



AGENDA

A **MEETING** of the **Traffic Committee** will be held at the Council Chambers, 200 Miller Street, North Sydney at 10:00 AM on Friday 22 April 2022.
The agenda is as follows.

Ken Gouldthorp
GENERAL MANAGER



North Sydney Council is an Open Government Council. The records of Council are available for public viewing in accordance with this policy, with the only exception being made for certain confidential documents such as legal advice, matters required by legislation not to be divulged, and staff matters.

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1. Confirmation of Minutes

The Minutes of the previous meeting held on 4 February 2022, copies of which had been previously circulated, were taken as read and confirmed.

2. Disclosures of Interest

Nil.

3. Matters Arising from the Minutes

Nil.

4. Matters Arising from Council Resolutions

Nil.

5. Items for Consideration

5.1. Traffic Delegations

AUTHOR: Tram Nguyen, Parking Facilities Operations Officer

ENDORSED BY: Duncan Mitchell, Director Engineering and Property Services

ATTACHMENTS:

1. Attachment Delegations of Authority [5.1.1 - 2 pages]

PURPOSE:

To report to the Committee matters given approval under delegated authority to the Traffic & Transport Operations Manager.

EXECUTIVE SUMMARY:

Attached is a list of projects given approval under delegated authority to the Traffic & Transport Operations Manager. Approval was given subject to concurrence of Transport for NSW, the NSW Police and the local State Members.

FINANCIAL IMPLICATIONS:

There are no direct financial implications arising from this report.

RECOMMENDATION:

1. **THAT** the information regarding Delegated Authority items be received.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

- 2. Our Built Infrastructure
 - 2.1 Infrastructure and assets meet community needs
 - 2.4 Improved traffic and parking management
- 3. Our Future Planning
 - 3.5 North Sydney is regulatory compliant

CONSULTATION REQUIREMENTS

Community engagement is not required.

**APPROVAL FOR PROJECTS UNDER
DELEGATED AUTHORITY TO THE TRAFFIC & TRANSPORT OPERATIONS MANAGER
546th TRAFFIC COMMITTEE – 22 April 2022**

No.	Street	Location	Precinct, Ward, Electorate	Issue	Recommendation	Appr	Date	ECM	Comments
Resident Parking									
Nil									
Temporary Road Closures									
Nil									
Special Use Zones									
22-015	Willoughby Lane, Crows Nest	Between Burlington St and Falcon St	Holtermann, St Leonards, Willoughby	Loading zone modification	Council relocate the existing signages on the eastern side of Willoughby Lane near Burlington Street, 2.3 metres south from the existing position	Yes	9/03/2022	8810673	
Regulatory Signs									
Nil									
Signs Across Driveways									
Nil									
Warning Signs									
Nil									
Construction Management Plan									
22-018	12-14 Waters Road, Cremorne	Between Grosvenor St and Grosvenor Lane	Parks, St Leonards, Willoughby	CTMP	<p>1. THAT Council approve the traffic aspects of the Construction Traffic Management Plan dated 2 March 2022 prepared by Arup Pty Ltd for the approved development (92/21) at 12-14 Waters Road, Neutral Bay subject to the conditions of approval.</p> <p>2. THAT the Work Zone on Waters Road and Grosvenor Street as described in this CTMP is approved under delegated authority of Council's Traffic Engineer, with the same conditions pending lodgement of a Work Zone application and payment of all applicable fees.</p>	Yes	18/03/2022 with conditions	8824555	Approved with conditions from TfNSW

No.	Street	Location	Precinct, Ward, Electorate	Issue	Recommendation	Appr	Date	ECM	Comments
22-020	2-4 Winnie Street, Cremorne	Between Parraween St and Military Rd	Brightmore, St Leonards, Willoughby	CTMP	1. THAT Council approve the traffic aspects of the Construction Traffic Management Plan dated March 2022 prepared by Traffix Traffic & Transport Planner for the approved development (381/19) at 2-4 Winnie Street, Cremorne subject to the conditions of approval. 2. THAT the Work Zone on Winnie Street as described in this CTMP is approved under delegated authority of Council's Traffic Engineer, with the same conditions pending lodgement of a Work Zone application and payment of all applicable fees.	Yes	24/03/2022 – with conditions	8832073	Approved with conditions from TfNSW
Australian Road Rules Compliance Signs									
Nil									
Traffic Facilities									
22-021	Morton Street, Wollstonecraft	At the intersection with Rocklands Road	Wollstonecraft, St Leonards, North Shore	Raised pedestrian crossing upgrade	THAT Council upgrades the existing pedestrian crossing at the intersection of Morton Street and Rocklands Street, Wollstonecraft to a raised pedestrian crossing with kerb extensions on both sides.	Yes	22/03/2022	8834848	
Council Decisions									
Nil									

5.2. Sydney Metro Victoria Cross North

AUTHOR: Iman Mohammadi , Public Projects Engineering Officer

ENDORSED BY: Duncan Mitchell, Director Engineering and Property Services

ATTACHMENTS:

1. 5.2 Attach Cross Station - Metro WAD Package 01 - Technical Note 01 [5.2.1 - 31 pages]
2. 5.2 Attach McLaren - Miller Concept Design [5.2.2 - 1 page]
3. 5.2 Attach Victoria Cross IAP - Kerbside Usage Concept [5.2.3 - 1 page]

PURPOSE:

The purpose of this report is to update and seek endorsement from the North Sydney Traffic Committee on the Victoria Cross Interchange Access Plan traffic and parking arrangements for Victoria Cross North station portal at the intersection of Miller Street and McLaren Street, North Sydney that affect local roads and existing parking arrangements.

Updates are also provided on the Sydney Metro website at <https://www.sydneymetro.info/>

EXECUTIVE SUMMARY:

Consent for the Metro City & South-West (Metro) project was granted by the Department of Planning and Environment on 9 January 2017. The consent can be viewed in full at www.majorprojects.planning.nsw.gov.au.

The project will deliver new railway infrastructure for Sydney, including two new Metro stations within the North Sydney Local Government Area - at Crows Nest and Victoria Cross (North Sydney Centre). Construction commenced in early 2017, with train operations expected to be underway by 2024.

As part of the project planning condition (E92), Sydney Metro must develop an Interchange Access Plan for each station to inform the final design of transport and access facilities and services, including footpaths, cycleways, passenger facilities, parking, traffic and road changes, and integration of public domain and transport initiatives around and at each station.

The Victoria Cross Interchange Access Plan is under development and is expected to be finalised in late June 2022, subject to approval from Department of Planning and Environment (DPE).

In accordance with the various conditions of consent, Sydney Metro and North Sydney Council worked collaboratively over the past year to provide facilities and services for the Victoria Cross North station portal at the corner of Miller Street and McLaren Street, North Sydney.

These facilities and services will be operational upon 'day one' of train operations. The changes involve kerb side parking changes on McLaren Street and crossing widenings at Miller Street and McLaren Street intersection (subject to Transport for NSW approval) to cater for Customer access and demand.

As part of these facility and services changes, Sydney Metro and North Sydney Council will review capacity and operation of kiss-and-ride (and taxi) spaces 12 months after metro opening to ensure the capacity accommodates demand.

It is expected Sydney Metro will begin works relating to these changes in early 2023 (TBC), further consultation will be provided to Stakeholders and the Community closer to the anticipated start date.

FINANCIAL IMPLICATIONS:

There are no direct financial implications arising from this report.

RECOMMENDATION:

- 1.THAT** the information concerning Sydney Metro City & South-West Victoria Cross North station portal Interchange Access Plan be received and endorsed.
- 2.THAT** the location and design of the bus shelter is subject to further detailed design review and will be presented to Council for further consideration.
- 3.THAT** Council monitors and reviews the usage of the new bus stops and the existing bus stops between Ridge Street and Berry Street after 12 months from implementation.
- 4.THAT** Council monitor and review usage of the Taxi Rank and Disabled Parking space after 12 months implementation to verify that they meet their intended objectives, and the parking is being utilised in the most effective way.
- 5.THAT** Council's Tree Management team do not support any plans that will have an impact on the significant Trees in particular the Plane Trees on Miller or Maclaren streets. It would be expected that any designs take into account the retention of all Trees.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

- 2. Our Built Infrastructure
 - 2.1 Infrastructure and assets meet community needs
 - 2.3 Sustainable transport is encouraged
 - 2.4 Improved traffic and parking management

- 5. Our Civic Leadership
 - 5.2 Council is well governed and customer focused
 - 5.3 Community is informed and consulted

BACKGROUND

Consent for the Metro City & South-West (Metro) project was granted by the Department of Planning and Environment on 9 January 2017. The consent can be viewed in full at www.majorprojects.planning.nsw.gov.au.

The project will deliver new railway infrastructure for Sydney, including two new Metro stations within the North Sydney Local Government Area, at Crows Nest and Victoria Cross (North Sydney Centre). Construction commenced in early 2017, with train operations expected to be underway by 2024.

CONSULTATION REQUIREMENTS

Community engagement will be undertaken in accordance with Council's Community Engagement Protocol.

Relates to ECM No: 8844952

Standard or Guideline Used: AS1742.2, 2890.5, Bus Infrastructure Guidelines

Signs & Lines Priority: 2

Precinct and Ward: Stanton Precinct, Cammeraygal

Impact on Bicycles: Bicycle access is improved under the proposed works

Impact on Pedestrians: Pedestrian's access is improved under the proposed works

Impact on Parking: The proposal will result in loss of 21 parking spaces in McLaren Street and Miller Street



Victoria Cross Station WAD Package 01 – Marked Foot Crossing Changes at Miller Street / McLaren Street, North Sydney

WAD Package TECHNICAL NOTE

Project:	Sydney Metro City and Southwest	Date:	22/03/2022
Group:	Metro Operations, Customer & Placemaking	Status:	Draft
Author:	P Brogan, N Hutapea	Revision:	6
Company:	Sydney Metro	File number:	N/A
File name:	Victoria Cross Station - Metro WAD Package 01 - Technical Note 01		

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Revision	Revision date	Status	Brief reason for update	Name/ position/ company	Author/ Reviewer/ Approver	Signature
0	20/03/2019	Draft	Draft report	C McGeoch	Traffic Advisor, Transport Planning	
1	04/04/2019	Draft	Update report	P Brogan	Traffic Advisor, Transport Planning	
2	31/05/2019	Draft Final	Sidra inputs	P Brogan	Traffic Advisor, Transport Planning	
3	27/06/2019	Draft Final	Insert placemaking vision section 1.2	P Brogan	Traffic Advisor, Transport Planning	
4	20/09/2019	Draft Final	Update analysis to reflect marked foot crossing mods only	P Brogan	Program Mgr, Transport Planning	
5	22/03/2022	Draft Final	Update on marked foot crossing width	N Hutapea	Manager Network Modelling Advisory	
6	22/03/2022	Draft Final	Review Technical Note	G Hitchcox	Senior Manager, Transport Planning	

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Executive Summary Table

Item	WAD Package Assessment Summary	TfNSW Response
1.WAD Package No	Victoria Cross Station WAD Package 01 – signalised pedestrian crossing enhancement at Miller Street / McLaren Street, North Sydney.	
1.1 Consultation	North Sydney Council and the Transport Cluster (including the former RMS) have been consulted through the Victoria Cross Interchange Access Plan process. The previously proposed changes to the marked foot crossings received in principle endorsement from the TfNSW Planning and Program (former RMS) by way of email dated 9 October 2019. The proposed changes to the marked foot crossing on this technical note are consistent with the most recent negotiation with TfNSW Planning and Program as of August 2021.	
2.WAD Package Description	Widening of the marked foot crossings on all approaches at the intersection of Miller Street and McLaren Street, North Sydney. The works will involve pavement line marking removal and re painting, kerb ramp modifications and traffic signal post and lantern relocations that may be needed at the intersection, subject to detailed design.	
3.Rationale	The works are required to better accommodate the safe and efficient movement of all customers. Customer accessibility, safety & crossing capacity benefit through the provision of greater separation of pedestrians and vehicles at the signalised crossing. This simplifies intersection operations, provides more direct efficient access for high volumes of pedestrians and provides for the access needs of school children. The works will also increase crossing capacity in response to forecast increased pedestrian demands.	
4.TfNSW (former RMS) Warrants	See below.	
5.Meeting TfNSW KPI's	See below.	

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5.1 Traffic & Pedestrian Demands	<p>Miller Street (b/w McLaren and Berry St), both directions combined:</p> <ul style="list-style-type: none"> • AM 1,100 veh/h • PM 945 veh/hr (2018). <p>McLaren Street (b/w Pacific Hwy & Miller St), both directions combined (2018):</p> <ul style="list-style-type: none"> • AM 605 veh/hr • PM 505 veh/hr. 	
5.2 Network Efficiency	Sidra intersection analysis has been undertaken by Sydney Metro and is reported below.	
5.3 Pedestrian Safety	The works will provide greater separation between pedestrian and vehicle movement and through these measures will reduce the risk of conflict at the intersection.	
5.4 Intersection Operation	Sidra intersection analysis has been undertaken by Sydney Metro and reported in Sections 5.2 and 5.4.	
5.5 Crashes	One crash at the Miller St / McLaren St intersection in the period year 2016 to year 2020.	
5.6 Regulatory Signage	No changes will be required to regulatory signs at the intersection. Traffic signal pole relocation will be required.	
6. Conclusions	The works are required to enhance pedestrian accessibility, road safety & throughput capacity at the intersection. The works will not adversely impact traffic flow efficiency.	

1. WAD Package Proposal

The works involve the following:

- Widening the marked foot crossings on all approaches to the Miller Street and McLaren Street intersection.
- Other possible works listed below.

Figure 1 shows the indicative layout for the Victoria Cross Metro Station north site and the Miller Street / McLaren Street intersection.

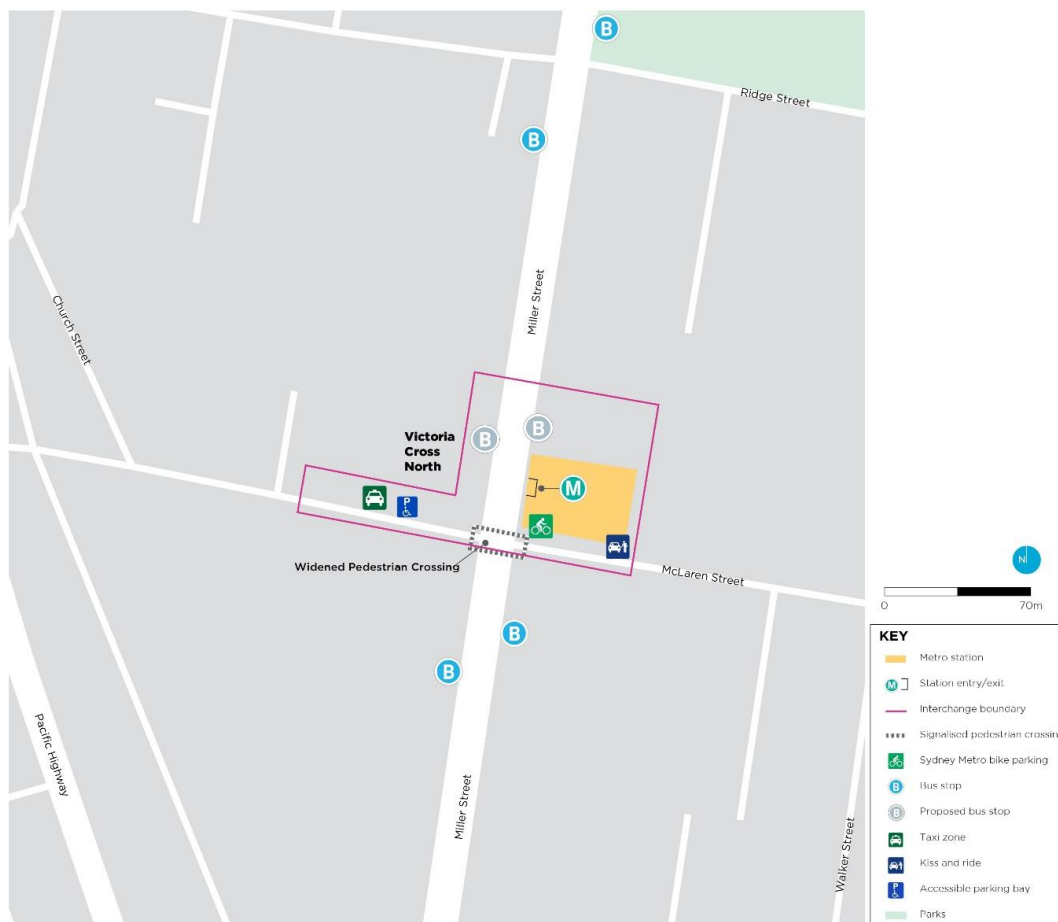


Figure 1. Victoria Cross Station (North) indicative layout

The widening of the marked foot crossings at the Miller Street and McLaren Street intersection are required to enhance pedestrian accessibility, road safety & throughput capacity in response to forecast growth in pedestrian activity through the intersection of Miller Street and McLaren Street. The following works are proposed:

- Pavement line marking removal and re-painting.
- Traffic signal post and lantern relocations that may be needed at the intersection, subject to detailed design.
- Kerb ramp modifications, subject to detailed design.

The works will exclude the following:

- Tree removal and/or replanting
- Light pole adjustments or relocation
- Signage changes and/or pole relocations
- Controller and CCTV upgrades.
- Detector removal and/or relocations
- Utilities adjustments and relocations

A concept sketch of the modified marked foot crossings proposal is shown at **Appendix A**.

The works are not required to facilitate Metro construction and are end state related.

1.1. Consultation

Consultation has occurred with TfNSW Greater Sydney and North Sydney Council and other agencies in the context of the Interchange Access Plan process. The previously proposed changes to the marked foot crossings received in principle endorsement from the TfNSW Planning and Program (former RMS) by way of email dated 9 October 2019. The proposed changes to the marked foot crossing on this technical note are consistent with the most recent negotiation with TfNSW Planning and Program as of August 2021.

1.2. North Sydney CBD Place Making Vision

The Transport Cluster is currently working with the Greater Sydney Commission, NSW Government Architect Office and North Sydney Council to develop the preferred place making vision for North Sydney CBD. The vision will guide transport planning and investment in the North Sydney CBD – and interconnected areas – over the next 20 years and beyond. The vision will support and facilitate the outcomes envisaged by the Greater Sydney Region Plan and Future Transport 2056. The delivery of the vision is cognisant of two major projects within the locality, these being the Sydney Metro City and South West and Western Harbour Tunnel Beaches Link (WHTBL) projects.

The vision will address the strategic multi-modal (physical and operational) changes required to enable the precinct to grow and support its role as part of the Eastern Harbour City. The vision includes a staged approach to the possible closure of Miller Street between Berry Street and the Pacific Highway to general traffic. The staged approach may include the initial introduction of selected turn bans at the Berry Street and Pacific Highway intersections and enhancements to pedestrian crossing facilities and controls. This may be followed by partial closures, initially narrowing of the road carriageway, then the introduction of bus only access, and ultimately its full closure to all traffic at some point following the commencement of Metro operations in 2024.

TfNSW will also further investigate improved pedestrian amenity and safety, improved access for cyclists to and through the CBD, convenient interchanges between bus and rail services, and management of kerbside access to support business activity across the day, including night-time activation.

The WAD works proposed in this technical note represent and enable an initial staged approach in the delivery of this longer-term vision for the North Sydney CBD. The WAD works, once approved, are designed to complement and not to preclude the delivery of other works required in the staged delivery of the longer-term vision.

Sydney Metro

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Sydney Metro and its contractors will continue to collaborate with Transport for NSW, North Sydney Council and other stakeholders to facilitate planned growth and the delivery of an integrated transport solution for North Sydney.

2. Rationale

The works are required to better accommodate the safe and efficient movement of all customers. Figure 2 shows the existing marked pedestrian crossings at the intersection of Miller Street and McLaren Street.



Figure 2 - Looking south at the existing marked foot crossings at the Miller Street / McLaren Street intersection (Google Maps).

The WAD package works are required for the following reasons:

1. Accessibility – pedestrian movement across Miller Street and also McLaren Street will increase over time with the introduction of the Victoria Cross Metro Station and as a consequence of planned growth in the North Sydney CBD. The works will facilitate improved access to and from the Metro station and serve general existing and forecast CBD pedestrian movement.
2. Safety – The works will provide greater separation between pedestrian and vehicle movement and through these measures will reduce the risk of conflict at the intersection.
3. Capacity - The works will increase capacity at the intersection by increasing the spatial throughout capacity for pedestrians while reducing delay resulting from conflict.

The works require delivery via the Works Authorisation Deed (WAD) because they will impact traffic signal layout and infrastructure at the Miller Street / McLaren Street intersection.

3. TfNSW (former RMS) Warrants

A proposal to widen an existing marked foot crossing at a signalised intersection does not require assessment against the TfNSW (former RMS) warrants. Section 6.3 of the (former RMS) Traffic Signal Design document states that “*the standard width of a marked foot crossing at an intersection is 3.6 metres measured to the outside edge of the dashed paint lines. However, where large flows of pedestrians use the crossing (more than two ranks per cycle in either direction during peak periods) or large numbers of pedestrians arrive in platoons (eg: near railway stations or schools), wider crossings may be used. Wider crossings should be 4.5m, 6m or 10 m in width shown on the design layout.*”

The forecast Victoria Cross Metro station patronage demands documented in the 2017 EIS Victoria Cross and Artarmon Substation Modification report for the northern entrance are as follows:

- AM period passenger entries: 1,050 ped/hr (2036)
- AM period passenger exits: 1,250 ped/hr (2036)

Estimates of 2036 Metro related additional pedestrian demands via the Miller Street / McLaren Street and Miller Street / Berry Street intersections have been prepared on the basis of the Sydney Metro (Metron 2056 demand) percentage distributions shown at **Appendix B**. A sensitivity test higher range has also been assumed in each case. This provides estimates of pedestrian crossings at key intersections shown in Table 1.

Table 1- Estimated pedestrian crossing flows at Miller Street / McLaren Street, 2036 AM peak hour

Location	Estimated crossing flow
Miller St / McLaren St (northern crossing of Miller St)	1,200-1,500 ped/hr
Miller St / McLaren St (eastern crossing of McLaren St)	2,500-3,000 ped/hr
Miller St / McLaren St (southern crossing of Miller St)	600-1,200 ped/hr
Miller St / McLaren St (western crossing of McLaren St)	600-1,200 ped/hr

4. Key WAD assumptions

The key assumptions for Victoria Cross WAD Package 01 are as follows:

1. The northern (Miller Street) marked foot crossing is 2.8 metres wide and is proposed to be widened to 4.5 metres.
2. The eastern (McLaren Street) marked foot crossing is 4.5 metres wide and is proposed to be widened to 5.0 metres. Sydney Metro previously proposed to widen this marked foot crossing to 6.0 metres. However, it would require tree removal to facilitate the traffic light pole relocation. North Sydney Council (NCS) advised that the tree removal is not in line with the leafy tree strategy for North Sydney. Therefore, the marked foot crossing is proposed to be widened to 5.0 metres.
3. The southern (Miller Street) marked foot crossing is 3.3 metres wide and is proposed to be widened to 4.5 metres.
4. The western (McLaren Street) marked foot crossing is 3.0 metres wide and is proposed to be widened to 3.6 metres.
5. Signal cycle and phase times at the intersection will continue to be linked with adjacent intersections under control of SCATS.
6. The existing footpath and kerb extents at the intersection will be modified. Kerb ramp modifications will be required.
7. SCATS linking of signal times for the intersection to the proposed signalised mid-block pedestrian crossing across Miller Street to the south of the Miller Street / Berry Street intersection is yet to be defined.
8. The extent of post and lantern relocations that may be needed to facilitate the works will be subject to detailed design.
9. The works will not require telephone pole relocations but may require controller and CCTV modifications.
10. It is anticipated that the changes will occur immediately prior to Metro Station opening in 2024. The changes will remain in place post 2024.
11. Clearways apply northbound along Miller Street between 3:00 – 7:00pm. Clearways apply southbound along Miller Street between 6:00am – 10:00am. Short term parking is permitted in the kerbside lanes outside these times.

The key assumptions adopted in the Sidra analysis (which apply to all Victoria Cross WAD packages) are as follows:

12. The SIDRA network study area developed for the technical appraisal is consistent with and covers the intersections of:
 - Pacific Highway / Berry Street
 - Berry Street / Miller Street
 - McLaren Street / Miller Street
 - Miller Street / (proposed) mid-block crossing. It is noted that Sydney Metro is currently reviewing the proposed provision of mid-block crossing along Miller St. The outcome will be provided in Victoria Cross Station – Metro Package 03 – Technical Note 1.
13. Network traffic peaks hours are AM (8:00-9:00) and PM (17:00-18:00).
 - a. Volumes of the intersections of Pacific Highway/Berry Street, Berry Street / Miller Street and Miller Street / McLaren Street were reviewed to identify the peak hour from surveys undertaken in 2018.

- b. Northbound and southbound traffic volumes at the Miller Street mid-block crossing location were estimated based on the traffic counts at the Miller Street / Berry Street intersection.
14. Growth in the network was estimated based on SCATS detector loop count data collected for May 2015 period and May 2018 period at the Pacific Highway / Berry Street, Berry Street / Miller Street and Miller Street / McLaren Street intersections.
 - a. The annual traffic growth rates were approximately -2.8 per cent (negative) for AM peak and 1.0 per cent (positive) for PM peak hour. An average growth of 0.5% per annum was applied to PM peak hour volumes to extrapolate the traffic volumes to assess the 2036 scenarios. No growth rate was applied to the AM peak hour volumes.
15. According to SCATS signal data, signalised intersections of the Pacific Highway / Berry Street, Berry Street / Miller Street are currently operating with an average cycle time between 110 and 120 seconds during the AM and PM peak. Miller Street / McLaren Street intersection is currently operating at 80 seconds cycle time. It was advised that all sites mentioned above are linked to the intersection of Pacific Highway / Miller Street (TCS 630) as a subsystem which has a maximum cycle time of 120 seconds. Therefore a 120 seconds cycle time was adopted for all future scenarios.
16. Mid-block crossing is assumed to be coordinated with the Miller Street / Berry Street intersection (TCS 874) at an offset time calculated in SIDRA.
17. The mid-block crossing is assumed to operate with a 'double cycle' (i.e. introduced twice during the nominal cycle time of the road network). Phase time given for the pedestrian phase is 19 to 22 seconds to provide (a minimum of 13 seconds green time and 6 seconds clearance time).
18. Pedestrian volumes at the proposed mid-block pedestrian crossing in Miller Street are estimated at 770 ped/hr and 700 ped/hr for the AM and PM peak periods, respectively.
19. For the purpose of assessing the impact of the additional marked foot crossing width at the Miller Street / Berry Street intersection (eastern approach), the Berry Street eastbound traffic inter-green time was assumed to be increased by 1 second. This was to take account of the increased crossing distance between the departure stop line to the furthest point of conflict with pedestrians in the next signal phase.

5. Meeting the TfNSW KPI's

Section 5 demonstrates how the WAD package meets the TfNSW KPI's of safety and traffic flow efficiency. This has been done with reference to the following criteria:

- Traffic and pedestrian demand
- Network efficiency
- Pedestrian safety
- Intersection operation
- Crashes
- Regulatory signage

Each of these is discussed in the sections below.

5.1. Traffic and Pedestrian Demand

Traffic count data for local streets in North Sydney are presented in the 2016 Sydney Metro City and Southwest Chatswood to Sydenham Environmental Impact Statement (EIS). In 2015, peak period vehicle flows were as shown in Table 2.

Table 2 - Peak hour traffic volumes, veh/hr 2015

Location	AM	PM
Miller Street (between McLaren & Berry Sts) southbound	630	530
Miller Street (between McLaren & Berry Sts) northbound	470	500
McLaren Street (between Pacific Hwy & Miller St) eastbound	240	190
McLaren Street (between Pacific Hwy & Miller St) westbound	290	250

Pedestrian volumes at the Miller Street / McLaren Street intersection have been forecast to inform design development of the Victoria Cross Metro Station. Forecast pedestrian movements at the Miller Street / McLaren Street intersection, related to the Metro station and also 'background' movements related to other non-station uses and developments in North Sydney, for the 2036 AM peak hour are shown at **Appendix C**. Some 5,300 pedestrian movements are forecast at the intersection in the AM peak hour in 2036.

5.2. Network Efficiency

5.2.1. Model Calibration

Sydney Metro has undertaken the Sidra analysis having regard to the requirements of the (former RMS) Traffic Modelling Guidelines, 2013. The analysis outlined in this WAD Package technical note makes use of traffic counts undertaken in April 2018. The calibration process of the SIDRA models was undertaken by adopting SCATS signal control data captured on the same date as the traffic count surveys. Site observations were undertaken during the AM and PM peaks to check existing traffic movement, intersection layout and traffic signal operations. After the initial modelling results for the 2018 Base models were produced, on site traffic behaviour and vehicle queuing observations were undertaken to verify that the traffic volumes and queues were a reasonable representation of average weekday traffic activity on this part of the network. A separate model calibration report has not been prepared.

5.2.2. Overview

Sidra intersection analysis has been undertaken for five (5) scenarios as follows:

S1: 2018 existing

S2: 2036 Future base

S3: 2036 Metro (S2 with a provision of signalised mid-block on Miller Street)

S4: 2036 Widened pedestrian crossing (S3 with the widened marked foot crossings at the intersections of Miller St / Berry St and Miller St / McLaren St)

S4 Upgrade S4 with a kerb on street parking restriction along Miller Street northbound between the Pacific Highway and Berry Street in the AM peak hour.

A cumulative overview of the forecast network implications of the Sidra scenarios is provided below. Refer to **Appendix C**. Under existing (2018 traffic) conditions the Miller Street / Berry Street intersection operates at LoS C in both peaks. The Miller Street / McLaren Street intersection operates at LoS B in both peaks. The Pacific Highway / Berry Street intersection operates at LoS A in both peaks. Under 2036 traffic conditions minimal change is forecast at each of the intersections.

The analysis indicates that the introduction of the signalised mid-block crossing in Miller Street does not have adverse impacts upon network operations, however, as is the case under existing conditions, queues in Miller Street may extend up to the adjacent Pacific Highway / Miller Street intersection in the AM peak hour (refer to **Figure 3**). The distance along Miller Street between the mid block crossing and the Pacific Highway is about 80 metres. All intersections including the Miller Street mid-block crossing are forecast to operate at a satisfactory level of service, achieving LoS D or better for both AM and PM peak hours.

The Miller Street / Berry Street intersection is forecast to operate at LoS D or better in both peaks with the introduction of the marked foot crossing changes. Northbound queues generated from this intersection is forecast to extend through the proposed signalised marked foot crossing in Miller Street in the AM peak hour.

5.3. Pedestrian Safety

The works will provide greater separation between pedestrian and vehicle movement and reduce the risk of conflict at the intersection. The proposed works would provide more direct efficient access for high volumes of pedestrians and provide for the access needs of school children.

5.4. Intersection Operation

5.4.1. Pacific Highway / Berry Street

The intersection is forecast to operate at LoS A under existing conditions. This is forecast to change to LoS B in all future scenarios. The changes to the marked foot crossings have negligible impact upon intersection operation at this location. **Figures E1 and E2** in **Appendix E** show that under 2036 traffic conditions traffic queues on the Pacific Highway increase slightly but that the introduction of the mid block crossing in Miller Street and the widening marked foot crossings have little impact of queues in 2036.

5.4.2. Miller Street / Berry Street

The intersection is forecast to operate at LoS D or better under 2018 and 2036 traffic conditions and with the introduction of the mid block crossing in Miller Street. The changes to the marked foot crossings has no discernible impact on intersection performance. Change in average delay at the intersection are forecast to be negligible.

5.4.3. Miller Street / McLaren Street

The intersection is forecast to operate at LoS B under existing conditions. This is forecast to change to LoS C in all future scenarios. In the AM peak hour, average delay deteriorates slightly from 20 seconds in 2036 to about 38 seconds with the introduction of 120 seconds network cycle time in the 2036 future scenarios. In the PM peak, average delay is forecast to change little with the proposed WAD works. The changes to the marked foot crossings has no discernible impact on intersection performance. Change in average delay and queues at the intersection are forecast to be negligible.

5.4.4. Miller Street Mid Block Crossing

The proposed signalised mid block crossing in Miller Street is forecast to operate satisfactorily in all future scenarios at LoS A. It was assumed that kerb side parking along Miller Street will be maintained during the AM peak period south of the proposed mid-block crossing. Clearways apply northbound along Miller Street between the Pacific Highway and McLaren Street during the PM peak period.

Traffic queues along Miller Street are not forecast to extend back into the Pacific Highway or Berry Street intersections in the PM peak hour. However, northbound queues may extend along Miller Street through the Pacific Highway intersection. SIDRA network modelling results indicate that the average back of queue length of 75m would be expected south of the mid block crossing where 80 m queuing space is available between the mid block crossing in Miller Street and the Pacific Highway stop line. As generated queues from the mid block crossing may interrupt the signal operation at the Pacific Highway and Miller Street intersection, consideration should be given to restricting the (northbound) kerb-side parking along Miller Street in the AM peak hour. With kerb-side parking restrictions in place, northbound queues are forecast to reduce to below 40 metres. Refer to Scenario S4U in **Appendix C**.

It is noted that Sydney Metro is currently reviewing the proposed provision of mid-block crossing along Miller St. The outcome will be provided in Victoria Cross Station – Metro Package 03 – Technical Note 1.

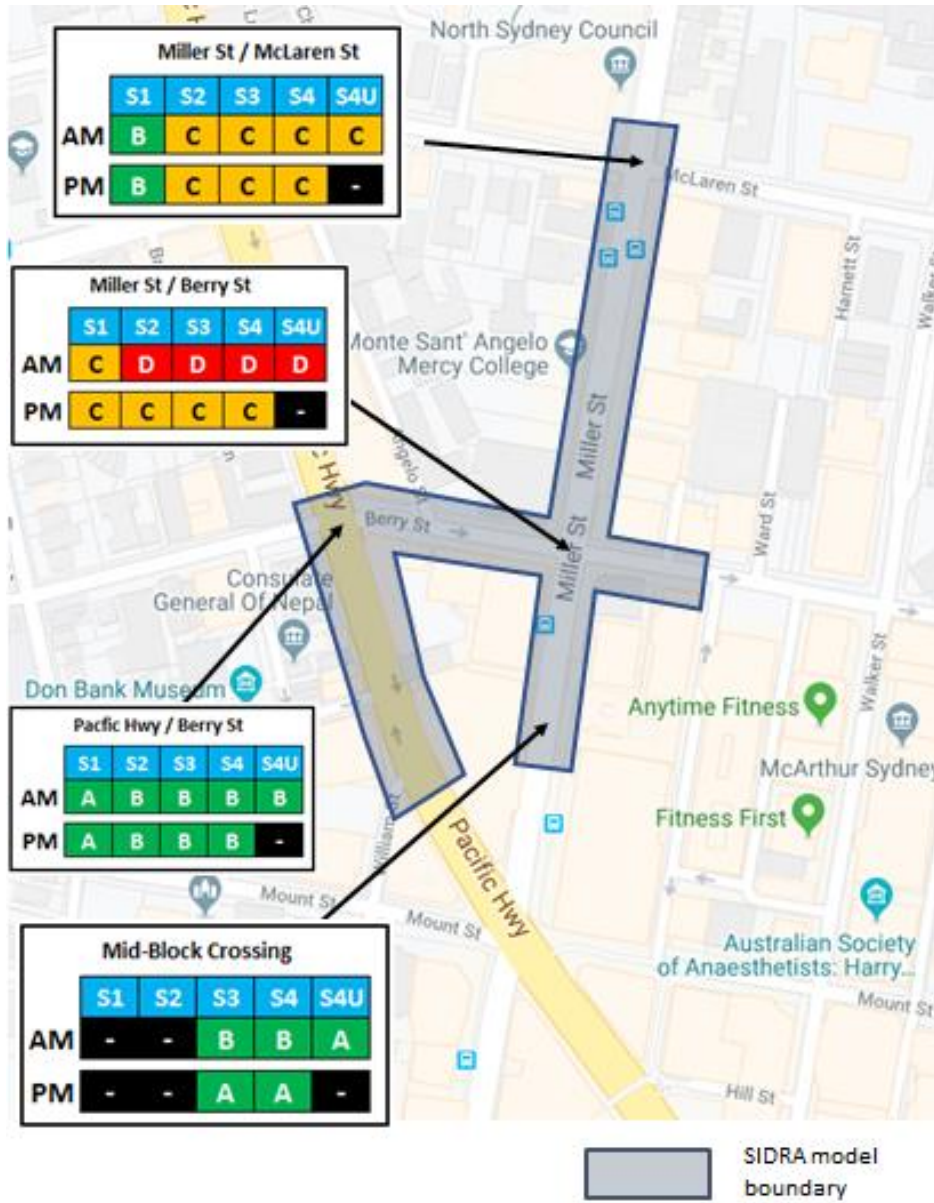


Figure 5.1 - Forecast AM and PM Peak intersection operation.

5.5. Crashes

Crash data analysed for the period year 2016 to year 2020 (inclusive). At the Miller Street / McLaren Street intersection there was one crashes recorded in the five years analysis period. The crash involved the right turn and through movement traffic. No injury is recorded. The works will mitigate pedestrian crashes.

5.6. Regulatory Signage

The proposed WAD works will not require changes to regulatory or wayfinding signage in Miller or McLaren Streets.

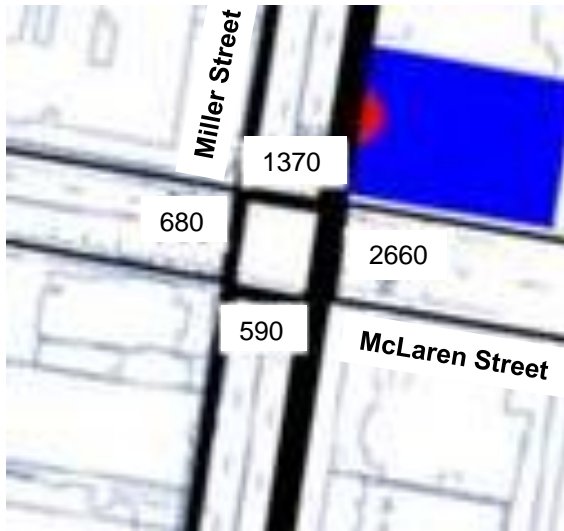
6. Conclusion

The works are required to better accommodate the safe and efficient movement of all customers. The proposed widening of the marked foot crossings on all approaches to the Miller Street and McLaren Street intersection is required to support the future planned growth of the North Sydney CBD on pedestrian accessibility, safety and capacity grounds. The works will also increase crossing capacity in response to forecast increased pedestrian demands in the area. The works will facilitate improved access to and from the Victoria Cross Metro Station.

The impacts of the works on network efficiency and intersection operation have been assessed using Sidra. The analysis shows that all intersections continue to operate satisfactorily during the AM and PM peak hours. Minimal change in traffic queues is forecast across the scenarios. Northbound queuing along Miller Street from the proposed mid-block crossing may extend into the Pacific Highway / Miller Street intersection in the AM peak hour. There may be scope to restrict short term kerbside parking along the western kerb of Miller Street in the AM peak period if queuing becomes an issue in coming years. It is also noted that Sydney Metro is currently reviewing the proposed provision of mid-block crossing along Miller St. The outcome will be provided in Victoria Cross Station – Metro Package 03 – Technical Note 1.

The works require delivery via the Works Authorisation Deed (WAD) because they will impact traffic signal layout and infrastructure at the Miller Street / Berry Street intersection.

Appendix B. Forecast pedestrian movements at Miller Street / McLaren Street, 2036 AM peak hour



Source: Sydney Metro (Metron)

Sydney Metro

(Uncontrolled when printed)



Appendix C. Sidra Analysis Outputs, 2036

Site ID	Intersection	Scenario	Peak	Demand	DoS	Ave. Delay	LoS	Queue	Peak	Demand	DoS	Ave. Delay	LoS	Queue
I-01	Pacific Highway / Berry Street	S1 2018 Existing	AM	2567	0.88	14	A	71 (N)	PM	2223	0.89	14	A	54 (N)
		S2 2036 Future Base		2652	0.94	18	B	82 (N)		2524	1.04	25	B	113 (S)
		S3 2036 with Metro		2652	0.94	18	B	82 (N)		2524	1.04	25	B	111 (S)
		S4 S3 with widened ped crossings		2652	0.94	18	B	82 (N)		2524	1.06	27	B	120 (S)
		S4U S4 without kerb side parking		2652	0.94	18	B	82 (N)						
I-02	Miller Street / Berry Street	S1 2018 Existing	AM	2501	0.93	42	C	110 (N)	PM	2193	0.67	36	C	81 (W)
		S2 2036 Future Base		2606	0.91	48	D	110 (W)		2505	0.77	39	C	100 (W)
		S3 2036 with Metro		2606	0.91	48	D	110 (W)		2505	0.77	39	C	100 (W)
		S4 S3 with widened ped crossings		2606	0.91	49	D	110 (W)		2505	0.77	39	C	103 (W)
		S4U S4 without kerb side parking		2606	0.91	49	D	110 (W)						
I-03	Miller Street / McLaren Street	S1 2018 Existing	AM	1684	0.69	20	B	56 (N)	PM	1407	0.44	20	B	33 (N)
		S2 2036 Future Base		1705	0.75	38	C	120 (N)		1562	0.66	35	C	74 (S)
		S3 2036 with Metro		1705	0.75	38	C	120 (N)		1562	0.66	35	C	75 (S)
		S4 S3 with widened ped crossings		1705	0.75	38	C	120 (N)		1562	0.60	33	C	71 (S)
		S4U S4 without kerb side parking		1705	0.75	38	C	120 (N)						
I-05	Miller Street Mid Block crossing	S1 2018 Existing	AM	-	-	-	-	-	PM	-	-	-	-	-
		S2 2036 Future Base		-	-	-	-	-		-	-	-	-	-
		S3 2036 with Metro		1121	0.92	21	B	95 (S)		984	0.49	10	A	33 (S)
		S4 S3 with widened ped crossings		1121	0.92	21	B	95 (S)		984	0.49	10	A	33 (S)
		S4U S4 without kerb side parking		1121	0.50	11	A	41 (S)						

Appendix D. Sidra Analysis Checklist

Victoria Cross site, 20 September 2019 by Chris Chun

SIDRA model name 7 revision:

- 01 VC 2018 Existing_RevD.sip8
- 02 VC 2036 Future Base_RevD.sip8
- 03 VC 2036 with Metro_RevD.sip8
- 04 VC 2036 S3 with widened ped crossing_RevD.sip8

No.	Topic	Sub Topic	Status	Response
0	General setting			
0a		Current setup – “NEW South Wales”	✓	Checked
0b		Parameter Settings - Site level of service method – “Delay (RTA NSW)”	✓	Checked
0c		Confirm original data source (traffic/pedestrian volume, signal timing)	✓	<ul style="list-style-type: none"> • The analysis outlined in this WAD Package technical note makes use of traffic counts undertaken in April 2018 which was provided from (former RMS). • Pedestrian counts were undertaken in 2015 for the Sydney Metro City and Southwest Chatswood to Sydenham Environmental Impact Statement (EIS). • Intersection signal history data was obtained from the SCATS system for all signalised intersections within the study area.
0d		Calibration/validation process as per TfNSW (former RMS) modelling guidelines	✓	The validation process of the SIDRA models was undertaken by adopting SCATS signal control data. After the initial modelling results produced for base models, a calibration process was undertaken by matching the queueing vehicles and traffic behaviour observation from the site inspections.
0e		Pre analysis site visit (queue lengths, lane lengths, phasing, cycle times etc)	✓	<p>Site inspections were conducted during weekday morning and afternoon peak periods (Wednesday 26 June 2019) to make observations to assist with model development. While on site observations were made of:</p> <ul style="list-style-type: none"> • intersection layout • traffic signal operation • pedestrian and cyclist movements • vehicle queuing

0f		Software package and version	✓	Version 8.0.5.7916
1	Intersection & Lane Geometry			
1a		Approach and exit distances checked	✓	Network models were developed based on the geometry identified in aerial imagery from Nearmap as well as observations from the site inspections.
1b		Arrivals profiles	✓	
1c		Length of short lane	✓	
1d		Median island	✓	
1e		Lane configuration	✓	
1f		Lane utilisation ratio	✓	Adjustment to lane utilisation values were made to reflect the observed lane demand behaviour, including use of bus lanes, the location of bus stops and on-street parking provision. The adjustments made to the 2018 Base models (Scenario 1) to account for downstream constraints and lane utilisation were retained in future 2036 models (Scenario 2 to 4).
1g		Lane discipline (for bus only lanes)	✓	
1h		Parking lane assumptions / coding	✓	Existing on-street parking adopted
2	Movement Definitions			
2a		Additional vehicles types	✓	
2b		Banned movements	✓	
3	Pedestrians			
3a		Crossing location (full/slip lane)	✓	
3b		Volumes	✓	
3c		Crossing distance (if manual input required)	✓	Crossing distance was measured from Nearmap
3d		Walking speed – change to 1.2m/s	✓	Pedestrian walking speed of 1.2m/sec was adopted for all sites.
4	Volumes			
4a		Traffic data checked & fit for use ?	✓	
4b		Pedestrian data checked & fit for use?	✓	Pedestrian volumes are forecast based on TfNSW demand modelling for Victoria Cross Station
4c		Cyclist data checked & fit for use ?	✓	
4d		HV, bus & other data checked ?	✓	

4e		Peak flow factor	✓	SIDRA default peak flow factor of 95 percent was applied.
4f		Growth rate applied / justification	✓	Growth in the network was estimated based on SCATS detector loop count data collected for May 2015 and May 2018 at assessed intersections. A growth rate of 0.5% per annum was applied to PM peak but no growth rate was applied to the AM peak hour volumes.
5	Priorities			
5a		Setting between traffic and pedestrians	✓	Priority was given to pedestrian crossing over the turning movements for signalised intersections.
6	Gap acceptance			
6a		Check if any parameters have been adjusted.	✓	Default parameters were used
7	Vehicle movement data			
7a		Applied speed	✓	As per existing speed limit (40 & 50 km/h)
7b		Signal co-ord /common control group ?	✓	No common control group (CCG) within the developed network models
7c		Signals – applied start loss or late start	✓	Start loss time was applied for turning movements against to the pedestrian crossing movement at the signalised intersection. Additional start loss time (1 sec) was applied to consider the increased pedestrian demand in 2036 models.
8	Phasing & Timing			
8a		Applied cycle time / justification	✓	<p>2018 base models were analysed based on current SCATS signal data. Pacific Hwy / Berry St, Miller St / Berry St are currently operating with an average cycle time between 110 and 120 seconds during the peak hours. Miller Street / McLaren Street intersection is currently operating at 80 seconds cycle time.</p> <p>It was advised that all sites mentioned above are linked to the intersection of Pacific Highway / Miller Street (TCS 630) as a subsystem which has a maximum cycle time of 120</p>

				seconds. Therefore a 120 seconds cycle time was adopted for all tested future models (Scenario 2, and 4).
8b		Source of phasing information	✓	<p>Intersection signal history data was obtained from the SCATS system for all signalised intersections within the study area.</p> <p>The signal sequences, timing and cycle times adopted in the existing base models were maintained in the future models. Where required adjustments, the phase time have been manually adjusted within the minimum and maximum phase times that are provided in the SCATS data to ensure each approach gets the appropriate green time.</p>
8c		Phase transition	✓	
9	Results			
9a		Results in "Movement Summary" and "Lane Summary"	✓	Network model outputs were checked and reported
9b		Adopted cycle time setting in "Phasing Summary"	✓	<p>User-given phase time setting was adopted for the existing base model with a cycle time of 80 / 110 seconds.</p> <p>User-given Cycle time of 120 seconds was adopted for all future models.</p>
9c		Lane utilisation and Capacity adjustment % in "Lane Summary"	✓	
9d		Ensure sufficient delay time has been applied to traffic movement against pedestrian crossing in "Movement timing"	✓	Reviewed that sufficient green time was allocated to pedestrian crossing movement.
10	Network Model			
10a		Site level of service method – "Delay (RTA NSW)"	✓	Checked
10b		Cycle time	✓	As mentioned above phasing times were optimised by SIDRA for all future models by applying the user-given cycle time.
10c		Signal offsets – Program or User given offsets	✓	
10d		Network routes	✓	
10e		Network configuration – check network layout	✓	

Appendix E. Forecast Traffic Queues, 2036



Figure E1 - Forecast AM Peak network queues (Pacific Highway / Berry Street).



Figure E2 - Forecast PM Peak network queues (Pacific Highway / Berry Street).



Figure E3 - Forecast AM Peak network queues (Berry Street / Miller Street).



Figure E4 - Forecast PM Peak network queues (Berry Street / Miller Street).



Figure E5 - Forecast AM Peak network queues (Miller Street / McLaren Street).

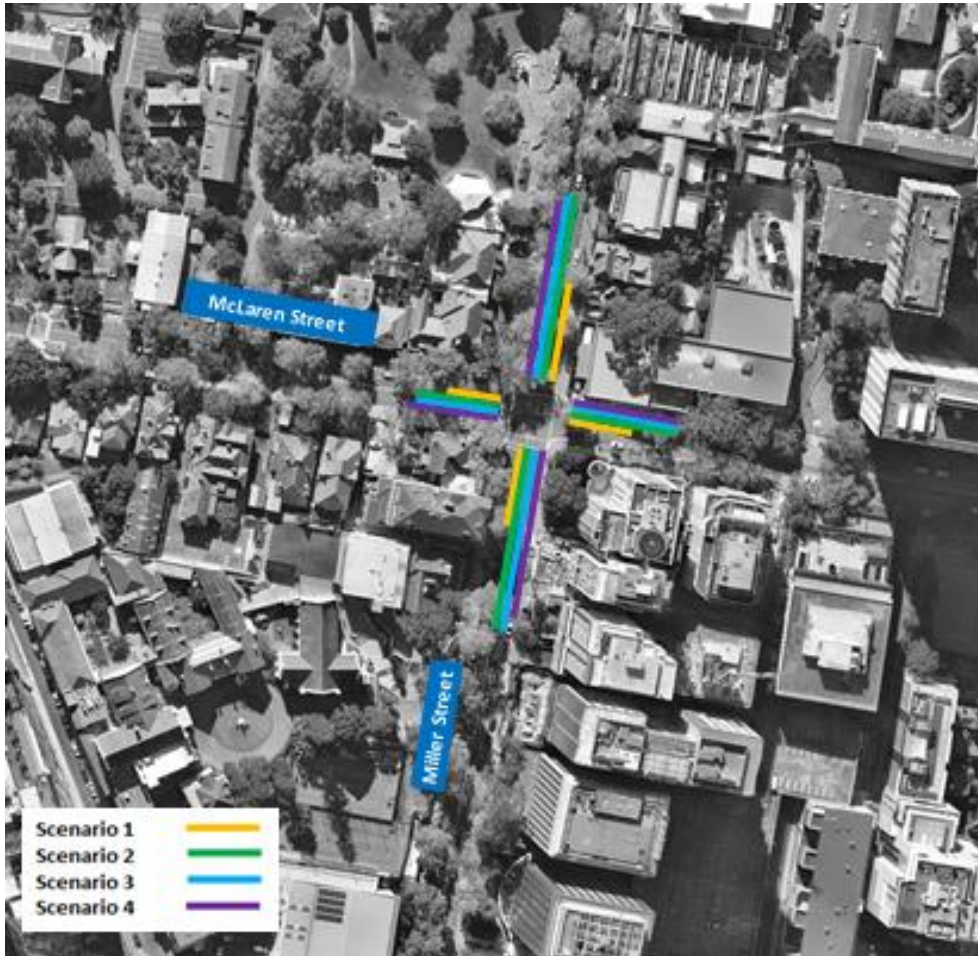
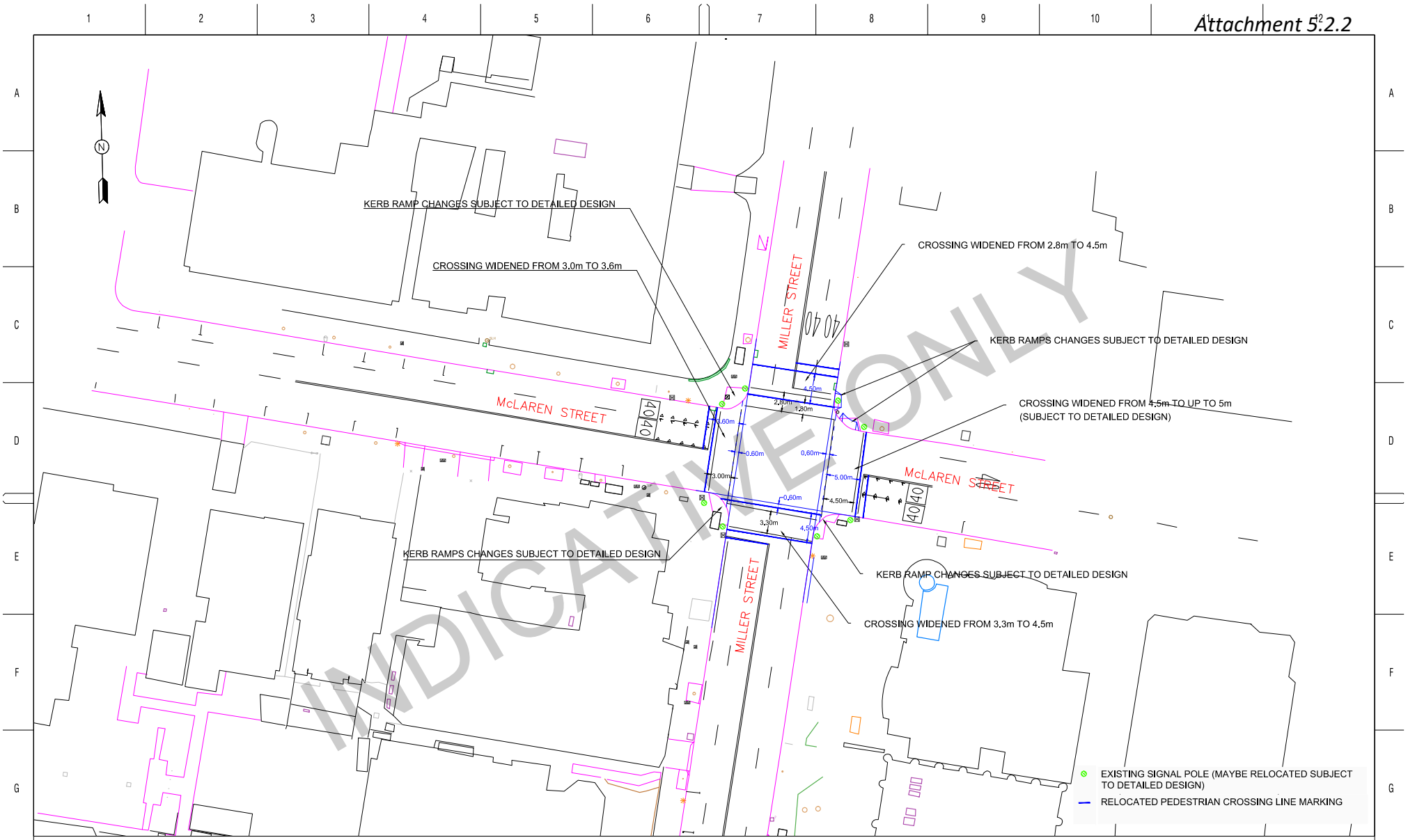


Figure E6 - Forecast PM Peak network queues (Miller Street / McLaren Street).



- EXISTING SIGNAL POLE (MAYBE RELOCATED SUBJECT TO DETAILED DESIGN)
- RELOCATED PEDESTRIAN CROSSING LINE MARKING

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

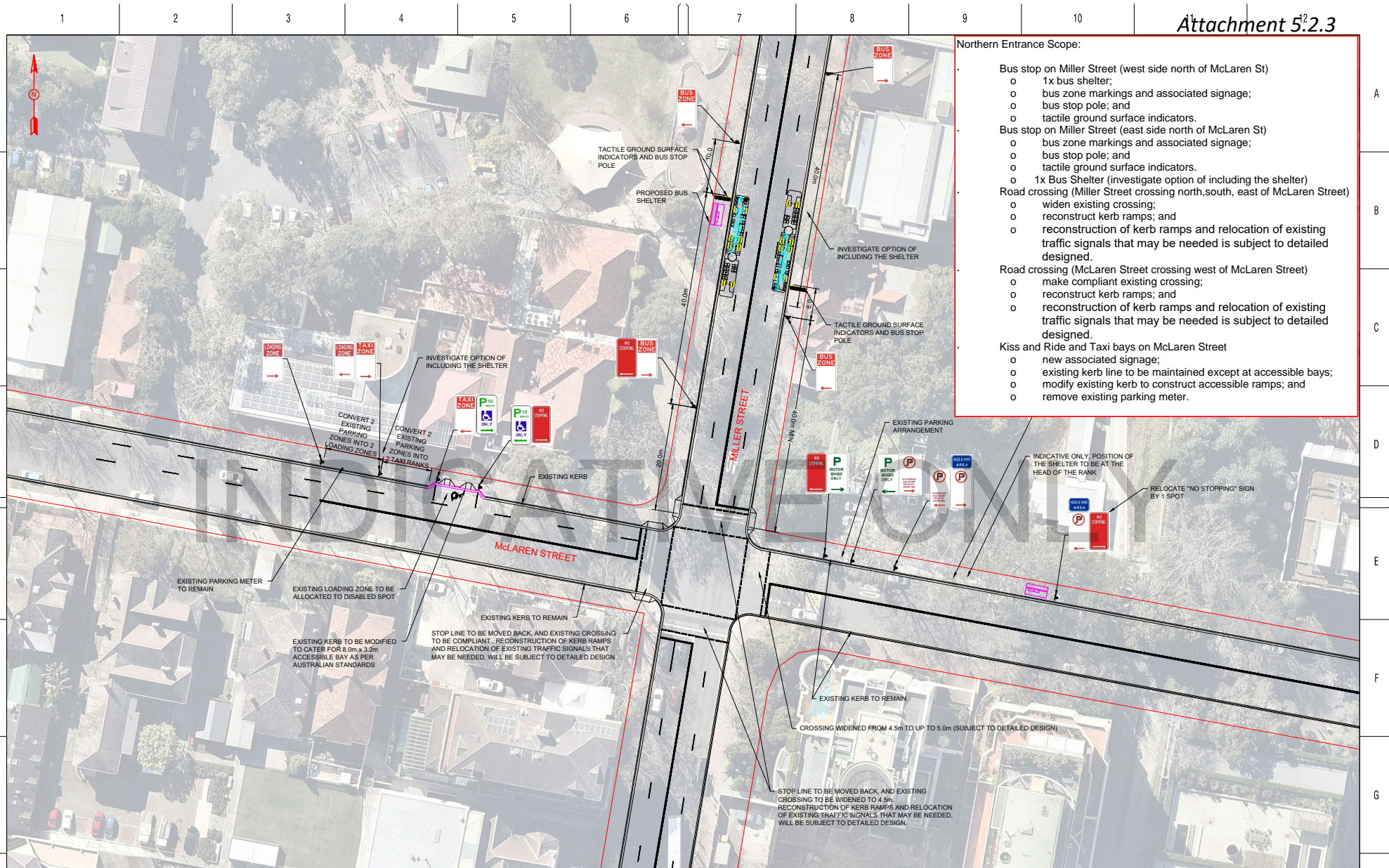
NO	DESCRIPTION	DESIGNER SIGN_DATE	VERIFIED SIGN_DATE	APPROVED SIGN_DATE
01	CONCEPT DESIGN			

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SYDNEY METRO CITY & SOUTHWEST VICTORIA CROSS STATION		SHEET: 1 OF 1		A3
MILLER AND MCLAREN STREET CROSSING WIDENING		TMC:		©
CONCEPT DESIGN		STATUS: PRELIMINARY		1
FILE No:	DRG No:	EDMS No:		

- Northern Entrance Scope:**
- Bus stop on Miller Street (west side north of McLaren St)
 - o 1x bus shelter;
 - o bus zone markings and associated signage;
 - o bus stop pole; and
 - o tactile ground surface indicators.
 - Bus stop on Miller Street (east side north of McLaren St)
 - o bus zone markings and associated signage;
 - o bus stop pole; and
 - o tactile ground surface indicators.
 - o 1x Bus Shelter (investigate option of including the shelter)
 - Road crossing (Miller Street crossing north, south, east of McLaren Street)
 - o widen existing crossing;
 - o reconstruct kerb ramps; and
 - o reconstruction of kerb ramps and relocation of existing traffic signals that may be needed is subject to detailed designed.
 - Road crossing (McLaren Street crossing west of McLaren Street)
 - o make compliant existing crossing;
 - o reconstruct kerb ramps; and
 - o reconstruction of kerb ramps and relocation of existing traffic signals that may be needed is subject to detailed designed.
 - Kiss and Ride and Taxi bays on McLaren Street
 - o new associated signage;
 - o existing kerb line to be maintained except at accessible bays;
 - o modify existing kerb to construct accessible ramps; and
 - o remove existing parking meter.



AMD	DESCRIPTION	DESIGNER SIGNAL DATE	VERIFIED SIGNAL DATE	APPROVED SIGNAL DATE
01	CONCEPT DESIGN			
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DESIGNED	S.A.RODD	22.03.2022
DRG CHECK		
DESIGN CHECK		
APPROVED		

SYDNEY METRO CITY & SOUTHWEST VICTORIA CROSS STATION MILLER AND MCLAREN STREET CROSSING WIDENING CONCEPT DESIGN	
FILE No:	SHEET: 1 OF 1
TMC:	A3
STATUS:	©
DRG No:	EDMS No:
	1

5.3. Thrupp Street, Neutral Bay – between Aubin Street and Kurraba Road

AUTHOR: Bec Thomas, Road Safety Co-ordinator

ENDORSED BY: Duncan Mitchell, Director Engineering and Property Services

ATTACHMENTS: Nil

PURPOSE:

To monitor the traffic flow in Thrupp Street between Aubin Street and Kurraba Road. >>

EXECUTIVE SUMMARY:

Council at its meeting on 25 October 2021 resolved to adopt the following Traffic Committee recommendation:

- 1. THAT Council continue to monitor the traffic flow in Thrupp Street between Aubin Street and Kurraba Road and that the matter be brought back to the February Traffic Committee meeting.*

A further traffic count has been undertaken in Thrupp Street to ascertain and compare the traffic conditions since previous investigation.

The finding indicates that there are no significant changes in either traffic volume and speed when compared to the previous traffic counts done in February, May and June 2021. Therefore, the traffic flow condition in Thrupp Street between Aubin Street and Kurraba Road is considered acceptable and satisfactory.

FINANCIAL IMPLICATIONS:

Nil.

RECOMMENDATION:

- 1. THAT** information regarding traffic flow in Thrupp Street between Aubin Street and Kurraba Road be received.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

2. Our Built Infrastructure
 - 2.1 Infrastructure and assets meet community needs
 - 2.4 Improved traffic and parking management

BACKGROUND

The matter concerning residents' requests to convert Thrupp Street between Aubin Street and Kurraba Road to one-way and installation of time limited parking in Thrupp Street was considered at the Traffic Committee meeting on 25 October 2021.

After consideration, the committee made the following recommendation:

- 1. THAT Council continue to monitor the traffic flow in Thrupp Street between Aubin Street and Kurraba Road and that the matter be brought back to the February Traffic Committee meeting.*

Council at its meeting on 25 October 2021 resolved to adopt the above Traffic Committee recommendation.

At the Traffic Committee meeting, results of traffic counts undertaken in separate periods from 19-25 February 2021, 21-27 May 2021 and 2-8 June 2021 were presented. The recorded average daily traffic volume in Thrupp Street were around 200 vehicles in each direction. The recorded truck volume ranged from 1-5%. The 85th percentile speed was recorded at 35-36km/h.

The traffic conditions in Thrupp Street were not considered problematic. Therefore, it was difficult to justify for the need to convert the street to one-way. Regarding the installation of parking restriction, it has been put on hold due to the matter being deferred.

Accordingly, an additional traffic count has been undertaken in Thrupp Street for a 7-day period from 23 March to 30 March 2022 to monitor the traffic flow condition in Thrupp Street.

CONSULTATION REQUIREMENTS

Community engagement will be undertaken in accordance with Council's Community Engagement Protocol.

Relates to ECM No: 8275244, 8386980

Standard or Guideline Used: AS1742.13, AS2890.5

Signs & Lines Priority: N/A

Precinct and Ward: Hayes, Victoria

Impact on Bicycles: Nil

Impact on Pedestrians: Nil

Impact on Parking: Nil

DETAIL

The results of latest traffic count undertaken in Thrupp Street between Aubin Street and Kurraba Road are summarised in table below:

23 March - 30 March 2022

Speed limit 50km/h	50 th percentile speed	85 th percentile speed	5-day avg. daily traffic volume	7-day avg. daily traffic volume
South	31	38	256	246
North	28	37	236	223
Combined	30	38	491	469

The results of the previous traffic count undertaken in Thrupp Street between Aubin Street and Kurraba Road are summarised in table below:

19 February – 25 February 2021

Speed limit 50km/h	50 th percentile speed	85 th percentile speed	5-day avg. daily traffic volume	7-day avg. daily traffic volume
South	31	38	231	231
North	27	36	263	263
Combined	29	37	494	494

21 May – 27 May 2021

Speed limit 50km/h	50 th percentile speed	85 th percentile speed	5-day avg. daily traffic volume	7-day avg. daily traffic volume
South	29	38	233	232
North	27	36	260	251
Combined	28	37	493	483

2 June – 8 June 2021

Speed limit 50km/h	50 th percentile speed	85 th percentile speed	5-day avg. daily traffic volume	7-day avg. daily traffic volume
South	30	38	263	250
North	28	37	283	271
Combined	29	37	547	521

The above results indicate that the 50th and 85th percentile speed and the average daily traffic volume for 5 days and 7 days from the most recent traffic count dated from 23 March 2022 to 30 March 2022 are similar to the previous counts undertaken in February, May and June 2021. Therefore, the traffic flow condition in Thrupp Street between Aubin Street and Kurraba Road is considered acceptable and satisfactory.

5.4. Waters Road, Neutral Bay - Raised Pedestrian Crossing

AUTHOR: Nathan Wu, Traffic & Transport Engineer

ENDORSED BY: Duncan Mitchell, Director Engineering and Property Services

ATTACHMENTS:

1. Waters Road Pedestrian Crossing Plan amended plan [5.4.1 - 1 page]

PURPOSE:

Upgrade the existing pedestrian crossing on Waters Road at Grosvenor Street, Neutral Bay.

EXECUTIVE SUMMARY:

Council has received Federal Government Stimulus Road Safety Program (School Zone Infrastructure) funding, to upgrade the existing pedestrian crossing on Waters Road at Grosvenor Street, Neutral Bay.

The proposal is to raise the pedestrian crossing to footpath level and install kerb extensions on both sides of the pedestrian crossing to increase visibility of approaching drivers, slow down traffic and reduce the crossing distance. The proposal will result in the loss of one parking space on the eastern side Waters Road as shown on the attached plan to comply with TfNSW statutory No Stopping requirement.

Due to the objections received during the community consultation on the loss of parking and through discussion with TfNSW, Council has been advised that TfNSW is in principal support to retain the parking space on the eastern side of the crossing on the departure side. Therefore, there will be no loss of parking.

Community consultation took place from 7 February 2022 until 13 March 2022. The outcomes of the community consultation are attached.

FINANCIAL IMPLICATIONS:

The cost for this project is estimated to be \$120,000 which is funded by Federal Government Stimulus Road Safety Program (School Zone Infrastructure) funding 2021/2022

RECOMMENDATION:

1.THAT Council proceeds with the upgrade of the existing pedestrian crossing Waters Road at Grosvenor Street, Neutral Bay to a raised pedestrian crossing as per the attached plan as part of the 2021/22 Federal Government Stimulus Road Safety Program (School Zone Infrastructure).

2.THAT the parking space on the eastern side of Waters Road on the departure of the proposed pedestrian crossing be retained. Therefore, there will be no loss of parking.

3.THAT the affected residents and businesses be notified prior to the implementation of the proposal.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

2. Our Built Infrastructure

2.1 Infrastructure and assets meet community needs

2.4 Improved traffic and parking management

3. Our Future Planning

3.4 North Sydney is distinctive with a sense of place and quality design

5. Our Civic Leadership

5.3 Community is informed and consulted

BACKGROUND

As part of the 2021/22 Federal Government Stimulus Road Safety Program (School Zone Infrastructure) it is proposed to upgrade the existing pedestrian crossing on Waters Road at Grosvenor Street, Neutral Bay to a raised pedestrian crossing with kerb extensions.

The project was identified through the 2020 Pedestrian Crossing Audit reported to the Traffic Committee meeting on 20 March 2020 where it was recommended and Council subsequently resolved, inter alia:

“THAT each of the existing flush pedestrian crossings in the priority list attached to this report be added to the LATM Action Plans to upgrade to raised pedestrian crossings and three crossings per year be funded from the annual Traffic Facilities Program for upgrade.”

Community consultation took place from 7 February 2022 until 13 March 2022. The outcomes of the community consultation are attached.

CONSULTATION REQUIREMENTS

Community engagement has occurred in accordance with Council’s Community Engagement Protocol. The detail of this report provides the outcomes from the engagement for Council to consider prior to adoption.

Relates to ECM No: 8488682

Standard or Guideline Used: AS1742.10

Signs & Lines Priority: N/A

Precinct and Ward: Brightmore, Tunks

Impact on Bicycles: Nil

Impact on Pedestrians: The proposal improves pedestrian safety

Impact on Parking: It is proposed to retain all existing parking spaces

DETAIL

Community consultation took place from 7 February 2022 until 13 March 2022. A total of 977 survey letters were distributed to the affected properties in Waters Road and surrounding area and Brightmore Precinct Committee. Businesses in the vicinity of the pedestrian crossing were also notified via letterbox drops. The survey was available online through Council's 'Have Your Say' webpage. A total of 20 responses were received.

The result of this survey is summarized in the table below:

I support the proposal to upgrade the pedestrian crossing in Waters Road:	Response				Total
	Yes		No		
Residential Street Address	Qty	%	Qty	%	
Military Road	3	75%	1	25%	4
Waters Road	9	60%	6	40%	15
Guthrie Avenue	-	-	1	100%	1
Total	12	60%	8	40%	20

Comments received

Respondents were asked to provide general comments/feedback as desired. Comments have been grouped by emerging themes.

Support the proposal

- Supported to improve pedestrian safety and amenity. Please also consider options to improve safety at the intersection of Grosvenor Lane and Waters Rd. Vehicles regularly disobey the stop sign and shared zone environment, increasing hazards for pedestrians walking along Waters Rd and crossing Grosvenor Lane. There is poor sightline looking to Grosvenor Lane from Waters Rd (particularly when approaching from the south) and vehicles often come through exceeding the speed limit and disobeying the stop sign.
- As a legally blind person with impaired vision, I find being a pedestrian in Neutral Bay generally and in the area of the crossing on Waters Road between Grosvenor Lane and Grosvenor Street in particular a very scary experience. I use the relevant crossing nearly every day and take particular care when crossing. I also use a white cane which tends to slow drivers down and respect my use of the crossing. However, anything which will increase safety on the crossing is very desirable. Waters Road is a short cut for many drivers who seem keen to escape the immediate shopping precinct as quickly as possible. There are lots of school children who use that crossing regularly and, like many people, they walk automatically onto the crossing without looking to the right then the left. Similarly, many older citizens use the

crossing and most don't have the reflexes to avoid cars driven without proper care on the crossing. In fact, the crossing is a very busy one in constant use throughout the day. I do feel that there will be a tragedy on that crossing one day. For the reasons set out above, I strongly support the proposed to raise the crossing in the manner set in the letter from Nathan Wu.

- The more you can do the slow traffic the better.
- Whilst this improvement is carried out the plantings on the two (2) corners of Grosvenor Street and Waters Road require re-assessment and limited to a height of no more than 50cms as they impede motorists vision of any on-coming traffic and are a danger to all drivers.
- My wife and I moved into Bouganvillea Retirement Village five months ago. Its main entrance is 25 metres from the pedestrian crossing. We use the crossing everyday as do many Bouganvillea residents. Many residents, including my wife, walk very slowly and with the aid of a wheelchair, walker or stick. Several times we have been startled by an approaching car breaking suddenly as we were using the crossing. I think some motorists do not realize that it is a pedestrian crossing. I think the proposal is an excellent one and could well save a life or lives.
- Traffic is increasing greatly on Waters Rd - partly due to the questionable closure of Young Street - Waters Road crossing is used by an adjacent large school pupils and a large retirement village residents facing the street. Not to mention many other local residents accessing the supermarket.
- Excellent plan
- Thank you for advising Council's success in gaining funding from the Federal Government Stimulus Commitment to Road Safety Program (School Zone Infrastructure) to improve the existing marked foot pedestrian crossing on Water's Road between Grosvenor Street and Grosvenor Lane. We support the proposed pedestrian crossing upgrade, and we look forward to the safety improvements of the existing pedestrian crossing. Yours sincerely, Daniel Grant, Head of Property Services.

- We write to you as Strata Managing Agents for the above Strata Plan. We refer to correspondence dated 14 February 2022 regarding the “Proposed Raised Pedestrian Crossing”.

While the Owners Corporation is supportive of this proposal however, there is a potential issue regarding vehicles overhanging the driveway thereby impeding vehicles entering or exiting the driveway of the “Bougainvillea Village” complex. The following has been advised to our office in relation to this matter from the Building Maintenance Manager:

“I've dealt with many issues over the past 10 years of vehicles parking across the driveway with the current set up, mainly on the left side as you exit. Vehicles overhang

into the no parking signage area, impeding those exiting the village driveway. If the proposal by council proceeds as outlined, I'm concerned (through experience) that the reduction in the 2 car spacing on the right to a roughly 1.5 length parking space will create problems with cars also overhanging the driveway on that side too. Drivers seem to feel if a small part of their car is within the allowed parking area, but the majority is over the driveway, that's fine for them. It, however, creates a real issue for our drivers vision, especially the bus when I'm trying to get out or reverse in.”

We look forward to further communications from Council in regards to this matter in due course.

Oppose the proposal

- Parking in this area is at a premium and the loss of a parking space to allow for a raised pedestrian crossing where the existing crossing is functioning perfectly seems unnecessary.
- The existing crossing on Waters Road works. I believe raising of the road to upgrade the crossing is unnecessary. The loss of parking in an area where this is at a premium doesn't seem to warrant the upgrade. I believe the money would be better spent enhancing the sidewalk planting on the street.
- Improvement of the crossing is long overdue, and while I clicked "no" I do approve in principle with the following caveats:
 - (i) the completely unnecessary removal of a car parking space is unacceptable in a precinct with grossly inadequate street parking. It will damage the already struggling small businesses who rely on passing trade. This part of the proposal demonstrates the lazy thinking and absence of problem-solving skills in the team responsible.
 - (ii) everyone in the precinct agrees that the most obvious improvement would be solar powered flashing lights on the pedestrian crossing. The council's clumsy mistake of closing Young Street has forced traffic into Waters Road, which exhibits frustration by speeding down towards Grosvenor Street to make up for lost time. The council has been warned previously that a fatality is imminent whether from the numerous elderly or school children pedestrians. This crossing upgrade appears to be the council's "PR insurance policy" for when that death occurs.
 - (iii) no provision has been made in the plan for protecting elderly pedestrians from the increasingly aggressive cyclists who break NSW laws by riding on the footpaths and on crossings at high speed. The council has been repeatedly advised of this

dangerous problem but refuses to act. Be assured that those notifications will all come to light at the coronial enquiry when the inevitable happens. It's very frustrating for residents when the council presents changes as a fait accompli without the slightest intention of making any alterations, since the anonymous and unaccountable people behind the changes face no consequences for their mistakes. It's like a form of street theatre in which the players pretend to be open minded, receptive and flexible, but they're just following the script. And here we go again.

Please stop treating rate-paying residents like we are idiots. We are not, and we will be there to hold the council and its individual employees accountable.

- Between Redlands school, Bougainvillea retirement village, Woolworths and residents around Waters Road, road traffic is slow in the area. The pedestrian crossing needs to be level (not raised, no hump) for people with walking sticks, or pushing their walkers, shopping trolleys or prams.
- Seems unnecessary and will mean an already difficult area for residents (!!) to park in will be worse by one spot. Can you open up more parking in waters road to residents with permits? Also I just means motorist will slow down then accelerate which means more noise. Spend the money on something else and not on unnecessary projects.
- The needs of pedestrians need to be balanced with the needs of motorists
- Any proposal that results in the loss of even 1 parking space in this area, which has very little parking even now...is no good..
- The loss of even one parking space is not good (unless Council builds a parking station in close vicinity). Visibility of crossing won't make much difference to drivers. There are too many proposed signs. One/two signs at entrance to Waters Road from Military Road - 40kms only. Timing is bad - new proposed building on corner of Waters Rd/Grosvenor Street will make a mess of the crossing - will be mayhem!

Council response: Almost all the objections received were concerned about the loss of parking as a result of the proposal. Through discussion with TfNSW, Council has been advised that TfNSW is in principal support to retain the parking space on the eastern side of the crossing on the departure side. Therefore, there will be no loss of parking.

Precinct Comments:

"The site adjacent to this crossing (12-14 WATERS ROAD / 55-57 GROSVENOR STREET, NEUTRAL BAY) was the subject of DA 92/21 (Demolition of existing buildings and construction of a 6 storey mixed use building with basement parking consisting of retail; commercial and 44 apartments with parking for 107 cars). The original DA was modified, and is now Planning Proposal 2/22 (see Brightmore minutes of 19 January 2022 Item 6, extract below).

A notice from Council re the Planning Proposal has recently been put up on the building. The Planning Proposal is "seeking to amend North Sydney LEP 2013 by increasing the maximum building height control from 16m to 26m (6 storeys), and increasing the minimum non-residential FSR from 0.5:1 to 1.2:1".

It was noted that this site was subject to a DA lodged 9 April 2021 for a 6 storey building. Revised plans for a 5 storey building were subsequently lodged and approved on 27 October 2021 with deferred commencement conditions. Approval of deferred commencement conditions was given on 22 December 2021.

The Planning Proposal seeks a spot rezoning of the property to allow an additional storey of residential development.

I am pretty sure that any money spent on a new pedestrian crossing here will be a total waste of money, as the whole site will be re-configured for vehicle access if/when the new development goes ahead.

What that final design will be who knows?

Note that this is already being marketed. The development is called "Pienza".

Could you please make sure all the relevant departments involved. know the site is the subject of a Planning Proposal and to take that into consideration before any decisions are made."

Council response: The Planning Proposal (PP) has been received/lodged but not yet assessed by Council staff nor proceeded to DPIE Gateway determination etc i.e. rezoning not yet approved. The pedestrian crossing is grant funded and will be constructed by end of June 2022. The PP may not proceed. The proposed pedestrian crossing is located on a 'pedestrian desire line', the location where logical to cross the road. Proposed development would be prohibited from putting a driveway where the pedestrian crossing has been constructed i.e. need to work around the existing road infrastructure/amend plans in response to the constructed pedestrian crossing.

Other

- I agree that there is a problem with the pedestrian crossing on Waters Road as described in your letter. It takes some patience to cross the road but I do not think a raised crossing is that way to solve this. I live next door to Bougainvillea Retirement Village and meet many residents along the street. Some are out for exercise others heading for Woolworths and other shops. I think many of these people may have great difficulty negotiating a slope to the raised crossing with their walking frames, wheel chairs or just walking sticks.

Mornings and afternoons there are a large number of school children crossing at this point too. Some are of course in Secondary School but there are still a significant number of Primary age children too.

I do not know the answer to the problem of impatient or inattentive drivers but I have major concerns about the proposal. I am elderly too but at this stage quite mobile but I do have concerns for not only my neighbours but the many other older people who need and use this crossing.

- I want to thank the North Sydney Council for ensuring that new pedestrian crossings installed around North Sydney now have signage that meets the Australian Standards. Also, at raised crossings, the footpath is level with the crossing as per TfNSW Technical Directions, allowing the elderly and parents with prams to cross safely, especially when it rains. Oslo in Norway has reduced its

pedestrian fatalities to zero by implementing simple standards which involves clear zones around crossings and intersections. Crossing signage is always placed well away from the kerb not be impacted by the trucks trying to deliver goods to local shops and building sites.

Could the council please consider the following:

1. Make sure the TSGI is perpendicular to the direction of travel of a sight-impaired person.
 2. Make sure no tall plants are planted within the clear zone (see picture of crossing Broughton)
 3. Install signs well away from the edge of the road.
 4. All signs to be fluorescent green-yellow.
 5. Make sure that arrows of all parking signs are to the new Australian Standards (Belgian arrow)
 6. Use recycled concrete, like Boral Envirocrete to reduce councils carbon footprint
- New raised crossing at Broughton St, plants have grown so high that vehicles approaching cannot see the two women about to cross from the left. (picture taken at the height of drivers line of sight)
- Norway would never have plants or other objects within the clear zone, and this is why they have reduced their fatalities of pedestrians to zero.
- At the same crossing, the new pedestrian sign has been hit and knocked over by a truck that may be trying to make a delivery to the Woolworths and trying to avoid the keep left signs at either end of the crossing.

Council response: Noted.

Conclusion

Considering majority of the respondents support the proposal and the concerns raised by the respondents regarding the parking loss has been addressed, it is recommended that Council proceeds with the upgrade of the existing pedestrian crossing Waters Road at Grosvenor Street, Neutral Bay to a raised pedestrian crossing as per the attached plan.

5.5. Standing Item Pedestrian Safety

AUTHOR: Bec Thomas, Road Safety Co-ordinator

ENDORSED BY: Duncan Mitchell, Director Engineering and Property Services

ATTACHMENTS:

1. Attachment 1. Pedestrian safety [5.5.1 - 7 pages]

PURPOSE:

To provide a report to the Committee on current pedestrian safety matters and projects, and their current status.

EXECUTIVE SUMMARY:

At the 530th Traffic Committee meeting on 7 February 2020 it was recommended that pedestrian safety be added to the agenda as a standing item. A list of current pedestrian safety standing items and their current status is attached.

FINANCIAL IMPLICATIONS:

There are no financial implications arising directly from this report.

RECOMMENDATION:

1. **THAT** the information concerning Standing Item - Pedestrian Safety be received.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

- 2. Our Built Infrastructure
 - 2.1 Infrastructure and assets meet community needs
 - 2.3 Sustainable transport is encouraged

BACKGROUND

At the 530th Traffic Committee meeting on 7 February 2020 it was recommended that pedestrian safety be added to the agenda as a standing item.

CONSULTATION REQUIREMENTS

Community engagement is not required.

Relates to ECM No: N/A

Standard or Guideline Used: N/A

Signs & Lines Priority: N/A

Precinct and Ward: All Precincts, All Wards"[Precinct], [Ward]"

Impact on Bicycles: Impacts on cyclists will be assessed for individual projects when they are reported to the Committee in detail.

Impact on Pedestrians: This report highlights current projects that benefit pedestrians

Impact on Parking: Impacts on parking will be assessed for individual projects when they are reported to the Committee in detail.

DETAIL

The table below has the current status of projects that relate to pedestrian safety.

Standing Item - Pedestrian Safety
Traffic Committee 18 March 2022

Item	Street	Location	First TC	Summary	Problem/Request	Comments	ECM
20/01	Bligh Street, Kirribilli	Between Broughton Street and Humphrey Place	20/3/20	Request for Shared Zone	Mayor Gibson has requested a Shared Zone be implemented in Bligh Street due to narrow footpaths and high pedestrian activity in the street.	<p>Bligh Street Shared Zone is listed in Council's Zone 7 LATM Action Plan as a long term priority (T.17).</p> <p>Bligh Street Shared Zone is also listed in Council's Draft 40km/h and 10km/h Shared Zone Masterplan as a long term priority.</p> <p>A Shared Zone for Bligh Street is being implemented as part of the DPIE Streets as Shared Spaces Program.</p> <p>A proposal to construct a permanent shared zone in Bligh Street has been submitted under Active Transport Walking & Cycling Program for funding.</p>	
20/02	Various	Various	8/7/20	Blackspot Grant Funded Projects 2020/21	<p>Council was successful with grant funding applications for 4 locations under the Federal Black Spot Program.</p> <p>Design, consultation and construction is scheduled for 2020/21 financial year.</p>	<p>Projects include:</p> <ol style="list-style-type: none"> 1. Hazelbank St/Morton St - move stop lines forward & install refuge island (TC 5/2/21 - Item 4.6; TC 19/3/21 - Item 4.5) (Completed) 2. Kurraba Road near Hayes St - raise existing pedestrian crossing (Completed) 3. Lavender St at Walker St - raise existing pedestrian crossing (TC 5/2/21 - Item 4.7)(Completed) 4. Ben Boyd Road between Lindsay Street and Kurraba Road - traffic calming (TC 19/3/21 - Item 4.4) (Further investigation is being undertaken) TfNSW has agreed to roll over the funding to FY22-23. 	

Item	Street	Location	First TC	Summary	Problem/Request	Comments	ECM
20/03	Various	Various	20/3/20	Pedestrian Crossing Audit	Council's Traffic Engineer completed an audit of all existing pedestrian crossings to prioritise upgrade of existing flush pedestrian crossings to raised crossings.	<p>Crossings to be upgraded in 2020/21 include:</p> <ol style="list-style-type: none"> 1. Clark Road at Margaret Street (Completed) 2. Ben Boyd Road at Hardie Street (Completed) 3. Carabella Street at Fitzroy Street (TC 5/2/21 - Item 4.8)(Completed) <p>Crossings to be upgraded in 2021/22 include:</p> <ol style="list-style-type: none"> 1. Burton Street at St Aloysius Junior School, Kirribilli 2. Clarke Street at Willoughby Road, Crows Nest (Design completed, community consultation close on 13 March 22, a TDA has been prepared and submitted to TC on 22 March 22) 3. Waters Road at Grosvenor Street, Cremorne (Design completed, community consultation is being undertaken close on 13 March 22). A report on the consultation results is being prepared to TC or TDA) 4. Morton Street at Rocklands Road, Wollstonecraft. (Design completed, community consultation finished and a TDA prepared and approved by TC, the project passed to project team for action) 	
20/06	Moodie Street, Cammeray	Between Ernest Street and Falcon Street	27/11/20	Pedestrian safety	Residents of Moodie Street have raised concerns about pedestrian safety due to lack of footpath in the 100m section south of Ernest Street.	<p>Refer to report 4.4 to the Traffic Committee 27/11/20 and report to 23/7/2021.</p> <p>Matter deferred until after Council elections & when public is able to address Committee.</p>	
21/01	River Road at Russell Street, Wollstonecraft		5/2/21	LATM implementation - pedestrian refuge islands	As part of the implementation of the 2020/21 pedestrian refuge islands are proposed at the intersection of River Road and Russell Street	Refer to report 4.5 to the Traffic Committee 5/2/21. Construction completed August 2021.	

Item	Street	Location	First TC	Summary	Problem/Request	Comments	ECM
21/02a	Gerard Street at Macpherson Street, Cremorne	Pedestrian crossing	19/3/21	Pedestrian safety at existing pedestrian crossing	At its meeting of 25 February 2019, Council resolved to adopt the following recommendation of the North Sydney Traffic Committee: <i>1. THAT pedestrian signals on Gerard Street at Macpherson Street be expedited as a high priority project and funding be brought forward to progress the project to construction .</i>	A report was considered at the Council meeting on 30 November 2020 where it was resolved: <i>1. THAT Council write to the Minister for Transport and Roads requesting special consideration for installation of traffic signals at the intersection of Gerard Street and Macpherson Street on the basis of pedestrian safety and amenity, with reference to this report.</i> The letter was sent 5/2/21 <i>2. THAT the following signage changes be referred to the Traffic Committee for installation under delegation of the Manager Traffic & Transport Operations:</i> <i>a. an additional pedestrian crossing sign installed in front of the tree on the southern side of Gerard Street facing west.</i> <i>b. the Give Way sign on the left-hand side of Macpherson Street at Gerard Street be removed so as not to obstruct the pedestrian crossing sign.</i> Approved and signage instruction issued. <i>3. THAT all line marking associated with the pedestrian crossing including, zebra markings and zig zag markings on approaches, be maintained and refreshed to ensure visibility to the crossing is adequate.</i> Crossing is included in regular maintenance program. Council received a response from the Parliamentary Secretary for Transport and Roads on 19 April 2021 . The response is not favourable to Council's request for traffic signals and staff will contact Transport for NSW regarding alternate solutions.	8478715

Item	Street	Location	First TC	Summary	Problem/Request	Comments	ECM
20/02b	Gerard Street at Macpherson Street, Cremorne	Pedestrian crossing	19/3/21	Pedestrian safety at existing pedestrian crossing	<p>At the Traffic Committee meeting 3/9/21 it was recommended:</p> <ol style="list-style-type: none"> 1. THAT Council notes that despite repeated requests to Transport for New South Wales, there has been a refusal to install traffic lights at the crossing on Gerard Street at Macpherson Street. Therefore, Council must find alternative methods to improve pedestrian safety. 2. THAT Council urgently remark the pedestrian crossing at Gerard Street and Macpherson Street to make it more visible in accordance with TfNSW standards. 3. THAT the crossing at Gerard Street and Macpherson Street be included in the maintenance schedule more frequently. 4. THAT Council examine alternative methods of increasing visibility at the crossing at Gerard Street and Macpherson Street within TfNSW standards. 5. THAT Council reviews the lighting at the crossing on Gerard Street at Macpherson Street for compliance with the relevant standards for inclusion under the pedestrian safety item at the next Traffic Committee. 	27/9/21: To be investigated/actioned.	

Item	Street	Location	First TC	Summary	Problem/Request	Comments	ECM
21/03	Various Locations	Federal Stimulus	30/4/21	School Pedestrian Crossing Upgrades - Grant Funding	<p>Council has received grant funding under the TfNSW and Federal Government Stimulus Road Safety Program (School Zone Infrastructure) for 14 projects totalling \$1.6M in 2020/21 & 2021/22.</p> <p>The grants will be used to create raised crossings, to extend kerbs and introduce pedestrian refuge islands, which all help improve visibility and slow down traffic, making children safer as they walk to and from school.</p>	<p>The funding has been allocated to upgrade the following crossings:</p> <ul style="list-style-type: none"> - St Aloysius College Junior School: Install two raised pedestrian crossings on the Alfred Street South at Fitzroy Street intersection, Milsons Point COMPLETED - St Aloysius College: Install raised pedestrian crossing on Broughton Street at Kirribilli Avenue, Kirribilli COMPLETED - Loreto Kirribilli: Raise existing crossing on Carabella Street at Fitzroy Street, Kirribilli COMPLETED - St Aloysius College: Raise existing crossing on Clark Road at Margaret Street, North Sydney COMPLETED - Neutral Bay Public School: Raise existing crossing on Ben Boyd Road at Hardie St, Neutral Bay COMPLETED - Cammeray Public School: Raise existing crossing on Carter Street at Colin Street, Cammeray COMPLETED - Cammeraygal High School: Raise existing crossing on Clarke Street at Willoughby Road, Crows Nest - Under Consultation - St Aloysius College Junior School: Raise existing crossing on Burton Street, Kirribilli. NOT TO PROCEED (Refer to TC 15/10/21 item 5.2) - Redlands: Raise existing crossing on Waters Road at Grosvenor Street, Neutral Bay (Design completed, community consultation is being undertaken close on 13 March 22) Refer to notes above in item 20/03 - North Sydney Public School: Raise existing crossing on Morton St at Rocklands Rd, Wollstonecraft - Under Consultation. - North Sydney Public School: Construct pedestrian refuge islands and kerb buildouts on Crows Nest Road at McHatton Street, Waverton - Under Consultation 	
21/04	Military Road. Neutral Bay	At Spofforth Street and Cabramatta Road	24/7/20	Request to amend phasing and cycle times	A resident of Cremorne has requested additional time be added to the pedestrian phase to cross at this intersection, and reduced waiting time between cycles for pedestrians.	1/7/20: The email from the resident was to TfNSW for their attention as the Road Authority for Military Road and all signalised intersections.	

Item	Street	Location	First TC	Summary	Problem/Request	Comments	ECM
21/05	Grosvenor Lane, Neutral Bay	At Young Street	30/4/21	Pedestrian safety	The Traffic Committee recommended: 1. THAT “end shared zone” signage in Grosvenor Lane be moved closer to Young Street and add “give way to pedestrian” signage. (7.4) 2. THAT Council Staff review the current signage and options for increased safety measures. (7.4)	16/8/21: Signage changes completed 29/7/21. Further reviews to be undertaken when public health orders permit. An instruction has been issued to relocate the Give Way to Pedestrian signs at Young St intersection to be in front of the trees and lower the STOP signs to normal eye level. A STOP line is also being installed at the exit to Young St where it joins the footpath.	8525757
21/07	Miller Street at Amherst Street, Cammeray	Intersection traffic signals	11/6/21	Pedestrian Safety - reports of near misses & recent crashes	On 11/6/21 the Traffic Committee recommended: 1. THAT the Traffic Committee acknowledge a recent incident at the intersection of Miller and Amherst Streets which involved the safety of a child crossing the road on the 24 May 2021. Council thank our resident Ms Freeman for bringing this to our attention at the meeting and that this be actioned as a matter of urgency. 1a) THAT Council acknowledge the incident and the long history of dangerous driving and incidents at this intersection. 2. THAT Council start immediate lobbying to TfNSW to extend the red-light pedestrian protection arrow and add a green right turn arrow phase at the intersection. 3. THAT Council TfNSW looks at the intersection of Palmer and Miller Streets in conjunction with this matter. 4. THAT Council actively lobby Transport for NSW for a red-light camera to be installed in this location. 5. THAT the matter be brought back to the next Traffic Committee meeting to be held on Friday, 23 July 2021.	16/8/21: Letter sent to TfNSW 19/7/21. Response received 13/8/21 from A/Director Network and Asset Management: <i>Road safety, including pedestrian safety, is a top priority for Transport for NSW. I am very sorry to read about the very serious incident you describe, and I wish the people involved a full recovery.</i> <i>As you may be aware, Transport for NSW installed an extra left and right-turn red arrow at the traffic lights under the ‘Green on Green’ project in June 2020, to improve safety for pedestrians at this location.</i> <i>Miller Street is a State Road which caters for high network demands, including public transport to and from the Cammeray area. Installing a dedicated right-turn arrow from Miller to Amherst streets is not supported at this time due to further congestion that would occur on Miller Street.</i> <i>You may be assured that Transport for NSW will continue to monitor the intersection, to ensure it operates safely and as reliably as possible.</i> <i>Transport for NSW is reviewing further potential safety measures in this area, including:</i> • <i>Adjusting the traffic light phasing for both pedestrians and motorists at the intersection</i> • <i>Installing a red-light speed camera at this intersection</i> • <i>Constructing a pedestrian crossing on the western side of the intersection of Miller and Palmer streets.</i> <i>Transport for NSW will continue to update council’s local traffic committee on the review of these safety measures.</i> 27/9/21: Variable Messaging Sign (VMS) installed in Amherst Street near Miller Street temporarily to alert motorists to watch for pedestrians.	8606280

Item	Street	Location	First TC	Summary	Problem/Request	Comments	ECM
21/08	Miller Street, Cammeray	Mid-block pedestrian signals at Cammerayg al Place	3/9/21	Pedestrian Safety	Reports of pedestrian crash wich occured on Sunday evening 1/8/21	16/8/21: Request sent to TfNSW 3/8/21 to lengthen pedestrian crossing signal (phasing) b, and suggestion to improve the visibility of the lights. This is being investigated by TfNSW Network Operations.	

5.6. Moodie Street, Cammeray - Traffic and Safety issues

AUTHOR: Iman Mohammadi, Public Projects Engineering Officer,

ENDORSED BY: Duncan Mitchell, Director Engineering and Property Services

ATTACHMENTS:

1. 5.6 Attach Moodie Street CONCEPT PLAN [5.6.1 - 1 page]

PURPOSE:

To report the background of the traffic and safety issues in Moodie Street, including traffic studies and recommendations to the past Traffic Committees.

EXECUTIVE SUMMARY:

The matter of speeding, rat-running and requests for Moodie Street to be converted to one-way northbound due to the restricted carriageway as well as residents request for a footpath in Moodie Street from Ernest Street to the start of the bend was first presented to the Traffic Committee meeting on 27 November 2020. Followed by subsequent reports to Traffic Committee meetings on the 5 February 2021 and 23 July 2021 where the matter was deferred until after the September Local Government election.

The background information of Traffic Committees recommendations and Council resolutions are detailed in this report.

FINANCIAL IMPLICATIONS:

The cost for this project is estimated to be \$100,000. The proposal is ranked as a medium-term priority in the LATM Action Plan Zone 2. Funding allocations for 2022/23 will be determined based on funding availability and respective priorities of projects within the 7 LATM Action Plans.

RECOMMENDATION:

1.THAT Council construct footpath in the northern section of Moodie Street and offset some of the parking loss by converting the parallel parking in the central section of Moodie Street to angle parking.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

2. Our Built Infrastructure
 - 2.1 Infrastructure and assets meet community needs

2.4 Improved traffic and parking management

4. Our Social Vitality

4.1 North Sydney is connected, inclusive, healthy and safe

5. Our Civic Leadership

5.3 Community is informed and consulted

BACKGROUND

A report concerning speeding and rat-run issues, request for converting Moodie Street to one-way and construction of footpath in the northern section of street was considered at the 536th Traffic Committee meeting on 27 November 2020, where it was recommended:

1. *THAT Council progress as soon as possible the construction of a footpath in the northern section of Moodie Street and offset some of the parking loss by converting the parallel parking in the central section of Moodie Street to angle parking.*
2. *THAT Council proceed with community consultation as soon as practicable.*
3. *THAT a report be submitted to the next Traffic Committee on the design and estimated cost of this work.*
4. *THAT Council acknowledges the concerns raised by local residents with regard to pedestrians and traffic in Moodie Street.*

A copy of the report to the 27 November 2020 Traffic Committee is available at:

https://www.northsydney.nsw.gov.au/Council_Meetings/Meetings/Committees/Traffic_Co_mittee/2020/27_November_2020

A further report in response to the resolutions of 22 February 2021 was prepared and considered at the 537th Traffic Committee on 5 February 2021. Subsequently, at the 3741st Council meeting on 22 February 2021 it was resolved:

1. *THAT residents of Moodie Street be consulted on the proposed footpath and parking re-arrangement and the result of this consultation be reported to the next available Traffic Committee.*
2. *THAT it be noted that the Moodie Street footpath and parking re-arrangement is a medium-term priority in the LATM Action Plan Zone 2 and funding allocations for 2021/22 will be determined based on funding availability and respective priorities of projects within the 7 LATM Zones.*

A copy of the report to the 5 February 2021 Traffic Committee is available at:

https://www.northsydney.nsw.gov.au/Council_Meetings/Meetings/Committees/Traffic_Co_mmittee/2021/5_February_2021

Following Council's resolution of 5 February 2021, Council consulted with residents of Moodie Street regarding the footpath and parking re-arrangement design plan. Community engagement took place from 7 May until 6 June 2021. The respondents were required to indicate if they support the proposed footpath construction and parking re-arrangements in Moodie Street. Of the 77 submissions received, 39 (50.65%) were in favour of the proposal and 38 (49.35%) were opposed.

The result of community consultation was considered at the 541st Traffic Committee on 23 July 2021. Subsequently, at the 3749th Council meeting on 23 August 2021 it was resolved:

2. *THAT the matter concerning Moodie Street, Cammeray – Footpath design and Parking Re-arrangement, Community Consultation be deferred to until after the September Local Government election and until such time that residents can attend in person to address the Committee. (5.2)*
3. *THAT the submitters be notified of the deferral of this matter. (5.2)*
4. *THAT the Committee thank the staff involved in the report for the efforts in ameliorating the traffic in Moodie Street. (5.2)*

A copy of the report to the 23 July 2021 Traffic Committee is available at:

https://www.northsydney.nsw.gov.au/Council_Meetings/Meetings/Committees/Traffic_Co_mmittee/2021/23_July_2021

CONSULTATION REQUIREMENTS

Community engagement will be undertaken in accordance with Council's Community Engagement Protocol.

Relates to ECM No: N/A

Standard or Guideline Used: AS1742.2, 2890.5

Signs & Lines Priority: N/A

Precinct and Ward: Registry/ Tunks

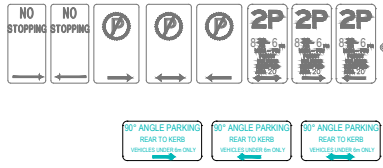
Impact on Bicycles: Nil

Impact on Pedestrians: the proposal may improve pedestrian safety in the street

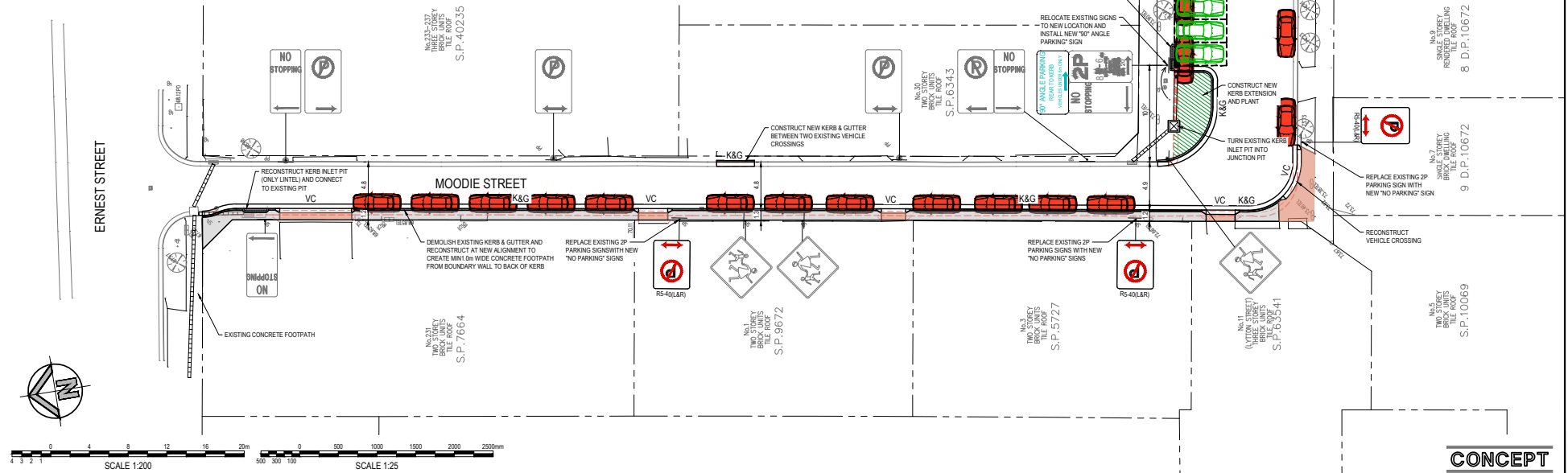
Impact on Parking: Construction of footpath in Moodie Street and proposed parking re-arrangement will result in net loss of 9 on-street parking spaces.

LEGEND

- EXISTING STORMWATER PIPE
- PROPOSED STORMWATER PIPE
- PROPOSED KERB & GUTTER
- PROPOSED VEHICLE CROSSING
- KERB & GUTTER TO BE REMOVED
- RETAINED PARKING SPACE
- LOSS OF PARKING SPACE
- PROPOSED PARKING SPACE
- PROPOSED JUNCTION FIT
- PROPOSED KERB INLET PIT (SINGLE)
- PROPOSED GARDEN AREA
- PROPOSED CONCRETE FOOTPATH
- PROPOSED CONCRETE DRIVEWAY



CAR SPACES - MOODIE STREET	
EXISTING	8 No (FROM No.20 MOODIE STREET TO No.28 MOODIE STREET) 28 No (FROM No.13 MOODIE STREET TO ERNEST STREET) TOTAL: 26 No
PROPOSED RETAINED	17 No (FROM No.20 MOODIE STREET TO No.28 MOODIE STREET) 0 No (FROM No.13 MOODIE STREET TO ERNEST STREET) TOTAL: 17 No
LOSS	9 NO



SCALE 1:200
SCALE 1:25

SURVEY INFORMATION	
HORIZONTAL SYSTEM (MGA 2020)	
COORDINATE SYSTEM	MAGNETIC
EASTING	330 000 000
NORTHING	6 800 000 000
VERTICAL SYSTEM	
DATE	
BY	

Client	City of Brisbane
Project Name	C-SIDE SOURCE
Address	
City	
State	
Postcode	
Phone	
Fax	
Email	
Web	

Build 2.01
8/8 Pacific Highway Gordon NSW 2322
Telephone 41 5 947 8400
Facsimile 41 5 947 8537
Email enquiries@hrym.com.au
Web www.henryandhymas.com.au

CIVIL AND DRAINAGE DESIGN
MOODIE STREET CAMMERA

DATE	01/04/2022	BY	SR
DATE	01/04/2022	BY	SR
DATE	01/04/2022	BY	SR
DATE	01/04/2022	BY	SR

CONCEPT

6. Informal Items for Consideration

6.1. Standing Item - Sydney Metro - Project Update

AUTHOR: Iman Mohammadi, Public Projects Engineering Officer

ENDORSED BY: Duncan Mitchell, Director Engineering and Property Services

ATTACHMENTS: Nil

PURPOSE:

The purpose of this report is to update the North Sydney Traffic Committee on the current status of the Metro City & South-West (Metro) project and upcoming works affecting local roads.

Updates are also provided on the Sydney Metro website at <https://www.sydneymetro.info/>

EXECUTIVE SUMMARY:

Consent for the Metro City & South-West (Metro) project was granted by the Department of Planning and Environment on 9 January 2017. The consent can be viewed in full at www.majorprojects.planning.nsw.gov.au.

The project will deliver new railway infrastructure for Sydney, including two new Metro stations within the North Sydney Local Government Area - at Crows Nest and Victoria Cross (North Sydney Centre). Construction commenced in early 2017, with train operations expected to be underway by 2024.

In accordance with the various conditions of consent, a Traffic and Transport Liaison Group (TTLG) has been established to inform traffic and transport measures during construction and operation of the project. The TTLG is chaired by the Sydney Coordination Office (SCO) and comprises representatives from the relevant Road Authorities, which includes North Sydney Council. The TTLG meets monthly and a smaller group of representatives known as the Traffic Control Group (TCG) meets weekly to discuss impending construction-related traffic management matters.

The Construction Traffic Management Plans (CTMPs) must be developed in consultation with the TTLG. TfNSW is the approval authority for the CTMPs, following endorsement by the SCO.

FINANCIAL IMPLICATIONS:

There are no direct financial implications arising from this report.

RECOMMENDATION:

1. THAT the information concerning Sydney Metro City & South-West Construction Update be received.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

2. Our Built Infrastructure

2.1 Infrastructure and assets meet community needs

2.4 Improved traffic and parking management

5. Our Civic Leadership

5.2 Council is well governed and customer focused

5.3 Community is informed and consulted

BACKGROUND

Consent for the Metro City & South-West (Metro) project was granted by the Department of Planning and Environment on 9 January 2017. The consent can be viewed in full at www.majorprojects.planning.nsw.gov.au.

The project will deliver new railway infrastructure for Sydney, including two new Metro stations within the North Sydney Local Government Area - at Crows Nest and Victoria Cross (North Sydney Centre). Construction commenced in early 2017, with train operations expected to be underway by 2024.

CONSULTATION REQUIREMENTS

As this is a state government project, Transport for NSW are responsible for all community engagement relating to the project.

DETAIL

Relates to ECM No: N/A

Standard or Guideline Used: N/A

Signs & Lines Priority: N/A

Precinct and Ward: Various precincts, St Leonards & Cammeraygal Wards

Impact on Bicycles: Local cycling access maintained and managed through traffic guidance schemes

Impact on Pedestrians: Local pedestrian access may be impacted adjacent to and around the Sydney Metro work sites and managed through traffic guidance schemes.

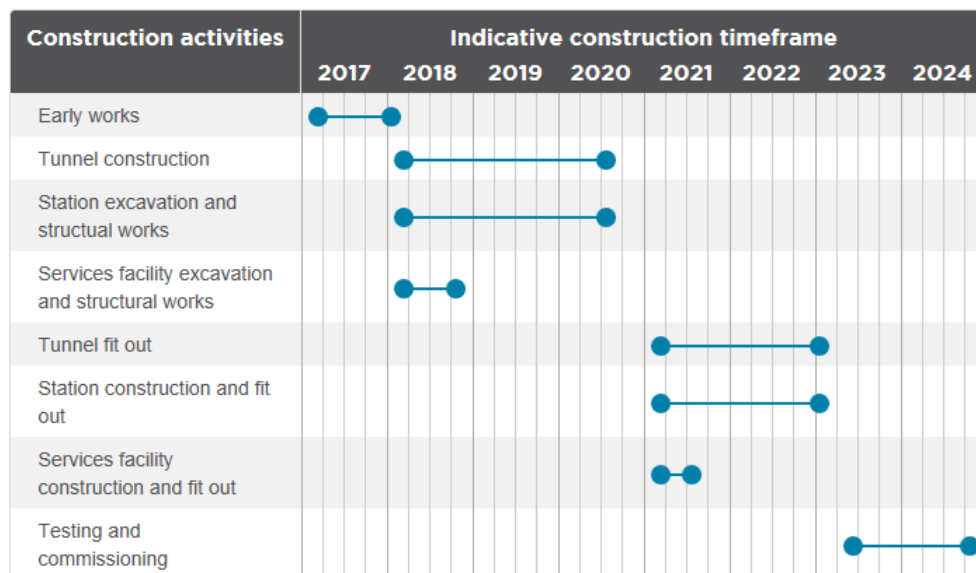
Impact on Parking: Parking adjacent to each construction site has been removed under applications throughout the project to facilitate construction.

There are four (4) construction sites within the North Sydney LGA associated with the Metro project.

1. **Victoria Cross Station (VC2)** – includes 155-189 Miller Street bounded by Miller Street, Berry Street and Denison Street.
2. **Victoria Cross North (VC1)** –site for the services building and additional access point at 52 McLaren Street (vacant site on northern corner of Miller Street and McLaren Street intersection).
3. **Crows Nest Station (CN)** – includes 497-521 Pacific Highway bounded by Pacific Highway, Oxley Street, Clarke Lane and Hume Street; 14 Clarke Street (Beaurepaires site); and 477-495 Pacific Highway bounded by Pacific Highway, Hume Street and Clarke Lane.
4. **Blues Point Reserve (BP)** – Temporary construction site, including creation of a shaft for the delivery and extraction of tunnel boring equipment.

The City & Southwest (Chatswood to Sydenham) project has been split into stages. Each stage is subject to separate contracts and may be undertaken by different contractors. An indicative timeline for the full City & Southwest portion is provided below.

Indicative timeline



Source: Sydney Metro website 26/5/17

Works at each site are currently at station construction/ fit out and linewise trackworks. The key activities are summarised below.

Update on sites within North Sydney Council area

Victoria Cross South

[Vic Cross – Construction Updates](#)

Excavation works, formwork steel fitting, deliveries, concrete pouring. Installation of hoardings, site accommodation and tower cranes on Miller Street frontage. Deliveries via Miller Street Work Zone.

Miller Street – major stormwater upgrade works located within southbound, establishment of one-way contra flow – staged night works from March 2022 until first week of May (approx. 4 weeks total).

Victoria Cross North

[Vic Cross – Construction Updates](#)

Deliveries and tower crane operations within site boundary. Access via McLaren Street.

Crows Nest Station

[Crows Nest – Construction Updates](#)

Deliveries occurring from Pacific Highway “logistics lane” – footpath occupation - pedestrians diverted to western side of Pacific Highway. Some concrete pours occurring from Clarke Lane.

Hume Street fully closed to traffic between Pacific Highway and Clarke Lane until 31 December.

Blues Point

[Blues Point – Construction Updates](#)

DPIE granted modification for continued use of Blues Point site for additional 12 months from December 2020 for linewide track fitout.

The site acoustic shed was removed in December 2021.

A site compound has been established on Blues Point Road to facilitate and expedite these works. Blues Point Road south of Henry Lawson Avenue was closed to traffic from 16 August 2021 for an initial period of 3 months. Pedestrian access to Blues Point Reserve maintained with temporary pathway.

Existing parking spaces at Blues Point Road had to be temporary removed and Blues Point Road be closed to traffic at the reserve to enable completion of Capping beam removal works and landscaping works in the Blues Point Reserve. These works started on 21 February 2022 and completed at the end of March 2022

Park reinstatement works in Henry Lawson Reserve will continue into 2022.

6.2. Standing Item - Western Harbour Tunnel & Warringah Freeway Upgrade

AUTHOR: Iman Mohammadi, Public Projects Engineering Officer

ENDORSED BY: Duncan Mitchell, Director Engineering and Property Services

ATTACHMENTS: Nil

PURPOSE:

The purpose of this report is to provide an update on current works and impacts associated with the Transport for NSW Western Harbour Tunnel and Warringah Freeway Upgrade project (SSI 8863).

EXECUTIVE SUMMARY:

The Western Harbour Tunnel and Warringah Freeway Upgrade project SSI 8863 was approved by the Minister for Planning and Public Spaces on 21 January 2021. The project is being undertaken by Transport for NSW.

Warringah Freeway Upgrade Early Works commenced in April 2021 and impact on a number of Council roads adjacent to and alongside the Warringah Freeway. Transport for NSW has exercised functions of a roads authority under the Roads Act 1993 for those roads.

This report provides a high-level overview of the current work sites and summary of complaints received by Council.

FINANCIAL IMPLICATIONS:

There are no direct financial implications arising from this report.

RECOMMENDATION:

1. THAT the information concerning the Western Harbour Tunnel and Warringah Freeway Upgrade project be received.

LINK TO COMMUNITY STRATEGIC PLAN

The relationship with the Community Strategic Plan is as follows:

- 2. Our Built Infrastructure
 - 2.1 Infrastructure and assets meet community needs
 - 2.4 Improved traffic and parking management
- 5. Our Civic Leadership
 - 5.2 Council is well governed and customer focused
 - 5.3 Community is informed and consulted

BACKGROUND

The Western Harbour Tunnel and Warringah Freeway Upgrade project SSI 8863 was approved by the Minister for Planning and Public Spaces on 21 January 2021. The project is being undertaken by Transport for NSW.

Warringah Freeway Upgrade Early Works commenced in April 2021. The works impact on a number of Council roads adjacent to and alongside the Warringah Freeway. All community notifications are available on the Western Harbour Tunnel and Warringah Freeway Upgrade webpage at <https://caportal.com.au/rms/wht/documents-and-notifications>

CONSULTATION REQUIREMENTS

As this is a state government project, Transport for NSW are responsible for all community engagement relating to the project.

DETAIL

Relates to ECM No:

Standard or Guideline Used:

Signs & Lines Priority: N/A

Precinct and Ward: Registry/ Stanton/ Neutral/ Anderson/ CBD; Tunks/ Victoria/ Wollstonecraft

Impact on Bicycles: Local cycling access may be impacted adjacent to and around the WHT/WFU work sites under traffic management

Impact on Pedestrians: Local pedestrian access may be impacted adjacent to and around the WHT/WFU work sites under traffic management

Impact on Parking: Approximately 75 parking spaces on Alfred Street North; 35 spaces on Cammeray Avenue and 10 spaces on Ridge Street have so far been removed by TfNSW to facilitate the works.

Council has received numerous notices from Transport for NSW under 64(1A) of the Roads Act 1993 of their intention to exercise functions of a roads authority. This means that TfNSW has the same powers under the Roads Act 1993 as Council for the roads listed in each notice.

7. Local Development Advisory Committee Items for Consideration

Nil

8. General Business

9. Closure