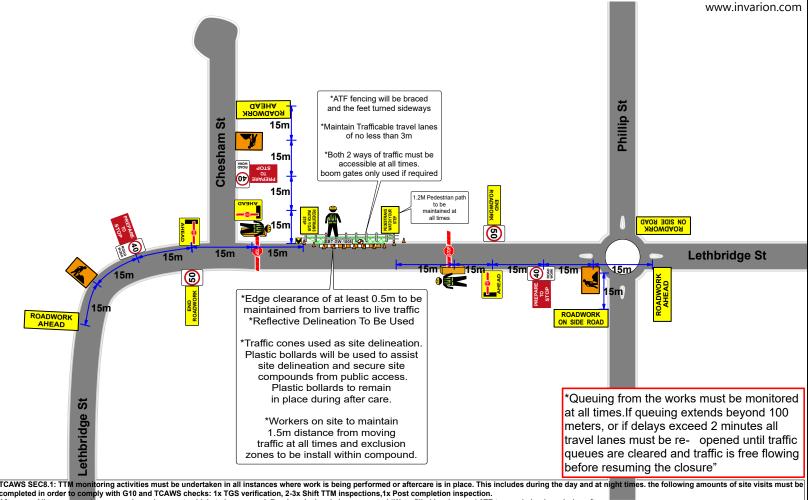
This site specific TCP is based on TCAWS V6 & Austroads Guide and is to be setup and packed up by qualified traffic controllers with current Introduction to Traffic Control at Roadwork's *Traffic Controller Ticket *Implement Traffic Plan modifications made to this site specific TGS should made by qualified personnel with current *Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number. Plan shown is the property of Statewide Roads and Traffic Pty Ltd.

APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	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

SPEED OF TRAFFIC	DIMINESON "D"
KM/H	М
45 OR LESS	15m
46 - 55	15m
56 - 65	45m
GREATER THAN	EQUAL TO
65 KM/H	POSTED SPEED

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

For works on and around footpath a minimum width of 1.2m shall be maintained at all times for pedestrians to pass unhindered. Pedestrians shall not be directed onto roadway unless traffic controllers are used to control site and proper measures are put in place to conform with AS 1742.3



completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection.

Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted "Waterfilled barriers and ATF to remain in place during aftercare.
"PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

Comments: The Author has drawn this TCP based on the information provided by the client. Prior to implementation of TCP a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work, Person(s) implementing this TGS must hold current Implement Traffic Management Plans - RIIWHS3032D training. Modifications to this TGS must comply with the requirements from the Austroads Section 3 - static worksites manual & RMS Traffic Control at Work Sites Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads. This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6 - 2019.

WORK AREA

*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route.

Pedestrians will be assisted by work crew to follow alternative route. -PEDESTRIAN TRAVEL PATH

Project: SBT-GW-1005 Date: 15/3/2022 CLIENT: Tetra Tech Coffey PLAN No: WSA010 ROAD/SUBURB: SBT-GW-1005, 5 Letherbridge Street, St Marys - WSA010 - V3 Rev: V3 CROSS STREET: Phillip St ROAD SPEED 50km ROAD TYPE: 2 Lane 2 way **OPERATION: Davworks AUTHOURITY:** Penrith City Council

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RECOMMENDED TAPER LENGHTH

APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	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

DIMENSON "D"		
SPEED OF TRAFFIC	DIMINESON "D"	
KM/H	М	
45 OR LESS	15m	
46 - 55	15m	
56 - 65	45m	
GREATER THAN	EQUAL TO	
65 KM/H	POSTED SPEED	

TOLERANCES

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Davworks

Penrith City Council

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Date: 27/5/2022

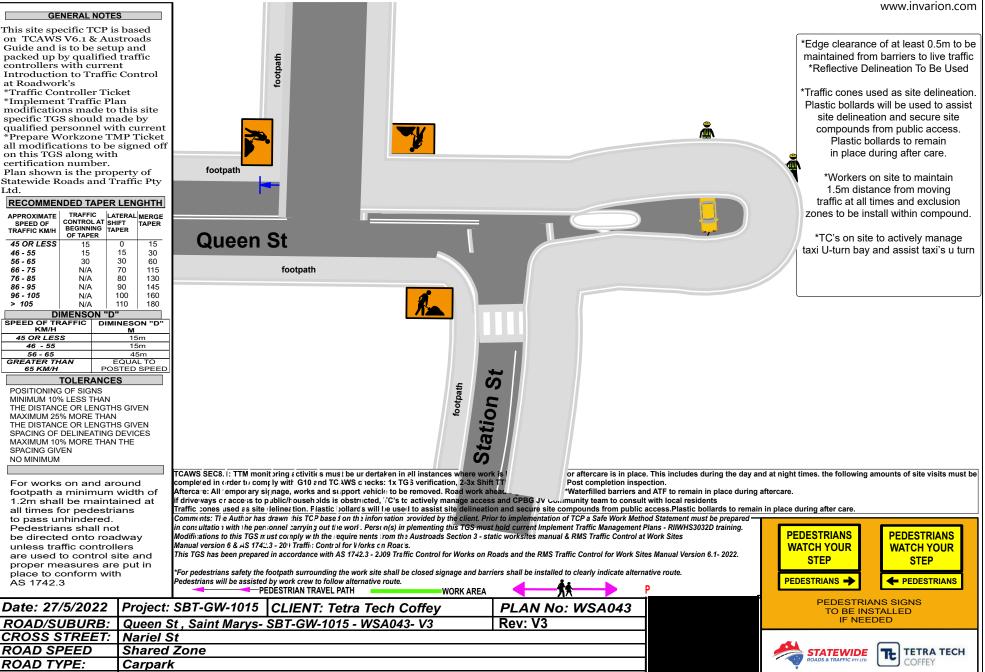
ROAD/SUBURB:

ROAD SPEED

ROAD TYPE:

OPERATION:

AUTHOURITY:



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all modifications to be signed off on this TGS along with certification number. Plan shown is the property of Statewide Roads and Traffic Pty

*Prepare Workzone TMP Ticket

RECOMMEN	R LEN	GHTH	
APPROXIMATE SPEED OF TRAFFIC KM/H		LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
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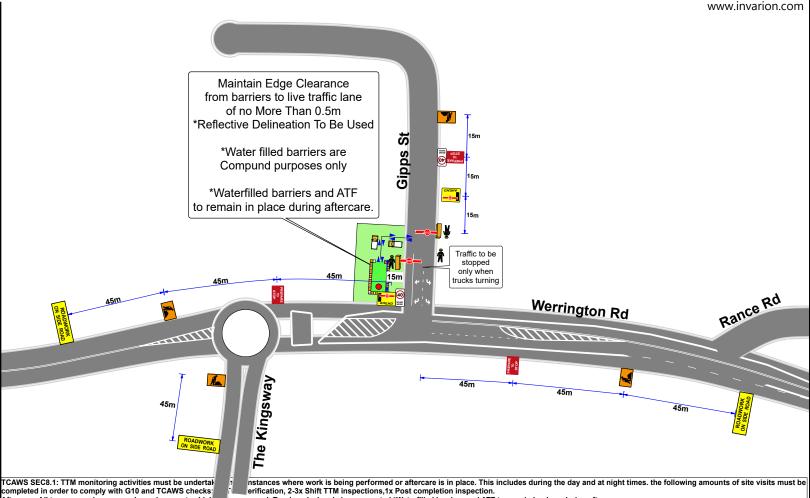
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SPEED OF TRAFFIC	DIMINESON "D"	
KM/H	М	
45 OR LESS	15m	
46 - 55	15m	
56 - 65	45m	
GREATER THAN	EQUAL TO	
65 KM/H	POSTED SPEED	

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TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

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completed in order to comply with G10 and TCAWS checks: Aftercare: All temporary signage, works and support vehicl PTS and boom gates including additional traffic personnel be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare.

e removed where stops not required or active lane is not impacted Comments: The Author has drawn this TCP based on the information provided by the client. Prior to implementation of TCP a Safe Work Method Statement must be prepared

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*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route. Pedestrians will be assisted by work crew to follow alternative route PLAN NOT DRAWN TO SCALE PEDESTRIAN TRAVEL PATH WORK AREA

Project: SBT-BH-1023 Date: 7/7/2022 CLIENT: Tetra Tech Coffey PLAN No: WSA063 ROAD/SUBURB: SBT-BH-1023, Gipps St and Werrington Rd, Werrington - WSA063 - V1 CROSS STREET: The Kingsway ROAD SPEED 60km ROAD TYPE: 2 Lane 2 way OPERATION: Davworks **AUTHOURITY:** Penrith City Council The Statewide Roads and Traffic Ptv Ltd (SWRT) accepts no liability for the implementation or execution of this TCP unless implemented by authorized (SWRT) personnel.

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TO BE INSTALLED









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Plan shown is the property of Statewide Roads and Traffic Pty

RECOMMENDED TAPER LENGHTH

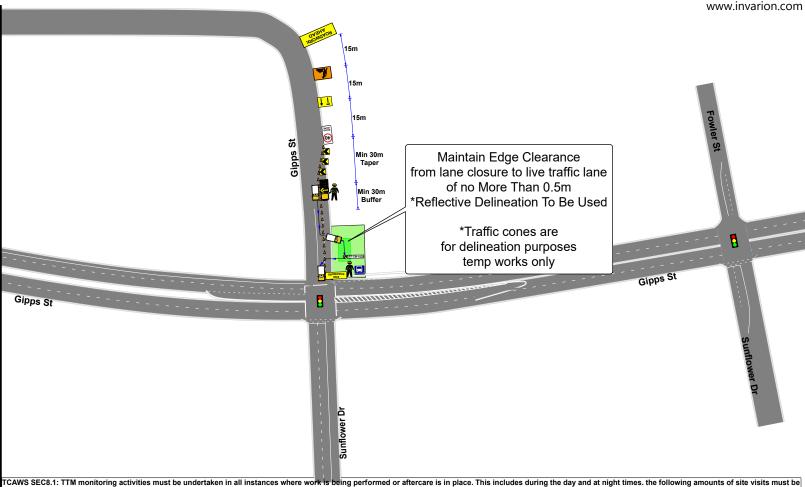
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45 OR LESS	15	0	15
46 - 55	15	15	30
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DIMENSO	ON "D"
SPEED OF TRAFFIC	DIMINESON "D"
KM/H	М
45 OR LESS	15m
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GREATER THAN	EQUAL TO
65 KM/H	POSTED SPEED

TOLERANCES

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TCAWS SEC8.1: TTM monitoring activities must be undertaken in all instances where work is being performed or aftercare is in place. This includes during the day and at night times. the following amounts of site visits must be completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection. Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted

PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

Comments: The Author has drawn this TCP based on the information provided by the client. Prior to implementation of TCP a Safe Work Method Statement must be prepared

WORK AREA

in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Management Plans - RIIWHS3032D training. Modifications to this TGS must comply with the requirements from the Austroads Section 3 - static worksites manual & RMS Traffic Control at Work Sites Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads.

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Date: 7/7/2022 Project: SBT-CM-1029 CLIENT: Tetra Tech Coffey PLAN No: WSA064 ROAD/SUBURB: SBT-CM-1029 Gipps St, Claremont Meadows - WSA064 Rev: V1 CROSS STREET: Sunflower Dr ROAD SPEED 70km **ROAD TYPE:** Multilane OPERATION: **Dayworks AUTHOURITY:** Penrith City Council The Statewide Roads and Traffic Pty Ltd (SWRT) accepts no liability for the implementation or execution of this TCP unless implemented by authorized (SWRT) personnel.

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PEDESTRIAN TRAVEL PATH



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IF NEEDED







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Plan shown is the property of Statewide Roads and Traffic Pty

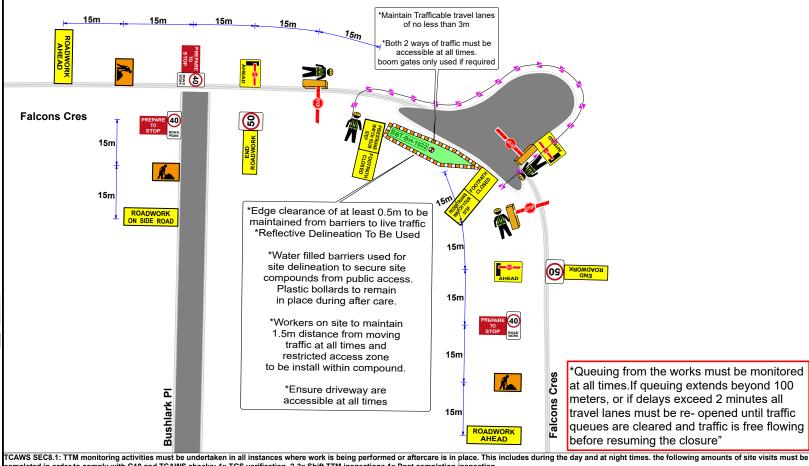
RECOMMENDED TAPER LENGHTH TRAFFIC CONTROL AT SHIFT TAPER TAPER APPROXIMATE SPEED OF TRAFFIC KM/H OF TAPER 45 OR LESS 15 46 - 55 15 15 30 56 - 65 30 60 30 70 115 N/A 66 - 75 76 - 85 N/A 80 130 86 - 95 N/A 90 145 96 - 105 100 160 N/A > 105 N/A 180

DIMENSO	ON "D"							
SPEED OF TRAFFIC								
KM/H	М							
45 OR LESS	15m							
46 - 55	15m							
56 - 65	45m							
GREATER THAN	EQUAL TO							
65 KM/H	POSTED SPEE	D						

TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

For works on and around footpath a minimum width of 1.2m shall be maintained at all times for pedestrians to pass unhindered. Pedestrians shall not be directed onto roadway unless traffic controllers are used to control site and proper measures are put in place to conform with AS 1742.3



completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection.

Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare. PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

Comments: The Author has drawn this TCP based on the information provided by the client. Prior to implementation of TCP a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work, Person(s) implementing this TGS must hold current Implement Traffic Management Plans - RIIWHS3032D training. Modifications to this TGS must comply with the requirements from the Austroads Section 3 - static worksites manual & RMS Traffic Control at Work Sites Manual version 6.1 & AS 1742.3 -Traffic Control for Works on Roads. This TGS has been prepared in accordance with AS 1742.3 - 2022 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6.1 - 2022.

*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route.

Pedestrians will be assisted by work crew to follow alternative route. PLAN NOT DRAWN TO SCALE PEDESTRIAN TRAVEL PATH

WORK AREA Project: SBT-BH-1032 Date: 8/7/2022 **CLIENT: Tetra Tech Coffey** PLAN No: WSA065 SBT-GW-1005, 30-31 Falcon Cres, Claremont Meadows - WSA065 - V1 ROAD/SUBURB: CROSS STREET: Bushlark Pl ROAD SPEED 50km ROAD TYPE: 2 Lane 2 way **OPERATION: Davworks AUTHOURITY:** Penrith City Council

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PEDESTRIANS PEDESTRIANS SIGNS

TO BE INSTALLED IF NEEDED





GENERAL NOTES

This site specific TCP is based on TCAWS V6 & Austroads Guide and is to be setup and packed up by qualified traffic controllers with current Introduction to Traffic Control at Roadwork's *Traffic Controller Ticket *Implement Traffic Plan

modifications made to this site specific TGS should made by qualified personnel with current *Prepare Workzone TMP Ticket all modifications to be signed off on this TGS along with certification number.

Plan shown is the property of Statewide Roads and Traffic Pty Ltd.

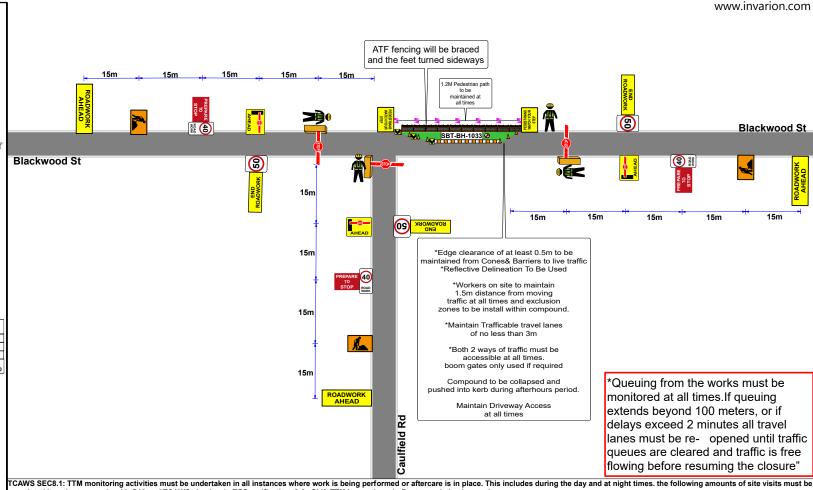
RECOMMEN	NDED TAPE	R LEN	<u>GHTH</u>
APPROXIMATE SPEED OF TRAFFIC KM/H	CONTROL AT	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
86 - 95	N/A	90	145
96 - 105	N/A	100	160
> 105	N/A	110	180

DIMENSON "D"								
SPEED OF TRAFFIC KM/H	DIMINESON "D" M							
45 OR LESS	15m							
46 - 55	15m							
56 - 65	45m							
GREATER THAN	EQUAL TO							

TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

For works on and around footpath a minimum width of 1.2m shall be maintained at all times for pedestrians to pass unhindered. Pedestrians shall not be directed onto roadway unless traffic controllers are used to control site and proper measures are put in place to conform with AS 1742.3



completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection.

Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare.

PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted Comments: The Author has drawn this TCP based on the information provided by the client. Prior to implementation of TCP a Safe Work Method Statement must be prepared

in consultation with the personnel carrying out the work, Person(s) implementing this TGS must hold current Implement Traffic Management Plans - RIIWHS3032D training. Modifications to this TGS must comply with the requirements from the Austroads Section 3 - static worksites manual & RMS Traffic Control at Work Sites Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads. This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6 - 2019.

*For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route. Pedestrians will be assisted by work crew to follow alternative route.

PLAN NOT DRAWN TO SCALE PEDESTRIAN TRAVEL PATH WORK AREA PLAN No: WSA066 Date: 8/7/2022 Project: SBT-BH-1033 **CLIENT: Tetra Tech Coffey** SBT-BH-1033, 57 Blackwood Street, Claremont - WSA066 - V1 ROAD/SUBURB: Rev: V1 CROSS STREET: Caulfield Rd ROAD SPEED 50km ROAD TYPE: 2 Lane 2 way **OPERATION: Dayworks AUTHOURITY:** Penrith City Council

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PEDESTRIANS WATCH YOUR STEP

PEDESTRIANS

PEDESTRIANS SIGNS

TO BE INSTALLED IF NEEDED





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RECOMMEN	NDED TAPE	R LEN	GHTH
APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	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

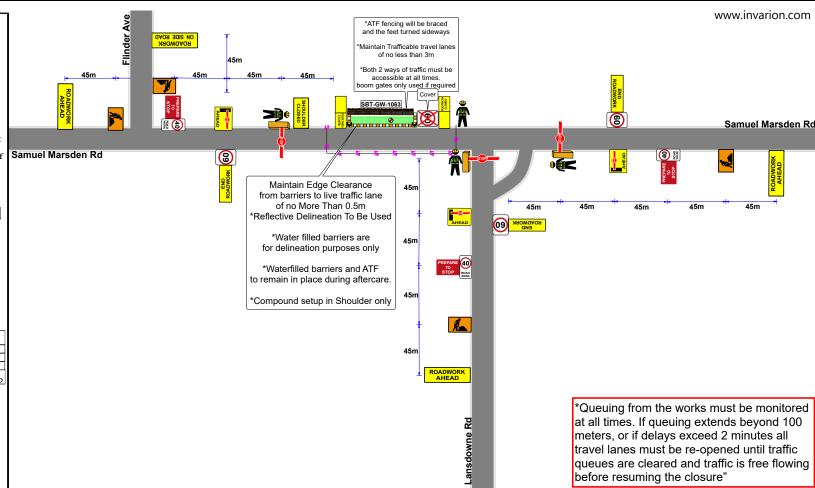
Ltd.

DIMENSON "D"							
SPEED OF TRAFFIC	DIMINESON "D"						
KM/H	M						
45 OR LESS	15m 15m						
46 - 55							
56 - 65	45m						
GREATER THAN	EQUAL TO						
65 KM/H	POSTED SPEED						

TOLERANCES

POSITIONING OF SIGNS
MINIMUM 10% LESS THAN
THE DISTANCE OR LENGTHS GIVEN
MAXIMUM 25% MORE THAN
THE DISTANCE OR LENGTHS GIVEN
SPACING OF DELINEATING DEVICES
MAXIMUM 10% MORE THAN THE
SPACING GIVEN
NO MINIMUM

For works on and around footpath a minimum width of 1.2m shall be maintained at all times for pedestrians to pass unhindered. Pedestrians shall not be directed onto roadway unless traffic controllers are used to control site and proper measures are put in place to conform with AS 1742.3



TCAWS SEC8.1: TTM monitoring activities must be undertaken in all instances where work is being performed or aftercare is in place. This includes during the day and at night times. the following amounts of site visits must be completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection.

Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted "Waterfilled barriers and ATF to remain in place during aftercare.
"PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

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Pedestrians will be assisted by work crew to follow alternative route.

PLAN NOT DRAWN TO SCALE PEDESTRIAN TRAVEL PATH WORK AREA Date: 16/7/2022 | Project: SBT-GW-1063 CLIENT: Tetra Tech Coffey PLAN No: WSA067 SBT-GW-1063, 114 Samuel Marsden Road, Orchard Hills - WSA067 - V2 Rev: V2 ROAD/SUBURB: CROSS STREET: Lansdowne Rd ROAD SPEED 60km ROAD TYPE: 2 Lane 2 way OPERATION: **Davworks AUTHOURITY:** Penrith City Council

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PEDESTRIANS SIGNS TO BE INSTALLED IF NEEDED





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RECOMMENDED TAPER LENGHTH APPROXIMATE TRAFFIC LATERAL MERGE

Statewide Roads and Traffic Pty

Ltd.

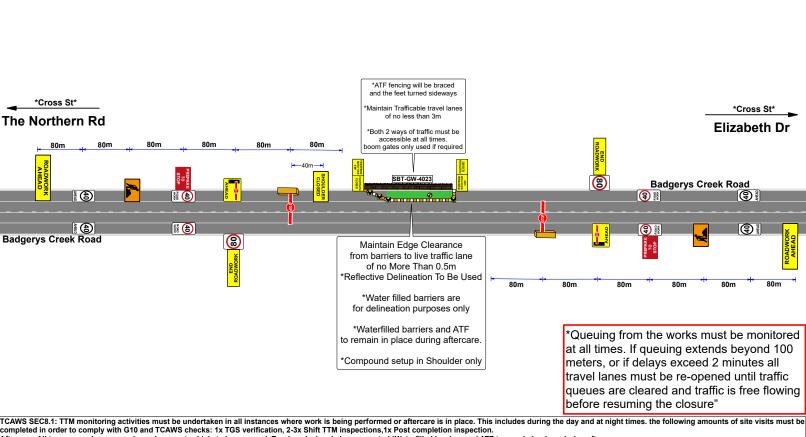
TRAFFIC KM/H	BEGINNING OF TAPER	TAPER	IAPER
45 OR LESS	15	0	15
46 - 55	15	15	30
56 - 65	30	30	60
66 - 75	N/A	70	115
76 - 85	N/A	80	130
86 - 95	N/A	90	145
96 - 105	N/A	100	160
> 105	N/A	110	180

DIMENSON "D' SPEED OF TRAFFIC DIMINESON "D' 45 OR LESS 15m 15m 46 - 55 45m GREATER THAN EQUAL TO 65 KM/H POSTED SPEED

TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

For works on and around footpath a minimum width of 1.2m shall be maintained at all times for pedestrians to pass unhindered. Pedestrians shall not be directed onto roadway unless traffic controllers are used to control site and proper measures are put in place to conform with AS 1742.3



completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection.

Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare. *PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

Comments: The Author has drawn this TCP based on the information provided by the client. Prior to implementation of TCP a Safe Work Method Statement must be prepared in consultation with the personnel carrying out the work. Person(s) implementing this TGS must hold current Implement Traffic Management Plans - RIIWHS3032D training. Modifications to this TGS must comply with the requirements from the Austroads Section 3 - static worksites manual & RMS Traffic Control at Work Sites Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads.

This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic Control for Works on Roads and the RMS Traffic Control for Work Sites Manual Version 6 - 2019.

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PLAN NOT DRAWN TO SCALE PEDESTRIAN TRAVEL PATH WORK AREA Date: 8/7/2022 Proiect: SBT-GW-4023 CLIENT: Tetra Tech Coffey PLAN No: WSA068 ROAD/SUBURB: SBT-GW-4023, 190 Badgerys Creek Road, Bringelly - WSA068 - V1 Rev: V1 CROSS STREET: The Northern Rd ROAD SPEED 80km ROAD TYPE: 2 Lane 2 way OPERATION: **Davworks AUTHOURITY:** Liverpool City Council

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PEDESTRIANS SIGNS TO BE INSTALLED IF NEEDED







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RECOMMENDED TAPER LENGHTH

APPROXIMATE SPEED OF TRAFFIC KM/H	TRAFFIC CONTROL AT BEGINNING OF TAPER	LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	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

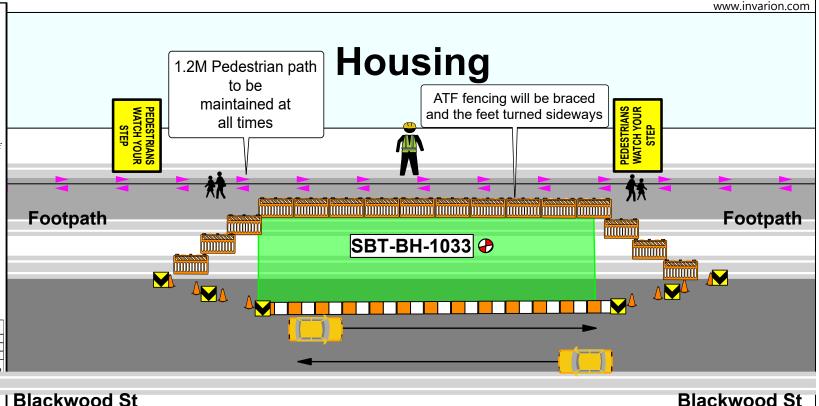
DIMINESON "D KM/H 15m

45 OR LESS 46 - 55 15m 56 - 65 45m GREATER THAN FOLIAL TO POSTED SPEED

TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

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TCAWS SEC8.1: TTM monitoring activities must be undertaken in all instances where work is being performed or aftercare is in place. This includes during the day and at night times. the following amounts of site visits must be

Aftercare: All temporary signage, works and support vehicle to be removed. Road work ahead signs excepted *Waterfilled barriers and ATF to remain in place during aftercare.

PTS and boom gates including additional traffic personnel to be removed where stops not required or active lane is not impacted

completed in order to comply with G10 and TCAWS checks: 1x TGS verification, 2-3x Shift TTM inspections,1x Post completion inspection.

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Project: SBT-BH-1033 Date: 16/7/2022 PLAN No: WSA070 CLIENT: Tetra Tech Coffey ROAD/SUBURB: SBT-BH-1033, 57 Blackwood Street, Claremont - Pedestrian Plan - WSA070 - V1 Rev: V1 CROSS STREET: Caulfield Rd ROAD SPEED 50km ROAD TYPE: 2 Lane 2 wav **OPERATION: Dayworks** AUTHOURITY: Penrith City Council

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*Traffic Controller Ticket
*Implement Traffic Plan
modifications made to this site
specific TGS should made by
qualified personnel with current
*Prepare Workzone TMP Ticket

all modifications to be signed off on this TGS along with certification number. Plan shown is the property of Statewide Roads and Traffic Pty

RECOMMENDED TAPER LENGHTH

APPROXIMATE SPEED OF TRAFFIC KM/H		LATERAL SHIFT TAPER	MERGE TAPER
45 OR LESS	15	0	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

DIMENSO	ט אכ		
SPEED OF TRAFFIC	DIMINESON "D"		
KM/H	М		
45 OR LESS	15m		
46 - 55	15m		
56 - 65	45m		
GREATER THAN	EQUAL TO		
65 KM/H	POSTED SPEED		

TOLERANCES

POSITIONING OF SIGNS MINIMUM 10% LESS THAN THE DISTANCE OR LENGTHS GIVEN MAXIMUM 25% MORE THAN THE DISTANCE OR LENGTHS GIVEN SPACING OF DELINEATING DEVICES MAXIMUM 10% MORE THAN THE SPACING GIVEN NO MINIMUM

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West Ln

Nariel St

Maintain Edge Clearance from barriers to live traffic lane of no More Than 0.5m *Reflective Delineation To Be Used

*Water filled barriers are for delineation purposes only

*Waterfilled barriers and ATF to remain in place during aftercare.

- *Compound setup parking area
- * 3 parking spots to be occupied

Workers onsite to remain 1.5m from live traffic Behind Barriers inside the closure

TCAWS SEC8.1: TTM monitoring activities must be undertaken in all in completed in order to comply with G10 and TCAWS checks: 1x TGS ve Aftercare: All temporary signage, works and support vehicle to be rem PTS and boom gates including additional traffic personnel to be remo Comments: The Author has drawn this TCP based on the information provi in consultation with the personnel carrying out the work. Person(s) implem Modifications to this TGS must comply with the requirements from the Aus Manual version 6 & AS 1742.3 - 209 Traffic Control for Works on Roads. This TGS has been prepared in accordance with AS 1742.3 - 2009 Traffic CC

For pedestrians safety the footpath surrounding the work site shall be closed signage and barriers shall be installed to clearly indicate alternative route.

Pedestrians will be assisted by work crew to follow alternative route.

PEDESTRIAN TRAVEL PATH

WORK ARFA

P

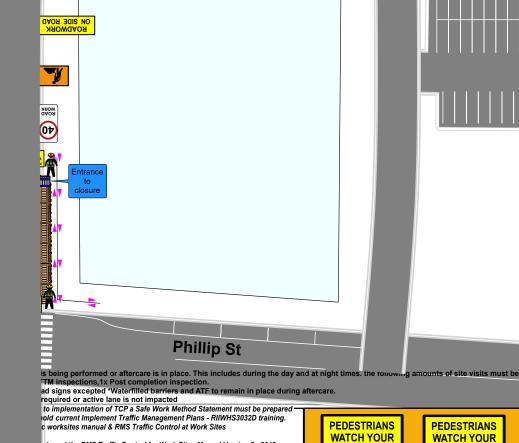
Date: 16/7/2022 Project: SBT-GW-1016 CLIENT: Tetra Tech Coffey PLAN No: WSA071
ROAD/SUBURB: SBT-GW-1016, Queen St, St Marys - WSA071 - V1 Rev: V1
CROSS STREET: Phillip St

ROAD SPEED 50km

ROAD TYPE: 2 Lane 2 way

OPERATION: Dayworks
AUTHOURITY: Penrith City Council

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STEP

PEDESTRIANS -

PEDESTRIANS SIGNS

TO BE INSTALLED IF NEEDED

STEP

PEDESTRIANS

TETRA TECH

ads and the RMS Traffic Control for Work Sites Manual Version 6 - 2019.

www:

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

> P.O. Box 237 St Leonards NSW 1590

> > 02 8437 7800

info@ttpp.net.au

www.ttpp.net.au





Appendix 4 Review comments



REVIEW COMMENTS SHEET



METRO		1							IIO OIILLI				for NSW
SMWSASBT-CPG-SWD- SW000-TF-PLN-000002	TITLE Sydney Metro WSA - SBT - Construction Traffic Management Plan (CTMP)	D.01	STATUS S3	NO. 46	11/08/2022	LCC	RAISED BY	SMWSASBT-CPG- SWD-SW000-TF-	5.5. Road occupation and openings	DEED REF*	COMMENTS / RESPONSE Needs to be added, For any road opening required, the relevant Road Opening Permit (ROP) will be applied for through the existing Liverpool Council process. Details on	COMMENT CATEGORY* Observation	CLOSED OUT
3W000-17-PEN-000002	Tetra Tech Coffey – Geotech Scope North							PLN-000002 SMWSASBT-CPG- SWD-SW000-TF-	5.5. Road occupation		the permits required are found at Liverpool City Council (nsw.gov.au) Comment added to CTMP to include City of Liverpool Council	Observation	N
		\vdash						PLN-000002	and openings	•	the compound will be built in the northbound shoulder. A	ODSCI VALIOTI	
				47	11/08/2022	LCC			2.1.14. 190 Badgerys Creek Road (SBT-GW- 4023)		contraflow will be setup in the southbound lane and traffic controllers with boom gates will guide traffic, please clarify, is the Southbound shoulder would be used as a trafficable lane under this arrangement or existing trafficable lanes would be maintained opened?	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	2.1.14. 190 Badgerys Creek Road (SBT-GW- 4023)		WSA068 will be utilised during work hours, only the southbound lane will be trafficable (TGS updated) with traffic controllers allowing one direction of traffic at a time. WSA082 is provided as an aftercare TGS	Observation	N
				48	11/08/2022	LCC		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	3.1.15. 190 Badgerys Creek Road (SBT-GW- 4023)		"the temporary compound would be setup on the northbound shoulder lane of Samuel Marsden Road For these works" remove Samuel Marsden Road and add Badgerys Creek Road	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	3.1.15. 190 Badgerys Creek Road (SBT-GW- 4023)		Corrected	Observation	N
				49	12/08/2022	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	WSA010 (Page 54)	NA	Please update TGS to show location of existing pedestrian crossings on Phillip and Lethbridge Streets so the location of the boom gate can be confirmed as no	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	WSA010 (Page 54)	NA	impact on pedestrian safety. Work has been completed under previously approved TGS	Observation	N
				50	12/08/2022	TFN		SMWSASBT-CPG-	WSA071 (Page 62)	NA	Please confirm that the waterfilled barriers will not obscure pedestrians crossing Phillip Street, including children, for vehicles turning left from Queen Street into Phillip Street.	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	WSA071 (Page 62)	NA	The southernmost extent of our compound will be approximately 9m from the pedestrian crossing (as our compound will be built inside the existing parking spots). The water filled barriers themselves are approximately a metre tall and will no more obstruct lines of sight as would a parked car in those designated parking spots	Observation	N
				51	15/08/2022	SMD		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Section 3.1.15.	tba	Section 3.1.15 190 Badgerys Ck Rd - Is the reference to Samuel Marsden Rd correct ?	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Section 3.1.15.	tba	No it is not, it has been corrected in this submission	Observation	N
				52	15/08/2022	SMD		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Section 2.1.14.	tba	Section 2.1.14 190 Badgerys Ck Rd - Is Badgerys Creek Rd a local road in this location ?	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Section 2.1.14.	tba	It is a regional road in this location, this has been corrected in this submission	Observation	N
				53	15/08/2022	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002 SMWSASBT-CPG-	D	NA	It is CJP's preference that all future addendum are included as an appendix only. This helps to simplify the review process and ensures that no new information is lost. Noted, we will act in accordance in future	Observation	N
		-						SWD-SW000-TF- PLN-000002 SMWSASBT-CPG-	D	NA	Section 2 In the future it would be Handy to provide a	Observation	N
				54	15/08/2022	TFN		SWD-SW000-TF- PLN-000002 SMWSASBT-CPG-	D	NA	slightly more zoomed out map to provide better context for the location of the new bore holes Noted, we will act in accordance in future		N
		-						SWD-SW000-TF- PLN-000002 SMWSASBT-CPG-	D	NA	Section 5.3 Any bus changes (relocation's, bus stop	Observation	N
		L		55	15/08/2022	TFN			D	NA	closures, detours etc.) need to be discussed and agreed to with CJP Integration Team prior to implementation. A 28 day lead-time is typically required. This section has now been revised as it refers to a	Observation	N
								SWD-SW000-TF- PLN-000002	D	NA	superceded TGS. Access to bus zones or public transport in general will not be impeded during the site investigation works.	Observation	N
				56	15/08/2022	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	D	NA	Section 7.5 The addition of works on Samuel Marsden Rd will require sports days/meets at the reserve to be taken into consideration. Penrith City Council was contacted and confirmed no	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	D	NA.	events are taking place between the 8th of September and the 8th of October. Furthermore, CPG's community team are in touch with The Colyton St Clair Chiefs Baseball Club who predominantly use Samuel Marsden Reserve for their games and practice. They have advised about their comp games every Saturday and training evenings Monday through to Friday from August through to April. There will be minimal impact of CPBG's works on their activities noting works will generally be undertaken during standard construction hours of 7AM to 6PM Monday to Friday and 8AM to 1PM on Saturdays in accordance with SSI Planning Approval Condition E38.	Observation	N
				57	15/08/2022	TFN	_	SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	D	NA	Appendix 1 Regarding TGS WSA010 (Rev 4), what is the intended use of the portabooms when it appears works are confined to the southbound shoulder of Lethbridge St? It is important that impacts and stoppages along Phillip St are kept to an absolute minimum as this is a key bus route.	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	D	NA	Work has been completed under previously approved TGS. The portabooms were to facilitate entry and exit of vehicles and plant into the compound.	Observation	N
				58	15/08/2022	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	D	NA	Appendix 1 ROLs to be applied for via CJM/TMC for all works and TGS setups, in addition to any required permits from local council.	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	D	NA	Noted	Observation	N
				59	17/08/2022	SMD		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	WSA068	NA	Water filled barriers are noted on the plan, however only cones are drawn. Please confirm water filled barriers will be used to separate the work zone from the live traffic.	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	WSA068	NA	Confirming water filled barriers will be used - TCP updated	Observation	N
				60	17/08/2022	SMD		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	WSA071	NA	Has the swept path of buses turning from Queen St, left into Phillip St, been reviewed to identify if there is a clash with the location of water filled barriers?	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	WSA071	NA	Our compound will be located within the existing parking spaces on Queen Street so the current swept paths of buses will be preserved.	Observation	N
				61	17/08/2022	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	TCS Plan No. WSA063	N/A	TN - Assume the footpath on western side of Werrington Rd be maintained at the work site?	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	TCS Plan No. WSA063	N/A	Our works will not extend to this footpath - TCP updated to include footpath in plan	Observation	N
				62	17/08/2022	TFN	_	SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	TCS Plan No. WSA066 & WSA070	N/A	TN - Section 5.1 states that contraflow will be in use during work hours for 'SBT-BH-1033', but the TCSs show that 2-way traffic remain at all time. Please confirm the actual treatment. Kerb-to-kerb width on Blackwood St is 1-7m.	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	TCS Plan No. WSA066 & WSA070	N/A	Confirming that traffic will flow one direction at a time under stop-slow controls using the southbound lane - TCP WSA066 has been updated accordingly	Observation	N
				63	17/08/2022	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	TCS Plan No. WSA071	N/A	TN - Advance warnings required on Queen St (northbound) and Phillip St (westbound) to warn traffic the work zone ahead.	Potential Non-Compliance	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	TCS Plan No. WSA071	N/A	TCP revised accordingly	Potential Non-Compliance	N
				64	17/08/2022	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	TCS Plan No. WSA068	N/A	TN - Southbound traffic to use shoulder? From aerial the southbound shoulder at 190 Badgerys Creek Rd is too narrow, and probably not in a good condition for vehicles. Roughly 7-8m width available to fit two traffic lanes, and the clearance between work zone and live traffic. The waterfilled barriers shown in WSA082 (aftercare) apply to WSA088 (during work)? Consider delineation for southbound traffic.	Observation	N
				65	19/08/2022	SMD		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	TCS Plan No. WSA068	N/A	WSA088 will be utilised during work hours, only the southbound lane will be trafficable (TGS updated) with traffic controllers allowing one direction of traffic at a time We will carry through the water filled barriers in WSA082 to be included during works too No Comments	Observation	N
									SBT-BH-1023 Gipps		Due to the site proximity to Wollemi College, construction vehicle movements should not occur during peak school	01	Y
				66	22/08/2022	PCC		PLN-000002 SMWSASBT-CPG-	Street / Werrington Road SBT-BH-1023 Gipps		Noted, ingress and egress of vehicles will be avoided during these periods.	Observation	N
								PLN-000002 SMWSASBT-CPG-	Street / Werrington Road SBT-BH-1023 Gipps		Wollemi College students walking from the south use the	Observation	IN
				67	22/08/2022	PCC		SWD-SW000-TF- PLN-000002	Street / Werrington Road	NA	verge to travel to/from the school. Provide measures to manage pedestrian movements around the work site. Pedestrian travel path added to TCP WSA063. Traffic	Observation	N
								SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	SBT-BH-1023 Gipps Street / Werrington Road	NA	controllers to assist. Our work site will be enclosed using water barriers, providing a barrier between people and plant from the general public.	Observation	N
				68	22/08/2022	PCC		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002 SMWSASBT-CPG-	SBT-BH-1023 Gipps Street / Werrington Road SBT-BH-1023 Gipps	NA	Provide 'End Roadwork' sign on Gipps Street westbound lane. TCP revised accordingly	Observation	N
				69	22/08/2022	SMD		SWD-SW000-TF- PLN-000002	Street / Werrington Road	NA	No Comments	Observation	N Y
				UB	22/00/2022	OIVID					110 SUITINGINS		





Appendix 5 Addendum added to the existing Tetra Tech Coffey – Geotech Scope North Construction Traffic Management Plan with inclusion of Appendix 5 to cover installation of additional boreholes on Queen Street.





Geotech Scope North - Construction Traffic Management Plan- Addendum

Sydney Metro Western Sydney Airport Station Boxes and Tunnelling Works

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Document approval

A 14/03/2023	Rev	Date	Prepared by	Reviewed by	Approved by
	Α	14/03/2023			
Signature	В	05/04/2023			
	Signa	iture			







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 construction, legal and other requirements, as required.

Amendments

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

Revision Details

Revision	Details
А	Issued for external review
В	Issued for approval







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1.Introduction

1.1. Project and location

The Project forms part of the broader Sydney Metro network. It involves the construction and operation of a 23km new metro rail line that extends from the existing Sydney Trains suburban T1 Western Line (at St Marys) in the north and the Aerotropolis (at Bringelly) in the south. The alignment includes a combination of tunnels and civil structures, including viaduct, bridges, surface, and open-cut troughs between the two tunnel sections. See Figure 1

The Project will be delivered through several works packages including the Station Boxes and Tunnelling Works (SBT Works). The SBT Works includes the design and construction of:

- Two sections of twin tunnels with a total combined length of approximately 9.8km, plus associated portal structures, one from Orchard Hills to St Marys and the other under Western Sydney International (WSI) airport to the new Aerotropolis Station in New South Wales (NSW)
- Excavations at either end to enable trains to turn back and stub tunnels to enable future extensions
- Station box excavations with temporary ground support for four stations at St Marys, Orchard Hills, Airport Terminal and Aerotropolis
- Excavations for two intermediate service facilities, one in each of the tunnel sections at Claremont and Bringelly.



Figure 1: Project Location

1.2. Overview

This Construction Traffic Management Plan (CTMP) has been prepared by CPBG JV to support the Sydney Metro Western Sydney Airport Station Boxes and Tunnelling Works (WSA-SBT). Tetra Tech Coffey have been engaged by CPB and Ghella Joint Venture (CPBG JV) to conduct the groundwater monitoring for SBT works.

This CTMP is an addendum to the previously approved Tetra Tech Coffey – Geotech Scope North - Construction Traffic Management Plan as new groundwater wells will need to be installed for geotechnical investigation and ongoing monitoring. This plan sets out the traffic management that will be deployed to implement restrictions and divert traffic to minimise disruption and ensure the safety of community and stakeholders is not compromised. Traffic and transport impacts will be detailed, and associated managements measures will be conducted during the operation.

This plan has been prepared in accordance with the Construction Traffic Management Framework, SSI 10051 Planning Approval Condition E103 and will be submitted to the Planning Secretary of the NSW Department of Planning and Environment for information.





2.Locality and Existing Traffic Conditions

2.1. Site Context – Queen Street, St Marys



Figure 2: Aerial View of Queen St, Queen St Cul-De-Sac and Station St

2.1.1. Road Characteristics

Queen Street is located within St Mary and falls under the control of the Penrith City Council. The road is classified as a local road, aligning in the north-south direction, and connecting to the Great Western Highway. Queen Street is a 50km/hr road, where the northern end of Queen Street is a Cul-De-Sac. Parking is not permitted within the Cul-De-Sac; however, it is currently occupied by Taxis as a pickup/drop-off location as shown in Figure 3.



Figure 3: Queen Street Cul-De-Sac







2.1.2. Traffic Conditions

Queen Street is a local road occupied by local businesses and the daily traffic consists of light vehicles, heavy vehicles, and buses. The northern end of Queen Street continues onto Station Street. The northern end is closed off to public and all local traffic is to turn left on Nariel Street. Only access allowed on the northern end of Queen Street is taxis and buses as shown in Figure 4.



Figure 4: Queen Street (Northern End)

The bus interchange has been relocated south of Station Street and is accessed via Station Street from Queen Street. Station Street has been closed to the west of Access Road A as part of construction works associated with Sydney Metro WSA Station Boxes and Tunnelling Package. Buses continue from Queen Street following eastbound into Station Street to the relocated Temporary Bus Interchange.

2.1.3. Public Transport Facilities

Queen Street is surrounded by transport facilities including the following.

- a. As noted in 2.1.2, the end of Station Street is a bus interchange. Buses travel northbound from Queen Street and continue eastbound onto Station Street where the trip terminates at the bus interchange. They then turn at the end of Station Street (cul-de-sac) and continue westbound before turning left and continuing southbound on Queen Street.
- b. St Mary's station is located at the north-east end of Queen Street.
- c. Taxi pickup/drop-off location located at the northern end of Queen Street.

2.1.4. Pedestrian and Cyclist Infrastructure

There is high pedestrian activity on Queen Street as it is surrounded by transport facilities and local businesses.

- a. As noted in 2.1.3, St Mary's station and taxi pickup/drop-off locations are located near Queen Street. As there are accessible public transport facilities close to the northern end of Queen Street, there is an increase in pedestrian activity.
- b. As per Transport NSW Cycleway Finder, Queen Street is a council road with no bicycle paths and shared paths. It is considered a general road where bicycles share spaces with motor vehicles.

2.1.5. Existing Parking Restrictions

Queen Street is a double lane road, with a single traffic lane running northbound/southbound. The road has trafficable shoulders and parking spaces with the following parking restrictions in place.







- a. 1P parking on either side of Queen Street near the cul-de-sac
- b. Queen Street Cul-De-Sac has a no parking restriction and is currently signposted as a pickup/drop-off location for taxis.

3. Site operations

3.1. Scope of Work

Tetratech, on behalf of CPBG, are planning to install four wells for groundwater monitoring, which are within the Queen Street Cul-de-sac (Compound 1) and six wells on the northern footpath between the station platform access and the goods shed on Station Street.



Figure 5: Compound Locations

Compound 1:

Duration: 3 Weeks (24 hours)

Commencement Date: April 2023

The installation of four monitoring wells will involve the closure of Queen Street cul-de-sac for 3 weeks. Queen Street Cul-De-Sac is to be fully closed as shown by compound 1 in Figure 5 to facilitate completion of the following scope:

- 1. Initial Service Locating Locating of services within Queen Street cul-de-sac
- 2. Drill boreholes at Queen Street cul-de-sac as per Table 1 for installation of groundwater monitoring wells.

Borehole Number	Address	Road Type	Activity
C1-1	Queen Street Cul-De-Sac, St Marys	Council Road	Monitoring Well Installation
C1-2	Queen Street Cul-De-Sac, St Marys	Council Road	Monitoring Well Installation
C1-3	Queen Street Cul-De-Sac, St Marys	Council Road	Monitoring Well Installation
C1-4	Queen Street Cul-De-Sac, St Marys	Council Road	Monitoring Well Installation

Table 1 Compound 1 Borehole Locations





Compound 2:

Duration: 7 days (24 hours)

Commencement Date: April 2023

Compound 2 will be setup on the footpath between the station platform access and the goods shed on Station Street. with minor impacts on pedestrians. Six wells will be installed on the northern footpath along the between the station platform access and the goods shed as shown in Figure 5 to facilitate completion of the following scope:

- 1. Initial Service Locating Locating of services within Queen Street cul-de-sac
- Drill boreholes at Queen Street cul-de-sac as per Table 2 for installation of groundwater monitoring wells

Borehole ID	Address	Road Type	Activity
C2-1	Station Street Footpath	Council Road Footpath	Monitoring Well Installation
C2-2	Station Street Footpath	Council Road Footpath	Monitoring Well Installation
C2-3	Station Street Footpath	Council Road Footpath	Monitoring Well Installation
C2-4	Station Street Footpath	Council Road Footpath	Monitoring Well Installation
C2-5	Station Street Footpath	Council Road Footpath	Monitoring Well Installation
C2-6	Station Street Footpath	Council Road Footpath	Monitoring Well Installation

Table 2 Compound 2 Borehole Locations

3.2. Methodology

- 1. Site establishment Site to be setup as noted in TGSs included in Annexure A. The work area is to be isolated from the public using construction fencing panels. The closure of Queen Street cul-de-sac (Compound 1) and temporary site on the northern footpath (compound 2) will allow for the separation of work area from the public.
- 2. Initial service locating Non-Destructive Digging to locate services within specified area.
- 3. Delivery of Piling Rig Piling rig will be delivered on a truck (12.5m). Swept path analysis has been completed for the float and provided in Annexure C. Truck will travel northbound on Queen Street and follow through to Station Street. The truck will then reverse into the Queen Street Cul-De-Sac and drop the piling rig into the work zone, before egressing the site southbound through Queen Street. The delivery of the piling rig will be managed under traffic control.
- 4. Drilling of installation wells The rig will drill holes within each work zone.
- 5. Demobilisation of Site: Site team to remove all contractor temporary facilities and construction equipment from the site. Site will be delivered back to its original state.





3.3. Borehole Installation Programme

Borehole ID	Start Date	Finish Date	Road Impact	TGS Plan No.
C1-1	24/04/23	15/05/23	Road Closure Queen	
C1-2	24/04/23	15/05/23	Street Cul-de-sac	TGS 2023-0608 (See attached
C1-3	24/04/23	15/05/23	Stop/slow control for ingress/egress of	Annexure A)
C1-4	24/04/23	15/05/23	truck.	
C2-1	24/04/23	1/05/23	Compound to be setup	
C2-2	24/04/23	1/05/23	whilst maintaining 2.5m pedestrian	
C2-3	24/04/23	1/05/23	walkway on Station Street northern	TGS 2023-0608 (See attached
C2-4	24/04/23	1/05/23	footpath.	Annexure A)
C2-5	24/04/23	1/05/23		
C2-6	24/04/23	1/05/23		

Table 3: Borehole Installation Programme

3.4. Site Setup

Site to be setup as per Figure 6.



Figure 6: Proposed Site Setup

3.4.1. Construction Traffic

A list of vehicles used for this scope and the estimated number of truck movements generated for delivery of scope is provided below noting the numbers are for the complete duration of works.







Type of Vehicles	Estimated Volumes of truck movement (Compound 1)	Estimated Volumes of truck movement (Compound 2)
Heavy Vehicles		
Piling Rig	1	1
Delivery Truck (piling Rig)	2	2
Light Vehicles		
Ute - Tetratech	5	2
Ute - Traffic controller	5	2

Table 4: Construction Traffic for Complete Duration of Works

3.4.2. Work Hours

Works will be carried out during normal working hours noted below, however, the compound will be retained and demobilised at the completion of scope.

Normal Construction Hours: 7am to 6pm

3.4.3. Fencing Panel

Construction Fencing Panel is to be used to separate both compounds from public and to enclose all equipment.

The fencing panels shall be installed as noted in Figure 6.

- Dimensions (mm): Width: 2400mm x Height: 2100mm x 32mm OD
- Weight (kg): nil
- Material: Hot Dipped Galvanised Steel
- Colour Finish: Galvanised Steel / Powder Coated Colours



3.5. Traffic Management

Key points on the proposed traffic management measures are provided below for ease of reference.

- a. Work area to be fenced off to store plant and equipment on site by establishing compounds shown in Figure 6.
- b. Storing of equipment- The setup for compound 1 will be 24 hours a day for 3 weeks with compound 2 setup for 7 days. The compounds will be demobilised at the completion of scope. All equipment will be stored within the compounds during delivery of scope.
- c. Fencing will be established to separate work from public. The fencing panel and installation are compliant to RMS acceptance conditions. See Figure 7 for specification
- d. The existing taxi pickup/drop-off location within Queen Street Cul-De-Sac will be relocated to the southern side of Nariel Street to establish compound 1.
- e. Traffic control signs and devices will be installed in accordance with the drawings provided in TGS included in Annexure A.
- f. Stop/slow traffic control to be implemented with PTCD to temporarily stop traffic, to allow vehicular movements in/ out of compounds.
- g. Impact on pedestrians/cyclists is minimal as detailed in the PMP included in Annexure D
- h. VMP for general traffic included in Annexure B.





i. Swept Path Analysis has been completed for the truck to drop off the pile rig within Queen Street cul-de-sac and enclosed in Annexure C.

4. Construction Impacts

4.1. Impact on Traffic Flow

The traffic management will have minimal impact on the local traffic on Queen Street.

Compound 1:

- a. Ingress/egress of piling rig on the truck, traffic will be managed according to TGS included in Annexure A. TGS will provide advanced warning on all approaches with a Stop/slow traffic control which will be implemented to deliver pile rig to its location. Bus movements will be always prioritised and will not be affected by the stop/slow control for the piling rig reverse movement. All disruptive vehicle movements will be programmed to occur outside of the bus and station peak periods.
- b. TGS will provide advanced warning on all approaches for construction ahead to notify road users of changed conditions.

Compound 2:

- a. Ingress/egress of piling rig on the truck, traffic will be controlled according to TGS included in Annexure A. TGS will provide advanced warning on all approaches with a Stop/slow traffic control which will be implemented to deliver pile rig to its location. Bus movements will be always prioritised and will not be affected by the stop/slow control for the piling rig reverse movement. All disruptive vehicle movements will be programmed to occur outside of the bus and station peak periods.
- b. TGS will provide advanced warning on all approaches for construction ahead to notify road users of changed conditions.

4.2. Impact on Active Transport Users and Pedestrians

The construction works will have minimal impact on active transport users and pedestrians

Compound 1:

- a. Construction compound 1 is within the Queen Street cul-de-sac, with no impact on pedestrians. Pedestrian Management Plan included in Annexure D shows the footpaths being maintained during this setup. Customers entering and exiting the St Mary's Station have clear paths through to Queen Street and Nariel Street.
- b. The taxi pickup/drop-off location within the Queen Street cul-de-sac will be impacted by Queen Street cul-de-sac closure. CPBG proposes to relocate the taxi pickup/drop-off location to the southern side of Nariel Street. Refer to Figure 8.
- c. No dedicated cyclists' facilities will be impacted by the works.







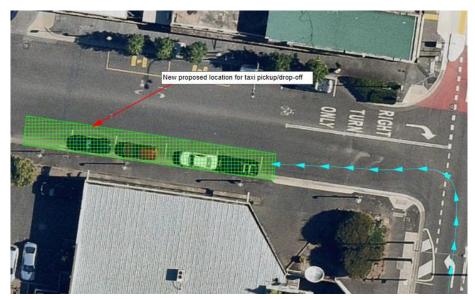


Figure 8: Proposed Location for Taxi Pickup/Drop-off

Compound

2:

- a. Work boundaries have been considered and will have minimal impact on pedestrian footpaths from St Marys to adjoining bus interchange on Station Street. A 2.5m pedestrian walkway will be maintained on the northern footpath of Station Street for access to temporary bus interchange.
- b. No dedicated cyclists' facilities will be impacted by the works.

4.3. Impact on Property Access

Construction works will have no impact on property access.

Compound 1:

- a. Work boundaries have been considered to not impede on pedestrian footpaths and to not block entry of business properties.
- b. Pedestrian footpath to be maintained and work boundaries to not occupy pedestrian footpaths where business entries are situated. CPBG will notify business owners and public of construction works and work boundaries. Refer to 6.1 Communications and the community for more information.

Compound 2:

a. No impact on property access.

5. Vehicles Movements and Permits

5.1. Heavy / Light vehicle movements

Heavy vehicle access from site must do so with the direction of traffic controllers to reduce the impact on traffic flow. Positive radio communication must be made to traffic controllers when approaching site with warning beacon lights turned on, to organise compound access and/or parking due to limited space on site. There will be no reversing without a spotter and all plant movements must be communicated to onsite traffic control. Traffic to be stopped on both approaches when truck is reversing and traffic controllers to help truck position.

5.2. Staff parking and transportation to site

It is anticipated that there will be 3-4 personnel on each site excluding traffic controllers each day. Sites are designed to ensure adequate room for crews to safely operate within this area. Staff parking will be within work zone allocated by TGS.





5.3. Traffic Guidance Scheme/ Road Occupancy License identified works

Works that have been identified as requiring a Traffic Guidance Scheme (TGS) are listed below:

- 1. Traffic control during pile rig delivery
- 2. Traffic control for site establishment
- 3. Traffic control for site demobilisation

The TGS have been included in Annexure A.

5.4. Required Council approvals

Works that have been identified as requiring Council approval include:

- 1. Road Reserve Opening Permit
- 2. Temporary Road Reserve Occupancy Permit

5.5. Taxi Pickup/Drop Off Location

Following taxi companies will be notified of works and consulted for before relocation of taxi pickup/drop-off location for duration of works:

- 1. Taxi Council
- 2. Premier Cabs
- 3. 13Cabs

6. Other matters

6.1. Communications and the community

CPBG Community team will be responsible for the dissemination of information to the community including affected residents, relevant Councils, businesses, and the public. Appropriate way finding signage will be installed to assist general public with access to the relocated taxi pickup/drop-off at Nariel Street.

6.1.1. Proposed communications

Proposed communications to be implemented by CPBG for this CTMP are specified in table below.

Notification	Geotechnical Investigations
Community Notice	Yes
Precinct update/ e-update	Yes
Email	Yes
Internet	Yes
Print advertising	No
Advance warning sign	No

Table 5: Proposed Communications

6.1.2. Travelling public





Where the SBT works will impact on the travelling public, CPBG will undertake the following communications:

- a. Public transport interruptions will be communicated via on site signage
- b. Motoring public will be forewarned of any changes including road closures, road changes and lane changes in advance using appropriate signs.
- c. Active transport users will be provided with advance warning signs.
- d. Incident Reporting and Management

6.1.3. Incident Management

Tetra Tech Coffey will notify CPBG JV of all incidents including but not limited to incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident. A completed Project Incident Report Form is to be provided to the CPBG JV site representative in prescribed timeframes.

NOTE: CPBG JV will notify Sydney Metro on becoming aware of the incident, as per agreed communication protocols.

Incidents are classified and managed in accordance with the CPBG JV Emergency Response Plan. In the event of an incident, the project Emergency Response Plan, which includes the Pollution Incident Response Management Plan required under the Protection of the Environment Operations Act will be implemented.

6.1.4. Traffic Incident Plan

The traffic control Team Leader is the personnel responsible for dealing with traffic incidents reporting at the work site and is responsible for contacting emergency services if required. Following any traffic-related incident on site, the following steps will be undertaken:

- Works to stop until safe to continue (Traffic Team Leader and Tetra Tech CoffeyField Manager to assess).
- If required, emergency services will be contacted.
- The site will immediately be made safe where required to ensure the flow of traffic around the site is maintained.
- Traffic Team Leader to record details of vehicles and people involved in the incident.
- Tetra Tech Project Manager to be notified to communicate incident to CPBG JV and Sydney Metro.
- Team Leader is to do an onsite assessment to ensure the site is set up correctly.
- Checking that the traffic control measures in place are in accordance with this TMP and its component plans, and ROL conditions.
- Team Leader is to carry out a "drive through" and get a passenger to get a video recording
 of the roadway, including the location where the incident has taken place.
- Team Leader is to assess if the TGS needs amendments (See Annexure A)
- An incident report must be completed, and Team Leader is to inform Management as soon as possible.

6.2. Stakeholders

Stakeholder	Consultation type	Date
Sydney Metro Project Team	Submission of Addendum	14 March 2023
Penrith City Council	Submission of Addendum	14 March 2023







Stakeholder	Consultation type	Date
Customer Journey Planning	Submission of Addendum	14 March 2023
Traffic Control Group	Presentation	08 March 2023

There are several stakeholders consulted during the development of this CTMP. Table below provides an overview of the consultation undertaken for this CTMP. The review comments are provided in Table 6: Consultation undertaken

Table 6: Consultation undertaken

6.3. Special events

When planning the works, CPBG will identify special events which directly impact the worksites or haulage activities and will continue to interrogate event websites that provide details on forthcoming events such as:

- NSW and Sydney Events <u>Destination NSW</u>
- NSW Events and Festivals Visit NSW and
- Upcoming Events <u>Penrith City Council</u>

6.4. Training

CPBG will ensure that all personnel, including sub-contractors are aware of the specific requirements of TfNSW customers, public, residents and businesses, prior to attending site through the induction process and regular updates through toolbox talks.

6.5. Inspections and monitoring

The site will be monitored by the site supervisor. Any changes to signs and lines that impact on the public will be recorded. Daily monitoring will be undertaken during site operating hours. Traffic control used for pedestrian management, lane closures etc will need to provide records of the traffic control implemented. Any changes required to the traffic control set up will be authorised by a holder of a SafeWork NSW "Prepare a Work Zone Traffic Management Plan" or equivalent.

6.6. Environmental maintenance

All works will be undertaken in accordance with the SBT works NSW Site Establishment Management Plan and associated procedures and the Construction Environmental Management Plan and associated sub plans. The SBT works are regulated by the NSW Environment Protection Authority and works to be undertaken outside of standard construction hours will need to comply with the requirements of the Environmental Protection License (EPL).

6.7. Site contacts

Name	Position	Contact details







Name	Position	Contact details

Table below provides the contact details for the works identified in this CTMP.

Table 7: Site Contacts

7. Conclusion

This proposal is for a 3-week closure of the Queen Street cul-de-sac (Compound 1) and a 1-week closure on Station Street pedestrian footpath (Compound 2) to provide an opportunity for CPBG to install new groundwater monitoring wells. As the works will have limited impact on the community, we believe that our proposal would be the most appropriate method in controlling risks and hazards.

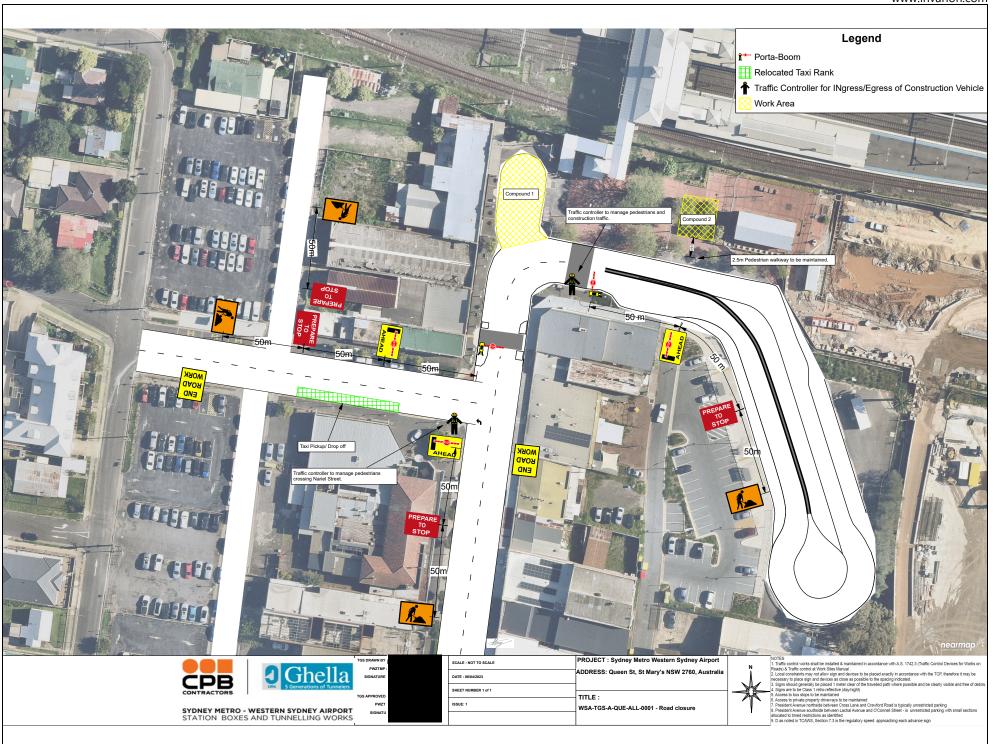






Annexure A Traffic Guidance Schemes

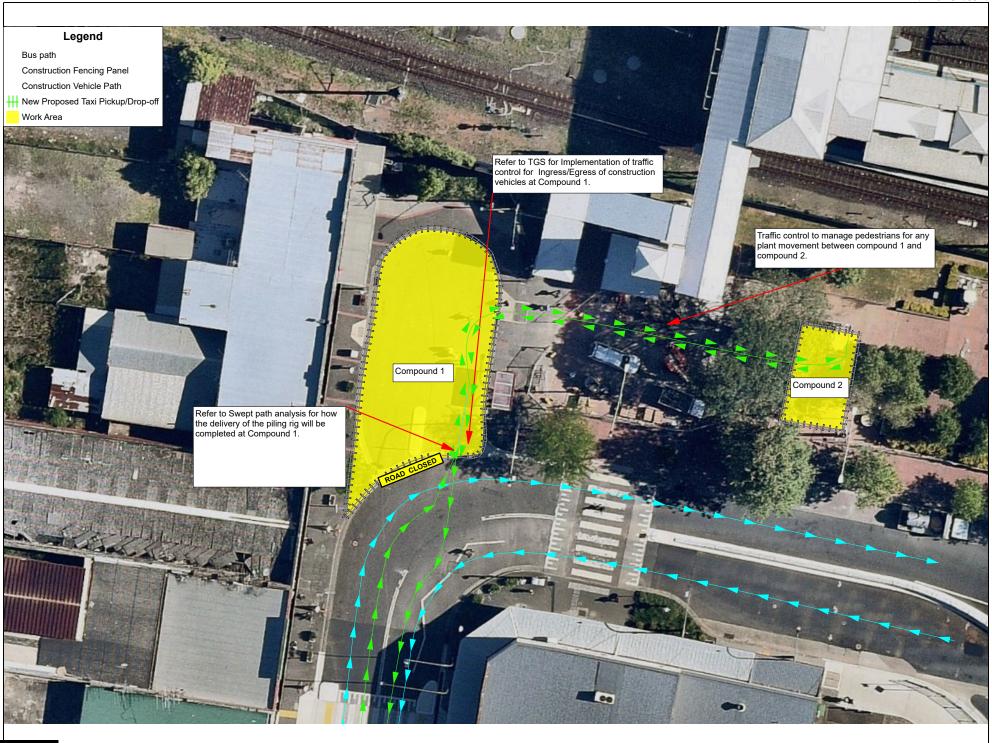


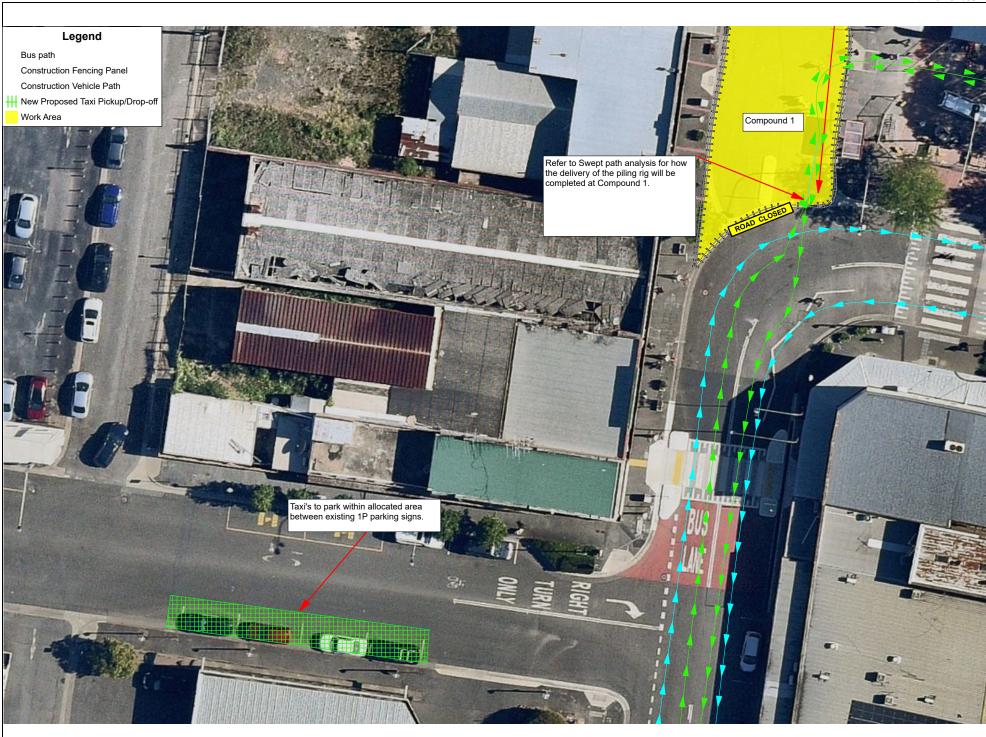




Annexure B Vehicle Management Plan for Site Ingress/Egress





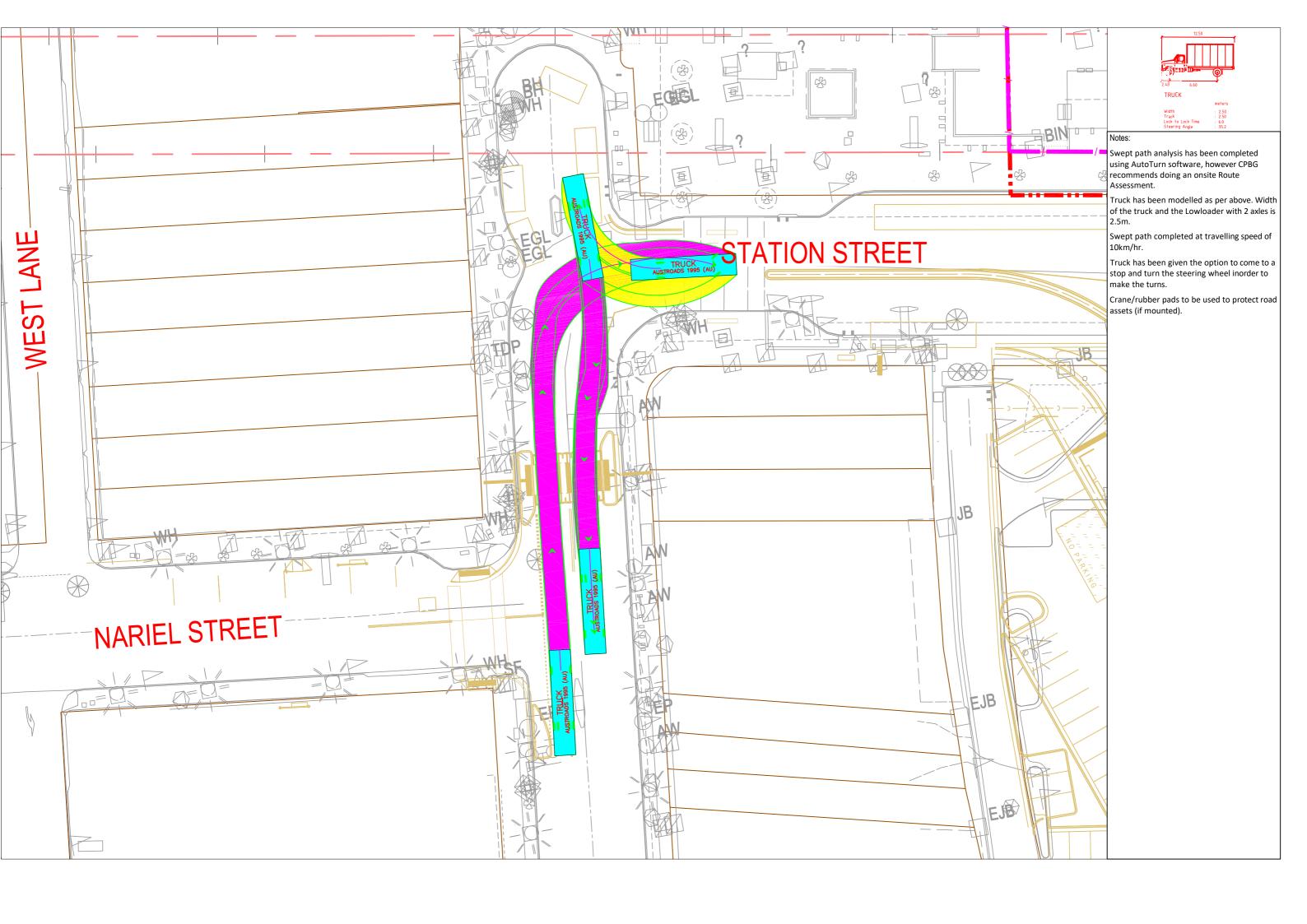






Annexure C Swept Path Analysis

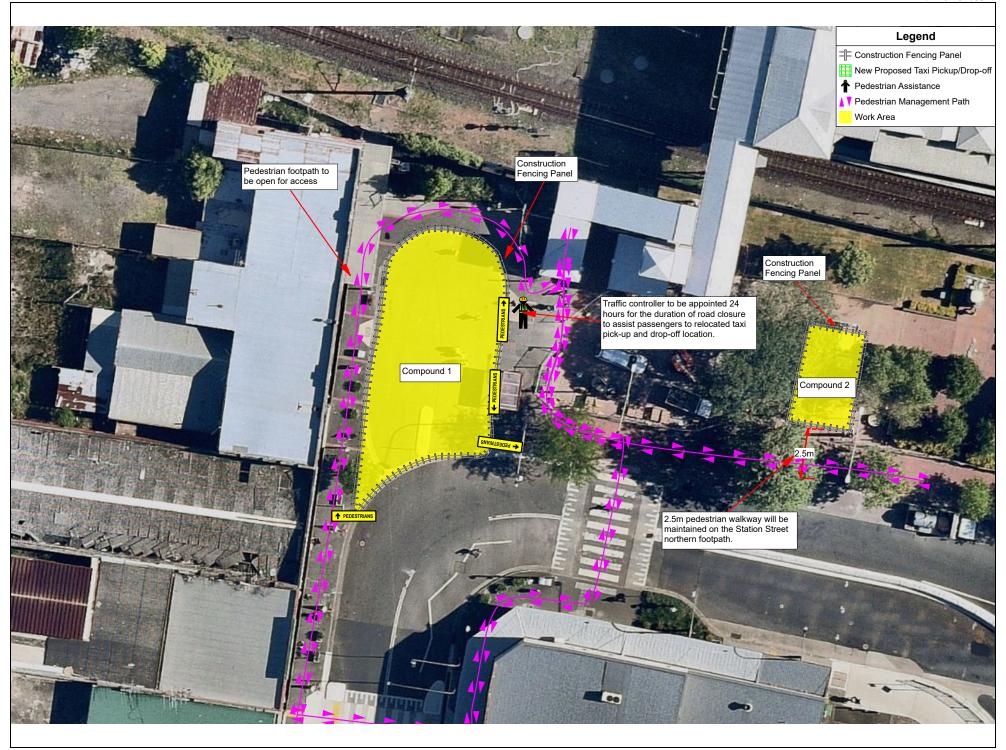






Annexure D Pedestrian Management Plan











Annexure E Review Comments





REVIEW COMMENTS SHEET



SMWSASBT-CPG-SWD-SW000-TF-PLN-000002	Sydney Metro WSA - SBT – Construction Traffic Management Plan (CTMP) Tetra Tech Coffey – Geotech Scope North	VER 01.01	NO.	17/03/2023	SMD	RAISED BY	SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	general	DEED REF*	is a possible contact at the NSW Taxi	COMMENT CATEGORY* Observation	CLOSED OUT	Int_Hst 30826	Int_Cmnt 46209	DocOrder 6
	Notui						SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	general	ctmf	Noted. Taxi Council and all relevant taxi companies including 13cabs and Premier Cabs have been notified of works.	Observation	N	30826	46209	7
			73	17/03/2023	SMD		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Appendix 5	CTMF	Appendix 5 - CTMP Addendum - perhaps acknowledge that wheelchair access is still possible between the relocated taxi rank and the existing heavy rail station and bus interchange.	Observation	N	30826	46210	8
							SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Appendix 5	CTMF	PMP has been updated to include a note to confirm wheelchair access is possible between relocated taxi pickup/dropoff location and St Mary's station/ Temporary Bus Interchange using the existing pram ramps at Nariel St/ Queen St intersection.	Observation	N	30826	46210	9
			74	17/03/2023	LCC	-	SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	SMWSASBT-CPG- SWD-SW000-TF-PLN- 000002	CTMF	A ROL is required from Council for the proposed compound at 190 Badgerys Creek.	Observation	N	30826	46219	10
							SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	SMWSASBT-CPG- SWD-SW000-TF-PLN- 000002	CTMF	Appendix 5 (CTMP addendum to cover additional boreholes at St Marys) does not have any scope on Badgery's Creek Road. The request for stakeholder review was for Appendix 5.	Observation	N	30826	46219	11
			75	28/03/2023	PCC		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Appendix 5	NA	- Taxi passengers will have to cross Nariel Street without provision of a pedestrian crossing facility Some passengers may be elderly or have mobility issues No seating facilities are provided at the proposed temporary taxi rank. For the above reasons, staff are to be on site at all times to assist passengers.	Observation	N	30826	47121	12
							SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Appendix 5	NA	Noted. PMP has been updated to include 2x Traffic Controllers: 1x TC on Queen St/ Nariel St intesection to assist pedestrians with crossing 1x Outside St Mary's Station stairs (to ensure pedestrians do not cross the entrance to the Cul-De-Sac. (Outside work hours)	Observation	N	30826	47121	13
			76	28/03/2023	PCC		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Appendix 5	NA	The taxi Council, Premier Cabs and 13Cabs are to be notified prior to implementation of the CTMP.	Observation	N	30826	47122	14
							SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Appendix 5	NA	Noted. Taxi Council and all relevant taxi companies including 13cabs and Premier Cabs have been notified of works.	Observation	N	30826	47122	15
			77	28/03/2023	PCC		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Appendix 5	NA	Pedestrian signboards (T8-2 or similar) are to be placed to direct pedestrian access around compound 1 safely. Staff are to be on site at all times to ensure pedestrians do not cross the entrance to the cul-de-sac to go to or from the station.	Observation	N	30826	47123	16
	:						SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	Appendix 5	NA	Noted. PMP has been updated to include wayfinding signage. Staff will be on site to advise pedestrians to cross at designated locations. 2x traffic controllers have been proposed in the updated PMP at the following locations: 1x Queen St /Nariel St intersection 1x Outside St Mary's Station stairs	Observation	N	30826	47123	17
			78	30/03/2023	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	General	NA	Note: CJPs review is limited to Appendix 5 only	Observation	N	30826	47425	18
							SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	General	NA	Noted.	Observation	N	30826	47425	19
			79	30/03/2023	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	3.4.1	NA	Does the table denote total truck movements over the full duration of works in each compound or are these daily movements?	Observation	N	30826	47426	20
							SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	3.4.1	NA	Table denotes truck movements for complete scope of works (full duration of works). Table has been updated.	Observation	N	30826	47426	21
			80	30/03/2023	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002 SMWSASBT-CPG-	3.5	NA	Point B indicates compound 2 only has a 3 day duration, whereas Section 3.1 indicates a 7 day duration. Which is correct? Compound 2 will be in place for 7 days. Document has	Observation	N	30826	47427	22
							SWD-SW000-TF- PLN-000002	3.5	NA	been updated. Bus movements are to be prioritised at all times and	Observation	N	30826	47427	23
			81	30/03/2023	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	4	NA	should not be affected by the stop/slow for the piling rig reverse movement, all disruptive vehicle movements should be programmed to occur outside of the bus and station peak periods.	Observation	N	30826	47428	24
							SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	4	NA	Noted. Ingress and egress of construction vehicles to be programmed outside the bus and station peak periods.	Observation	Ν	30826	47428	25
			82	30/03/2023	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	4.2	NA	Will there be movements in and out of compound 2? If so how will the pedestrians be managed and how will they access the site?	Observation	N	30826	47429	26
							SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	4.2	NA	Confirming there will be movements in and out of compound, however as noted in table 4, the volumes will be minimal and managed by on site Traffic Controller as shown in the TGS.		Ν	30826	47429	27
			83	30/03/2023	TFN		SMWSASBT-CPG- SWD-SW000-TF- PLN-000002	6.1	NA	Advanced notification to CJP comms team is required to ensure the appropriate customer boards and maps are installed prior to the implementation.		N	30826	47430	28

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SWD-SW000-TF- PLN-000002 The following are suggested: 1.) Introduce advance warning on Queen St twestbound (from TBI) to achieve advance warning on all approaches ahead of the work zone. And the truck path analysis to/from the cul-de-sac impacts bi-direction traffic. 2.) Pedestrian way-finding instruction around the compounds as part of the PMP, and mark traffic controllers on the TGS. 3.) Increase sign warning better. TCAWS 6.1 mentions the posted speed when determining Dimension D. 1)Warning signs are implemented westbound of TBI to achieve warning on all approaches. TGS has been		40
90 30/03/2023 TFN SMWSASBT-CPG-SWD-SW000-TF-PLN-000002 TGS No: 20230608 (pg.136) TGS No: 20230608 (47464 4	41
achieve warning on all approaches. TGS has been	47465 4	42
SMWSASBT-CPG-SWD-SW000-TF-PLN-000002 TGS No: 20230608 (pg.136) TGS No: 20	47465 4	43
91 30/03/2023 TFN SMWSASBT-CPG-SWD-SW000-TF-PLN-000002 Section 3.5 Section 3.5 Section 3.5 states the setup of compound 2 for 3-day and Table 3 for 7-day, need clarification.	47466 4	44
SMWSASBT-CPG- SWD-SW000-TF- PLN-000002 Compound 2 will be in place for 7 days. Document has been updated. Observation N 30826	47466 4	45
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