

Briefing Note – South Terrace road closure traffic management for lifting of the modular buildings

Line-wide Works Contract Sydney Metro City & Southwest

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Document Approval

Rev.	Date	Prepared by	Reviewed by	Recommended by	Remarks
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Signature:		18	18	Scott Brown	e

Details of Revision Amendments

Document Control

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

Amendments

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

Revision Details

Revision	Details
A	Detailing of the temporary road closure for the lifting the prefabricated modular buildings for the new Punchbowl traction substation.

Table of Contents

1.	PART A – Introduction – Punchbowl Traction Power Substation	4
	1.1. Introduction 4	
	1.2. Hour By Hour Program	7
	1.3. VMS Strategy 8	
	1.4. OSOM Route consideration	9
	1.5. Overheads and ground survey	10
2.	Traffic and Transport Management	12
	2.1. Bus Operations12	
	2.1. bus Operations 12 2.2. Local Residents / Businesses	12
	2.3. Special Event Clearway Justification	12
	2.4. Pedestrians 13	
3.	Summary of this report	
4.	Appendices	14
	4.1. TCP 14	
	4.2 Community Notification	15

1. PART A – Introduction – Punchbowl Traction Power Substation

1.1. Introduction

This report is to supplement the Bankstown to Sydenham – Traction Substations and Site Compound CTMP # SMCSWLWC-SYC-WEC-TF-PLN-004072 in regards to detailing of the site specific requirements for a temporary road closure at South Terrace for the delivery and lifting of prefabricated modular buildings and implementation of temporary special event clearway associated with the work on the weekend beginning from 5pm Friday 7 May 2022 till 9pm Sunday 8 May 2022.

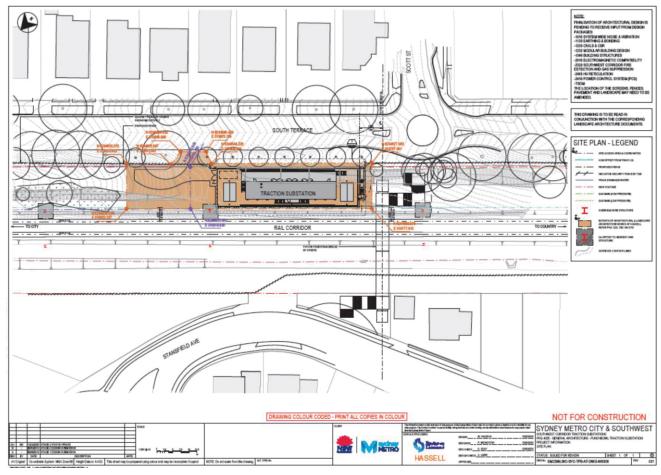


Figure 1. Plan view of the Punchbowl traction substation plan located at South Terrace near Scott Street



Figure 2. Locality plan of the Punchbowl traction power substation

The new Punchbowl traction substation is located at South Terrace near Scott Street. The traction substation serves as a powerhouse to supply power, automations and controls for the new Sydney Metro train operations. The traction substation consists of 2 each prefabricated large modular buildings that need to be transported from the fabricator from Adelaide, SA to site.

These prefabricated buildings once transported from a truck would need to be offloaded from the trucks into the site in the rail corridor. A large crane need to be setup on South Terrace in order to lift the buildings into position. The crane setup would require a temporary road closure at South Terrace between Scott Street and near Loder Lane.

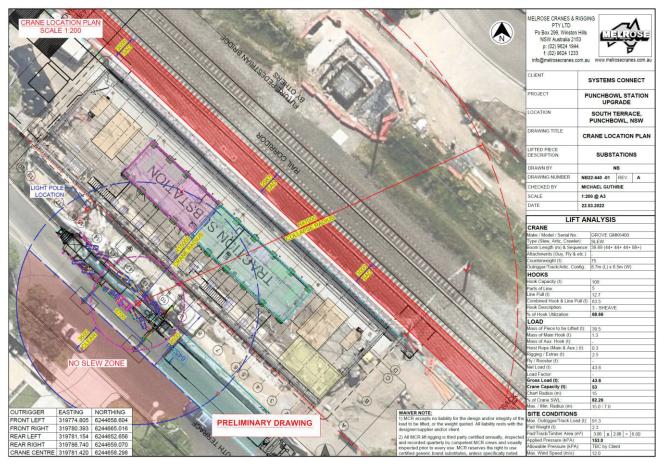


Figure 3. Lift plan showing the crane setup at South Terrace

A temporary traffic management will be put in place to manage traffic to bypass the crane work area. Various TCPs options were considered for the work. Below are the lists of considered traffic control options for

Options	Description	Pros	Cons
Option A	Traffic to detour at Loder Lane to bypass South Terrace	Simple setup without changing the intersection	Not major cons except Loder Lane is not preferred by stakeholders as the detour route
Option B (the committed option after consultation)	Traffic to use Griffiths St intersection to by pass South Terrace	(in difference)	Could be more difficult to setup and involves closing of the right turn lane. Potential longer queuing
Option C	One Way westbound through South Terrave	Traffic direction is not drastically changed	No useable lane width behing the crane.
Option D	Traffic to use Punchbowl Road – Canterbury Road – Stacey St – Fairford Road to bypass South Terrace	Bypass the whole area all together	Long detour for buses that may cause bus scheduled to be disturbed



Figure 4. Committed Option B TCP.

Traffic control plan (Option B) will be used to manage traffic around the crane work area. Summary of the works needs to implement TCP Option B are but not limited to:

- Special event clearway signs required to be installed along westbound Punchbowl Road between Griffiths Avenue and Rossmore Avenue to convert the kerbside parking lane into through lane
- Special ebent clearway signs to be installed on Griffiths Avenue on the northbound direction to provide additional space for detoured traffic to have a better flow
- TCP has stop slow capability in case Punchbowl Road traffic needs to be stopped to facilitate Griffiths Avenue traffic to enter Punchbowl Road
- An existing No Right Turn sign facing westbound Punchbowl Road traffic at Griffiths Avenue to be temporarily covered to allow the right turn movements
- Variable Message Signs (VMS) board to be deployed to key intersections to advice the road closure at South Terrace and to deter traffic from the area reduce expected congestion
- Update to Livetraffic website
- Localised area notifications of the work
- Non traffic related element outside of this document (minor tree trimmings on low hanging tree branches to have clearance to the oversized load refer to tree clearing report where applicable)

The travelling route to the Punchbowl traction power substation site as the transporter is within the locality of Punchbowl area is via King Georges Road – Punchbowl Road – South Terrace.

1.2. Hour By Hour Program

Hour by hour program to provide a context of the work is shown below.

Punchbowl Substation Program																									
Tuesday, 26 April 2022	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
Installation of Special Event sign																									
Monday, 2 May 2022	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
Deploy VMSs																									
Friday, 6 May 2022	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
Begin TCP Option B implementation																									
Saturday, 7 May 2022	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
South Terrace closed																							Contin	Contin	Continge
Crane arrives																									
Trucks arrives																									
Lift building 1																									
Lift building 2																									
Lift aux transformers																									
DEMOB																									
(contingency)																		Conting	Continge	Conting	Conting	Contin	Contin	Contin	Continge
Sunday, 8 May 2022	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	0:00
South Terrace remain closed	Continge	Conting	Contin	Conti	Contin	Contin	Conti	Conti	Conti	Conti	Contin	Conting	Contin	Contin	Conting	Contir	Conting	Conting	Continge	Conting	Conting	END			

1.3. VMS Strategy

A wider area Variable Message Sign (VMS) board to be deploy on strategic wider locations to deter Punchbowl westbound towards South Terrace. A second layer of localised VMSs placed closer Road area is also available.

Wider VMS Position	Messages 5 days prior	Message on the day			
Punchbowl Road WB at MacDonald Street	Roadwork Sth Tce near Scott St, Sat 1am to Sun 9pm, Expect Delays	Roadwork Sth Tce near Scott St; Use Alt Route			
King Georges Road NB at Roseland Avenue	Roadwork Sth Tce near Scott St, Sat 1am to Sun 9pm, Expect Delays	Roadwork Sth Tce near Scott St; Use Alt Route			
Canterbury Road EB 200m before Punchbowl Road	Roadwork Sth Tce near Scott St, Sat 1am to Sun 9pm, Expect Delays	Roadwork Sth Tce near Scott St; Use Alt Route			
Localised VMS Position	Messages 5 days prior				
Punchbowl Road westbound – approx. 400m before the Boulevarde intersection	Roadwork Sth Tce near Scott St, Sat 1am to Sun 9pm, Expect Delays	Roadwork Sth Tce near Scott St; Expect Delays			
Punchbowl Road westbound – approx. 200m before the Boulevarde intersection	Roadwork Sth Tce near Scott St, Sat 1am to Sun 9pm, Expect Delays	Roadwork Sth Tce near Scott St; Expect Delays			
Punchbowl Road westbound and Rossmore Ave intersection	Roadwork Sth Tce near Scott St, Sat 1am to Sun 9pm, Expect Delays	Roadwork Sth Tce near Scott St; Expect Delays			



Figure 5. View of VMS Positions

1.4. OSOM Route consideration

As mentioned on Section 1.1, the prefabricated buildings are transported from Adelaide, SA to site. Routes study for the best combination of routes is summarised below. There route were planned since June 2021.

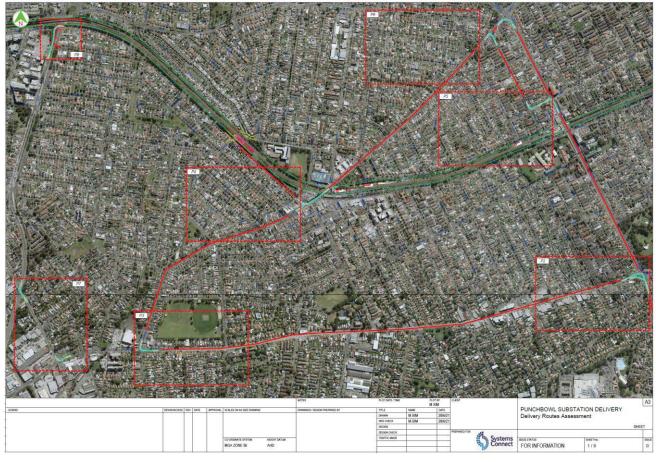
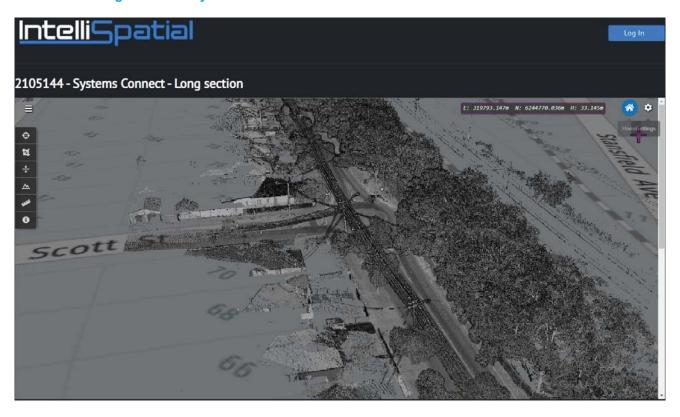


Figure 6. 3 routes considered to travel from the M5 to the site

Route Option	Pros	Cons	Weighting
Option A – King Georges Road – Punchbowl Road – South Terrace (the committed route)	Simple and direct route	(indifference)	4/5
Option B – King Georges Road – Canterbury Road – Punchbowl Road – South Terrace	(indifference)	Right turn into Punchbowl Road is difficult. Kerb side parking at Punchbowl Road from this side could pose a risk	3/5
Option C – King Georges Road – Canterbury Road – Stacey Street – Fairford Road – South Terrace	None.	Low overhear near Carnation Avenue and low overpass above South Terrace	0/5
Option D – Fairford Road – Canterbury Road – Punchbow Road	Similar to Option A just from opposite direction into Punchbowl Road.	Kerb side parking at Punchbowl Road from this side could pose a risk. A lot more oveheads from visual inspection	3/5

1.5. Overheads and ground survey





All overhead obstacles were factored on the route survey and overall operations. 3D interactive report/BIM used for detailed planning of the works.

Full height report avaible upon request (files too large to be attached).



Figure 7. Survey setout to check crane outrigger position to determine constructibility

2. Traffic and Transport Management

2.1. Bus Operations

Transport for New South Wales (State Transit Authority) has been consulted regarding the work. They have reviewed all the TCP options and have provided the best outcome for all with their input in terms of bus management. The review process has begun in March 2022. STA will advise the local operators.

2.2. Local Residents / Businesses

Immediate residents/businesses within the work area will be consulted in person and any of their special needs are to be considered (at the time of the report, residents have not been approached yet). Residents where the crane is directly outside of their property will be doorknocked and advised to park close by but elsewhere for the duration of the work. Property # 64, # 66 and # 68 are directly next to the crane.

Possible and likely scenarios are:

- Special arrangement to allow locals to return to their home/business place by going through Loder Lane.
- A list of regos available to the traffic controller on site to let only local residents through up to the crane lifting radius.
- We are required to notify the community at a minimum 5 business days before work commences, ideally 10 business days before work commences, subject to Sydney Metro approvals
- We are required to notify the community within a 200m radius of the site impacted, this includes local road routes where oversized vehicles travel and temporary parking take out is required
- Notifications are distributed via letterbox drops, usually using a third party distributor
- Where the impact would be immediate, in this case closing the road outside of residential properties, these residences will be doorknocked and engaged with before and/or after the notification is sent
- In the event respite is required, determined by noise monitoring, we will send out respite letters to affected properties / residences
- The businesses within the 200m radius will be contacted separately

Business in the area – the day care located on the Scott Street side is not directly impacted however as per standard procedures, this particular business will be advised.

Another business located along South Terrace will be similarly consulted per standard procedure of their movement or any specific requests.

Only residents and businesses between Scott Street and Punchbowl Road will be doorknocked along South Terrace.

Parking takeout within the closed section of South Terrace does not require additional clearway signs nor no parking signs. A few parked cars within the closed section at South Terrace is not going to compromise the overall operations. A clearway sign is not necessary for installation at South Terrace will it will add anxiety/stress to the locals.

Community engagement is dynamic and this report could not provide full details until the community engagement has begun approx 5 days prior to the work.

2.3. Special Event Clearway Justification

Special event clearway operation is required to effectively convert Punchbowl Road westbound Lane 1 between Griffiths Avenue and Rossmore Avenue into a through lane and Lane 2 as a decidated right turn lane for suit TCP Option B.

Addtional special event clearway at Griffiths Avenue northbound between Scott St and Punchbowl Road is to ensure a more free flowing traffic take the detour route. Griffiths Avenue southbound does not require to be a special event clearway to provide a relief to residents on the northbound direction to park their vehicles except for a 50m section towards Punchbowl Road.

Special event clearway is also required along Scott Street between South Terrace and Griffiths Avenue to ensure a smoother flow for detoured traffic.

The special event clearway is proposed to operate from Friday 6 May 2022 from 5pm till 9pm Sunday 8 May 2022 continuously.

Without the special event clearway, any parked cars on Lane 1 Punchbowl Road between Griffiths Avenue and Rossmore Avenue will be blocking the lane. Refer to Appendix A for the extend of the special event clearway zone.

2.4. Pedestrians

Pedestrians are not impacted from the work as no footpaths are closed. Pedestrians may be put on a temporary hold in the event during the crane lift which is quite unlikely as the work area will be fenced off and will have spotters or security. Pedestrians movement are random and it is best to deal with the pedestrian needs as pedestrians is on approach.

3. Summary of this report

Work is necessary for timely delivery of the project. The road closure is short term and all possible avenues have been explored for the best outcome for all. Aiming to complete the work by Saturday 9pm.

4. Appendices

4.1. TCP





4.2. Community Notification



City & Southwest

Project update - Punchbowl substation lift DRAFT FOR TRAFFIC COMMITTEE REVIEW

March 2022

Sydney Metro is Australia's biggest public transport project.

Services started in May 2019 in the city's north west with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new CBD metro railway stations underground at Martin Place, Pitt Street, Barangaroo, and new metro platforms at Central Station. In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre.

Systems Connect (an unincorporated joint venture between CPB Contractors and UGL Limited) is delivering line-wide work including installing metro rail track, power systems and infrastructure to turn the excavated tunnels into a working railway between Chatswood and Sydenham. Line-wide work also includes the permanent systems, services and buildings required for Sydney Metro operations between Chatswood and Bankstown.

Lifting the Punchbowl substation modular buildings into place

Systems Connect continues to install the new substation on South Terrace, Punchbowl. We will lift two substation modular buildings, built offsite, into place using a crane assembled onsite, delivering the buildings on heavy vehicles, lifting the buildings into place, and dismantling the crane.

We will do this from 10pm Friday 6 May until 10pm Sunday 8 May 2022. (To be confirmed)

Temporary traffic changes and parking restrictions

To do this work safely, we need to temporarily close a section of South Terrace between the roundabout at Scott Street and number 54 South Terrace.

Traffic and bus diversions will be in place and local residents will have limited access to the closed road at certain times of the day. We will separately contact directly impacted residents and provide respite to those affected. More information on traffic changes is included on the map over the page, which also shows the detour in place, and the oversized vehicle route along South Terrace from Punchbowl Road.

We also need to make temporary changes to street signage on South Terrace to allow the oversized vehicles enough room to move into place safely. These changes will take place on **XXX**. The street signs will be reinstalled after the work is completed.

Delivering the buildings and the substation lift will occur **outside of standard construction hours** between XXX May 2022. Some of this work will be noisy and we will do everything we can to reduce impact.

Further details to be confirmed.

Substation lift at Punchbowl 10pm Friday 6 May until 10pm Sunday 8 May 2022 (to be confirmed)								
Location	Detail							
On South Terrace next to the Scott Street intersection	Work activities include but not limited to: To be confirmed							

This work is subject to obtaining relevant approvals before going ahead.

What to expect

We will use the following machinery: a large crane, a pick and carry crane with semi trailers, an elevated work platform, two oversized low loader trucks, support trucks for the crane, lighting towers and construction vehicles.

Further details to be confirmed

Map of the work area including oversized vehicle route

To be developed

Potential work delays

Our work has been subject to delays for reasons outside of our control. As a result of industrial action at Sydney Trains, a range of works planned along the Bankstown Line that required power isolation have been postponed. These works will be rescheduled for a future rail shutdown. This substation installation is subject to the same circumstances and it is possible we may need to postpone this work.

Keeping you informed

To keep up to date about the substations and power cable work, please register for email updates. Send your details to LinewideMetro@transport.nsw.gov.au, or call us on **1800 171 386**. Thank you for your cooperation while we complete this essential work.





Sydney Metro City & Southwest, PO Box K659, Haymarket NSW 1240

If you need an interpreter, contact TIS National on 131 450 and ask them to call 1800 171 386