AGENDA

LOCAL TRAFFIC COMMITTEE MEETING

MONDAY 17 FEBRUARY 2025

11:00 AM

Location Ashfield Service Centre, 260 Liverpool Road, Ashfield

Function of the Local Traffic Committee

Background

Roads and Maritime Services (RMS) is legislated as the Authority responsible for the control of traffic on all NSW Roads. The RMS has delegated certain aspects of the control of traffic on local roads to councils. To exercise this delegation, councils must establish a local traffic committee and obtain the advice of the RMS and Police. The Inner West Council Local Traffic Committee has been constituted by Council as a result of the delegation granted by the RMS pursuant to Section 50 of the Transport Administration Act 1988.

Role of the Committee

The Local Traffic Committee is primarily a technical review and advisory committee which considers the technical merits of proposals and ensures that current technical guidelines are considered. It provides recommendations to Council on traffic and parking control matters and on the provision of traffic control facilities and prescribed traffic control devices for which Council has delegated authority. These matters are dealt with under **Part A** of the agenda and require Council to consider exercising its delegation.

In addition to its formal role as the Local Traffic Committee, the Committee may also be requested to provide informal traffic engineering advice on traffic matters not requiring Council to exercise its delegated function at that point in time, for example, advice to Council's Development Assessment Section on traffic generating developments. These matters are dealt with under **Part C** of the agenda and are for information or advice only and do not require Council to exercise its delegation.

Committee Delegations

The Local Traffic Committee has no decision-making powers. The Council must refer all traffic related matters to the Local Traffic Committee prior to exercising its delegated functions. Matters related to State Roads or functions that have not been delegated to Council must be referred directly to the RMS or relevant organisation.

The Committee provides recommendations to Council. Should Council wish to act contrary to the advice of the Committee or if that advice is not supported unanimously by the Committee members, then the Police or RMS have an opportunity to appeal to the Regional Traffic Committee.

Committee Membership & Voting

Formal voting membership comprises the following:

- one representative of Council as nominated by Council;
- one representative of the NSW Police from each Local Area Command (LAC) within the LGA, being Newtown, Marrickville, Leichhardt and Ashfield LAC's.
- one representative from the RMS; and
- State Members of Parliament (MP) for the electorates of Summer Hill, Newtown, Heffron, Canterbury, Strathfield and Balmain or their nominees.

Where the Council area is represented by more than one MP or covered by more than one Police LAC, representatives are only permitted to vote on matters which effect their electorate or LAC.

Informal (non-voting) advisors from within Council or external authorities may also attend Committee meetings to provide expert advice.

Committee Chair

Council's representative will chair the meetings.

Public Participation

Members of the public or other stakeholders may address the Committee on agenda items to be considered by the Committee. The format and number of presentations is at the discretion of the Chairperson and is generally limited to 3 minutes per speaker. Committee debate on agenda items is not open to the public.

AGENDA

1 Apologies

2 Disclosures of Interest

3 Confirmation of Minutes

4 Matters Arising from Council's Resolution of Minutes

5 Part A – Items Where Council May Exercise Its Delegated Functions

Traffic Matters

Parking Matters

Late Items

Nil at time of printing.

6 Part B - Items for Information Only

7 Part C - Items for General Advice

Nil at the time of printing.

8 General Business

9 Close of Meeting

Minutes of Meeting held on 09 December 2024

Meeting commenced at 11:09 AM

ACKNOWLEDGEMENT OF COUNTRY BY CHAIRPERSON

I acknowledge the Gadigal and Wangal people of the Eora nation on whose country we are meeting today, and their elders past and present.

COMMITTEE REPRESENTATIVES PRESENT

Victor Macri	Councillor –Midjuburi - Marrickville Ward (Chair)
Bill Holliday	Representative for Kobi Shetty MP, Member for Balmain
Graeme McKay	Representative for Jo Haylen MP, Member for Summer Hill
Eleanor Nurse	Representative for Jenny Leong MP, Member for Newtown
Nina Fard	Transport for NSW (TfNSW)
Ben Walters	NSW Police – Inner West Police Area Command

NON VOTING MEMBERS IN ATTENDANCE

Col Jones	Inner West Bicycle Coalition (IWBC)
Michael Takla	Representative for Transit Systems
Nalin Rajapaksha	Representative for U-Go Mobility
Manod Wickramasinghe	IWC's Traffic and Transport Planning Manager
Sunny Jo	IWC's Coordinator Traffic Engineering Services (North)
George Tsaprounis	IWC's Coordinator Traffic Engineering Services (South)
Jason Scoufis	IWC's Coordinator Traffic Investigations & Road Safety
Amir Falamarzi	IWC's Traffic Engineer
Christy Li	IWC's Business Administration Officer

VISITORS

Ben Peake	Public Speaker (Item 4)
Hassan Kharroubi	Public Speaker (Item 4)
Huw Davis	Public Speaker (Item 4)
Rory Steinle- Davis	Public Speaker (Item 4)
Carmel McDonald	Public Speaker (Item 4)
Dyranda Hortle	Public Speaker (Item 4)
Edward Walsh	Public Speaker (Item 4)
Susan Moxham	Public Speaker (Item 4)
Bob Stephenson	Public Speaker (Item 4)
Sandra Ianitto	Public Speaker (Item 5)
Rosanna Martinello	Public Speaker (Item 5)
Manjur Rahman	Transport for NSW (TfNSW) (Item 11)
Ahsanul Amin	Transport for NSW (TfNSW) - Sydney Metro (Item 12)
Nick Windmiller	Transport for NSW (TfNSW) - Sydney Metro (Item 12)
Imogen Markus	Transport for NSW (TfNSW) - Sydney Metro (Item 12)
Fernando Guerreiro	Public Speaker (Item 14)
Bret Tombs	Public Speaker (Item 14)
Marijke Tombs	Public Speaker (Item 14)

APOLOGIES:

Sgt Charles Buttrose	NSW Police – Leichhardt Police Area Command

DISCLOSURES OF INTERESTS:

Nil.

CONFIRMATION OF MINUTES

That the Minutes of the Local Traffic Committee held on Monday, 18 November 2024 be confirmed.

MATTERS ARISING FROM COUNCIL'S RESOLUTION OF MINUTES

The Minutes of the Local Traffic Committee meeting held on 18 November 2024 were adopted at Council's meeting held on 03 December subject to the following:

1. Item 16 - Mackey Park and Carrington Road Survey Area, Marrickville: Request for extension of M2 Residential Parking Scheme: that Council write to affected residents explaining the actions taken to date and inviting residents to attend a town hall meeting to be organised in February 2025 and held in South Marrickville; and that council investigate and consult the Marrickville Red Devils on establishing a kiss and ride zone at a location near Mackey Park on Saturdays; and

2. Item 17 - Tempe Reserve - Parking Study: that Council write to affected residents explaining the actions taken to date and inviting residents to attend a town hall meeting to be organised in February 2025 and held in Tempe.

LTC1224(1) Item 1 Robert Street at Holden Street, Ashfield - New At-Grade Pedestrian (Zebra) Crossing (Djarrawunang-Ashfield Ward/Summer Hill Electorate/Burwood PAC)

SUMMARY

Council at its meeting on the 18 March 2024 (through its Traffic Committee 11 December 2023) approved in principle a series of proposed pedestrian (zebra) crossings and kerb extension treatments (under concept) with other auxiliary works (relocation of bus stops, inclusion of raised platform thresholds) for improved pedestrian and road safety around and near to the Cardinal Freeman (Retirement) Village, Ashfield.

This report describes and shows the detailed design plan of one of the proposed treatments involving the placing of a pedestrian (zebra) crossing in Robert Street, at the intersection of Holden Street, Ashfield. This work is programmed and envisaged to be constructed in the 2025/2026 financial year, subject to funding.

Officers Recommendation:

That the detailed design plan (10302) for a proposed new at-grade pedestrian (zebra) crossing in Robert Street at its intersection with Holden Street, Ashfield, with associated signs and line marking (as shown in Attachment 1) be approved.

DISCUSSION:

The Representative for the Transport for NSW raised concerns regarding the crossing not being entirely at the intersection nor offset from the intersection by a vehicle length (6 metres). Due to this, vehicles could stop partially over the pedestrian crossing which could reduce motorist sightlines to pedestrians wishing to cross.

The Representative for Transport for NSW advised they are still in discussion with Council

Officers regarding what adjustments can be made whilst taking into consideration the current constraints of the proposed location.

The Representative for Transit Systems questioned when the works would be implemented and whether buses would be allowed through during construction. Council Officers advised that the project is currently scheduled for construction in the next financial year however it will be subject to grant funding opportunities therefore nothing has been determined as of yet. It was noted that once construction is scheduled, Council will be able to provide further information to the Representative for Transit Systems.

Council Officers suggested that this item be deferred to allow for further investigations regarding the proposed location of the crossing and other potential options.

The Committee members agreed with the amended recommendation.

COMMITTEE RECOMMENDATION:

That the detailed design plan (10302) for a proposed new at-grade pedestrian (zebra) crossing in Robert Street at its intersection with Holden Street, Ashfield, with associated signs and line marking (as shown in Attachment 1 of the Local Traffic Committee report) be deferred for further investigation.

For Motion: Unanimous

LTC1224(1) Item 2 Edgeware Road and Camden Street, Enmore - Proposed kerb extensions (Damun-Enmore Ward/Newtown Electorate/Inner West PAC)

SUMMARY

This report discusses an assessment completed for the intersection at Edgeware Road and Camden Street, Enmore in response to concerns raised and recent accidents. Kerb extensions and adjustments to the 'GIVE WAY' lines are proposed to improve safety at this intersection.

Officers Recommendation:

That:

1. the design plan for the kerb extensions and adjustment of the 'GIVE WAY' line marking at the intersection of Edgeware Road and Camden Street, Enmore be approved in principle and a detailed design be bought back to the Committee for consideration.
2. the design for the interim line marking treatment at the intersection of Edgeware Road and Camden Street, Enmore be approved (as detailed in *Attachment 2).*

DISCUSSION:

The Representative for the Inner West Bicycle Coalition advised that some cyclists tend to ride their bikes in the door zones and if the kerb extensions were to be placed to the edge of the travel lane, some cyclists may diverge around the kerb extensions and into the carriageway causing a potential safety issue. The Representative for the Inner West Bicycle Coalition noted that he does not have any issues with the interim treatment noting that cyclists can ride over the markings.

Council Officers advised that they will investigate the possibility of shortening the concrete

kerb island and incorporate that into the detailed design.

The Committee members agreed with the Officer's recommendation.

COMMITTEE RECOMMENDATION:

That:

1. **the design plan for the kerb extensions and adjustment of the 'GIVE WAY' line marking at the intersection of Edgeware Road and Camden Street, Enmore be approved in principle and a detailed design be bought back to the Committee for consideration.**
2. **the design for the interim line marking treatment at the intersection of Edgeware Road and Camden Street, Enmore be approved (as detailed in *Attachment 2* of the Local Traffic Committee report*).***

For Motion: Unanimous

LTC1224(1) Item 3 LGA-Wide High Pedestrian Activity Area (HPAA) Investigations - Final Report (All Wards / All Electorates / All PACs)

SUMMARY

The Pedestrian Access and Mobility Plan (PAMP) prepared in 2021 recommended the implementation of High Pedestrian Activity Areas (HPAAs) in 10 areas throughout the LGA. Stantec was subsequently engaged by Council to develop proposals to implement HPAA schemes in these 10 areas.

This report seeks to improve pedestrian safety in town centres through the provision of traffic management treatments and by lowering speed limits for vehicles it will further improve bicycle safety within the overall proposed safety improvements.

This proposal seeks to lower the speed limit to 40km/h at all times within the proposed HPAA areas. Changes to the local road environment have been designed and proposed to alert drivers to the lower speed limit and make them aware of the presence of pedestrians.

Officers Recommendation:

That:

a) The proposed 40 km/h High Pedestrian Activity Areas and subsequent treatments listed in the 40 km/h High Pedestrian Activity Area Investigations report be supported in principle as per the attached report in Attachment 1 and Attachment 2, subject to approval from TfNSW.

b) That the proposed 40 km/h High Pedestrian Activity Areas and subsequent treatments listed in the 40 km/h High Pedestrian Activity Area Investigations report on State roads be forwarded to TfNSW for their consideration.

DISCUSSION:

Council Officers advised that this project was completed by a consultant who reviewed potential high pedestrian activity areas within the Inner West Council LGA which Council could raise with TfNSW and apply for grant funding in the future. It was noted that this has not yet been forwarded to Transport for NSW for formal review which means that there will have to be a body of work after the item is noted for TfNSW to review and endorse the HPAAs before Council can commence with the detailed design. It was also noted that speed

limit changes are under the jurisdiction of TfNSW and not a matter for the Committee.

To clarify this, Council Officers suggested to amend the recommendation to take into consideration the comments received from TfNSW regarding the approval process for the speed limit reductions.

The Committee members agreed with the amended recommendation.

COMMITTEE RECOMMENDATION:

That:

a) **That the 40km/h High Pedestrian Activity areas (HPAAs) investigation report be noted and submitted to TfNSW for formal review prior to HPPA projects being listed in Council's capital works program.**
b) **That the traffic facilities on local and regional road proposed in the report be supported in principle.**

For Motion: Unanimous

LTC1224(1) Item 4 Re-exhibition of proposed permanent road closure Jaggers Lane, Balmain (Baludarri - Balmain Ward / Balmain Electorate / Leichhardt PAC)

SUMMARY

The previous decision for the closure of Jaggers Lane was deferred at the Council's Ordinary meeting of 9 April 2024. This was as a result of a pending Land and Environment Court Appeal relating to 4 Caroline Street, Balmain which proposed a modified access to Jaggers Lane for approved onsite carparking.

On 30 August 2024 a Court judgment was handed down in the Appeal making it conditional that unless there was a Traffic Management Committee approval for the Jaggers Lane access to 4 Caroline Street there would be no access permitted to the property. The Court judgment included a permanent road closure with a single bollard along the mid-block of Jaggers lane, including a splay at the intersection of Jaggers Lane at Caroline Street to accommodate vehicular access and appropriate signage at no cost to Council.

As the proposal was different from the previously deferred option considered by Council which included two bollards at either end of Jaggers Lane, three options were put to community engagement, that is Option 1: A full road closure of Jaggers Lane to all traffic; Option 2: A mid-block road closure of Jaggers Lane; and Option 3: No changes to the existing traffic arrangements in Jaggers Lane.

Community Engagement has closed and indicated that Option 1 was the preferred option with 66.7% support rate.

Officers Recommendation:

1. That the permanent full road closure of Jaggers Lane, Balmain between Duncan Street and Caroline Street (Option 1) be approved subject to the approval of the Traffic Management Plan (TMP) by Transport for NSW (TfNSW).

2. That the closure of Jaggers Lane, Balmain (Option 1) be implemented as per the bollards and signposting plan provided in *Attachment 1.*

DISCUSSION:

Public Speakers Ben Peake, Hassan Kharroubi, Huw Davis, Rory Steinle-Davis, and Carmel MacDonald entered the meeting at 11.10am

Mr Kharroubi objected to the recommendation as he advised he had previously received a DA approval for restorations and carparking on his property at Caroline Street. He advised that he has also gone to the Land and Environment court and that he has entered into a Section 34 agreement whereby he intends to dedicate part of his land to widen Jaggers Lane and to allow for cars to enter his property. Mr Kharroubi advised that he supported Council's previous proposal to add a bollard in the centre of the lane to prevent through traffic whilst achieving a balance of allowing residents to use the lane to access their properties. Mr Kharroubi noted that as part of the Section 34 agreement, he is to prepare a submission to the Local Traffic Committee demonstrating that he can access the lane and that he has engaged a traffic consultant to provide all relevant reports. He added that the process has been constantly deferred due to the proposal to close off Jaggers Lane and noted that having onsite parking will help alleviate the off street parking issues in the area. Mr Kharroubi advised that the full closure of Jaggers Lane will impact amenity and accessibility in the area, property values, appeal for potential buyers to purchase in the area as well as affect current and future developments in the area.

Mr Peake spoke in agreement with Mr Kharroubi and advised that a submission was put to the Committee in July by Mr Kharroubi's traffic consultants and has concerns that their submission was not properly considered. Mr Peake advise that the key issues arising from the meeting could be addressed with having a centrally located bollard in the lane would be able to somewhat satisfy the needs of all residents. It was noted that Mr Kharroubi's onsite parking has been considered by both Council and the Land and Environment court with minor technical matters that needed to be addressed.

Mr Davies objected to the recommendation and advised his concerns regarding the report being biased to supporting the road closure. Mr Davis noted that the Committee is proposing a road closure that affects 320 people (as per the consultation area) which purportedly can be closed down by 22 people and questioned how many of the 22 people have access to off-street parking. Mr Davis advised that the summaries in the engagement outcomes report seem to be biased towards having the road being closed noting that if 8 people are directly impacted and want the lane closure out of the 320 people consulted in the area. Mr Davis also noted that the original petition to close the road had 47 names and that it has now gone down to 22 submission and suggested that people are changing their minds on the closure.

Mr Steinle-Davis objected to the recommendation and advised that the laneway is an asset to renovation, upgrade, and maintenance projects for neighbouring properties. Mr Steinle-Davis raised concerns that the closure of the lane will cause more traffic on the main road as well as add to existing parking issues in the area. Mr Steinle-Davis advised that he would like a resolution to this matter and that he would not be opposed to having a bollard installed centrally in the lane and advised that it would assist with partially closing the lane and providing pedestrian access. It was also noted that Sydney Water had been consulted in previous engagements and that they had advised that they would require access to the laneway to maintain their assets in the laneway.

Ms MacDonald objected to the recommendation noting she does not see any reason for the proposed closure of the lane as there is not much vehicular traffic on the lane. Ms MacDonald noted that there is limited parking availability on Waterview Street and that residents of Waterview Street should be able to use the lane to access their homes for reasons such as unloading shopping, charging their vehicles or moving furniture.

Public Speakers Ben Peake, Hassan Kharroubi, Huw Davis, Rory Steinle-Davis and Carmel MacDonald left the meeting at 11.33am

Public Speakers Dyranda Hortle, Edward Walsh, Susan Moxham and Bob Stephenson entered the meeting at 11.34am

Ms Hortle, Mr Walsh, Ms Moxham and Mr Stephenson all supported the recommendation as the lane is non-compliant with the Australian Standard for vehicular use. Mr Walsh also noted that cars and pedestrians could not safely coexist in the lane as the lane was too narrow for pedestrians and vehicles to pass each other safety. Mr Walsh advised that the local community often use the lane as a footpath to get to the Balmain ferry as there is no footpath available on a portion of Waterview Street. Mr Walsh noted he disagreed with the reports of there being a low risk of conflicts between cars and pedestrians and that in the previous traffic survey conducted, there were 3 incidents during the survey period, 1 being vehicle-to-vehicle damage, 1 road rage incident and 1 incident where a vehicle almost collided with the residents back gate as they opened their gate onto the lane. Mr Walsh noted that one of the key risks was that some property's back gates open onto the lane which may cause issues if vehicular movements were allowed in the lane.

Mr Stephenson advised that the recommendation aligns with community wishes to future-proof the lane for pedestrian access. Mr Stephenson advised that the lane is a great amenity for the residents and has many environmental and social benefits to the community.

Ms Moxham advised that she uses the lane multiple times daily and many people in the wider community also do so due to the lack of footpaths in the area. Ms Moxham also noted that she did not support the idea of creating private driveways for developers who do not intend to live in the area. Ms Moxham also encouraged Council to investigate developing the lane into a functioning walkway/cycleway as Council is currently doing in other areas of the LGA. Ms Moxham noted that by doing so it will enhance the environment and encourage people to take on active transport.

Ms Walsh noted that the proposal to have a single bollard installed in the middle of the lane would stop through traffic in the lane however his main concern was that by not having the road fully closed, the current DA application would allow for traffic to utilise the laneway for access.

Public Speakers Dyranda Hortle, Edward Walsh, Susan Moxham and Bob Stephenson left the meeting at 11.47am.

The Chairperson advised that he supports the option of having a bollard placed into the laneway so that residents can still access the rear of their property if required. The Chairperson noted the concerns regarding future developments and the potential conflicts between pedestrians and vehicles however with the lack of parking in adjacent streets, residents may still need to access the laneway to service their properties. The Chairperson noted that Mr Kharroubi's intention to dedicate part of his lane as a footpath will set a precedent for future residents who wish to add off-street parking onto their properties. The Chairperson noted that if the bollard is placed in the lane, the lane will technically become a 'shared zone' instead of a through road and suggested that Council investigate the repositioning of the bollard. The Representative for the Member of Balmain suggested having a rules-based arrangement so that cars are secondary to pedestrians and the possibility of implementing 'No Stopping' throughout the lane and having the speed limit reduced to a low speed so pedestrians can safely use it. The Representative for the Member of Summer Hill recommended that a bollard be installed in Jaggers Lane. The Chairperson noted that the installation of the bollard can be reversed if it is not a suitable treatment.

Council Officers advised that the original request to close that lane came in as the lane is only 3 metres wide and pedestrians and vehicles cannot safely pass each other in the lane. It was noted that there were issues of illegal parking in the lane which obstructed access for pedestrians. Council Officers noted that in terms of its technical merits, there should be no traffic in the lane. It was noted that there are currently no approved driveways in the lane and that the residents are concerned for the potential for developments to start increasing the

number of driveways in the lane. It was noted that historically there have been no approvals for driveways in the lane due to the limited space to access the lane. Council Officers advised that the closure of the lane is essentially formalising the current conditions of the lane.

It was noted that Council had received 40 submissions from the community engagement, 7 were deemed out of the consultation area. Out of the 7 out of area submissions, two were in support of option 1 and 5 submissions were in support of leaving the lane as it is now. Council Officers noted that from the submissions from the consultation area, there was a 66% support rate to close the lane to all traffic and if the statistics were narrowed down to the immediately affected properties, that would still be a 61% support rate to close the lane to all traffic. Council Officers advised that the recommendation put forward to support option 1 was based on the overall community support to close the lane.

The Chairperson noted his concerns regarding the ability for residents to access their properties from the lane due to the existing parking issues in the area.

Council Officers also noted that pictures of the construction vehicles being parked in the lane are technically illegal and that if works did need to happen for the property, Council would suggest the resident apply for a 'Work Zone' at the frontage of their property.

The Chairperson noted that he supported the idea of the bollard being installed into the lane and have that reviewed over time.

The Committee members agreed with the amended recommendation.

COMMITTEE RECOMMENDATION:

1. **That the permanent full road closure of Jaggers Lane, Balmain between Duncan Street and Caroline Street (Option 2), with a single bollard positioned on Jaggers Lane at the common property alignment of 31 and 33 Waterview Street be approved subject to the approval of the Traffic Management Plan (TMP) by Transport for NSW (TfNSW).**

For Motion: Unanimous

LTC1224(1) Item 5 Empire Street, Haberfield - Proposed Motorbike Parking (Gulgadya-Leichhardt Ward/Summer Hill Electorate/Burwood PAC)

SUMMARY

Council has received concerns regarding vehicles obstructing the driveway of No.26 Empire Street, Haberfield. It was reported that the existing 4m kerbspace between No.24 and No.26 Empire Street is insufficient to accommodate a standard sized vehicle without partially obstructing the driveway, and impeding vehicular access to No.26 Empire Steet, Haberfield.

To assist in maintaining vehicular access, Council proposed to install a 4m length 'Motor Bike Only' parking zone. Following consultation, concerns were raised regarding the impact of the restriction from the directly impacted resident and hence the proposal is recommended to not proceed at this time.

Officers Recommendation:

That the proposed 4m length 'Motor Bike Parking' zone between the driveway of No.24 and No.26 Empire Street, Haberfield be not supported due to lack of support from the immediately impacted property.

DISCUSSION:

Public Speaker Sandra Ianitto entered the meeting at 11.48am.

Ms Ianitto supported the recommendation advising she has never had concerns with car parking or driveway access to her property caused by the size or location of the kerb space located in front of her property. Ms Ianitto advised she sympathised with her neighbour's concerns regarding driveway access issues however, noted that there must be other solutions for her neighbour that do not impact her as drastically by removing amenity for herself, her visitors, and other neighbours. Ms Ianitto noted that outside of sporting events at Algie Park, parking levels are low and that her section of Empire Street is a quiet residential street with most residents utilising their off-street parking. Ms Ianitto noted that extra cars on the street coincide with activities on the sports fields and that the regular parkgoers are quite familiar with the available parking spaces and where they can park safely. Ms Ianitto noted that although this may make the street busier at times, it does not have a significant impact on the residents in the surrounding area as these extra cars occur for 2-3 weekdays during the playing seasons from 4pm to 7pm. Ms Ianitto advised she disagreed with the description of the kerb space being too small for vehicles to park as she drives a 5-seat Volkswagen hatchback which fits into the space.

Public Speaker Sandra Ianitto left the meeting at 11.51am.

Public Speaker Rosanna Martinello entered the meeting at 11.52am.

Ms Martinello opposed the recommendation as vehicles who often park in the 4m kerb space between No.24 and No.26 Empire Street, Haberfield often obstruct access to her driveway and property. Ms Martinello advised that Council had previously advised her to install driveway linemarkings to deter people from parking too close to her driveway however, the issue still persists and often she is blocked in and unable to exit her property. Ms Martinello requested that Council continue with the original proposal to implement 'Motor Bike Parking' in front of No.24 Empire Street or investigate other potential treatments so that she can safely access her property at all times. Ms Martinello advised that the recommendation noted that the original proposal was not supported due to lack of support from the immediately impacted property which is No.24. Ms Martinello noted that she is also severely impacted at No.26 and has advised that she has reported instances of illegal parking to Council numerous times. Ms Martinello stated that the issue arises from cars parking in the 4m kerb space advising that the 4m space is insufficient for today's vehicles as the minimum requirement for a car space is 5.4 meters long. Ms Martinello also noted that Council has acknowledged that this kerb space is too small for cars to park in the report. Ms Martinello advised that when cars overhang and obstruct access to her driveway, it causes safety and access issues. Ms Martinello advised that the issue has caused her significant distress with previous instances of her not being able to access her driveway.

Public Speaker Rosanna Martinello left the meeting at 11.58am.

Council Officers suggested deferring the item to allow for further investigations to take place.

The Chairperson suggested investigating the possibility of angled parking to help alleviate some of the parking issues in the area.

The Committee members agreed with the amended recommendation.

COMMITTEE RECOMMENDATION:

That the proposed 4m length 'Motor Bike Parking' zone between the driveway of No.24 and No.26 Empire Street, Haberfield be deferred for officers to undertake investigation into other options.

For Motion: Unanimous

LTC1224(1) Item 6 Evans Street at Mansfield Street, Rozelle- Proposed Raised Pedestrian Crossing

SUMMARY

Council is planning to improve safety for pedestrians in Evans Street and Mansfield Street, Rozelle by constructing a new raised pedestrian crossing in Evans Street and kerb extensions in Mansfield Street. The proposal aims to improve pedestrian and motorist safety by defining safe pedestrian crossing points, improving sight distances, reducing traffic speeds and conflicts with traffic movements at this location.

This project was one of the recommendations from the Balmain Local Area Traffic Management (LATM) study adopted by Council on 10 October 2023.

It is proposed to adjust the existing 'No Stopping' zones in Evans Street to facilitate implementation of the new raised pedestrian crossing. This will result in the loss of two (2) existing on-street parking spaces in Evans Street. The remainder of the works will generally be within the existing 'No Stopping' zones of Evans Street and Mansfield Street and therefore will not impact parking spaces at these locations.

Officers Recommendation:

That the attached detailed design plan (No.10307-B) for the proposed new raised pedestrian crossing and kerb extensions on Evans Street at Mansfield Street, Rozelle be approved.

DISCUSSION:

The Committee members agreed with the Officer's recommendation.

COMMITTEE RECOMMENDATION:

That the attached detailed design plan (No.10307-B) for the proposed new raised pedestrian crossing and kerb extensions on Evans Street at Mansfield Street, Rozelle be approved.

For Motion: Unanimous

LTC1224(1) Item 7 Elizabeth Street, Ashfield (Frederick Street to Nixon Avenue)- Pedestrian and Parking facility improvements (Djarrawunang-Ashfield Ward/Summer Hill Electorate/Burwood PAC)

SUMMARY

Council is planning to improve safety in Elizabeth Street (between Frederick St to Nixon Avenue), Ashfield by constructing a new kerb realignment, kerb extension and kerb blister islands with in-built kerb ramps along this section of road.

The proposal aims to improve pedestrian and motorist safety by better defining safe pedestrian crossing points, providing more road width for parking, and addressing pedestrian safety and driver behaviour at this location.

Officers Recommendation:

That the detailed design plans (10295-1 sheets 1-2, 10295-2 & 10295-3) for proposed new kerb realignment, kerb extension and kerb blister islands with in-built kerb ramps, with associated signs and line marking in Elizabeth Street, between Frederick Street and Nixon Avenue, Ashfield, as shown in *Attachments 1, 2* and *3* respectively, be approved.

DISCUSSION:

The Representative for the Member of Summer Hill questioned if the kerb extensions near the roundabout will affect bus services. Council Officers advised that the kerb extension should not affect the buses noting that turning templates were completed to ensure that vehicles could still maneuverer the turns and that the roundabout is mountable to allow for buses to drive straight.

The Committee members agreed with the Officer's recommendation.

COMMITTEE RECOMMENDATION:

That the detailed design plans (10295-1 sheets 1-2, 10295-2 & 10295-3) for proposed new kerb realignment, kerb extension and kerb blister islands with in-built kerb ramps, with associated signs and line marking in Elizabeth Street, between Frederick Street and Nixon Avenue, Ashfield, as shown in *Attachments 1, 2* and *3* of the Local Traffic Committee report respectively, be approved.

For Motion: Unanimous

LTC1224(1) Item 8 Clissold Street, at Holden Street, Ashfield- new at-grade (road level) Pedestrian (zebra) crossing (Djarrawunang-Ashfield Ward/Summer Hill Electorate/Burwood PAC)

SUMMARY

Council at its meetings on the 18 March 2024 approved in principle, subject to detailed design, a series of proposed pedestrian (zebra) crossings and kerb extension treatments (under concept) with other auxiliary works (i.e. relocation of bus stops, inclusion of raised platform thresholds) for improved pedestrian and road safety around and near to the Cardinal Freeman (Retirement) Village, Ashfield.

This report describes the detailed design plan for the proposed treatments involving the placing of a pedestrian (zebra) crossing in Clissold Street, at the intersection of Holden Street, Ashfield. This work is programmed and is envisaged to be constructed in the 2025/2026 financial year, subject to funding.

Officers Recommendation:

That the detailed design plan (10301) for a proposed new at-grade (road level pedestrian (zebra) crossing in Clissold Street at the intersection with Holden Street, Ashfield, with associated signs and line marking as shown in *Attachment 1* be approved.

DISCUSSION:

Council Officers and Representative for Transport for NSW noted and agreed that they would move the pedestrian crossing back 5.5metres or as far as feasible from the intersection and 'Give Way' line.

The Committee members agreed with the amended recommendation.

COMMITTEE RECOMMENDATION:

That the detailed design plan (10301) for a proposed new at-grade (road level pedestrian (zebra) crossing in Clissold Street at the intersection with Holden Street, Ashfield, with associated signs and line marking as shown in *Attachment 1* of the Local Traffic Committee report be approved subject to the crossing being located by up to 5.5m back from the Give Way holding line.

For Motion: Unanimous

LTC1224(1) Item 9 Queen Street, between Hillcrest Avenue & New Street, Ashfield- Pedestrian Safety & Traffic improvement works. (Djarrawunang-Ashfield Ward/Summer Hill Electorate/Burwood PAC)

SUMMARY

Council at its meetings on the 18 March 2024 approved in principle, subject to detailed design, a series of proposed pedestrian (zebra) crossings and kerb extension treatments (under concept) with other auxiliary works (i.e. relocation of bus stops, inclusion of raised platform thresholds) for improved pedestrian and road safety around and near to the Cardinal Freeman (Retirement) Village, Ashfield.

This report describes the detailed design plans for proposed corridor treatments along Queen Street between Hillcrest Avenue and New Street. The works involve placing in new raised platform thresholds and raised pedestrian (zebra) crossing in Queen Street, at/near the intersections with Seaview Street and Clissold Street; kerb blister island/extensions to the intersections of Queen Street at Seaview Street and Clissold Street; relocation of Bus Stops away of the proposed crossings; and removal of existing horizontal chicanes to provide additional parking in the area.

This work is programmed and is envisaged to be constructed in the 2025/2026 financial year, subject to funding.

Officers Recommendation:

That the detailed design plan (10303-sheets 1 to 5) for a proposed corridor treatment of new raised pedestrian (zebra) crossings, new raised platform thresholds, new kerb blister islands/extensions to intersections, bus stop relocations and associated signposting and line marking in Queen Street between Hillcrest Avenue and New Street, Ashfield, as shown in Attachment 1 be approved.

DISCUSSION:

The Committee members agreed with the Officer's recommendation.

COMMITTEE RECOMMENDATION:

That the detailed design plan (10303-sheets 1 to 5) for a proposed corridor treatment of new raised pedestrian (zebra) crossings, new raised platform thresholds, new kerb blister islands/extensions to intersections, bus stop relocations and associated signposting and line marking in Queen Street between Hillcrest Avenue and New Street, Ashfield, as shown in Attachment 1 of the Local Traffic Committee report be approved.

For Motion: Unanimous

LTC1224(1) Item 10 Norton Street, Ashfield (between A'Beckett Avenue to Carlisle Street) - Proposed improved Pedestrian Facility and Traffic Calming Works (Djarrawunang-Ashfield Ward/ Summer Hill Electorate/ Burwood PAC)

SUMMARY

Council is planning to improve pedestrian and motorist safety in Norton Street, Ashfield from A'Beckett Avenue to Carlisle Street, by constructing various traffic calming facilities including raised thresholds, raised pedestrian crossing, landscaped kerb blister islands, pedestrian refuge islands and lane delineation markings. The proposal aims to improve safety for pedestrians and motorists by better defining crossing points, reducing conflicts with traffic movements, and reducing traffic speeds. This will help address concerns with pedestrian and motorist behaviour in this area, particularly during busy periods.

Officers Recommendation:

1. That the detailed design plans (10262 Sheets 1 to 4) for proposed corridor treatments comprising of raised thresholds, raised pedestrian (zebra) crossing, kerb-blister islands and pedestrian refuges and lane delineation markings with associated signposting along Norton Street between A'Beckett Avenue to Carlisle Street, and the intersections of Carlisle Street, Miller Avenue and Knox Streets, as shown in Attachment 1, be approved.

2. That the detailed design plans (10262 Sheets 5-8) as approved by Council at its meeting on 10 October 2023, be noted.

DISCUSSION:

The Committee members agreed with the Officer's recommendation.

COMMITTEE RECOMMENDATION:

1. **That the detailed design plans (10262 Sheets 1 to 4) for proposed corridor treatments comprising of raised thresholds, raised pedestrian (zebra) crossing, kerb-blister islands and pedestrian refuges and lane delineation markings with associated signposting along Norton Street between A'Beckett Avenue to Carlisle Street, and the intersections of Carlisle Street, Miller Avenue and Knox Streets, as shown in Attachment 1of the Local Traffic Committee report be approved.**

2. **That the detailed design plans (10262 Sheets 5-8) as approved by Council at its meeting on 10 October 2023, be noted.**

For Motion: Unanimous

LTC1224(1) Item 11 Burrows Avenue and Railway Road, Sydenham - Proposed Bus layover and parking changes (Midjuburi - Marrickville Ward / Heffron Electorate / Inner West PAC)

SUMMARY

This report follows a previous report to an Extraordinary Local Traffic Committee Meeting on Monday 3 June 2024 in which the proposed bus layover and parking changes along Burrows

Avenue and Railway Road, Sydenham were detailed. At the meeting the Transport for NSW representative requested this item be deferred on the basis that the proposed layover will be going to a Review of Environmental Factors (REF) process and once the REF had been determined, Transport for New South Wales (TfNSW) would again request that this matter be brought back to the LTC for consideration. The Traffic Committee therefore recommended that "the Burrows Avenue and Railway Road, Sydenham - Proposed Bus layover and parking changes, be deferred".

Transport for New South Wales (TfNSW) has approached Council with regards to a proposal for the construction of a bus layover area in Burrows Avenue, west of Gleeson Avenue, Sydenham. The designated bus layover area is required at Sydenham Station to cater for the growing number of bus services in this area. Prior to picking up passengers, buses currently park along Burrows Avenue which creates congestion and safety issues for pedestrians and drivers. The bus layover area will store up to 6 buses. The existing unrestricted parking spaces (approximately 11 spaces) on the south side of Burrows Avenue (adjacent to the vacant property) and six (6) 90-degree angle parking spaces on the north side of Burrows Avenue will be lost as a result of the proposal. In response to this loss of parking it is proposed to convert the parallel parking on the east side of Railway Road to 45-degree rear to kerb parking to lessen the impact from the loss of parking because of this proposal.

Community engagement was initially undertaken on Friday 24 November to Friday 8 December 2023. Community notifications, letterbox dropped, and nearby properties door knocked on Railway Road, Burrows Avenue and Wright Street were part of the consultation process. Results of this community engagement process and related parking study (Parking Data Report) were table in the report that was presented to the Extraordinary Local Traffic Committee Meeting on Monday 3 June 2024. Subsequently a Review of Environmental Factors (REF) report was completed in July 2024, and this has been provided to address issues arising because of both operational and construction matters from this project (refer to attachment 1 - Sydenham Bus Layover - Review of Environmental Factors July 2024).

It is recommended that Council approve the signs and line marking plan (drawing no. 520212-AURC-038-RW-DRG-002001, sheet 10 of 41 dated 4 July 2024)

Officers Recommendation:

That the detail design drawing for the on-road changes associated with the proposed construction of a bus layover area in Burrows Avenue, west of Gleeson Avenue, Sydenham (as per attached drawing "Sydenham Station Bus Layover Burrows Avenue and Railway Road Signs and line marking plan" by Aurecon, dated 4/7/24, drawing no. 520212-AURC-038-RW-DRG-002001, sheet 10 of 41) be approved, subject to the following conditions:

a) TfNSW monitor the interaction between buses and vehicles along Railway Road (one way) and Burrows Road over the next 12 months and implement further traffic control measures should they be required.

DISCUSSION:

Public Speaker Manjur Rahman entered the meeting at 12.26 pm.

Mr Rahman advised that Transport for NSW (TfNSW) have been managing the design and development of the bus layover project along Burrows Avenue, Sydenham. It was noted that given the importance of the station as a major transport interchange and that bus operators are missing the ability to layover and terminate between services. Mr Rahman advised in order to address these issues; Transport for NSW is proposing to create a bus layover for the buses to use along Burrows Avenue. Mr Rahman advised that this proposal includes a plan to have 6, 16 metre bus spaces, 1 amenity block and some changes to the current parking arrangements in the area noting this will remove 11 parking spaces on Burrows Avenue. It was noted that removal of those parking spaces will allow for buses to maneuverer and egress safely. Mr Rahman advised that there were plans to convert 8 parallel parking spaces

along the eastern side of Railway Road into 13, 45-degree angle car parking spaces to reduce the impact of the parking loss.

The Chairperson queried whether buses would be able to layover at Tempe Depot instead as the depot has all the required facilities and it will cause fewer parking disruptions in the local area. Mr Rahman advised they have considered that possibility however found that the depot did not have the capacity to take on the extra buses and that factors such as time, and traffic were also taken into consideration if buses were to layover at Tempe Depot.

The Chairperson queried if there was a requirement to stack the buses in such a way that would require 11 parking spaces to be removed from the community and whether there would be another way to utilise the site so that there was less of an impact on parking for the community. Mr Rahman advised that various options were explored to ensure minimal impact on parking and that those options were discussed with Council and that this option was concluded to be the optimal option.

Council Officers questioned why there was a need for 6 bus layover spaces. Mr Rahman advised the bus planners have asked for more spaces and that 6 spaces were the maximum Transport for NSW could allocate for the buses. Council Officers questioned if there would be any other opportunities for bus layovers to take place if the area reduces the number of parking spaces taken from the community. Mr Rahman advised that there are currently no other layover locations identified in the vicinity of Sydenham Station, so the current area identified is the best possible location for the layover. Council Officers noted that Burrows Avenue has the capacity for buses to layover on the opposite side of the Gleeson Road intersection, adjacent to the station and questioned whether this option was explored as a possibility. Mr Rahman advised that the option was explored by the team and was deemed to not be a feasible option. The Representative for Transport for NSW added that the reason this was considered not to be a feasible option was due to plans of having a cycleway put in on the opposite side of Burrows Avenue. It was noted that there would be signal upgrades at the intersection of Unwins Bridge Road and Hogan Street to assist with bus access if a bus layover area was placed adjacent to the station on Burrows Avenue and that due to the active transport link along Burrows Avenue the presence of idling buses would cause safety issues.

The Chairperson questioned if the options that were considered by Transport for NSW could be shared with the committee. Mr Rahman advised he will send the options analysis to the Manager of Traffic and Transport to distribute to the Committee. Council Officers questioned where Transport for NSW was with the approval process for the site and when the construction schedule was for this project. Mr Rahman advised that construction is scheduled to begin in January 2025.

Council Officers requested that subject to the approval of the recommendation, that Transport for NSW review the current design to try to minimise the loss of parking in the area.

The Committee members agreed with the amended recommendation.

COMMITTEE RECOMMENDATION:

That the detail design drawing for the on-road changes associated with the proposed construction of a bus layover area in Burrows Avenue, west of Gleeson Avenue, Sydenham (as per attached drawing "Sydenham Station Bus Layover Burrows Avenue and Railway Road Signs and line marking plan" by Aurecon, dated 4/7/24, drawing no. 520212-AURC-038-RW-DRG-002001, sheet 10 of 41) be approved, subject to the following conditions:

a) TfNSW monitor the interaction between buses and vehicles along Railway Road (one way) and Burrows Road over the next 12 months and implement further traffic control measures should they be required.

b) TfNSW investigate amending the design to incorporate additional on-street parking spaces along Burrows Avenue.

For Motion: Unanimous

LTC1224(1) Item 12 Wardell Road railway overbridge in Dulwich Hill - proposed modification to the existing delineation for associated footpath and barriers works (Midjuburi - Marrickville Ward / Summer Hill Electorate / Inner West PAC)

SUMMARY

As part of Sydney Metro, Sydenham to Bankstown project works to road over rail bridges are being upgrade with barriers (for errant vehicles) and throw screens to meet current safety standards for such bridges. Wardell Road railway bridge amongst other bridges in the LGA is proposed to be upgraded.

This report seeks Council approval to re-adjust existing line markings on Wardell Road Railway overbridge and to undertake necessary road safety barrier works and improvement to the existing footpath widths (by reducing/removing existing road shoulder).

It is recommended that the following changes to the bridge travel lane, shoulder, and footpath as well as changes to the line marking be approved. It is also recommended that a ‘’No Left Turn’’ ban for vehicles over 6.5m with the exception of Council Waste vehicles be installed for left turning vehicles from Wardell Road into Dudley Street. Finally, that TfNSW monitor the changes made to the bridge over a 12 month period and report back to Council with the outcome of this monitoring including a Post Construction Road Safety Audit. Any costs related to addressing the outcomes of the monitoring period and a Post Construction Road Safety Audit be borne by TfNSW.

Officers Recommendation:

That;

1. The proposed changes to the road widths along Wardell Road rail bridge from 7.8m to 6.6m for footpath widening and road safety barrier works be approved (including adjustment to associated travel lane linemarking)
2. Narrow Bridge (W4-1) signs be installed in Wardell Road (both north and southbound) and in Dudley Street (southwest bound), prior to approaching the railway overbridge.
3. Sydney Metro (TfNSW) undertake all necessary actions (including preparation of a Traffic Management Plan) for the installation of a “No Left Turn; Vehicles under 6.5m and Council Waste Vehicles Excepted” sign on the southbound approach of Dudley Street from Wardell Road.
4. Sydney Metro (TfNSW) monitor the changes made to the bridge over a 12 month period and report back to Council with the outcome of this monitoring including a Post Construction Road Safety Audit. Any costs related to addressing the outcomes of the monitoring period and a Post Construction Road Safety Audit be borne by Sydney Metro.

DISCUSSION:

Public Speakers Ahsanul Amin, Nick Windmiller and Imogen Markus entered the meeting at 12.18 pm.

Mr Windmiller advised that the proposal will assist with the Sydney Metro works in the area which will assist with upgrading Sydney’s transport network. Mr Windmiller advised that a risk assessment on errant vehicles entering the corridor and as part of mitigating that risk,

Sydney Metro is proposing to install bridge and road barriers. Mr Windmiller noted that the lane widths will not change and that there will only be minor adjustments to the linemarking. It was noted that there will be a reduction to the shoulder on the lanes to increase the footpath width however this will not impact the swept paths of vehicle movements on the bridge. Mr Windmiller advised there has been an existing issue identified with longer vehicles turning left on Dudley Street, from the Southbound Lane and advised that there was a condition put in place to implement 'No Left Turn' signage. Mr Windmiller advised that this proposal will have a positive impact on transport users, pedestrians, and road safety. Council Officers questioned if Sydney Metro would be happy to go back to monitor the changes to the bridge over 12 months and report back to Council with the changes. Ms Markus noted the recommendation and advised Sydney Metro would be happy to do so.

Public Speakers Ahsanul Amin, Nick Windmiller and Imogen Markus left the meeting at 12.25 pm.

Council Officers advised that Transport for NSW have requested an amendment to part 3 of the recommendation to include a bus exemption on the 'No Left Turn' signage which supports existing bus movements into the street.
The Committee members agreed with the amended recommendation.

COMMITTEE RECOMMENDATION:

That;

1. **The proposed changes to the road widths along Wardell Road rail bridge from 7.8m to 6.6m for footpath widening and road safety barrier works be approved (including adjustment to associated travel lane linemarking)**
2. **Narrow Bridge (W4-1) signs be installed in Wardell Road (both north and southbound) and in Dudley Street (southwest bound), prior to approaching the railway overbridge.**
3. **Sydney Metro (TfNSW) undertake all necessary actions (including preparation of a Traffic Management Plan) for the installation of a "No Left Turn, Vehicles under 6.5m; Council Waste Vehicles and Buses Excepted" sign on the southbound approach of Dudley Street from Wardell Road.**
4. **Sydney Metro (TfNSW) monitor the changes made to the bridge over a 12 month period and report back to Council with the outcome of this monitoring including a Post Construction Road Safety Audit. Any costs related to addressing the outcomes of the monitoring period and a Post Construction Road Safety Audit be borne by Sydney Metro.**

For Motion: Unanimous

LTC1224(1) Item 13 Dulwich Hill Station Precinct - Proposed parking changes (Djarrawunang-Dulwich Hill Ward/Summer Hill Electorate/Inner West PAC)

SUMMARY

This report outlines the parking investigations completed in the Dulwich Hill Station Precinct following the completion of the Public Domain Improvement works. The proposed parking changes seek to provide more flexible parking options and improve turnover of parking in the morning and on Saturdays, particularly within the Precinct along Wardell Road. Furthermore, parking adjustments are also proposed on Dudley Street to provide more parking and improve loading and unloading operations.

Officers Recommendation:

That the following parking changes within the Dulwich Hill Station Precinct be approved:

1. the reallocation of three (3) timed parking restrictions signposted as '1P 8.30am-6pm Mon-Fri; 8.30am-12.30pm Sat' to 'P30 minute 8am-6pm Mon-Fri; 8.am-4pm Sat' on the western side of Wardell Road north of Ewart Street,
2. the reallocation of four (4) timed parking restrictions signposted as '1P 8.30am-6pm Mon-Fri; 8.30am-12.30pm Sat' to '1P 8am-6pm Mon-Fri; 8am-4pm Sat' on the western side of Wardell Road, north of Ewart Street,
3. the reallocation of 4.5 metres of the existing 'Bus Zone' to '1P 8am-6pm Mon-Fri;8am-4pm Sat' on the western side of Wardell Road, north of Ewart Street,
4. the reallocation of the 18 metre 'Bus Zone' to 'P30 minute 9.30am-2.30pm, 4pm-6pm Mon-Fri; 8am-4pm Sat, Bus Zone 8am-9.30am,2.30pm-4pm Mon-Fri' on the western side of Wardell Road, north of Ewart Street,
5. the reallocation of 16 metres of the existing 'No Parking' restriction on the eastern side of Wardell Road, north of Ewart Street to 'P30 minute 8am-6pm Mon-Fri; 8am-4pm Sat',
6. the reallocation of five (5) timed parking restrictions signposted as '1P 8.30am-6pm Mon-Fri; 8.30am-12.30pm Sat' to '1P 8am-6pm Mon-Fri; 8am-4pm Sat' on the eastern side of Wardell Road, north of Ewart Street,
7. the reallocation of two (2) timed parking restrictions signposted as '1P 8.30am-6pm Mon-Fri; 8.30am-12.30pm Sat' to 'P30 minute 8am-6pm Mon-Fri; 8am-4pm Sat' on the eastern side of Wardell Road, north of Ewart Street,
8. the reallocation of the 'Loading Zone 8.30am-6pm Mon-Fri; 8.30am-12.30pm Sat' and 'No Stopping' restrictions on the northern side of Dudley Street, west of School Parade to '1P 8am-6pm Mon-Fri; 8am-4pm Sat',
9. the allocation of three (3) motorcycle parking spaces to the 3.6 metre unallocated kerb length on the southern side of Dudley Street, west of School Parade
10. the reallocation of eight (8) metres from the existing temporary bus zone on the southern side of Dudley Street to 'Loading Zone 8am-6pm'
11. the 26-metre-long temporary bus zone on the southern side of Dudley Street, west be made a permanent bus zone (there are no changes to the 'Bus Zone' signposting);
12. the reallocation of four (4) timed parking restrictions signposted as '1P 9am-5pm Mon-Fri' to '1P 8am-6pm Mon-Fri; 8am-4pm Sat' on the western side of Wardell Road, north of Bedford Crescent,
13. the reallocation of one (1) timed parking restrictions signposted as '1P 9am-5pm Mon-Fri' to 'P30 minute 8am-6pm Mon-Fri on the western side of Wardell Road, north of Bedford Crescent; and
14. the reallocation of two (2) timed parking restrictions signposted as '2P 9am-5pm Mon-Fri' to '2P 8am-6pm Mon-Fri;8am-4pm Sat' on the northern side of Bedford Crescent, west of Wardell Road.

DISCUSSION:

Council Officers advised that Transport for NSW have issues with parts of the recommendation and has proposed to defer parts 3, 4, 5, 10, and 11 of the recommendation as well as the reallocation of the 'Loading Zone 8.30am-6pm Mon-Fri ;8.30am-12.30pm Sat' in part 8 of the recommendation.

Council Officers noted that Transport for NSW have concerns regarding the reduction of the capacity of the 'No Stopping' zones near signalised intersections as well as the removal of the existing temporary bus zone on the southern side of Dudley Street in case it may be needed to assist with operations to the train station.

It was noted that Council Officers will further discuss with Transport for NSW and will bring back a separate report on these items for the Committees review and consideration.

The Committee members agreed with the amended recommendation.

COMMITTEE RECOMMENDATION:

That the following parking changes within the Dulwich Hill Station Precinct be approved:

1. **the reallocation of three (3) timed parking restrictions signposted as '1P 8.30am-6pm Mon-Fri; 8.30am-12.30pm Sat' to 'P30 minute 8am-6pm Mon-Fri; 8.am-4pm Sat' on the western side of Wardell Road north of Ewart Street,**
2. **the reallocation of four (4) timed parking restrictions signposted as '1P 8.30am-6pm Mon-Fri; 8.30am-12.30pm Sat' to '1P 8am-6pm Mon-Fri; 8am-4pm Sat' on the western side of Wardell Road, north of Ewart Street,**
3. **the reallocation of five (5) timed parking restrictions signposted as '1P 8.30am-6pm Mon-Fri; 8.30am-12.30pm Sat' to '1P 8am-6pm Mon-Fri; 8am-4pm Sat' on the eastern side of Wardell Road, north of Ewart Street,**
4. **the reallocation of two (2) timed parking restrictions signposted as '1P 8.30am-6pm Mon-Fri; 8.30am-12.30pm Sat' to 'P30 minute 8am-6pm Mon-Fri; 8am-4pm Sat' on the eastern side of Wardell Road, north of Ewart Street,**
5. **the reallocation of the 'No Stopping' restrictions on the northern side of Dudley Street, west of School Parade to '1P 8am-6pm Mon-Fri; 8am-4pm Sat',**
6. **the allocation of three (3) motorcycle parking spaces to the 3.6 metre unallocated kerb length on the southern side of Dudley Street, west of School Parade**
7. **the reallocation of four (4) timed parking restrictions signposted as '1P 9am-5pm Mon-Fri' to '1P 8am-6pm Mon-Fri; 8am-4pm Sat' on the western side of Wardell Road, north of Bedford Crescent,**
8. **the reallocation of one (1) timed parking restrictions signposted as '1P 9am-5pm Mon-Fri' to 'P30 minute 8am-6pm Mon-Fri on the western side of Wardell Road, north of Bedford Crescent; and**
9. **the reallocation of two (2) timed parking restrictions signposted as '2P 9am-5pm Mon-Fri' to '2P 8am-6pm Mon-Fri;8am-4pm Sat' on the northern side of Bedford Crescent, west of Wardell Road.**

That the following parking changes within the Dulwich Hill Station Precinct be deferred for further investigation:

1. **the reallocation of 4.5 metres of the existing 'Bus Zone' to '1P 8am-6pm Mon-Fri;8am-4pm Sat' on the western side of Wardell Road, north of Ewart Street,**
2. **the reallocation of the 18 metre 'Bus Zone' to 'P30 minute 9.30am-2.30pm, 4pm-6pm Mon-Fri; 8am-4pm Sat, Bus Zone 8am-9.30am,2.30pm-4pm Mon-Fri' on the western side of Wardell Road, north of Ewart Street,**
3. **the reallocation of 16 metres of the existing 'No Parking' restriction on the eastern side of Wardell Road, north of Ewart Street to 'P30 minute 8am-6pm Mon-Fri; 8am-4pm Sat',**
4. **the reallocation of eight (8) metres from the existing temporary bus zone on the southern side of Dudley Street to 'Loading Zone 8am-6pm'**
5. **the 26-metre-long temporary bus zone on the southern side of Dudley Street, west be made a permanent bus zone (there are no changes to the 'Bus Zone' signposting)**
6. **the reallocation of the 'Loading Zone 8.30am-6pm Mon-Fri; 8.30am-12.30pm Sat'**

For Motion: Unanimous

LTC1224(1) Item 14 Douglas Lane, Stanmore - Proposed 'No Parking' and 'No Stopping' restrictions (Damun-Stanmore Ward/Newtown

Electorate/Inner West PAC)

SUMMARY

This report discusses parking and access issues in Douglas Lane, Stanmore and proposes parking restrictions in Douglas Lane to improve access and parking for households on Douglas and Temple Streets. In addition, it also recommends further consultation be completed on a proposal to install timed permit parking restrictions on Douglas Street to improve parking opportunities for households with limited or no-off street parking.

Officers Recommendation:

That:

1. 'No Parking' restrictions on both sides of Douglas Lane between Percival Lane West and Bruce Lane East, Stanmore be installed,
2. An 8.5 metre 'No Stopping' restriction on the northern side of Douglas Lane, east of Bruce Lane East be installed,
3. A 10 metre 'No Stopping' restriction on the northern side of Douglas Lane, west of Percival Lane West be installed,
4. A 6 metre 'No Stopping' restriction on the southern side of Douglas Lane, west of Percival Lane West be installed,
5. A 10 metre 'No Stopping' restriction on the southern side of Douglas Lane, east of Bruce Lane East be installed,
6. A 10 metre 'No Stopping' restriction on the eastern side of Bruce Lane East, south of Douglas Lane be installed, and
7. Council officers carry out a community consultation on a proposal to extend the Area M17 Resident Parking Scheme to the northern side of Douglas Street between no. 40 and no.64 Douglas Street, Stanmore.

DISCUSSION:

Public Speakers Fernando Guerrerio, Bret Tombs and Marijke Tombs entered the meeting at 12.01pm

Mr Fernando, Mr Tombs, and Ms Tombs objected to the recommendation and expressed concerns that the proposed restrictions will create significant challenges for residents who rely on Douglas Lane for essential daily activities. Mr Tombs advised that the proposed changes would severely impact residents who need to temporarily park in the lane to access their homes for reasons such as transporting groceries and supplies to their homes and supporting elderly, disabled, or young family members who require close, safe access to their homes. Mr Tombs noted that forcing residents to park further away from their homes would make these tasks more difficult and unsafe particularly for families with young children or those assisting vulnerable family members. Mr Tombs noted that the proposed restrictions would exacerbate existing parking challenges in the area as Douglas Street residents are currently excluded from the Resident Parking Scheme, leaving them with limited parking options near their homes and that the proximity to Stanmore Station from Douglas Street further adds to parking pressures in the area. Mr Tombs advised that he has spoken to his neighbours regarding his concerns and since the notification of this Local Traffic Committee meeting and he has created a petition opposing the proposed 'No Parking' restrictions in Douglas Lane. He explained that his neighbours who are elderly or have English as a second language and face barriers voicing their opinions and are notable to fully participate in the matter. It was noted that due to the limited time, Mr Tombs was only able to visit 14 residences on Douglas Street the previous day, and of the 14 residences visited, 13 had signed his petition. Mr Tombs advised he will continue to visit residences in Douglas and Temple Streets and will submit an updated petition to Council once completed. Mr Tombs suggested that Council abandon the proposal for a blanket 'No Parking Zone' as this will take away the resident's ability to temporarily park in Douglas Lane to do essential activities and

consider timed parking to deter long term parking. Mr Tombs also suggested the possibility of extending the Resident Parking Scheme to Douglas Street and that the 'No Parking Zone' outside of 26 to 40 Douglas Street be amended so that the 'No Parking Zone' is enforceable during peak hours as this will help create additional parking opportunities for residents without affecting the traffic flow during peak hours.

Coordinator Traffic Engineering Services (South) questioned whether implementing a Resident Parking Scheme in Douglas Street will make a difference in implementing the proposed restrictions in Douglas Lane and if residents would be more supportive of the proposed restrictions to be implemented in Douglas Lane. Mr Guerrerio advised that there would be no need to implement the restrictions in Douglas Lane if a Resident Parking Scheme was in place there would be no issues in Douglas Lane. Mr Tombs advised he would still not be supportive of the proposed restrictions in Douglas Lane as he often uses the lane to temporarily park to safely access his property.

Coordinator Traffic Engineering Services (South) questioned what the speakers' thoughts were on implementing the 'No Stopping' restrictions on the corners of Douglas Lane. Mr Tombs advised that he understood the implementation of the 'No Stopping' restrictions on the corners however was advised that there was a possibility that the 6 metre 'No Stopping' restriction would come the side of his driveway which would still make it impossible for him to unload goods from his vehicle or assist vulnerable family members with accessing the property.

Coordinator Traffic Engineering Services (South) noted that the majority of Douglas Lane provide rear access to properties driveways and questioned if most people park in front of their driveways. Mr Tombs advised this was not the case and that issue seems to stem from a neighbour dispute whereby a neighbour is parking in front of someone's garage door that has no driveway access. Mr Guerrerio advised that the solution to this issue would be to just implement 'No Parking' restrictions in the affected area rather than having the implementing 'No Parking' in the whole laneway.

Public Speakers Fernando Guerrerio, Bret Tombs and Marijke Tombs left the meeting at 12.17 pm.

Council Officers suggested deferring the proposed 'No Parking' and 'No Stopping' restrictions in Douglas Lane, Stanmore for further investigation and to also investigate the extension of the Resident Parking Scheme to Douglas Street Stanmore.

The Committee members agreed with the amended recommendation.

COMMITTEE RECOMMENDATION:

That the proposed 'No Parking' and 'No Stopping' restrictions in Douglas Street, Stanmore be deferred for further investigation.

For Motion: Unanimous

LTC1224(1) Item 15 Griffiths Street, Tempe - Request for extension of existing M18 residential parking scheme - resident parking questionnaire survey results (Midjuburi-Marrickville Ward/Heffron Electorate/Inner West PAC)

SUMMARY

This report outlines a resident permit parking scheme investigation completed in Griffiths Street and surrounding streets near Tempe Station and assesses whether permit parking

restrictions can be considered to address commuter/long-term parking problems. The investigation found that parking occupancy rates on Griffiths Street is approximately 85 per cent (84 per cent) with some level of commuter parking. Community consultation revealed strong support for timed permit parking restrictions on Griffiths Street. Concerns were raised by nearby streets such as Station and Nicholson Streets about redistribution of parking. The redistribution of commuter parking is estimated to be low, and adjacent streets can also formally request for Council officers to investigate further timed permit parking restrictions. Accordingly, timed permit parking restrictions are recommended on Griffiths Street to improve parking opportunities for households.

Officers Recommendation:

That the proposal to implement Resident Parking Scheme (RPS) Restrictions '2P 8.30am-10pm Mon-Fri Permit Holders Excepted Area M18' on the eastern side of Griffiths Street, south of Station Street be approved.

DISCUSSION:

The Committee members agreed with the Officer's recommendation.

COMMITTEE RECOMMENDATION:

That the proposal to implement Resident Parking Scheme (RPS) Restrictions '2P 8.30am-10pm Mon-Fri Permit Holders Excepted Area M18' on the eastern side of Griffiths Street, south of Station Street be approved.

For Motion: Unanimous

LTC1224(1) Item 16 Lincoln Street, Stanmore - Proposed angle parking (Damun-Stanmore Electorate/Newtown Electorate/Inner West PAC)

SUMMARY

This report outlines a parking investigation completed in Lincoln Street, Stanmore to assess parking conditions. The investigation revealed adequate parking capacity in Lincoln Street, however, nearby parking generators such as Bain Playground may affect parking opportunities. Accordingly, the conversion of some parallel parking spaces to angle parking is proposed. Following community consultation, this proposal was further refined to minimise household impact. Subsequently, five (5) angle parking spaces are proposed, gaining two (2) parking spaces on Lincoln Street. In addition, 'No Stopping' restrictions are proposed at the dead-end to provide a turnaround area for motorists.

Officers Recommendation:

That the conversion of two parallel parking spaces to five (5) 90-degree angle parking spaces, and the 'No Stopping' restrictions (for a length of 15m from Salisbury Road) adjacent to Bain Playground on Lincoln Street, Stanmore be approved as per *Attachment 2.*

DISCUSSION:

The Representative for the Inner West Bicycle Coalition requested that proposed parking spaces be made 90-degree angle rear to kerb parking.

Council Officers advised that there are no objections to incorporating rear to kerb parking into the recommendation.

The Committee members agreed with the Officer's recommendation.

COMMITTEE RECOMMENDATION:

That the conversion of two parallel parking spaces to five (5) 90-degree (rear to kerb) angle parking spaces, and the 'No Stopping' restrictions (for a length of 15m from Salisbury Road) adjacent to Bain Playground on Lincoln Street, Stanmore be approved as per *Attachment 2 of the Local Traffic Committee report.*

For Motion: Unanimous

LTC1224(1) Item 17 Fredbert Street, Lilyfield - Resident Parking Scheme Removal (Baludarri-Balmain Ward/Balmain Electorate/Leichhardt PAC)

SUMMARY

The residents of Fredbert Street, Lilyfield have raised concerns regarding the parking restriction in their street. They have submitted a petition stating that the existing parking restriction '2P 8am-1pm Sat, Permit Holders Excepted Area LY' is too restrictive for their visitors and have requested for the removal of the restrictions.

Officers Recommendation:

That:

1. The removal of '2P 8am-1pm Sat, Permit Holders Excepted Area LY' on both sides of Fredbert Street, Lilyfield be approved.
2. It be noted that a 24-month Resident Parking Scheme investigation moratorium period will be in effect for Fredbert Street, Lilyfield

DISCUSSION:

The Committee members agreed with the Officer's recommendation.

COMMITTEE RECOMMENDATION:

That:

1. **The removal of '2P 8am-1pm Sat, Permit Holders Excepted Area LY' on both sides of Fredbert Street, Lilyfield be approved.**
2. **It be noted that a 24-month Resident Parking Scheme investigation moratorium period will be in effect for Fredbert Street, Lilyfield**

For Motion: Unanimous

LTC1224(1) Item 18 Review of proposed resident parking scheme in Croydon (Gulgadya-Leichhardt Ward & Djarrawunang-Ashfield Ward/Summer Hill Electorate/Burwood PAC)

SUMMARY

Council has received requests from residents to review and consider introducing a Resident Parking Scheme (RPS) in various streets of Croydon around the Ashfield Aquatic Centre, Croydon Station, and the major school being the Presbyterian Ladies College (PLC).

A recent occupancy survey has identified varied streets or sections of streets, (14 in all as shown in *Attachment 1*) with high occupancy levels, to be considered under a proposed Resident Parking Scheme (RPS) for Croydon.

Under the current Public Domain Parking Policy for the Inner West Council which identifies eligibility criteria for an RPS; Section 7.20 Parking Scheme Investigations and Development- Level of Support- advises as follows:

Council will generally not proceed with implementation of a parking scheme or changes to an existing parking scheme in isolation from a precinct wide parking study unless at least 65% of respondents, from different households within the proposed zone, support the proposal and provided a minimum response rate of 30% of households is achieved to Council's survey.

A survey of responses is therefore tabled in *Attachment 2*. The overall response rate for an area wide inclusion of all the streets under the proposed RPS in this report was low around 17%. Submissions received in support over non-support was around 53%, however the level of support overall was relatively low around 9.1%, showing a low level of support (in the surveyed community) for an area wide RPS. An overall RPS in the area could not be supported.

However, a separate street by street analysis in response and support rate identified that (3) streets or street sections had achieved both sufficient response and support rates or were marginally identified and were weighed up by either a higher response rate or support rate.

These streets, as shown tabled in *Attachment 2*, namely:

- Etonville Avenue (west side) between Elizabeth Street and Anthony Street (having 55% response rate and 60% support rate)
- Croydon Road (west side) between Elizabeth Street and Anthony Street having (33% response rate and 83% support rate)
- Edwin Street (South) (west side) between Thomas Street and Paisley Road (having 25% response rate and 75% support rate)

are therefore recommended for resident parking in the Croydon Area.

The above supported street sections of Etonville Avenue and Edwin Street (South) will be captured under and form as part of an extension of an existing RPS Area 6 which currently has two (2) streets to the north of the railway line, that being Horden Parade and Railway Street. Edwin Street South will be captured under RPS Area 2 to the south of the railway Line. *Attachment 3* shows the above streets relative to the nearby existing RPS streets.

Furthermore section 7.20 of the policy quotes that:

A minimum of 24 months will elapse before Council revisits consideration of parking scheme proposals, unless substantial land use change has subsequently occurred permanently impacting on-street parking in the neighbourhood.
The proposal also included introducing statutory 'No Stopping' restrictions to corners of intersections where such restrictions do not exist.

'No Stopping' with varied lengths are also proposed to corners extending over driveways, next to carpark exits, or around dead-end locations of the street for vehicular sight view and manoeuvrability. It is recommended these restrictions proceed to be implemented to control parking in the area irrespective whether resident parking is implemented or not.

Officers Recommendation:

1. That the following streets (or sections of streets) proposed for a Resident Parking Scheme in Croydon, with the one side of the streets as shown in *Attachment 1*, not be supported.

   (a) Walter Street, between Thomas Street and Heighway Avenue,
   (b) Heighway Avenue, between Edwin Street (South) and Frederick Street,
   (c) Paisley Road, between Edwin Street (South) and Paisley Lane,
   (d) Bastable Street, between Elizabeth Street to dead end,
   (e) Elizabeth Street, between Etonville Parade and Croydon Road,
   (f) Anthony Street, between Croydon Road and Etonville Parade,
   (g) Anthony Street, between Edwin Street (North) and Croydon Road,
   (h) Croydon Road, between Anthony Street and Hunt Street,
   (i) Edwin Street (North), between Anthony Street to dead end,
   (j) Edwin Street (North), between Elizabeth Street and Anthony Street; and
   (k) College Street, between Hennessy Street and Elizabeth Street.

2. That the following streets (or section of streets) proposed for resident parking in Croydon, on the one side of the street, be supported and signposted as '2P 8am – 6pm Mon – Fri, Permit Holders Excepted.

   (a) Edwin Street (South), between Thomas Street and Paisley Road (west side),
   (b) Etonville Parade, between Elizabeth Street and Anthony Street (west side); and
   (c) Croydon Road, between Elizabeth Street and Anthony Street (west side).

3. That the statutory 10 metre length of 'No Stopping' restrictions to corners, and 'No Stopping' restrictions of varied lengths to corners extending over driveways, next to carpark exits, or around dead-end locations of streets for sight view and maneuverability as shown in Diagram Annexure 2, be supported.

- 4. That it be noted that no further review will be carried out for at least a period of 24 months for a Residential Parking Scheme in the subject streets of Croydon, unless substantial land use changes occur to re-visit a scheme beforehand, as per the Inner West Council Public Domain Parking Policy 2020.

DISCUSSION:

The Committee members agreed with the Officer's recommendation.

COMMITTEE RECOMMENDATION:

1. That the following streets (or sections of streets) proposed for a Resident Parking Scheme in Croydon, with the one side of the streets as shown in *Attachment 1*, not be supported.

   (a) Walter Street, between Thomas Street and Heighway Avenue,
   (b) Heighway Avenue, between Edwin Street (South) and Frederick Street,
   (c) Paisley Road, between Edwin Street (South) and Paisley Lane,
   (d) Bastable Street, between Elizabeth Street to dead end,
   (e) Elizabeth Street, between Etonville Parade and Croydon Road,
   (f) Anthony Street, between Croydon Road and Etonville Parade,
   (g) Anthony Street, between Edwin Street (North) and Croydon Road,
   (h) Croydon Road, between Anthony Street and Hunt Street,
   (i) Edwin Street (North), between Anthony Street to dead end,
   (j) Edwin Street (North), between Elizabeth Street and Anthony Street; and
   (k) College Street, between Hennessy Street and Elizabeth Street.

2. That the following streets (or section of streets) proposed for resident parking in

Croydon, on the one side of the street, be supported and signposted as '2P 8am – 6pm Mon – Fri, Permit Holders Excepted.

(a) Edwin Street (South), between Thomas Street and Paisley Road (west side),
(b) Etonville Parade, between Elizabeth Street and Anthony Street (west side); and
(c) Croydon Road, between Elizabeth Street and Anthony Street (west side).

3. That the statutory 10 metre length of 'No Stopping' restrictions to corners, and 'No Stopping' restrictions of varied lengths to corners extending over driveways, next to carpark exits, or around dead-end locations of streets for sight view and maneuverability as shown in Diagram Annexure 2, be supported.

- **4. That it be noted that no further review will be carried out for at least a period of 24 months for a Residential Parking Scheme in the subject streets of Croydon, unless substantial land use changes occur to re-visit a scheme beforehand, as per the Inner West Council Public Domain Parking Policy 2020.**

For Motion: Unanimous

LTC1224(1) Item 19 West Street and Railway Terrace intersection, Petersham – Traffic and pedestrian safety review - C0924(1) Item 38 Notice of Motion – (Damun-Stanmore Ward / Newtown Electorate / Inner West LAC)

SUMMARY

At the Council Meeting held 3 September 2024 a Notice of Motion for West Street and Railway Terrace Intersection (Item C0924(1) Item 38) was resolved. Part 3 was that Council, noting that both roads concerned are state and regional roads, write to Transport for NSW (TfNSW) in relation to a number of traffic and pedestrian safety improvements at the signalised intersection. This report provides TfNSW's response in regard to Council's letter sent to TfNSW.

Officers Recommendation:

That the report be received and noted.

DISCUSSION:

The Committee members agreed with the Officer's recommendation.

COMMITTEE RECOMMENDATION:

That the report be received and noted.

For Motion: Unanimous

General Business:

Item 20: Cars queuing across the pedestrian crossing on Hardie Avenue at Smith Street, Summer Hill.

The Representative for the Inner West Bicycle Coalition raised concerns regarding vehicles queuing across and blocking the pedestrian crossing on Hardie Avenue at Smith Street,

Summer Hill as they wait for a break in traffic causing difficulties for pedestrians to cross safely. Council Officers advised that the area is being looked at as part of another project Council is undertaking near Lackey Street, Summer Hill.

Meeting closed at 1.55pm.

CHAIRPERSON

Clr Victor Macri.

Item 1

Item No: **LTC0225(1) Item 1**

Subject: **LOWER RAILWAY PARADE, SYDENHAM – TEMPORARY MEDIUM-TERM 12P PARKING CHANGES DURING MAJOR RAIL SHUTDOWN OF T3 LINE FOR SYDNEY METRO UPGRADE WORKS (MIDJUBURI-MARRICKVILLE WARD / SUMMER HILL ELECTORATE / INNER WEST PAC)**

Prepared By: Jennifer Adams - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

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RECOMMENDATION

1. **That the following temporary medium-term parking / traffic changes be approved:**

   a) **Lower Railway Parade (40 parking spaces) - The medium-term conversion of 109 metres (40 parking spaces) 90 degree angled 'unrestricted parking' on the southeast kerb of Lower Railway Parade (between Gleeson Avenue and Marrickville Road) to '12P' restrictions; and**
   b) **Temporarily converting Lower Railway Parade into a single direction entry / exit, subject to implementation of the Traffic Management Plan for the proposed access changes.**

2. **That the cost of all works of the statement and/or reinstatement of any/all signage will be borne by TfNSW.**

3. **That the applicant and Council Rangers be advised in terms of this report.**

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

From Monday 30 September 2024, the T3 Bankstown Line from Sydenham to Bankstown was closed for a 12-month period to enable the final conversion of the 130-year-old line to modern metro standards. A report went to the August 2024 Local Traffic Committee meeting detailing various temporary medium-term parking changes associated with the 12-month T3 shutdown.

Transport for NSW (TfNSW) have notified Council that local businesses along Lower Railway Parade, Sydenham have indicated they are in favour of changing the unrestricted parking in Lower Railway Parade to timed parking to increase availability of spaces for use by customers and employees of the businesses for the remainder of T3 shutdown period.

Specifically, TfNSW is requesting approval for the medium-term conversion of 109 metres (40 parking spaces) 90 degree angled 'unrestricted parking' on the southeast kerb of Lower Railway Parade (between Gleeson Avenue and Marrickville Road) to '12P' restrictions.

BACKGROUND

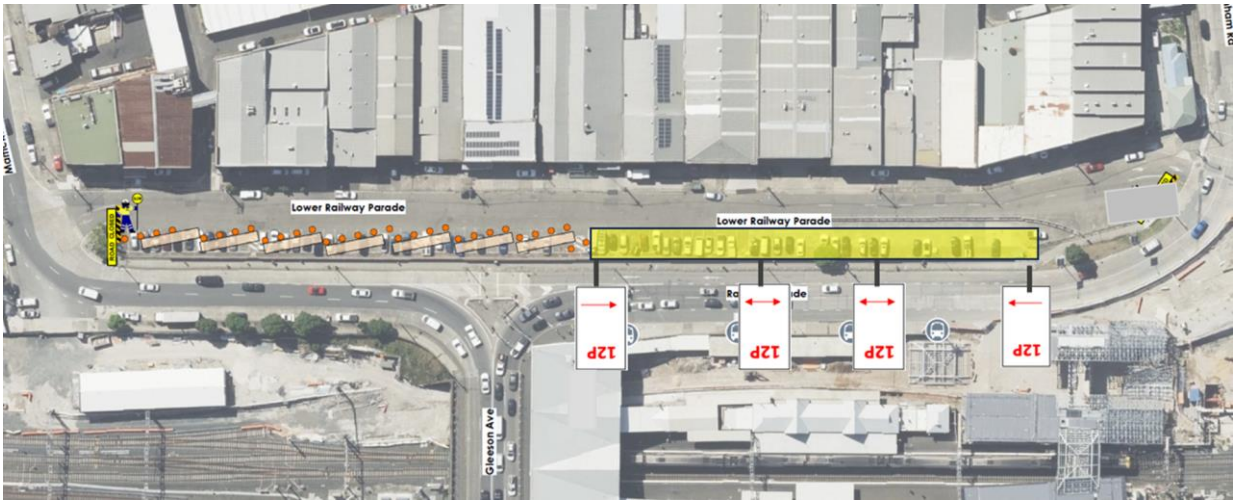
Sydney Metro City & Southwest - Sydenham to Bankstown project will upgrade all 10 stations between Marrickville and Bankstown to meet metro standards before converting the T3

Bankstown Line to Metro operations. Works are now well advanced and the estimated completion date is late 2025.

During the current one-year possession, rail services on the T3 Bankstown Line will not operate and Temporary Transport Plan (TTP) buses, known as 'Southwest Link' are operating instead necessitating some short-term changes in parking at a number of locations. These changes were reported to the Committee in August 2024. Lower Railway Parade in particular lost 29 parking spaces along the southwest kerb of Lower Railway Parade (between Gleeson Avenue and Marrickville Road) to become a 'Bus Zone' accommodating bus layovers.

TfNSW have notified Council that local businesses along Lower Railway Parade, Sydenham have indicated they are in favour of changing the unrestricted parking in Lower Railway Parade to timed parking to increase availability of spaces for use by customers and employees of the businesses for the remainer of T3 shutdown period.

Specifically, TfNSW is requesting approval for the medium-term conversion of 109 metres (40 parking spaces) 90 degree angled 'unrestricted parking' on the southeast kerb of Lower Railway Parade (between Gleeson Avenue and Marrickville Road) to '12P' restrictions. It is expected that the restriction will minimise long term vehicle parking. Refer to the diagram below.

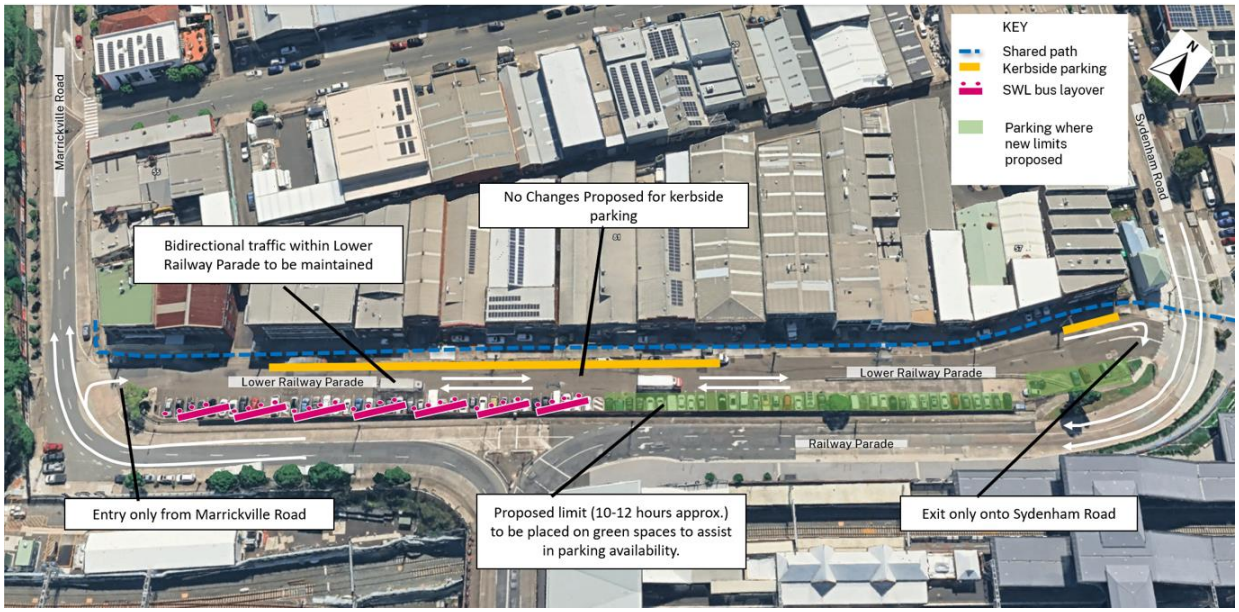


Any changes to street signage/regulatory signage will be made by TfNSW and will be reinstated at the completion of the planned shutdown.

TfNSW has also requested possible temporary changes in the traffic flow in and out of Lower Railway Parade for the remainder of the T3 Shutdown period this involves temporarily converting Lower Railway Parade into a single direction entry whereby:

- Vehicles will only be able to enter but not leave Lower Railway Parade from Marrickville Road at the Southern end of Lower Railway Parade
- Vehicles will only be able to exit but not enter Lower Railway Parade at Sydenham Road at the northern end of Lower Railway Parade.

Refer to the diagram below.



Refer to *Attachment 1* for the Traffic Control Plan.

Any changes to street signage/regulatory signage will be made by TfNSW and will be reinstated at the completion of the planned shutdown.

PUBLIC CONSULTATION

Transport for NSW have consulted the local businesses along Lower Railway Parade and they have indicated they are in favour of changing the unlimited parking to timed parking – which aims to increase the availability of space for customers and employees of these businesses. Pending approval, Transport for NSW would notify nearby residents and businesses via letterbox drop ahead of the changes being implemented.

FINANCIAL IMPLICATIONS

There are no financial implications for Council associated with this matter. The cost of the work will be borne by Transport for NSW.

ATTACHMENTS

1.⇩ Traffic Control Plan

www.invarion.com

VERSION CONTROL	Ver	Date	Description
	1	11/09/2024	V1.0
	2		
	3		
	4		
	5		

Project Information			
Project Name: Sydneham Station Precinct	TGS No: ARG 24-1164 TGS		
Project Description: Traffic Control Provisions for the T3 Bankstown Line Closure	TMP No: N/A		
Project Location: Railway Parade, Sydenham NSW 2204	Scale: 1:500	North Code:	

TGS Verification/ Review Information		
Designed by:	Ronak Gandhi	
PWZ Qual. No:	TCT0063633	
Signature:	R.H.Gandhi	
Reviewed by:	Franziska Mueller	
PWZ Qual. No:	TCT0063633	
Signature:		

Client Information		
Client Logo:	NSW GOVERNMENT Transport for NSW	
Client Name:	TfNSW	
Contact Name:	N/A	
Contact No.:	N/A	

Page Information	
Review Date:	11/09/2024
Page No:	1
Total Pages	1

Item No: **LTC0225(1) Item 2**

Subject: **CHARLOTTE AVENUE, MARRICKVILLE AT MYRTLE STREET AND VICTORIA ROAD - TEMPORARY FULL ROAD CLOSURE AND TEMPORARY REGULATORY SIGNAGE CHANGES– SYDNEY WATER SEWER UPGRADE WORKS MARRICKVILLE CTMP (MIDJUBURI-MARRICKVILLE WARD / SUMMER HILL ELECTORATE / INNER WEST PAC)**

Prepared By: Jennifer Adams - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

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RECOMMENDATION

That the proposed temporary full road closure (ENRC/2024/0069) of Charlotte Avenue, Marrickville at its junction with Myrtle Street and Victoria Road, for an approximate 6-month period beginning from 1 April 2025 to 1 September 2025 be approved, in order to facilitate Sydney Water's sewer upgrade works subject to, but not limited to, the following conditions:

1. **A Road Occupancy License be obtained by the applicant from the Transport Management Centre;**

2. **All affected residents and businesses, including the NSW Police Local Area Commander, Fire & Rescue NSW and the NSW Ambulance Services be notified in writing, by the applicant, of the proposed temporary road closure at least 7 days in advance of the closure with the applicant making reasonable provision for stakeholders;**

3. **The occupation of the road carriageway must not occur until the road has been physically closed; and**

4. **The applicant is to bear all costs and works associated with the installation/removal of the temporary "No Parking' restrictions at the northern end of Charlotte Avenue, Marrickville.**

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

An application has been received from D4C for the temporary full road closure of Charlotte Avenue, Marrickville at its junction with Myrtle Street and Victoria Road, for an approximate 6-month period beginning 1 April 2025 to 1 September 2025 in order to facilitate Sydney Water's sewer upgrade works. As per the supplied Sydney Water sewer upgrade works Marrickville CTMP the road will be temporarily closed to all vehicular traffic and there is a proposed temporary regulatory signage change at the northern end of Charlotte Avenue to facilitate U-turns. It is recommended that the proposed temporary full road closure and temporary signage change be approved, subject to the conditions outlined in this report.

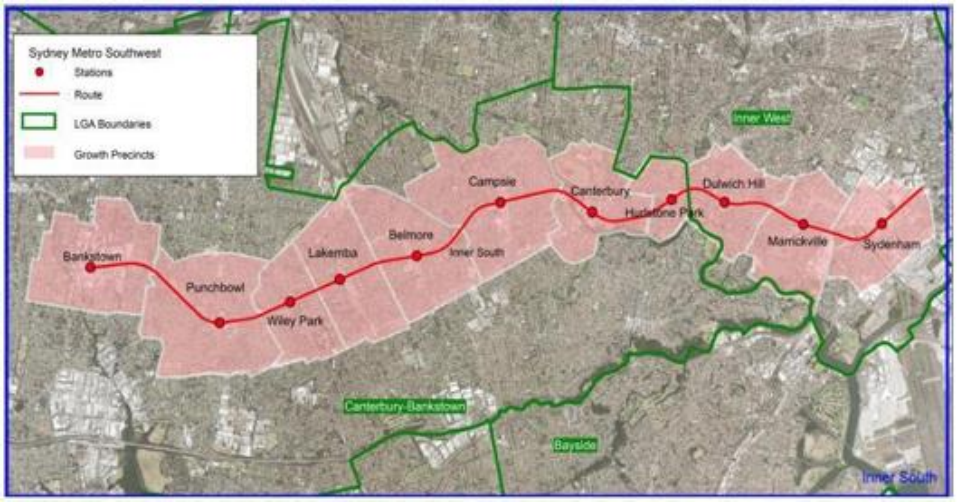
BACKGROUND

The works are part of the Sydenham to Bankstown Wastewater Upsizing – Marrickville and Belmore proposal. The proposal has been undertaken in response to the Department of Planning and Environment's (DPE) 'Sydenham to Bankstown Urban Renewal Corridor Strategy' (2017). The strategy targets growth opportunities for urban renewal around the train stations between Sydenham and Bankstown over the next 20 years.

The purpose of these works is to improve network functionality by increasing the capacity of the wastewater network to service increased demand, thereby reducing the risk of wastewater main breaks in the future.

Due to the Sydenham to Bankstown Metro Upgrade Project being undertaken by TfNSW, Sydney Water has an opportunity to access the railway corridor and upgrade wastewater infrastructure in these areas. This would be undertaken with ongoing consultation with TfNSW/Sydney Trains.

The new Metro Sydenham to Bankstown line shown in the diagram below, shows the new stations at the 11 growth precincts along the metro corridor. Marrickville and Belmore are the first sites selected for increasing the wastewater capacity in areas deemed required to meet the growth needs of the Sydenham to Bankstown Urban Renewal Corridor Strategy.



Location of works

The proposal is located in the road and verge of Victoria Road and under the railway overpass.

Scope of works

The proposal involves construction of about 111 metres of a DN375 wastewater main via open trench along Victoria Road and into the railway property access driveway. Excavation depths will range from 3 to 4 metres. The proposal would also involve the construction of 4 new maintenance holes, and grouting and decommissioning the existing wastewater pipe.

The scope of work is outlined below:

Pre-Construction

- further site investigations may be required e.g. potholing, boreholes, geotechnical and contamination testing etc

Establishing site

- install erosion and sediment control measures
- install fencing and traffic control measures

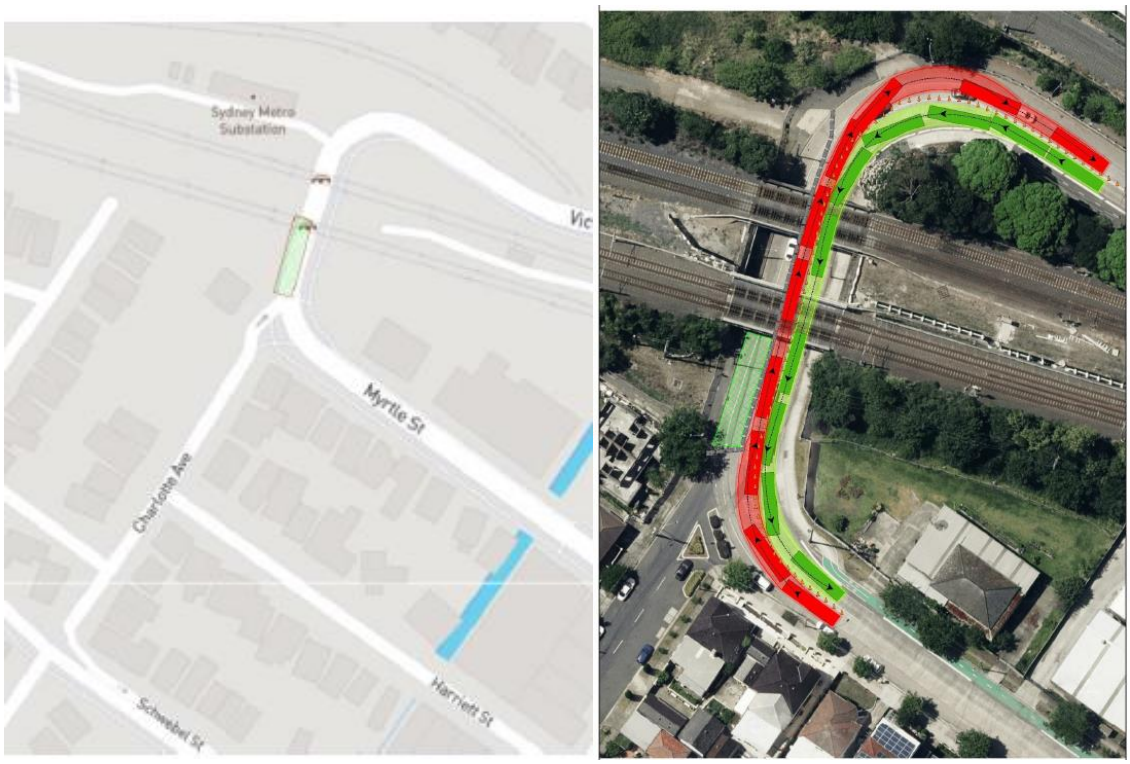
Wastewater upsizing works:
- open trench excavation in the verge, roadway, and public land for the new wastewater main, up to about 3 to 4 metres deep and 1.0 metre wide
- minor excavation to create new maintenance holes • minor excavation to create launch and receiving pits, up to about 2.7 metres depth, 6.0 metres long and 4.0 metres wide (Belmore)
- micro tunnelling from the launch to receiving pit, including a new section of the DN450 main (Belmore only)
- install bends, tapers, tees, hydrants, thrust blocks & other fittings for new wastewater mains
- connect the new wastewater main to existing network
- traffic and pedestrian management during work and shutdown periods.

The work site will be restored to the pre-existing condition following construction, in consultation with landowners.

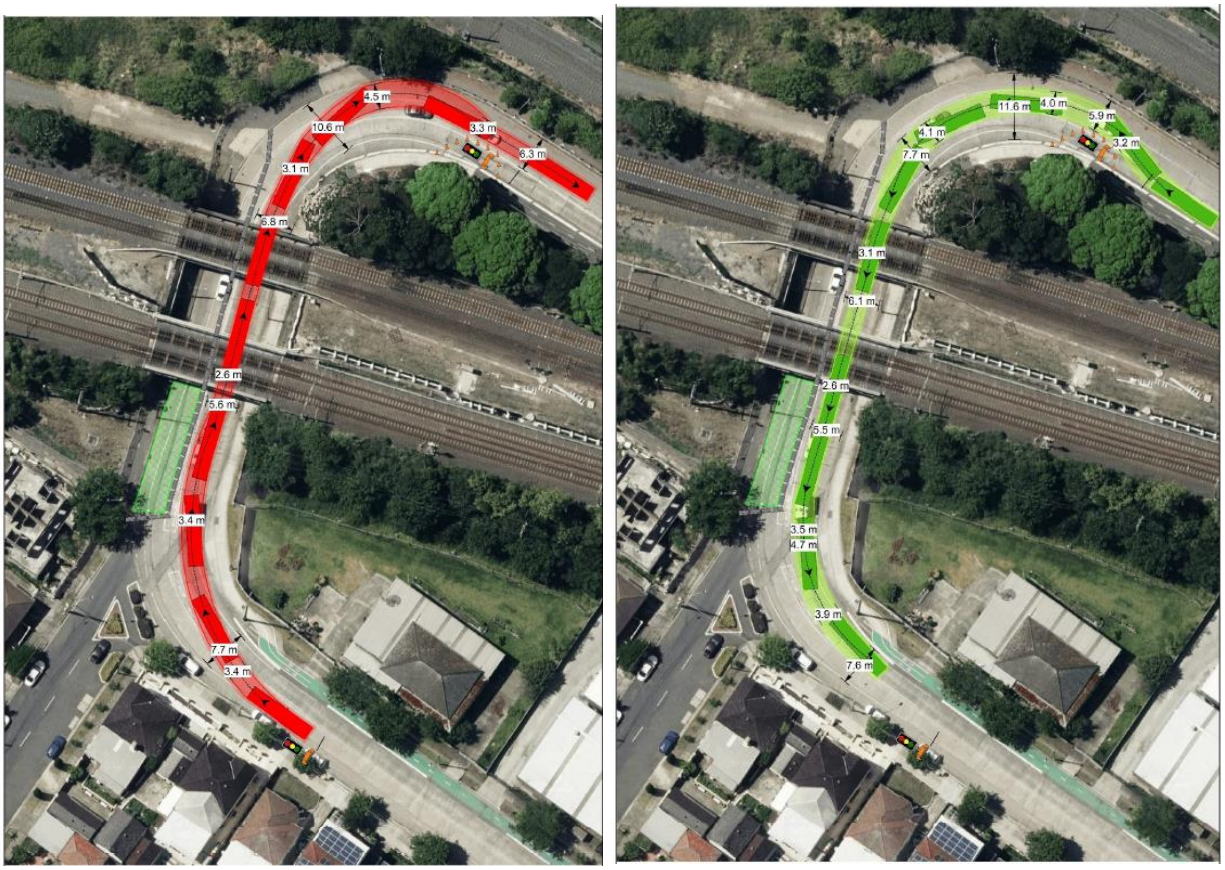
Construction Traffic Management Plan (CTMP)

D4C will work to minimize impacts during this time. However, there may be machinery noise as well as temporary disruptions to local and pedestrian traffic. Access to properties will be maintained at all times where possible. The road closure impacts no bus route. A Construction Traffic Management Plan (CTMP) has been provided and is attached at the end of this report.

It is proposed to carry out the works with a counterflow system operating on Victoria Road, Marrickville. The CTMP notes that during the planning stage of the project a number of scenarios were run to find the most suitable traffic management for the site. Priority was given to always keeping 2 lanes of traffic open, and this was modelled as **Scenario 1**. Despite efforts to reduce the Work Zone footprint, and study of the site to cater for passing vehicles, it was determined there was not enough room to maintain adequate trafficable lanes as per the Austroads Guides to Temporary Traffic Management and the TfNSW TCAWS V6 manual. Several swept path analyses were completed with the different compound configurations, and each time the vehicle paths clashed. Refer to SPA001 – Scenario 1 reproduced below.



Scenario 2 was modelled on always keeping 1 trafficable lane open. This allows D4C to meet the minimum lane width requirements of the Austroads Guides to Temporary Traffic Management & the TfNSW TCAWS V6 manual. Several swept path analyses were done, and it was considered that this arrangement would best cater for all expected vehicles travelling this section of roadway. Refer to SPA 002/003 reproduced below.



A portable traffic light/signal system will be operating for after-hours traffic management. D4C have stated that malfunction of the system is rare and noted that the traffic lights will be tested and fully charged prior to crews leaving site and that the out of hours traffic management company phone number is on the lights. The traffic management company night shift manager will complete regular site checks of the unmanned site throughout the week.

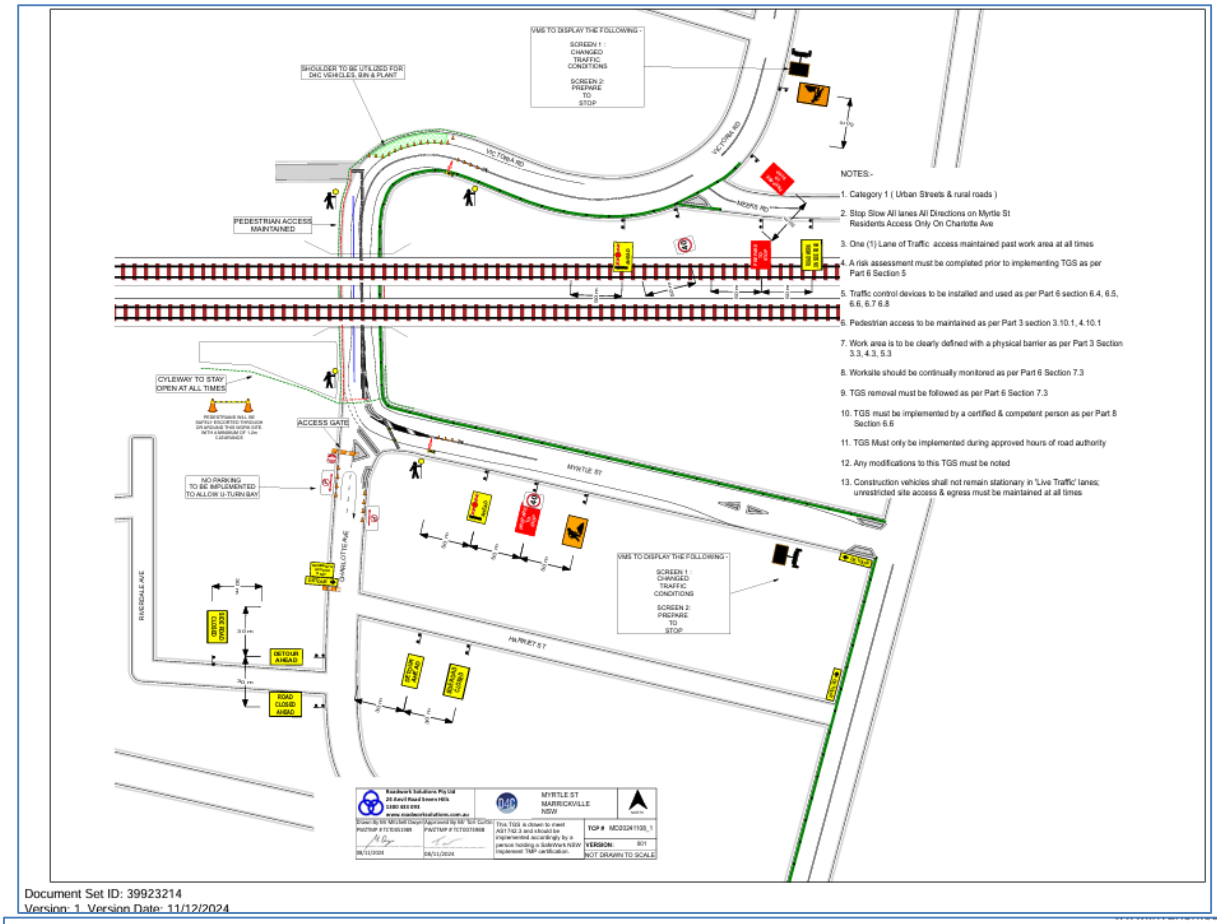
The Traffic Guidance Scheme Plans for the temporary road closure of Charlotte Avenue are shown below. Detours will be in place. VMS boards will be displayed on the perimeter area.

Traffic control and directional signage will be in place for the safety of workers and the community. There may be an increase in traffic movements around the local area. Motorists may experience some delays. Concrete barriers or water filled barriers are to be utilized to delineate the compound. All barriers are to be compliant with AS/NZS 3845.

Pedestrian routes will not be affected by works. All pedestrian paths will be maintained at a minimum clearance of 1.2m at all times. Pedestrians will be adequately separated from always works with appropriate site fencing. The cycleway is to stay open at all times.

Emergency services will be provided with advance notice of any changes via the site management team and email updates. All Emergency services will have access always maintained through the road closures.

Item 2



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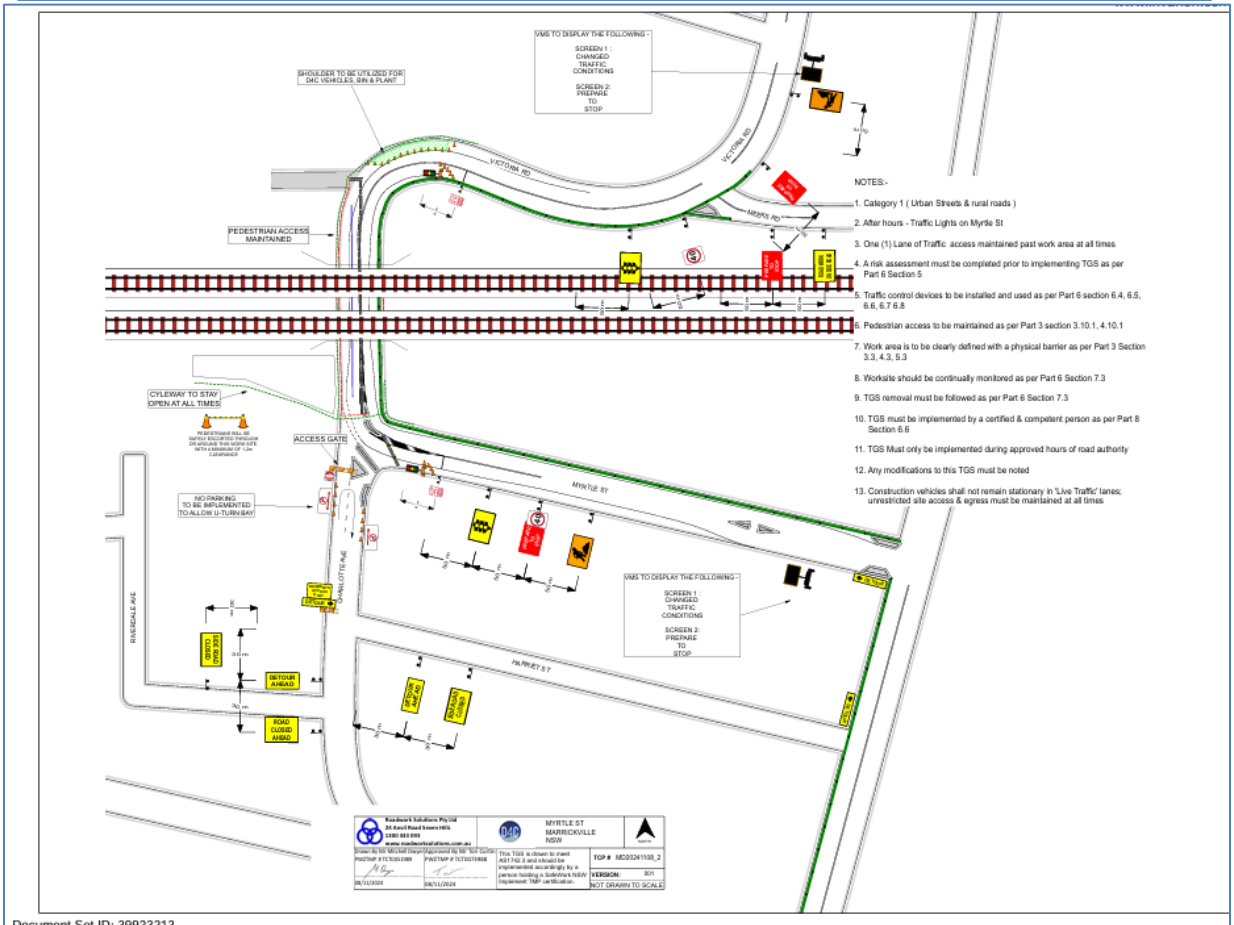
Version: 1, Version Date: 11/12/2024



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Version: 1, Version Date: 11/12/2024

FINANCIAL IMPLICATIONS

There are no financial implications associated with the implementation of the proposed recommendations outlined in the report.

OFFICER COMMENTS

Charlotte Avenue is a local residential road and carries around 250 vehicles per day. It has a travel lane in both directions and kerb side parking. Currently the parking is unrestricted. Vehicles can only exit onto Victoria Road at its northern end. These vehicles will have to detour possibly via Harriet Street, Carrington Road and Myrtle Street during the medium-term temporary full road closure.

Thus, it is noted that the medium-term temporary full road closure will divert traffic to other local streets for a period of time which may be disruptive to some local residents.

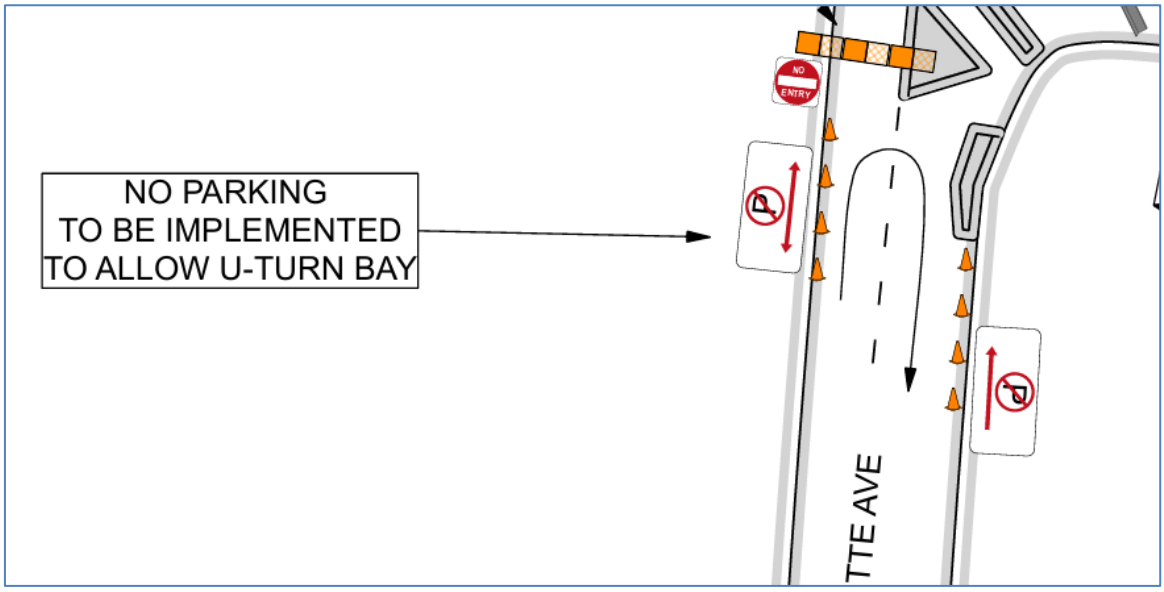
Myrtle Street is a local road and between Carrington Road and Victoria Road, carries 7,689 vehicles per day. Victoria Road, between Fernbank Street and Calvert Street, carries around 9,408 vehicles per day. As previously noted, motorists may experience some inconvenience and delays over the six-month period.

D4C have stated that VMS boards can go up 2 weeks prior to construction. Initial message of VMS boards will be 'CONSTRUCTION AHEAD' & 'APRIL TO SEPTEMBER', once construction kicks off onsite, the message will change to 'CONSTRUCTION AHEAD' & 'SLOW DOWN'. It is suggested that the later messages be changed to 'Expect Delays' opposed to 'Slow Down' and that the VMS boards stay in place for the duration of the works.

Traffic controlled during the day under contra flow arrangement using stop/go with traffic controllers on site and portable traffic light/signal system operating for after-hours traffic management is acceptable and should be reviewed within two weeks of operation and any changes implemented as or if required.

<u>Parking change</u>

D4C have advised that a small parking modification will be made on Charlotte Avenue to allow for vehicles to do a U-turn at the closure point. D4C will supply, install and remove the temporary signage appropriately.



With the construction works and the temporary parking changes some local parking will be lost. The CTMP states:

> ***5.1 Vehicle Access***
> *LVs and Heavy vehicles will be able to enter the site. If parking is not available on site, LVs should be parked legally on the surrounding or other local streets.*
> ***6.3 Construction Workers Parking***
> *Construction workers are to park either inside the compound or legally curb side on surrounding or local streets. It is likely D4C will park cars, bins & plant in the Northbound direction's shoulder area as per TGS in section 9.0.*

It is noted, in recent times, residents in Charlotte Avenue have raised concerns about worker parking in their street. Council officers have also reviewed the parking utilization in Charlotte Street and it was noted to be operating at near capacity. As such, all provisions for the approximate 15 workers on-site needs to be within the off-road site compound.

PUBLIC CONSULTATION

The proposed road closure has been advertised on Council's website in accordance with the Roads Act 1993.

The applicant is to notify all affected residents and businesses in writing at least 7 days prior to the commencement of works. A draft copy of their notification letter is reproduced below.

CONCLUSION

It is recommended that the proposed temporary full road closure be approved, subject to but not limited to the conditions and recommendations outlined in this report.

ATTACHMENTS

1.⇩ CTMP - Sydenham to Marrickville WAA Marrickville - REV C

Item 2

Sydney WATER

Upcoming working in your area

DD MONTH 2024

We're upgrading our wastewater services to cater for growing demand from Sydenham to Bankstown. Marrickville has been identified as one of the key areas where future growth needs require an increase in wastewater capacity. Our Sydenham to Bankstown Growth Project will ensure a robust wastewater network that will enable your community to grow.

What you need to know

Overview of our work
The aim of our project is to upgrade our wastewater infrastructure, which will involve decommissioning the existing wastewater main, and building a new wastewater main along Victoria Road, Marrickville. Our work will start on the road at the Charlotte Avenue and Myrtle Street junction to Victoria Road, before moving off the road and into the Transport for NSW compound (see Figure 1).

Timeframe and work hours
We plan to start work in February 2025 and expect to finish in July 2025, weather permitting. Our work hours will be **7 am** to **6 pm** Monday to Friday, and **8 am** to **1 pm** on Saturday's if needed.

Our work on Victoria Road will take up to three months, and during this time there will be changes to pedestrian access and traffic management on the road.

Traffic and parking changes
Unfortunately, to complete our work we will need to close one lane of traffic on Victoria Road and have traffic management and personnel on the road while we work.

Pedestrian access across Victoria Road
The footpath will need to be closed temporarily while we work from the end of Charlotte Avenue and pass the rail compound on Victoria Road (see Figure X). Our traffic controllers will help direct pedestrians across the road so they can safely cross from Myrtle Street onto Victoria Road.

We know our work can be disruptive, so we'll make every effort to reduce any impact this work may have on you.

Where do I get more information and help?
If you would like to know more, please contact our Community Engagement team on the contact details at the bottom of the page. If you need to make special arrangements with us, please reach out so we can work with you.

Thank you for your cooperation during this essential work.

Yours sincerely

Dianne Clemens
Project Manager

☎ 1800 006 113 option 1
✉ Delivering4Customers@sydneywater.com.au

Sydney WATER

Figure 1 – Location of our work

Figure 2 – Road changes on Victoria Road

Interpreter Service 13 14 50
Arabic • Chinese • Greek • Italian • Korean • Vietnamese • Hindi • Punjabi
إذا كنت تحتاج إلى مترجم، يرجى الاتصال بالرقم أعلاه.
如果您需要傳譯員的協助，請致電以上的號碼。
Αν χρειάζεστε διερμηνέα, τηλεφωνήστε στον παραπάνω αριθμό.
Se vi serve un interprete, telefonate al numero indicato sopra.
통역사가 필요하시면 위의 번호로 전화하십시오.
Nếu quý vị cần thông dịch viên, hãy gọi đến số trên đây.
यदि आपको दुभाषिए की सहायता की ज़रूरत है, तो कृपया ऊपर दिए गए नम्बर पर फोन करें।
ਜੇ ਤੁਹਾਨੂੰ ਦੋਭਾਸ਼ੀਏ ਦੀ ਮਦਦ ਦੀ ਲੋੜ ਹੈ, ਤਾਂ ਕ੍ਰਿਪਾ ਕਰਕੇ ਉੱਤੇ ਦਿੱਤੇ ਨੰਬਰ 'ਤੇ ਫੋਨ ਕਰੋ।

1800 006 113 option 1
Delivering4Customers@sydneywater.com.au

Item 2

Construction Traffic Management Plan

Sydenham to Bankstown Corridor

Wastewater Asset Amplification

Marrickville

Revision control:

Revision	Date	Description	Approved
Draft	05/08/2024	First Draft	Tori Curtin
A	08/11/2024	Addition of scenario 2 & details	Mitchell Dwyer
B	11/12/2024	Amended TGS, work dates & contacts	Tori Curtin
C	08/01/2025	Amended Scenario 2 Swept Path – measurements added, Site compound added to 2.0 location of works.	Tori Curtin
D			

ROADWORK SOLUTIONS
SAFE RELIABLE PROFESSIONAL

Attachment 1

Contents

ROADWORK SOLUTIONS
SAFE RELIABLE PROFESSIONAL

1.0 Scope of Works

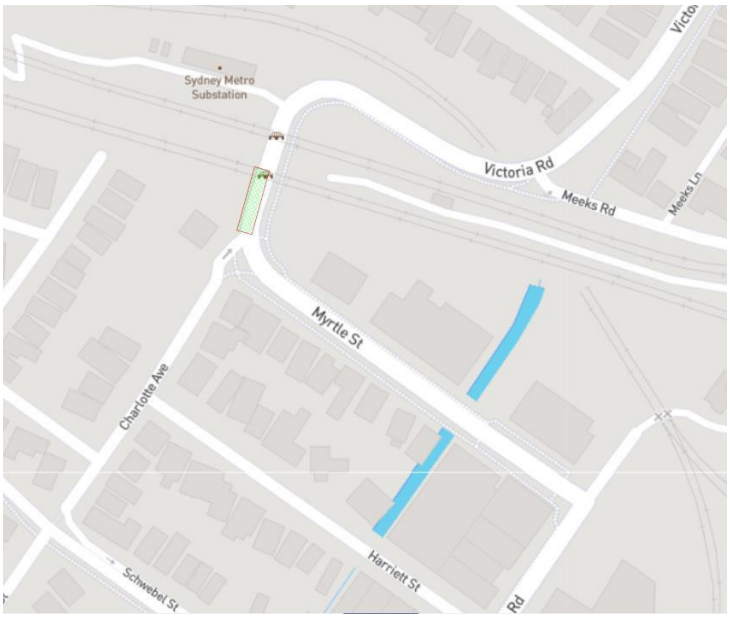
This Construction Traffic Management Plan (CTMP) facilitates the safe implementation of a Traffic guidance scheme prepared to address traffic access and safety issues associated with D4C's project Sydenham to Bankstown Corridor Wastewater Asset Amplification at, Myrtle St Marrickville.

This CTMP has been prepared to provide details of the management of the traffic, plant and site compound activities associated with the proposed works. The primary purpose of this Plan is to provide traffic and plant management measures to be incorporated into the operational management of the works to ensure that all traffic and plant activity associated with work occurs with minimal interaction with adjoining public road traffic movements as well as ensuring the safe working conditions for construction crews. The traffic management plan is designed to be consistent with the overall construction plan for the project.

2.0 Location of Works

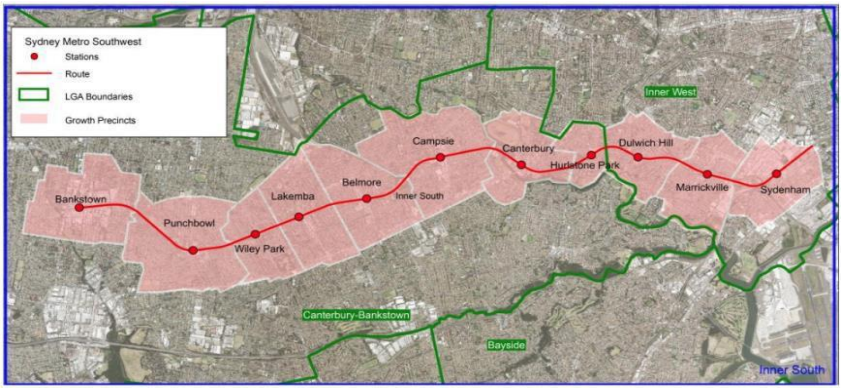
The site will be located near the intersection of Myrtle St x Victoria Rd x Charlotte Ave Marrickville.

Location map is presented below.



Site Compound.

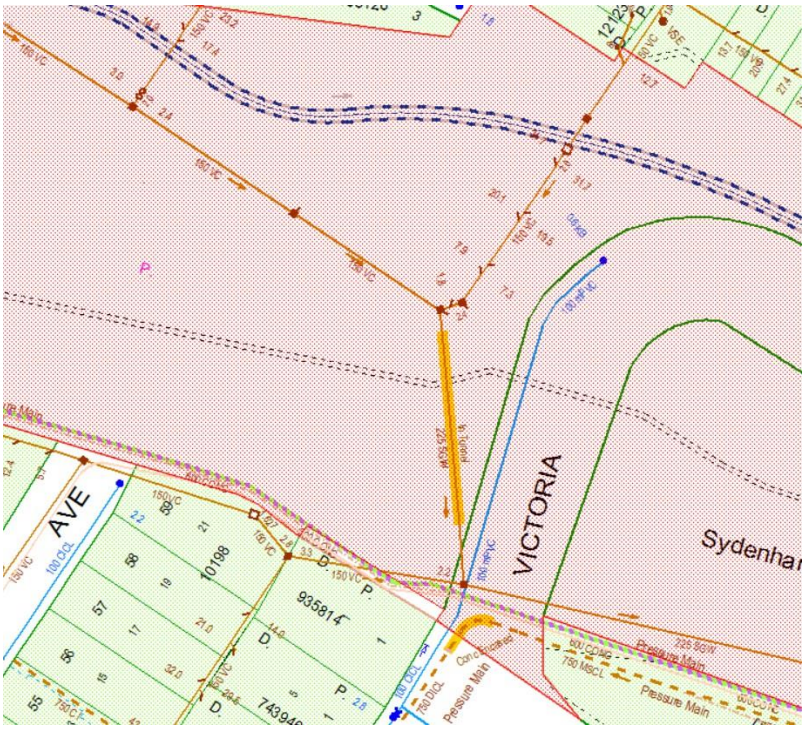
3.0 Project Scope & Context



The new Metro Sydenham to Bankstown line shown in the below image, shows the new stations at the 11 growth precincts along the metro corridor. Marrickville and Belmore are the first sites selected for increasing the wastewater capacity in areas deemed required to meet the growth needs of the Sydenham to Bankstown Urban Renewal Corridor Strategy.

The existing DN225 SGW GC167 1955 (ID 3892523) sewer is to be disused, and grout filled. A new DN375 PVC main is to be installed via laser bore and pipe pulling on the verge of Victoria Rd, with two new maintenance holes built on the alignment at the change of the direction to reconnect two upstream sewer lines adjacent the newly constructed Metro building.

The existing asset to be replaced presented below.



4.0 Impact Assessment

Existing Road Network

Sydenham Rd – A classified State Road that will allow all vehicles to access the greater road network which generally runs in Northern & Southern direction. It is subject to a speed limit of 60 km/h. it typically carries two trafficable lanes in each direction. It is located to the North of the site

Victoria Rd Between Sydenham Rd & Marrickville Rd – A classified Regional Road which generally runs in a Northern & Southern direction to the North of the site. It is subject to a speed limit of 60 km/h and typically carries two trafficable lanes in each direction.

Marrickville Rd – A classified Regional Road which generally runs in a Northern & Southern direction to the North of the site. It is subject to a speed limit of 60 km/h and typically carries two trafficable lanes in each direction.

Victoria Rd between Marrickville Rd & Myrtle St - A Local Council Road which generally runs in a Northern & Southern direction. It carries a single lane in each direction. It is subject to a 50 km/h speed limit. The site will be located on this road near the intersection of Charlotte Ave and Myrtle St.

Myrtle St - A Local Council Road runs in an Eastern & Western direction. It carries a single lane in each direction with dedicated non trafficable shoulders. It is subject to a 50 km/h speed limit. The site will be located on this road near the intersection of Charlotte Ave and Victoria Rd.

Charlotte Ave - A Local Council Road runs in a Northern & Southern direction. It carries a single lane in each. It is subject to a 50 km/h speed limit. It will intersect with Victoria Rd in the North.

Site access – Marrickville Site

All site vehicles are to enter and exit the site from the dedicated access points located on Victoria Rd, and Charlotte St as needed.

Image of working location Charlotte Ave x Myrtle St

Hours of Operation – Marrickville Site

The site will be in place for the duration of the construction, delineated with concrete barriers and fencing. Works are proposed to be commencing February 2025 – July 2025. Despite the site being in place for the entire duration, working hours inside the compound are anticipated to be Monday to Friday, 07:00 – 18:00, Occasionally Saturday 08:00 – 13:00.

Construction Vehicles

Construction vehicles likely to travel to and from site are likely to include:

- Heavy Medium rigid trucks for construction spoil removal
- Heavy and medium rigid trucks for construction material delivery
- Mobile cranes
- Concrete Agitators
- Trade vehicles

During the construction period, the construction vehicle movement activities are set out in the below table.

Task	Duration	Vehicle movement per day
Mobilization	2 weeks	10
Construction	5 months	10
Demobilization	2 weeks	10

Vehicle Dimensions

SRV – Small rigid vehicle-load capacity of 4 tonnes, typically single rear axle, are 6 m long

MRV – Medium rigid vehicle-load capacity of 8 tonnes, typically single rear axle, are 8.8 m long

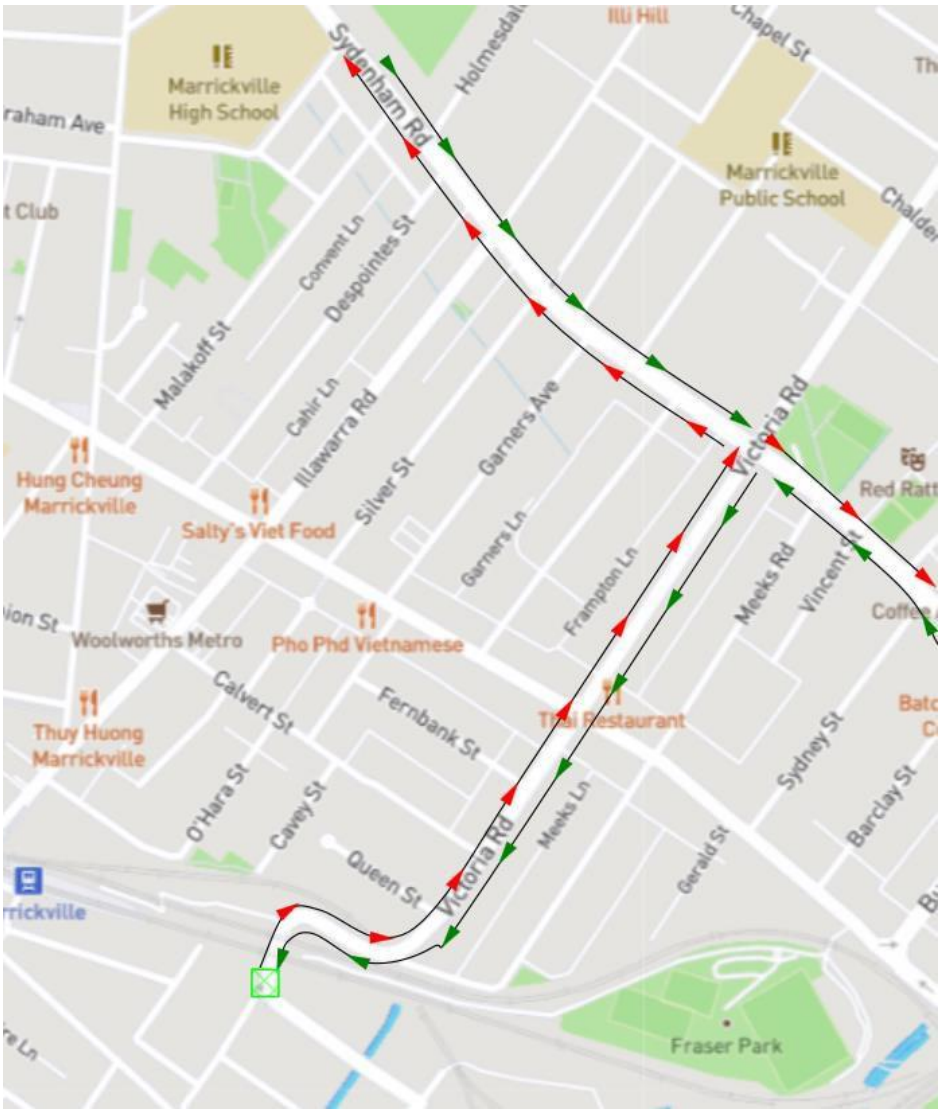
HRV – Heavy rigid vehicle-load capacity of 12-16 tonnes, typically dual rear axle, up to 12.5 m long

AV – Truck and dog combinations, typically an MRV with a trailer

Construction Routes

Construction vehicles will travel to and from site on arterial roads suitable to their vehicle type. The main routes are illustrated below.

Construction Travel Route



5.0 Traffic Control

D4C on occasions may need to develop TGSs for works outside of the site's parameters given that each work task has different requirements, these will be identified individually, and management plans put into place. The site TGSs will include more details of this implementation and how the controls put in place will minimize disruption whilst maintaining a safe work area for construction crews. These Traffic Control Plans based on Australian Standard 1742.3 and TfNSW Traffic Control at Work Sites Guidelines, will be produced in consultation with Council and RMS.

Each work site will have a TGS which will address the following:

Traffic flow. All traffic will be managed by a TGS which will comply with AS 1742.3 and the TfNSW Traffic Control at Work Sites manual (TCWSM). Please refer to the Traffic Control Plans attached.

Pedestrian movement. All pedestrian movement including entry, egress and movement around the work area will be in accordance with TfNSW TCWSM Section 9.3 – Pedestrians. All work areas will be secured with barriers and fencing to ensure that no unauthorized entry for pedestrians is possible.

Plant movement. All plant movement including entry, egress and movement within the work area in accordance with TfNSW TCWSM Section 7 – Providing for works traffic.

Cyclist movement. All cyclist movement including around or adjacent to the work area will be in accordance with TfNSW TCWSM Section 9.4 – Cyclists.

During the planning stage of the project a number of scenarios were run to find the most suitable traffic management for this site. Priority was given to always keeping 2 lanes of traffic open, and this was modelled as **Scenario 1**. Despite efforts to reduce the Workzone footprint, and study of the site to cater for passing vehicles, it was determined there was not enough room to maintain adequate trafficable lanes as per the AustRoads Guides to Temporary Traffic Management & the TfNSW TCAWS V6 manual. Several swept path analysis were completed with the different compound configurations, and each time the vehicle paths clashed. This is further identified in SPA 001 – Scenario 1 in annexure A.

Scenario 2 was modeled on always keeping 1 trafficable lane open. This allows us to meet the minimum lane width requirements of the AustRoads Guides to Temporary Traffic Management & the TfNSW TCAWS V6 manual. Several swept path analysis were done, and this solution caters for all expected vehicles travelling this section of roadway. This is identified in SPA 002/003 in annexure 1.

5.1 Vehicle Access

LVs and Heavy vehicles will be able to enter the site. If parking is not available on site, LVs should be parked legally on the surrounding or other local streets.

5.2 Site Access

All site access during construction periods will be managed under the vehicle movement plan. As a safety precaution, safety barriers will be utilised to ensure that appropriate separation of workers, plant and construction traffic is maintained. Pedestrians attempting to cross the Site's vehicle accesses are to be managed through signage, pedestrian barriers, and traffic controllers.

5.3 Pedestrian Access

Pedestrian routes will not be affected by works. All pedestrian paths will be maintained at a minimum clearance of 1.2m at all times. Pedestrians will be adequately separated from works with appropriate site fencing at all times.

5.4 Signage

The TMP introduces regulatory and advice signage designed to provide motorists and pedestrians the clearest notification of the potential hazards created by the new work site. Parking restrictions signs will also be used for construction zones when required.
Additional static signs to inform motorist and pedestrians will be put on the approach to works. Please refer to Traffic Control Plans/Traffic Guidance Schemes.

5.5 Barriers

Concrete barriers or water filled barriers are to be utilized to delineate the compound. All barriers are to be compliant with AS/NZS 3845.

6.0 Maintaining Network Performance

6.1 Road Occupancy

Where required, D4C will obtain an approval from Inner West Council and TfNSW prior to the commencement of any works on the road except in the case of an emergency, or when directed by Police or Emergency services, D4C will endeavour to reinstate road as soon as practicable.

All applications will be forwarded to the Inner West Council and TfNSW with an allowance for the Traffic Committee to approve the application (if required). Associated works (utilities) may require ROLs, as required subcontractors will obtain ROL's and carry out works as per ROL conditions.

All ROL's will comply with the overarching road safety and traffic management principles, objectives and targets outlined in the Project Construction Management Plan.

6.2 Surrounding Parking Modifications

A small parking modification will be made on Charlotte St to allow for vehicles to do a U-turn at the closure point. D4C will submit any modifications for approval from Inner West Council. Once obtained, adequate temporary signage is to be erected for the duration of the construction.

6.3 Construction Workers Parking

Construction workers are to park either inside the compound or legally curb side on surrounding or local streets. It is likely D4C will park cars, bins & plant in the Northbound direction's shoulder area as per TGS in section 9.0.

6.4 Unplanned Events (Incident Response)

D4C will manage all incidents which may contribute to congestion, aggravate the free flow of traffic, or threaten the wellbeing of any road user within the Project boundaries in compliance with the Project Incident Management Plan.

6.5 Planned Events

Inner West Council and Transport for NSW events calendar will be considered when programming this work, to ensure there are no conflicts with local events or other motorway works. Consultation will continue with the council regarding any issues working during proposed times.

6.6 Public Transport

No public transport is anticipated to be affected by these works.

6.7 Property Access

All property access adjacent to, and the surrounding area will be maintained wherever possible, residents must be notified of the potential impacts on their access during the construction. Any restrictions to property access will be extensively communicated to stakeholders prior to works commencing. Local Business and Resident access must be always maintained.

6.8 Emergency Services

Emergency services will be provided with advance notice of any changes via the site management team and email updates. All Emergency services will have access always maintained through the road closures.

6.9 Monitor the effectiveness of control measures

The use of an inspection checklist will be implemented to monitor the effectiveness of the traffic control measures in place. A traffic control safety inspection will be completed at least once per week, with any minor modifications completed as required. Any major modifications will be assessed and implemented by a suitably qualified person.

7.0 Community/Advertising/Consultation

D4C will have continuous communication between all parties involved in the construction process, local stakeholders and the regulatory authority. This establishes a dynamic response process which allows for the adjustment of control methods and criteria for the benefit of all parties.

The objective in undertaking a consultation process is to:

- Inform and educate the groups about the project and the noise controls being implemented.
- Increase understanding of all acoustic issues related to the project and options available.
- Identify group concerns generated by the project, so that they can be addressed; and
- Ensure that concerned individuals or groups are aware of and have access to a Constructions Complaints Register which will be used to address any construction noise-related problems should they arise.

The D4C community consultation team will conduct community notification prior to any works commencing on site, with letterbox notifications to all identified surrounding sensitive receivers.

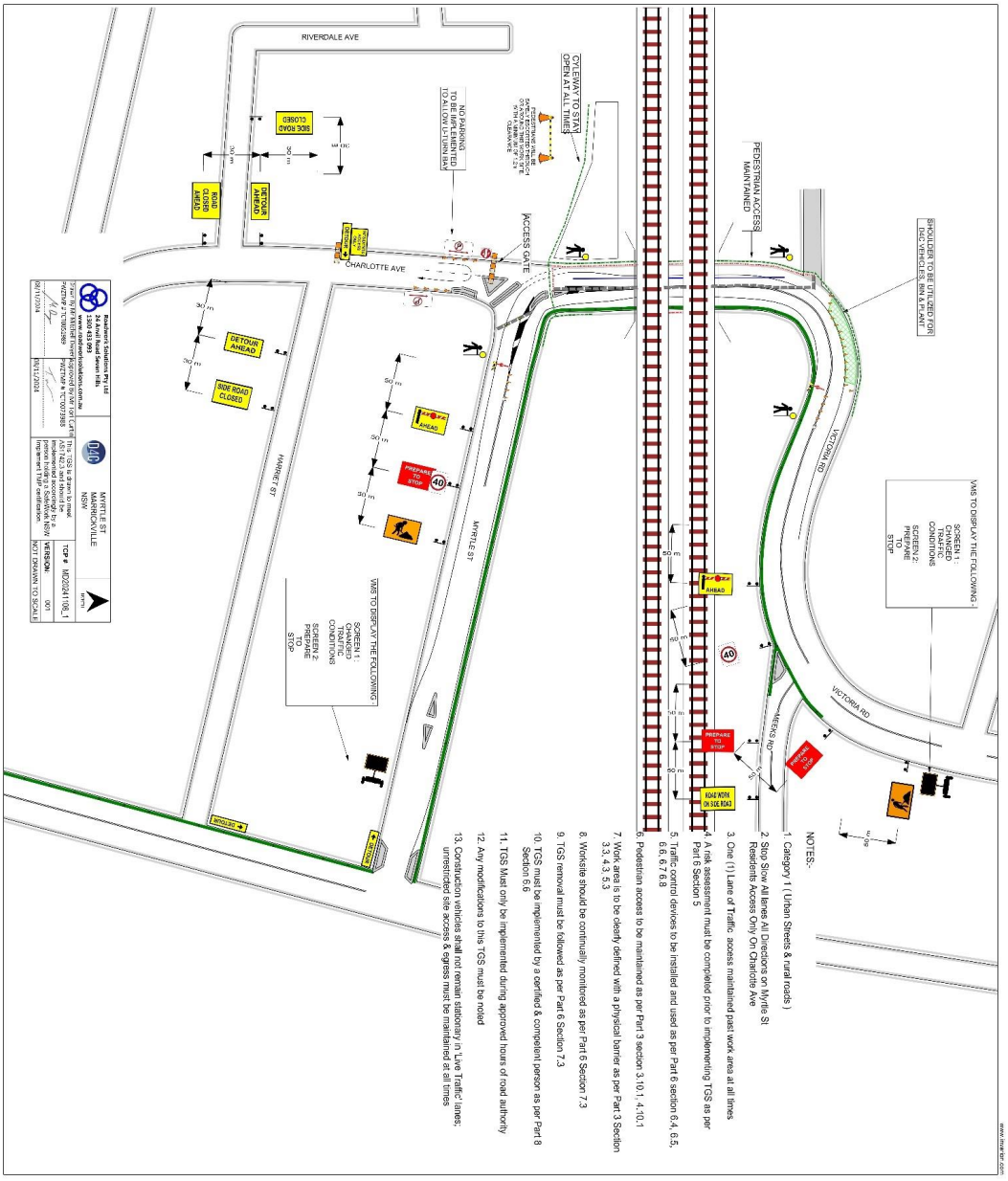
8.0 Contacts

Contact	Position	Mobile No.
Carlos Dyrka	Construction Lead	0418 242 158
David Falsay	Construction Engineer	0418 114 248
Wesley Wang	Construction Engineer	0447 361 678
Rob Jay	Construction Supervisor	0428 216 302
Eric Randell	Snr Construction Supervisor	0413 483 281
Jemima Waddell	Community Engagement Advisor	0413 483 281
Tori Curtin	Traffic Management Consultant	0439 107 502
Roadwork Solutions (24/7)	Traffic Management After Hours	1300 433 093
Transport Management Centre	Operations Centre	1 800 679 782

Item 2

9.0 Traffic Control Plan/Traffic Guidance Scheme

Myrtle St Marrickville - PTCD – Working Hours



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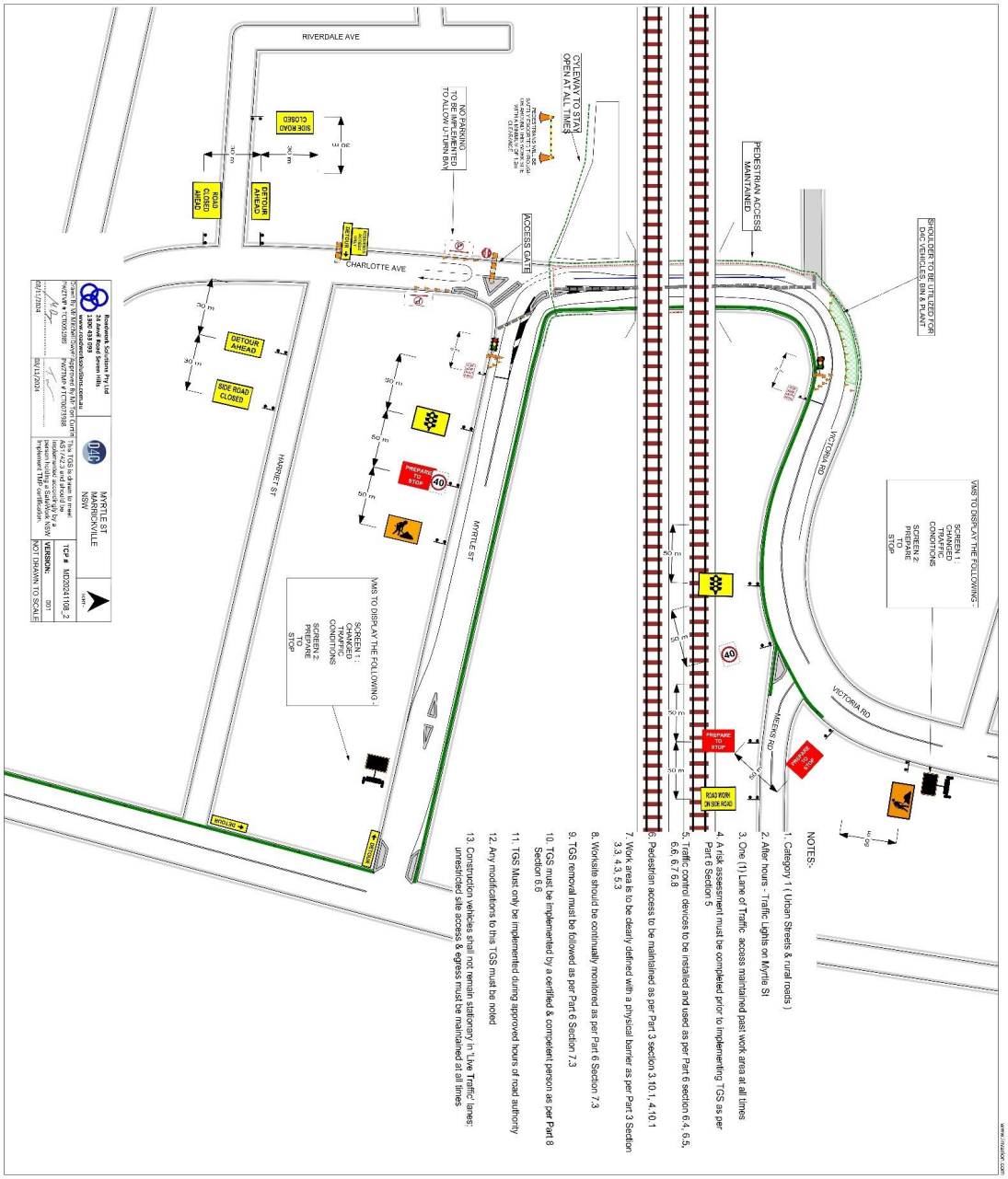
Attachment 1

Item 2

Attachment 1

Myrtle St Marrickville - TL After Hours



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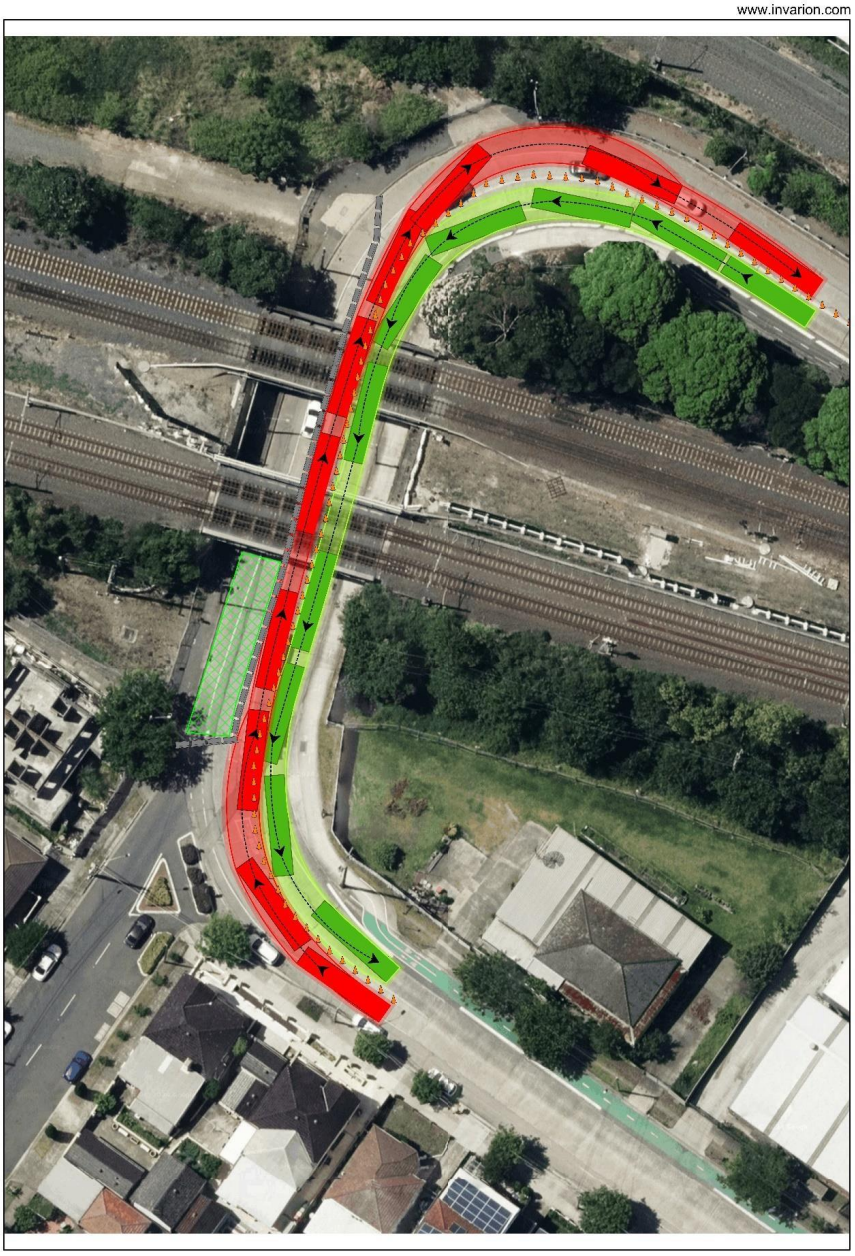
SPA 001 – Scenario 1 – two lanes of traffic open

www.invarion.com



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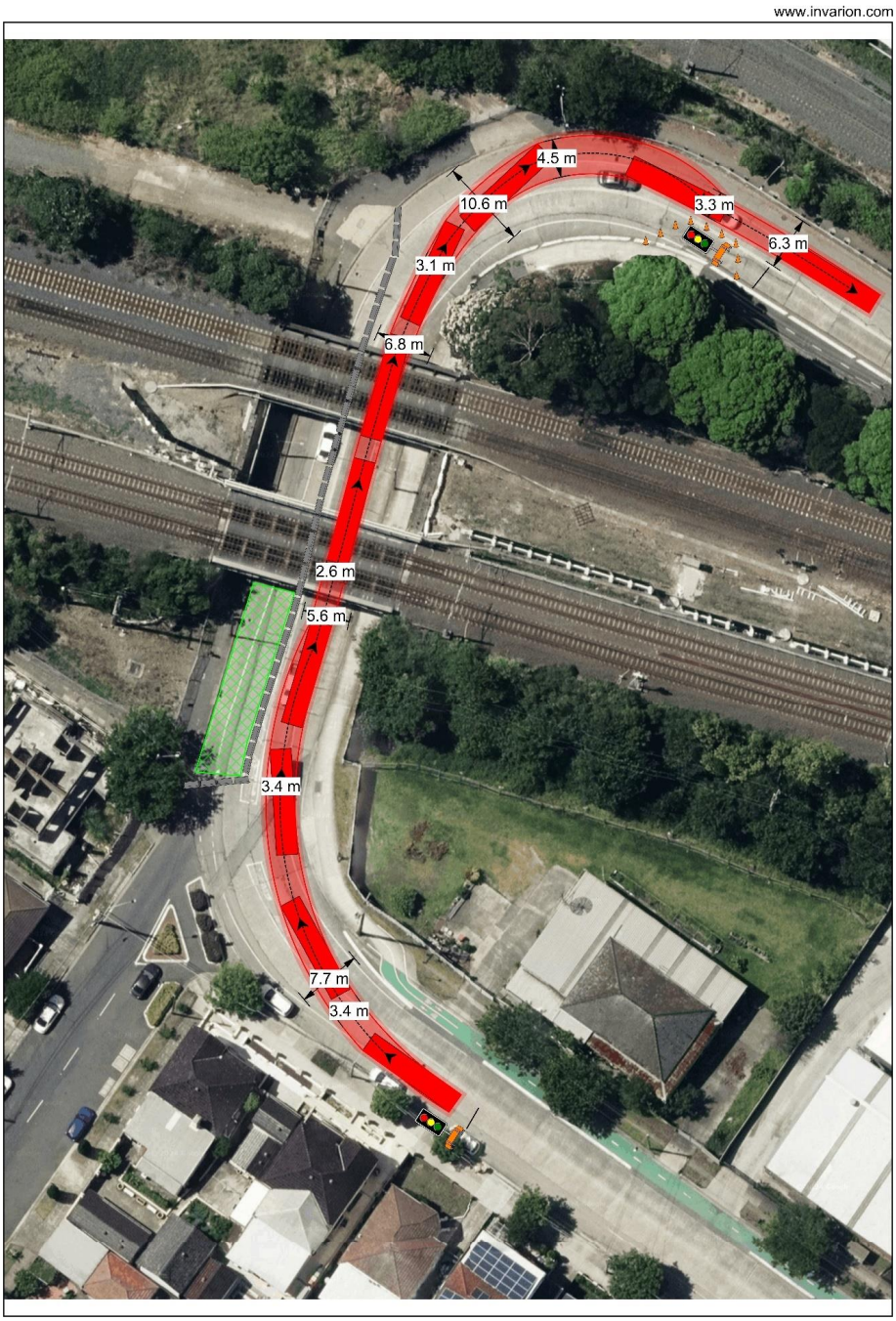
SPA 002 – Scenario 2 – one lane of traffic open



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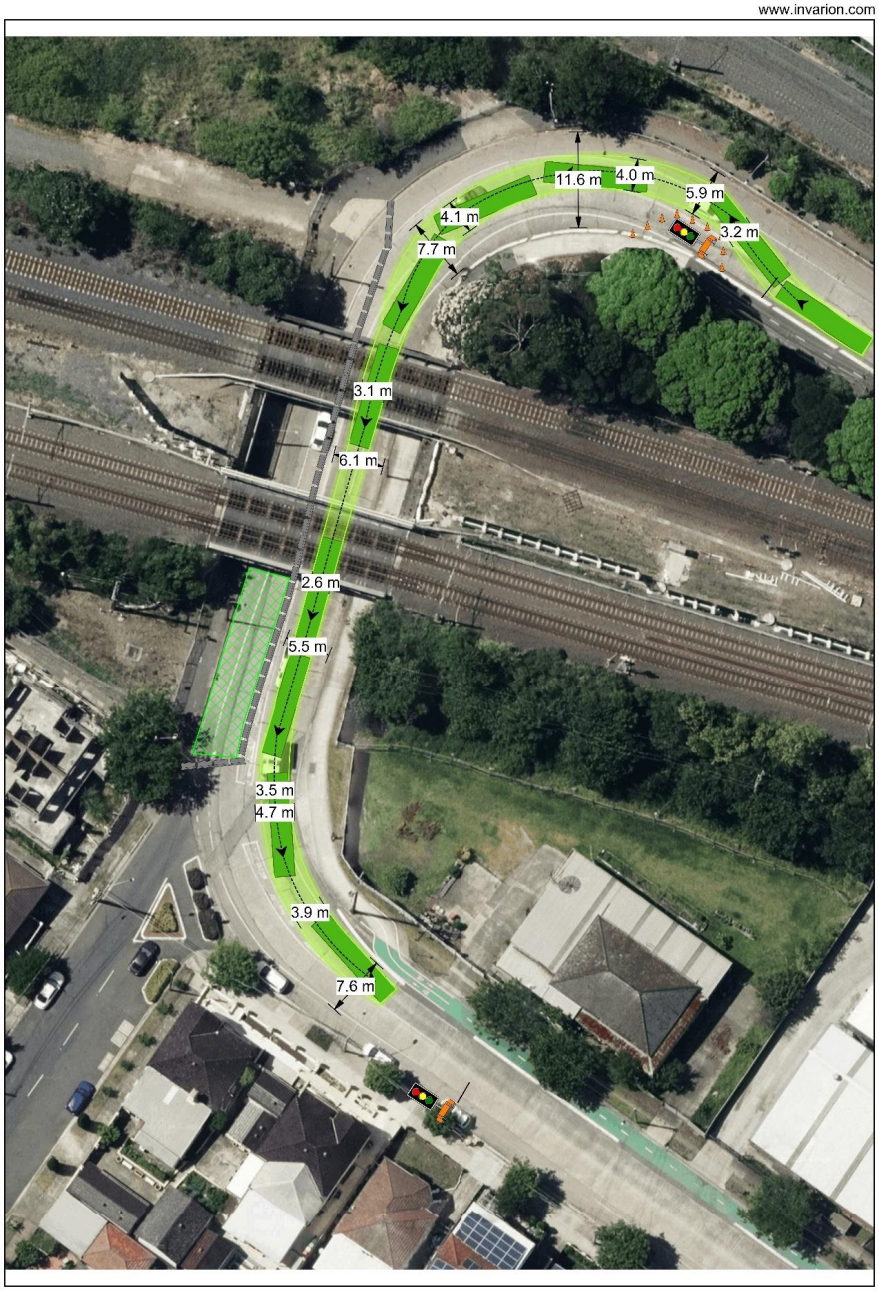

CTMP – Sydenham to Bankstown Corridor
Wastewater Asset Amplification
Marrickville

ROADWORK SOLUTIONS
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10.0 CTMP Approval

D4C representative to sign off.

The Project Manager will verify the long term TMP is completed and suitable for consideration by the approval authorities:

Name and signature:	Date:

Road Authority representative to sign off

The Road Authority Project Manager will email confirmation that this TMP is approved for implementation to the D4C Construction Lead. The signature box below will record a note confirming receipt of that email. A copy of the email will be attached as an Appendix to this document.

Name and signature:	Date:

11.0 Driver Code of Conduct

General Requirements

Construction vehicle drivers travelling to and from the site must:

- Have undertaken a site induction carried out by an approved member staff or suitably qualified person under the direction of management.
- Hold a valid driver's licence for the class of vehicle that they operate.
- Operate the vehicle in a safe manner within and external to the work site.
- Comply with the direction of authorised site personnel when within the site.

Heavy Vehicle Speed

Increased speed means not only an increased risk of crashing but also increased severity if an accident occurs. A study undertaken for the Australian Transport Safety Bureau found that travelling 10 km/h faster than the average traffic speed can more than double the risk of involvement in a casualty accident. (Source Roads and Maritime Services (RMS) previously known as Roads and Traffic Authority (RTA)).

There are two types of speeding:

- Where a heavy vehicle travels faster than the posted speed limit; and
- Where a driver travels within the speed limit but because of road conditions (e.g. fog or rain) this speed is inappropriate. (Source RMS).

Drivers and truck operators are to be aware of the "Three Strikes Scheme" introduced by the Roads and Maritime Services which applies to all vehicles over 4.5 tonnes. When a heavy vehicle is detected travelling at 15 km/h or more over the posted or relevant heavy vehicle speed limit by a mobile Police unit or fixed speed camera, the Roads and Maritime Services will record a strike against that vehicle. If three strikes are recorded within a three-year period, the Roads and Maritime Services will act to suspend the registration of that vehicle (up to three months).

More information is available from the Roads and Maritime Services website.

Vehicle speed on public roads is enforced by the NSW Police Service.

Heavy Vehicles Driver Fatigue

Fatigue is one of the biggest causes of accidents for heavy vehicle drivers. The Heavy Vehicle Driver Fatigue Reform was therefore developed by the National Transport Commission (NTC) and approved by Ministers from all States and Territories in February 2007.

The heavy vehicle driver fatigue law commenced in NSW on 28 September 2008 and applies to trucks and truck combinations over 12 tonne GVM (however there are Ministerial Exemption Notices that

can apply).

Under the law, industry has the choice of operating under three fatigue management schemes:

- Standard Hours of Operation
- Basic Fatigue Management (BFM)
- Advanced Fatigue Management (AFM)

Heavy Vehicle Compression Braking

Compression braking by heavy vehicles is a source of irritation to the community generating many complaints especially at night when residents are especially sensitive to noise.

In some instances, compression braking is required for safety reasons however when passing through or adjacent to residential areas or isolated farmsteads a reduction in the speed of the vehicle is recommended to reduce the instances and severity of compression braking.

Heavy Vehicle Noise

The following activities may be carried out on the site outside these hours of operation.

- delivery or dispatch of materials as requested by Police or other authorities; and
- Emergency work to avoid the loss of lives, property and/or to prevent environmental harm.

At the commencement of the working day, it is not unusual for drivers to arrive early and wait for opening. If this occurs drivers are to wait with engines turned off.

Vehicle Departure and Arrival

Heavy Vehicles travelling in close proximity on single lane public roads can be of concern to light vehicle drivers as well as increasing noise through or adjacent to residential areas. To alleviate public concern and increase road safety, heavy vehicles leaving the site should be separated by a minimum two-minute interval.

It is difficult to schedule arrivals to the site (except at the commencement of work for the day), however, when a driver becomes aware, through visual contact or two-way contact between trucks, that they will arrive at approximately the same time then they are to ensure that there is a suitable gap between vehicles.

12.0 Traffic Control Inspection Checklist

Date…… Time…… Completed by……
Name of Supervisor:…… Project:……
Name of Client…… Foreman ……
Location…… TGS No……

Tick or cross in the appropriate box:

No.	Conditions	Acceptable	Not Acceptable	Not Applicable
1	**Traffic Control Plan**			
1.1	Is an approved TGS on site & has it been modified by an authorized person?			
1.2	Have signs & devices been correctly implemented as per the TGS?			
1.3	Could the worksite be set out differently to minimize the impact on traffic, pedestrians &/or cyclists?			
1.4	Is the clearance between workers & traffic adequate for worksite?			

ANY COMMENTS, IMPROVEMENT?

……
……
……

2	Signs & Devices	Acceptable	Not Acceptable	Not Applicable
2.1	Has a site check been completed?			
2.2	Are signs present & in good condition?			
2.3	Are the signs in a clear position & not affected by other contradictory signs, plant, vegetation, shade, etc?			
2.4	Are the correct sign sizes being used?			
2.5	Have the needs for pedestrians & cyclists been provided for?			
2.6	Is all property access to the site controlled?			
2.7	Is the taper length correct?			
2.8	Is there an adequate buffer zone?			

ANY COMMENTS, IMPROVEMENT?

……
……
……

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3	Traffic Controllers	Acceptable	Not Acceptable	Not Applicable
3.1	Are the correct number of Traffic Controllers being used?			
3.2	Have their Traffic Control Certifications been sighted & are they current? (WHS Card? Blue ticket? Client/Project Induction?)			
3.3	Are all staff using a two-way radio?			
3.4	Are they wearing high visibility clothing?			
3.5	Are the TC's getting adequate breaks?			
3.6	Do the TC's have a clear escape route?			

ANY COMMENTS IMPROVMENTS?

……
……
……

4	Record Keeping	Acceptable	Not Acceptable	Not Applicable
4.1	Has a Job Safety Analysis been completed & signed?			
4.2	Does the Job Safety Analysis cover the risks & hazards associated with the worksite?			
4.3	Has a service delivery docket been completed & recorded?			

ANY COMMENTS, IMPROVEMENT?

……
……
……

ROADWORK SOLUTIONS
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Item 3

Item No: **LTC0225(1) Item 3**

Subject: **ILLAWARRA ROAD, MARRICKVILLE - PROPOSED ROADSIDE BARRIER (MIDJUBURI-MARRICKVILLE WARD/SUMMER HILL ELECTORATE/INNER WEST PAC)**

Prepared By: James Nguyen - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

That the protective measure works proposed by Sydney Metro as part of the Sydney Metro Southwest project at the existing bridge on Illawarra Road between Schwebel and Arthur Streets, Marrickville be approved including associated amendments to the travel lanes.

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

This report presents the protective measure works proposed by Sydney Metro as part of the Sydney Metro Southwest project, at the existing bridge on Illawarra Road between Schwebel and Arthur Streets, Marrickville. It outlines the scope of work and the implications to the existing footpath and road.

BACKGROUND

As part of the Sydney Metro Southwest project, Sydney Metro are proposing to provide protective measures at the existing bridge on Illawarra Road between Schwebel and Arthur Streets to prevent any potential errant vehicle from entering the rail corridor. As the proposed works require adjustments to the existing footpath and roadway, Sydney Metro are seeking approval from the Local Traffic Committee and Inner West Council.

DISCUSSION

Sydney Metro are proposing to install a roadside safety barrier on the western side of Illawarra Road, as shown in Figure 1 below:

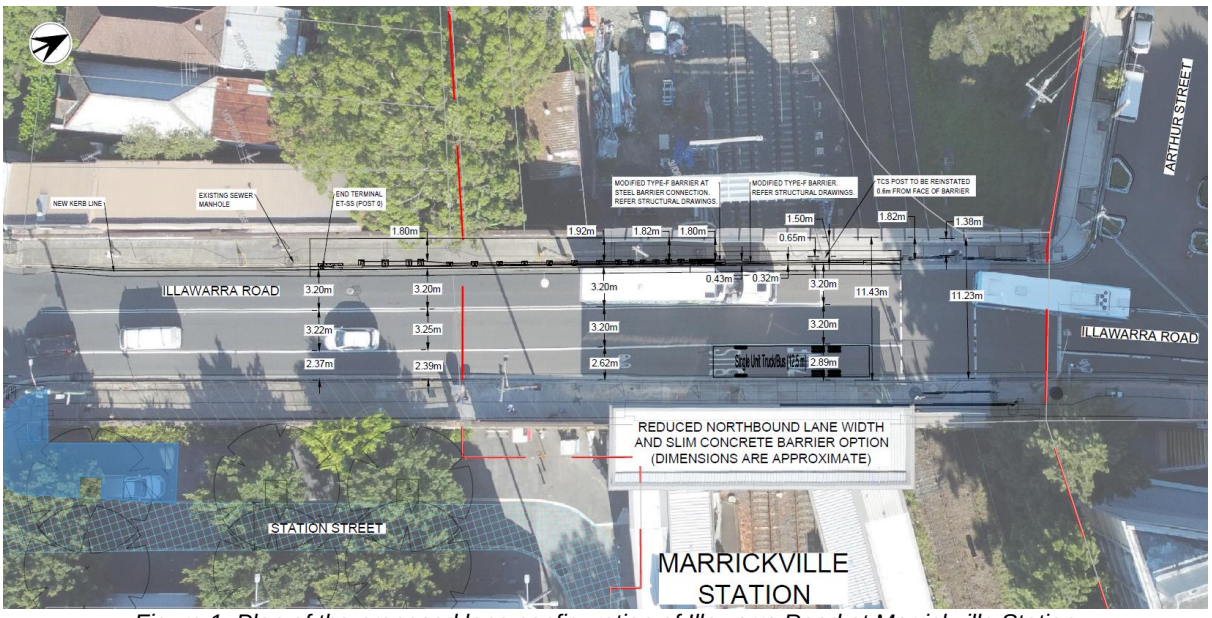


Figure 1: Plan of the proposed lane configuration of Illawarra Road at Marrickville Station

The protective measures at the existing bridge on Illawarra Road consists of the following:

- Kerb replacement works consisting of a new slim TL3 type-f concrete barrier (approx. 15m long) adjoining a standard type-sa kerb and gutter (approx. 53m long), as shown in the section Figure 2 below.

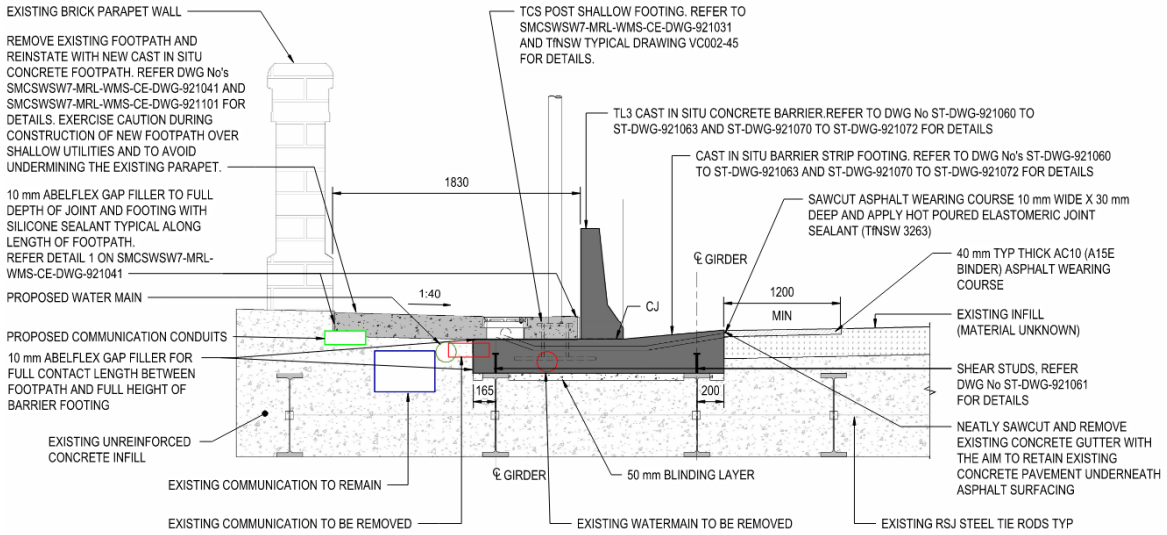


Figure 2: Cross section of the proposed countryside footpath behind type-f barrier

- A TL3 guardrail and ET-SS end terminal (approx. 33m long) as shown in the section Figure 3 below. The TL3 guardrail is connected to the type-f concrete barrier.

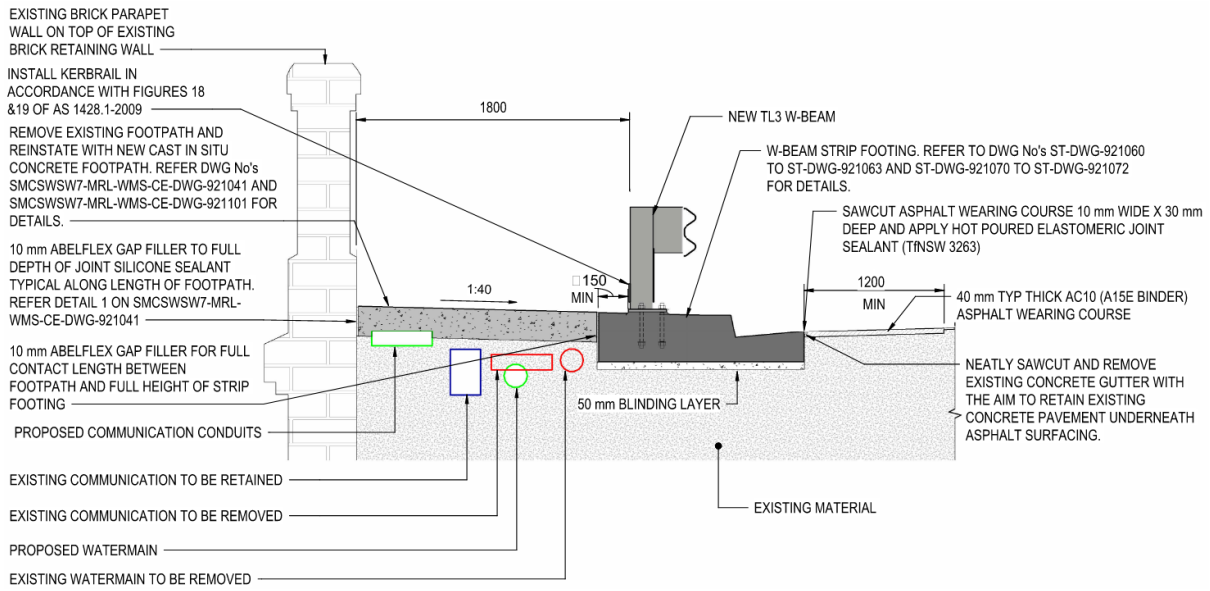


Figure 3: Cross section of the proposed countryside footpath behind TL3 w-beam

The overall proposal is shown in Figure 1 and Figure 4 below. The protective measure treatments will require the reduction to a short section of the northbound travel lane on Illawarra Road. This section is approximately 3.4-3.6 metres wide, and will be reduced to 3.2 metres wide, and aligns with the travel lane width further north; this will allow appropriate travel widths for buses. In addition, the footpath on the western side will be reduced from 2.1 metres to 1.8 metres and is adequate pedestrians.

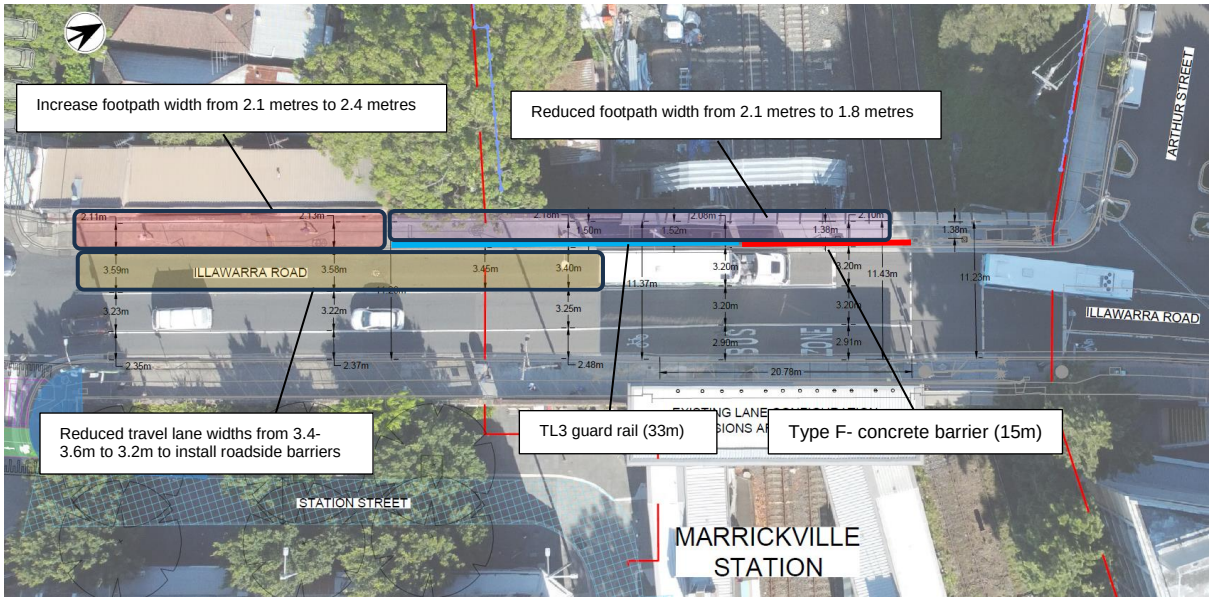


Figure 4: Plan of the existing lane configuration of Illawarra Road at Marrickville Station

The protective measure works will require an adjustment to the existing signalised mid-block pedestrian crossing on Illawarra Road, south of Arthur Street; this is under the jurisdiction of Transport for NSW and subject to Transport for NSW approval. The proposal is shown in Figure 5 below.

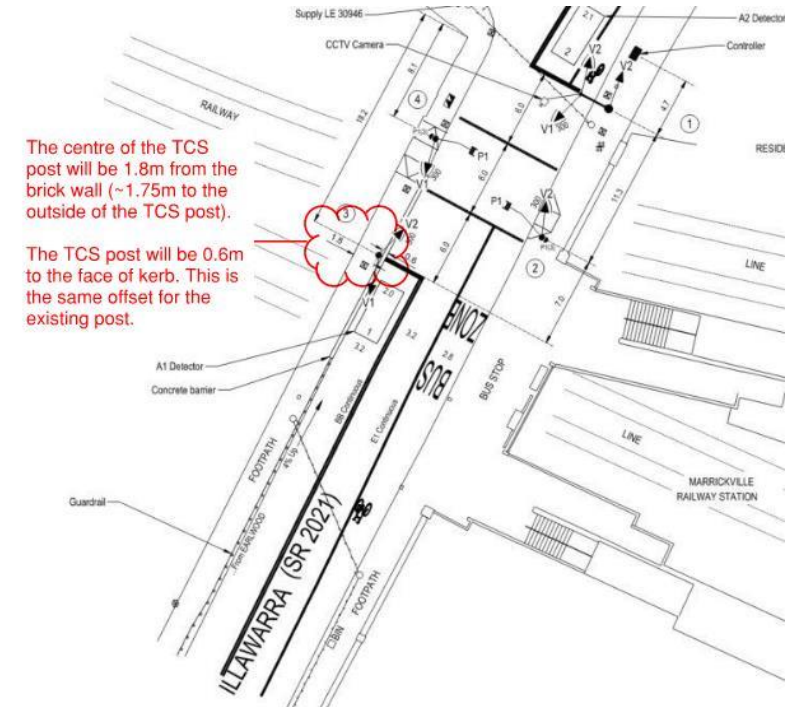


Figure 5: TCS plan - Signal post adjustment at Illawarra Road

FINANCIAL IMPLICATIONS

There are no financial implications associated with the implementation of the proposed recommendations outlined in the report.

ATTACHMENTS

1.⇩ Sydney Metro report
2.⇩ Road Safety Audit
3.⇩ Design plan
4.⇩ Design plan
5.⇩ Design plan

1 Illawarra Road overbridge LTC Report

1.1 Introduction:

This report is to seek Local Traffic Committee (LTC) and Council's approval to adjust the existing countryside (northbound) kerb and footpath on Illawarra Road at Marrickville Station as part of the necessary road safety barrier works of the Errant And Hostile Vehicle Mitigation Treatment for the Southwest Metro project. A cross section of the proposed changes has been provided in **Figure 3**. Proposed works will also involve modification of existing Traffic Control Signal (TCS) design at Marrickville Station.

1.2 Scope of works

To mitigate any potential errant vehicle entering the rail corridor, which are also Critical State Significant Infrastructure (CSSI), it is necessary to implement protection measures. In addition, Sydney Metro Trains are driverless trains, hence not able to see/observe errant vehicles in the rail corridor.

To overcome the above safety concerns, Martinus has developed a countryside barrier design which provides errant vehicle mitigation solutions to protect the rail corridor whilst balancing the minimum requirements of road and footpath users. The kerb line positioning ensures compliance with the carriageway width, minimising impact on the existing bridge while optimising footpath width for improved pedestrian access. Security upgrades near the station on the cityside enhance protection against hostile vehicles.

The civil and structural design works for the Illawarra Road overbridge at Marrickville Station site include:

- Upgrading the existing kerb and footpath to accommodate MASH TL3 compliant traffic barriers (countryside).
- Kerb and footpath reconstruction, and level tie-ins (countryside).
- Relocation of TCS post (countryside).
- Identification of utilities affected by the works for utility asset owners (countryside).
- Installation of HVM PAS 68 rated bollards (cityside).

1.3 Existing features

Illawarra Road is an un-classified regional road with a posted speed of 50km/h and provides general access to vehicles (including buses). The subject section of Illawarra Road overbridge, the section between Warburton Street and Arthur Street, consists of two-lane and two-way traffic. These lanes are situated within an 11.2m wide carriageway.

The countryside consists of a min 3.2m wide lane at the signalised crossing (decreasing from approx. 3.6m at Warburton Street) and a 2.1m wide footpath (with a min 1.5m clear width at localised sections).

The cityside consists of a min 3.2m wide lane at the signalised crossing (which is maintained to Warburton Street), a 2.9m wide bus zone at the station entrance and a 2.4m shoulder / cycle lane between the bus zone and Warburton Street. Refer Figure 1.

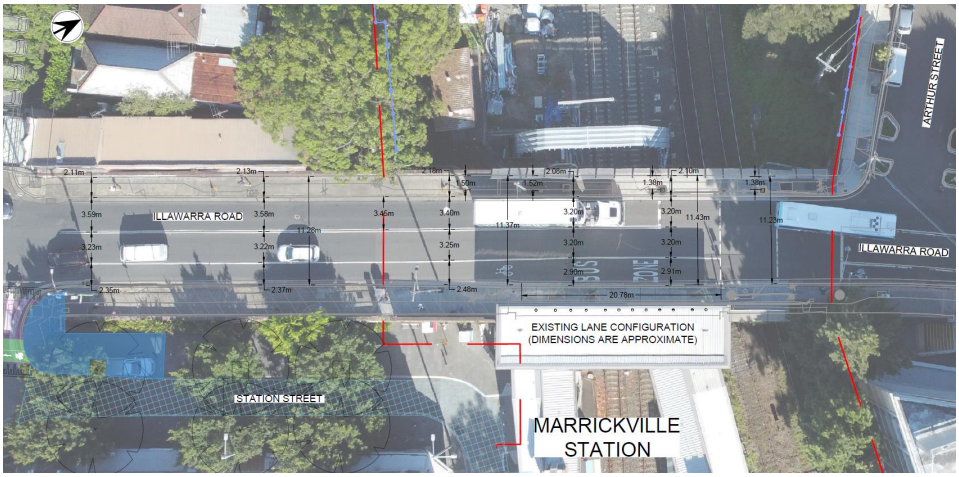


Figure 1: Plan of the existing lane configuration of Illawarra Road at Marrickville Station

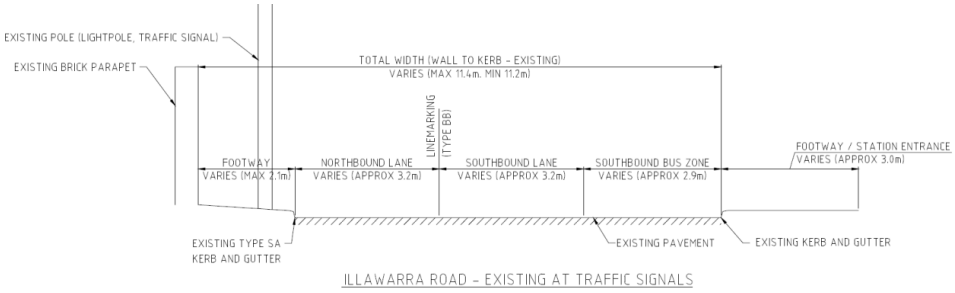


Figure 2: Cross section of the existing lane configuration of Illawarra Road at Marrickville Station

Key width dimensions have been documented in the table below.

Location	Existing (m)	Proposed (m)	Difference (m)
NB lane	3.2 – 3.6	3.2	0.4 reduction
NB shoulder	0.0	0.0	No change
Western footpath	2.1	1.8	0.3 reduction
SB lane	3.2	3.2	No change
SB shoulder / bus zone	2.4 / 2.9	2.4 / 2.9	No change
Eastern footpath	3.0	3.0	No change

1.4 Description of change

As part of the road safety barrier works on the countryside of Illawarra Road, a 68m section of the existing kerb is proposed to be replaced between Warburton Street and the southern edge of the Illawarra Road / Arthur Street pedestrian crossing kerb ramp.

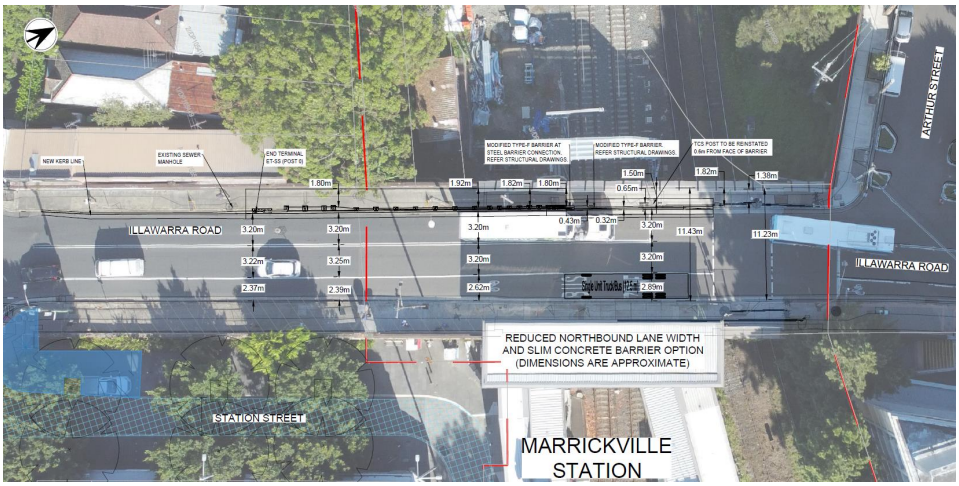


Figure 3: Plan of the proposed lane configuration of Illawarra Road at Marrickville Station

There are no changes to linemarking or southbound lane widths proposed. The northbound lane will be reduced from a variable (3.6m to 3.2m) width to a constant 3.2m wide lane.

The kerb replacement works consist of a new slim TL3 type-f concrete barrier (approx. 15m long) adjoining a standard type-sa kerb and gutter (approx. 53m long). To meet the point of need requirements for errant vehicles entering the rail corridor, the type-f concrete barrier has been connected to a TL3 guardrail and ET-SS end terminal (approx. 33m long).

At the southern end, the realigned type-sa kerb joins back to existing on the northern edge of the existing stormwater pit on Illawarra Road near Warburton Street. At the northern end, the type-f barrier joins back to existing at the signalised crossing.

The existing footpath will be reconstructed between the southern tie in and Arthur Street. Existing non-compliant footpath crossfalls will be removed as part of the reconstruction works to achieve DDA compliant crossfalls in the footpath. This will require lowering of the footpath and impact existing utility cover and pit lids.

A traffic control signal will be relocated as part of these works. This is discussed further in Section 1.6.

The proposed relocation of the kerb line toward the centre of the carriageway on the countryside is designed to ensure that a minimum 1.8m wide clear footpath width (as requested by Council) is achieved between the back of the barrier system to the existing brick parapet, refer Figure 4 and Figure 5. The primary design intent is to maintain both the minimum width and the position of the existing traffic lanes, ensuring minimal disruption to the current lane configuration and clearances.

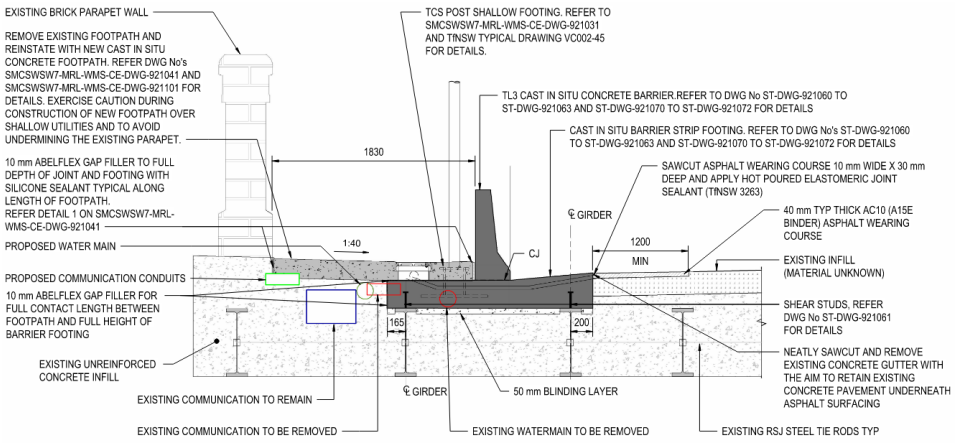


Figure 4: Cross section of the proposed countryside footpath behind type-f barrier

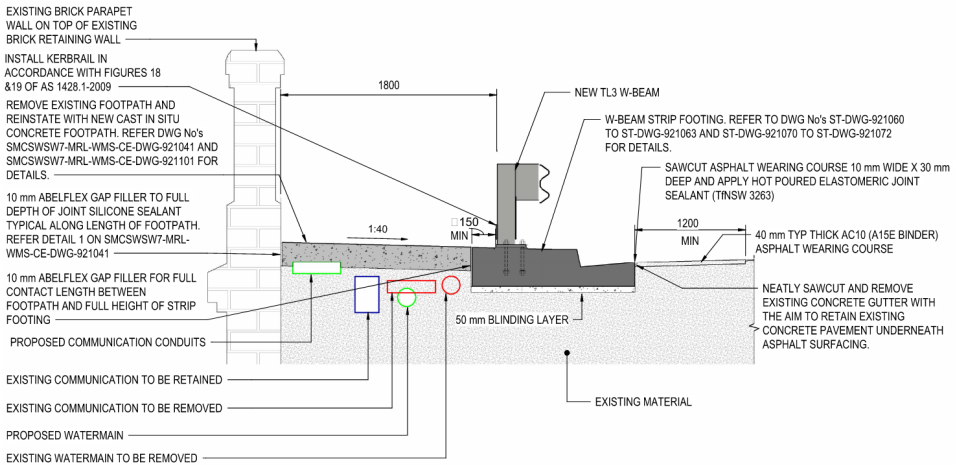


Figure 5: Cross section of the proposed countryside footpath behind TL3 w-beam

1.5 Bridge Load Limit

The existing bridge is rated to accommodate a 44-tonne, 19-meter semi-trailer. Check vehicle movements are illustrated in the images below.

The new kerb and barrier arrangement on the bridge would not affect the check vehicle turning movements. However, the existing movements remain constrained.

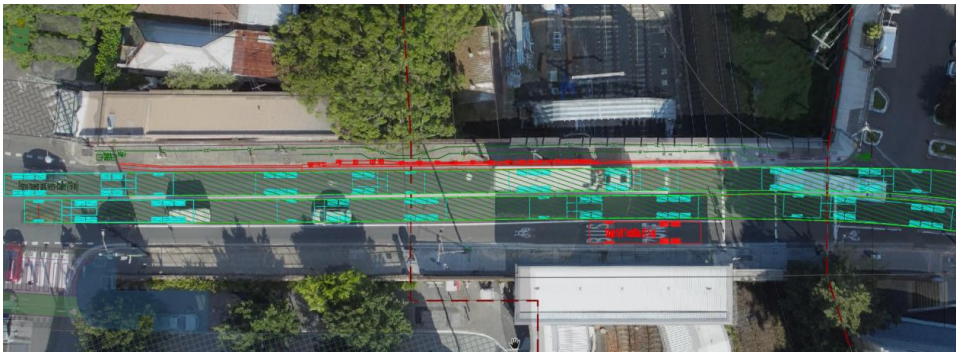


Figure 6: Illawarra Road northbound and southbound heavy vehicle movements

1.6 Traffic Control Signals

A signalised mid-block pedestrian crossing on the Illawarra Road bridge has a primary post that will be impacted by the new TL3 concrete barrier and kerb works on the western side of the bridge as shown in Figure 7. The works to the Traffic Control Signals are being provided to TfNSW for approval.

The primary post is a Type 2 post with a primary vehicle lantern for the northbound movement and secondary vehicle lantern for the southbound movement.

The concrete barrier and kerb works will also impact the in-pavement detector loop, which will need to be recut and reconnected to a new TCS pit on the footpath side of the barrier.

Figure 7 Current TCS Arrangement

A previously submitted TCS Design Layout for the Illawarra Road package incorporated a TCS post on top of the barrier. This arrangement has however changed because it was inconsistent with a TfNSW technical note that did not support a traffic signal post integrated with the barrier.

The new TCS post will be a Type 8 post (post number 3 on TCS Design Layout) behind the barrier as shown in Figure 8 and Figure 9.

The post has been placed as close to the barrier as practicable to prevent pedestrians walking between the post and the barrier, and to provide a space of approximately 1.75m between the outside edge of the post and the brick wall for pedestrian movements. The post has a 0.6m offset to the kerb.

The in-pavement loop cables will pass through the barrier foundation in a 32mm diameter conduit into a new TCS pit (pavement junction box) as shown in Figure 8.

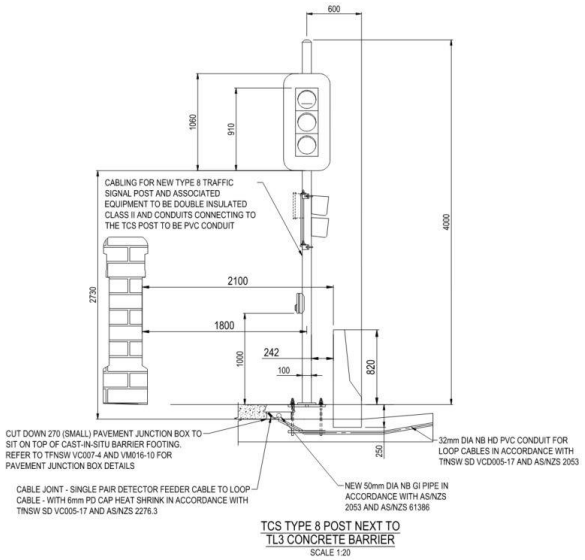


Figure 8 Section - TCS post behind barrier

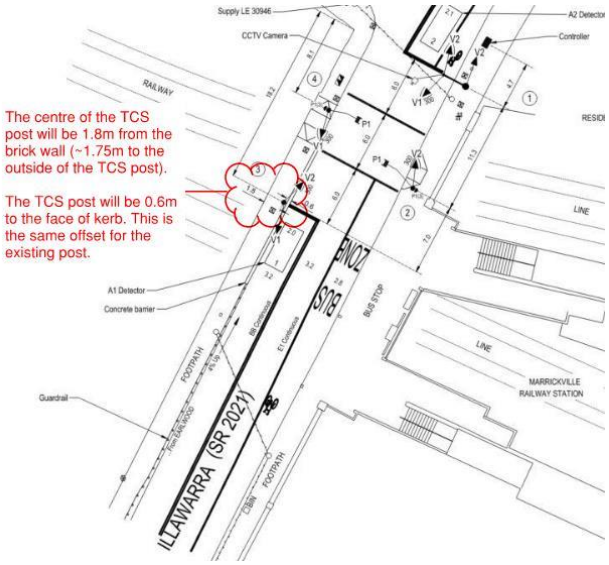


Figure 9 TCS Design Layout - TCS post placement

Although the post offset of 0.6m from the kerb is consistent with the existing condition, the placement will require a departure from TfNSW Traffic Signal Design, Appendix D, Section 1.7.(a), which requires a 1.0m offset.

It should be noted that the proposed post offset of 0.6m will provide the same lantern visibility and clearance to the dynamic envelope for the northbound movement as is currently provided by the existing lantern arrangement as shown in Figure 10. If the lantern requires additional protection, the lantern can be offset from the centre of the post towards the footpath with longer lantern brackets.

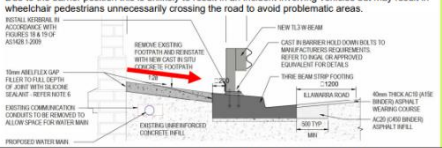
Figure 10 Illawarra Road bridge - south approach

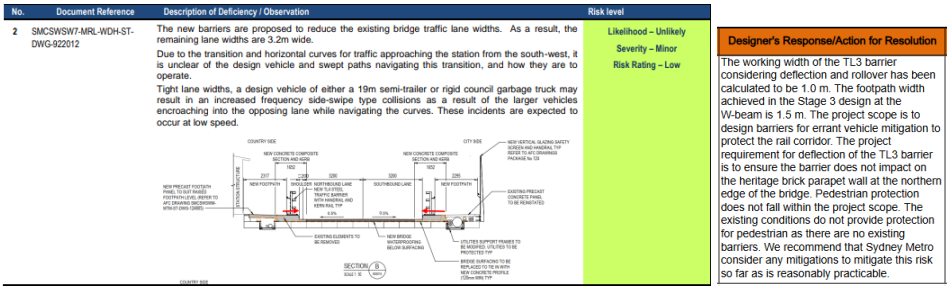
1.7 Road Safety Audit

A pre-construction road safety audit was conducted on 11th September 2024. This report presented the findings of a Pre-construction Road Safety Audit based on the Preliminary Design Drawings. The audit reviewed the design information provided for the section of Illawarra Road near Marrickville Train Station, which was impacted by the planned changes outlined in the design.

The purpose of the audit was to verify the implementation of documentation and planning for works within road-related areas, particularly within the project's specified impact zone. It evaluated the application of the 'safe system' approach to road design, focusing on identifying and mitigating roadside hazards. These hazards included, but were not limited to, signage and pavement markings, pedestrian and cyclist facilities, delineation, sight distances, intersection controls, and safety barriers.

The following items were identified, designer responses have been provided.

No.	Document Reference	Description of Deficiency / Observation	Risk level	Designer's Response/Action for Resolution
1	SMCSWSW7-MRL-WMS-ST-DWG-921011	The preliminary design outlines the proposed removal and replacement of the existing footpath. The new footpath in the typical sections seems to vary in grade, while showing a 1:28 grade. The sections appear to be steeper in some, and if constructed as shown may result in a difficult crossfall for navigating with prams and wheelchairs. Due to the barrier position this is unlikely to result in an incident involving vehicles but may result in wheelchair pedestrians unnecessarily crossing the road to avoid problematic areas. 	Likelihood – Rare Severity – Moderate Risk Rating – Low	The Stage 3 design achieves a crossfall grade of 1:40 (2.5%) for the new footpath.
2	SMCSWSW7-MRL-WMS-ST-DWG-921011	The TL-3 W beam barrier carries a deflection area if impacted. It is understood that the barrier is in a relatively low speed environment, and impacts are unlikely, however may result in deflection of barrier onto the footpath where pedestrians are travelling. In some very unlikely cases may result in the barrier deflecting into the pedestrians, although it is noted that an impact on the barrier before impacting a pedestrian is likely to result in a reduced injury to the pedestrian.	Likelihood – Rare Severity – Moderate Risk Rating – Low	



No.	Document Reference	Description of Deficiency / Observation	Risk level	Designer's Response/Action for Resolution
2	SMCSWSW7-MRL-WDH-ST-DWG-922012	The new barriers are proposed to reduce the existing bridge traffic lane widths. As a result, the remaining lane widths are 3.2m wide. Due to the transition and horizontal curves for traffic approaching the station from the south-west, it is unclear of the design vehicle and swept paths navigating this transition, and how they are to operate. Tight lane widths, a design vehicle of either a 19m semi-trailer or rigid council garbage truck may result in an increased frequency side-swipe type collisions as a result of the larger vehicles encroaching into the opposing lane while navigating the curves. These incidents are expected to occur at low speed.	Likelihood – Unlikely Severity – Minor Risk Rating – Low	The working width of the TL3 barrier considering deflection and rollover has been calculated to be 1.0 m. The footpath width achieved in the Stage 3 design at the W-beam is 1.5 m. The project scope is to design barriers for errant vehicle mitigation to protect the rail corridor. The project requirement for deflection of the TL3 barrier is to ensure the barrier does not impact on the heritage brick parapet wall at the northern edge of the bridge. Pedestrian protection does not fall within the project scope. The existing conditions do not provide protection for pedestrian as there are no existing barriers. We recommend that Sydney Metro consider any mitigations to mitigate this risk so far as is reasonably practicable.

Figure 11: RSA report summary with findings and respond to the issues raised.

1.8 Bus Route via Illawarra Road

Currently bus routes 423 / 423X (City Martin Place to Kingsgrove), N40 (City Town Hall to East Hills Night Service), SW1 (Sydenham to Bankstown) and 645s (St Scholasticas, Glebe to Earlwood) travel through Marrickville via Illawarra Road and go over Illawarra Road bridge.

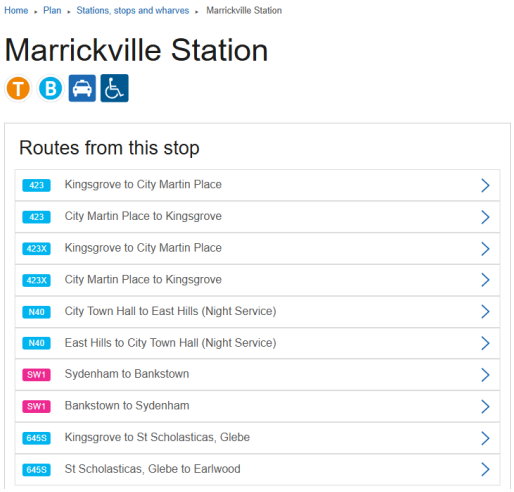


Figure 12: Bus Routes from Marrickville Station via Illawarra Road (source: Marrickville Station | transportnsw.info)

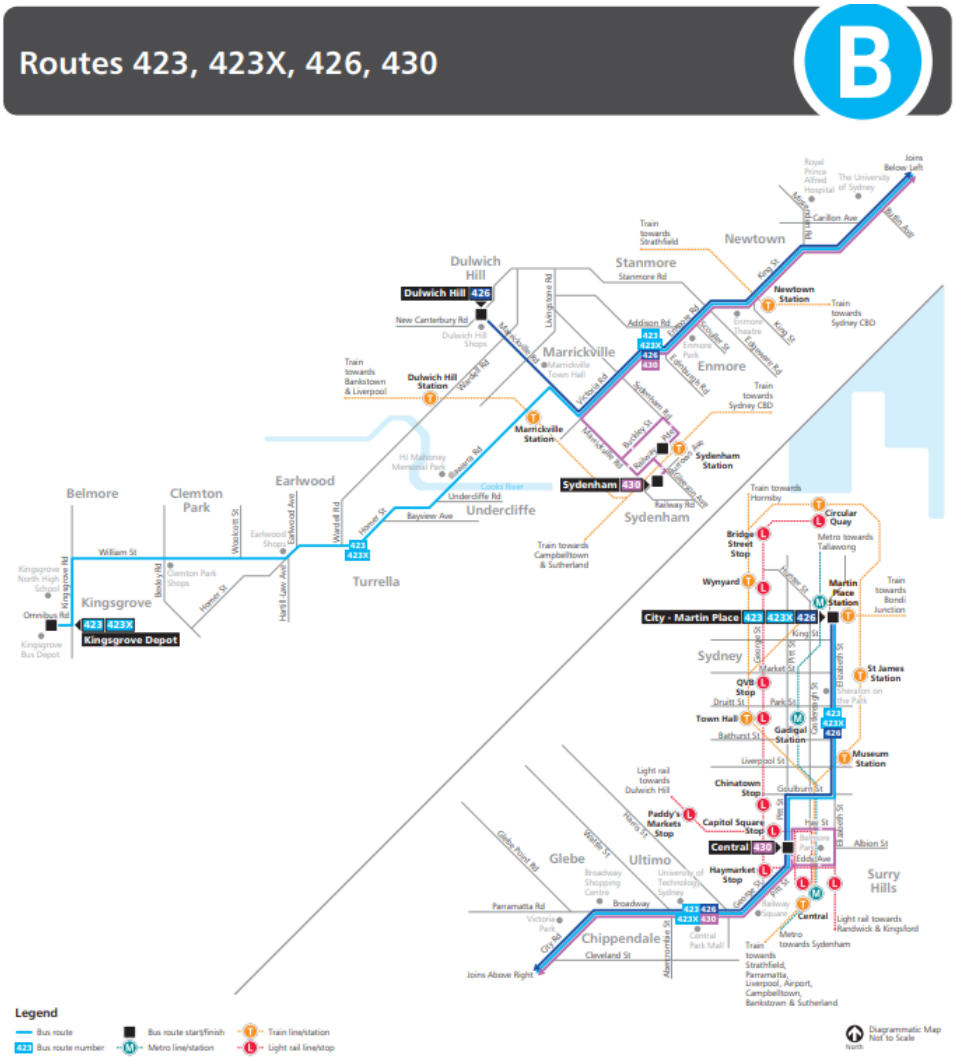


Figure 13: Bus Route No. 423 route plan (source: https://transportnsw.info/documents/timetables/74-423-Kingsgrove-to-City-Martin-Place-20250203.pdf)

However, there are school bus services which travel over Illawarra Road bridge which operate only during school terms.

In addition, there are bus services during track possessions which also use Illawarra Road railway overbridge as their movement route.

The proposed countryside barrier and kerb realignment does not impact regular bus route services as a minimum 3.2m lane width (as required by the Bus Operations team) has been achieved. As there are no proposed changes to the lanes or linemarking on the cityside, the existing southbound bus movements and clearances are maintained.

1.9 Turn paths

Martinus checked the turn paths for all types of vehicles travelling northbound and southbound on Illawarra Road overbridge. The turn paths included but not limited to 5.2m cars/vans (B99 vehicles), 8.8m long service vehicles and 12.5m long vehicles/ buses. From the turn path analysis, it was identified that the existing road configuration is constrained in the vicinity of the traffic signals at the station entrance but allows sufficient space for heavy vehicles to pass in the low-speed environment. By retaining existing lane widths at the traffic signals, existing vehicle movements in this constrained area are maintained.

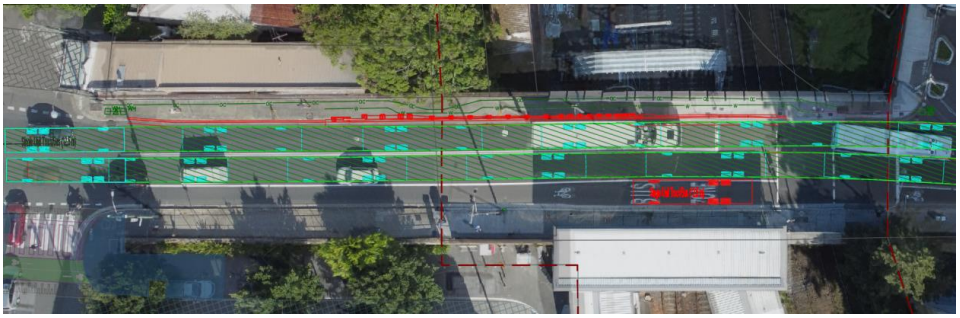


Figure 14: Turn paths on existing road configuration for buses travelling north-south direction on Illawarra Road over the railway bridge.

1.10 Conclusion

The scope to meet Sydney Metro safety requirements dictate rated bridge barriers to prevent errant vehicles from entering the rail corridor. The primary design intent is to maintain minimum width requirements of road users ensuring minimal disruption to the existing traffic lane configuration and clearances whilst maximising the available clear width of travel for pedestrians. The proposed kerb realignment on the countryside of Illawarra Road balances minimum width requirements for differrent user groups and is generally in line with exsiting conditions. Given the minimal changes to the existing lane configurations and necessity for vehicle protection to the rail corridor we believe this proposal should be viewed favourably by the Committee.

1.11 Supporting documents

- PKG921 Illawarra Road Overbridge – construction drawings
- PKG921 Illawarra Road Overbridge – design report
- Turn path sketches
- Road Safety Audit

1.12 Recommendations

The Inner West Council's Local Traffic Committee recommended that;

- TBC

Item 3

DETAILED DESIGN
ROAD SAFETY AUDIT

MARTINUS – ERRANT AND HVM TREATMENTS
ILLAWARRA ROAD OVERBRIDGE (MARRICKVILLE STATION)

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Attachment 2

DETAILED DESIGN - ROAD SAFETY AUDIT

MARTINUS – ERRANT AND HVM TREATMENTS – SYDNEY METRO

ILLAWARRA ROAD OVERBRIDGE (MARRICKVILLE STATION)

CONTENTS

Item 3

DETAILED DESIGN - ROAD SAFETY AUDIT

MARTINUS – ERRANT AND HVM TREATMENTS – SYDNEY METRO

ILLAWARRA ROAD OVERBRIDGE (MARRICKVILLE STATION)

Document Control

Title:	Description
Ref No.:	CCPL-MAR-SMW-RSA-0002
Description:	Errant and HVM Treatments – Sydney Metro City and Southwest

Role	Name	Position
Author:	Alex Gosper	Level 3 – Road Safety Auditor

Document Revisions

No.	Date	Issue / Description
00	16.09.2024	ORIGINAL ISSUE
01	31.01.2025	CRITICAL DESIGN REVIEW - UPDATE

Attachment 2

DETAILED DESIGN - ROAD SAFETY AUDIT

MARTINUS – ERRANT AND HVM TREATMENTS – SYDNEY METRO

ILLAWARRA ROAD OVERBRIDGE (MARRICKVILLE STATION)

Executive Summary

Audited Project:	Errant and HVM Treatments – Sydney Metro City and Southwest
Audit for:	Martinus
Address:	Illawarra Road at Marrickville Station
Email Address:	Christian.Kasadelis@martinus.com.au
Clients Contact:	**Christian Kasadelis**
Auditors:	**Alex Gosper** (Level 3 Road Safety Auditor – ID:0908), Director / Senior Civil Engineer – Civlink Consulting Pty Ltd **Louis Peau** (Level 3 Road Safety Auditor – ID:1271), Director / Senior Civil Engineer – Civlink Consulting Pty Ltd
Audit Type:	Pre-construction Preliminary Design Road Safety Audit
Commencement Meeting:	Monday 9th September 2024
Site Visit:	Wednesday 11th September 2024
Completion Meeting:	To be advised
Previous Audit:	Nil

DETAILED DESIGN - ROAD SAFETY AUDIT

MARTINUS – ERRANT AND HVM TREATMENTS – SYDNEY METRO

ILLAWARRA ROAD OVERBRIDGE (MARRICKVILLE STATION)

1. Introduction

1.1 Purpose of Audit

This report presents findings of a Pre-construction Road Safefty Audit (based on the Preliminary Design Drawings). The audit will review the design information provided for the section of Illawarra Road at the Marrickville train station impacted by the planned changes reflected in the design.

The audit is conducted to verify the manifestation of the documentation and planning for works within road related areas, and within the specified area affected by the project works. The audit scrutinizes the 'safe system' approach to road design, targeting roadside hazards including (but not limited to) signage and pavement marking, pedestrian & cyclists' facilities, delineation, sight distances, intersection controls and safety barriers.

The design being audited covers Illawarra Road at Marrickville Station in Marrickville, as outlined in Figure 1, below;

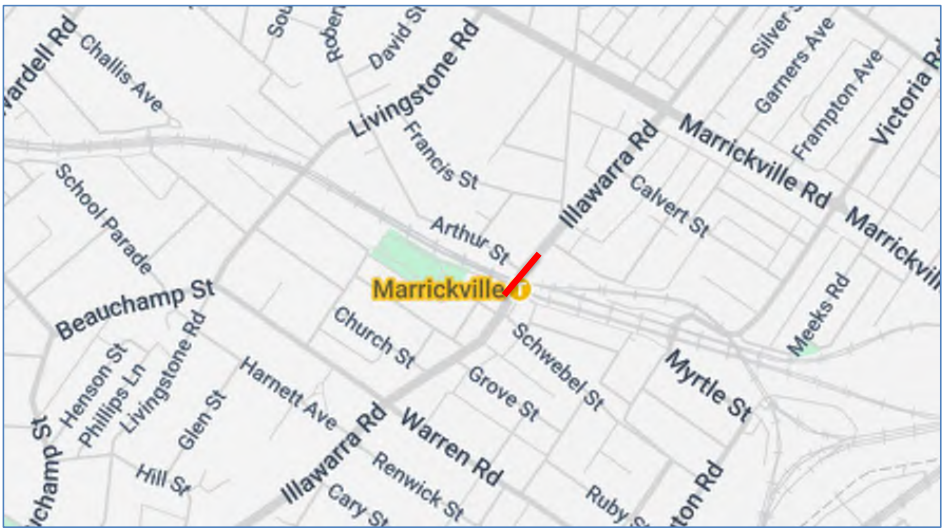


Figure 1: Preliminary Design - Road Safety Audit Scope

[Source: Google]

1.2 Audit Objectives

The objective of this road safety audit was to identify relevant road safety deficiencies in the design and planning documents which, if addressed, would improve safety for road users.

The other objectives of this Preliminary Design Road Safety Audit were to:

- Check the compatibility between the traffic management's safety features and the functional classification of the roads.
- Identify any design feature's that can, either now or with time, create a traffic safety issue.
- Identify additional design's features at the site that pose a safety hazard or risk to any of the road users
- Determine the extent of the deficiencies in the design, considering all road user groups.

1.3 Procedures and reference material

The procedures used are those in the Austroads Guide to Road Safety Part 6: Road Safety Audit (2022) and RTA Guidelines for Road Safety Audit Practices 2011.

1.4 Supporting information

The preliminary design drawings were the primary reference document provided for assessment, and audit. The audit was conducted primarily focusing on the areas where changes are proposed within the road and pedestrian corridor, the ways in which these changes will be implemented and a review of how these new arrangements may interact with the existing road configuration.

A copy of the Preliminary Design package is included in Appendix A.

Table 1 - Supporting Documents

Document reference	Document description	Revision
DESIGN REPORT		
SMCSWSW7-MRL-WMS-CE-REP-927001	DESIGN REPORT	B
GENERAL DRAWINGS		
SMCSWSW7-MRL-WMS-CE-DWG-921001	COVER SHEET	B
SMCSWSW7-MRL-WMS-CE-DWG-921002	DRAWING INDEX	B
SMCSWSW7-MRL-WMS-CE-DWG-921005	LEGEND	B
SMCSWSW7-MRL-WMS-CE-DWG-921011 - 921019	GENERAL NOTES	B
CIVIL DRAWINGS		
SMCSWSW7-MRL-WMS-CE-DWG-921031	TYPICAL DETAILS	B
SMCSWSW7-MRL-WMS-CE-DWG-921041	FOOTPATH PAVEMENT DETAILS	B
SMCSWSW7-MRL-WMS-CE-DWG-921101	GENERAL ARRANGEMENT	B
STRUCTURAL DRAWINGS		
SMCSWSW7-MRL-WMS-ST-DWG-921010 - 921011	GENERAL ARRANGEMENT	B
SMCSWSW7-MRL-WMS-ST-DWG-921025	BOLLARD FOUNDATION DETAILS	B
SMCSWSW7-MRL-WMS-ST-DWG-921060 - 921063	TRAFFIC BARRIER LAYOUT	B
SMCSWSW7-MRL-WMS-ST-DWG-921070 - 921071	TRAFFIC BARRIER REINFORCEMENT	B
SMCSWSW7-MRL-WMS-ST-DWG-921150	BAR SHAPES DIAGRAM	B
UTILITIES DRAWINGS		
SMCSWSW7-MRL-WMS-UT-DWG-921101 - 921102	UTILITIES LAYOUT	B

1.5 Audit Team

This Audit Team consisted of:

a) **Alex Gosper** (Civlink Consulting Director / Traffic Manager / Senior Civil Engineer). Alex is a registered Road Safety Auditor with the Institute of Public Works Engineers Australia, NSW and senior auditor in both VIC & QLD. Alex is a registered Level 3 Road Safety Auditor in NSW.

b) **Louis Peau** (Civlink Consulting Director / Traffic Manager / Senior Civil Engineer). Louis has 11 years construction and traffic experience and is a registered Level 3 (Lead) Road Safety Auditor in NSW and senior auditor in both VIC & QLD.

2. Road Safety Audit Program

2.1 Commencement Meeting

On Monday the 9th of September 2024 a commencement email and phone call was received from Christian Kasadelis requesting a pre-construction audit be conducted on the preliminary design drawings for the barrier upgrade works on King Georges Road at the Wiley Park train station. The audit

was to be conducted by Alex Gosper, Lead Road Safety Auditor (Civlink Consulting) with the assistance of Louis Peau. The audit was to be conducted on the provided design drawing set which outlined the proposed arrangement for the new treatments being designed for the errant vehicle protection works at the station as part of the Sydney Metro West upgrade.

2.1 Updated design

Additional design drawings were issued on the 31st of January 2025. The drawings outlined the change in design of the barrier to northern side of the bridge.

These were reflected in the revised drawing set, and a new table of findings has been introduced for any additional issues in Section 5, below.

2.2 Site inspection

A site inspection was undertaken on Wednesday 11th of September 2024, which reviewed the site during daylight conditions.

Figure 2 Illawarra Road northbound at Marrickville Station

Figure 3 Illawarra Road southbound at Marrickville Station

2.3 Completion meeting

Project representatives are to advise of the need for a Completion meeting.

2.4 Responding to the audit report

The responsibility for the design and implementation of this project rests with the client's project management and/or the design team. The project manager is under no obligation to accept the audit findings. Also, it is not the role of the auditor to agree or to approve the project manager's responses to the audit. Rather, the audit provides the opportunity to highlight potential road safety problems and have them formally considered by the project manager or design manager in conjunction with all other project considerations.

2.5 Corrective action response

The road safety audit is a formal process. The road safety audit report is by no means the end of the audit process. The audit report documents the audit teams' identified concerns made to improve the safety of the roads. This report must be responded to by the client with a written response to each audit finding.

2.6 Disclaimer

The findings and opinions in the report are based on the examination of the design drawings and might not address all concerns existing at the time of the audit. The auditors have endeavoured to identify features of the design that could be modified or removed in order to improve safety, although it must be recognised that safety cannot be guaranteed since no road can be regarded as safe. The problems identified have been noted in this report and should be considered for improving road safety. Where corrective actions are not taken, this should be reported in writing, providing the reason for the decision. Readers are urged to seek specific advice on matters and not to rely solely on this report. While every effort has been made to ensure the accuracy of this report, it is made available strictly on the basis that everyone relying on it does so at their own risk without any liability to the Auditors.

DETAILED DESIGN - ROAD SAFETY AUDIT

MARTINUS – ERRANT AND HVM TREATMENTS – SYDNEY METRO

ILLAWARRA ROAD OVERBRIDGE (MARRICKVILLE STATION)

3. Risk Assessment Approach

This audit identified and rated risks per the Austroads recommendation using the assessment process below. Potential safety hazards were identified and categorised based on the frequency of occurrence and severity (consequence of crash). A preliminary risk rating for each identified issue has been assigned in Section 4 which were determined via a subjective judgement by the Auditor guided by the Austroads "*Guide to Road Safety, Part 6: Road Safety Audit*".

Austroads' provides an indication of the level of risk and what response may be appropriate – refer to the tables below.

3.1 Likelihood

	Description
Almost Certain	Occurrence once per quarter
Likely	Occurrence once per quarter to once per year
Possible	Occurrence once per year to once every three years
Unlikely	Occurrence once every three years to once every seven years
Rare	Occurrence less than once every seven years

3.2 Severity

	Description
Insignificant	Property damage
Minor	Minor first aid
Moderate	Major first aid and/or presents to hospital (not admitted)
Serious	Admitted to hospital
Fatal	At scene or within 30 days of the crash

3.3 Risk Rating

		Severity				
		Insignificant	**Minor**	**Moderate**	**Serious**	**Fatal**
Likelihood	**Almost Certain**	**Medium**	**High**	**High**	**Extreme**	**Extreme**
	Likely	**Medium**	**Medium**	**High**	**Extreme**	**Extreme**
	Possible	**Low**	**Medium**	**High**	**High**	**Extreme**
	Unlikely	**Negligible**	**Low**	**Medium**	**High**	**Extreme**
	Rare	**Negligible**	**Negligible**	**Low**	**Medium**	**High**

3.4 Treatment

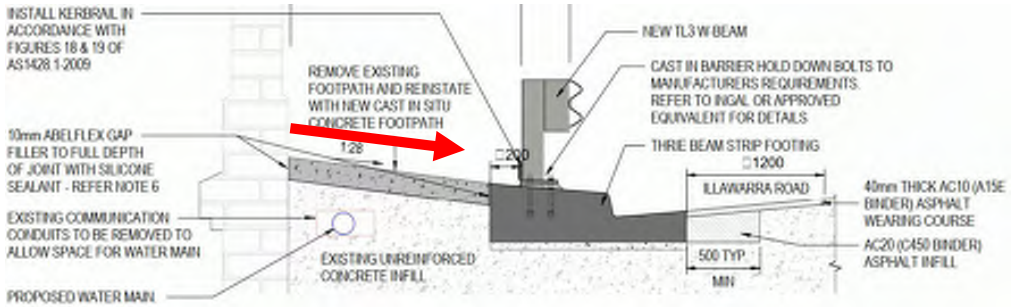
Risk	Suggested treatment approach
Negligible	No action required
Low	Should be corrected or the risk reduced if the treatment cost is low
Medium	Should be corrected or the risk significantly reduced, if the treatment cost is moderate but not high
High	Should be corrected or the risk significantly reduced, even if the treatment cost is high
Extreme	Must be corrected regardless of cost

PRELIMINARY DESIGN - ROAD SAFETY AUDIT

MARTINUS – ERRANT AND HVM TREATMENTS

ILLAWARRA ROAD OVERBRIDGE (MARRICKVILLE STATION)

4. Audit Findings

No.	Document Reference	Description of Deficiency / Observation	Risk level
1	SMCSWSW7-MRL-WMS-ST-DWG-921011	The preliminary design outlines the proposed removal and replacement of the existing footpath. The new footpath in the typical sections seems to vary in grade, while showing a 1:28 grade. The sections appear to be steeper in some, and if constructed as shown may result in a difficult crossfall for navigating with prams and wheelchairs. Due to the barrier position this is unlikely to result in an incident involving vehicles but may result in wheelchair pedestrians unnecessarily crossing the road to avoid problematic areas. 	**Likelihood – Rare** **Severity – Moderate** **Risk Rating – Low**
2	SMCSWSW7-MRL-WMS-ST-DWG-921011	The TL-3 W beam barrier carries a deflection area if impacted. It is understood that the barrier is in a relatively low speed environment, and impacts are unlikely, however may result in deflection of barrier onto the footpath where pedestrians are travelling. In some very unlikely cases may result in the barrier deflecting into the pedestrians, although it is noted that an impact on the barrier before impacting a pedestrian is likely to result in a reduced injury to the pedestrian.	**Likelihood – Rare** **Severity – Moderate** **Risk Rating – Low**

PRELIMINARY DESIGN - ROAD SAFETY AUDIT

MARTINUS – ERRANT AND HVM TREATMENTS

ILLAWARRA ROAD OVERBRIDGE (MARRICKVILLE STATION)

5. Critical Design Review - Audit Findings

No.	Document Reference	Description of Deficiency / Observation	Risk level
		No further issues have been identified as part of the audit	

6. Conclusion

The report outlines where potential deficiencies have been identified for consideration by the project manager and/or designer.

The findings and opinions in the report are based on the examination of the design report and the Preliminary Design drawings for the Marrickville Station barrier upgrade works as part of the Sydney Metro City and Southwest Errant and HVM Treatment works. The Auditors have endeavoured to identify features of the design that could be modified or removed to improve safety, although it must be recognised that safety cannot be guaranteed. While every effort has been made to ensure the accuracy of this report, it is made available strictly on the basis that anyone relying on it does so at their own risk without any liability to the Auditors.

Date: 16.09.2024

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Date: 16.09.2024

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PRELIMINARY DESIGN - ROAD SAFETY AUDIT

MARTINUS – ERRANT AND HVM TREATMENTS

ILLAWARRA ROAD OVERBRIDGE (MARRICKVILLE STATION)

APPENDIX A – DESIGN REPORT

PRELIMINARY DESIGN - ROAD SAFETY AUDIT

MARTINUS – ERRANT AND HVM TREATMENTS

ILLAWARRA ROAD OVERBRIDGE (MARRICKVILLE STATION)

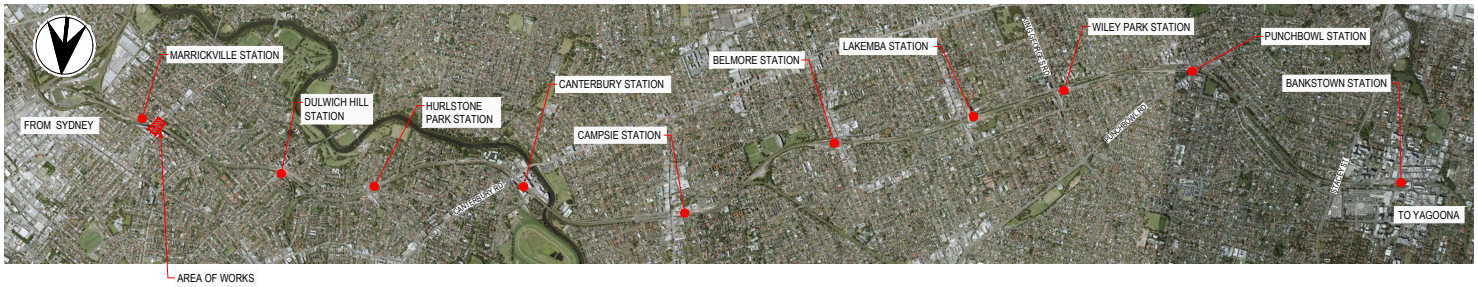
APPENDIX B – UPDATED DESIGN DRAWINGS

NSW GOVERNMENT | sydney METRO

SYDNEY METRO CITY & SOUTHWEST

ERRANT AND HOSTILE VEHICLE MITIGATION TREATMENTS

PKG921 ILLAWARRA ROAD OVERBRIDGE



LOCALITY PLAN
N.T.S.

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AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

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AURECON CML

DRAWN	PHAT NGUYEN	XX.XX.2025
DESIGNED	ELNER SAPO II	XX.XX.2025
DRG CHECK	LUKE EASTMAN	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
COVER SHEET

FILE No. | SHEET: 1 OF 1 | A1
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DF 801554

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Plotted by:Tony Ang

ERRANT AND HOSTILE VEHICLE MITIGATION TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
DRAWING INDEX

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SMCSWSW7-MRL-WMS-CE-DWG-921002	DRAWING INDEX
SMCSWSW7-MRL-WMS-CE-DWG-921005	LEGEND
SMCSWSW7-MRL-WMS-CE-DWG-921011	GENERAL NOTES - SHEET 1 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921012	GENERAL NOTES - SHEET 2 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921013	GENERAL NOTES - SHEET 3 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921014	GENERAL NOTES - SHEET 4 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921015	GENERAL NOTES - SHEET 5 OF 9
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SMCSWSW7-MRL-WMS-CE-DWG-921017	GENERAL NOTES - SHEET 7 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921018	GENERAL NOTES - SHEET 8 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921019	GENERAL NOTES - SHEET 9 OF 9
CIVIL	
SMCSWSW7-MRL-WMS-CE-DWG-921031	TYPICAL DETAILS
SMCSWSW7-MRL-WMS-CE-DWG-921041	FOOTPATH PAVEMENT DETAILS
SMCSWSW7-MRL-WMS-CE-DWG-921091	BARRIER SETOUT TABLES
SMCSWSW7-MRL-WMS-CE-DWG-921101	GENERAL ARRANGEMENT
STRUCTURAL	
SMCSWSW7-MRL-WMS-ST-DWG-921010	GENERAL ARRANGEMENT - SHEET 1
SMCSWSW7-MRL-WMS-ST-DWG-921011	GENERAL ARRANGEMENT - SHEET 2
SMCSWSW7-MRL-WMS-ST-DWG-921012	GENERAL ARRANGEMENT - SHEET 3
~~SMCSWSW7-MRL-WMS-ST-DWG-921025~~	~~BOLLARD FOUNDATION DETAILS~~
SMCSWSW7-MRL-WMS-ST-DWG-921030	DEMOLITION WORK PLAN
SMCSWSW7-MRL-WMS-ST-DWG-921060	STRIP FOOTING AND TRAFFIC BARRIER DETAILS - SHEET 1
SMCSWSW7-MRL-WMS-ST-DWG-921061	STRIP FOOTING AND TRAFFIC BARRIER DETAILS - SHEET 2
SMCSWSW7-MRL-WMS-ST-DWG-921062	STRIP FOOTING AND TRAFFIC BARRIER DETAILS - SHEET 3
~~SMCSWSW7-MRL-WMS-ST-DWG-921063~~	~~TRAFFIC BARRIER DETAILS - SHEET 3~~
SMCSWSW7-MRL-WMS-ST-DWG-921070	STRIP FOOTING AND TRAFFIC BARRIER REINFORCEMENT - SHEET 1
SMCSWSW7-MRL-WMS-ST-DWG-921071	STRIP FOOTING AND TRAFFIC BARRIER REINFORCEMENT - SHEET 2
SMCSWSW7-MRL-WMS-ST-DWG-921072	STRIP FOOTING AND TRAFFIC BARRIER REINFORCEMENT - SHEET 3
SMCSWSW7-MRL-WMS-ST-DWG-921073	STEEL BARRIER DETAILS
SMCSWSW7-MRL-WMS-ST-DWG-921080	BOLLARD FOUNDATION DETAILS
SMCSWSW7-MRL-WMS-ST-DWG-921150	BAR SHAPES DIAGRAM

DRAWING NUMBER	DRAWING TITLE
TRAFFIC CONTROL SIGNALS	
SMCSWSW7-MRL-WMS-TT-DWG-921160	TCS DETAILS
UTILITIES	
SMCSWSW7-MRL-WMS-UT-DWG-921101	UTILITIES LAYOUT - SHEET 1 OF 2
SMCSWSW7-MRL-WMS-UT-DWG-921102	UTILITIES LAYOUT - SHEET 2 OF 2

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APPROVED	SCOTT HENDERSON	XX.XX.2025

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Plotted by: Tony Jing

GENERAL LEGEND

- NON-BRIDGE BARRIER STEEL
- NON-BRIDGE BARRIER CONCRETE
- BOLLARDS
- PROPERTY BOUNDARY
- GAS GAS QENOS GAS PIPELINE

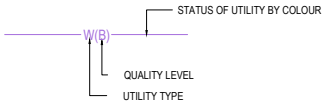
HERITAGE LEGEND

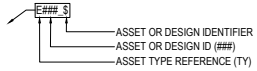
- LEP ITEM
- LEP CONSERVATION AREA
- STATE HERITAGE REGISTER ITEM
- SECTION 170 ITEM
- SECTION 170 ITEM B
- INDICATIVE CONSTRUCTION COMPOUND

ACTIVE TRANSPORT CORRIDOR

- EWPCL INTERFACE

UTILITIES LEGEND





ASSET TYPE REFERENCE
E - ELECTRICAL, G - GAS, C - COMMUNICATION, W - POTABLE WATER, S - WASTE WATER

ASSET OR DESIGN IDENTIFIER
E - EXISTING TO REMAIN, R - EXISTING TO REMOVE OR ABANDON, P - EXISTING TO PROTECT, M - EXISTING TO MODIFY, D - DESIGN/PROPOSED ASSET

- PROPOSED UTILITIES
- PRESERVED
- DECOMMISSIONED

- W(0) PRESERVED WATER MAIN
- W PROPOSED WATER MAIN
- S(0) PRESERVED SEWER MAIN
- S PROPOSED SEWER MAIN
- G(0) PRESERVED GAS MAIN
- G PROPOSED GAS MAIN
- E-HV(0) PRESERVED UG ELECTRICAL HIGH VOLTAGE
- E-HV PROPOSED UG ELECTRICAL HIGH VOLTAGE
- E-LV(0) PRESERVED UG ELECTRICAL LOW VOLTAGE
- E-LV PROPOSED UG ELECTRICAL LOW VOLTAGE
- E HV (0) PRESERVED OH ELECTRICAL HIGH VOLTAGE
- E HV PROPOSED OH ELECTRICAL HIGH VOLTAGE
- E-LV(0) PRESERVED OH ELECTRICAL LOW VOLTAGE
- E-LV PROPOSED OH ELECTRICAL LOW VOLTAGE
- OC(0) PRESERVED COMMUNICATIONS OPTIC FIBRE
- OC PROPOSED COMMUNICATIONS OPTIC FIBRE
- WH WATER HYDRANT
- WATER STOP VALVE
- WATER METER
- SEWER MANHOLE
- POLE - ELECTRICAL - POWER AND LIGHT (PPPL)
- EJB ELECTRICAL CABLE JUNCTION BOX
- EMH ELECTRICAL CABLE MANHOLE
- OFP OPTICAL FIBRE PIT
- COMMUNICATIONS SINGLE CONCRETE PIT
- COMMUNICATIONS TWIN CONCRETE PIT
- COMMUNICATIONS TRIPLE CONCRETE PIT
- TSP MAIN COMMUNICATION PIT
- TDP TELEPHONE DISTRIBUTION PILLAR

DSS LEGEND - EXISTING FEATURES

- DSS - FENCE
- OHW STRUCTURE
- DRAINAGE PIT
- LARGE ROUND PIT (RAD>0.5m)
- EARTH TERMINAL
- RAILWAY SIGNAL
- JUNCTION BOX
- TELEPHONE
- POINTS EQUIPMENT
- MALL PIT (<0.5m)
- RAILWAY TUNING UNIT
- TRAIN STOP
- CCTV CAMERA
- PUBLIC ANNOUNCEMENT
- DRAINAGE INSPECTION PIT (FLUSH POINT)
- ELECTRIC LIGHT POLE
- ANCHOR BLOCK
- BOOT LEG RISER
- GATE
- SURVEY MARK
- IMPEDANCE BOND
- BOLLARD
- POLE (AERIAL FEEDER)
- 0 0 UNDER CONTROL AREA BOUNDARY
- 1 1 SIGNAL CABLE - DIRECT BURIED
- 2 2 SIGNAL CABLE - GALVANISED STEEL TROUGHING
- 3 3 SIGNAL CABLE - GROUND LEVEL TROUGHING
- 4 4 SIGNAL CABLE - DUCTED PIPE
- 5 5 COPPER COMMS CABLE - DIRECT BURIED
- 6 6 COPPER COMMS CABLE - GALVANISED STEEL TROUGHING
- 7 7 COPPER COMMS CABLE - GROUND LEVEL TROUGHING
- 8 8 COPPER COMMS CABLE - DUCTED PIPE
- 9 9 SIGNAL & COPPER COMMS CABLE - DIRECT BURIED
- 10 10 SIGNAL & COPPER COMMS CABLE - GALVANISED STEEL TROUGHING
- 11 11 SIGNAL & COPPER COMMS CABLE - GROUND LEVEL TROUGHING
- 12 12 SIGNAL & COPPER COMMS CABLE -DUCTED PIPE
- 13 13 OPTIC FIBRE - DIRECT BURIED
- 14 14 OPTIC FIBRE - GALVANISED STEEL TROUGHING
- 15 15 OPTIC FIBRE - GROUND LEVEL TROUGHING
- 16 16 OPTIC FIBRE - DUCTED PIPE
- 17 17 LV POWER - DIRECT BURIED
- 18 18 LV POWER - GALVANISED STEEL TROUGHING
- 19 19 LV POWER - GROUND LEVEL TROUGHING
- 20 20 LV POWER - DUCTED PIPE
- 21 21 HV - DIRECT BURIED
- 22 22 HV - GALVANISED STEEL TROUGHING
- 23 23 HV - GROUND LEVEL TROUGHING
- 24 24 HV - DUCTED PIPE
- 26 26 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE - GALVANISED STEEL TROUGHING
- 27 27 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE - GROUND LEVEL TROUGHING
- 28 28 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE - DUCTED PIPE
- 30 30 COPPER COMMS CABLE, OPTIC FIBRE - GALVANISED STEEL TROUGHING
- 32 32 COPPER COMMS CABLE, OPTIC FIBRE - DUCTED PIPE
- 34 34 OPTIC FIBRE, LV POWER - GALVANISED STEEL TROUGHING
- 35 35 OPTIC FIBRE, LV POWER - GROUND LEVEL TROUGHING
- 36 36 OPTIC FIBRE, LV POWER - DUCTED PIPE
- 43 43 SIGNAL CABLE, LV POWER - LEVEL TROUGHING
- 44 44 SIGNAL CABLE, LV POWER - DUCTED PIPE
- 50 50 SIGNAL & COPPER COMMS CABLE, LV POWER - GALVANISED STEEL TROUGHING

DSS LEGEND - EXISTING FEATURES (CONTINUED)

- 51 51 SIGNAL & COPPER COMMS CABLE, LV POWER - GROUND LEVEL TROUGHING
- 52 52 SIGNAL & COPPER COMMS CABLE, LV POWER - DUCTED PIPE
- 53 53 SIGNAL & COPPER COMMS CABLE, HV - DIRECT BURIED
- 54 54 SIGNAL & COPPER COMMS CABLE, HV - GALVANISED STEEL TROUGHING -
- 56 56 SIGNAL & COPPER COMMS CABLE, HV - DUCTED PIPE
- 58 58 SIGNAL CABLE, OPTIC FIBRE - GALVANISED STEEL TROUGHING
- 59 59 SIGNAL CABLE, OPTIC FIBRE - GROUND LEVEL TROUGHING
- 64 64 LV POWER, HV - DUCTED PIPE
- 66 66 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, LV POWER - GALVANISED STEEL TROUGHING
- 67 67 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, LV POWER - GROUND LEVEL TROUGHING
- 68 68 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, LV POWER - DUCTED PIPE
- 70 70 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, HV - GALVANISED STEEL TROUGHING
- 71 71 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, HV - GROUND LEVEL TROUGHING
- 72 72 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, HV - DUCTED PIPE
- 75 75 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, LV POWER, HV - GROUND LEVEL TROUGHING
- 76 76 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, LV POWER, HV - DUCTED PIPE
- 80 80 TRACK DRAINAGE - UNKNOWN
- 83 83 COMPRESSED AIR - DIRECT BURIED
- 84 84 COMPRESSED AIR - ABOVE GROUND
- 85 85 ABANDONED ROUTE - UNKNOWN
- 91 91 HV - DIRECTIONAL UNDER BORE
- 92 92 SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE - DIRECTIONAL UNDER BORE
- 105 105 LV POWER - AERIAL
- 106 106 HV POWER - AERIAL
- 108 108 1500V DC SYSTEM CABLE - GALVANISED STEEL TROUGHING
- 109 109 1500V DC SYSTEM CABLE - GROUND LEVEL TROUGHING
- 110 110 1500V DC SYSTEM CABLE - DUCTED PIPE
- 112 112 ELECTROLYSIS BOND CABLE - UNKNOWN
- 113 113 CLOSED CIRCUIT TELEVISION - DUCTED PIPE
- 116 116 CLOSED CIRCUIT TELEVISION, COPPER COMMS CABLE - DUCTED PIPE
- 119 119 CLOSED CIRCUIT TELEVISION, LV POWER - DUCTED PIPE
- 125 125 STATION DATA - DUCTED PIPE
- 131 131 LIQUID FUEL LINE - UNKNOWN
- 132 132 VACANT - DUCTED PIPE
- 133 133 VACANT - GALVANISED STEEL TROUGHING
- 134 134 VACANT - GROUND LEVEL TROUGHING
- 197 197 SERVICE PIT (POLYGON)
- 198 198 SERVICE PIT (POINT)
- 199 199 UN-CODED SERVICE MIX - UNKNOWN
- 200 200 ELECTRIC POWER LESS THAN 33kV - EXTERNAL AGENCY SERVICE (CONSULT ASSET OWNER)
- 201 201 ELECTRIC POWER EQUAL TO OR GREATER THAN 33kV - EXTERNAL AGENCY SERVICE (CONSULT ASSET OWNER)
- 202 202 LOW PRESSURE GAS MAIN - EXTERNAL AGENCY SERVICE (CONSULT ASSET OWNER)
- 203 203 HIGH PRESSURE GAS MAIN - EXTERNAL AGENCY SERVICE (CONSULT ASSET OWNER)
- 205 205 TELSTRA - GALVANISED STEEL TROUGHING
- 206 206 TELSTRA - GROUND LEVEL TROUGHING
- 207 207 TELSTRA -DUCTED PIPE
- 211 211 OPTUS - DUCTED PIPE
- 212 212 POWERTEL - DIRECT BURIED
- 219 219 VISION STREAM - DUCTED PIPE
- 220 220 WATER - UNKNOWN
- 221 221 SEWER - UNKNOWN
- 222 222 OTHER SERVICE(S) - DIRECT BURIED
- 223 223 UECOMM - DIRECT BURIED
- 233 233 ELECTRIC POWER LESS THAN 33kV - AERIAL
- 234 234 ELECTRIC POWER EQUAL TO OR GREATER THAN 33kV - AERIAL
- 235 235 DRAINAGE SERVICE - DUCTED PIPE
- 236 236 AERIAL - TELSTRA
- 244 244 RTA - DUCTED PIPE

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NSW GOVERNMENT | sydney METRO

aurecon
AURECON CML

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	ELNER SAPOI II	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
LEGEND

FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921005 | 00 | EDMS No.

DF 801554

Plotted by Tony Jing | Plot Date & Time 24/01/2025 12:20:14 PM | File Plotted\SWSW7-MRL-WMS-CE-DWG-921005.dwg

ABBREVIATIONS

GENERAL

&	AND
AB	ABOVE BENCH
AFFL	ABOVE FINISHED FLOOR LEVEL
APPROX.	APPROXIMATE
ARCH	ARCHITECT OR ARCHITECTURAL
ARCH'S	ARCHITECT'S OR ARCHITECTURAL'S
AS	AUSTRALIAN STANDARD
ASOP	AS SHOWN ON PLAN
B	BOTTOM
CI	CAST IRON
CRS	CENTRES
CL	CENTRELINE
CO	CLEAR OUT
COL	COLUMN
CJ	CONSTRUCTION JOINT
CONC	CONCRETE
CONT	CONTINUOUS
COS	CHECK ON SITE
CFW	CONTINUOUS FILLET WELD
C/W	COMPLETE WITH
db	DIAMETER BAR
DIA	DIAMETER
DPM	DAMP PROOF MEMBRANE
DWG	DRAWING
EA	EQUAL ANGLE
EF	EACH FACE
EW	EACH WAY
EWPCL	EAST WEST PEDESTRIAN CYCLE LINK
F/A	FROM ABOVE
F/B	FROM BELOW
FSBW	FULL STRENGTH BUTT WELD
FW	FILLET WELD
FFL	FINISHED FLOOR LEVEL
FL	FLAT
FLG	FLANGE
GL	GROUND LINE
GP	GENERAL PURPOSE
HD	HOLDING DOWN
HDG	HOT DIP GALVANISED
H/L	HIGH LEVEL
HORIZ	HORIZONTAL
ID	INTERNAL DIAMETER
IL	INVERT LEVEL
L/L	LOW LEVEL
LD	LIGHT DUTY
LG	LONG
LONG	LONGITUDINAL
LV	LENGTH VARIES
MAX	MAXIMUM
MFA	MASONRY FLEXIBLE ANCHORS
MIN	MINIMUM
MS	MILD STEEL
MSW	METRO SOUTHWEST
N.T.S.	NOT TO SCALE
No.	NUMBER
NSOE	NOT SHOWN ON ELEVATION
NSOP	NOT SHOWN ON PLAN
O/F	OVER FLOW
OHW	OVERHEAD WIRING
OPP	OPPOSITE
OD	OUTSIDE DIAMETER
O/A	OVERALL
PL	PLATE
PREF	PREFERRED
RL	REDUCED LEVEL
RC	REINFORCED CONCRETE
REINF	REINFORCEMENT
REQD.	REQUIRED
SAA	STANDARDS ASSOCIATION OF AUSTRALIA
SEC.	SECOND
SGR	SITE GEOTECHNICAL REPRESENTATIVE
SL	SURFACE LEVEL
SM	SITE MEASURE
SP	STRUCTURAL PURPOSE
SQ.	SQUARE
SQGE	SUITABILITY QUALIFIED GEOTECHNICAL ENGINEER
STAG	STAGGERED BARS
STD	STANDARD
SSL	STRUCTURAL SLAB LEVEL
T	TOP
T/A	TO ABOVE
T/B	TO BELOW
TBA	TO BE ADVISED
T.B.C.	TO BE CONFIRMED
TfNSW	TRANSPORT FOR NEW SOUTH WALES
TYP	TYPICAL
UB	UNDER BENCH
UNO	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
VERT	VERTICAL

UNITS

m^3	CUBIC METRE
kg	KILOGRAM
km	KILOMETRE
kN	KILONEWTON
kPa	KILOPASCAL
MPa	MEGAPASCAL
m	METRE
mm	MILLIMETRE
N	NEWTON
Pa	PASCAL
km^2	SQUARE KILOMETRE
m^2	SQUARE METRE
mm^2	SQUARE MILLIMETRE

GENERAL NOTES

GN1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTS, OTHER PROJECT PACKAGES AND INTERFACE CONTRACTOR'S DRAWINGS AND REPORTS AND SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
GN2. IF IN DOUBT, VERIFY WITH THE RELEVANT PARTY AS NECESSARY.
GN3. REFER ANY DISCREPANCY, AMBIGUITY, OMISSION OR INCONSISTENCY TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
GN4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFIED OTHERWISE.
GN5. LEVELS ARE IN METRES, REFERENCED TO AUSTRALIAN HEIGHT DATUM (A.H.D.).
GN6. CO-ORDINATES ARE TO MAP GRID OF AUSTRALIA (M.G.A.), COORDINATE SYSTEM (ZONE 56) GDA 94.
GN7. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE RELEVANT PROJECT GENERAL NOTES, REPORTS AND SPECIFICATIONS (WHERE APPLICABLE) AND RELEVANT AUTHORITY STANDARDS, GUIDELINES AND SPECIFICATIONS.
GN8. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE PROJECT GENERAL NOTES, REPORTS AND SPECIFICATIONS (WHERE APPLICABLE), TOGETHER WITH THE REQUIREMENTS OF ALL RELEVANT CODES OF PRACTICE REFERRED TO THEREIN AND THE REQUIREMENTS OF ALL STATUTORY AUTHORITIES WHERE APPLICABLE.
GN9. ALL LOCATIONS, ORIENTATIONS AND LEVELS SHALL BE VERIFIED ON SITE BEFORE COMMENCING ANY WORK. REFER DISCREPANCIES TO THE CONSULTANT. DO NOT OBTAIN DIMENSIONS FROM SCALING.
GN10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A SEDIMENT CONTROL PLAN AND TEMPORARY DRAINAGE DIVERSION DURING CONSTRUCTION.
GN11. ANY PERMITS FOR DIVERSION WORKS REQUIRED DURING CONSTRUCTION SHALL BE OBTAINED BY THE CONTRACTOR.
GN12. EXISTING STORMWATER PIPES OR CULVERTS THAT ARE DEFINED TO BE DECOMMISSIONED ARE TO BE BACKFILLED WITH GROUT AND CAPPED OFF AT ENDS AND MAY REMAIN IN SITU UNLESS DAMAGED. STRUCTURALLY UNSOUND STORMWATER PIPES OR PIPES CONFLICTING WITH DESIGN ELEMENTS SHALL BE REMOVED.
GN13. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE BUT INDICATES THE REQUIRED PROPERTIES OF THE ITEM. SIMILAR ALTERNATIVES HAVING THE REQUIRED PROPERTIES MAY BE OFFERED FOR DESIGNER APPROVAL. INSTALL PROPRIETARY ITEMS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. REFER ANY DISCREPANCIES TO THE DESIGN PROJECT TEAM BEFORE PROCEEDING WITH THE WORK.
GN14. FOR UTILITIES THAT HAVE BEEN RELOCATED OR REQUIRE ADJUSTMENT FOR THE WORKS, REFER TO INDIVIDUAL UTILITY DIVERSION DRAWINGS AND DETAILS FROM THE RELEVANT UTILITY AUTHORITY.
GN15. THE TREATMENT OF ANY REDUNDANT UTILITIES TO BE MANAGED ON SITE WITH AGREEMENT OF THE SUPERINTENDENT.
GN16. THE CONTRACTOR SHALL DETERMINE WHERE TEMPORARY WORKS AND TEMPORARY WORKS DESIGNS ARE REQUIRED.
GN17. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, PROOF ENGINEERING CERTIFICATION, CONSTRUCTION, INSPECTION AND PERFORMANCE OF THE TEMPORARY WORK, EXCEPT TO THE EXTENT THAT TEMPORARY WORK DESIGN IS SHOWN ON THE RELEVANT PACKAGE DRAWING(S). THE TEMPORARY WORK SHALL NOT BE DESIGNED TO RELY ON RESTRAINT OR SUPPORT FROM THE PERMANENT WORK STRUCTURE WITHOUT PRIOR APPROVAL FROM THE DESIGNER.
GN18. THE CONTRACTOR SHALL ENSURE THAT NO PART OF THE PERMANENT WORKS IS OVER STRESSED OR UNSTABLE DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL ENSURE THAT DURING CONSTRUCTION THE PERMANENT WORKS AVOIDS DEFORMATION DUE TO SELF-WEIGHT AND TRANSIENT CONSTRUCTION LOADS.
GN19. ANY DESIGN ACTIONS THAT IMPACT ON THE PERMANENT WORKS SHALL BE SUBMITTED TO THE PERMANENT WORKS DESIGNER PRIOR TO FABRICATION AND CHANGES TO THE PERMANENT WORKS DESIGN MAY BE NECESSARY.
GN20. MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
GN21. ON COMPLETION OF WORKS ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS AND ROAD PAVEMENT UNLESS DIRECTED OTHERWISE.
GN22. THE CONTRACTOR IS TO ENSURE THAT MINIMAL DISTURBANCE IS MADE TO AREAS OUTSIDE THE CONSTRUCTION WORKS.
GN23. DURING EXCAVATION WORKS ALL STRUCTURES SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART OF THE STRUCTURE SHALL BE OVERSTRESSED.
GN24. DURING CONSTRUCTION THE CONTRACTOR MUST MAINTAIN ACCESS TO PROPERTIES AT ALL TIMES.
GN25. THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN NOTED FROM EXISTING RECORDS AND SERVICE PROVIDERS RECORDS. AS VARIATIONS WITH THE EXISTING MAY EXIST, COMPLETE ACCURACY CANNOT BE GUARANTEED. ALL EXISTING SERVICES LOCATIONS SHALL BE VERIFIED ON SITE BY THE CONTRACTOR BEFORE COMMENCING WORKS.
GN26. THE CONTRACTOR IS REQUIRED TO NOTIFY THE DESIGNER IMMEDIATELY UPON DISCOVERY OF ANY VARIANCES TO THE SURVEY DATA.
GN27. HERITAGE ZONES SHOWN INDICATIVELY FOR INFORMATION PURPOSES.
GN28. FOR STRUCTURAL WORKS GENERALLY (UNLESS NOTED OTHERWISE) CONCRETE GRADE F'c (MPa) AT 28 DAYS: 40.
GN29. FOR BLINDING AND MASS FILL CONCRETE, CONCRETE GRADE F'c (MPa) AT 28 DAYS: 20.
GN30. CONTRACTOR TO ALLOW FOR CLEARING AND GRUBBING IN ACCORDANCE WITH THE CONTRACTORS APPROVED EMP.

NON-BRIDGE SAFETY BARRIER NOTES

SB1. SAFETY BARRIERS ARE TO BE PROVIDED IN ACCORDANCE WITH THE MANUFACTURERS PRODUCT MANUAL TO SATISFY THE LOAD LIMITS SPECIFIED IN AS 3845.1 TABLE D.1.
SB2. SAFETY BARRIER TERMINALS MUST BE APPROVED FOR THE SAFETY BARRIER SYSTEM INSTALLED. REFER TO TfNSW ACCEPTANCE DOCUMENTATION FOR TERMINALS THAT ARE APPROVED FOR SPECIFIC BARRIER SYSTEMS.
SB3. FOR INSTALLATION AND SPACING OF BREAKAWAY POSTS, REFER TO APPENDIX L OF AUSTROADS GUIDE TO ROAD DESIGN, PART 6.
SB4. WHERE STANDARD BARRIER POST SPACING CLASH WITH UNDERGROUND UTILITY CROSSING THE CONTRACTOR IS TO CONSIDER NON-STANDARD POST SPACING IN CONSULTATION WITH THE SAFETY BARRIER SUPPLIER.
SB5. FOUNDATION PREPARATION FOR TL5 BARRIERS TO BE IN ACCORDANCE WITH VERGE MATERIAL AS PER TfNSW SPECIFICATION R44.
SB6. BARRIER TO BE FOUNDED ON SUITABLE MATERIAL. UNSUITABLE MATERIAL IS AS DEFINED IN TfNSW SPECIFICATION R44. REMOVE AND REPLACE UNSUITABLE AS PER TfNSW SPECIFICATION R44.
SB7. WHERE STEEL BARRIERS ARE SHORTER THAN 26m IN LENGTH POST SPACING TO BE DECREASED TO 1m OR AS RECOMMENDED BY MANUFACTURER.
SB8. KICKER PLATE TYPICAL DETAILS FOR TL3/TL4 STEEL BARRIERS ADJACENT TO EWPCL TO BE SUPPLIED BY MANUFACTURERS.
SB9. BARRIERS TO BE CONSTRUCTED GENERALLY IN ACCORDANCE WITH AS 3845.1: 2015.

INTERFACING DESIGN PACKAGES

THE FOLLOWING DESIGN PACKAGES ARE RELEVANT TO THIS SUBMISSION:

SMCSWSW7-MRL-WEC-910-DURABILITY REPORT
SMCSWSW7-MRL-WEC-912-DESIGN SAFETY ASSURANCE REPORT
SMCSWSW7-MRL-WEC-940-HVM STRATEGY MEMORANDUM
SMCSWSW7-MRL-WEC-941-76 NON BRIDGE SITES - EAST
SMCSWSW7-MRL-WEC-951-STATION SITES HVM
SWMC DPK 330 SECURITY CORRIDOR FENCING - EASTERN
BAC DPK 904 CORRIDOR OHW WORKS HURLSTONE PARK STATION TO BELMORE STATION (B5+845 AND B6+076 TO B8+714)
DP610 COMBINED SERVICES ROUTE - EASTERN
DP630 COMBINED SERVICES ROUTE - EASTERN T1B SCOPE TRANSFER
SMCSWSWM-SMD-WEC-TI-DWG-001710.-.COO.-.03 EAST WEST PEDESTRIAN AND CYCLE LINK CONCEPT DESIGN

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00	APPROVED FOR CONSTRUCTION	ESI / XX.XX.25	BK / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	ESI / 18.10.24	BK / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	JK / 28.06.24	BK / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE:

NSW GOVERNMENT | sydney METRO

aurecon
AURECON CML

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	ELNER SAPOI II	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

FILE No. | SHEET: 1 OF 9 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921011 | 00 | EDMS No.

DF 801554

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Plot Date & Time 24/01/2025 2:23:34 PM
Plotted by Tony Jing

SPECIFICATIONS AND STANDARDS NOTES

THE SPECIFICATIONS THAT APPLY TO THIS DESIGN PACKAGE ARE THE STANDARD TfNSW D&C SPECIFICATIONS UNO.
REFERENCED SPECIFICATIONS WITHIN THIS PACKAGE ARE SCHEDULED BELOW:

B30	EXCAVATION AND BACKFILL FOR BRIDGEWORKS
B59	BORED CAST-IN PLACE REINFORCED CONCRETE PILES (WITHOUT PERMANENT CASING)
B80	CONCRETE WORK FOR BRIDGES
B110	PRECAST CONCRETE MEMBERS
B201	STEELWORKS FOR BRIDGES
B220	PROTECTIVE TREATMENT OF BRIDGE STEELWORK TO BE USED FOR ALL PAINTING AND GALVANISING ON PROJECT
B240	STEEL FASTENERS
B260	ERECTION OF STRUCTURAL STEELWORK
B312	COLD APPLIED SEALANT JOINTS
ESC200	TRACK SYSTEM
R11	STORMWATER DRAINAGE
R23	PLASTIC FLEXIBLE PIPES
R44	EARTHWORKS
R63	GEOTEXTILES (SEPARATION AND FILTRATION)
R64	SOIL NAILING
R67	HIGH STRENGTH GEOSYNTHETIC REINFORCEMENT
R68	SHOTCRETE WORK WITHOUT STEEL FIBRES
R132	SAFETY BARRIER SYSTEMS
SPC 301	STRUCTURES CONSTRUCTION
TMC302	STRUCTURES REPAIR
TMC305	STRUCTURES ASSESSMENT
T HR CI 12111 SP	EARTHWORKS MATERIALS
T HR CI 12030 ST	OVERBRIDGES AND FOOTBRIDGES
T HR CI 12130 ST	AMB TRACK DRAINAGE
T HR CI 12160 ST	BOUNDARY FENCES
T HR CI 12110 ST	EARTHWORKS AND FORMATION
T HR EL 08001 ST	SAFETY SCREENS AND BARRIERS REQUIREMENTS FOR 1500V OHW EQUIPMENT
T HR SS 90002 ST	BARRIERS, BALUSTRADES, SCREENS AND HANDRAILS
TfNSW BTD 2007/2008	DESIGN OF REPLACEMENT TRAFFIC BARRIERS ON EXISTING BRIDGES
TfNSW GTD 2012/001	TECHNICAL DIRECTION - GEOTECHNOLOGY
TfNSW R0220-35	INSPECTION PIT WITH SINGLE OR DOUBLE CAST IRON FRAME AND COVER

THE STANDARDS THAT APPLY TO THIS DESIGN PACKAGE INCLUDE BUT ARE NOT LIMITED TO THOSE SCHEDULED BELOW:

AS/NZS 1214: 2016	HOT-DIP GALVANISED COATINGS ON THREADED FASTENERS (ISO METRIC COARSE THREAD SERIES) (ISO 10684:2004, MOD)
AS 1289	METHODS OF TESTING SOILS FOR ENGINEERING PURPOSES
AS 13822:2010	BASES FOR DESIGN OF STRUCTURES - ASSESSMENT OF EXISTING STRUCTURES
AS 1428.1:2021 / AS1428.2:1992	DESIGN FOR ACCESS AND MOBILITY
AS 1554	STRUCTURAL STEEL WELDING
AS 1726:2017	GEOTECHNICAL SITE INVESTIGATIONS
AS/NZS 2566.1:1998	BURIED FLEXIBLE PIPELINES STRUCTURE DESIGN
AS/NZS 2566.2:2007	BURIED FLEXIBLE PIPELINES INSTALLATION
AS 2758	AGGREGATES AND ROCK FOR ENGINEERING PURPOSES
AS/NZS 3500.1:2021	PLUMBING AND DRAINAGE - PART 1 WATER SERVICES
AS/NZS 3500.2:2021	PLUMBING AND DRAINAGE - PART 2 SANITARY PLUMBING AND DRAINAGE
AS/NZS 3500.3:2021	PLUMBING AND DRAINAGE PART 3: STORMWATER DRAINAGE
AS 3600:2018	CONCRETE STRUCTURES
AS 3610.1:2018	FORMWORK FOR CONCRETE, PART 1: SPECIFICATIONS
AS 3610.2:2023	FORMWORK FOR CONCRETE, PART 2: DESIGN AND CONSTRUCTION
AS/NZS 3725:2007	DESIGN FOR INSTALLATION OF BURIED CONCRETE PIPES
AS 3798:2007	GUIDELINES FOR EARTHWORKS FOR COMMERCIAL BUILDINGS & DEVELOPMENTS
AS 3996:2019	ACCESS COVERS AND GRATE
AS/NZS 4058:2007	PRECAST CONCRETE PIPES (PRESSURE AND NON-PRESSURE)
AS 4133	METHODS OF TESTING ROCK FOR ENGINEERING PURPOSES
AS 4139:2003	FIBRE-REINFORCED CONCRETE PIPES AND FITTINGS
AS 4678:2002	EARTH RETAINING STRUCTURES
AS/ NZS 4680:2006	HOT- DIP GALVANISED (ZINC) COATINGS ON FABRICATED FERROUS ARTICLES
AS 5100	BRIDGE DESIGN

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AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE
00	APPROVED FOR CONSTRUCTION	ESI / XX.XX.25	BK / XX.XX.25	SH / XX.XX.25
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CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE:

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DRAWN	MIA DOMINGO	XX.XX.2025
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WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

FILE No. | SHEET: 2 OF 9 | A1
STATUS: FOR CONSTRUCTION ©
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-321012 | 00 | EDMS No.

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Plot Date & Time: 14/1/2025 12:31:7 PM
Plotted by: Tony Jing
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STRUCTURAL NOTES

EXISTING BRIDGES - ILLAWARRA ROAD

BRIDGE NO. BR07 DESIGN STANDARD: STATE-SPECIFIC PRACTICES

REGISTRATION No. OF PLANS: No. 70-300

GENERAL NOTES

SN1. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL REDUCED LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
SN2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
SN3. ALL DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED ON SITE BY THE CONTRACTOR PRIOR TO FABRICATION OR CONSTRUCTION.
SN4. ANY DISCREPANCIES OR OMISSION SHALL BE REFERRED TO THE SITE DESIGN ENGINEER FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
SN5. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVER STRESSED.
SN6. ALL CODES REFERRED TO IN THESE NOTES ARE THE LATEST EDITIONS WITH AMENDMENTS, AS AT THE DATE OF DRAWING ISSUE.
SN7. THE FOLLOWING ABBREVIATIONS MAY BE USED ON THESE DRAWINGS:
UNO - UNLESS NOTED OTHERWISE
TYP - TYPICAL
SN8. UTILITIES SHOWN ARE INDICATIVE ONLY. CONTRACTOR IS TO CONFIRM LOCATION OF ALL SERVICES PRIOR TO COMMENCING WORK. CONTRACTOR TO ENSURE ADOPTED METHOD OF CONSTRUCTION WILL AVOID DAMAGE TO ALL UTILITIES.
SN9. TO MANAGE AND MITIGATE RESIDUAL RISKS, WORKS SHALL BE UNDERTAKEN BY TRAINED, CERTIFIED AND SUPERVISED PERSONNEL, WITH APPROPRIATE POSSESSION AND TRAFFIC MANAGEMENT CONTROLS IN PLACE.
SN10. ALL ANCHOR BOLTS MUST BE CLEAR OF EXISTING STEEL REINFORCEMENT, IF CONFLICT WITH EXISTING REINFORCEMENT IS ENCOUNTERED DURING DRILLING OF HOLES, NOTIFY THE DESIGN ENGINEER FOR DIRECTION.

REFERENCE DRAWINGS

RD1. CV0107687 N.S.W.T ELECTRIC TRAMWAY, MARRICKVILLE TO UNDERCLIFFE, OVER BRIDGE AT MARRICKVILLE - GENERAL ELEVATION, PLAN & SECTIONS

RD2. CV0239996 N.S.W.T ELECTRIC TRAMWAY, MARRICKVILLE TO UNDERCLIFFE, OVER BRIDGE AT MARRICKVILLE - DETAILS OF OVERBRIDGE, RETAINING & PARAPET WALLS AND GATEWAYS

RD3. CV0212222 TO CV0212224 & EL0289764 MARRICKVILLE, BANKSTOWN LINE AND METROPOLITAN GOODS LINE, 6.661KM, EB11004 - ILLAWARRA ROAD OVERBRIDGE DECK STRENGTHENING

RD4. SMCSWSWM-MTM-WMS-ST-PKG-002400.C.RVW.C.01 SYDNEY WEST METRO SOUTHWEST STRUCTURAL - BRIDGES PACKAGE No.114 CORRIDOR BRIDGES

TRAFFIC LOADING

TL1. THE LOAD CAPACITY OF THE BRIDGE HAS BEEN ASSESSED BY AURECON GHD JV AS T44 (BRIDGE ASSESSMENT REPORT STAGE 3 2019)

TL2. LOAD RATING (PROVIDED BY METRO) ADOPTED:
T44 TRAFFIC LOADING IN ACCORDANCE WITH AS 5100.7-2017
NUMBER OF DESIGN LANES: 3
DYNAMIC LOADING ALLOWANCE FACTOR: 0.4
OVERALL REPORTED LOAD RATING FACTOR: 0.94 (AS-IS AGJV 2019)

TRAFFIC BARRIER PERFORMANCE LEVEL

TB1. TL3 / INTERMEDIATE PERFORMANCE LEVEL TO AS 5100.2 & BTD 2007/08 REV 2
HORIZONTAL OUTWARD LOAD = 225kN
APPLIED AT MIN EFFECTIVE HEIGHT = 700mm
OVER CONTACT LENGTH = 1100mm

WIND LOADING

WL1. WIND TERRAIN CATEGORY (TC): 3
WL2. WIND REGION: A2
WL3. TOPOGRAPHICAL MULTIPLIER (MT): 1.0
WL4. REGIONAL WIND SPEED ULS: 48m/s
WL5. AVERAGE RECURRENCE INTERVAL ULS R = 2000 YEARS

REFERENCE DESIGN REPORT

RP1. DP921 ILLAWARRA ROAD OVERBRIDGE / MARRICKVILLE STATION DESIGN REPORT SMCSWSW7-MRL-WMS-EN-REP-921001

STRUCTURAL STEELWORK

SS1. STEEL PLATE SHALL BE GRADE 350 TO AS/NZS 3678.
SS2. HOT ROLLED SECTIONS SHALL BE GRADE 350 TO AS/NZS 3679.1. RECTANGULAR HOLLOW SECTIONS SHALL BE GRADE C450L0, CIRCULAR HOLLOW SECTIONS SHALL BE GRADE C350L0 TO AS/NZS 1163.
SS3. HIGH STRENGTH STEEL BOLTS SHALL BE PROPERTY CLASS 8.8 TO AS/NZS 1252-2016.
SS4. HIGH STRENGTH STEEL NUTS SHALL BE PROPERTY CLASS 8.8 TO AS/NZS 1252-2016.
SS5. HIGH STRENGTH STEEL WASHERS SHALL CONFORM TO AS/NZS 1252-2016.
SS6. STEEL WASHERS (NORMAL AND LARGE SERIES) SHALL CONFORM TO AS 1237.
SS7. EDGES OF STEELWORK TO BE GALVANISED SHALL BE ROUNDED TO A RADIUS OF 2mm UNO.
SS8. UNLESS NOTED OTHERWISE, ALL COMPONENTS EXCEPT STAINLESS STEEL ITEMS SHALL BE HOT DIP GALVANISED TO AS 4680 AFTER FABRICATION IN ACCORDANCE WITH TINSW SPECIFICATION B201 AND B220.
SS9. BOLTS, NUTS, WASHERS, FERRULES AND OTHER CAST IN ITEMS SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH AS 1214 AND RMS SPECIFICATION B240.
SS10. WORKSHOP FABRICATION DRAWINGS SHALL BE SUBMITTED TO THE DESIGNER FOR REVIEW AT LEAST 14 DAYS PRIOR TO COMMENCEMENT OF FABRICATION. FABRICATION SHALL NOT COMMENCE WITHOUT THE PRINCIPAL DESIGNER'S APPROVAL OF THE WORKSHOP DRAWINGS.
SS11. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH TINSW SPECIFICATION B201.
SS12. ALL BUTT WELDS, WHERE SHOWN, SHALL BE FULL PENETRATION UNO.
SS13. ALL GUSSET PLATES AND STIFFENERS SHALL BE WELDED ALONG ALL EDGES THAT CONTACT OTHER PLATES AND SECTIONS.
SS14. ANY STIFFENERS OR GUSSETS THAT ARE NOT OF SPECIFIED THICKNESS SHALL BE 10 THICK PLATE. ALL BASEPLATES SHALL BE 20mm THICK UNO.
SS15. UNLESS OTHERWISE NOTED, SURFACE TREATMENT SHALL BE HOT DIP GALVANISED. VENT AND DRAINAGE HOLES SHALL BE PROVIDED IN ACCORDANCE WITH THE GALVANISER'S RECOMMENDATIONS AND TO THE ACCEPTANCE OF THE DESIGNER.
SS16. UNLESS OTHERWISE NOTED, ALL FILLET WELDS SHALL BE 6mm.
SS17. UNLESS OTHERWISE NOTED, BOLTS FOR STEELWORK SHALL BE M20 GALVANISED GRADE 8.8/S TO AS 1252 SNUG TIGHTENED. MIN TWO BOLTS PER CONNECTION.
SS18. GROUT UNDER COLUMN BASE PLATES SHALL BE NON-SHRINK GROUT WITH A CHARACTERISTIC STRENGTH OF 50MPa UNO.
SS19. RADIOGRAPHIC OR ULTRASONIC EXAMINATION OF WELDS SHALL BE TO AS 1554 SERIES, AS 2177.1 AND AS 2207 AS APPROPRIATE.
SS20.

	EXAMINATION METHOD	EXTENT (% OF TOTAL LENGTH OF WELD TYPE)
FILLET WELDS SP	VISUAL INSPECTION	100
BUTT WELDS SP	VISUAL INSPECTION	100
BUTT WELDS SP	ULTRASONIC TESTING	100

SS21. THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH NORMAL THICKNESS PLATES AND CONTINUOUS FILLET WELDED UNLESS NOTED OTHERWISE.
SS22. WHERE MEMBERS SHOWN ON THE STRUCTURAL OR ARCHITECTURAL DRAWINGS ARE REQUIRED TO BE CURVED, BENT OR ROLLED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE METHODS REQUIRED TO ACHIEVE THE REQUIRED SHAPES WITHOUT LOCALISED DISTORTION OF THE MEMBERS.
SS23. THE CONTRACTOR SHALL PROVIDE AND LEAVE IN PLACE, UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED, SUCH TEMPORARY BRACING AS IS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.
SS24. TRIMMING MEMBERS FOR MECHANICAL/HYDRAULIC PENETRATIONS ARE NOT NECESSARILY SHOWN.
SS25. THE CONTRACTOR SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL, TIMBER AND OTHER ELEMENTS TO STEEL WHETHER OR NOT DETAILED ON THE STRUCTURAL DRAWINGS.
SS26. THE FABRICATION AND ERECTION OF THE STRUCTURAL STEELWORK SHALL BE SUPERVISED BY QUALIFIED PERSONNEL EXPERIENCED IN SUCH SUPERVISION TO ENSURE THAT ALL REQUIREMENTS OF OH&S AND THE DESIGN ARE MET. DETAILS OF ERECTION SEQUENCE SHALL BE SUBMITTED TO THE HEAD CONTRACTOR FOR REVIEW PRIOR TO COMMENCEMENT OF ERECTION. THE APPROVED ERECTION SEQUENCE SHALL NOT BE VARIED DURING THE ERECTION PROCESS WITHOUT THE APPROVAL OF THE HEAD CONTRACTOR.
SS27. ALL PROPRIETARY NAMES PRODUCTS SHALL BE ERECTED TO THE MANUFACTURERS SPECIFICATIONS.
SS28. ALL MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTH. SPLICES SHALL ONLY BE PERMITTED IN LOCATIONS SHOWN ON THE STRUCTURAL DRAWINGS.
SS29. ISOLATION OF DISSIMILAR METALS SUCH AS STAINLESS STEEL AND MILD STEEL SHOULD BE PROVIDED.

STEELWORK PROTECTIVE COATING

SP1. ALL EXTERNAL STEELWORK OR SIMILAR APPROVED SYSTEMS AS PER D&C B220 TO BE HOT DIP GALVANISED TO HDG600 IN ACCORDANCE WITH TINSW QA SPECIFICATION B220 & AS 2312.2 & AS 4680 UNO.
SP2. IN ACCORDANCE WITH TINSW QA SPECIFICATION B220, ALL EXPOSED STEELWORK THAT ARE CONSIDERED VISIBLE TO THE PUBLIC AS IDENTIFIED BY THE ARCHITECT SHALL BE PROVIDED WITH AN EXTERNAL PAINT SYSTEM EQUIVALENT TO PUR5, PSL2, OR EHB6 TO AS 2312, OR SIMILAR APPROVED SYSTEMS AS PER D&C B220, WITH A SUITABLE MAINTENANCE REGIME. THIS SYSTEM SHALL BE SUBMITTED FOR REVIEW AND COMMENT BY THE DESIGNER WITH ALL RELEVANT TESTING, CERTIFICATES, WARRANTY, RECOMMENDED MAINTENANCE PERIODS PRIOR TO ANY WORKS PROCEEDING. ALL PAINTING SYSTEMS SHALL BE TOUCHED-UP/MADE GOOD FOLLOWING INSTALLATION TO THE APPROVAL OF THE DESIGNER.
SP3. ALL EDGES TO BE PROTECTIVE TREATED SHALL BE ROUNDED TO A RADIUS OF 2mm UNO.
SP4. DAMAGED PAINTED SURFACES SHALL BE REPAIRED IN ACCORDANCE WITH QA B220.

STEELWORK PROTECTIVE COATING (CONT.)

SP5. PROTECTION OF INTERNAL SURFACES OF HOLLOW MEMBERS SHALL FOLLOW TINSW SPECIFICATION D&C B220
SP6. DAMAGED GALVANISED SURFACES SHALL BE RENOVATED IN ACCORDANCE WITH TINSW QA SPECIFICATION B220.
SP7. DAMAGED PAINTED SURFACES SHALL BE REPAIRED IN ACCORDANCE WITH QA B220.

CONCRETE

C1. REINFORCEMENT SHALL NOT BE IN CONTACT WITH THE HOLD DOWN BOLT ASSEMBLY UNLESS NOTED OTHERWISE. REINFORCEMENT MUST BE INSPECTED BY THE SITE ENGINEER TO CONFIRM SEPARATION BETWEEN REINFORCEMENT AND THE HOLD DOWN BOLT ASSEMBLY PRIOR TO CONCRETING. REFER ALSO TO SPECIFIC DETAILS.
C2. WELDING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS 5100.5 AND TINSW QA SPECIFICATION B80.
C3. VOID FORMERS SHALL BE HELD SECURELY IN PLACE TO AVOID DISPLACEMENT DURING CONCRETING.
C4. GALVANISED REINFORCEMENT WHERE SPECIFIED - LONGITUDINAL BARS AT JOINTS SHALL BE PASSIVATED IN A 0.2% SODIUM DICHROMATE SOLUTION OR EQUIVALENT.
C5. CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES.
C6. DEPTHS OF BEAMS AND BANDS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS. THE METHOD OF ACHIEVING THE CAMBER IS SUBJECT TO APPROVAL BY THE DESIGNER.
C7. FOR CHAMFERS, DRIP GROOVES, REGLETS, ETC. REFER TO ARCHITECTS DETAILS. MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS.
C8. NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE DESIGNER.
C9. WHERE NOT SHOWN ON THE STRUCTURAL DRAWINGS CONSTRUCTION JOINTS SHALL BE LOCATED TO THE APPROVAL OF THE DESIGNER.
C10. CONDUITS, PIPES ETC. SHALL ONLY BE LOCATED IN THE MIDDLE ONE THIRD OF SLAB DEPTH AND SPACED AT NOT LESS THAN 3 DIAMETERS. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE COVER TO THE REINFORCEMENT.
C11. REINFORCEMENT SHALL BE SUPPORTED ON PURPOSE MADE CONCRETE, STEEL OR PLASTIC SUPPORTS DEPENDING ON THE EXPOSURE CONDITION TO PROVIDE THE SPECIFIED CLEAR COVER. AT EXTERNAL SURFACES EITHER ALL PLASTIC OR CONCRETE SUPPORTS SHALL BE USED. SUPPORTS SHALL BE LOCATED AT NOT MORE THAN 60 BAR DIAMETERS EACH WAY FOR BARS AND NOT MORE THAN 750mm EACH WAY FOR MESH.
C12. REINFORCEMENT SYMBOLS - BARS
R - ROUND
D - DEFORMED
I - INDENTED
250, 500, 500 - STRENGTH GRADE IN MPa
L - LOW DUCTILITY
N - NORMAL DUCTILITY
E - EARTHQUAKE DUCTILITY
eg. D500N16 - DEFORMED BAR, GRADE 500MPa, NORMAL DUCTILITY, 16mm DIAMETER

REINFORCEMENT SYMBOLS - WELDED MESH
R, D, I - AS FOR BARS
500 - STRENGTH GRADE
S - SQUARE MESH
R - RECTANGULAR MESH
L, N, E - DUCTILITY AS FOR BARS

C13. BARS DENOTED N SHALL BE TYPE D500N
BARS DENOTED R SHALL BE TYPE R230N
MESH DENOTED SL..... OR RL.....SHALL BE TYPE D500SL OR TYPE D500RL RESPECTIVELY.

C14. REINFORCEMENT NOTATION
N12-300 — SPACING (mm); BAR DIAMETER (mm); TYPE OF BAR
3N28 — BAR DIAMETER (mm); TYPE OF BAR; NUMBER OF BARS

C15. REFERENCE NUMBER FOR MESH IN ACCORDANCE WITH AS 4671. TO BE RE-BENT ON SITE SHALL BE MADE FROM QUENCHED AND SELF PULL OUT BARS OR OTHER BARS WHICH SL..... OR L..... IS THE TEMPERED STEEL. THE BARS SHALL BE POSITIONED WITH THE INITIAL BEND CLEAR OF THE CONCRETE FACE.
C16. SITE BENDING OF REINFORCEMENT BARS SHALL BE DONE WITHOUT HEATING USING A RE-BENDING TOOL. THE BARS SHALL BE RE-BENT AGAINST A FLAT SURFACE OR A PIN WITH A DIAMETER NOT LESS THAN THE MINIMUM PIN SIZE PRESCRIBED IN TINSW QA SPECIFICATION B80.
C17. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.
C18. WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-400 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400mm UNLESS NOTED OTHERWISE.
C19. SLAB REINFORCEMENT SHALL EXTEND AT LEAST 65mm ONTO MASONRY SUPPORT WALLS.
C20. AT JOGGLES IN BARS, THE MAXIMUM OFFSET SHALL BE 1 BAR DIAMETER OVER A LENGTH OF 12 BAR DIAMETER.
C21. REINFORCEMENT COUPLERS, UNLESS SHOWN ON THE DRAWINGS, SHALL NOT BE USED WITHOUT APPROVAL BY THE DESIGNER.
C22. ALL DOWELS PLACED IN DOWEL JOINTS AND IN EXPANSION JOINTS IN CONCRETE SLABS SHALL BE PLACED WITHIN THE FOLLOWING TOLERANCES. VERTICAL ALIGNMENT ± 2 DEGREES FROM LEVEL HORIZONTAL ALIGNMENT ± 2 DEGREES FROM A LINE PERPENDICULAR TO THE FACE OF THE JOINT. POSITION ± 5mm.
C23. GIVE A MINIMUM OF 2 CLEAR BUSINESS DAY NOTICE FOR INSPECTION OF REINFORCEMENT BY THE DESIGNER.

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NSW GOVERNMENT sydney METRO

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DRG CHECK	TONY ING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

FILE No. SHEET: 3 OF 9 A1
STATUS: FOR CONSTRUCTION ©
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921013 00 EDMS No.

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Plotted by: Tony Ing

STRUCTURAL NOTES (CONT.)

CONCRETE CONT'

C24. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE SHALL BE COMPACTED WITH MECHANICAL VIBRATORS. CONCRETE FINISHES FOR FORMED SURFACES MUST BE CLASS 2C (EXPOSED SURFACES) AND CLASS 3 FOR ALL PERMANENTLY HIDDEN SURFACES IN ACCORDANCE WITH AS 3610.1.

C25. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN ON THE STRUCTURAL DRAWINGS OR IN POSITIONS OTHERWISE APPROVED IN WRITING BY THE DESIGNER. THE DEVELOPMENT AND LAP LENGTHS FOR REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE TABLE BELOW UNLESS NOTED ELSEWHERE:

TENSION DEVELOPMENT LENGTH 'L' / SPLICE SCHEDULE (mm)		
BAR SIZE	CONCRETE GRADE 40MPa / 50MPa	
	LESS THAN 300mm CONCRETE BELOW BAR OR VERTICAL BAR *	MORE THAN 300mm CONCRETE BELOW BAR *
N12 DEVEL'T	350	500
SPLICE	350	500
N16 DEVEL'T	500	650
SPLICE	550	750
N20 DEVEL'T	600	800
SPLICE	750	1000
N24 DEVEL'T	800	1050
SPLICE	1000	1300
N28 DEVEL'T	1000	1300
SPLICE	1250	1650
N32 DEVEL'T	1200	1600
SPLICE	1500	1950
N36 DEVEL'T	1450	1900
SPLICE	1800	2350
N40 DEVEL'T	1925	2500
SPLICE	2150	2800

a. CLEAR DISTANCE BETWEEN LAPPED BARS SHALL NOT EXCEED 3 x THE BAR DIAMETER.
b. UNLESS SPECIFIED OTHERWISE LAPS IN ADJACENT BARS SHALL BE OFFSET BY AT LEAST A DEVELOPMENT LENGTH.
c. *VALUES TO BE INCREASED BY 20% FOR 3-BAR BUNDLE AND 33% FOR A 4-BAR BUNDLE.
d. TABULATED VALUES ARE BASED ON 45mm CLEAR COVER TO REINFORCEMENT.

C26. SPLICES IN MESH: THE OUTERMOST TRANSVERSE WIRES SHALL BE OVERLAPPED BY AT LEAST THE SPACING OF THE TRANSVERSE WIRES PLUS 50mm.
C27. CONSTRUCTION TOLERANCE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF TfNSW QA SPECIFICATION B80.
C28. PROVIDE 'NOMINAL' COVER AS DEFINED IN SECTION 4.10.3.1 OF AS 5100.5 UNLESS STATED OTHERWISE.

EARTHING AND BONDING NOTES:

EB1. ELECTRICAL CONTINUITY SHALL BE PROVIDED FOR REINFORCEMENT BY TACK WELDING IN ACCORDANCE WITH AS/NZS 1554.3-2014 AT REGULAR INTERVALS AND/OR USING STRONG MULTIPLE TIES.
EB2. ELECTRICAL CONTINUITY OF REINFORCEMENT SHALL BE TESTED IN ACCORDANCE WITH AS/NZS 2832.5-2015. THE STABLE RESISTANCE OF REINFORCEMENT CAGE SHALL BE MEASURED LESS THAN 0.2 OHM PRIOR TO SECURING CAGES OR CASTING CONCRETE.
EB3. TACK WELDS SHALL BE PERFORMED BY A QUALIFIED WELDER AS DEFINED IN AS 1554.
EB4. EXISTING TRAFFIC SIGNAL POST TO BE RELOCATED AND REPLACED WITH NEW DOUBLE INSULATED LIGHTING AND PVC CONDUIT FOR CABLES.
EB5. ELECTRICAL CONTINUITY TEST BETWEEN OHW ATTACHMENTS AND SPARK GAP SHALL BE UNDERTAKEN WITH A MILLI-OHM HIGH CURRENT INJECTION TESTER BEFORE AND AFTER OHW ATTACHMENTS RELOCATION, THE RESULT SHALL BE NO MORE THAN 20mΩ.

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SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

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EARTHWORKS NOTES

ENVIRONMENTAL

EN1. CEMP: CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN.
EN2. ENVIRONMENTAL TESTING IN ACCORDANCE WITH THE CEMP MUST BE UNDERTAKEN.
EN3. CONSTRUCTION PROCEDURES MUST BE IN ACCORDANCE WITH CEMP.
EN4. TOPSOIL TO BE GENERALLY STOCKPILED FOR RE-USE.
EN5. EXCESS SPOIL TO BE BENEFICIALLY RE-USED ON SITE, WHERE POSSIBLE.
EN6. FILL EARTHWORKS MUST PRIORITISE THE USE OF SITE WON MATERIAL BEFORE ADDITIONAL MATERIAL IS INTRODUCED.
EN7. CONSTRUCTION SHOULD BE UNDERTAKEN IN ACCORDANCE WITH THE RELEVANT CONDITIONS OF APPROVAL (SSI 8256) AND REVISED ENVIRONMENTAL MITIGATION MEASURES (SYDENHAM TO BANKSTOWN SUBMISSIONS AND PREFERRED INFRASTRUCTURE REPORT), AND THE SYDNEY METRO CITY & SOUTHWEST SYDENHAM TO BANKSTOWN SUBMISSIONS REPORT (THE SR), AND THE REVISED DESIGN OF BANKSTOWN STATION STATE SIGNIFICANT INFRASTRUCTURE MODIFICATION ASSESSMENT (SSI 8256 MOD 1), AND THE SYDNEY METRO CITY & SOUTHWEST SYDENHAM TO BANKSTOWN RESPONSE TO SUBMISSIONS, AND APPENDIX L OF THE RELEVANT DESIGN REPORT.
EN8. CONSTRUCTION ACTIVITIES SHOULD COMPLY WITH THE REQUIREMENTS OF THE ARTEFACT HERITAGE (2018) SYDNEY METRO CITY AND SOUTHWEST SYDENHAM TO BANKSTOWN UPGRADE - ARCHAEOLOGICAL ASSESSMENT AND RESEARCH DESIGN REPORT.

GEOTECHNICAL

GE1. IF LOCALISED POCKETS OF UNSUITABLE MATERIAL AS DEFINED IN TfNSW D&C R44 (INCLUDING SOFT AND VERY SOFT MATERIAL) REMOVAL AND REPLACEMENT SHALL BE CARRIED OUT AND DIRECTED BY THE SQGE BASED ON INSPECTION OF EXPOSED FOUNDATIONS. PROOF ROLLING SHALL BE UNDERTAKEN FOR SIGN OFF OF HOLD POINT FOR UNSUITABLE MATERIAL.
GE2. IN AREAS WHERE SPECIAL TREATMENTS WILL BE REQUIRED, PARTICULAR INVESTIGATION AND ASSESSMENT OF THE DEPTH AND EXTENT OF THE FOUNDATION TREATMENT SHALL BE VERIFIED BY THE SQGE.
GE3. GROUND TREATMENT MAY BE REQUIRED TO SUIT ACTUAL GROUND CONDITIONS ENCOUNTERED ON SITE AS DIRECTED BY SUITABLY QUALIFIED GEOTECHNICAL ENGINEER (SQGE).
GE4. ALL FOUNDATION TREATMENTS AND ASSOCIATED EARTHWORKS MATERIALS SHALL BE VERIFIED BY SQGE (HOLD POINT).
GE5. SEPARATION GEOTEXTILE MAY BE REQUIRED ABOVE AND BELOW THE STRUCTURAL ZONE SUBJECT TO GRADING ASSESSMENT OF STRUCTURAL ZONE, CAPPING AND SUB GRADE. TO BE CONFIRMED ON SITE BY SQGE.
GE6. FOUNDING MATERIAL FOR ALL STRUCTURES IS ASSUMED TO BE STIFF CLAY OR BETTER UNO WITH A MINIMUM UNRESTRAINED COHESION OF 50kPa, OR A MINIMUM EFFECTIVE COHESION OF 5kPa AND EFFECTIVE FRICTION ANGLE OF 26°. THESE ARE MINIMUM REQUIREMENTS. VARIATIONS IN GROUND CONDITIONS AND BEDROCK MAY BE ENCOUNTERED WITHIN THE DEPTH OF THE EXCAVATION UNO.
GE7. PRIOR TO CONSTRUCTION, THE FOUNDING CONDITIONS SHALL BE VERIFIED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO ENSURE THAT THE FOUNDING MATERIAL STRENGTHS MEET OR EXCEED THE ASSUMED DESIGN STRENGTH. THE SUITABLY QUALIFIED GEOTECHNICAL ENGINEER SHALL ENSURE THAT ANY NECESSARY FOUNDATION TREATMENTS ARE COMPLETED PRIOR TO CONSTRUCTION. FOUNDING MATERIALS NOT MEETING THE REQUIRED STRENGTH SHALL BE REMOVED AND REPLACED WITH A GENERAL FILL IN ACCORDANCE WITH THE EARTHWORKS GENERAL NOTES TO THE SATISFACTION OF THE SUITABLY QUALIFIED GEOTECHNICAL ENGINEER.

COMPACTION

CO1. TRACK AND ROAD EMBANKMENTS

ZONE	COMPACTION TYPE	DESCRIPTION
STRUCTURAL FILL	COMPACTION (A)	COHESIVE SOILS - NOT LESS THAN 100% RELATIVE COMPACTION AS DETERMINED BY TfNSW T111. ROCK FILL OR COHESIONLESS SOILS - NO VISIBLE DEFLECTION OF SURFACE UNDER 10 TONNE VIBRATORY ROLLERS AFTER 6-8 PASSES
GENERAL FILL	COMPACTION (B)	NOT LESS THAN 98% RELATIVE COMPACTION AS DETERMINED BY TfNSW T111 (STANDARD COMPACTION)
RAIL CAPPING LAYER	COMPACTION (C)	NOT LESS THAN 95% RELATIVE COMPACTION AS DETERMINED BY TfNSW T112 (MODIFIED COMPACTION)
FOUNDATION FOR EMBANKMENT	COMPACTION (D)	NOT LESS THAN 95% RELATIVE COMPACTION AS DETERMINED BY TfNSW T111 (STANDARD COMPACTION)

CO2. GENERAL
a. PLACEMENT OF MATERIAL LAYERS SHOULD NOT EXCEED 200mm THICKNESS. GRANULAR MATERIAL SHOULD BE PLACED IN LAYERS NOT EXCEEDING 300mm. THESE LAYER THICKNESS ARE PROVIDED AS GUIDANCE AND CAN BE USED DURING CONSTRUCTION PROVIDING THE REQUIRED COMPACTION IS ACHIEVED.
b. EARTHWORKS NEAR STRUCTURES SHALL COMPLY WITH T HR CI 12110 ST - SECTION 13.

CUTTING AND EMBANKMENTS

CE1. LANDSCAPE BATTER SLOPES MUST NOT BE STEEPER THAN 1V:3H.
CE2. BENCHES MUST BE PROVIDED ON ALL BATTER SLOPES GREATER THAN 10m HIGH. BENCH WIDTHS MUST NOT BE LESS THAN 4m WIDE.
CE3. ALLOWANCE FOR A MAXIMUM FUTURE EXCAVATION OF 1m AT THE TOE OF EMBANKMENTS AND CUTTINGS MUST BE INCLUDED FOR ALL PERMANENT FORMATION EARTHWORKS.
CE4. STABILITY AND EROSION PREVENTION OF SLOPES TO BE ASSESSED AND CONFIRMED BY SQGE.

VERIFICATION & TESTING REQUIREMENTS

APPROPRIATE SUPERVISION AND VERIFICATION / TESTING TO BE CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING STANDARD DURING THE CONSTRUCTION WORKS:

VTR1. TfNSW D&C R44 - EARTHWORKS
VTR2. T HR CI 12110 ST - EARTHWORKS AND FORMATION
VTR3. T HR CI 12111 SP - EARTHWORKS MATERIALS

THE TABLES BELOW DETAIL THE MATERIAL PROPERTIES TO BE ACHIEVED FROM TESTING AND VERIFICATION.

VTR4. STRUCTURAL ZONE FILL MATERIAL: (CRUSHED ROCK)

DESCRIPTION	CRITERIA
PARTICLE SIZE DISTRIBUTION	% PASSING 53.0mm SIEVE 80-100
	% PASSING 2.36mm SIEVE 15-100
	% PASSING 425um SIEVE 5-70
	% PASSING 75um SIEVE 0-30
ATTERBERG LIMITS	LIQUID LIMIT MAX. 40%
	PLASTICITY INDEX MAX. 20%
MAXIMUM DRY DENSITY	MINIMUM 18kN/m³
SOAKED CBR	MINIMUM 8%

VERIFICATION & TESTING REQUIREMENTS (CONT.)

VTR5. GENERAL FILL / SUBGRADE

DESCRIPTION	CRITERIA
SOAKED CBR (4 DAY)	≥3.0%
PLASTICITY INDEX	9 - 45%
FREE SWELL VALUE	MAX. 3%
PARTICLE SIZE DISTRIBUTION	% PASSING 200mm SIEVE 100
	% PASSING 37.5mm SIEVE 60
MAXIMUM NOMINAL SIZE	100mm

BACKFILL AND BULK FILL

BB1. BACKFILL TO EXCAVATION MUST BE FREE OF DELETERIOUS MATERIALS.
BB2. EARTH BACKFILL MATERIALS MUST BE VIRGIN EXCAVATED NATURAL MATERIAL AND FREE OF CONTAMINATION.

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WORK IN PROGRESS

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CIVIL NOTES

SIGNS AND LINEMARKING

GENERAL

ALL MATERIALS AND WORKMANSHIP IS TO BE IN ACCORDANCE WITH THE RELEVANT TfNSW D&C SPECIFICATIONS FOR THE WORK.

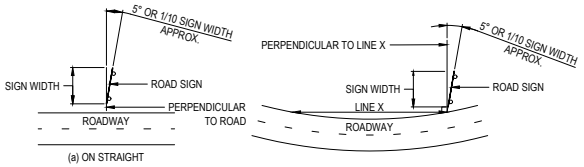
a. 3400 - MANUFACTURE AND DELIVERY OF ROAD SIGNS
b. DC R142 ED 1 REV 2 RETROREFLECTIVE RAISED PAVEMENT MARKETS (VA12657929).doc
c. DC R143 ED 2 REV 0 SIGNPOSTING (VA12658640).doc
d. DC R145 ED 3 REV 0 PAVEMENT MARKING (PERFORMANCE BASED) (VA13966768).doc

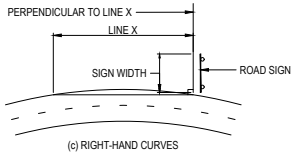
DELINEATION

DE1. DELINEATION TO BE IN ACCORDANCE WITH THE TfNSW DELINEATION GUIDELINES AND AUSTRALIAN STANDARD AS 1742.
DE2. PAVEMENT MARKING TO BE PROVIDED IN ACCORDANCE WITH TfNSW D&C SPECIFICATION R145.
DE3. LINE MARKING TO BE PROVIDED ON PAVEMENT SURFACES IN ACCORDANCE WITH TfNSW D&C SPECIFICATION R145 AS FOLLOWS:
FOR LOCAL ROADS - WATERBORNE PAINTED NORMAL LINEMARKING
DE4. PARKING LINE MARKING TO BE 100mm WIDE WHITE AS PER AS 2890.

SIGNAGE

SG1. SIGNPOSTING TO BE IN ACCORDANCE WITH AUSTRALIAN STANDARD AS 1742 AND TfNSW SIGNS REGISTER.
SG2. MANUFACTURE, SUPPLY AND INSTALLATION OF SIGNAGE SHALL BE IN ACCORDANCE WITH ROADS AND MARITIME D&C SPECIFICATION R143 AND AS 3400 MANUFACTURE AND DELIVERY OF ROAD SIGNS.
SG3. CONNECTION OF SIGN FACES AND ASSEMBLY DETAILS TO BE UNDERTAKEN IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RELEVANT ROADS AND MARITIME SPECIFICATIONS.
SG4. SIGNS MAY BE RELOCATED LOCALLY WITH CONSIDERATION OF SIGHT LINES AND THE INTERFACING WITH NEW AND EXISTING INFRASTRUCTURE WITH THE APPROVAL OF THE DESIGN SITE REPRESENTATIVE.
SG5. TO ELIMINATE EXCESSIVE GLARE FROM THE SURFACE OF A SIGN, THE SIGN SHOULD BE TURNED APPROX. 5° OR 1/10 SIGN WIDTH AWAY FROM THE NORMAL TO THE HEADLIGHT BEAM/LINE OF SIGHT 200m IN ADVANCE OF THE SIGN. THE VERTICAL AXIS OF OVERHEAD SIGNS SHOULD BE TILTED BACK 5° TO THE LINE OF SIGHT ON LEVEL AND DOWNHILL. ON UPHILL GRADES, TILT BACK 5° TO THE LINE OF SIGHT. REFER TO DIAGRAMS BELOW FOR INDICATIVE SET-OUT OF SIGNS.





LINE X = 200m

PROVISION FOR TRAFFIC DURING CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CURRENT AUSTRALIAN STANDARD 1742.3 / RMS G10 SPECIFICATION.

PAVEMENTS

PT1. THE CONTRACTOR SHALL CONSTRUCT THE PAVEMENTS AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE RELEVANT AUSTROADS AND TfNSW SPECIFICATIONS AND SPECIFICALLY WITH THE FOLLOWING:
a. ASPHALT: TfNSW R116 AS NOTED ON DRAWINGS
b. SPRAYED SEAL/BITUMINOUS SURFACE : TfNSW R106
c. SOLID WALLED PVC PIPE: AS 2032
PT2. FOLLOWING COMPLETION OF THE WEARING SURFACE THE CONTRACTOR SHALL SURVEY THE SURFACE AND PROVIDE DRAWINGS SHOWING THE AS BUILT LEVELS AND ANY DEVIATIONS IN ACCORDANCE WITH THE TOLERANCE PROVIDED IN THE APPLICABLE TfNSW SPECIFICATION.
PT3. ALL 'PT' NOTES HEREIN ARE UNO ON THE DRAWINGS.

PATHWAYS

F01. CONCRETE PATHWAY SURFACE TO HAVE A NON-SLIP BROOM FINISH WITH MINIMUM SLIP RESISTANCE CLASSIFICATION (CLASS) P5 OR TO MATCH URBAN DESIGNER'S SPECIFIC REQUIREMENTS.
F02. CONCRETE FOR PATHWAYS (OFF-STRUCTURE) ARE TO BE SUPPLIED AND PLACED IN ACCORDANCE WITH TfNSW R54 UNO.

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00	APPROVED FOR CONSTRUCTION	ESI / XX.XX.25	BK / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	ESI / 18.10.24	BK / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	JK / 28.06.24	BK / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE:

aurecon
AURECON CML

DRAWN MIA DOMINGO XX.XX.2025
DESIGNED ELNER SAPID II XX.XX.2025
DRG CHECK TONY JING XX.XX.2025
DESIGN CHECK AMY CLARK XX.XX.2025
APPROVED SCOTT HENDERSON XX.XX.2025

IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

FILE No. | SHEET: 6 OF 9 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-321016 | 00 | EDMS No.

DF 801554

UTILITIES NOTES

GENERAL

UT1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL PUBLIC OR PRIVATE SERVICE PROVIDER DRAWINGS, INCLUDING BUT NOT LIMITED TO:

- JEMENA DRAWINGS
- AUSGRID DRAWINGS
- SYDNEY WATER DRAWINGS
- TfNSW SIGNAL PLAN DRAWINGS
- TELSTRA AND OPTUS DRAWINGS
- SYDNEY TRAINS DRAWINGS

UT2. EXISTING UTILITIES SHOWN ON DRAWINGS ARE INDICATIVE ONLY AND COMPRISES OF A COMBINATION OF DBYD DATA, SYDNEY TRAINS DSS AND GROUND SURVEY DATA OBTAINED DURING THE DESIGN PROCESS AND MAY NOT INCLUDE ALL SERVICES PRESENT. AURECON TAKES NO RESPONSIBILITY FOR THE UTILITY INFORMATION AS SHOWN ON THESE DRAWINGS.

UT3. IT IS THE CONTRACTORS RESPONSIBILITY TO LIAISE WITH EACH UTILITY SERVICE PROVIDER, TO LOCATE AND IDENTIFY THE SIZE, POSITION, LINE AND LEVEL OF ALL UTILITY SERVICES IN BOTH PUBLIC AND PRIVATE LAND, PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.

UT4. THE CONTRACTOR MUST TAKE EVERY PRECAUTION TO PROTECT EXISTING AND NEW UTILITY SERVICES THROUGH THE COURSE OF THE CONTRACT.

UT5. ALL WORKS INVOLVING UTILITY SERVICES TO BE UNDERTAKEN TO THE SATISFACTION OF THE UTILITY SERVICE PROVIDER. THE CONTRACTOR WILL BE RESPONSIBLE FOR ENGAGING WITH THE UTILITY SERVICE PROVIDER, THE EXECUTION OF THE WORK TO THEIR REQUIREMENTS AND PROCUREMENT OF APPROVALS FOR WORKS UNDERTAKEN.

UT6. ALL WORKS INVOLVING UTILITY SERVICES MUST ONLY BE UNDERTAKEN USING PLANS APPROVED BY THE UTILITY SERVICE PROVIDER.

UT7. ALL SERVICE PIT COVERS TO BE PLACED AT FINISHED SURFACE LEVELS TO MATCH THE PROPOSED LONGITUDINAL AND CROSS FALL GRADES OF THE FOOTPATH OR ROADWAY IT IS CONTAINED WITHIN.

UT8. NO PIPE OR TRENCH SHALL BE LOCATED WITHIN THE ZONE OF INFLUENCE (1V:1H) OF A FOOTING WHERE AN AUTHORITIES APPROVAL IS NOT PROVIDED

UT9. "WORKS AS CONSTRUCTED" SURVEY ON ALL UTILITY WORK SHALL BE RECORDED PRIOR TO ANY BACKFILLING.

UT10. AUSGRID TRANSMISSION CABLES - AUSGRID SUPERVISOR SHALL BE ON SITE WHEN EXCAVATION IS WITHIN 2m OF TRANSMISSION CABLES.

UT11. JEMENA GAS - JEMENA SUPERVISOR SHALL BE ON SITE WHEN EXCAVATION IS UNDERTAKEN AS REQUIRED BY JEMENA SPECIFICATIONS.

UT12. UTILITY LOCATION BASED ON DATA WITH VARIOUS LEVEL OF ACCURACY. THIS ACCURACY IS DEFINED BY AS 5488 SUCH AS QUALITY LEVEL A HAVING HORIZONTAL AND VERTICAL TOLERANCES OF +- 50mm, QUALITY LEVEL B HAS TOLERANCE OF +- 300mm HORIZONTAL AND +- 500mm VERTICAL AND QUALITY LEVEL D INDICATES THE PRESENCE OF A UTILITY ONLY WITH ITS LOCATION UNDEFINED. ADDITIONAL CONSULTATION MAY BE REQUIRED OR ADDITIONAL CLASHES MAY BE IDENTIFIED ONCE EXACT LOCATION OF UTILITIES IS KNOWN. LOCATION TO BE CONFIRMED ON SITE DURING CONSTRUCTION.

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AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE
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CO-ORDINATE SYSTEM: MGA 94 HEIGHT DATUM: AHD SCALE:

AURECON CIVIL

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	ELNER SAPO II	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
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D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

FILE No. SHEET: 7 OF 9 A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921017 00 EDMS No.

DF 801*554

Plotted by Tony Jing

SUSTAINABILITY NOTES

MATERIALS – STEEL

SU1. MAXIMISE THE RECYCLED CONTENT OF STEEL.
SU2. SOURCE STEEL FROM SUPPLIERS THAT ARE CERTIFIED UNDER THE AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS OR A DEMONSTRATED EQUIVALENT ASSOCIATION OR ORGANISATION.
SU3. SOURCE STEEL FROM STEEL MAKERS WITH AN ISO 14001:2015 ENVIRONMENTAL MANAGEMENT CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM.
SU4. SOURCE FABRICATED STRUCTURAL STEELWORK FROM A STEEL FABRICATOR/STEEL CONTRACTOR ACCREDITED TO THE AUSTRALIAN STEEL INSTITUTE'S ENVIRONMENTAL SUSTAINABILITY CHARTER OR A SIMILAR ASSOCIATION OR ORGANISATION.
SU5. SOURCE STEEL PRODUCTS FABRICATED IN ACCORDANCE WITH AS 5131:2016 STRUCTURAL STEELWORK FABRICATION AND ERECTION AND CERTIFIED THROUGH THE NATIONAL STRUCTURAL STEELWORK COMPLIANCE SCHEME.
SU6. ALL STEEL TO BE SOURCED FROM A STEELMAKER THAT IS A CURRENT MEMBER OF THE WORLD STEEL ASSOCIATION CLIMATE ACTION DATA COLLECTION PROGRAMME.
SU7. AT LEAST 60% BY MASS OF ALL REINFORCING STEEL MUST BE PRODUCED USING ENERGY- REDUCING PROCESSES, WHICH INCLUDE POLYMER INJECTION TECHNOLOGY OR ITS EQUIVALENT, IN ITS MANUFACTURE.
SU8. MAJOR STRUCTURAL ELEMENTS AND CLADDING TO BE PERMANENTLY MARKED DURING MANUFACTURE TO ENSURE THAT OPPORTUNITIES FOR REUSE ARE MAXIMISED.
SU9. A PORTION OF ALL REINFORCING STEEL IS ASSEMBLED USING OFF SITE OPTIMAL FABRICATION TECHNIQUES.

MATERIALS - TIMBER

SU10. SOURCE ALL TIMBER PRODUCTS FROM EITHER REUSED TIMBER, POST-CONSUMER RECYCLED TIMBER, TIMBER SUPPLIERS IN AUSTRALIA CERTIFIED BY THE FOREST STEWARDSHIP COUNCIL, OR TIMBER SUPPLIERS IN AUSTRALIA CERTIFIED UNDER THE PROGRAM FOR THE ENDORSEMENT OF FOREST CERTIFICATION.

MATERIALS – CONCRETE

SU11. SOURCE CONCRETE FROM MEMBERS OF CEMENT CONCRETE AND AGGREGATES AUSTRALIA OR A SIMILAR ASSOCIATION OR ORGANISATION.
SU12. ALL CONCRETE AND CONSTITUENTS MUST COMPLY WITH AS 1379, EXCEPT WHERE STATED OTHERWISE IN THE GENERAL SPECIFICATION.
SU13. EMBODIED CARBON AND LIFECYCLE IMPACTS MUST BE MINIMISED BY USING CEMENTITIOUS MATERIALS THAT CONTAINS WASTE INDUSTRIAL PRODUCTS SUCH AS FLY ASH, GROUND GRANULATED BLAST FURNACE SLAG AND SILICA FUME.
SU14. USE GEOPOLYMER CONCRETE FOR NON-STRUCTURAL APPLICATIONS WHERE POSSIBLE.
SU15. ALL CEMENT MUST BE TYPE SL OR GP IN ACCORDANCE WITH AS 3972. SUBJECT TO APPROVAL BY THE PRINCIPAL, OTHER CEMENTS CAN BE USED PROVIDING THESE ARE IN ACCORDANCE WITH AS 3972 AND PROVIDING THESE ACHIEVE THE SAME OR BETTER EMBODIED CARBON OUTCOMES.
SU16. THE MAXIMUM CEMENTITIOUS CONTENT FOR CONCRETE AND SHOTCRETE USED IN ALL CIVIL AND STRUCTURAL WORKS WITH A DESIGN CHARACTERISTIC COMPRESSIVE STRENGTH (SWTC APPENDIX B01):
- a. UP TO AND INCLUDING 20MPa MUST BE 280kg PER CUBIC METRE OF CONCRETE;
- b. OVER 20MPa UP TO AND INCLUDING 25MPa MUST BE 310kg PER CUBIC METRE OF CONCRETE;
- c. OVER 25MPa UP TO AND INCLUDING 32MPa MUST BE 360kg PER CUBIC METRE OF CONCRETE;
- d. BETWEEN 40MPa UP TO AND INCLUDING 65MPa MUST BE 450kg;
- e. GREATER THAN 65MPa MUST BE 500kg PER CUBIC METRE OF CONCRETE.

SU17. ALL CONCRETE INCLUDING SHOTCRETE USED IN THE TEMPORARY AND PERMANENT CIVIL AND STRUCTURAL WORKS WITH A COMPRESSIVE STRENGTH UP TO AND INCLUDING 65MPa (SWTC APPENDIX B01):
- a. MUST CONTAIN FLY ASH AND/OR GROUND GRANULATED BLAST FURNACE SLAG, IN COMPLIANCE WITH THE FOLLOWING:
  - I. FOR CONCRETE ELEMENTS THAT ARE NOMINALLY THICKER THAN 600mm (EXCLUDING LOCAL DISCRETE THICKENING) THE CEMENTITIOUS CONTENT MUST CONTAIN AT LEAST 50% FLY ASH OR 70% SLAG. WHERE A MIX CONTAINING 50% FLY ASH OR MORE IS USED, THE DESIGN WATER/CEMENTITIOUS RATIO MUST NOT BE GREATER THAN 0.4;
  - II. FOR CONCRETE ELEMENTS LESS THAN OR EQUAL TO – 600mm IN THICKNESS, THE CEMENTITIOUS CONTENT MUST CONTAIN AT LEAST 30% FLY ASH OR 55% SLAG; AND
  - III. CONCRETE ELEMENTS THAT HAVE A FLY ASH CONTENT WHICH IS GREATER THAN OR EQUAL TO 50% OF THE TOTAL CEMENTITIOUS CONTENT AND/OR A SLAG CONTENT WHICH IS GREATER THAN OR EQUAL TO 70% OF THE TOTAL CEMENTITIOUS CONTENT MUST RECEIVE A MINIMUM OF 7 DAYS OF CONTINUOUS MOIST CURING AFTER CASTING.
- b. TERNARY BLENDED CEMENT USED MUST CONFORM TO TABLE 3112/A.2 OF TfNSW D&C 3211.

SU18. FOR CONCRETE ELEMENTS WITH A COMPRESSIVE STRENGTH GREATER THAN 65MPa:
- a. THE CONTRACTOR MUST UNDERTAKE A PERFORMANCE BASED ASSESSMENT WHICH INCLUDES A MOCK-UP REPRESENTATIVE OF THE LARGEST CONCRETE ELEMENT FOR EACH MIX TYPE TO CONFIRM THE FOLLOWING:
  - I. OPTIMISED CEMENTITIOUS CONTENT AND OPTIMISED CARBON FOOTPRINT OF THE CEMENTITIOUS CONCRETE IN MIX;
  - II. PRODUCTION AND PLACEMENT QUALITY CONTROL PROCESSES TO BE ADOPTED TO CONTROL TEMPERATURE DURING PLACEMENT AND CURING. THIS MUST BE CONFIRMED BY THERMOCOUPLE MEASUREMENTS; AND
  - III. THE REQUIRED CONCRETE COMPRESSIVE STRENGTH IS ACHIEVED. THIS MUST BE TESTED BY A CORE SAMPLE TAKEN FROM THE LOCATION WHERE THE PEAK IN-SITU TEMPERATURE WAS MEASURED WITHIN THE MOCK-UP ELEMENTS.
- b. THE CONTRACTOR MUST DESIGN MOCK-UP DIMENSIONS SUCH THAT THE PEAK TEMPERATURE MEASURED IS REPRESENTATIVE OF THE PEAK TEMPERATURE THAT WILL OCCUR IN ACTUAL CONSTRUCTION;
- c. MOCK-UP DIMENSIONS, PROPOSED CONCRETE MIXES AND METHODOLOGY MUST BE ACCEPTED BY THE PRINCIPAL'S REPRESENTATIVE PRIOR TO TESTING; AND
- d. THE CONTRACTOR MUST DEMONSTRATE A MINIMUM 35% REDUCTION IN THE EMBODIED GREENHOUSE GAS EMISSIONS ASSOCIATED WITH CONCRETE USED FOR THE PROJECT WORKS AND TEMPORARY WORKS.

SU19. USE RECYCLED WATER IN CONCRETE BATCHING.

MATERIALS – AGGREGATES

SU20. FOR AGGREGATES USED IN CONCRETE,
- a. AT LEAST 40% OF COARSE AGGREGATE IN THE CONCRETE SHALL BE CRUSHED SLAG AGGREGATE, RECYCLED CONCRETE AGGREGATE OR ANOTHER ALTERNATIVE MATERIAL (MEASURED BY MASS ACROSS ALL CONCRETE MIXES ON THE PROJECT), PROVIDED THAT THE OF SUCH MATERIALS DOES NOT INCREASE THE USE OF PORTLAND CEMENT BY OVER 5kg PER CUBIC METRE OF CONCRETE;
- b. AT LEAST 50% OF FINE AGGREGATES (SAND) IN THE CONCRETE SHALL BE MANUFACTURED SAND OR ANOTHER ALTERNATIVE MATERIAL (MEASURED BY MASS ACROSS ALL CONCRETE MIXES ON THE PROJECT), PROVIDED THAT THE USE OF SUCH MATERIALS DOES NOT INCREASE THE USE OF PORTLAND CEMENT BY OVER 5kg PER CUBIC METRE OF CONCRETE. THE AGGREGATES SHALL COMPLY AS 2758.

SU21. USE A MINIMUM OF 10% RECYCLED CONCRETE AGGREGATES FOR NON-STRUCTURAL CONCRETE WHERE FEASIBLE.

MATERIALS – COATINGS AND FINISHES

SU22. USE LOW VOLATILE ORGANIC COMPOUNDS (VOC) PAINTS. FINISHES, SEALANTS AND ADHESIVES AND ZERO OR LOW FORMALDEHYDE EMISSION COMPOSITE WOOD PRODUCTS.
SU23. ENSURE THAT ALL SURFACE COATINGS COMPLY WITH THE VOC LIMITS DEFINED IN THE AUSTRALAN PAINT APPROVAL SCHEME.
SU24. POLYVINYL CHLORIDE MUST BE COMPLIANT WITH THE GBCA BEST PRACTICE GUIDELINES FOR PVC IN THE BUILT ENVIRONMENT.

MATERIALS – GENERAL

SU25. UTILISE OR REUSE APPROPRIATE SITE-WON MATERIALS ONSITE.
SU26. WASTE MUST ONLY BE EXPORTED TO A SITE LICENSED BY THE EPA FOR THE STORAGE, TREATMENT, PROCESSING, REPROCESSING OR DISPOSAL OF THE SUBJECT WASTE, OR IN ACCORDANCE WITH A RESOURCE RECOVERY EXEMPTION OR ORDER ISSUED UNDER THE PROTECTION OF THE ENVIRONMENT OPERATIONS (WASTE) REGULATION 2014, OR TO ANY OTHER PLACE THAT CAN LAWFULLY ACCEPT SUCH WASTE.
SU27. ALL WASTE MUST BE CLASSIFIED IN ACCORDANCE WITH THE EPA'S WASTE CLASSIFICATION GUIDELINES, WITH APPROPRIATE RECODES AND DISPOSAL DOCKETS RETAINED FOR AUDIT PURPOSES.
SU28. CONSTRUCTION WASTE WOULD BE MINIMISED BY ACCURATELY CALCULATING MATERIALS BROUGHT TO THE SITE AND LIMITING MATERIALS PACKAGING.
SU29. ALL WASTE WOULD BE ASSESSED, CLASSIFIED, MANAGED AND DISPOSED OF IN ACCORDANCE WITH THE WASTE CLASSIFICATION GUIDELINES (EPA, 2014).
SU30. WASTE SEGREGATION BINS WOULD BE LOCATED AT VARIOUS LOCATIONS WITHIN THE PROJECT AREA, IF SPACE PERMITS, TO FACILITATE SEGREGATION AND PREVENT CROSS CONTAMINATION.

HERITAGE NOTES

GENERAL

HE1. HERITAGE SPECIALIST IS TO BE ADVISED OF ANY CHANGE OF SCOPE, HOWEVER MINOR, FOR REVIEW. PROJECT TEAM TO AWAIT INSTRUCTION BY HERITAGE SPECIALIST BEFORE PROCEEDING WITH WORKS.
HE2. IN THE FIRST INSTANCE, RETAIN AND CONSERVE ELEMENTS OF HIGH HERITAGE SIGNIFICANCE.
HE3. UNDERTAKE ALL DEMOLITION WORK, REMOVAL OF MODERN ACCRETIONS AND THE LIKE CAREFULLY AND BY HAND TO AVOID DAMAGE TO SURROUNDING HERITAGE FABRIC.
HE4. INSTALL NECESSARY PROTECTION PRIOR TO COMMENCING WORK THAT MAY DAMAGE SURROUNDING HERITAGE FABRIC.
HE5. ALL WORKS TO HERITAGE FABRIC TO BE UNDERTAKEN BY SUITABLY EXPERIENCED HERITAGE TRADESPERSONS. CONTRACTORS ARE TO PROVIDE LIST OF RELEVANT HERITAGE WORKS UNDERTAKEN IN RECENT YEARS.
HE6. ALL CONTRACTORS ARE TO BE BRIEFED ON THE HERITAGE SIGNIFICANCE OF THE SITE AS PART OF AN INDUCTION. INDUCTIONS MUST INCORPORATE INFORMATION REGARDING SIGNIFICANT BUILDING FABRIC, ELEMENTS / AREAS TO BE PROTECTED, REPAIR APPROACH, ROLES, RESPONSIBILITIES, REPORTING AND UNEXPECTED FINDS PROCEDURES.
HE7. EXISTING PENETRATIONS ARE TO BE USED WHERE POSSIBLE WHEN INTRODUCING NEW SERVICES AND EQUIPMENT TO LIMIT CHANGE TO HERITAGE FABRIC.
HE8. NEW SERVICES AND EQUIPMENT ARE TO BE RATIONALISED AND SHOULD NOT COVER DECORATIVE FABRIC.
HE9. FOLLOWING REMOVAL OF ALL ANY MODERN ELEMENTS, REDUNDANT PENETRATIONS, ACCRETIONS AND THE LIKE, REPAIR AND MAKE GOOD FABRIC AS REQUIRED AND IN ACCORDANCE WITH BEST PRACTICE CONSERVATION TECHNIQUES.
HE10. CLEAN ALL HERITAGE FABRIC OF DIRT, ORGANIC GROWTH, GUANO AND OTHER DEBRIS USING LOW PRESSURE WARM WATER, BIOCIDE AND A STIFF BRISTLE (NON-FERROUS) BRUSH. DO NOT USE AGGRESSIVE OR HARSH CHEMICALS, SAND BLASTING OR OTHER ABRASIVE MEANS.
HE11. WORK TO BE UNDERTAKEN WITH MINIMAL DISTURBANCE TO ADJOINING PROPERTY.
HE12. EXISTING SURFACES TO BE RETAINED ARE TO BE PROTECTED. ANY DAMAGE SUSTAINED DURING THE DURATION OF THE WORKS IS TO BE REPLACED OR MADE GOOD BY CONTRACTOR TO AN EQUIVALENT STANDARD OR BETTER.
HE13. ALLOW FOR MAKING GOOD ALL EXISTING SURFACES EXPOSED AFTER REMOVAL OF EXISTING FIXTURES AND FITTINGS.
HE14. UNEXPECTED OR UNDOCUMENTED DILAPIDATION OF FIXTURES OR MATERIALS DISCOVERED DURING THE DEMOLITION WORKS SHOULD BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER AND HERITAGE SPECIALIST. THE EXTENT OF NEW WORKS RESULTING IS TO BE AGREED WITH THE PROJECT MANAGER PRIOR TO PROCEEDING.
HE15. ALL ITEMS TO BE REMOVED FROM SITE FOR REINSTATEMENT AFTER COMPLETION ARE TO BE STORED IN A SECURE DRY LOCATION TO BE AGREED WITH THE PROJECT MANAGER AND CLIENT.
HE16. ALL DEMOLISHED FIXTURES AND MATERIALS ARE TO BE REMOVED FROM SITE AND DISPOSED OF SAFELY AND LEGALLY BY THE BUILDER.
HE17. ALL AREAS AFFECTED BY THE WORKS MUST BE CLEANED ON COMPLETION.
HE18. AN EXCAVATION DIRECTOR'S REPORT (EDR) MUST BE PREPARED FOR ANY HERITAGE ITEMS OF STATE SIGNIFICANCE THAT ARE DISCOVERED DURING WORK. THE EDR MUST BE PREPARED IN CONSULTATION WITH OEH.
HE19. THE CONTRACTOR MUST SEEK THE ADVICE OF A HERITAGE SPECIALIST ON METHODS AND LOCATIONS FOR INSTALLING EQUIPMENT USED FOR VIBRATION, MOVEMENT AND NOISE MONITORING AT HERITAGE-LISTED STRUCTURES.

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NSW GOVERNMENT | sydney METRO

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BANKSTOWN LINE - 5.90km TO 18.60km
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GENERAL NOTES

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DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921018 | 00 | EDMS No.

DF 801554

File Protocol:P:\SYDNEY\MRL-WMS-CE\DWG\921018.dwg
Plot Date & Time:4/01/2025 12:44 PM
Plotted by: Tony Jing

SITE SAFETY NOTES

SS1. ALL CONSTRUCTION WORKS HAVE THE POTENTIAL FOR SAFETY RISKS TO PERSONNEL, PROPERTY AND EQUIPMENT. ALL PARTIES ARE REQUIRED TO CONSIDER, DOCUMENT AND EMPLOY APPROPRIATE WORK PLACE PROCEDURES FOR ALL ACTIVITIES.

SS2. THE CONTRACTOR SHALL:
- a. BE BOUND IN ACCORDANCE WITH THE CURRENT SAFE WORK AUSTRALIA ACT, REGULATIONS AND PRIORITY CODES OF PRACTICE STATE BY STATE.
- b. BE RESPONSIBLE FOR THE IMPLEMENTATION, DOCUMENTATION AND MAINTENANCE OF WORK SAFETY AND OTHER RELEVANT DOCUMENTATION AND ENSURE THAT ALL SUB-CONTRACTORS COMPLY.

THE CONTRACTOR SHOULD CONSULT WITH THE PRINCIPAL'S ENGINEER IF THERE IS ANY POTENTIAL PERCEIVED RISK. THE CONTRACTOR SHALL BE ALERT AND PROACTIVE TO:
- a. IDENTIFY HAZARDS.
- b. APPLY MEASURES TO ELIMINATE OR MINIMISE RISKS ASSOCIATED WITH SUCH HAZARDS.

SS3. THE CONTRACTOR SHALL ENSURE:
- a. SO FAR AS IS REASONABLY PRACTICABLE THAT THE CONSTRUCTION PHASE IS WITHOUT RISK TO THE HEALTH AND SAFETY OF PERSONS WHO ARE ENGAGED TO WORK ON THIS SITE OR ANY PERSON WHO MAY ENTER THIS SITE. ALL TRADES SHALL CONSIDER, DOCUMENT AND EMPLOY APPROPRIATE WORKSAFE PROCEDURES FOR ALL REQUIRED ACTIVITIES.

SPECIFIC ATTENTION SHALL BE GIVEN TO BUT NOT LIMITED TO ACTIVITIES INVOLVING:
- a. SITE ESTABLISHMENT.
- b. DEMOLITION, RECYCLING AND REMOVAL.
- c. DEMOLITION WORKS WHERE SERVICES ARE EXPOSED.
- d. TEMPORARY WORKS.
- e. EXCAVATION AND TRENCHING
- f. UNSTABLE GROUND.
- g. GAS SERVICES.
- h. GASES AND TOXIC WASTE.
- i. JACK HAMMERING
- j. NOISE AND DUST PROTECTION.
- k. WELDING-EYE PROTECTION.
- l. CONTAMINATED SOILS.
- m. CONSTRUCTION PROCESSES.
- n. CONFINED SPACES.
- o. TRIPS AND FALLS (GENERAL)
- p. UNSTABLE FOOTING.
- q. HIGH RISK WORK.
- r. ELECTRICAL-HIGH VOLTAGE CABLES.
- s. ASBESTOS OR ANY FIBROUS MATERIAL.
- t. WORKING AT HEIGHTS.
- u. MAINTENANCE AND REPAIR.
- v. REFURBISHMENT, RENOVATION AND EXTENSION.
- w. USE AS A WORK PLACE.
- x. WORKING NEXT TO LIVE TRAFFIC.

SS4. COMPLIANCE MANDATORY.
THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL COMPLY WITH ALL APPLICABLE WORK HEALTH AND SAFETY LEGISLATION (ACTS, CODES OF PRACTICE, GUIDANCE NOTES) AND OTHER RELEVANT DOCUMENTATION.

SS5. SITE INDUCTION REQUIRED.
THE CONTRACTOR SHALL ENSURE THAT ALL PERMANENT AND CONTRACT WORKERS ENGAGED ON THIS SITE ARE FORMALLY INDUCTED AND AWARE OF ALL SITE SPECIFIC SAFETY REQUIREMENTS BEFORE ENTERING THE SITE. A SEPARATE LOG-IN / LOG-OUT REGISTER SHALL BE KEPT AT THE SITE OFFICE FOR ALL CASUAL VISITORS. THE CONTRACTOR SHALL ENSURE THAT ALL PERSONS WHO ENTER THE WORK ZONE ARE WEARING SUITABLE PROTECTIVE CLOTHING AND EQUIPMENT IN ACCORDANCE WITH SAFETY REQUIREMENTS.

SS6. PUBLIC SAFETY.
A LIVE SITE THAT IS WORKING OR UNATTENDED HAS A STRONG ATTRACTION TO THE PUBLIC IN GENERAL. THE CONTRACTOR IS REQUIRED TO TAKE ALL REASONABLE PRECAUTIONS TO PREVENT UNAUTHORISED PEOPLE ENTERING THE SITE. EXCAVATIONS, STRUCTURES AND ACCESS EQUIPMENT SHALL BE KEPT IN A SECURE MANNER AS IS REASONABLY PRACTICABLE TO PREVENT UNAUTHORISED PEOPLE INCLUDING CHILDREN FROM ENTERING, CLIMBING OR FALLING. THE SITE SHALL HAVE CLEAR WARNING SIGNS IN APPROPRIATE LOCATIONS E.G. "DANGER KEEP OUT' AND SECURELY BARRICADED AND WHEN UNATTENDED LEFT IN A LOCKED CONDITION AS IS REASONABLY PRACTICABLE.

SS7. CURRENT LEGISLATION.
CURRENT LEGISLATION REQUIRES THAT ALL PERSONS ARE TO CONSIDER THEIR ACTIONS OR LACK OF ACTION ON THE HEALTH AND SAFETY OF THEMSELVES AND OTHERS.

SS8. RISK ASSESSMENT.
THE COMMISSIONED CONTRACTOR AND ALL SUB-CONTRACTORS SHALL CARRY OUT RISK ASSESSMENTS FOR ALL OF THEIR ACTIVITIES AND WHERE NECESSARY INTRODUCE SUITABLE CONTROL MEASURES OR PROVIDE PROTECTIVE CLOTHING/ EQUIPMENT TO MINIMISE THOSE RISKS. THE SUB-CONTRACTOR SHALL PROVIDE COPIES OF THEIR RISK ASSESSMENT TO THE CONTRACTOR FOR APPROVAL.

SITE SAFETY NOTES (CONT.)

SS9. SAFETY PRECAUTIONS.
EXCAVATIONS FOR TRENCHES REQUIRED FOR INSTALLATION OF SERVICES SHALL BE IN ACCORDANCE WITH WORK HEALTH AND SAFETY CODE OF PRACTICE - SAFETY PRECAUTIONS IN TRENCHING OPERATIONS' AND ALL OTHER NECESSARY STATUTORY AUTHORITY REGULATIONS AND RECOMMENDATIONS.

SS10. PERCEIVED RISKS.
THE CONTRACTOR SHOULD CONSULT WITH THE PRINCIPAL'S ENGINEER IF THERE IS ANY PERCEIVED RISK WITH THE DESIGN OR WITH THE CONSTRUCTION OF THE DESIGN. THE CONTRACTOR SHOULD ENGAGE SUITABLY QUALIFIED ENGINEERS TO CERTIFY ALL TEMPORARY STRUCTURAL WORKS.

SAFETY IN DESIGN

SD1. THIS DESIGN IS IN ACCORDANCE WITH THE MODEL WORK HEALTH AND SAFETY (WHS) ACT AND SAFEWORK AUSTRALIA MODEL CODE OF PRACTICE - SAFE DESIGN OF STRUCTURES. THE PROJECT SPECIFIC HAZARDS IDENTIFIED BELOW ARE BASED ON EXPERIENCE ON SIMILAR PROJECTS AND DO NOT NECESSARILY ACCOUNT FOR ALL CONSTRUCTION, OPERATION, MAINTENANCE AND DEMOLITION SAFETY HAZARDS. THE HAZARDS LISTED BELOW ARE LIMITED TO HAZARDS THAT ARE NOT CONSIDERED LIKELY TO BE OBVIOUS TO A COMPETENT CONTRACTOR, ARE UNUSUAL, DIFFICULT TO MANAGE, OR NOT NORMALLY ENCOUNTERED ON PROJECTS OF A SIMILAR NATURE. BASED ON INFORMATION AVAILABLE TO THE DESIGNERS AT THE TIME OF DOCUMENTATION, THE DESIGNERS HAVE ATTEMPTED TO IDENTIFY SAFETY HAZARDS RELATING TO THE CONSTRUCTION, OPERATION, MAINTENANCE AND DEMOLITION PHASES OF THIS PROJECT. INCLUSION (OR NOT) OF ANY HAZARD DOES NOT REDUCE OR LIMIT THE OBLIGATIONS OF THE CONTRACTOR, USER, MAINTAINER OR DEMOLISHER TO UNDERTAKE APPROPRIATE SAFETY MANAGEMENT. THESE NOTES ARE NOT AN ADMISSION OF RESPONSIBILITY BY THE DESIGNERS FOR MANAGEMENT OF ANY SAFETY HAZARDS RELATING TO THIS PROJECT.

SD2. DESIGN AND RISK MANAGEMENT:
A RISK MANAGEMENT PROCESS HAS BEEN INTEGRATED INTO THE DESIGN PROCESS AS FOLLOWS:
- a. IDENTIFICATION OF REASONABLY FORESEEABLE HAZARDS ASSOCIATED WITH THE DESIGN OF THE STRUCTURE.
- b. ASSESSMENT OF THE RISKS ARISING FROM SUCH HAZARDS. • ELIMINATION OR MINIMISATION OF THE RISK BY DESIGNING CONTROL MEASURES. • REVIEW OF THE CONTROL MEASURES.
- c. IDENTIFICATION OF ANY RESIDUAL HAZARDS TO BE PASSED ONTO THE CONTRACTOR WITHIN THE DESIGN DOCUMENTATION OR SEPARATE SAFETY IN DESIGN DOCUMENTATION. THE CLIENT AND CONTRACTOR SHOULD ENSURE THAT ALL PROFESSIONAL DESIGN SERVICES ENGAGED FOR THIS CONTRACT SHALL COMPLY WITH THE SAFE WORK AUSTRALIA WORK HEALTH AND SAFETY ACT AND CODE OF PRACTICE.

SD3. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH TfNSW QA SPECIFICATIONS. THIS DOCUMENT LISTS SOME DESIGN RELATED WORK HEALTH AND SAFETY HAZARDS ASSOCIATED WITH THE PROJECT DESIGN, CONSTRUCTION AND OPERATION. THERE MAY BE OTHER HAZARDS AND RISKS NOT STATED IN THIS DOCUMENT. THIS DOCUMENT DOES NOT RELIEVE THE CONTRACTOR OF ITS OBLIGATIONS UNDER THE CONTRACT AND RELEVANT LEGISLATION.

SD4. HIGH RISK CONSTRUCTION.
THE CONTRACTOR SHALL IDENTIFY AREAS OF CONSTRUCTION THAT MAY BE CONSIDERED HIGH RISK, AND IMPLEMENT SUFFICIENT SAFETY PROCEDURES FOR THESE TASKS. EXAMPLES OF HIGH RISK CONSTRUCTION INCLUDE, BUT ARE NOT LIMITED TO:
WORK THAT INVOLVES:
- a. ASBESTOS
- b. A RISK OF FALLING MORE THAN TWO (2) METRES OR IS CARRIED OUT ON A TELECOMMUNICATIONS TOWER
- c. BUILDING OR DEMOLITION WORK INVOLVING TILT-UP OR PRECAST CONCRETE, STRUCTURAL ALTERATIONS, OR REPAIRS TO A STRUCTURE THAT REQUIRES TEMPORARY SUPPORT TO PREVENT COLLAPSE
- d. THE DEMOLITION OF A LOAD BEARING PART OF A STRUCTURE OR THE DEMOLITION OF ANY PART OF A STRUCTURE THAT IS LIKELY TO AFFECT ITS PHYSICAL INTEGRITY.
- e. WORKING IN AREAS OF HIGH VOLTAGE ELECTRICAL CABLES.
- f. WORK CARRIED OUT IN, ON OR NEAR ANY:
- g. CONFINED SPACE
- h. SHAFT OR TRENCH WITH AN EXCAVATED DEPTH OF GREATER THAN 1.5m OR A TUNNEL.
- i. PRESSURISED GAS DISTRIBUTION MAINS OR PIPING.
- j. CHEMICAL, FUEL OR REFRIGERANT LINES.
- k. AREAS WHERE THERE ARE ARTIFICIAL EXTREMES OF TEMPERATURE
- l. AREAS THAT MAY HAVE A CONTAMINATED OR FLAMMABLE ATMOSPHERE
- m. ROAD, RAILWAY, OR OTHER TRAFFIC CORRIDOR THAT IS IN USE BY TRAFFIC OTHER THAN PEDESTRIANS
- n. AREA AT A WORKPLACE IN WHICH THERE IS MOVEMENT OF POWERED MOBILE PLANT
- o. WATER OR OTHER LIQUID THAT INVOLVES A RISK OF DROWNING
- p. ADJACENT TO DEEP EXCAVATIONS
- q. ADJACENT TO HIGH RETAINING STRUCTURES

SAFETY IN DESIGN NOTES (CONT.)

- r. ROAD, RAILWAY, SHIPPING LANE, OR OTHER TRAFFIC CORRIDOR THAT IS IN USE BY TRAFFIC OTHER THAN PEDESTRIANS
- s. AREA AT A WORKPLACE IN WHICH THERE IS MOVEMENT OF POWERED MOBILE PLANT
- t. WATER OR OTHER LIQUID THAT INVOLVES A RISK OF DROWNING
- u. ADJACENT TO DEEP EXCAVATIONS
- v. ADJACENT TO HIGH RETAINING STRUCTURES

SD5.

CAUTION

THIS DRAWING IS BASED ON SURVEY THAT IS INCOMPLETE AND NOT VERIFIED. THE EXISTING SURFACE MAY VARY FROM THAT INDICATED AND SOME FEATURES MAY NOT BE SHOWN.

WARNING

BEWARE OF UNDERGROUND/OVERHEAD SERVICES THE LOCATIONS OF UNDERGROUND/OVERHEAD SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

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SD6: BUILDING OPERATION AND MAINTENANCE.
MUST BE CARRIED OUT IN ACCORDANCE WITH THE DESIGN INTENT OF THE BUILDING CODE OF AUSTRALIA AS APPLIES STATE BY STATE.
OPERATION, CLEANING AND MAINTENANCE OF THE BUILDING MAY REQUIRE BUT NOT LIMITED TO ITEMS INVOLVING:
- a. ACCESS USING WORK PLATFORMS, STEPS, FALL ARREST SYSTEMS AND LADDERS.
- b. WORKING AT HEIGHT.
- c. INCLUSION OF BMU IN ROOF LAYOUT.
- d. USE OF HAZARDOUS MATERIALS OR CHEMICALS.
- e. LIFTING OF MATERIALS.
- f. ACCESS AND WORKING IN CONFINED SPACES.
- g. SUFFICIENT WORK SPACE.
- h. OPERATION AND MAINTENANCE MANUALS.
- i. USE OF HEAVY EQUIPMENT.
- j. WORKING ON SMOOTH / SLIPPERY SURFACES.
- k. WORKING ADJACENT TO VEHICULAR / FORKLIFT TRAFFIC.
- l. WORKING NEAR TRAFFIC OR MOVING FREIGHT CARRIERS.

SD7. DESIGN OUT RISK.
METHODS USED TO DESIGN OUT OCCUPATIONAL RISKS RELATED TO THE CONSTRUCTION, OCCUPATION OR DEMOLITION OF THIS STRUCTURE INCLUDE:
- a. OFF-SITE PREFABRICATION OF CONSTRUCTION ELEMENTS.
- b. USE OF BOLTED STEEL SITE CONNECTIONS TO AVOID ON-SITE WELDING.

SD8. DECONSTRUCTION.
AT THE END OF THE LIFE OF THIS STRUCTURE, ENGAGE SUITABLY QUALIFIED DEMOLITION ENGINEERS TO ASSIST WITH ITS DECONSTRUCTION.

SD9. POST-CONSTRUCTION REVIEW:
THE CONTRACTOR AND CLIENT SHALL PROVIDE FEEDBACK TO THE DESIGNERS AS FOLLOWS:
- a. POST-OCCUPANCY EVALUATIONS
- b. DEFECT REPORTS
- c. ACCIDENT INVESTIGATION REPORTS
- d. INFORMATION REGARDING MODIFICATIONS
- e. USER DIFFICULTIES
- f. DEVIATIONS FROM INTENDED CONDITIONS OF USE

PROHIBITED MATERIALS AND MATERIALS TO BE AVOIDED NOTES

PM1. PROHIBITED MATERIALS VOC'S IN HIGH CONCENTRATION IN:
- a. PAINTS
- b. ADHESIVES AND SEALANTS
- b. FORMALDEHYDES (EXCEEDING E1 OF EN 13986, 2001) IN COMPOSITE/ENGINEERED WOOD PRODUCTS.
- c. HIGH CONSERVATION VALUE TIMBER, - IS FOUND IN FORESTS WITH SPECIALLY HIGH ECOLOGICAL OR SOCIAL VALUE, THE TERM AROSE IN CONNECTION WITH THE DEVELOPMENT OF STANDARDS FOR THE CERTIFICATION OF FOREST MANAGEMENT BY THE FOREST STEWARDSHIP COUNCIL (FSC).
- d. TIMBER TREATED WITH ENVIRONMENTALLY DAMAGING CHEMICALS, SUCH AS COPPER, CHROMIUM AND ARSENIC (CCA) TREATMENT WHERE VOLUNTARY RESTRICTIONS ON SALE AND USE APPLY.
- e. HCFC'S - ARE OZONE DEPLETING SUBSTANCES FOUND IN REFRIGERANTS AND AEROSOL PROPELLANTS.

ALREADY BANNED MATERIALS:
- a. ASBESTOS
- b. PCB'S (POLYCHLORINATED BIPHENYLS). AMONG THEIR APPLICATIONS ARE USED ON ELECTRIC UTILITY LINES, IN AIR CONDITIONERS, AND IN THE BALLAST OF FLUORESCENT LAMP FIXTURES.
- c. HEAVY METALS (LEAD, MERCURY, CADMIUM, CHROMIUM, COBALT, ANTIMONY)
- d. POLYCHLORINATED TRIPHENYLS (PCT'S), SIMILAR TO PCB'S
- e. CARBON TETRACHLORIDE (TCT), ARE OZONE DEPLETING SUBSTANCES FOUND IN REFRIGERANTS, AEROSOL PROPELLANTS, FIRE EXTINGUISHERS AND CLEANING FLUIDS.
- f. ORGANOTIN COMPOUNDS - FOUND IN PVC HEAT STABILIZERS, BIOCIDES, CATALYSTS, AGROCHEMICALS AND GLASS COATINGS.
- g. LINDANE/HEXACHLOROCYLOHEXANE (HCH) - WAS FOUND IN INSECTICIDES.
- h. TITANIUM DIOXIDE MANUFACTURING WASTES - WASTE FROM MANUFACTURE OF PAINTS, VARNISHES, PLASTICS AND SUNSCREEN.
- i. *SPECIAL USAGE CASES ACCEPTED WHERE NO OTHER ALTERNATIVE IS AVAILABLE.

PM2. MATERIALS TO BE AVOIDED
- a. POLYCHLOROPRENE (OR CHLOROPRENE RUBBER, NEOPRENE) IN GEO-MEMBRANES, WEATHER STRIPPING, EXPANSION JOINT FILLER, WATER SEALERS AND OTHER GASKET AND ADHESIVES.
- b. CHLORINATED POLYETHYLENE AND CHLORO-SULFINATED POLYETHYLENE IN GEO-MEMBRANES, WIRE AND CABLE JACKETING, ROOF MEMBRANES AND ELECTRICAL CONNECTORS.
- c. HFC WITH HIGH GWP IN HVAC REFRIGERANTS.
- d. VIRGIN AGGREGATES
- e. PORTLAND CEMENT

CONTAMINATION

CT1. CONTAMINATION AREA

WHENEVER POSSIBLE, RISK IS DESIGNED OUT OF THE PROPOSAL DURING THE DESIGN PROCESS. WHERE THIS IS NOT POSSIBLE, THE RISK WILL BE MINIMIZED, AND HIGHLIGHTED IN THE WORK AND MATERIALS SPECIFICATION

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

00	APPROVED FOR CONSTRUCTION	ESI / XX.XX.25	BK / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	ESI / 18.10.24	BK / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	JK / 28.06.24	BK / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE:

NSW GOVERNMENT | sydney METRO

aurecon — AURECON CML

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	ELNER SAPOI II	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

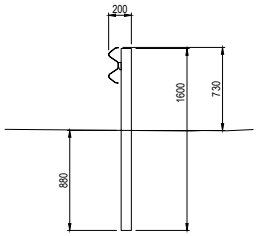
WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

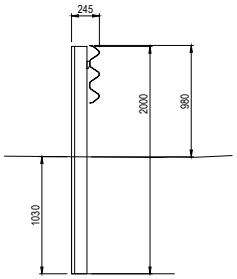
FILE No. | SHEET: 9 OF 9 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-VMS-CE-DWG-921019 | 00 | EDMS No.

DF 801554

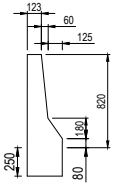
Plot Date & Time: 4/02/2025 12:14:43 PM
Plotted by: Tony Jing
File Plotted: R:\SYDNEY\MRL-VMS-CE-DWG-921019.dwg



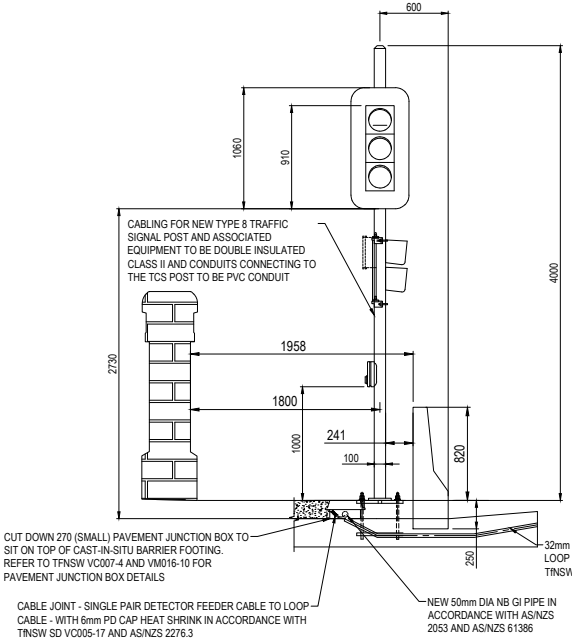
EZY GUARD TL3 STEEL RAIL BARRIER
TYPICAL DETAIL
SCALE 1:20



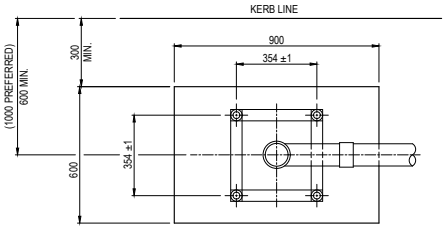
EZY GUARD TL4 STEEL RAIL BARRIER
TYPICAL DETAIL
SCALE 1:20



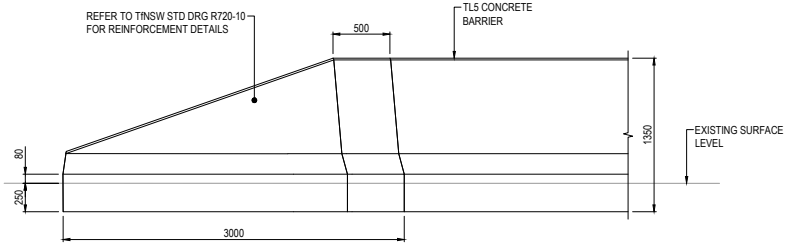
TL3 CAST IN SITU CONCRETE BARRIER
TYPICAL DETAIL
SCALE 1:20
* WIDTH VARIES AT CONNECTION TO EZY GUARD TL4 STEEL RAIL BARRIER. REFER DRAWING ST-DWG-921061 FOR DETAILS



TCS TYPE 8 POST NEXT TO
TL3 CONCRETE BARRIER
SCALE 1:20



BASE PLATE DETAIL
SCALE 1:10



SLOPE END TERMINATION TYPICAL DETAIL
SCALE 1:20

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00	APPROVED FOR CONSTRUCTION	BS / XX.XX.25	CW / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	BS / 18.10.24	AB / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	BS / 28.06.24	AB / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE: AS SHOWN

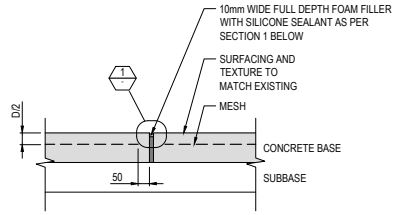
aurecon
AURECON CML

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	BARADA SAMANTARAY	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	ANTHONY CLARKE	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

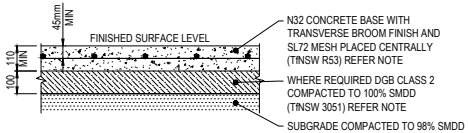
SIGN IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
TYPICAL DETAILS
FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921031 | 00 | EDMS No.

100 0 200 400mm SCALE 1:10
200 0 400 800mm SCALE 1:20

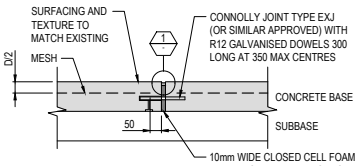


JOINT TYPE P15
ISOLATION JOINT
SCALE NTS

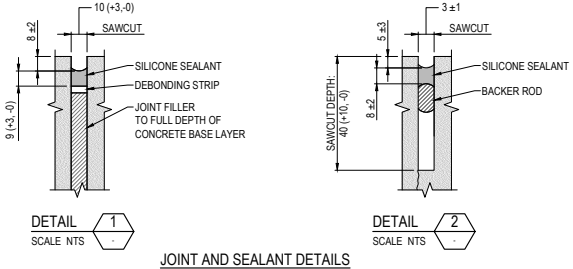


PAVEMENT TYPE PT-SWM4-S01
CONCRETE FOOTPATH
SCALE NTS

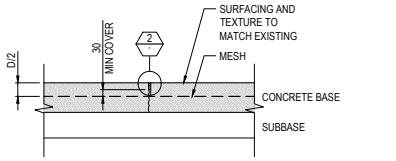
NOTE: EXTREME CAUTION REQURIED TO AVOID DAMAGING EXISTING AND PROPOSED UTILITIES. STABILSED SAND BACKFILL ACCEPTABLE IN LIEU OF DGB20.



JOINT TYPE P16
EXPANSION JOINT, DOWELLED
SCALE NTS



JOINT AND SEALANT DETAILS



JOINT TYPE P17
CONTRACTION JOINT, SAWN
SCALE NTS

NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE RELEVANT TINSW SPECIFICATIONS. CONCRETE SHALL COMPLY WITH TINSW D&C SPECIFICATION R53 AND BE PLACED IN ACCORDANCE WITH TINSW D&C SPECIFICATION R54. IN ADDITION, REFER TO TOLERANCES IN NOTE 13.
2. ALL CONCRETE FOOTPATHS TO BE SUPPLIED AND PLACED IN ACCORDANCE WITH TINSW R53 AND R54.
3. JOINTS TO BE CLEAN DRY AND FREE OF ALL LOOSE MATERIAL PRIOR TO APPLICATION OF SEALANT TO MANUFACTURER'S SPECIFICATION.
4. ISOLATION JOINTS TO BE PROVIDED WHEREVER THE SLAB ABUTS EXISTING BUILDINGS, PAVEMENTS, OR RIGID STRUCTURES SUCH AS DRAINAGE PITS, ACCESS HOLES OR COLUMNS.
5. SAW CUTS SHALL COMMENCE WITHIN 24 HOURS OR WHEN CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT CUTTING WITHOUT EXCESSIVE CHIPPING SPALLING OR TEARING.
6. ODD SHAPED AND THIN SLABS SHALL BE AVOIDED WHERE POSSIBLE. ACUTE ANGLES OF JOINTS SHALL BE AVOIDED WHERE POSSIBLE.
7. EXPANSION JOINTS ARE NOT PERMITTED TO INTERSECT EACH OTHER.
8. EXPANSION JOINT SHALL BE CONSTRUCTED AT THE START-STOP OF A DAYS PAVING.
9. PUBLIC DOMAIN PAVEMENT SURFACE FINISH, SEALANT COLOUR AND TEXTURE TO MATCH EXISTING.
10. REINFORCEMENT TO HAVE A MINIMUM 40mm COVER UNLESS NOTED OTHERWISE.
11. PAVEMENT IS TO BE FOUNDED ON FIRM NATURAL CUT GROUND OR COMPACTED FILL PLACED IN ACCORDANCE WITH TINSW D&C SPECIFICATION R54. ANY SOFT AREAS ARE TO BE REMOVED AND REPLACED WITH COMPACTED SELECT FILL 'TYPE U' IN ACCORDANCE WITH TINSW D&C SPECIFICATION R54.
12. THE FINISHED LEVEL OF ANY PAVEMENT ABUTTING A WALL OR BUILDING MUST BE BELOW THE DAMP PROOF COURSE AND MUST NOT OBSCURE ANY WEEP HOLES OR DRAINAGE OPENINGS.
13. TOLERANCES (CONCRETE BASE):
    - CHANGE IN HEIGHT EACH SIDE OF JOINT: 3mm
    - CROSS FALL: 0% TO ±0.5% (UNO)
    - DESIGN THICKNESS: +20mm / -0mm
    - UNDULATION IN ALL DIRECTIONS:
      - 1mm OVER 250mm
      - 5mm OVER 1.5m
      - 10mm OVER 3m OR JOINT TO JOINT (WHICHEVER GREATER)
13. STEEL MESH REINFORCEMENT MAY BE REPLACED WITH MACRO-SYNTHETIC FIBRE REINFORCEMENT (EPC BARCHIP, E-MESH OR SIMILAR APPROVED).
14. TYPICAL JOINT LAYOUT SHALL BE WITHIN IN ACCORDANCE WITH TINSW D&C R54.

TABLE 1 - JOINT SPACING

FOOTPATH WIDTH (m)	P17 CONTRACTION JOINT SPACING (m)	P16 EXPANSION JOINT SPACING (m)
1.2	1.2	4.8
1.6	1.5	6.0
2.5	2.0	8.0

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00	APPROVED FOR CONSTRUCTION	BS / XX.XX.25	CW / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	BS / 18.10.24	AB / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	BS / 28.06.24	AB / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE: AS SHOWN

SCALE 1:5 (50 0 100 200mm)
SCALE 1:10 (100 0 200 400mm)

aurecon
AURECON CML

DRAWN MIA DOMINGO XX.XX.2025
DESIGNED BARADA SAMANTARAY XX.XX.2025
DRG CHECK TONY JING XX.XX.2025
DESIGN CHECK ANTHONY CLARKE XX.XX.2025
APPROVED SCOTT HENDERSON XX.XX.2025
IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
FOOTPATH PAVEMENT DETAILS
FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-IWMS-CE-DWG-921041 | 00 | EDMS No.

POINT	CHAINAGE (m)	EASTING (m)	NORTHING (m)	ELEVATION (m)	ELEMENT	LENGTH (m)	BEARING
ALIGNMENT NAME:		CI - 006					
DESCRIPTION:		TYPE SA KERB AND TL3 TYPE F CONCRETE BARRIER SINGLE SIDED					
START	0.000	329227.355	6245819.841	11.954			
					STRAIGHT	4.985	31°33'14.197"
HIP	4.985	329229.963	6245824.088	12.141			229°34'33.822"
CC		320256.625	6244439.759		STRAIGHT	3.584	26°44'20.924"
HIP	8.569	329231.576	6245827.289	12.254			231°35'38.235"
					STRAIGHT	2.998	26°45'47.075"
HIP	11.567	329232.926	6245829.966	12.372			231°35'38.236"
CC		320260.936	6244432.968		STRAIGHT	2.492	26°45'47.075"
HIP	14.058	329234.048	6245832.191	12.466			228°35'35.272"
					STRAIGHT	3.005	27°04'13.185"
HIP	17.063	329235.415	6245834.866	12.590			181°09'50.471"
					STRAIGHT	1.830	27°01'16.979"
HIP	18.893	329236.247	6245836.497	12.667			
					STRAIGHT	1.830	27°01'16.979"
HIP	20.724	329237.078	6245838.127	12.763			
					STRAIGHT	1.345	26°27'05.238"
HIP	22.069	329237.677	6245839.332	12.812			
					STRAIGHT	1.345	26°27'05.238"
HIP	23.414	329238.277	6245840.536	12.853			
					STRAIGHT	3.656	26°24'10.813"
HIP	27.070	329239.902	6245843.810	13.018			
					STRAIGHT	3.656	26°24'10.813"
HIP	30.726	329241.528	6245847.085	13.174			
					STRAIGHT	3.885	26°19'59.709"
HIP	34.610	329243.251	6245850.566	13.342			
					STRAIGHT	4.497	26°26'01.841"
HIP	39.108	329245.253	6245854.593	13.531			
					STRAIGHT	2.997	26°26'01.841"
HIP	42.104	329246.587	6245857.277	13.693			
					STRAIGHT	4.923	26°26'01.841"
HIP	47.027	329248.778	6245861.685	13.930			
					STRAIGHT	4.494	26°18'19.286"
HIP	51.521	329250.770	6245865.714	14.160			
	53.185				STRAIGHT	4.498	26°18'19.286"
HIP	56.019	329252.763	6245869.745	14.392			
					STRAIGHT	2.998	26°18'19.286"
HIP	59.017	329254.092	6245872.433	14.439			
					STRAIGHT	3.405	26°26'56.312"
HIP	62.423	329255.609	6245875.482	14.478			
					STRAIGHT	2.500	26°59'45.127"
HIP	64.922	329256.743	6245877.710	14.487			
					STRAIGHT	2.500	26°59'45.127"
HIP	67.422	329257.878	6245879.937	14.498			
					STRAIGHT	0.652	26°49'07.320"
END	68.074	329258.172	6245880.519	14.502			

TYPE SA KERB

MODIFIED TYPE F BARRIER

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE
00	APPROVED FOR CONSTRUCTION	BS / XX.XX.25	CW / XX.XX.25	SH / XX.XX.25

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE:

NSW GOVERNMENT | sydney METRO

aurecon

AURECON CIVIL

DRAWN MIA DOMINGO XX.XX.2025
DESIGNED BARADA SAMANTARAY XX.XX.2025
DRG CHECK TONY JING XX.XX.2025
DESIGN CHECK ANTHONY CLARKE XX.XX.2025
APPROVED SCOTT HENDERSON XX.XX.2025

WORK IN PROGRESS

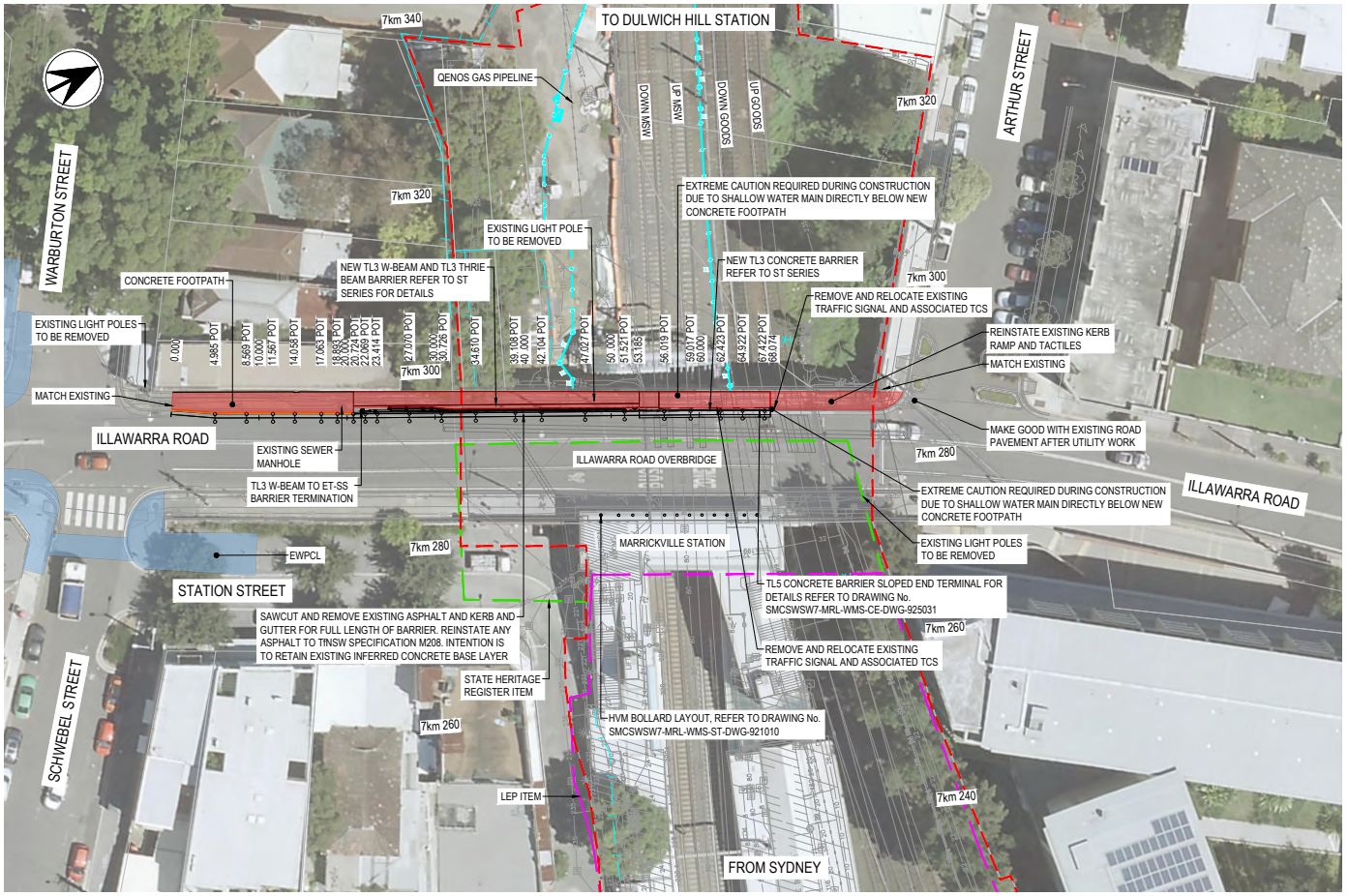
SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
BARRIER SETOUT TABLES

FILE No. | SHEET: 1 OF 1 | A1

STATUS: FOR CONSTRUCTION ©

DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921091 | 00 | EDMS No.

DF 801*554



LEGEND

- PROPERTY BOUNDARY
- NEW CONCRETE FOOTPATH
- EWPCL INTERFACE
- MTM FENCE

NOTE

1. FOR GENERAL NOTES REFER TO DRAWING SMCSWSW7-MRL-WMS-CE-DWG-921011 TO 921019.

LAYOUT PLAN
SCALE 1:250

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

00	APPROVED FOR CONSTRUCTION	BS / XX.XX.25	CW / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	BS / 18.10.24	AB / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	BS / 28.06.24	AB / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE: AS SHOWN

SCALE 1:250

aurecon
AURECON CML

DRAWN	MA DOMINGO	XX.XX.2025
DESIGNED	BARADA SAMANTARAY	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	ANTHONY CLARKE	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

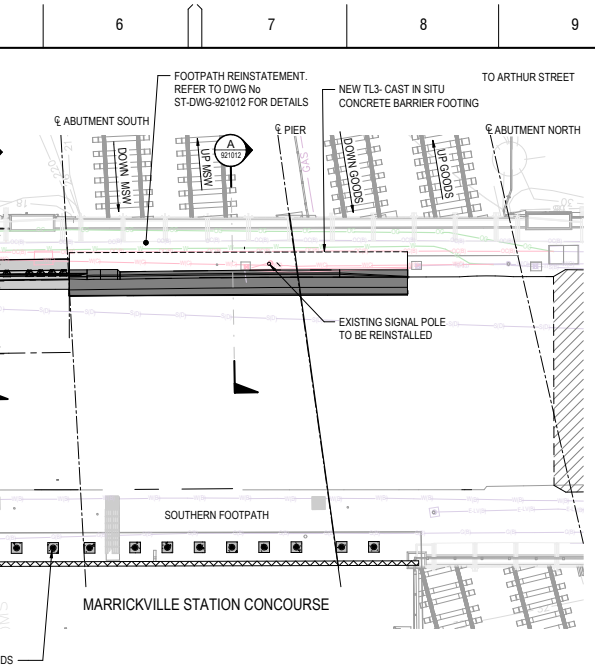
IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL ARRANGEMENT

FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921101 | 00 | EDMS No.

DF 801554

Plotted by Tony Jing | Plot Date & Time 24/01/2025 2:21:57 PM | File Plotted SMCSWSW7-MRL-WMS-CE-DWG-921101.dwg



PLAN
SCALE 1 : 100

NOTES

1. FOR GENERAL NOTES AND SYSTEM WIDE TYPICAL DETAILS REFER TO DWG No's SMCSWSW7-MRL-WEC-CE-DWG-921011 TO SMCSWSW7-MRL-WEC-CE-DWG-921041.
2. FOR LEGEND REFER TO DWG No SMCSWSW7-MRL-WMS-CE-DWG-921005.
3. DIMENSIONS EXTRACTED FROM SURVEY MODEL MAY CONTAIN DISCREPANCIES TO THE AS-BUILT INFORMATION. ALL DIMENSIONS TO BE VERIFIED ON SITE BY THE CONTRACTOR PRIOR TO INSTALLATION.
4. EXISTING REINFORCEMENT SHALL BE SCANNED TO CONFIRM THE ACTUAL POSITION BY THE CONTRACTOR ON SITE PRIOR TO MODIFICATION, FABRICATION AND INSTALLATION.
5. THE NEW SECTION OF FOOTPATH SHALL BE IN ACCORDANCE WITH THE LOCAL COUNCIL'S SPECIFICATION.
6. CONCRETE FOOTPATH IN ACCORDANCE WITH CIVIL DESIGN SPECIFICATION. REFER TO DWG No SMCSWSW7-MRL-WEC-CE-DWG-931031 TO 931041 FOR DETAILS.
7. THE BRIDGE LOAD RATING BASED ON THE AS-IS CONDITION WAS CALCULATED TO BE 0.94<1 FOR A T44 ROAD VEHICLE AS DETERMINED WITHIN THE AGJV LOAD RATING REPORT 2019 (SMCSWSSJ-JHL-WEC-ST-REP-251003). CONSTRUCTION VEHICLES SHALL NOT DECREASE THIS LOAD RATING FURTHER WHILST UNDERTAKING THE PROJECT WORKS.
8. FOR INFORMATION OF UTILITY RELOCATIONS OR UPGRADE WORKS REFER TO DESIGN DWG No SMCSWSW7-MRL-WMS-UT-DWG-921101.
9. THE LOCATION OF ANY EXISTING UTILITIES SHALL BE CONFIRMED ON SITE BEFORE WORKS PROCEED. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES AND STRUCTURES DURING CONSTRUCTION.
10. NOTWITHSTANDING THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHERE TEMPORARY WORKS DESIGN ARE REQUIRED, IT IS NOTED AT THIS SITE THAT TEMPORARY STABILITY AND STRENGTH OF THE EXISTING STRUCTURE IS IMPACTED BY THE PROPOSED DEMOLITION ACTIVITIES.
11. SECTION, CALLOUTS, VIEW AND DETAIL CROSS REFERENCES WITHIN THE STRUCTURAL SET TO REFER TO ST DISCIPLINE DRAWINGS ONLY.

LEGEND

GEOTECHNICAL INVESTIGATION LOCATIONS

NOTE FOR CONSTRUCTION WORKS

W1. THE WORKS ARE IN CLOSE PROXIMITY TO EXISTING SERVICES AND STRUCTURES. THE INFORMATION SHOWN ON THIS DRAWING IS BASED ON INFORMATION PROVIDED BY OTHERS. PRIOR TO COMMENCEMENT OF ANY EXCAVATION WORKS, THE CONTRACTOR IS TO POSITIVELY LOCATE ALL EXISTING SERVICES AND STRUCTURES TO CONFIRM LOCATION IN PLAN AND DEPTH MATCHES THE DESIGN SET-OUT.
W2. WHERE EXCAVATION IS REQUIRED, THE EXCAVATION MUST BE PROTECTED FROM COLLAPSE SO NO DAMAGE TO ADJACENT UTILITIES OR STRUCTURES OCCURS.

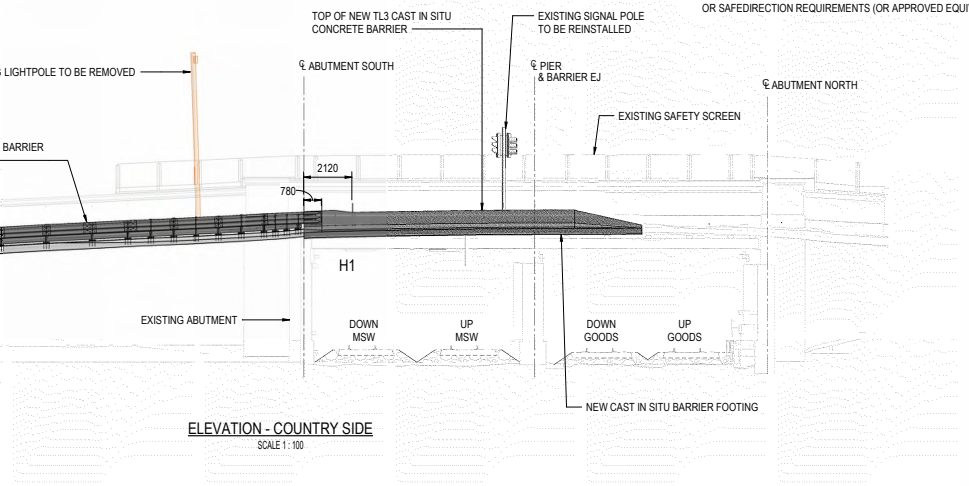
CITY SIDE

A
B
C
D

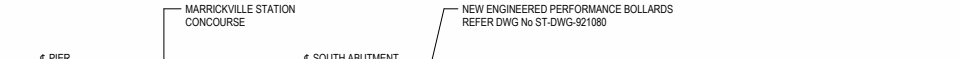
6 7 8 9 10 11 12

NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921010.
2. ET-SS END TERMINAL SHALL BE CONSTRUCTED IN ACCORDANCE TO INGAL REQUIREMENTS (OR APPROVED EQUIVALENT) WITH REFERENCE TO INGAL DRAWING No SS-STD-014, ET-SS TL3 ON BASEPLATE GENERAL ARRANGEMENT.
3. W-BEAM AND THRIE-BEAM SHALL BE CONSTRUCTED IN ACCORDANCE WITH INGAL OR SAFEDIRECTION REQUIREMENTS (OR APPROVED EQUIVALENT).

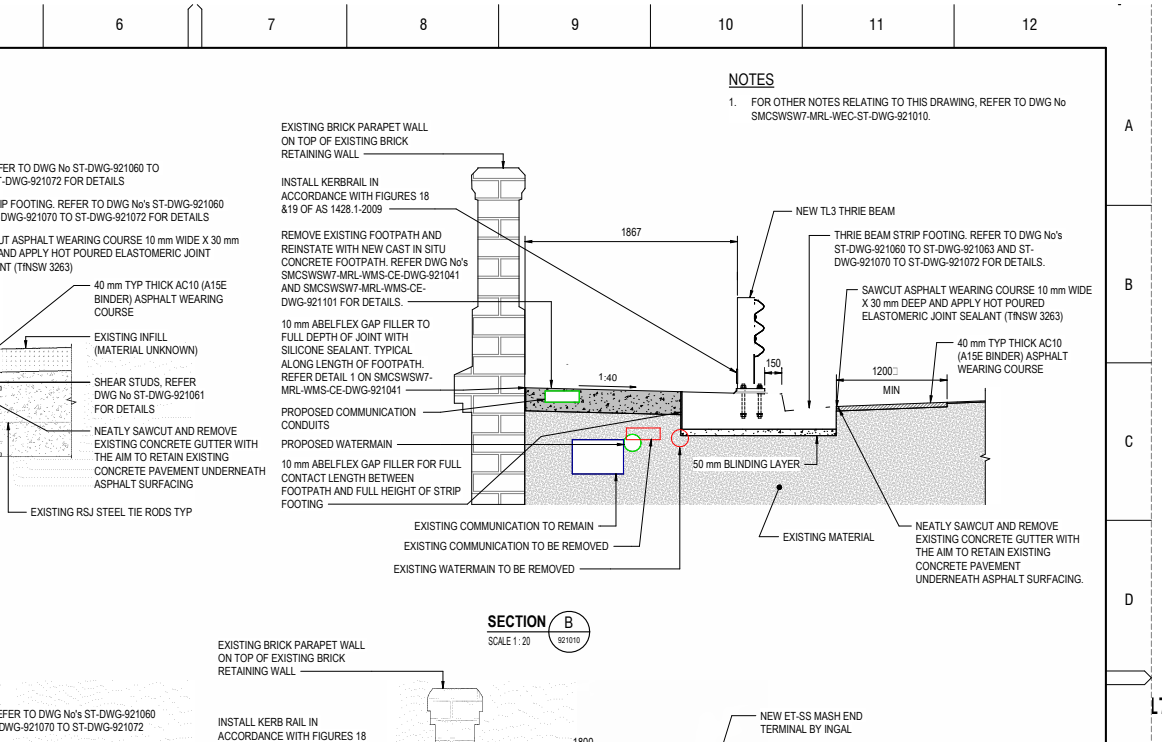


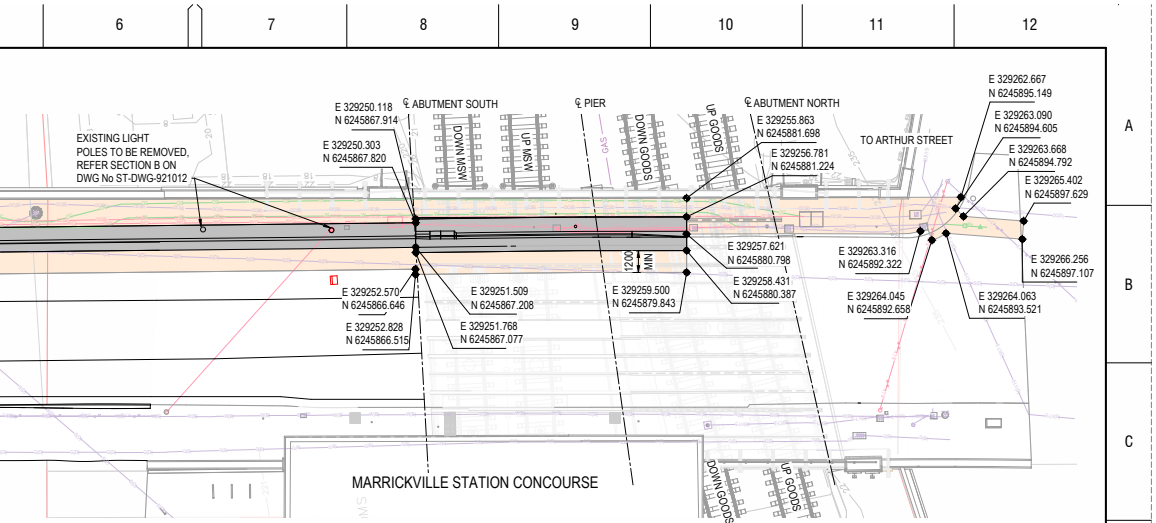
ELEVATION - COUNTRY SIDE
SCALE 1 : 100



A
B
C
D

L6


6
7
8
9
10
11
12
A
B
C
D
NOTES
1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No SMCSWSW7-MRL-WEC-ST-DWG-921010.
EXISTING BRICK PARAPET WALL ON TOP OF EXISTING BRICK RETAINING WALL
INSTALL KERBRAIL IN ACCORDANCE WITH FIGURES 18 &19 OF AS 1428.1-2009
REMOVE EXISTING FOOTPATH AND REINSTATE WITH NEW CAST IN SITU CONCRETE FOOTPATH. REFER DWG No's SMCSWSW7-MRL-WMS-CE-DWG-921041 AND SMCSWSW7-MRL-WMS-CE-DWG-921101 FOR DETAILS.
10 mm ABELFLEX GAP FILLER TO FULL DEPTH OF JOINT WITH SILICONE SEALANT. TYPICAL ALONG LENGTH OF FOOTPATH. REFER DETAIL 1 ON SMCSWSW7-MRL-WMS-CE-DWG-921041
PROPOSED COMMUNICATION CONDUITS
PROPOSED WATERMAIN
10 mm ABELFLEX GAP FILLER FOR FULL CONTACT LENGTH BETWEEN FOOTPATH AND FULL HEIGHT OF STRIP FOOTING
EXISTING COMMUNICATION TO REMAIN
EXISTING COMMUNICATION TO BE REMOVED
EXISTING WATERMAIN TO BE REMOVED
1867
1:40
NEW TL3 THRIE BEAM
THRIE BEAM STRIP FOOTING. REFER TO DWG No's ST-DWG-921060 TO ST-DWG-921063 AND ST-DWG-921070 TO ST-DWG-921072 FOR DETAILS.
SAWCUT ASPHALT WEARING COURSE 10 mm WIDE X 30 mm DEEP AND APPLY HOT POURED ELASTOMERIC JOINT SEALANT (TINSW 3263)
40 mm TYP THICK AC10 (A15E BINDER) ASPHALT WEARING COURSE
150
1200
MIN
50 mm BLINDING LAYER
EXISTING MATERIAL
NEATLY SAWCUT AND REMOVE EXISTING CONCRETE GUTTER WITH THE AIM TO RETAIN EXISTING CONCRETE PAVEMENT UNDERNEATH ASPHALT SURFACING.
FER TO DWG No ST-DWG-921060 TO
-DWG-921072 FOR DETAILS
IP FOOTING. REFER TO DWG No's ST-DWG-921060
DWG-921070 TO ST-DWG-921072 FOR DETAILS
UT ASPHALT WEARING COURSE 10 mm WIDE X 30 mm
AND APPLY HOT POURED ELASTOMERIC JOINT
NT (TINSW 3263)
40 mm TYP THICK AC10 (A15E BINDER) ASPHALT WEARING COURSE
EXISTING INFILL (MATERIAL UNKNOWN)
SHEAR STUDS, REFER DWG No ST-DWG-921061 FOR DETAILS
NEATLY SAWCUT AND REMOVE EXISTING CONCRETE GUTTER WITH THE AIM TO RETAIN EXISTING CONCRETE PAVEMENT UNDERNEATH ASPHALT SURFACING
EXISTING RSJ STEEL TIE RODS TYP
SECTION B
SCALE 1 : 20
921010
EXISTING BRICK PARAPET WALL ON TOP OF EXISTING BRICK RETAINING WALL
INSTALL KERB RAIL IN ACCORDANCE WITH FIGURES 18
FER TO DWG No's ST-DWG-921060
DWG-921070 TO ST-DWG-921072
NEW ET-SS MASH END TERMINAL BY INGAL
1800



N WORK

NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921010.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY WORKS SUPPORTS AND DESIGN AS REQUIRED FOR THE BRIDGE OR UTILITIES DURING DEMOLITION WORKS. REFER TO SMCSWSWZ-MRI-WEC-CE-DWG-921011 FOR MORE TEMPORARY WORKS NOTES.

EXISTING LIGHTPOLE REMOVED

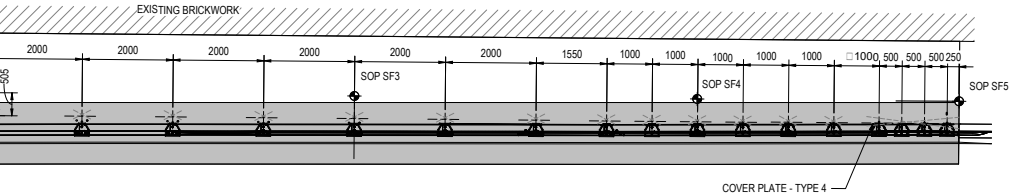
6 7 8 9 10 11 12

A B C D

TABLE 1 - FOOTPATH SOP SCHEDULE			
MARK	EASTING (m)	NORTHING (m)	ELEVATION (m)
SF1	329235.589	6245838.876	13.002
SF2	329239.603	6245846.783	13.421
SF3	329244.266	6245855.976	13.904
SF4	329247.674	6245862.697	14.266
SF5	329250.279	6245867.832	14.550

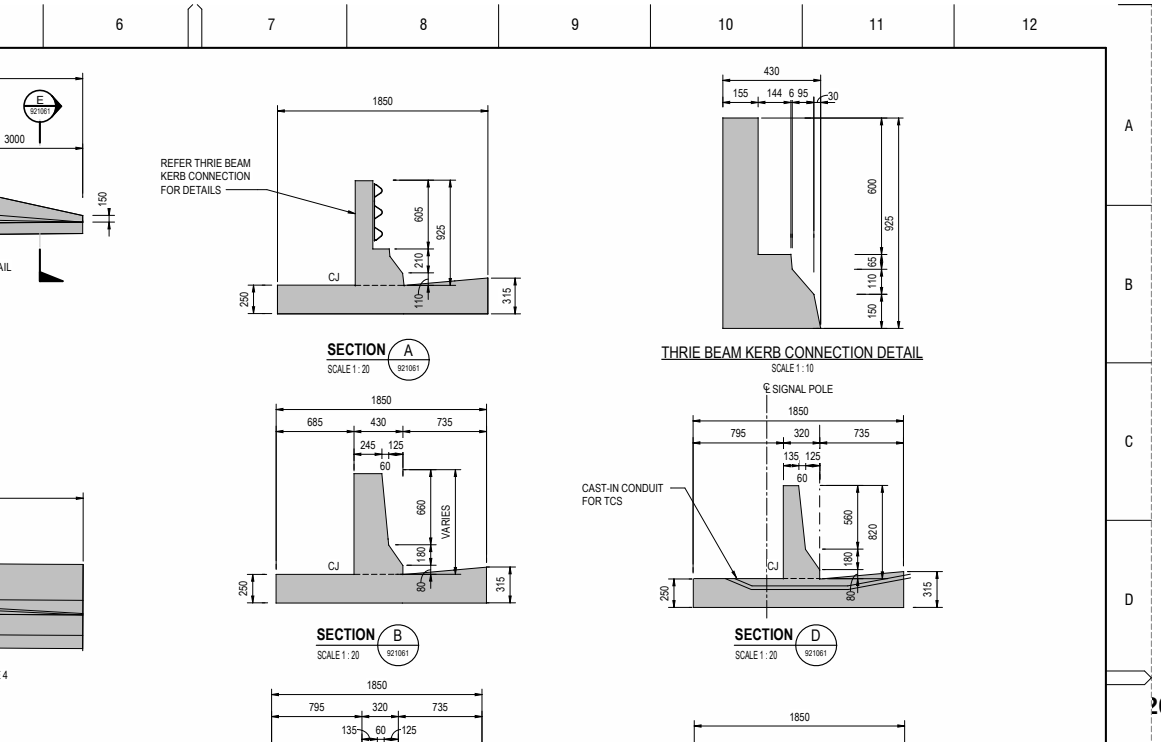
NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921010.
2. CONCRETE EXPOSURE CLASSIFICATION: B1 TO AS 5100
3. MINIMUM COMPRESSIVE STRENGTH OF ALL CONCRETE: 40 MPa
4. EDGES SHALL BE CHAMFERED 20 x 20 AND RE-ENTRANT ANGLES FILLETED 20 x 20 UNLESS OTHERWISE SPECIFIED.
5. CONCRETE WORKS TO COMPLY WITH TfNSW SPECIFICATION QA B80.
6. HOLD DOWN ANCHORS SHOWN INDICIATIVELY ONLY. ET-SS END TERMINAL HOLD DOWN ANCHORS SHALL BE CONSTRUCTED IN ACCORDANCE TO INGAL REQUIREMENTS (OR APPROVED EQUIVALENT) WITH REFERENCE TO INGAL DRAWING No SS-STD-014, ET-SS TL3 ON BASEPLATE GENERAL ARRANGEMENT.
7. HOLD DOWN ANCHORS SHOWN INDICIATIVELY ONLY. TYPICAL HOLD DOWN ANCHORS SHALL BE CONSTRUCTED IN ACCORDANCE WITH INGAL OR SAFEDIRECTION REQUIREMENTS (OR APPROVED EQUIVALENT) WITH REFERENCE TO INGAL DRAWING No's EZY-HC-009 AND EZY-SM-102 OR SAFEDIRECTION DRAWING No's SD-RB-01009 AND SD-RB-02017.
8. ASSUMED SOIL CONDITIONS: φ = 33 DEG, γ = 18 kN/m3 AND BETTER THAN MINIMUM MANUFACTURERS REQUIREMENTS TO INGAL DRAWING No EZY-HC-009. THE ACTUAL GROUND CONDITIONS SHALL BE CONFIRMED ONSITE BY SQGE DURING CONSTRUCTION.



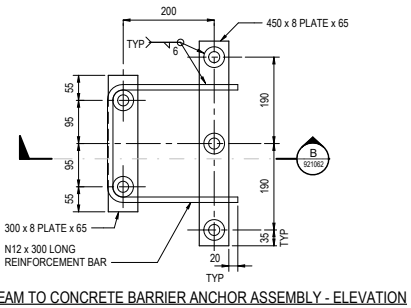
THRIE BEAM AND W-BEAM STRIP FOOTING - PLAN

SCALE 1 : 50


6
7
8
9
10
11
12
A
B
C
D
E
921061
3000
150
1850
REFER THRIE BEAM
KERB CONNECTION
FOR DETAILS
605
925
210
CJ
250
110
315
SECTION A
SCALE 1 : 20
921061
430
155
144
6
95
30
600
925
65
110
150
THRIE BEAM KERB CONNECTION DETAIL
SCALE 1 : 10
1850
685
430
735
245
125
60
660
VARIES
180
CJ
250
80
315
SECTION B
SCALE 1 : 20
921061
℄ SIGNAL POLE
1850
795
320
735
135
125
60
CAST-IN CONDUIT
FOR TCS
560
820
180
CJ
250
80
315
SECTION D
SCALE 1 : 20
921061
1850
795
320
735
135
60
125
1850

6 7 8 9 10 11 12

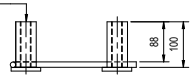
A B C D



EAM TO CONCRETE BARRIER ANCHOR ASSEMBLY - ELEVATION

SCALE 1 : 5

EEL BAR GRADE 250R TO
Ø24 HOLE TAPPED TO
OLT - TYP



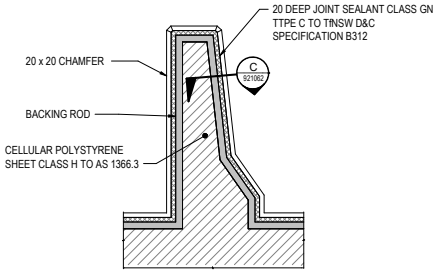
SECTION B

SCALE 1 : 5

921062

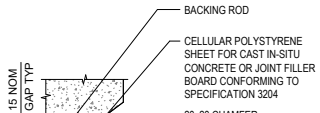
NOTES

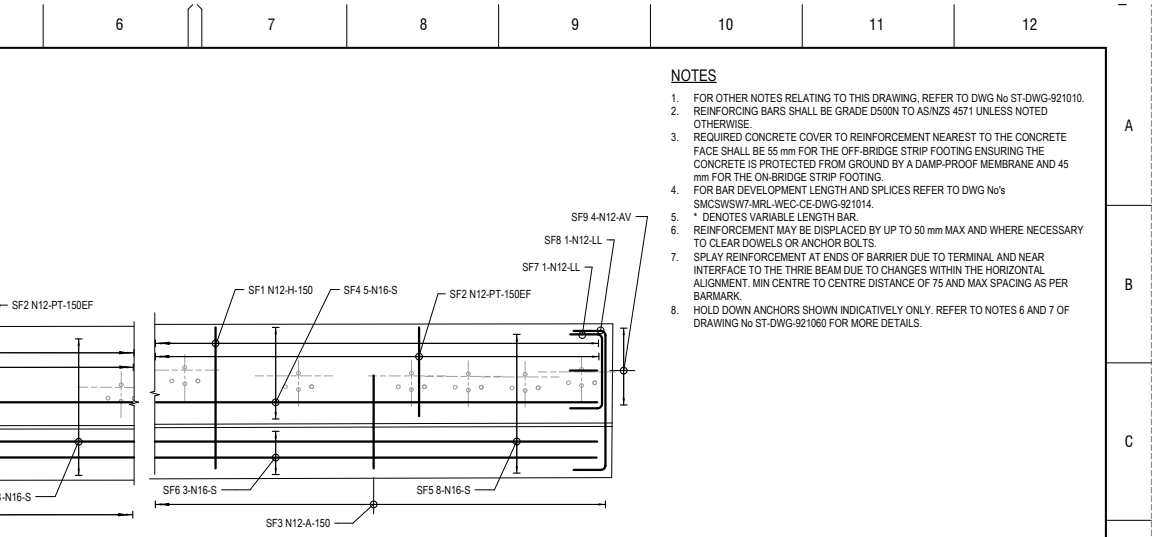
1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No SMCSWSW7-MRL-WEC-ST-DWG-921010.
2. LOW VOLTAGE EQUIPMENT SIGNAL LIGHTING POST SHALL BE DOUBLE INSULATED CLASS II AND THE ASSOCIATED CONDUIT SHALL BE NON-CONDUCTIVE MATERIAL (PVC).
3. REFER TO TINSW TRAFFIC BARRIERS THRIE BEAM CAST-IN ANCHOR STANDARD DWG No B0509 FOR MORE DETAILS AND GENERAL NOTES..



BARRIER JOINT DETAIL

SCALE 1 : 10





NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921010.
2. REINFORCING BARS SHALL BE GRADE D500N TO AS/NZS 4571 UNLESS NOTED OTHERWISE.
3. REQUIRED CONCRETE COVER TO REINFORCEMENT NEAREST TO THE CONCRETE FACE SHALL BE 55 mm FOR THE OFF-BRIDGE STRIP FOOTING ENSURING THE CONCRETE IS PROTECTED FROM GROUND BY A DAMP-PROOF MEMBRANE AND 45 mm FOR THE ON-BRIDGE STRIP FOOTING.
4. FOR BAR DEVELOPMENT LENGTH AND SPLICES REFER TO DWG No's SMCSWSW7-MRL-WEC-CE-DWG-921014.
5. * DENOTES VARIABLE LENGTH BAR.
6. REINFORCEMENT MAY BE DISPLACED BY UP TO 50 mm MAX AND WHERE NECESSARY TO CLEAR DOWELS OR ANCHOR BOLTS.
7. SPLAY REINFORCEMENT AT ENDS OF BARRIER DUE TO TERMINAL AND NEAR INTERFACE TO THE THRIE BEAM DUE TO CHANGES WITHIN THE HORIZONTAL ALIGNMENT. MIN CENTRE TO CENTRE DISTANCE OF 75 AND MAX SPACING AS PER BARMARK.
8. HOLD DOWN ANCHORS SHOWN INDICATIVELY ONLY. REFER TO NOTES 6 AND 7 OF DRAWING No ST-DWG-921060 FOR MORE DETAILS.

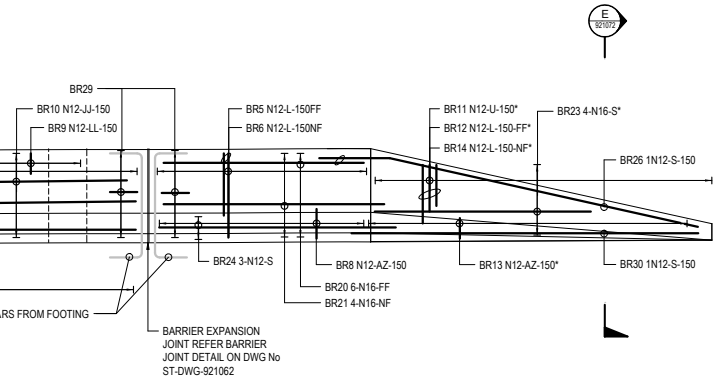
FORCEMENT PLAN

6 7 8 9 10 11 12

A B C D

NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921070.



TL3- CAST IN SITU CONCRETE BARRIER - ELEVATION

SCALE 1 : 20

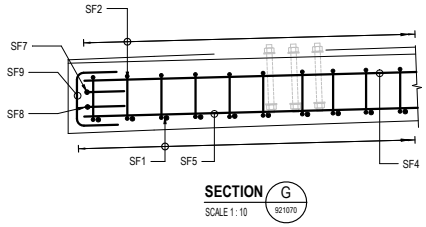
E
921072

6 7 8 9 10 11 12

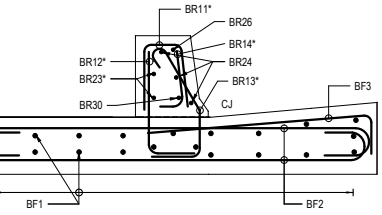
A B C D

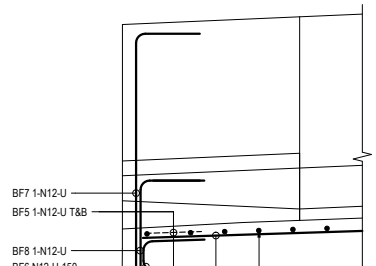
NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921070.



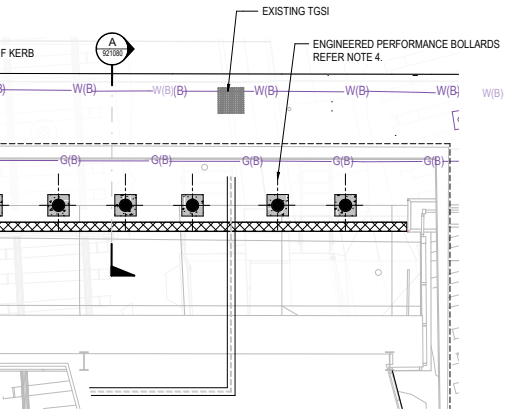
SECTION G
SCALE 1 : 10
921070





6 7 8 9 10 11 12

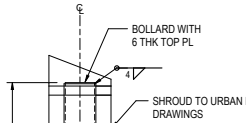
A B C D

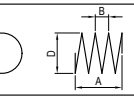
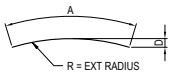
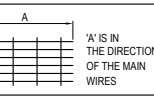
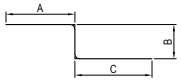
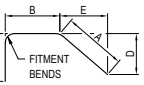
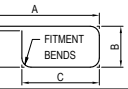
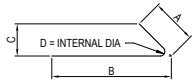
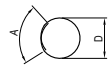
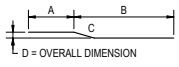
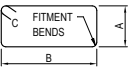


OLLARDS

NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921010.
2. DIMENSION ESTIMATED BASED ON EXISTING DATA. TO BE CONFIRMED ON SITE. SITE CREW SHALL INFORM DESIGN ENGINEER IF THIS DIMENSION VARIES BY MORE THAN -50 mm.
3. EXISTING CONCRETE PATH ASSUMED TO BE >=20 MPa CONCRETE REINFORCED WITH CRACK CONTROL REINFORCEMENT ONLY (E.G. SL82). CONCRETE STRENGTH, DEPTH OF CONCRETE AND REINFORCEMENT PRESENCE SHALL BE VALIDATED ON SITE VIA TWO CONCRETE CORE SAMPLE CYLINDER TESTS.
4. REFER TO URBAN DESIGN DWG No's SMCSWSW7-MRL-WMS-UD-DWG-921001 TO SMCSWSW7-MRL-WMS-UD-DWG-921080 FOR LAYOUT AND FINISH OF BOLLARDS.
5. LOCATION OF ALL EXISTING SERVICES AND EJ ARE SHOWN INDICATIVELY ONLY AS NO SURVEY DATA IS AVAILABLE.
6. THE MAXIMUM AMOUNT OF CONCRETE THAT SHALL BE BROKEN BACK FOR PLACEMENT OF ANY BOLLARD SHALL BE 100 mm (DEEP MEASURED AT THE CENTRE LINE OF THE BOLLARD) x 500 mm x 500 mm.
7. ALL HOLES IN THE FOOTPATH SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE POST-INTALLED CHEMICAL ANCHOR MANUFACTURER'S SPECIFICATION. ALL HOLES MUST BE DRILLED AND NOT CORED. REINFORCEMENT MUST NOT BE CUT DURING DRILLING.
8. DRILLING OF HOLES FOR THE CHEMICAL ANCHORS SHALL BE BASED ON THE DIAMETER RECOMMENDED BY THE ANCHOR MANUFACTURER.
9. SCANNING IS REQUIRED TO LOCATE THE POSITION AND DEPTH OF THE REINFORCEMENT PRIOR TO POST INSTALLATION OF THE ANCHORS.
10. TRIAL INSTALLATIONS ARE REQUIRED AT EACH BOLLARD PRIOR TO INSTALLATION OF POST-INSTALLED ANCHORS. THE TRIAL INSTALLATION SHALL CONSIST OF A MINIMUM OF FOUR POST-INSTALLED ANCHORS WITH REQUIRED SPACING AND EMBEDMENT DEPTH AS SHOWN ON THIS DRAWING. PULL-OUT TEST SHALL BE CARRIED OUT FOR ALL TRIAL INSTALLED ANCHORS TO A PROOF LOAD OF 30 kN. ONCE PULL-OUT TEST RESULTS MEET THE SPECIFIED PROOF LOAD, THE CONTRACTOR SHALL PROCEED WITH POST-INSTALLATION OF ALL ANCHORS. NOTIFY THE DESIGNER IMMEDIATELY OTHERWISE.
11. THE BOLLARDS HAVE BEEN DESIGNED FOR AN ULTIMATE 30 kN LATERAL LOAD APPLIED AT AN EFFECTIVE HEIGHT OF 700 mm.



STRALIAN STANDARD SHAPE	SHAPE CODE	AUSTRALIAN STANDARD SHAPE
	R	
	RC	
	T	
	A	
	CC	
		

BAR MARKING LEGEND

THE METHOD USED TO LABEL REINFORCEMENT ON THE DRAWINGS IS AS FOLLOWS:

A1 10-N16-S-300EF

- INFORMATION FOR PLACING
- SPACING ALONG LIMIT LINE
- BAR SHAPE CODE
- BAR SIZE IN MILLIMETERS
- BAR STRUCTURAL PROPERTIES
- NUMBER OF BARS IN THE SET
- BAR NUMBER IN SEQUENCE
- STRUCTURE ELEMENT DENOTATION

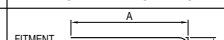
WHERE THE BAR SPACING IS APPROXIMATE ONLY, THE FOLLOWING FORMAT SHALL BE USED:
A1 10-N16-S-300EF APPROX

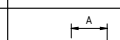
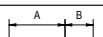
STRUCTURE ELEMENT DENOTATIONS COMMONLY USED ARE:
SF FOR THRIE BEAM STRIP FOOTING
BF FOR CAST IN SITU CONCRETE BARRIER FOOTING
BR FOR CAST IN SITU CONCRETE BARRIER

INFORMATION FOR PLACING:
NF FOR NEAR FACE
FF FOR FAR FACE
EF FOR EACH FACE
* FOR VARIABLE LENGTH BAR
NSOP FOR NOT SHOWN ON PLAN FOR CLARITY

REINFORCEMENT NOTES

AUSTRALIAN STANDARD BAR SHAPES ARE IN ACCORDANCE WITH AS 1100.501.
BAR SIZE IS THE NOMINAL DIAMETER IN MILLIMETERS, OR THE AS/NZS 4671 FABRIC NUMBER.
THE GRADE OF REINFORCEMENT, IF NOT STATED ON THE DRAWINGS, SHALL BE D500N TO AS/NZS 4671.
DIMENSIONS SHOWN ON BAR SHAPES DIAGRAMS ARE MEASURED FROM OUTSIDE FACES OF THE BARS AND ARE IN MILLIMETERS.
THE INCLUDED ANGLE OF ANY BEND SHALL BE RIGHT ANGLE IF NO DIMENSION SHOWN.
BARS OF DIAMETER GREATER THAN 24mm SHALL NOT BE REBENT.
BAR BENDING AND HOOK DETAILS SHALL BE IN ACCORDANCE WITH SECTION 5.13 OF AS 5100-BRIDGE DESIGN.

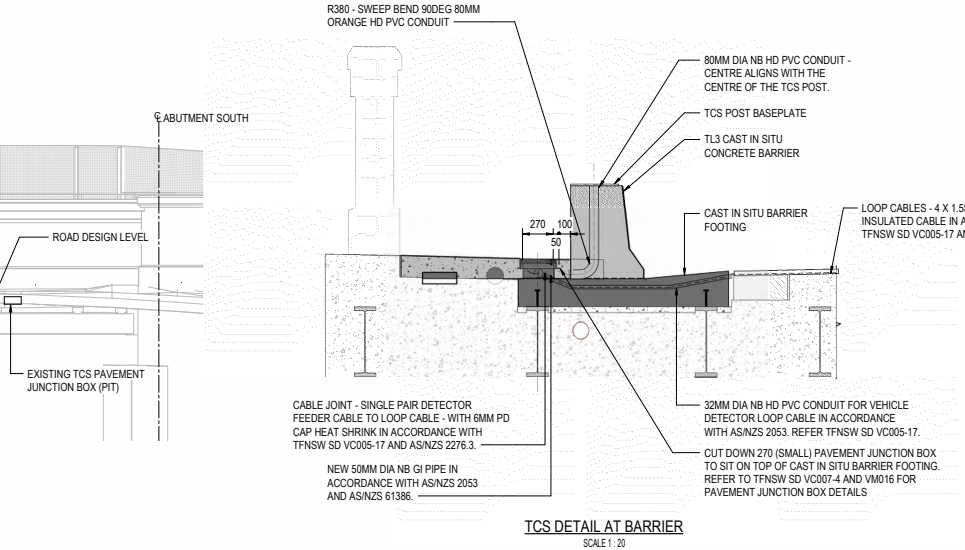
AND MARITIME SERVICES STANDARD SHAPES	SHAPE CODE	ROADS AND MARITIME SERVICES STANDARD SHAPES
		

SHAPE CODE	NON STANDARD SHAPE	SHAPE CODE	NON STANDARD SHAPE
			

6 7 8 9 10 11 12

NOTES

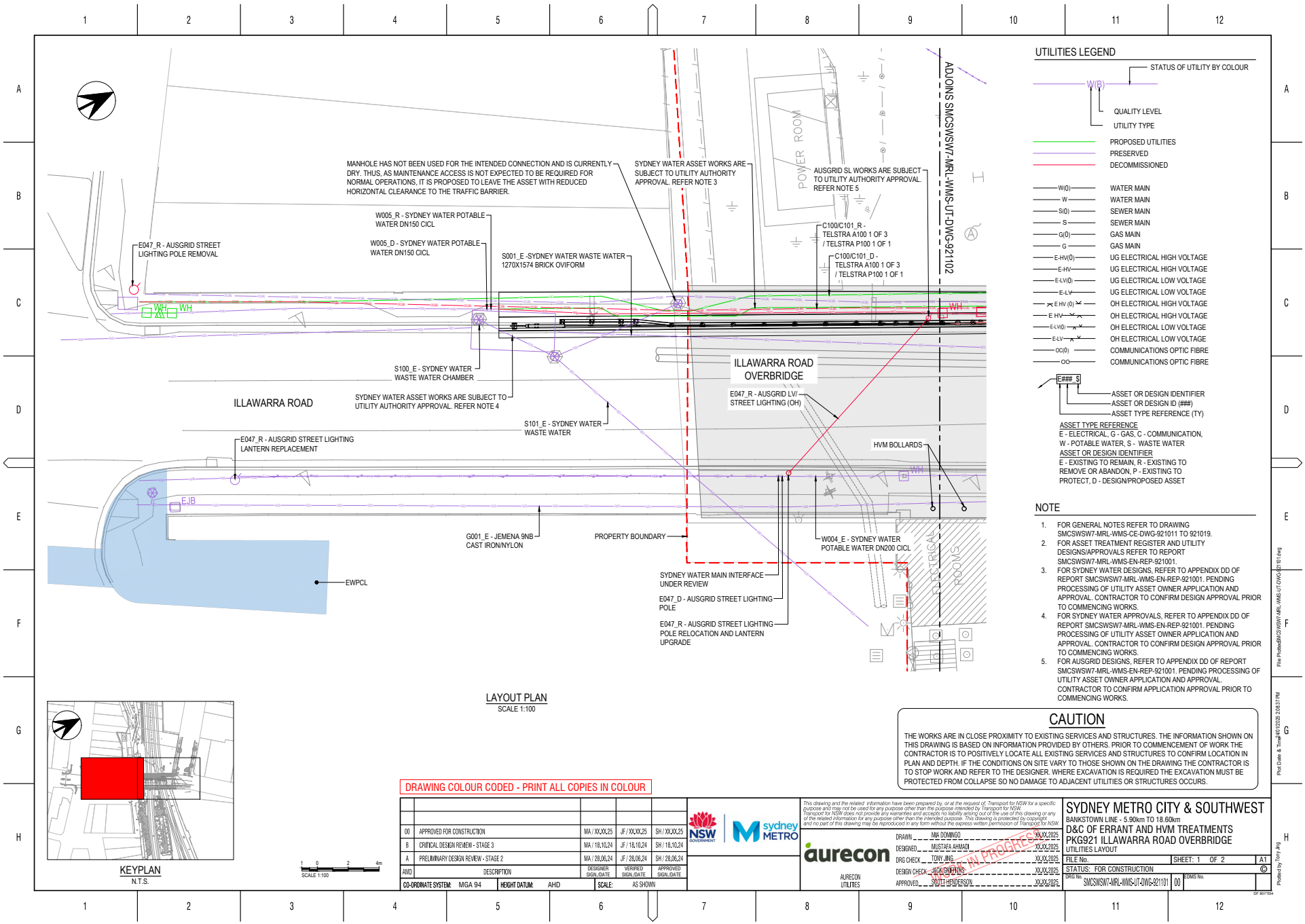
1. FOR GENERAL NOTES AND SYSTEM WIDE TYPICAL DETAILS TO DWG No'S SMCSWSW7-MRL-WEC-CE-DWG-921011 TO SMCSWSW7-MRL-WEC-CE-DWG-921041



TCS DETAIL AT BARRIER

SCALE 1 : 20

A B C D



LAYOUT PLAN
SCALE 1:100

UTILITIES LEGEND

STATUS OF UTILITY BY COLOUR
W(B)
QUALITY LEVEL
UTILITY TYPE

- PROPOSED UTILITIES
- PRESERVED
- DECOMMISSIONED

W(0)	WATER MAIN
W	WATER MAIN
SI(0)	SEWER MAIN
S	SEWER MAIN
G(0)	GAS MAIN
G	GAS MAIN
E-HV(0)	UG ELECTRICAL HIGH VOLTAGE
E-HV	UG ELECTRICAL HIGH VOLTAGE
E-LV(0)	UG ELECTRICAL LOW VOLTAGE
E-LV	UG ELECTRICAL LOW VOLTAGE
E HV (0)	OH ELECTRICAL HIGH VOLTAGE
E HV	OH ELECTRICAL HIGH VOLTAGE
E-LV(0)	OH ELECTRICAL LOW VOLTAGE
E-LV	OH ELECTRICAL LOW VOLTAGE
OC(0)	COMMUNICATIONS OPTIC FIBRE
OC	COMMUNICATIONS OPTIC FIBRE

E### S
- ASSET OR DESIGN IDENTIFIER
- ASSET OR DESIGN ID (###)
- ASSET TYPE REFERENCE (TY)

ASSET TYPE REFERENCE
E - ELECTRICAL, G - GAS, C - COMMUNICATION, W - POTABLE WATER, S - WASTE WATER
ASSET OR DESIGN IDENTIFIER
E - EXISTING TO REMAIN, R - EXISTING TO REMOVE OR ABANDON, P - EXISTING TO PROTECT, D - DESIGN/PROPOSED ASSET

NOTE

1. FOR GENERAL NOTES REFER TO DRAWING SMCSWSW7-MRL-WMS-CE-DWG-921011 TO 921019.
2. FOR ASSET TREATMENT REGISTER AND UTILITY DESIGNS/APPROVALS REFER TO REPORT SMCSWSW7-MRL-WMS-EN-REP-921001.
3. FOR SYDNEY WATER DESIGNS, REFER TO APPENDIX DD OF REPORT SMCSWSW7-MRL-WMS-EN-REP-921001. PENDING PROCESSING OF UTILITY ASSET OWNER APPLICATION AND APPROVAL. CONTRACTOR TO CONFIRM DESIGN APPROVAL PRIOR TO COMMENCING WORKS.
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CAUTION

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KEYPLAN
N.T.S.

SCALE 1:100

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

00	APPROVED FOR CONSTRUCTION	MA / XX.XX.25	JF / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	MA / 18.10.24	JF / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	MA / 28.06.24	JF / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE: AS SHOWN

aurecon
AURECON UTILITIES

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	MUSTAFA AHMADI	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	JACK ROBERTS	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
UTILITIES LAYOUT

FILE No.	SHEET: 1 OF 2	A1
STATUS: FOR CONSTRUCTION		©
DRG No. SMCSWSW7-MRL-WMS-UT-DWG-921101	00	EDMS No.

DF 801554

Plotted by: Tony Jing
Plot Date & Time: 24/01/2025 3:08:17 PM
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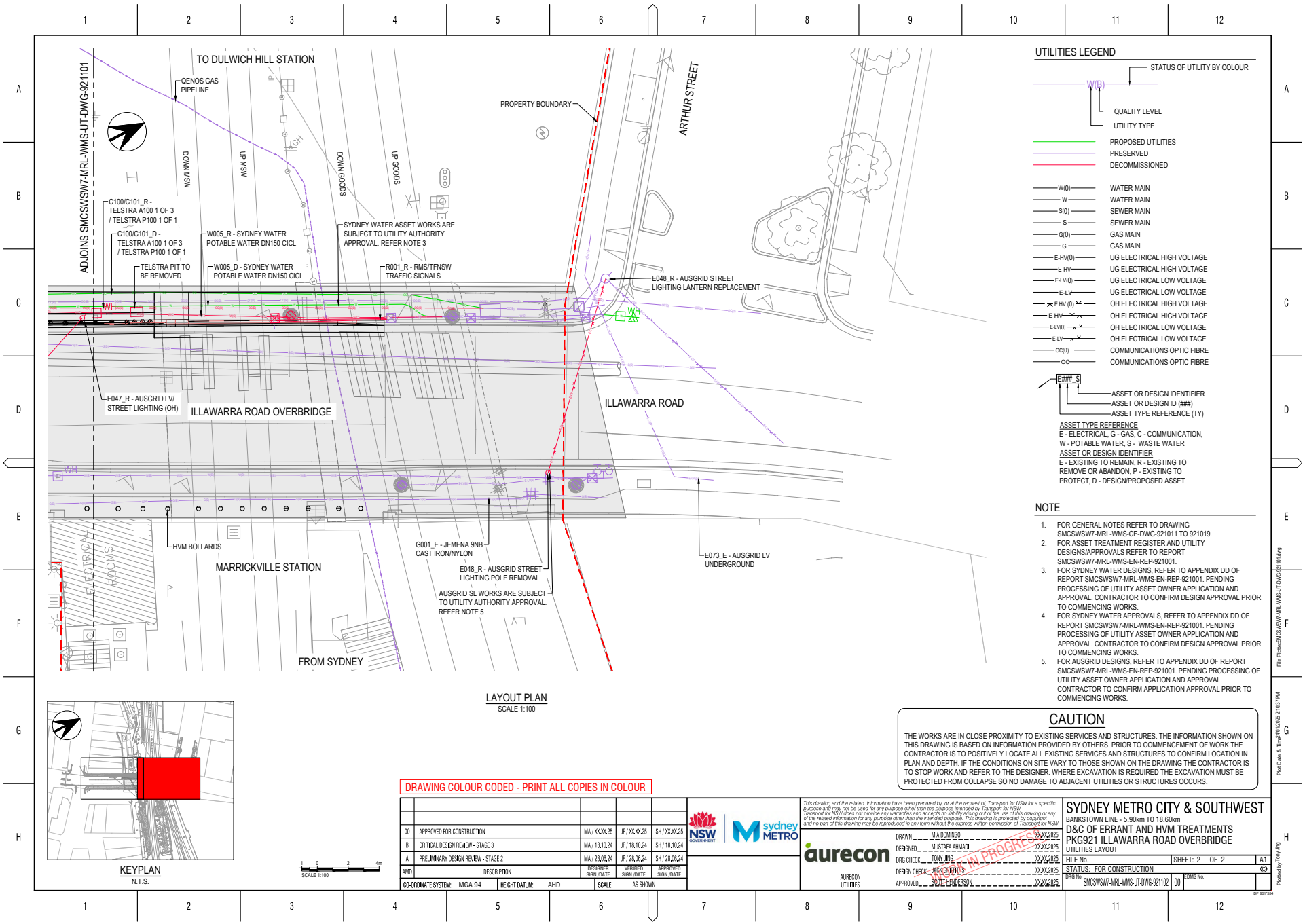

LAYOUT PLAN
SCALE 1:100

KEYPLAN
N.T.S.

SCALE 1:100

UTILITIES LEGEND

STATUS OF UTILITY BY COLOUR
W(B)
QUALITY LEVEL
UTILITY TYPE

PROPOSED UTILITIES
PRESERVED
DECOMMISSIONED

W(0)	WATER MAIN
W	WATER MAIN
SI(0)	SEWER MAIN
S	SEWER MAIN
G(0)	GAS MAIN
G	GAS MAIN
E-HV(0)	UG ELECTRICAL HIGH VOLTAGE
E-HV	UG ELECTRICAL HIGH VOLTAGE
E-LV(0)	UG ELECTRICAL LOW VOLTAGE
E-LV	UG ELECTRICAL LOW VOLTAGE
E HV (0)	OH ELECTRICAL HIGH VOLTAGE
E HV	OH ELECTRICAL HIGH VOLTAGE
E-LV(0)	OH ELECTRICAL LOW VOLTAGE
E-LV	OH ELECTRICAL LOW VOLTAGE
OC(0)	COMMUNICATIONS OPTIC FIBRE
OC	COMMUNICATIONS OPTIC FIBRE

E### _S
ASSET OR DESIGN IDENTIFIER
ASSET OR DESIGN ID (###)
ASSET TYPE REFERENCE (TY)

ASSET TYPE REFERENCE
E - ELECTRICAL, G - GAS, C - COMMUNICATION, W - POTABLE WATER, S - WASTE WATER
ASSET OR DESIGN IDENTIFIER
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NOTE

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3. FOR SYDNEY WATER DESIGNS, REFER TO APPENDIX DD OF REPORT SMCSWSW7-MRL-WMS-EN-REP-921001. PENDING PROCESSING OF UTILITY ASSET OWNER APPLICATION AND APPROVAL. CONTRACTOR TO CONFIRM DESIGN APPROVAL PRIOR TO COMMENCING WORKS.
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5. FOR AUSGRID DESIGNS, REFER TO APPENDIX DD OF REPORT SMCSWSW7-MRL-WMS-EN-REP-921001. PENDING PROCESSING OF UTILITY ASSET OWNER APPLICATION AND APPROVAL. CONTRACTOR TO CONFIRM APPLICATION APPROVAL PRIOR TO COMMENCING WORKS.

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DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

00	APPROVED FOR CONSTRUCTION	MA / XX.XX.25	JF / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	MA / 18.10.24	JF / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	MA / 28.06.24	JF / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIER SIGN./DATE	APPROVER SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE: AS SHOWN

NSW GOVERNMENT | sydney METRO

aurecon
AURECON UTILITIES

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	MUSTAFA AHMADI	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	NICK ROBERTS	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
UTILITIES LAYOUT

FILE No. | SHEET: 2 OF 2 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-UT-DWG-921102 | 00 | EDMS No.

DF 801554

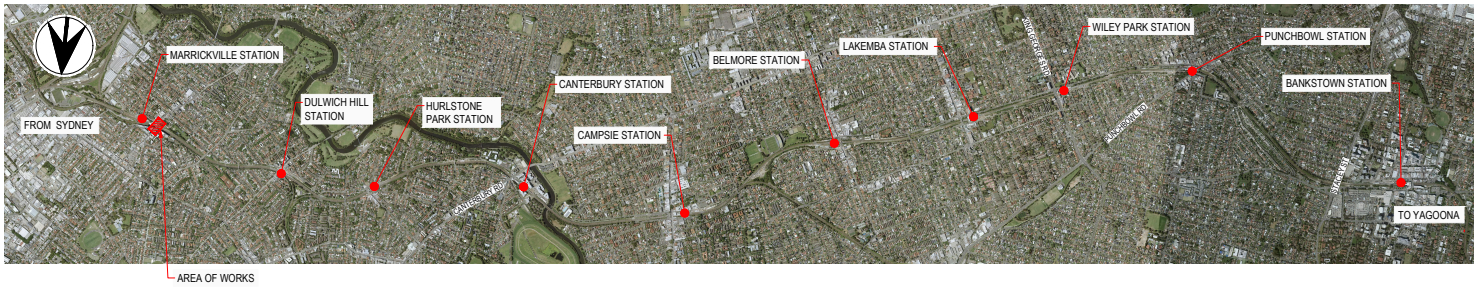
Plotted by: Tony Jing | Plot Date & Time: 24/1/2025 2:10:17 PM | File Plotted: R:\SWSW7-MRL-WMS-UT-DWG-921101.dwg

NSW GOVERNMENT | sydney METRO

SYDNEY METRO CITY & SOUTHWEST

ERRANT AND HOSTILE VEHICLE MITIGATION TREATMENTS

PKG921 ILLAWARRA ROAD OVERBRIDGE



LOCALITY PLAN
N.T.S.

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

00	APPROVED FOR CONSTRUCTION	ESI / XX.XX.25	BK / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	ESI / 18.10.24	BK / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	JK / 28.06.24	BK / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE: N.T.S.

aurecon
AURECON CML

DRAWN	PHAT NGUYEN	XX.XX.2025
DESIGNED	ELNER SAPO II	XX.XX.2025
DRG CHECK	LUKE EASTMAN	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
COVER SHEET

FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921001 | 00 | EDMS No.

DF 801554

File Plotted:R:\SCSWSW7-MRL-WMS-CE-DWG-921001.dwg
Plot Date & Time:24/01/2025 2:19:37 PM
Plotted by: Tony Ang

ERRANT AND HOSTILE VEHICLE MITIGATION TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
DRAWING INDEX

DRAWING NUMBER	DRAWING TITLE
GENERAL	
SMCSWSW7-MRL-WMS-CE-DWG-921001	COVER SHEET
SMCSWSW7-MRL-WMS-CE-DWG-921002	DRAWING INDEX
SMCSWSW7-MRL-WMS-CE-DWG-921005	LEGEND
SMCSWSW7-MRL-WMS-CE-DWG-921011	GENERAL NOTES - SHEET 1 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921012	GENERAL NOTES - SHEET 2 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921013	GENERAL NOTES - SHEET 3 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921014	GENERAL NOTES - SHEET 4 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921015	GENERAL NOTES - SHEET 5 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921016	GENERAL NOTES - SHEET 6 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921017	GENERAL NOTES - SHEET 7 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921018	GENERAL NOTES - SHEET 8 OF 9
SMCSWSW7-MRL-WMS-CE-DWG-921019	GENERAL NOTES - SHEET 9 OF 9
CIVIL	
SMCSWSW7-MRL-WMS-CE-DWG-921031	TYPICAL DETAILS
SMCSWSW7-MRL-WMS-CE-DWG-921041	FOOTPATH PAVEMENT DETAILS
SMCSWSW7-MRL-WMS-CE-DWG-921091	BARRIER SETOUT TABLES
SMCSWSW7-MRL-WMS-CE-DWG-921101	GENERAL ARRANGEMENT
STRUCTURAL	
SMCSWSW7-MRL-WMS-ST-DWG-921010	GENERAL ARRANGEMENT - SHEET 1
SMCSWSW7-MRL-WMS-ST-DWG-921011	GENERAL ARRANGEMENT - SHEET 2
SMCSWSW7-MRL-WMS-ST-DWG-921012	GENERAL ARRANGEMENT - SHEET 3
~~SMCSWSW7-MRL-WMS-ST-DWG-921025~~	~~BOLLARD FOUNDATION DETAILS~~
SMCSWSW7-MRL-WMS-ST-DWG-921030	DEMOLITION WORK PLAN
SMCSWSW7-MRL-WMS-ST-DWG-921060	STRIP FOOTING AND TRAFFIC BARRIER DETAILS - SHEET 1
SMCSWSW7-MRL-WMS-ST-DWG-921061	STRIP FOOTING AND TRAFFIC BARRIER DETAILS - SHEET 2
SMCSWSW7-MRL-WMS-ST-DWG-921062	STRIP FOOTING AND TRAFFIC BARRIER DETAILS - SHEET 3
~~SMCSWSW7-MRL-WMS-ST-DWG-921063~~	~~TRAFFIC BARRIER DETAILS - SHEET 3~~
SMCSWSW7-MRL-WMS-ST-DWG-921070	STRIP FOOTING AND TRAFFIC BARRIER REINFORCEMENT - SHEET 1
SMCSWSW7-MRL-WMS-ST-DWG-921071	STRIP FOOTING AND TRAFFIC BARRIER REINFORCEMENT - SHEET 2
SMCSWSW7-MRL-WMS-ST-DWG-921072	STRIP FOOTING AND TRAFFIC BARRIER REINFORCEMENT - SHEET 3
SMCSWSW7-MRL-WMS-ST-DWG-921073	STEEL BARRIER DETAILS
SMCSWSW7-MRL-WMS-ST-DWG-921080	BOLLARD FOUNDATION DETAILS
SMCSWSW7-MRL-WMS-ST-DWG-921150	BAR SHAPES DIAGRAM

DRAWING NUMBER	DRAWING TITLE
TRAFFIC CONTROL SIGNALS	
SMCSWSW7-MRL-WMS-TT-DWG-921160	TCS DETAILS
UTILITIES	
SMCSWSW7-MRL-WMS-UT-DWG-921101	UTILITIES LAYOUT - SHEET 1 OF 2
SMCSWSW7-MRL-WMS-UT-DWG-921102	UTILITIES LAYOUT - SHEET 2 OF 2

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00	APPROVED FOR CONSTRUCTION	ESI / XX.XX.25	BK / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	ESI / 18.10.24	BK / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	JK / 28.06.24	BK / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE:

NSW GOVERNMENT | sydney METRO

aurecon
AURECON CML

DRAWN	MA DOMINGO	XX.XX.2025
DESIGNED	ELNER SAPOI II	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
DRAWING INDEX

FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION | ©
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921002 | 00 | EDMS No.

DF 801554

File Protocol:\\SYDWP7-MRL-WMS-CE-DWG-921002.dwg
Plot Date & Time: 24/01/2025 3:19:51 PM
Plotted by: Tony Jing

GENERAL LEGEND

- NON-BRIDGE BARRIER STEEL
- NON-BRIDGE BARRIER CONCRETE
- BOLLARDS
- PROPERTY BOUNDARY
- GAS — GAS — QENOS GAS PIPELINE

HERITAGE LEGEND

- LEP ITEM
- LEP CONSERVATION AREA
- STATE HERITAGE REGISTER ITEM
- SECTION 170 ITEM
- SECTION 170 ITEM B
- INDICATIVE CONSTRUCTION COMPOUND

ACTIVE TRANSPORT CORRIDOR

- EWPCL INTERFACE

UTILITIES LEGEND

W(B) — STATUS OF UTILITY BY COLOUR
QUALITY LEVEL
UTILITY TYPE

E### $ — ASSET OR DESIGN IDENTIFIER
ASSET OR DESIGN ID (###)
ASSET TYPE REFERENCE (TY)

ASSET TYPE REFERENCE
E - ELECTRICAL, G - GAS, C - COMMUNICATION, W - POTABLE WATER, S - WASTE WATER

ASSET OR DESIGN IDENTIFIER
E - EXISTING TO REMAIN, R - EXISTING TO REMOVE OR ABANDON, P - EXISTING TO PROTECT, M - EXISTING TO MODIFY, D - DESIGN/PROPOSED ASSET

- PROPOSED UTILITIES
- PRESERVED
- DECOMMISSIONED

- W(0) — PRESERVED WATER MAIN
- W — PROPOSED WATER MAIN
- S(0) — PRESERVED SEWER MAIN
- S — PROPOSED SEWER MAIN
- G(0) — PRESERVED GAS MAIN
- G — PROPOSED GAS MAIN
- E-HV(0) — PRESERVED UG ELECTRICAL HIGH VOLTAGE
- E-HV — PROPOSED UG ELECTRICAL HIGH VOLTAGE
- E-LV(0) — PRESERVED UG ELECTRICAL LOW VOLTAGE
- E-LV — PROPOSED UG ELECTRICAL LOW VOLTAGE
- E HV (0) — PRESERVED OH ELECTRICAL HIGH VOLTAGE
- E HV — PROPOSED OH ELECTRICAL HIGH VOLTAGE
- E-LV(0) — PRESERVED OH ELECTRICAL LOW VOLTAGE
- E-LV — PROPOSED OH ELECTRICAL LOW VOLTAGE
- OC(0) — PRESERVED COMMUNICATIONS OPTIC FIBRE
- OC — PROPOSED COMMUNICATIONS OPTIC FIBRE
- WH — WATER HYDRANT
- WATER STOP VALVE
- WATER METER
- SEWER MANHOLE
- POLE - ELECTRICAL - POWER AND LIGHT (PPPL)
- EJB — ELECTRICAL CABLE JUNCTION BOX
- EMH — ELECTRICAL CABLE MANHOLE
- OFP — OPTICAL FIBRE PIT
- COMMUNICATIONS SINGLE CONCRETE PIT
- COMMUNICATIONS TWIN CONCRETE PIT
- COMMUNICATIONS TRIPLE CONCRETE PIT
- TSP — MAIN COMMUNICATION PIT
- TDP — TELEPHONE DISTRIBUTION PILLAR

DSS LEGEND - EXISTING FEATURES

- DSS - FENCE
- OHW STRUCTURE
- DRAINAGE PIT
- LARGE ROUND PIT (RAD>0.5m)
- EARTH TERMINAL
- RAILWAY SIGNAL
- JUNCTION BOX
- TELEPHONE
- POINTS EQUIPMENT
- MALL PIT (<0.5m)
- RAILWAY TUNING UNIT
- TRAIN STOP
- CCTV CAMERA
- PUBLIC ANNOUNCEMENT
- DRAINAGE INSPECTION PIT (FLUSH POINT)
- ELECTRIC LIGHT POLE
- ANCHOR BLOCK
- BOOT LEG RISER
- GATE
- SURVEY MARK
- IMPEDANCE BOND
- BOLLARD
- POLE (AERIAL FEEDER)
- 0 — 0 — UNDER CONTROL AREA BOUNDARY
- 1 — 1 — SIGNAL CABLE - DIRECT BURIED
- 2 — 2 — SIGNAL CABLE - GALVANISED STEEL TROUGHING
- 3 — 3 — SIGNAL CABLE - GROUND LEVEL TROUGHING
- 4 — 4 — SIGNAL CABLE - DUCTED PIPE
- 5 — 5 — COPPER COMMS CABLE - DIRECT BURIED
- 6 — 6 — COPPER COMMS CABLE - GALVANISED STEEL TROUGHING
- 7 — 7 — COPPER COMMS CABLE - GROUND LEVEL TROUGHING
- 8 — 8 — COPPER COMMS CABLE - DUCTED PIPE
- 9 — 9 — SIGNAL & COPPER COMMS CABLE - DIRECT BURIED
- 10 — 10 — SIGNAL & COPPER COMMS CABLE - GALVANISED STEEL TROUGHING
- 11 — 11 — SIGNAL & COPPER COMMS CABLE - GROUND LEVEL TROUGHING
- 12 — 12 — SIGNAL & COPPER COMMS CABLE -DUCTED PIPE
- 13 — 13 — OPTIC FIBRE - DIRECT BURIED
- 14 — 14 — OPTIC FIBRE - GALVANISED STEEL TROUGHING
- 15 — 15 — OPTIC FIBRE - GROUND LEVEL TROUGHING
- 16 — 16 — OPTIC FIBRE - DUCTED PIPE
- 17 — 17 — LV POWER - DIRECT BURIED
- 18 — 18 — LV POWER - GALVANISED STEEL TROUGHING
- 19 — 19 — LV POWER - GROUND LEVEL TROUGHING
- 20 — 20 — LV POWER - DUCTED PIPE
- 21 — 21 — HV - DIRECT BURIED
- 22 — 22 — HV - GALVANISED STEEL TROUGHING
- 23 — 23 — HV - GROUND LEVEL TROUGHING
- 24 — 24 — HV - DUCTED PIPE
- 26 — 26 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE - GALVANISED STEEL TROUGHING
- 27 — 27 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE - GROUND LEVEL TROUGHING
- 28 — 28 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE - DUCTED PIPE
- 30 — 30 — COPPER COMMS CABLE, OPTIC FIBRE - GALVANISED STEEL TROUGHING
- 32 — 32 — COPPER COMMS CABLE, OPTIC FIBRE - DUCTED PIPE
- 34 — 34 — OPTIC FIBRE, LV POWER - GALVANISED STEEL TROUGHING
- 35 — 35 — OPTIC FIBRE, LV POWER - GROUND LEVEL TROUGHING
- 36 — 36 — OPTIC FIBRE, LV POWER - DUCTED PIPE
- 43 — 43 — SIGNAL CABLE, LV POWER - LEVEL TROUGHING
- 44 — 44 — SIGNAL CABLE, LV POWER - DUCTED PIPE
- 50 — 50 — SIGNAL & COPPER COMMS CABLE, LV POWER - GALVANISED STEEL TROUGHING

DSS LEGEND - EXISTING FEATURES (CONTINUED)

- 51 — 51 — SIGNAL & COPPER COMMS CABLE, LV POWER - GROUND LEVEL TROUGHING
- 52 — 52 — SIGNAL & COPPER COMMS CABLE, LV POWER - DUCTED PIPE
- 53 — 53 — SIGNAL & COPPER COMMS CABLE, HV - DIRECT BURIED
- 54 — 54 — SIGNAL & COPPER COMMS CABLE, HV - GALVANISED STEEL TROUGHING -
- 56 — 56 — SIGNAL & COPPER COMMS CABLE, HV - DUCTED PIPE
- 58 — 58 — SIGNAL CABLE, OPTIC FIBRE - GALVANISED STEEL TROUGHING
- 59 — 59 — SIGNAL CABLE, OPTIC FIBRE - GROUND LEVEL TROUGHING
- 64 — 64 — LV POWER, HV - DUCTED PIPE
- 66 — 66 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, LV POWER - GALVANISED STEEL TROUGHING
- 67 — 67 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, LV POWER - GROUND LEVEL TROUGHING
- 68 — 68 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, LV POWER - DUCTED PIPE
- 70 — 70 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, HV - GALVANISED STEEL TROUGHING
- 71 — 71 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, HV - GROUND LEVEL TROUGHING
- 72 — 72 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, HV - DUCTED PIPE
- 75 — 75 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, LV POWER, HV - GROUND LEVEL TROUGHING
- 76 — 76 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE, LV POWER, HV - DUCTED PIPE
- 80 — 80 — TRACK DRAINAGE - UNKNOWN
- 83 — 83 — COMPRESSED AIR - DIRECT BURIED
- 84 — 84 — COMPRESSED AIR - ABOVE GROUND
- 85 — 85 — ABANDONED ROUTE - UNKNOWN
- 91 — 91 — HV - DIRECTIONAL UNDER BORE
- 92 — 92 — SIGNAL & COPPER COMMS CABLE, OPTIC FIBRE - DIRECTIONAL UNDER BORE
- 105 — 105 — LV POWER - AERIAL
- 106 — 106 — HV POWER - AERIAL
- 108 — 108 — 1500V DC SYSTEM CABLE - GALVANISED STEEL TROUGHING
- 109 — 109 — 1500V DC SYSTEM CABLE - GROUND LEVEL TROUGHING
- 110 — 110 — 1500V DC SYSTEM CABLE - DUCTED PIPE
- 112 — 112 — ELECTROLYSIS BOND CABLE - UNKNOWN
- 113 — 113 — CLOSED CIRCUIT TELEVISION - DUCTED PIPE
- 116 — 116 — CLOSED CIRCUIT TELEVISION, COPPER COMMS CABLE - DUCTED PIPE
- 119 — 119 — CLOSED CIRCUIT TELEVISION, LV POWER - DUCTED PIPE
- 125 — 125 — STATION DATA - DUCTED PIPE
- 131 — 131 — LIQUID FUEL LINE - UNKNOWN
- 132 — 132 — VACANT - DUCTED PIPE
- 133 — 133 — VACANT - GALVANISED STEEL TROUGHING
- 134 — 134 — VACANT - GROUND LEVEL TROUGHING
- 197 — 197 — SERVICE PIT (POLYGON)
- 198 — 198 — SERVICE PIT (POINT)
- 199 — 199 — UN-CODED SERVICE MIX - UNKNOWN
- 200 — 200 — ELECTRIC POWER LESS THAN 33kV - EXTERNAL AGENCY SERVICE (CONSULT ASSET OWNER)
- 201 — 201 — ELECTRIC POWER EQUAL TO OR GREATER THAN 33kV - EXTERNAL AGENCY SERVICE (CONSULT ASSET OWNER)
- 202 — 202 — LOW PRESSURE GAS MAIN - EXTERNAL AGENCY SERVICE (CONSULT ASSET OWNER)
- 203 — 203 — HIGH PRESSURE GAS MAIN - EXTERNAL AGENCY SERVICE (CONSULT ASSET OWNER)
- 205 — 205 — TELSTRA - GALVANISED STEEL TROUGHING
- 206 — 206 — TELSTRA - GROUND LEVEL TROUGHING
- 207 — 207 — TELSTRA -DUCTED PIPE
- 211 — 211 — OPTUS - DUCTED PIPE
- 212 — 212 — POWERTEL - DIRECT BURIED
- 219 — 219 — VISION STREAM - DUCTED PIPE
- 220 — 220 — WATER - UNKNOWN
- 221 — 221 — SEWER - UNKNOWN
- 222 — 222 — OTHER SERVICE(S) - DIRECT BURIED
- 223 — 223 — UECOMM - DIRECT BURIED
- 233 — 233 — ELECTRIC POWER LESS THAN 33kV - AERIAL
- 234 — 234 — ELECTRIC POWER EQUAL TO OR GREATER THAN 33kV - AERIAL
- 235 — 235 — DRAINAGE SERVICE - DUCTED PIPE
- 236 — 236 — AERIAL - TELSTRA
- 244 — 244 — RTA - DUCTED PIPE

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	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE
00	APPROVED FOR CONSTRUCTION	ESI / XX.XX.25	BK / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	ESI / 18.10.24	BK / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	JK / 28.06.24	BK / 28.06.24	SH / 28.06.24
AMD				

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE:

aurecon — AURECON CML

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	ELNER SAPOI II	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
LEGEND

FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-VMS-CE-DWG-921005 | 00 | EDMS No.

DF 801554

Plot Date & Time: 24/1/2025 12:20:14 PM
Plotted by: Tony Jing
File Plotted: R:\SYDWAY-MRL-VMS-CE-DWG-921005.dwg

ABBREVIATIONS

GENERAL

&	AND
AB	ABOVE BENCH
AFFL	ABOVE FINISHED FLOOR LEVEL
APPROX.	APPROXIMATE
ARCH	ARCHITECT OR ARCHITECTURAL
ARCH'S	ARCHITECT'S OR ARCHITECTURAL'S
AS	AUSTRALIAN STANDARD
ASOP	AS SHOWN ON PLAN
B	BOTTOM
CI	CAST IRON
CRS	CENTRES
CL	CENTRELINE
CO	CLEAR OUT
COL	COLUMN
CJ	CONSTRUCTION JOINT
CONC	CONCRETE
CONT	CONTINUOUS
COS	CHECK ON SITE
CFW	CONTINUOUS FILLET WELD
C/W	COMPLETE WITH
db	DIAMETER BAR
DIA	DIAMETER
DPM	DAMP PROOF MEMBRANE
DWG	DRAWING
EA	EQUAL ANGLE
EF	EACH FACE
EW	EACH WAY
EWPCL	EAST WEST PEDESTRIAN CYCLE LINK
F/A	FROM ABOVE
F/B	FROM BELOW
FSBW	FULL STRENGTH BUTT WELD
FW	FILLET WELD
FFL	FINISHED FLOOR LEVEL
FL	FLAT
FLG	FLANGE
GL	GROUND LINE
GP	GENERAL PURPOSE
HD	HOLDING DOWN
HDG	HOT DIP GALVANISED
H/L	HIGH LEVEL
HORIZ	HORIZONTAL
ID	INTERNAL DIAMETER
IL	INVERT LEVEL
L/L	LOW LEVEL
LD	LIGHT DUTY
LG	LONG
LONG	LONGITUDINAL
LV	LENGTH VARIES
MAX	MAXIMUM
MFA	MASONRY FLEXIBLE ANCHORS
MIN	MINIMUM
MS	MILD STEEL
MSW	METRO SOUTHWEST
N.T.S.	NOT TO SCALE
No.	NUMBER
NSOE	NOT SHOWN ON ELEVATION
NSOP	NOT SHOWN ON PLAN
O/F	OVER FLOW
OHW	OVERHEAD WIRING
OPP	OPPOSITE
OD	OUTSIDE DIAMETER
O/A	OVERALL
PL	PLATE
PREF	PREFERRED
RL	REDUCED LEVEL
RC	REINFORCED CONCRETE
REINF	REINFORCEMENT
REQD.	REQUIRED
SAA	STANDARDS ASSOCIATION OF AUSTRALIA
SEC.	SECOND
SGR	SITE GEOTECHNICAL REPRESENTATIVE
SL	SURFACE LEVEL
SM	SITE MEASURE
SP	STRUCTURAL PURPOSE
SQ.	SQUARE
SQGE	SUITABILITY QUALIFIED GEOTECHNICAL ENGINEER
STAG	STAGGERED BARS
STD	STANDARD
SSL	STRUCTURAL SLAB LEVEL
T	TOP
T/A	TO ABOVE
T/B	TO BELOW
TBA	TO BE ADVISED
T.B.C.	TO BE CONFIRMED
TfNSW	TRANSPORT FOR NEW SOUTH WALES
TYP	TYPICAL
UB	UNDER BENCH
UNO	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE
VERT	VERTICAL

UNITS

m^3	CUBIC METRE
kg	KILOGRAM
km	KILOMETRE
kN	KILONEWTON
kPa	KILOPASCAL
MPa	MEGAPASCAL
m	METRE
mm	MILLIMETRE
N	NEWTON
Pa	PASCAL
km^2	SQUARE KILOMETRE
m^2	SQUARE METRE
mm^2	SQUARE MILLIMETRE

GENERAL NOTES

GN1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ARCHITECTS, OTHER PROJECT PACKAGES AND INTERFACE CONTRACTOR'S DRAWINGS AND REPORTS AND SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
GN2. IF IN DOUBT, VERIFY WITH THE RELEVANT PARTY AS NECESSARY.
GN3. REFER ANY DISCREPANCY, AMBIGUITY, OMISSION OR INCONSISTENCY TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
GN4. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS SPECIFIED OTHERWISE.
GN5. LEVELS ARE IN METRES, REFERENCED TO AUSTRALIAN HEIGHT DATUM (A.H.D.).
GN6. CO-ORDINATES ARE TO MAP GRID OF AUSTRALIA (M.G.A.), COORDINATE SYSTEM (ZONE 56) GDA 94.
GN7. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE RELEVANT PROJECT GENERAL NOTES, REPORTS AND SPECIFICATIONS (WHERE APPLICABLE) AND RELEVANT AUTHORITY STANDARDS, GUIDELINES AND SPECIFICATIONS.
GN8. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE PROJECT GENERAL NOTES, REPORTS AND SPECIFICATIONS (WHERE APPLICABLE), TOGETHER WITH THE REQUIREMENTS OF ALL RELEVANT CODES OF PRACTICE REFERRED TO THEREIN AND THE REQUIREMENTS OF ALL STATUTORY AUTHORITIES WHERE APPLICABLE.
GN9. ALL LOCATIONS, ORIENTATIONS AND LEVELS SHALL BE VERIFIED ON SITE BEFORE COMMENCING ANY WORK. REFER DISCREPANCIES TO THE CONSULTANT. DO NOT OBTAIN DIMENSIONS FROM SCALING.
GN10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A SEDIMENT CONTROL PLAN AND TEMPORARY DRAINAGE DIVERSION DURING CONSTRUCTION.
GN11. ANY PERMITS FOR DIVERSION WORKS REQUIRED DURING CONSTRUCTION SHALL BE OBTAINED BY THE CONTRACTOR.
GN12. EXISTING STORMWATER PIPES OR CULVERTS THAT ARE DEFINED TO BE DECOMMISSIONED ARE TO BE BACKFILLED WITH GROUT AND CAPPED OFF AT ENDS AND MAY REMAIN IN SITU UNLESS DAMAGED. STRUCTURALLY UNSOUND STORMWATER PIPES OR PIPES CONFLICTING WITH DESIGN ELEMENTS SHALL BE REMOVED.
GN13. NOMINATION OF PROPRIETARY ITEMS DOES NOT INDICATE EXCLUSIVE PREFERENCE BUT INDICATES THE REQUIRED PROPERTIES OF THE ITEM. SIMILAR ALTERNATIVES HAVING THE REQUIRED PROPERTIES MAY BE OFFERED FOR DESIGNER APPROVAL. INSTALL PROPRIETARY ITEMS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. REFER ANY DISCREPANCIES TO THE DESIGN PROJECT TEAM BEFORE PROCEEDING WITH THE WORK.
GN14. FOR UTILITIES THAT HAVE BEEN RELOCATED OR REQUIRE ADJUSTMENT FOR THE WORKS, REFER TO INDIVIDUAL UTILITY DIVERSION DRAWINGS AND DETAILS FROM THE RELEVANT UTILITY AUTHORITY.
GN15. THE TREATMENT OF ANY REDUNDANT UTILITIES TO BE MANAGED ON SITE WITH AGREEMENT OF THE SUPERINTENDENT.
GN16. THE CONTRACTOR SHALL DETERMINE WHERE TEMPORARY WORKS AND TEMPORARY WORKS DESIGNS ARE REQUIRED.
GN17. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, PROOF ENGINEERING CERTIFICATION, CONSTRUCTION, INSPECTION AND PERFORMANCE OF THE TEMPORARY WORK, EXCEPT TO THE EXTENT THAT TEMPORARY WORK DESIGN IS SHOWN ON THE RELEVANT PACKAGE DRAWING(S). THE TEMPORARY WORK SHALL NOT BE DESIGNED TO RELY ON RESTRAINT OR SUPPORT FROM THE PERMANENT WORK STRUCTURE WITHOUT PRIOR APPROVAL FROM THE DESIGNER.
GN18. THE CONTRACTOR SHALL ENSURE THAT NO PART OF THE PERMANENT WORKS IS OVER STRESSED OR UNSTABLE DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL ENSURE THAT DURING CONSTRUCTION THE PERMANENT WORKS AVOIDS DEFORMATION DUE TO SELF-WEIGHT AND TRANSIENT CONSTRUCTION LOADS.
GN19. ANY DESIGN ACTIONS THAT IMPACT ON THE PERMANENT WORKS SHALL BE SUBMITTED TO THE PERMANENT WORKS DESIGNER PRIOR TO FABRICATION AND CHANGES TO THE PERMANENT WORKS DESIGN MAY BE NECESSARY.
GN20. MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
GN21. ON COMPLETION OF WORKS ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS AND ROAD PAVEMENT UNLESS DIRECTED OTHERWISE.
GN22. THE CONTRACTOR IS TO ENSURE THAT MINIMAL DISTURBANCE IS MADE TO AREAS OUTSIDE THE CONSTRUCTION WORKS.
GN23. DURING EXCAVATION WORKS ALL STRUCTURES SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART OF THE STRUCTURE SHALL BE OVERSTRESSED.
GN24. DURING CONSTRUCTION THE CONTRACTOR MUST MAINTAIN ACCESS TO PROPERTIES AT ALL TIMES.
GN25. THE LOCATIONS OF UNDERGROUND SERVICES HAVE BEEN NOTED FROM EXISTING RECORDS AND SERVICE PROVIDERS RECORDS. AS VARIATIONS WITH THE EXISTING MAY EXIST, COMPLETE ACCURACY CANNOT BE GUARANTEED. ALL EXISTING SERVICES LOCATIONS SHALL BE VERIFIED ON SITE BY THE CONTRACTOR BEFORE COMMENCING WORKS.
GN26. THE CONTRACTOR IS REQUIRED TO NOTIFY THE DESIGNER IMMEDIATELY UPON DISCOVERY OF ANY VARIANCES TO THE SURVEY DATA.
GN27. HERITAGE ZONES SHOWN INDICATIVELY FOR INFORMATION PURPOSES.
GN28. FOR STRUCTURAL WORKS GENERALLY (UNLESS NOTED OTHERWISE) CONCRETE GRADE F'c (MPa) AT 28 DAYS: 40.
GN29. FOR BLINDING AND MASS FILL CONCRETE, CONCRETE GRADE F'c (MPa) AT 28 DAYS: 20.
GN30. CONTRACTOR TO ALLOW FOR CLEARING AND GRUBBING IN ACCORDANCE WITH THE CONTRACTORS APPROVED EMP.

NON-BRIDGE SAFETY BARRIER NOTES

SB1. SAFETY BARRIERS ARE TO BE PROVIDED IN ACCORDANCE WITH THE MANUFACTURERS PRODUCT MANUAL TO SATISFY THE LOAD LIMITS SPECIFIED IN AS 3845.1 TABLE D.1.
SB2. SAFETY BARRIER TERMINALS MUST BE APPROVED FOR THE SAFETY BARRIER SYSTEM INSTALLED. REFER TO TfNSW ACCEPTANCE DOCUMENTATION FOR TERMINALS THAT ARE APPROVED FOR SPECIFIC BARRIER SYSTEMS.
SB3. FOR INSTALLATION AND SPACING OF BREAKAWAY POSTS, REFER TO APPENDIX L OF AUSTROADS GUIDE TO ROAD DESIGN, PART 6.
SB4. WHERE STANDARD BARRIER POST SPACING CLASH WITH UNDERGROUND UTILITY CROSSING THE CONTRACTOR IS TO CONSIDER NON-STANDARD POST SPACING IN CONSULTATION WITH THE SAFETY BARRIER SUPPLIER.
SB5. FOUNDATION PREPARATION FOR TL5 BARRIERS TO BE IN ACCORDANCE WITH VERGE MATERIAL AS PER TfNSW SPECIFICATION R44.
SB6. BARRIER TO BE FOUNDED ON SUITABLE MATERIAL. UNSUITABLE MATERIAL IS AS DEFINED IN TfNSW SPECIFICATION R44. REMOVE AND REPLACE UNSUITABLE AS PER TfNSW SPECIFICATION R44.
SB7. WHERE STEEL BARRIERS ARE SHORTER THAN 26m IN LENGTH POST SPACING TO BE DECREASED TO 1m OR AS RECOMMENDED BY MANUFACTURER.
SB8. KICKER PLATE TYPICAL DETAILS FOR TL3/TL4 STEEL BARRIERS ADJACENT TO EWPCL TO BE SUPPLIED BY MANUFACTURERS.
SB9. BARRIERS TO BE CONSTRUCTED GENERALLY IN ACCORDANCE WITH AS 3845.1: 2015.

INTERFACING DESIGN PACKAGES

THE FOLLOWING DESIGN PACKAGES ARE RELEVANT TO THIS SUBMISSION:

SMCSWSW7-MRL-WEC-910-DURABILITY REPORT
SMCSWSW7-MRL-WEC-912-DESIGN SAFETY ASSURANCE REPORT
SMCSWSW7-MRL-WEC-940-HVM STRATEGY MEMORANDUM
SMCSWSW7-MRL-WEC-941-76 NON BRIDGE SITES - EAST
SMCSWSW7-MRL-WEC-951-STATION SITES HVM
SWMC DPK 330 SECURITY CORRIDOR FENCING - EASTERN
BAC DPK 904 CORRIDOR OHW WORKS HURLSTONE PARK STATION TO BELMORE STATION (B5+845 AND B6+076 TO B8+714)
DP610 COMBINED SERVICES ROUTE - EASTERN
DP630 COMBINED SERVICES ROUTE - EASTERN T1B SCOPE TRANSFER
SMCSWSWM-SMD-WEC-TI-DWG-001710.-.COO.-.03 EAST WEST PEDESTRIAN AND CYCLE LINK CONCEPT DESIGN

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DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

FILE No. | SHEET: 1 OF 9 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921011 | 00 | EDMS No.

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Plotted by Tony Jing

SPECIFICATIONS AND STANDARDS NOTES

THE SPECIFICATIONS THAT APPLY TO THIS DESIGN PACKAGE ARE THE STANDARD TfNSW D&C SPECIFICATIONS UNO.
REFERENCED SPECIFICATIONS WITHIN THIS PACKAGE ARE SCHEDULED BELOW:

B30	EXCAVATION AND BACKFILL FOR BRIDGEWORKS
B59	BORED CAST-IN PLACE REINFORCED CONCRETE PILES (WITHOUT PERMANENT CASING)
B80	CONCRETE WORK FOR BRIDGES
B110	PRECAST CONCRETE MEMBERS
B201	STEELWORKS FOR BRIDGES
B220	PROTECTIVE TREATMENT OF BRIDGE STEELWORK TO BE USED FOR ALL PAINTING AND GALVANISING ON PROJECT
B240	STEEL FASTENERS
B260	ERECTION OF STRUCTURAL STEELWORK
B312	COLD APPLIED SEALANT JOINTS
ESC200	TRACK SYSTEM
R11	STORMWATER DRAINAGE
R23	PLASTIC FLEXIBLE PIPES
R44	EARTHWORKS
R63	GEOTEXTILES (SEPARATION AND FILTRATION)
R64	SOIL NAILING
R67	HIGH STRENGTH GEOSYNTHETIC REINFORCEMENT
R68	SHOTCRETE WORK WITHOUT STEEL FIBRES
R132	SAFETY BARRIER SYSTEMS
SPC 301	STRUCTURES CONSTRUCTION
TMC302	STRUCTURES REPAIR
TMC305	STRUCTURES ASSESSMENT

T HR CI 12111 SP	EARTHWORKS MATERIALS
T HR CI 12030 ST	OVERBRIDGES AND FOOTBRIDGES
T HR CI 12130 ST	AMB TRACK DRAINAGE
T HR CI 12160 ST	BOUNDARY FENCES
T HR CI 12110 ST	EARTHWORKS AND FORMATION
T HR EL 08001 ST	SAFETY SCREENS AND BARRIERS REQUIREMENTS FOR 1500V OHW EQUIPMENT
T HR SS 90002 ST	BARRIERS, BALUSTRADES, SCREENS AND HANDRAILS
TfNSW BTD 2007/2008	DESIGN OF REPLACEMENT TRAFFIC BARRIERS ON EXISTING BRIDGES
TfNSW GTD 2012/001	TECHNICAL DIRECTION - GEOTECHNOLOGY
TfNSW R0220-35	INSPECTION PIT WITH SINGLE OR DOUBLE CAST IRON FRAME AND COVER

THE STANDARDS THAT APPLY TO THIS DESIGN PACKAGE INCLUDE BUT ARE NOT LIMITED TO THOSE SCHEDULED BELOW:

AS/NZS 1214: 2016	HOT-DIP GALVANISED COATINGS ON THREADED FASTENERS (ISO METRIC COARSE THREAD SERIES) (ISO 10684:2004, MOD)
AS 1289	METHODS OF TESTING SOILS FOR ENGINEERING PURPOSES
AS 13822:2010	BASES FOR DESIGN OF STRUCTURES - ASSESSMENT OF EXISTING STRUCTURES
AS 1428.1:2021 / AS1428.2:1992	DESIGN FOR ACCESS AND MOBILITY
AS 1554	STRUCTURAL STEEL WELDING
AS 1726:2017	GEOTECHNICAL SITE INVESTIGATIONS
AS/NZS 2566.1:1998	BURIED FLEXIBLE PIPELINES STRUCTURE DESIGN
AS/NZS 2566.2:2007	BURIED FLEXIBLE PIPELINES INSTALLATION
AS 2758	AGGREGATES AND ROCK FOR ENGINEERING PURPOSES
AS/NZS 3500.1:2021	PLUMBING AND DRAINAGE - PART 1 WATER SERVICES
AS/NZS 3500.2:2021	PLUMBING AND DRAINAGE - PART 2 SANITARY PLUMBING AND DRAINAGE
AS/NZS 3500.3:2021	PLUMBING AND DRAINAGE PART 3: STORMWATER DRAINAGE
AS 3600:2018	CONCRETE STRUCTURES
AS 3610.1:2018	FORMWORK FOR CONCRETE, PART 1: SPECIFICATIONS
AS 3610.2:2023	FORMWORK FOR CONCRETE, PART 2: DESIGN AND CONSTRUCTION
AS/NZS 3725:2007	DESIGN FOR INSTALLATION OF BURIED CONCRETE PIPES
AS 3798:2007	GUIDELINES FOR EARTHWORKS FOR COMMERCIAL BUILDINGS & DEVELOPMENTS
AS 3996:2019	ACCESS COVERS AND GRATE
AS/NZS 4058:2007	PRECAST CONCRETE PIPES (PRESSURE AND NON-PRESSURE)
AS 4133	METHODS OF TESTING ROCK FOR ENGINEERING PURPOSES
AS 4139:2003	FIBRE-REINFORCED CONCRETE PIPES AND FITTINGS
AS 4678:2002	EARTH RETAINING STRUCTURES
AS/ NZS 4680:2006	HOT- DIP GALVANISED (ZINC) COATINGS ON FABRICATED FERROUS ARTICLES
AS 5100	BRIDGE DESIGN

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STRUCTURAL NOTES

EXISTING BRIDGES - ILLAWARRA ROAD

BRIDGE NO. BR07 DESIGN STANDARD: STATE-SPECIFIC PRACTICES

REGISTRATION No. OF PLANS: No. 70-300

GENERAL NOTES

SN1. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL REDUCED LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.
SN2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE STRUCTURAL DRAWINGS.
SN3. ALL DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED ON SITE BY THE CONTRACTOR PRIOR TO FABRICATION OR CONSTRUCTION.
SN4. ANY DISCREPANCIES OR OMISSION SHALL BE REFERRED TO THE SITE DESIGN ENGINEER FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
SN5. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVER STRESSED.
SN6. ALL CODES REFERRED TO IN THESE NOTES ARE THE LATEST EDITIONS WITH AMENDMENTS, AS AT THE DATE OF DRAWING ISSUE.
SN7. THE FOLLOWING ABBREVIATIONS MAY BE USED ON THESE DRAWINGS:
UNO - UNLESS NOTED OTHERWISE
TYP - TYPICAL
SN8. UTILITIES SHOWN ARE INDICATIVE ONLY. CONTRACTOR IS TO CONFIRM LOCATION OF ALL SERVICES PRIOR TO COMMENCING WORK. CONTRACTOR TO ENSURE ADOPTED METHOD OF CONSTRUCTION WILL AVOID DAMAGE TO ALL UTILITIES.
SN9. TO MANAGE AND MITIGATE RESIDUAL RISKS, WORKS SHALL BE UNDERTAKEN BY TRAINED, CERTIFIED AND SUPERVISED PERSONNEL, WITH APPROPRIATE POSSESSION AND TRAFFIC MANAGEMENT CONTROLS IN PLACE.
SN10. ALL ANCHOR BOLTS MUST BE CLEAR OF EXISTING STEEL REINFORCEMENT, IF CONFLICT WITH EXISTING REINFORCEMENT IS ENCOUNTERED DURING DRILLING OF HOLES, NOTIFY THE DESIGN ENGINEER FOR DIRECTION.

REFERENCE DRAWINGS

RD1. CV0107687 N.S.W.T ELECTRIC TRAMWAY, MARRICKVILLE TO UNDERCLIFFE, OVER BRIDGE AT MARRICKVILLE - GENERAL ELEVATION, PLAN & SECTIONS

RD2. CV0239996 N.S.W.T ELECTRIC TRAMWAY, MARRICKVILLE TO UNDERCLIFFE, OVER BRIDGE AT MARRICKVILLE - DETAILS OF OVERBRIDGE, RETAINING & PARAPET WALLS AND GATEWAYS

RD3. CV0212222 TO CV0212224 & EL0289764 MARRICKVILLE, BANKSTOWN LINE AND METROPOLITAN GOODS LINE, 6.661KM, EB11004 - ILLAWARRA ROAD OVERBRIDGE DECK STRENGTHENING

RD4. SMCSWSWM-MTM-WMS-ST-PKG-002400.C.RVW.C.01 SYDNEY WEST METRO SOUTHWEST STRUCTURAL - BRIDGES PACKAGE No.114 CORRIDOR BRIDGES

TRAFFIC LOADING

TL1. THE LOAD CAPACITY OF THE BRIDGE HAS BEEN ASSESSED BY AURECON GHD JV AS T44 (BRIDGE ASSESSMENT REPORT STAGE 3 2019)

TL2. LOAD RATING (PROVIDED BY METRO) ADOPTED:
T44 TRAFFIC LOADING IN ACCORDANCE WITH AS 5100.7-2017
NUMBER OF DESIGN LANES: 3
DYNAMIC LOADING ALLOWANCE FACTOR: 0.4
OVERALL REPORTED LOAD RATING FACTOR: 0.94 (AS-IS AGJV 2019)

TRAFFIC BARRIER PERFORMANCE LEVEL

TB1. TL3 / INTERMEDIATE PERFORMANCE LEVEL TO AS 5100.2 & BTD 2007/08 REV 2
HORIZONTAL OUTWARD LOAD = 225kN
APPLIED AT MIN EFFECTIVE HEIGHT = 700mm
OVER CONTACT LENGTH = 1100mm

WIND LOADING

WL1. WIND TERRAIN CATEGORY (TC): 3
WL2. WIND REGION: A2
WL3. TOPOGRAPHICAL MULTIPLIER (MT): 1.0
WL4. REGIONAL WIND SPEED ULS: 48m/s
WL5. AVERAGE RECURRENCE INTERVAL ULS R = 2000 YEARS

REFERENCE DESIGN REPORT

RP1. DP921 ILLAWARRA ROAD OVERBRIDGE / MARRICKVILLE STATION DESIGN REPORT SMCSWSW7-MRL-WMS-EN-REP-921001

STRUCTURAL STEELWORK

SS1. STEEL PLATE SHALL BE GRADE 350 TO AS/NZS 3678.
SS2. HOT ROLLED SECTIONS SHALL BE GRADE 350 TO AS/NZS 3679.1. RECTANGULAR HOLLOW SECTIONS SHALL BE GRADE C450L0, CIRCULAR HOLLOW SECTIONS SHALL BE GRADE C350L0 TO AS/NZS 1163.
SS3. HIGH STRENGTH STEEL BOLTS SHALL BE PROPERTY CLASS 8.8 TO AS/NZS 1252-2016.
SS4. HIGH STRENGTH STEEL NUTS SHALL BE PROPERTY CLASS 8.8 TO AS/NZS 1252-2016.
SS5. HIGH STRENGTH STEEL WASHERS SHALL CONFORM TO AS/NZS 1252-2016.
SS6. STEEL WASHERS (NORMAL AND LARGE SERIES) SHALL CONFORM TO AS 1237.
SS7. EDGES OF STEELWORK TO BE GALVANISED SHALL BE ROUNDED TO A RADIUS OF 2mm UNO.
SS8. UNLESS NOTED OTHERWISE, ALL COMPONENTS EXCEPT STAINLESS STEEL ITEMS SHALL BE HOT DIP GALVANISED TO AS 4680 AFTER FABRICATION IN ACCORDANCE WITH TINSW SPECIFICATION B201 AND B220.
SS9. BOLTS, NUTS, WASHERS, FERRULES AND OTHER CAST IN ITEMS SHALL BE HOT DIP GALVANISED IN ACCORDANCE WITH AS 1214 AND RMS SPECIFICATION B240.
SS10. WORKSHOP FABRICATION DRAWINGS SHALL BE SUBMITTED TO THE DESIGNER FOR REVIEW AT LEAST 14 DAYS PRIOR TO COMMENCEMENT OF FABRICATION. FABRICATION SHALL NOT COMMENCE WITHOUT THE PRINCIPAL DESIGNER'S APPROVAL OF THE WORKSHOP DRAWINGS.
SS11. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH TINSW SPECIFICATION B201.
SS12. ALL BUTT WELDS, WHERE SHOWN, SHALL BE FULL PENETRATION UNO.
SS13. ALL GUSSET PLATES AND STIFFENERS SHALL BE WELDED ALONG ALL EDGES THAT CONTACT OTHER PLATES AND SECTIONS.
SS14. ANY STIFFENERS OR GUSSETS THAT ARE NOT OF SPECIFIED THICKNESS SHALL BE 10 THICK PLATE. ALL BASEPLATES SHALL BE 20mm THICK UNO.
SS15. UNLESS OTHERWISE NOTED, SURFACE TREATMENT SHALL BE HOT DIP GALVANISED. VENT AND DRAINAGE HOLES SHALL BE PROVIDED IN ACCORDANCE WITH THE GALVANISER'S RECOMMENDATIONS AND TO THE ACCEPTANCE OF THE DESIGNER.
SS16. UNLESS OTHERWISE NOTED, ALL FILLET WELDS SHALL BE 6mm.
SS17. UNLESS OTHERWISE NOTED, BOLTS FOR STEELWORK SHALL BE M20 GALVANISED GRADE 8.8/S TO AS 1252 SNUG TIGHTENED. MIN TWO BOLTS PER CONNECTION.
SS18. GROUT UNDER COLUMN BASE PLATES SHALL BE NON-SHRINK GROUT WITH A CHARACTERISTIC STRENGTH OF 50MPa UNO.
SS19. RADIOGRAPHIC OR ULTRASONIC EXAMINATION OF WELDS SHALL BE TO AS 1554 SERIES, AS 2177.1 AND AS 2207 AS APPROPRIATE.
SS20.

	EXAMINATION METHOD	EXTENT (% OF TOTAL LENGTH OF WELD TYPE)
FILLET WELDS SP	VISUAL INSPECTION	100
BUTT WELDS SP	VISUAL INSPECTION	100
BUTT WELDS SP	ULTRASONIC TESTING	100

SS21. THE ENDS OF ALL TUBULAR MEMBERS ARE TO BE SEALED WITH NORMAL THICKNESS PLATES AND CONTINUOUS FILLET WELDED UNLESS NOTED OTHERWISE.
SS22. WHERE MEMBERS SHOWN ON THE STRUCTURAL OR ARCHITECTURAL DRAWINGS ARE REQUIRED TO BE CURVED, BENT OR ROLLED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE METHODS REQUIRED TO ACHIEVE THE REQUIRED SHAPES WITHOUT LOCALISED DISTORTION OF THE MEMBERS.
SS23. THE CONTRACTOR SHALL PROVIDE AND LEAVE IN PLACE, UNTIL PERMANENT BRACING ELEMENTS ARE CONSTRUCTED, SUCH TEMPORARY BRACING AS IS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.
SS24. TRIMMING MEMBERS FOR MECHANICAL/HYDRAULIC PENETRATIONS ARE NOT NECESSARILY SHOWN.
SS25. THE CONTRACTOR SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL, TIMBER AND OTHER ELEMENTS TO STEEL WHETHER OR NOT DETAILED ON THE STRUCTURAL DRAWINGS.
SS26. THE FABRICATION AND ERECTION OF THE STRUCTURAL STEELWORK SHALL BE SUPERVISED BY QUALIFIED PERSONNEL EXPERIENCED IN SUCH SUPERVISION TO ENSURE THAT ALL REQUIREMENTS OF OH&S AND THE DESIGN ARE MET. DETAILS OF ERECTION SEQUENCE SHALL BE SUBMITTED TO THE HEAD CONTRACTOR FOR REVIEW PRIOR TO COMMENCEMENT OF ERECTION. THE APPROVED ERECTION SEQUENCE SHALL NOT BE VARIED DURING THE ERECTION PROCESS WITHOUT THE APPROVAL OF THE HEAD CONTRACTOR.
SS27. ALL PROPRIETARY NAMES PRODUCTS SHALL BE ERECTED TO THE MANUFACTURERS SPECIFICATIONS.
SS28. ALL MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTH. SPLICES SHALL ONLY BE PERMITTED IN LOCATIONS SHOWN ON THE STRUCTURAL DRAWINGS.
SS29. ISOLATION OF DISSIMILAR METALS SUCH AS STAINLESS STEEL AND MILD STEEL SHOULD BE PROVIDED.

STEELWORK PROTECTIVE COATING

SP1. ALL EXTERNAL STEELWORK OR SIMILAR APPROVED SYSTEMS AS PER D&C B220 TO BE HOT DIP GALVANISED TO HDG600 IN ACCORDANCE WITH TINSW QA SPECIFICATION B220 & AS 2312.2 & AS 4680 UNO.
SP2. IN ACCORDANCE WITH TINSW QA SPECIFICATION B220, ALL EXPOSED STEELWORK THAT ARE CONSIDERED VISIBLE TO THE PUBLIC AS IDENTIFIED BY THE ARCHITECT SHALL BE PROVIDED WITH AN EXTERNAL PAINT SYSTEM EQUIVALENT TO PUR5, PSL2, OR EHB6 TO AS 2312, OR SIMILAR APPROVED SYSTEMS AS PER D&C B220, WITH A SUITABLE MAINTENANCE REGIME. THIS SYSTEM SHALL BE SUBMITTED FOR REVIEW AND COMMENT BY THE DESIGNER WITH ALL RELEVANT TESTING, CERTIFICATES, WARRANTY, RECOMMENDED MAINTENANCE PERIODS PRIOR TO ANY WORKS PROCEEDING. ALL PAINTING SYSTEMS SHALL BE TOUCHED-UP/MADE GOOD FOLLOWING INSTALLATION TO THE APPROVAL OF THE DESIGNER.
SP3. ALL EDGES TO BE PROTECTIVE TREATED SHALL BE ROUNDED TO A RADIUS OF 2mm UNO.
SP4. DAMAGED PAINTED SURFACES SHALL BE REPAIRED IN ACCORDANCE WITH QA B220.

STEELWORK PROTECTIVE COATING (CONT.)

SP5. PROTECTION OF INTERNAL SURFACES OF HOLLOW MEMBERS SHALL FOLLOW TINSW SPECIFICATION D&C B220
SP6. DAMAGED GALVANISED SURFACES SHALL BE RENOVATED IN ACCORDANCE WITH TINSW QA SPECIFICATION B220.
SP7. DAMAGED PAINTED SURFACES SHALL BE REPAIRED IN ACCORDANCE WITH QA B220.

CONCRETE

C1. REINFORCEMENT SHALL NOT BE IN CONTACT WITH THE HOLD DOWN BOLT ASSEMBLY UNLESS NOTED OTHERWISE. REINFORCEMENT MUST BE INSPECTED BY THE SITE ENGINEER TO CONFIRM SEPARATION BETWEEN REINFORCEMENT AND THE HOLD DOWN BOLT ASSEMBLY PRIOR TO CONCRETING. REFER ALSO TO SPECIFIC DETAILS.
C2. WELDING OF REINFORCEMENT SHALL BE IN ACCORDANCE WITH AS 5100.5 AND TINSW QA SPECIFICATION B80.
C3. VOID FORMERS SHALL BE HELD SECURELY IN PLACE TO AVOID DISPLACEMENT DURING CONCRETING.
C4. GALVANISED REINFORCEMENT WHERE SPECIFIED - LONGITUDINAL BARS AT JOINTS SHALL BE PASSIVATED IN A 0.2% SODIUM DICHROMATE SOLUTION OR EQUIVALENT.
C5. CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES.
C6. DEPTHS OF BEAMS AND BANDS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS. THE METHOD OF ACHIEVING THE CAMBER IS SUBJECT TO APPROVAL BY THE DESIGNER.
C7. FOR CHAMFERS, DRIP GROOVES, REGLETS, ETC. REFER TO ARCHITECTS DETAILS. MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS.
C8. NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE DESIGNER.
C9. WHERE NOT SHOWN ON THE STRUCTURAL DRAWINGS CONSTRUCTION JOINTS SHALL BE LOCATED TO THE APPROVAL OF THE DESIGNER.
C10. CONDUITS, PIPES ETC. SHALL ONLY BE LOCATED IN THE MIDDLE ONE THIRD OF SLAB DEPTH AND SPACED AT NOT LESS THAN 3 DIAMETERS. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE COVER TO THE REINFORCEMENT.
C11. REINFORCEMENT SHALL BE SUPPORTED ON PURPOSE MADE CONCRETE, STEEL OR PLASTIC SUPPORTS DEPENDING ON THE EXPOSURE CONDITION TO PROVIDE THE SPECIFIED CLEAR COVER. AT EXTERNAL SURFACES EITHER ALL PLASTIC OR CONCRETE SUPPORTS SHALL BE USED. SUPPORTS SHALL BE LOCATED AT NOT MORE THAN 60 BAR DIAMETERS EACH WAY FOR BARS AND NOT MORE THAN 750mm EACH WAY FOR MESH.
C12. REINFORCEMENT SYMBOLS - BARS
R - ROUND
D - DEFORMED
I - INDENTED
250, 300, 500 - STRENGTH GRADE IN MPa
L - LOW DUCTILITY
N - NORMAL DUCTILITY
E - EARTHQUAKE DUCTILITY
eg. D500N16 - DEFORMED BAR, GRADE 500MPa, NORMAL DUCTILITY, 16mm DIAMETER

REINFORCEMENT SYMBOLS - WELDED MESH
R, D, I - AS FOR BARS
500 - STRENGTH GRADE
S - SQUARE MESH
R - RECTANGULAR MESH
L, N, E - DUCTILITY AS FOR BARS

C13. BARS DENOTED N SHALL BE TYPE D500N
BARS DENOTED R SHALL BE TYPE R230N
MESH DENOTED SL..... OR RL.....SHALL BE TYPE D500SL OR TYPE D500RL RESPECTIVELY.

C14. REINFORCEMENT NOTATION
N12-300 — SPACING (mm); BAR DIAMETER (mm); TYPE OF BAR
3N28 — BAR DIAMETER (mm); TYPE OF BAR; NUMBER OF BARS

C15. REFERENCE NUMBER FOR MESH IN ACCORDANCE WITH AS 4671. TO BE RE-BENT ON SITE SHALL BE MADE FROM QUENCHED AND SELF PULL OUT BARS OR OTHER BARS WHICH SL..... OR L..... IS THE TEMPERED STEEL. THE BARS SHALL BE POSITIONED WITH THE INITIAL BEND CLEAR OF THE CONCRETE FACE.
C16. SITE BENDING OF REINFORCEMENT BARS SHALL BE DONE WITHOUT HEATING USING A RE-BENDING TOOL. THE BARS SHALL BE RE-BENT AGAINST A FLAT SURFACE OR A PIN WITH A DIAMETER NOT LESS THAN THE MINIMUM PIN SIZE PRESCRIBED IN TINSW QA SPECIFICATION B80.
C17. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.
C18. WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-400 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400mm UNLESS NOTED OTHERWISE.
C19. SLAB REINFORCEMENT SHALL EXTEND AT LEAST 65mm ONTO MASONRY SUPPORT WALLS.
C20. AT JOGGLES IN BARS, THE MAXIMUM OFFSET SHALL BE 1 BAR DIAMETER OVER A LENGTH OF 12 BAR DIAMETER.
C21. REINFORCEMENT COUPLERS, UNLESS SHOWN ON THE DRAWINGS, SHALL NOT BE USED WITHOUT APPROVAL BY THE DESIGNER.
C22. ALL DOWELS PLACED IN DOWEL JOINTS AND IN EXPANSION JOINTS IN CONCRETE SLABS SHALL BE PLACED WITHIN THE FOLLOWING TOLERANCES. VERTICAL ALIGNMENT ± 2 DEGREES FROM LEVEL HORIZONTAL ALIGNMENT ± 2 DEGREES FROM A LINE PERPENDICULAR TO THE FACE OF THE JOINT. POSITION ± 5mm.
C23. GIVE A MINIMUM OF 2 CLEAR BUSINESS DAY NOTICE FOR INSPECTION OF REINFORCEMENT BY THE DESIGNER.

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STRUCTURAL NOTES (CONT.)

CONCRETE CONT'

C24. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE SHALL BE COMPACTED WITH MECHANICAL VIBRATORS. CONCRETE FINISHES FOR FORMED SURFACES MUST BE CLASS 2C (EXPOSED SURFACES) AND CLASS 3 FOR ALL PERMANENTLY HIDDEN SURFACES IN ACCORDANCE WITH AS 3610.1.

C25. SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN ON THE STRUCTURAL DRAWINGS OR IN POSITIONS OTHERWISE APPROVED IN WRITING BY THE DESIGNER. THE DEVELOPMENT AND LAP LENGTHS FOR REINFORCEMENT SHALL BE IN ACCORDANCE WITH THE TABLE BELOW UNLESS NOTED ELSEWHERE:

TENSION DEVELOPMENT LENGTH 'L' / SPLICE SCHEDULE (mm)		
BAR SIZE	CONCRETE GRADE 40MPa / 50MPa	
	LESS THAN 300mm CONCRETE BELOW BAR OR VERTICAL BAR *	MORE THAN 300mm CONCRETE BELOW BAR *
N12 DEVEL'T	350	500
SPLICE	350	500
N16 DEVEL'T	500	650
SPLICE	550	750
N20 DEVEL'T	600	800
SPLICE	750	1000
N24 DEVEL'T	800	1050
SPLICE	1000	1300
N28 DEVEL'T	1000	1300
SPLICE	1250	1650
N32 DEVEL'T	1200	1600
SPLICE	1500	1950
N36 DEVEL'T	1450	1900
SPLICE	1800	2350
N40 DEVEL'T	1925	2500
SPLICE	2150	2800

a. CLEAR DISTANCE BETWEEN LAPPED BARS SHALL NOT EXCEED 3 x THE BAR DIAMETER.
b. UNLESS SPECIFIED OTHERWISE LAPS IN ADJACENT BARS SHALL BE OFFSET BY AT LEAST A DEVELOPMENT LENGTH.
c. *VALUES TO BE INCREASED BY 20% FOR 3-BAR BUNDLE AND 33% FOR A 4-BAR BUNDLE.
d. TABULATED VALUES ARE BASED ON 45mm CLEAR COVER TO REINFORCEMENT.

C26. SPLICES IN MESH: THE OUTERMOST TRANSVERSE WIRES SHALL BE OVERLAPPED BY AT LEAST THE SPACING OF THE TRANSVERSE WIRES PLUS 50mm.
C27. CONSTRUCTION TOLERANCE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF TINSW QA SPECIFICATION B80.
C28. PROVIDE 'NOMINAL' COVER AS DEFINED IN SECTION 4.10.3.1 OF AS 5100.5 UNLESS STATED OTHERWISE.

EARTHING AND BONDING NOTES:

EB1. ELECTRICAL CONTINUITY SHALL BE PROVIDED FOR REINFORCEMENT BY TACK WELDING IN ACCORDANCE WITH AS/NZS 1554.3-2014 AT REGULAR INTERVALS AND/OR USING STRONG MULTIPLE TIES.
EB2. ELECTRICAL CONTINUITY OF REINFORCEMENT SHALL BE TESTED IN ACCORDANCE WITH AS/NZS 2832.5-2015. THE STABLE RESISTANCE OF REINFORCEMENT CAGE SHALL BE MEASURED LESS THAN 0.2 OHM PRIOR TO SECURING CAGES OR CASTING CONCRETE.
EB3. TACK WELDS SHALL BE PERFORMED BY A QUALIFIED WELDER AS DEFINED IN AS 1554.
EB4. EXISTING TRAFFIC SIGNAL POST TO BE RELOCATED AND REPLACED WITH NEW DOUBLE INSULATED LIGHTING AND PVC CONDUIT FOR CABLES.
EB5. ELECTRICAL CONTINUITY TEST BETWEEN OHW ATTACHMENTS AND SPARK GAP SHALL BE UNDERTAKEN WITH A MILLI-OHM HIGH CURRENT INJECTION TESTER BEFORE AND AFTER OHW ATTACHMENTS RELOCATION, THE RESULT SHALL BE NO MORE THAN 20mΩ.

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DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

FILE No. | SHEET: 4 OF 9 | A1
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EARTHWORKS NOTES

ENVIRONMENTAL

EN1. CEMP: CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN.
EN2. ENVIRONMENTAL TESTING IN ACCORDANCE WITH THE CEMP MUST BE UNDERTAKEN.
EN3. CONSTRUCTION PROCEDURES MUST BE IN ACCORDANCE WITH CEMP.
EN4. TOPSOIL TO BE GENERALLY STOCKPILED FOR RE-USE.
EN5. EXCESS SPOIL TO BE BENEFICIALLY RE-USED ON SITE, WHERE POSSIBLE.
EN6. FILL EARTHWORKS MUST PRIORITISE THE USE OF SITE WON MATERIAL BEFORE ADDITIONAL MATERIAL IS INTRODUCED.
EN7. CONSTRUCTION SHOULD BE UNDERTAKEN IN ACCORDANCE WITH THE RELEVANT CONDITIONS OF APPROVAL (SSI 8256) AND REVISED ENVIRONMENTAL MITIGATION MEASURES (SYDENHAM TO BANKSTOWN SUBMISSIONS AND PREFERRED INFRASTRUCTURE REPORT), AND THE SYDNEY METRO CITY & SOUTHWEST SYDENHAM TO BANKSTOWN SUBMISSIONS REPORT (THE SR), AND THE REVISED DESIGN OF BANKSTOWN STATION STATE SIGNIFICANT INFRASTRUCTURE MODIFICATION ASSESSMENT (SSI 8256 MOD 1), AND THE SYDNEY METRO CITY & SOUTHWEST SYDENHAM TO BANKSTOWN RESPONSE TO SUBMISSIONS, AND APPENDIX L OF THE RELEVANT DESIGN REPORT.
EN8. CONSTRUCTION ACTIVITIES SHOULD COMPLY WITH THE REQUIREMENTS OF THE ARTEFACT HERITAGE (2018) SYDNEY METRO CITY AND SOUTHWEST SYDENHAM TO BANKSTOWN UPGRADE - ARCHAEOLOGICAL ASSESSMENT AND RESEARCH DESIGN REPORT.

GEOTECHNICAL

GE1. IF LOCALISED POCKETS OF UNSUITABLE MATERIAL AS DEFINED IN TfNSW D&C R44 (INCLUDING SOFT AND VERY SOFT MATERIAL) REMOVAL AND REPLACEMENT SHALL BE CARRIED OUT AND DIRECTED BY THE SQGE BASED ON INSPECTION OF EXPOSED FOUNDATIONS. PROOF ROLLING SHALL BE UNDERTAKEN FOR SIGN OFF OF HOLD POINT FOR UNSUITABLE MATERIAL.
GE2. IN AREAS WHERE SPECIAL TREATMENTS WILL BE REQUIRED, PARTICULAR INVESTIGATION AND ASSESSMENT OF THE DEPTH AND EXTENT OF THE FOUNDATION TREATMENT SHALL BE VERIFIED BY THE SQGE.
GE3. GROUND TREATMENT MAY BE REQUIRED TO SUIT ACTUAL GROUND CONDITIONS ENCOUNTERED ON SITE AS DIRECTED BY SUITABLY QUALIFIED GEOTECHNICAL ENGINEER (SQGE).
GE4. ALL FOUNDATION TREATMENTS AND ASSOCIATED EARTHWORKS MATERIALS SHALL BE VERIFIED BY SQGE (HOLD POINT).
GE5. SEPARATION GEOTEXTILE MAY BE REQUIRED ABOVE AND BELOW THE STRUCTURAL ZONE SUBJECT TO GRADING ASSESSMENT OF STRUCTURAL ZONE, CAPPING AND SUB GRADE. TO BE CONFIRMED ON SITE BY SQGE.
GE6. FOUNDING MATERIAL FOR ALL STRUCTURES IS ASSUMED TO BE STIFF CLAY OR BETTER UNO WITH A MINIMUM UNRESTRAINED COHESION OF 50kPa, OR A MINIMUM EFFECTIVE COHESION OF 5kPa AND EFFECTIVE FRICTION ANGLE OF 26°. THESE ARE MINIMUM REQUIREMENTS. VARIATIONS IN GROUND CONDITIONS AND BEDROCK MAY BE ENCOUNTERED WITHIN THE DEPTH OF THE EXCAVATION UNO.
GE7. PRIOR TO CONSTRUCTION, THE FOUNDING CONDITIONS SHALL BE VERIFIED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO ENSURE THAT THE FOUNDING MATERIAL STRENGTHS MEET OR EXCEED THE ASSUMED DESIGN STRENGTH. THE SUITABLY QUALIFIED GEOTECHNICAL ENGINEER SHALL ENSURE THAT ANY NECESSARY FOUNDATION TREATMENTS ARE COMPLETED PRIOR TO CONSTRUCTION. FOUNDING MATERIALS NOT MEETING THE REQUIRED STRENGTH SHALL BE REMOVED AND REPLACED WITH A GENERAL FILL IN ACCORDANCE WITH THE EARTHWORKS GENERAL NOTES TO THE SATISFACTION OF THE SUITABLY QUALIFIED GEOTECHNICAL ENGINEER.

COMPACTION

CO1. TRACK AND ROAD EMBANKMENTS

ZONE	COMPACTION TYPE	DESCRIPTION
STRUCTURAL FILL	COMPACTION (A)	COHESIVE SOILS - NOT LESS THAN 100% RELATIVE COMPACTION AS DETERMINED BY TfNSW T111. ROCK FILL OR COHESIONLESS SOILS - NO VISIBLE DEFLECTION OF SURFACE UNDER 10 TONNE VIBRATORY ROLLERS AFTER 6-8 PASSES
GENERAL FILL	COMPACTION (B)	NOT LESS THAN 98% RELATIVE COMPACTION AS DETERMINED BY TfNSW T111 (STANDARD COMPACTION)
RAIL CAPPING LAYER	COMPACTION (C)	NOT LESS THAN 95% RELATIVE COMPACTION AS DETERMINED BY TfNSW T112 (MODIFIED COMPACTION)
FOUNDATION FOR EMBANKMENT	COMPACTION (D)	NOT LESS THAN 95% RELATIVE COMPACTION AS DETERMINED BY TfNSW T111 (STANDARD COMPACTION)

CO2. GENERAL
a. PLACEMENT OF MATERIAL LAYERS SHOULD NOT EXCEED 200mm THICKNESS. GRANULAR MATERIAL SHOULD BE PLACED IN LAYERS NOT EXCEEDING 300mm. THESE LAYER THICKNESS ARE PROVIDED AS GUIDANCE AND CAN BE USED DURING CONSTRUCTION PROVIDING THE REQUIRED COMPACTION IS ACHIEVED.
b. EARTHWORKS NEAR STRUCTURES SHALL COMPLY WITH T HR CI 12110 ST - SECTION 13.

CUTTING AND EMBANKMENTS

CE1. LANDSCAPE BATTER SLOPES MUST NOT BE STEEPER THAN 1V:3H.
CE2. BENCHES MUST BE PROVIDED ON ALL BATTER SLOPES GREATER THAN 10m HIGH. BENCH WIDTHS MUST NOT BE LESS THAN 4m WIDE.
CE3. ALLOWANCE FOR A MAXIMUM FUTURE EXCAVATION OF 1m AT THE TOE OF EMBANKMENTS AND CUTTINGS MUST BE INCLUDED FOR ALL PERMANENT FORMATION EARTHWORKS.
CE4. STABILITY AND EROSION PREVENTION OF SLOPES TO BE ASSESSED AND CONFIRMED BY SQGE.

VERIFICATION & TESTING REQUIREMENTS

APPROPRIATE SUPERVISION AND VERIFICATION / TESTING TO BE CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING STANDARD DURING THE CONSTRUCTION WORKS:

VTR1. TfNSW D&C R44 - EARTHWORKS
VTR2. T HR CI 12110 ST - EARTHWORKS AND FORMATION
VTR3. T HR CI 12111 SP - EARTHWORKS MATERIALS

THE TABLES BELOW DETAIL THE MATERIAL PROPERTIES TO BE ACHIEVED FROM TESTING AND VERIFICATION.

VTR4. STRUCTURAL ZONE FILL MATERIAL: (CRUSHED ROCK)

DESCRIPTION	CRITERIA
PARTICLE SIZE DISTRIBUTION	% PASSING 53.0mm SIEVE 80-100
	% PASSING 2.36mm SIEVE 15-100
	% PASSING 425um SIEVE 5-70
	% PASSING 75um SIEVE 0-30
ATTERBERG LIMITS	LIQUID LIMIT MAX. 40%
	PLASTICITY INDEX MAX. 20%
MAXIMUM DRY DENSITY	MINIMUM 18kN/m³
SOAKED CBR	MINIMUM 8%

VERIFICATION & TESTING REQUIREMENTS (CONT.)

VTR5. GENERAL FILL / SUBGRADE

DESCRIPTION	CRITERIA
SOAKED CBR (4 DAY)	≥3.0%
PLASTICITY INDEX	9 - 45%
FREE SWELL VALUE	MAX. 3%
PARTICLE SIZE DISTRIBUTION	% PASSING 200mm SIEVE 100
	% PASSING 37.5mm SIEVE 60
MAXIMUM NOMINAL SIZE	100mm

BACKFILL AND BULK FILL

BB1. BACKFILL TO EXCAVATION MUST BE FREE OF DELETERIOUS MATERIALS.
BB2. EARTH BACKFILL MATERIALS MUST BE VIRGIN EXCAVATED NATURAL MATERIAL AND FREE OF CONTAMINATION.

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D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
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CIVIL NOTES

SIGNS AND LINEMARKING

GENERAL

ALL MATERIALS AND WORKMANSHIP IS TO BE IN ACCORDANCE WITH THE RELEVANT TfNSW D&C SPECIFICATIONS FOR THE WORK.

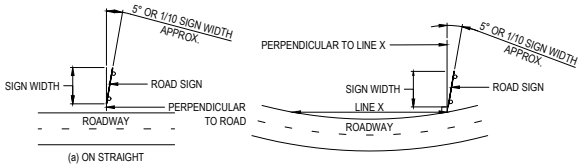
a. 3400 - MANUFACTURE AND DELIVERY OF ROAD SIGNS
b. DC R142 ED 1 REV 2 RETROREFLECTIVE RAISED PAVEMENT MARKETS (VA12657929).doc
c. DC R143 ED 2 REV 0 SIGNPOSTING (VA12658640).doc
d. DC R145 ED 3 REV 0 PAVEMENT MARKING (PERFORMANCE BASED) (VA13966768).doc

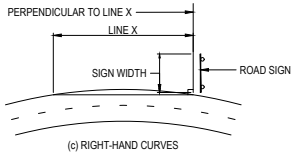
DELINEATION

DE1. DELINEATION TO BE IN ACCORDANCE WITH THE TfNSW DELINEATION GUIDELINES AND AUSTRALIAN STANDARD AS 1742.
DE2. PAVEMENT MARKING TO BE PROVIDED IN ACCORDANCE WITH TfNSW D&C SPECIFICATION R145.
DE3. LINE MARKING TO BE PROVIDED ON PAVEMENT SURFACES IN ACCORDANCE WITH TfNSW D&C SPECIFICATION R145 AS FOLLOWS:
FOR LOCAL ROADS - WATERBORNE PAINTED NORMAL LINEMARKING
DE4. PARKING LINE MARKING TO BE 100mm WIDE WHITE AS PER AS 2890.

SIGNAGE

SG1. SIGNPOSTING TO BE IN ACCORDANCE WITH AUSTRALIAN STANDARD AS 1742 AND TfNSW SIGNS REGISTER.
SG2. MANUFACTURE, SUPPLY AND INSTALLATION OF SIGNAGE SHALL BE IN ACCORDANCE WITH ROADS AND MARITIME D&C SPECIFICATION R143 AND AS 3400 MANUFACTURE AND DELIVERY OF ROAD SIGNS.
SG3. CONNECTION OF SIGN FACES AND ASSEMBLY DETAILS TO BE UNDERTAKEN IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND RELEVANT ROADS AND MARITIME SPECIFICATIONS.
SG4. SIGNS MAY BE RELOCATED LOCALLY WITH CONSIDERATION OF SIGHT LINES AND THE INTERFACING WITH NEW AND EXISTING INFRASTRUCTURE WITH THE APPROVAL OF THE DESIGN SITE REPRESENTATIVE.
SG5. TO ELIMINATE EXCESSIVE GLARE FROM THE SURFACE OF A SIGN, THE SIGN SHOULD BE TURNED APPROX. 5° OR 1/10 SIGN WIDTH AWAY FROM THE NORMAL TO THE HEADLIGHT BEAM/LINE OF SIGHT 200m IN ADVANCE OF THE SIGN. THE VERTICAL AXIS OF OVERHEAD SIGNS SHOULD BE TILTED BACK 5° TO THE LINE OF SIGHT ON LEVEL AND DOWNHILL. ON UPHILL GRADES, TILT BACK 5° TO THE LINE OF SIGHT. REFER TO DIAGRAMS BELOW FOR INDICATIVE SET-OUT OF SIGNS.





LINE X = 200m

PROVISION FOR TRAFFIC DURING CONSTRUCTION IS TO BE IN ACCORDANCE WITH THE CURRENT AUSTRALIAN STANDARD 1742.3 / RMS G10 SPECIFICATION.

PAVEMENTS

PT1. THE CONTRACTOR SHALL CONSTRUCT THE PAVEMENTS AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE RELEVANT AUSTROADS AND TfNSW SPECIFICATIONS AND SPECIFICALLY WITH THE FOLLOWING:
a. ASPHALT: TfNSW R116 AS NOTED ON DRAWINGS
b. SPRAYED SEAL/BITUMINOUS SURFACE : TfNSW R106
c. SOLID WALLED PVC PIPE: AS 2032
PT2. FOLLOWING COMPLETION OF THE WEARING SURFACE THE CONTRACTOR SHALL SURVEY THE SURFACE AND PROVIDE DRAWINGS SHOWING THE AS BUILT LEVELS AND ANY DEVIATIONS IN ACCORDANCE WITH THE TOLERANCE PROVIDED IN THE APPLICABLE TfNSW SPECIFICATION.
PT3. ALL 'PT' NOTES HEREIN ARE UNO ON THE DRAWINGS.

PATHWAYS

F01. CONCRETE PATHWAY SURFACE TO HAVE A NON-SLIP BROOM FINISH WITH MINIMUM SLIP RESISTANCE CLASSIFICATION (CLASS) P5 OR TO MATCH URBAN DESIGNER'S SPECIFIC REQUIREMENTS.
F02. CONCRETE FOR PATHWAYS (OFF-STRUCTURE) ARE TO BE SUPPLIED AND PLACED IN ACCORDANCE WITH TfNSW R54 UNO.

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APPROVED	SCOTT HENDERSON	XX.XX.2025

WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

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UTILITIES NOTES

GENERAL

UT1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL PUBLIC OR PRIVATE SERVICE PROVIDER DRAWINGS, INCLUDING BUT NOT LIMITED TO:

- JEMENA DRAWINGS
- AUSGRID DRAWINGS
- SYDNEY WATER DRAWINGS
- TfNSW SIGNAL PLAN DRAWINGS
- TELSTRA AND OPTUS DRAWINGS
- SYDNEY TRAINS DRAWINGS

UT2. EXISTING UTILITIES SHOWN ON DRAWINGS ARE INDICATIVE ONLY AND COMPRISES OF A COMBINATION OF DBYD DATA, SYDNEY TRAINS DSS AND GROUND SURVEY DATA OBTAINED DURING THE DESIGN PROCESS AND MAY NOT INCLUDE ALL SERVICES PRESENT. AURECON TAKES NO RESPONSIBILITY FOR THE UTILITY INFORMATION AS SHOWN ON THESE DRAWINGS.

UT3. IT IS THE CONTRACTORS RESPONSIBILITY TO LIAISE WITH EACH UTILITY SERVICE PROVIDER, TO LOCATE AND IDENTIFY THE SIZE, POSITION, LINE AND LEVEL OF ALL UTILITY SERVICES IN BOTH PUBLIC AND PRIVATE LAND, PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.

UT4. THE CONTRACTOR MUST TAKE EVERY PRECAUTION TO PROTECT EXISTING AND NEW UTILITY SERVICES THROUGH THE COURSE OF THE CONTRACT.

UT5. ALL WORKS INVOLVING UTILITY SERVICES TO BE UNDERTAKEN TO THE SATISFACTION OF THE UTILITY SERVICE PROVIDER. THE CONTRACTOR WILL BE RESPONSIBLE FOR ENGAGING WITH THE UTILITY SERVICE PROVIDER, THE EXECUTION OF THE WORK TO THEIR REQUIREMENTS AND PROCUREMENT OF APPROVALS FOR WORKS UNDERTAKEN.

UT6. ALL WORKS INVOLVING UTILITY SERVICES MUST ONLY BE UNDERTAKEN USING PLANS APPROVED BY THE UTILITY SERVICE PROVIDER.

UT7. ALL SERVICE PIT COVERS TO BE PLACED AT FINISHED SURFACE LEVELS TO MATCH THE PROPOSED LONGITUDINAL AND CROSS FALL GRADES OF THE FOOTPATH OR ROADWAY IT IS CONTAINED WITHIN.

UT8. NO PIPE OR TRENCH SHALL BE LOCATED WITHIN THE ZONE OF INFLUENCE (1V:1H) OF A FOOTING WHERE AN AUTHORITIES APPROVAL IS NOT PROVIDED

UT9. "WORKS AS CONSTRUCTED" SURVEY ON ALL UTILITY WORK SHALL BE RECORDED PRIOR TO ANY BACKFILLING.

UT10. AUSGRID TRANSMISSION CABLES - AUSGRID SUPERVISOR SHALL BE ON SITE WHEN EXCAVATION IS WITHIN 2m OF TRANSMISSION CABLES.

UT11. JEMENA GAS - JEMENA SUPERVISOR SHALL BE ON SITE WHEN EXCAVATION IS UNDERTAKEN AS REQUIRED BY JEMENA SPECIFICATIONS.

UT12. UTILITY LOCATION BASED ON DATA WITH VARIOUS LEVEL OF ACCURACY. THIS ACCURACY IS DEFINED BY AS 5488 SUCH AS QUALITY LEVEL A HAVING HORIZONTAL AND VERTICAL TOLERANCES OF +- 50mm, QUALITY LEVEL B HAS TOLERANCE OF +- 300mm HORIZONTAL AND +- 500mm VERTICAL AND QUALITY LEVEL D INDICATES THE PRESENCE OF A UTILITY ONLY WITH ITS LOCATION UNDEFINED. ADDITIONAL CONSULTATION MAY BE REQUIRED OR ADDITIONAL CLASHES MAY BE IDENTIFIED ONCE EXACT LOCATION OF UTILITIES IS KNOWN. LOCATION TO BE CONFIRMED ON SITE DURING CONSTRUCTION.

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SUSTAINABILITY NOTES

MATERIALS – STEEL

SU1. MAXIMISE THE RECYCLED CONTENT OF STEEL.
SU2. SOURCE STEEL FROM SUPPLIERS THAT ARE CERTIFIED UNDER THE AUSTRALIAN CERTIFICATION AUTHORITY FOR REINFORCING AND STRUCTURAL STEELS OR A DEMONSTRATED EQUIVALENT ASSOCIATION OR ORGANISATION.
SU3. SOURCE STEEL FROM STEEL MAKERS WITH AN ISO 14001:2015 ENVIRONMENTAL MANAGEMENT CERTIFIED ENVIRONMENTAL MANAGEMENT SYSTEM.
SU4. SOURCE FABRICATED STRUCTURAL STEELWORK FROM A STEEL FABRICATOR/STEEL CONTRACTOR ACCREDITED TO THE AUSTRALIAN STEEL INSTITUTE'S ENVIRONMENTAL SUSTAINABILITY CHARTER OR A SIMILAR ASSOCIATION OR ORGANISATION.
SU5. SOURCE STEEL PRODUCTS FABRICATED IN ACCORDANCE WITH AS 5131:2016 STRUCTURAL STEELWORK FABRICATION AND ERECTION AND CERTIFIED THROUGH THE NATIONAL STRUCTURAL STEELWORK COMPLIANCE SCHEME.
SU6. ALL STEEL TO BE SOURCED FROM A STEELMAKER THAT IS A CURRENT MEMBER OF THE WORLD STEEL ASSOCIATION CLIMATE ACTION DATA COLLECTION PROGRAMME.
SU7. AT LEAST 60% BY MASS OF ALL REINFORCING STEEL MUST BE PRODUCED USING ENERGY- REDUCING PROCESSES, WHICH INCLUDE POLYMER INJECTION TECHNOLOGY OR ITS EQUIVALENT, IN ITS MANUFACTURE.
SU8. MAJOR STRUCTURAL ELEMENTS AND CLADDING TO BE PERMANENTLY MARKED DURING MANUFACTURE TO ENSURE THAT OPPORTUNITIES FOR REUSE ARE MAXIMISED.
SU9. A PORTION OF ALL REINFORCING STEEL IS ASSEMBLED USING OFF SITE OPTIMAL FABRICATION TECHNIQUES.

MATERIALS - TIMBER

SU10. SOURCE ALL TIMBER PRODUCTS FROM EITHER REUSED TIMBER, POST-CONSUMER RECYCLED TIMBER, TIMBER SUPPLIERS IN AUSTRALIA CERTIFIED BY THE FOREST STEWARDSHIP COUNCIL, OR TIMBER SUPPLIERS IN AUSTRALIA CERTIFIED UNDER THE PROGRAM FOR THE ENDORSEMENT OF FOREST CERTIFICATION.

MATERIALS – CONCRETE

SU11. SOURCE CONCRETE FROM MEMBERS OF CEMENT CONCRETE AND AGGREGATES AUSTRALIA OR A SIMILAR ASSOCIATION OR ORGANISATION.
SU12. ALL CONCRETE AND CONSTITUENTS MUST COMPLY WITH AS 1379, EXCEPT WHERE STATED OTHERWISE IN THE GENERAL SPECIFICATION.
SU13. EMBODIED CARBON AND LIFECYCLE IMPACTS MUST BE MINIMISED BY USING CEMENTITIOUS MATERIALS THAT CONTAINS WASTE INDUSTRIAL PRODUCTS SUCH AS FLY ASH, GROUND GRANULATED BLAST FURNACE SLAG AND SILICA FUME.
SU14. USE GEOPOLYMER CONCRETE FOR NON-STRUCTURAL APPLICATIONS WHERE POSSIBLE.
SU15. ALL CEMENT MUST BE TYPE SL OR GP IN ACCORDANCE WITH AS 3972. SUBJECT TO APPROVAL BY THE PRINCIPAL, OTHER CEMENTS CAN BE USED PROVIDING THESE ARE IN ACCORDANCE WITH AS 3972 AND PROVIDING THESE ACHIEVE THE SAME OR BETTER EMBODIED CARBON OUTCOMES.
SU16. THE MAXIMUM CEMENTITIOUS CONTENT FOR CONCRETE AND SHOTCRETE USED IN ALL CIVIL AND STRUCTURAL WORKS WITH A DESIGN CHARACTERISTIC COMPRESSIVE STRENGTH (SWTC APPENDIX B01):
- a. UP TO AND INCLUDING 20MPa MUST BE 280kg PER CUBIC METRE OF CONCRETE;
- b. OVER 20MPa UP TO AND INCLUDING 25MPa MUST BE 310kg PER CUBIC METRE OF CONCRETE;
- c. OVER 25MPa UP TO AND INCLUDING 32MPa MUST BE 360kg PER CUBIC METRE OF CONCRETE;
- d. BETWEEN 40MPa UP TO AND INCLUDING 65MPa MUST BE 450kg;
- e. GREATER THAN 65MPa MUST BE 500kg PER CUBIC METRE OF CONCRETE.

SU17. ALL CONCRETE INCLUDING SHOTCRETE USED IN THE TEMPORARY AND PERMANENT CIVIL AND STRUCTURAL WORKS WITH A COMPRESSIVE STRENGTH UP TO AND INCLUDING 65MPa (SWTC APPENDIX B01):
- a. MUST CONTAIN FLY ASH AND/OR GROUND GRANULATED BLAST FURNACE SLAG, IN COMPLIANCE WITH THE FOLLOWING:
  - I. FOR CONCRETE ELEMENTS THAT ARE NOMINALLY THICKER THAN 600mm (EXCLUDING LOCAL DISCRETE THICKENING) THE CEMENTITIOUS CONTENT MUST CONTAIN AT LEAST 50% FLY ASH OR 70% SLAG. WHERE A MIX CONTAINING 50% FLY ASH OR MORE IS USED, THE DESIGN WATER/CEMENTITIOUS RATIO MUST NOT BE GREATER THAN 0.4;
  - II. FOR CONCRETE ELEMENTS LESS THAN OR EQUAL TO – 600mm IN THICKNESS, THE CEMENTITIOUS CONTENT MUST CONTAIN AT LEAST 30% FLY ASH OR 55% SLAG; AND
  - III. CONCRETE ELEMENTS THAT HAVE A FLY ASH CONTENT WHICH IS GREATER THAN OR EQUAL TO 50% OF THE TOTAL CEMENTITIOUS CONTENT AND/OR A SLAG CONTENT WHICH IS GREATER THAN OR EQUAL TO 70% OF THE TOTAL CEMENTITIOUS CONTENT MUST RECEIVE A MINIMUM OF 7 DAYS OF CONTINUOUS MOIST CURING AFTER CASTING.
- b. TERNARY BLENDED CEMENT USED MUST CONFORM TO TABLE 3112/A.2 OF TINSW D&C 3211.

SU18. FOR CONCRETE ELEMENTS WITH A COMPRESSIVE STRENGTH GREATER THAN 65MPa:
- a. THE CONTRACTOR MUST UNDERTAKE A PERFORMANCE BASED ASSESSMENT WHICH INCLUDES A MOCK-UP REPRESENTATIVE OF THE LARGEST CONCRETE ELEMENT FOR EACH MIX TYPE TO CONFIRM THE FOLLOWING:
  - I. OPTIMISED CEMENTITIOUS CONTENT AND OPTIMISED CARBON FOOTPRINT OF THE CEMENTITIOUS CONCRETE IN MIX;
  - II. PRODUCTION AND PLACEMENT QUALITY CONTROL PROCESSES TO BE ADOPTED TO CONTROL TEMPERATURE DURING PLACEMENT AND CURING. THIS MUST BE CONFIRMED BY THERMOCOUPLE MEASUREMENTS; AND
  - III. THE REQUIRED CONCRETE COMPRESSIVE STRENGTH IS ACHIEVED. THIS MUST BE TESTED BY A CORE SAMPLE TAKEN FROM THE LOCATION WHERE THE PEAK IN-SITU TEMPERATURE WAS MEASURED WITHIN THE MOCK-UP ELEMENTS.
- b. THE CONTRACTOR MUST DESIGN MOCK-UP DIMENSIONS SUCH THAT THE PEAK TEMPERATURE MEASURED IS REPRESENTATIVE OF THE PEAK TEMPERATURE THAT WILL OCCUR IN ACTUAL CONSTRUCTION;
- c. MOCK-UP DIMENSIONS, PROPOSED CONCRETE MIXES AND METHODOLOGY MUST BE ACCEPTED BY THE PRINCIPAL'S REPRESENTATIVE PRIOR TO TESTING; AND
- d. THE CONTRACTOR MUST DEMONSTRATE A MINIMUM 35% REDUCTION IN THE EMBODIED GREENHOUSE GAS EMISSIONS ASSOCIATED WITH CONCRETE USED FOR THE PROJECT WORKS AND TEMPORARY WORKS.

SU19. USE RECYCLED WATER IN CONCRETE BATCHING.

MATERIALS – AGGREGATES

SU20. FOR AGGREGATES USED IN CONCRETE,
- a. AT LEAST 40% OF COARSE AGGREGATE IN THE CONCRETE SHALL BE CRUSHED SLAG AGGREGATE, RECYCLED CONCRETE AGGREGATE OR ANOTHER ALTERNATIVE MATERIAL (MEASURED BY MASS ACROSS ALL CONCRETE MIXES ON THE PROJECT), PROVIDED THAT THE OF SUCH MATERIALS DOES NOT INCREASE THE USE OF PORTLAND CEMENT BY OVER 5kg PER CUBIC METRE OF CONCRETE;
- b. AT LEAST 50% OF FINE AGGREGATES (SAND) IN THE CONCRETE SHALL BE MANUFACTURED SAND OR ANOTHER ALTERNATIVE MATERIAL (MEASURED BY MASS ACROSS ALL CONCRETE MIXES ON THE PROJECT), PROVIDED THAT THE USE OF SUCH MATERIALS DOES NOT INCREASE THE USE OF PORTLAND CEMENT BY OVER 5kg PER CUBIC METRE OF CONCRETE. THE AGGREGATES SHALL COMPLY AS 2758.

SU21. USE A MINIMUM OF 10% RECYCLED CONCRETE AGGREGATES FOR NON-STRUCTURAL CONCRETE WHERE FEASIBLE.

MATERIALS – COATINGS AND FINISHES

SU22. USE LOW VOLATILE ORGANIC COMPOUNDS (VOC) PAINTS. FINISHES, SEALANTS AND ADHESIVES AND ZERO OR LOW FORMALDEHYDE EMISSION COMPOSITE WOOD PRODUCTS.
SU23. ENSURE THAT ALL SURFACE COATINGS COMPLY WITH THE VOC LIMITS DEFINED IN THE AUSTRALAN PAINT APPROVAL SCHEME.
SU24. POLYVINYL CHLORIDE MUST BE COMPLIANT WITH THE GBCA BEST PRACTICE GUIDELINES FOR PVC IN THE BUILT ENVIRONMENT.

MATERIALS – GENERAL

SU25. UTILISE OR REUSE APPROPRIATE SITE-WON MATERIALS ONSITE.
SU26. WASTE MUST ONLY BE EXPORTED TO A SITE LICENSED BY THE EPA FOR THE STORAGE, TREATMENT, PROCESSING, REPROCESSING OR DISPOSAL OF THE SUBJECT WASTE, OR IN ACCORDANCE WITH A RESOURCE RECOVERY EXEMPTION OR ORDER ISSUED UNDER THE PROTECTION OF THE ENVIRONMENT OPERATIONS (WASTE) REGULATION 2014, OR TO ANY OTHER PLACE THAT CAN LAWFULLY ACCEPT SUCH WASTE.
SU27. ALL WASTE MUST BE CLASSIFIED IN ACCORDANCE WITH THE EPA'S WASTE CLASSIFICATION GUIDELINES, WITH APPROPRIATE RECODES AND DISPOSAL DOCKETS RETAINED FOR AUDIT PURPOSES.
SU28. CONSTRUCTION WASTE WOULD BE MINIMISED BY ACCURATELY CALCULATING MATERIALS BROUGHT TO THE SITE AND LIMITING MATERIALS PACKAGING.
SU29. ALL WASTE WOULD BE ASSESSED, CLASSIFIED, MANAGED AND DISPOSED OF IN ACCORDANCE WITH THE WASTE CLASSIFICATION GUIDELINES (EPA, 2014).
SU30. WASTE SEGREGATION BINS WOULD BE LOCATED AT VARIOUS LOCATIONS WITHIN THE PROJECT AREA, IF SPACE PERMITS, TO FACILITATE SEGREGATION AND PREVENT CROSS CONTAMINATION.

HERITAGE NOTES

GENERAL

HE1. HERITAGE SPECIALIST IS TO BE ADVISED OF ANY CHANGE OF SCOPE, HOWEVER MINOR, FOR REVIEW. PROJECT TEAM TO AWAIT INSTRUCTION BY HERITAGE SPECIALIST BEFORE PROCEEDING WITH WORKS.
HE2. IN THE FIRST INSTANCE, RETAIN AND CONSERVE ELEMENTS OF HIGH HERITAGE SIGNIFICANCE.
HE3. UNDERTAKE ALL DEMOLITION WORK, REMOVAL OF MODERN ACCRETIONS AND THE LIKE CAREFULLY AND BY HAND TO AVOID DAMAGE TO SURROUNDING HERITAGE FABRIC.
HE4. INSTALL NECESSARY PROTECTION PRIOR TO COMMENCING WORK THAT MAY DAMAGE SURROUNDING HERITAGE FABRIC.
HE5. ALL WORKS TO HERITAGE FABRIC TO BE UNDERTAKEN BY SUITABLY EXPERIENCED HERITAGE TRADESPERSONS. CONTRACTORS ARE TO PROVIDE LIST OF RELEVANT HERITAGE WORKS UNDERTAKEN IN RECENT YEARS.
HE6. ALL CONTRACTORS ARE TO BE BRIEFED ON THE HERITAGE SIGNIFICANCE OF THE SITE AS PART OF AN INDUCTION. INDUCTIONS MUST INCORPORATE INFORMATION REGARDING SIGNIFICANT BUILDING FABRIC, ELEMENTS / AREAS TO BE PROTECTED, REPAIR APPROACH, ROLES, RESPONSIBILITIES, REPORTING AND UNEXPECTED FINDS PROCEDURES.
HE7. EXISTING PENETRATIONS ARE TO BE USED WHERE POSSIBLE WHEN INTRODUCING NEW SERVICES AND EQUIPMENT TO LIMIT CHANGE TO HERITAGE FABRIC.
HE8. NEW SERVICES AND EQUIPMENT ARE TO BE RATIONALISED AND SHOULD NOT COVER DECORATIVE FABRIC.
HE9. FOLLOWING REMOVAL OF ALL ANY MODERN ELEMENTS, REDUNDANT PENETRATIONS, ACCRETIONS AND THE LIKE, REPAIR AND MAKE GOOD FABRIC AS REQUIRED AND IN ACCORDANCE WITH BEST PRACTICE CONSERVATION TECHNIQUES.
HE10. CLEAN ALL HERITAGE FABRIC OF DIRT, ORGANIC GROWTH, GUANO AND OTHER DEBRIS USING LOW PRESSURE WARM WATER, BIOCIDE AND A STIFF BRISTLE (NON-FERROUS) BRUSH. DO NOT USE AGGRESSIVE OR HARSH CHEMICALS, SAND BLASTING OR OTHER ABRASIVE MEANS.
HE11. WORK TO BE UNDERTAKEN WITH MINIMAL DISTURBANCE TO ADJOINING PROPERTY.
HE12. EXISTING SURFACES TO BE RETAINED ARE TO BE PROTECTED. ANY DAMAGE SUSTAINED DURING THE DURATION OF THE WORKS IS TO BE REPLACED OR MADE GOOD BY CONTRACTOR TO AN EQUIVALENT STANDARD OR BETTER.
HE13. ALLOW FOR MAKING GOOD ALL EXISTING SURFACES EXPOSED AFTER REMOVAL OF EXISTING FIXTURES AND FITTINGS.
HE14. UNEXPECTED OR UNDOCUMENTED DILAPIDATION OF FIXTURES OR MATERIALS DISCOVERED DURING THE DEMOLITION WORKS SHOULD BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER AND HERITAGE SPECIALIST. THE EXTENT OF NEW WORKS RESULTING IS TO BE AGREED WITH THE PROJECT MANAGER PRIOR TO PROCEEDING.
HE15. ALL ITEMS TO BE REMOVED FROM SITE FOR REINSTATEMENT AFTER COMPLETION ARE TO BE STORED IN A SECURE DRY LOCATION TO BE AGREED WITH THE PROJECT MANAGER AND CLIENT.
HE16. ALL DEMOLISHED FIXTURES AND MATERIALS ARE TO BE REMOVED FROM SITE AND DISPOSED OF SAFELY AND LEGALLY BY THE BUILDER.
HE17. ALL AREAS AFFECTED BY THE WORKS MUST BE CLEANED ON COMPLETION.
HE18. AN EXCAVATION DIRECTOR'S REPORT (EDR) MUST BE PREPARED FOR ANY HERITAGE ITEMS OF STATE SIGNIFICANCE THAT ARE DISCOVERED DURING WORK. THE EDR MUST BE PREPARED IN CONSULTATION WITH OEH.
HE19. THE CONTRACTOR MUST SEEK THE ADVICE OF A HERITAGE SPECIALIST ON METHODS AND LOCATIONS FOR INSTALLING EQUIPMENT USED FOR VIBRATION, MOVEMENT AND NOISE MONITORING AT HERITAGE-LISTED STRUCTURES.

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00	APPROVED FOR CONSTRUCTION	ESI / XX.XX.25	BK / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	ESI / 18.10.24	BK / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	JK / 28.06.24	BK / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE:

NSW GOVERNMENT | sydney METRO

aurecon
AURECON CML

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	ELNER SAPOI II	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

FILE No. | SHEET: 8 OF 9 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921018 | 00 | EDMS No.

DF 801554

Plot Date & Time: 4/01/2025 12:44 PM
Plotted by: Tony Jing
File Plotted: R:\SYDNEY\MRL-WMS-CE-DWG-921018.dwg

SITE SAFETY NOTES

SS1. ALL CONSTRUCTION WORKS HAVE THE POTENTIAL FOR SAFETY RISKS TO PERSONNEL, PROPERTY AND EQUIPMENT. ALL PARTIES ARE REQUIRED TO CONSIDER, DOCUMENT AND EMPLOY APPROPRIATE WORK PLACE PROCEDURES FOR ALL ACTIVITIES.

SS2. THE CONTRACTOR SHALL:
- a. BE BOUND IN ACCORDANCE WITH THE CURRENT SAFE WORK AUSTRALIA ACT, REGULATIONS AND PRIORITY CODES OF PRACTICE STATE BY STATE.
- b. BE RESPONSIBLE FOR THE IMPLEMENTATION, DOCUMENTATION AND MAINTENANCE OF WORK SAFETY AND OTHER RELEVANT DOCUMENTATION AND ENSURE THAT ALL SUB-CONTRACTORS COMPLY.

THE CONTRACTOR SHOULD CONSULT WITH THE PRINCIPAL'S ENGINEER IF THERE IS ANY POTENTIAL PERCEIVED RISK. THE CONTRACTOR SHALL BE ALERT AND PROACTIVE TO:
- a. IDENTIFY HAZARDS.
- b. APPLY MEASURES TO ELIMINATE OR MINIMISE RISKS ASSOCIATED WITH SUCH HAZARDS.

SS3. THE CONTRACTOR SHALL ENSURE:
- a. SO FAR AS IS REASONABLY PRACTICABLE THAT THE CONSTRUCTION PHASE IS WITHOUT RISK TO THE HEALTH AND SAFETY OF PERSONS WHO ARE ENGAGED TO WORK ON THIS SITE OR ANY PERSON WHO MAY ENTER THIS SITE. ALL TRADES SHALL CONSIDER, DOCUMENT AND EMPLOY APPROPRIATE WORKSAFE PROCEDURES FOR ALL REQUIRED ACTIVITIES.

SPECIFIC ATTENTION SHALL BE GIVEN TO BUT NOT LIMITED TO ACTIVITIES INVOLVING:
- a. SITE ESTABLISHMENT.
- b. DEMOLITION, RECYCLING AND REMOVAL.
- c. DEMOLITION WORKS WHERE SERVICES ARE EXPOSED.
- d. TEMPORARY WORKS.
- e. EXCAVATION AND TRENCHING
- f. UNSTABLE GROUND.
- g. GAS SERVICES.
- h. GASES AND TOXIC WASTE.
- i. JACK HAMMERING
- j. NOISE AND DUST PROTECTION.
- k. WELDING-EYE PROTECTION.
- l. CONTAMINATED SOILS.
- m. CONSTRUCTION PROCESSES.
- n. CONFINED SPACES.
- o. TRIPS AND FALLS (GENERAL)
- p. UNSTABLE FOOTING.
- q. HIGH RISK WORK.
- r. ELECTRICAL-HIGH VOLTAGE CABLES.
- s. ASBESTOS OR ANY FIBROUS MATERIAL.
- t. WORKING AT HEIGHTS.
- u. MAINTENANCE AND REPAIR.
- v. REFURBISHMENT, RENOVATION AND EXTENSION.
- w. USE AS A WORK PLACE.
- x. WORKING NEXT TO LIVE TRAFFIC.

SS4. COMPLIANCE MANDATORY.
THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL COMPLY WITH ALL APPLICABLE WORK HEALTH AND SAFETY LEGISLATION (ACTS, CODES OF PRACTICE, GUIDANCE NOTES) AND OTHER RELEVANT DOCUMENTATION.

SS5. SITE INDUCTION REQUIRED.
THE CONTRACTOR SHALL ENSURE THAT ALL PERMANENT AND CONTRACT WORKERS ENGAGED ON THIS SITE ARE FORMALLY INDUCTED AND AWARE OF ALL SITE SPECIFIC SAFETY REQUIREMENTS BEFORE ENTERING THE SITE. A SEPARATE LOG-IN / LOG-OUT REGISTER SHALL BE KEPT AT THE SITE OFFICE FOR ALL CASUAL VISITORS. THE CONTRACTOR SHALL ENSURE THAT ALL PERSONS WHO ENTER THE WORK ZONE ARE WEARING SUITABLE PROTECTIVE CLOTHING AND EQUIPMENT IN ACCORDANCE WITH SAFETY REQUIREMENTS.

SS6. PUBLIC SAFETY.
A LIVE SITE THAT IS WORKING OR UNATTENDED HAS A STRONG ATTRACTION TO THE PUBLIC IN GENERAL. THE CONTRACTOR IS REQUIRED TO TAKE ALL REASONABLE PRECAUTIONS TO PREVENT UNAUTHORISED PEOPLE ENTERING THE SITE. EXCAVATIONS, STRUCTURES AND ACCESS EQUIPMENT SHALL BE KEPT IN A SECURE MANNER AS IS REASONABLY PRACTICABLE TO PREVENT UNAUTHORISED PEOPLE INCLUDING CHILDREN FROM ENTERING, CLIMBING OR FALLING. THE SITE SHALL HAVE CLEAR WARNING SIGNS IN APPROPRIATE LOCATIONS E.G. "DANGER KEEP OUT' AND SECURELY BARRICADED AND WHEN UNATTENDED LEFT IN A LOCKED CONDITION AS IS REASONABLY PRACTICABLE.

SS7. CURRENT LEGISLATION.
CURRENT LEGISLATION REQUIRES THAT ALL PERSONS ARE TO CONSIDER THEIR ACTIONS OR LACK OF ACTION ON THE HEALTH AND SAFETY OF THEMSELVES AND OTHERS.

SS8. RISK ASSESSMENT.
THE COMMISSIONED CONTRACTOR AND ALL SUB-CONTRACTORS SHALL CARRY OUT RISK ASSESSMENTS FOR ALL OF THEIR ACTIVITIES AND WHERE NECESSARY INTRODUCE SUITABLE CONTROL MEASURES OR PROVIDE PROTECTIVE CLOTHING/ EQUIPMENT TO MINIMISE THOSE RISKS. THE SUB-CONTRACTOR SHALL PROVIDE COPIES OF THEIR RISK ASSESSMENT TO THE CONTRACTOR FOR APPROVAL.

SITE SAFETY NOTES (CONT.)

SS9. SAFETY PRECAUTIONS.
EXCAVATIONS FOR TRENCHES REQUIRED FOR INSTALLATION OF SERVICES SHALL BE IN ACCORDANCE WITH WORK HEALTH AND SAFETY CODE OF PRACTICE - SAFETY PRECAUTIONS IN TRENCHING OPERATIONS' AND ALL OTHER NECESSARY STATUTORY AUTHORITY REGULATIONS AND RECOMMENDATIONS.

SS10. PERCEIVED RISKS.
THE CONTRACTOR SHOULD CONSULT WITH THE PRINCIPAL'S ENGINEER IF THERE IS ANY PERCEIVED RISK WITH THE DESIGN OR WITH THE CONSTRUCTION OF THE DESIGN. THE CONTRACTOR SHOULD ENGAGE SUITABLY QUALIFIED ENGINEERS TO CERTIFY ALL TEMPORARY STRUCTURAL WORKS.

SAFETY IN DESIGN

SD1. THIS DESIGN IS IN ACCORDANCE WITH THE MODEL WORK HEALTH AND SAFETY (WHS) ACT AND SAFEWORK AUSTRALIA MODEL CODE OF PRACTICE - SAFE DESIGN OF STRUCTURES. THE PROJECT SPECIFIC HAZARDS IDENTIFIED BELOW ARE BASED ON EXPERIENCE ON SIMILAR PROJECTS AND DO NOT NECESSARILY ACCOUNT FOR ALL CONSTRUCTION, OPERATION, MAINTENANCE AND DEMOLITION SAFETY HAZARDS. THE HAZARDS LISTED BELOW ARE LIMITED TO HAZARDS THAT ARE NOT CONSIDERED LIKELY TO BE OBVIOUS TO A COMPETENT CONTRACTOR, ARE UNUSUAL, DIFFICULT TO MANAGE, OR NOT NORMALLY ENCOUNTERED ON PROJECTS OF A SIMILAR NATURE. BASED ON INFORMATION AVAILABLE TO THE DESIGNERS AT THE TIME OF DOCUMENTATION, THE DESIGNERS HAVE ATTEMPTED TO IDENTIFY SAFETY HAZARDS RELATING TO THE CONSTRUCTION, OPERATION, MAINTENANCE AND DEMOLITION PHASES OF THIS PROJECT. INCLUSION (OR NOT) OF ANY HAZARD DOES NOT REDUCE OR LIMIT THE OBLIGATIONS OF THE CONTRACTOR, USER, MAINTAINER OR DEMOLISHER TO UNDERTAKE APPROPRIATE SAFETY MANAGEMENT. THESE NOTES ARE NOT AN ADMISSION OF RESPONSIBILITY BY THE DESIGNERS FOR MANAGEMENT OF ANY SAFETY HAZARDS RELATING TO THIS PROJECT.

SD2. DESIGN AND RISK MANAGEMENT:
A RISK MANAGEMENT PROCESS HAS BEEN INTEGRATED INTO THE DESIGN PROCESS AS FOLLOWS:
- a. IDENTIFICATION OF REASONABLY FORESEEABLE HAZARDS ASSOCIATED WITH THE DESIGN OF THE STRUCTURE.
- b. ASSESSMENT OF THE RISKS ARISING FROM SUCH HAZARDS. • ELIMINATION OR MINIMISATION OF THE RISK BY DESIGNING CONTROL MEASURES. • REVIEW OF THE CONTROL MEASURES.
- c. IDENTIFICATION OF ANY RESIDUAL HAZARDS TO BE PASSED ONTO THE CONTRACTOR WITHIN THE DESIGN DOCUMENTATION OR SEPARATE SAFETY IN DESIGN DOCUMENTATION. THE CLIENT AND CONTRACTOR SHOULD ENSURE THAT ALL PROFESSIONAL DESIGN SERVICES ENGAGED FOR THIS CONTRACT SHALL COMPLY WITH THE SAFE WORK AUSTRALIA WORK HEALTH AND SAFETY ACT AND CODE OF PRACTICE.

SD3. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH TfNSW QA SPECIFICATIONS. THIS DOCUMENT LISTS SOME DESIGN RELATED WORK HEALTH AND SAFETY HAZARDS ASSOCIATED WITH THE PROJECT DESIGN, CONSTRUCTION AND OPERATION. THERE MAY BE OTHER HAZARDS AND RISKS NOT STATED IN THIS DOCUMENT. THIS DOCUMENT DOES NOT RELIEVE THE CONTRACTOR OF ITS OBLIGATIONS UNDER THE CONTRACT AND RELEVANT LEGISLATION.

SD4. HIGH RISK CONSTRUCTION.
THE CONTRACTOR SHALL IDENTIFY AREAS OF CONSTRUCTION THAT MAY BE CONSIDERED HIGH RISK, AND IMPLEMENT SUFFICIENT SAFETY PROCEDURES FOR THESE TASKS. EXAMPLES OF HIGH RISK CONSTRUCTION INCLUDE, BUT ARE NOT LIMITED TO:
WORK THAT INVOLVES:
- a. ASBESTOS
- b. A RISK OF FALLING MORE THAN TWO (2) METRES OR IS CARRIED OUT ON A TELECOMMUNICATIONS TOWER
- c. BUILDING OR DEMOLITION WORK INVOLVING TILT-UP OR PRECAST CONCRETE, STRUCTURAL ALTERATIONS, OR REPAIRS TO A STRUCTURE THAT REQUIRES TEMPORARY SUPPORT TO PREVENT COLLAPSE
- d. THE DEMOLITION OF A LOAD BEARING PART OF A STRUCTURE OR THE DEMOLITION OF ANY PART OF A STRUCTURE THAT IS LIKELY TO AFFECT ITS PHYSICAL INTEGRITY.
- e. WORKING IN AREAS OF HIGH VOLTAGE ELECTRICAL CABLES.
- f. WORK CARRIED OUT IN, ON OR NEAR ANY:
- g. CONFINED SPACE
- h. SHAFT OR TRENCH WITH AN EXCAVATED DEPTH OF GREATER THAN 1.5m OR A TUNNEL.
- i. PRESSURISED GAS DISTRIBUTION MAINS OR PIPING.
- j. CHEMICAL, FUEL OR REFRIGERANT LINES.
- k. AREAS WHERE THERE ARE ARTIFICIAL EXTREMES OF TEMPERATURE
- l. AREAS THAT MAY HAVE A CONTAMINATED OR FLAMMABLE ATMOSPHERE
- m. ROAD, RAILWAY, OR OTHER TRAFFIC CORRIDOR THAT IS IN USE BY TRAFFIC OTHER THAN PEDESTRIANS
- n. AREA AT A WORKPLACE IN WHICH THERE IS MOVEMENT OF POWERED MOBILE PLANT
- o. WATER OR OTHER LIQUID THAT INVOLVES A RISK OF DROWNING
- p. ADJACENT TO DEEP EXCAVATIONS
- q. ADJACENT TO HIGH RETAINING STRUCTURES

SAFETY IN DESIGN NOTES (CONT.)

- r. ROAD, RAILWAY, SHIPPING LANE, OR OTHER TRAFFIC CORRIDOR THAT IS IN USE BY TRAFFIC OTHER THAN PEDESTRIANS
- s. AREA AT A WORKPLACE IN WHICH THERE IS MOVEMENT OF POWERED MOBILE PLANT
- t. WATER OR OTHER LIQUID THAT INVOLVES A RISK OF DROWNING
- u. ADJACENT TO DEEP EXCAVATIONS
- v. ADJACENT TO HIGH RETAINING STRUCTURES

SD5.

CAUTION

THIS DRAWING IS BASED ON SURVEY THAT IS INCOMPLETE AND NOT VERIFIED. THE EXISTING SURFACE MAY VARY FROM THAT INDICATED AND SOME FEATURES MAY NOT BE SHOWN.

WARNING

BEWARE OF UNDERGROUND/OVERHEAD SERVICES THE LOCATIONS OF UNDERGROUND/OVERHEAD SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

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SD6: BUILDING OPERATION AND MAINTENANCE.
MUST BE CARRIED OUT IN ACCORDANCE WITH THE DESIGN INTENT OF THE BUILDING CODE OF AUSTRALIA AS APPLIES STATE BY STATE.
OPERATION, CLEANING AND MAINTENANCE OF THE BUILDING MAY REQUIRE BUT NOT LIMITED TO ITEMS INVOLVING:
- a. ACCESS USING WORK PLATFORMS, STEPS, FALL ARREST SYSTEMS AND LADDERS.
- b. WORKING AT HEIGHT.
- c. INCLUSION OF BMU IN ROOF LAYOUT.
- d. USE OF HAZARDOUS MATERIALS OR CHEMICALS.
- e. LIFTING OF MATERIALS.
- f. ACCESS AND WORKING IN CONFINED SPACES.
- g. SUFFICIENT WORK SPACE.
- h. OPERATION AND MAINTENANCE MANUALS.
- i. USE OF HEAVY EQUIPMENT.
- j. WORKING ON SMOOTH / SLIPPERY SURFACES.
- k. WORKING ADJACENT TO VEHICULAR / FORKLIFT TRAFFIC.
- l. WORKING NEAR TRAFFIC OR MOVING FREIGHT CARRIERS.

SD7. DESIGN OUT RISK.
METHODS USED TO DESIGN OUT OCCUPATIONAL RISKS RELATED TO THE CONSTRUCTION, OCCUPATION OR DEMOLITION OF THIS STRUCTURE INCLUDE:
- a. OFF-SITE PREFABRICATION OF CONSTRUCTION ELEMENTS.
- b. USE OF BOLTED STEEL SITE CONNECTIONS TO AVOID ON-SITE WELDING.

SD8. DECONSTRUCTION.
AT THE END OF THE LIFE OF THIS STRUCTURE, ENGAGE SUITABLY QUALIFIED DEMOLITION ENGINEERS TO ASSIST WITH ITS DECONSTRUCTION.

SD9. POST-CONSTRUCTION REVIEW:
THE CONTRACTOR AND CLIENT SHALL PROVIDE FEEDBACK TO THE DESIGNERS AS FOLLOWS:
- a. POST-OCCUPANCY EVALUATIONS
- b. DEFECT REPORTS
- c. ACCIDENT INVESTIGATION REPORTS
- d. INFORMATION REGARDING MODIFICATIONS
- e. USER DIFFICULTIES
- f. DEVIATIONS FROM INTENDED CONDITIONS OF USE

PROHIBITED MATERIALS AND MATERIALS TO BE AVOIDED NOTES

PM1. PROHIBITED MATERIALS VOC'S IN HIGH CONCENTRATION IN:
- a. PAINTS
- b. ADHESIVES AND SEALANTS
- b. FORMALDEHYDES (EXCEEDING E1 OF EN 13986, 2001) IN COMPOSITE/ENGINEERED WOOD PRODUCTS.
- c. HIGH CONSERVATION VALUE TIMBER, - IS FOUND IN FORESTS WITH SPECIALLY HIGH ECOLOGICAL OR SOCIAL VALUE, THE TERM AROSE IN CONNECTION WITH THE DEVELOPMENT OF STANDARDS FOR THE CERTIFICATION OF FOREST MANAGEMENT BY THE FOREST STEWARDSHIP COUNCIL (FSC).
- d. TIMBER TREATED WITH ENVIRONMENTALLY DAMAGING CHEMICALS, SUCH AS COPPER, CHROMIUM AND ARSENIC (CCA) TREATMENT WHERE VOLUNTARY RESTRICTIONS ON SALE AND USE APPLY.
- e. HCFC'S - ARE OZONE DEPLETING SUBSTANCES FOUND IN REFRIGERANTS AND AEROSOL PROPELLANTS.

ALREADY BANNED MATERIALS:
- a. ASBESTOS
- b. PCB'S (POLYCHLORINATED BIPHENYLS). AMONG THEIR APPLICATIONS ARE USED ON ELECTRIC UTILITY LINES, IN AIR CONDITIONERS, AND IN THE BALLAST OF FLUORESCENT LAMP FIXTURES.
- c. HEAVY METALS (LEAD, MERCURY, CADMIUM, CHROMIUM, COBALT, ANTIMONY)
- d. POLYCHLORINATED TRIPHENYLS (PCT'S), SIMILAR TO PCB'S
- e. CARBON TETRACHLORIDE (TCT), ARE OZONE DEPLETING SUBSTANCES FOUND IN REFRIGERANTS, AEROSOL PROPELLANTS, FIRE EXTINGUISHERS AND CLEANING FLUIDS.
- f. ORGANOTIN COMPOUNDS - FOUND IN PVC HEAT STABILIZERS, BIOCIDES, CATALYSTS, AGROCHEMICALS AND GLASS COATINGS.
- g. LINDANE/HEXACHLOROCYLOHEXANE (HCH) - WAS FOUND IN INSECTICIDES.
- h. TITANIUM DIOXIDE MANUFACTURING WASTES - WASTE FROM MANUFACTURE OF PAINTS, VARNISHES, PLASTICS AND SUNSCREEN.
- i. *SPECIAL USAGE CASES ACCEPTED WHERE NO OTHER ALTERNATIVE IS AVAILABLE.

PM2. MATERIALS TO BE AVOIDED
- a. POLYCHLOROPRENE (OR CHLOROPRENE RUBBER, NEOPRENE) IN GEO-MEMBRANES, WEATHER STRIPPING, EXPANSION JOINT FILLER, WATER SEALERS AND OTHER GASKET AND ADHESIVES.
- b. CHLORINATED POLYETHYLENE AND CHLORO-SULFINATED POLYETHYLENE IN GEO-MEMBRANES, WIRE AND CABLE JACKETING, ROOF MEMBRANES AND ELECTRICAL CONNECTORS.
- c. HFC WITH HIGH GWP IN HVAC REFRIGERANTS.
- d. VIRGIN AGGREGATES
- e. PORTLAND CEMENT

CONTAMINATION

CT1. CONTAMINATION AREA

WHENEVER POSSIBLE, RISK IS DESIGNED OUT OF THE PROPOSAL DURING THE DESIGN PROCESS. WHERE THIS IS NOT POSSIBLE, THE RISK WILL BE MINIMIZED, AND HIGHLIGHTED IN THE WORK AND MATERIALS SPECIFICATION

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00	APPROVED FOR CONSTRUCTION	ESI / XX.XX.25	BK / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	ESI / 18.10.24	BK / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	JK / 28.06.24	BK / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE:

NSW GOVERNMENT | sydney METRO

aurecon — AURECON CML

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	ELNER SAPOI II	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	AMY CLARK	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

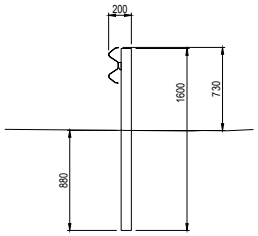
WORK IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL NOTES

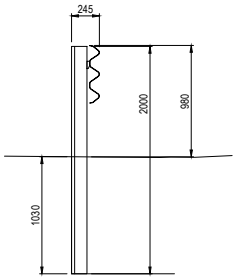
FILE No. | SHEET: 9 OF 9 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-VMS-CE-DWG-921019 | 00 | EDMS No.

DF 801554

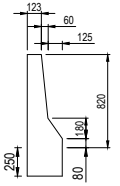
Plot Date & Time: 4/02/2025 12:14:43 PM
Plotted by: Tony Jing
File Plotted: R:\SYDWY\MRL-VMS-CE-DWG-921019.dwg



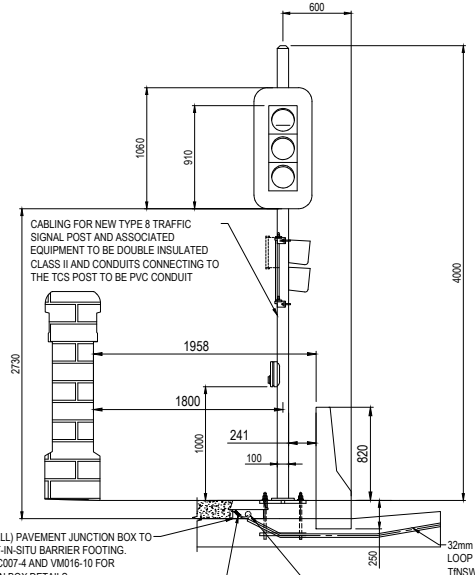
EZY GUARD TL3 STEEL RAIL BARRIER
TYPICAL DETAIL
SCALE 1:20



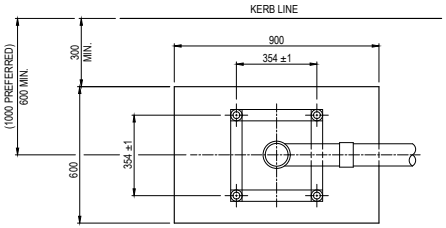
EZY GUARD TL4 STEEL RAIL BARRIER
TYPICAL DETAIL
SCALE 1:20



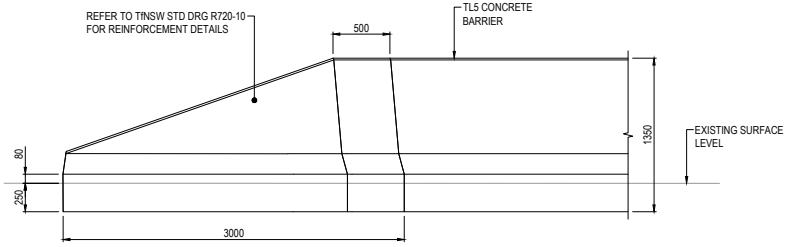
TL3 CAST IN SITU CONCRETE BARRIER
TYPICAL DETAIL
SCALE 1:20
* WIDTH VARIES AT CONNECTION TO EZY GUARD TL4 STEEL RAIL BARRIER. REFER DRAWING ST-DWG-921061 FOR DETAILS



TCS TYPE 8 POST NEXT TO
TL3 CONCRETE BARRIER
SCALE 1:20



BASE PLATE DETAIL
SCALE 1:10



SLOPE END TERMINATION TYPICAL DETAIL
SCALE 1:20

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

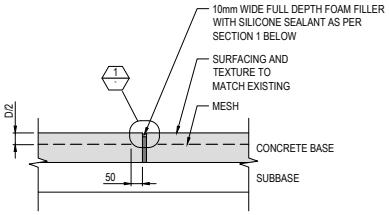
00	APPROVED FOR CONSTRUCTION	BS / XX.XX.25	CW / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	BS / 18.10.24	AB / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	BS / 28.06.24	AB / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE: AS SHOWN

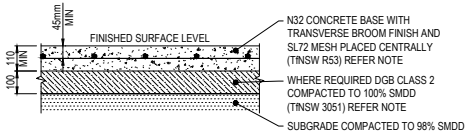
aurecon
AURECON CML

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	BARADA SAMANTARAY	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	ANTHONY CLARKE	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
TYPICAL DETAILS
FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921031 | 00 | EDMS No.
DF 801554

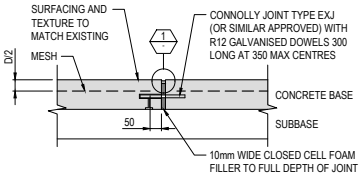


JOINT TYPE P15
ISOLATION JOINT
SCALE NTS

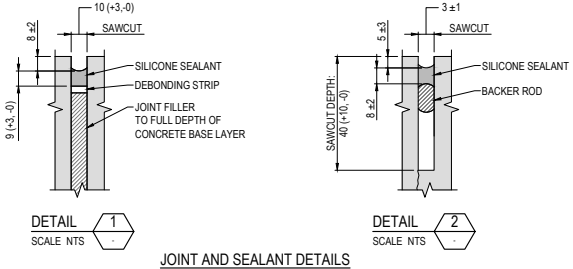


PAVEMENT TYPE PT-SWM4-S01
CONCRETE FOOTPATH
SCALE NTS

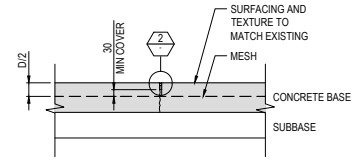
NOTE: EXTREME CAUTION REQURIED TO AVOID DAMAGING EXISTING AND PROPOSED UTILITIES. STABILSED SAND BACKFILL ACCEPTABLE IN LIEU OF DGB20.



JOINT TYPE P16
EXPANSION JOINT, DOWELLED
SCALE NTS



JOINT AND SEALANT DETAILS



JOINT TYPE P17
CONTRACTION JOINT, SAWN
SCALE NTS

NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE RELEVANT TINSW SPECIFICATIONS. CONCRETE SHALL COMPLY WITH TINSW D&C SPECIFICATION R53 AND BE PLACED IN ACCORDANCE WITH TINSW D&C SPECIFICATION R54. IN ADDITION, REFER TO TOLERANCES IN NOTE 13.
2. ALL CONCRETE FOOTPATHS TO BE SUPPLIED AND PLACED IN ACCORDANCE WITH TINSW R53 AND R54.
3. JOINTS TO BE CLEAN DRY AND FREE OF ALL LOOSE MATERIAL PRIOR TO APPLICATION OF SEALANT TO MANUFACTURER'S SPECIFICATION.
4. ISOLATION JOINTS TO BE PROVIDED WHEREVER THE SLAB ABUTS EXISTING BUILDINGS, PAVEMENTS, OR RIGID STRUCTURES SUCH AS DRAINAGE PITS, ACCESS HOLES OR COLUMNS.
5. SAW CUTS SHALL COMMENCE WITHIN 24 HOURS OR WHEN CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT CUTTING WITHOUT EXCESSIVE CHIPPING SPALLING OR TEARING.
6. ODD SHAPED AND THIN SLABS SHALL BE AVOIDED WHERE POSSIBLE. ACUTE ANGLES OF JOINTS SHALL BE AVOIDED WHERE POSSIBLE.
7. EXPANSION JOINTS ARE NOT PERMITTED TO INTERSECT EACH OTHER.
8. EXPANSION JOINT SHALL BE CONSTRUCTED AT THE START-STOP OF A DAYS PAVING.
9. PUBLIC DOMAIN PAVEMENT SURFACE FINISH, SEALANT COLOUR AND TEXTURE TO MATCH EXISTING.
10. REINFORCEMENT TO HAVE A MINIMUM 40mm COVER UNLESS NOTED OTHERWISE.
11. PAVEMENT IS TO BE FOUNDED ON FIRM NATURAL CUT GROUND OR COMPACTED FILL PLACED IN ACCORDANCE WITH TINSW D&C SPECIFICATION R54. ANY SOFT AREAS ARE TO BE REMOVED AND REPLACED WITH COMPACTED SELECT FILL 'TYPE U' IN ACCORDANCE WITH TINSW D&C SPECIFICATION R54.
12. THE FINISHED LEVEL OF ANY PAVEMENT ABUTTING A WALL OR BUILDING MUST BE BELOW THE DAMP PROOF COURSE AND MUST NOT OBSCURE ANY WEEP HOLES OR DRAINAGE OPENINGS.
13. TOLERANCES (CONCRETE BASE):
    - CHANGE IN HEIGHT EACH SIDE OF JOINT: 3mm
    - CROSS FALL: 0% TO ±0.5% (UNO)
    - DESIGN THICKNESS: +20mm / -0mm
    - UNDULATION IN ALL DIRECTIONS:
      - 1mm OVER 250mm
      - 5mm OVER 1.5m
      - 10mm OVER 3m OR JOINT TO JOINT (WHICHEVER GREATER)
13. STEEL MESH REINFORCEMENT MAY BE REPLACED WITH MACRO-SYNTHETIC FIBRE REINFORCEMENT (EPC BARCHIP, E-MESH OR SIMILAR APPROVED).
14. TYPICAL JOINT LAYOUT SHALL BE WITHIN IN ACCORDANCE WITH TINSW D&C R54.

TABLE 1 - JOINT SPACING

FOOTPATH WIDTH (m)	P17 CONTRACTION JOINT SPACING (m)	P16 EXPANSION JOINT SPACING (m)
1.2	1.2	4.8
1.6	1.5	6.0
2.5	2.0	8.0

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

SCALE 1:5 (50 0 100 200mm)
SCALE 1:10 (100 0 200 400mm)

00	APPROVED FOR CONSTRUCTION	BS / XX.XX.25	CW / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	BS / 18.10.24	AB / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	BS / 28.06.24	AB / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE: AS SHOWN

aurecon
AURECON CML

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	BARADA SAMANTARAY	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	ANTHONY CLARKE	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

NOT FOR CONSTRUCTION - DESIGN IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
FOOTPATH PAVEMENT DETAILS

FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921041 | 00 | EDMS No.
DF 801554

POINT	CHAINAGE (m)	EASTING (m)	NORTHING (m)	ELEVATION (m)	ELEMENT	LENGTH (m)	BEARING
ALIGNMENT NAME:		CI - 006					
DESCRIPTION:		TYPE SA KERB AND TL3 TYPE F CONCRETE BARRIER SINGLE SIDED					
START	0.000	329227.355	6245819.841	11.954			
					STRAIGHT	4.985	31°33'14.197"
HIP	4.985	329229.963	6245824.088	12.141			229°34'33.822"
CC		320256.625	6244439.759		STRAIGHT	3.584	26°44'20.924"
HIP	8.569	329231.576	6245827.289	12.254			231°35'38.235"
					STRAIGHT	2.998	26°45'47.075"
HIP	11.567	329232.926	6245829.966	12.372			231°35'38.236"
CC		320260.936	6244432.968		STRAIGHT	2.492	26°45'47.075"
HIP	14.058	329234.048	6245832.191	12.466			228°35'35.272"
					STRAIGHT	3.005	27°04'13.185"
HIP	17.063	329235.415	6245834.866	12.590			181°09'50.471"
					STRAIGHT	1.830	27°01'16.979"
HIP	18.893	329236.247	6245836.497	12.667			
					STRAIGHT	1.830	27°01'16.979"
HIP	20.724	329237.078	6245838.127	12.763			
					STRAIGHT	1.345	26°27'05.238"
HIP	22.069	329237.677	6245839.332	12.812			
					STRAIGHT	1.345	26°27'05.238"
HIP	23.414	329238.277	6245840.536	12.853			
					STRAIGHT	3.656	26°24'10.813"
HIP	27.070	329239.902	6245843.810	13.018			
					STRAIGHT	3.656	26°24'10.813"
HIP	30.726	329241.528	6245847.085	13.174			
					STRAIGHT	3.885	26°19'59.709"
HIP	34.610	329243.251	6245850.566	13.342			
					STRAIGHT	4.497	26°26'01.841"
HIP	39.108	329245.253	6245854.593	13.531			
					STRAIGHT	2.997	26°26'01.841"
HIP	42.104	329246.587	6245857.277	13.693			
					STRAIGHT	4.923	26°26'01.841"
HIP	47.027	329248.778	6245861.685	13.930			
					STRAIGHT	4.494	26°18'19.286"
HIP	51.521	329250.770	6245865.714	14.160			
	53.185				STRAIGHT	4.498	26°18'19.286"
HIP	56.019	329252.763	6245869.745	14.392			
					STRAIGHT	2.998	26°18'19.286"
HIP	59.017	329254.092	6245872.433	14.439			
					STRAIGHT	3.405	26°26'56.312"
HIP	62.423	329255.609	6245875.482	14.478			
					STRAIGHT	2.500	26°59'45.127"
HIP	64.922	329256.743	6245877.710	14.487			
					STRAIGHT	2.500	26°59'45.127"
HIP	67.422	329257.878	6245879.937	14.498			
					STRAIGHT	0.652	26°49'07.320"
END	68.074	329258.172	6245880.519	14.502			

TYPE SA KERB

MODIFIED TYPE F BARRIER

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

AMD	DESCRIPTION	BS / XX.XX.25 DESIGNER SIGN./DATE	CW / XX.XX.25 VERIFIED SIGN./DATE	SH / XX.XX.25 APPROVED SIGN./DATE
00	APPROVED FOR CONSTRUCTION			

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE:

aurecon
AURECON CML

DRAWN	MIA DOMINGO	XX.XX.2025
DESIGNED	BARADA SAMANTARAY	XX.XX.2025
DRG CHECK	TONY JING	XX.XX.2025
DESIGN CHECK	ANTHONY CLARKE	XX.XX.2025
APPROVED	SCOTT HENDERSON	XX.XX.2025

IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
BARRIER SETOUT TABLES

FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921091 | 00 | EDMS No.

DF 801554

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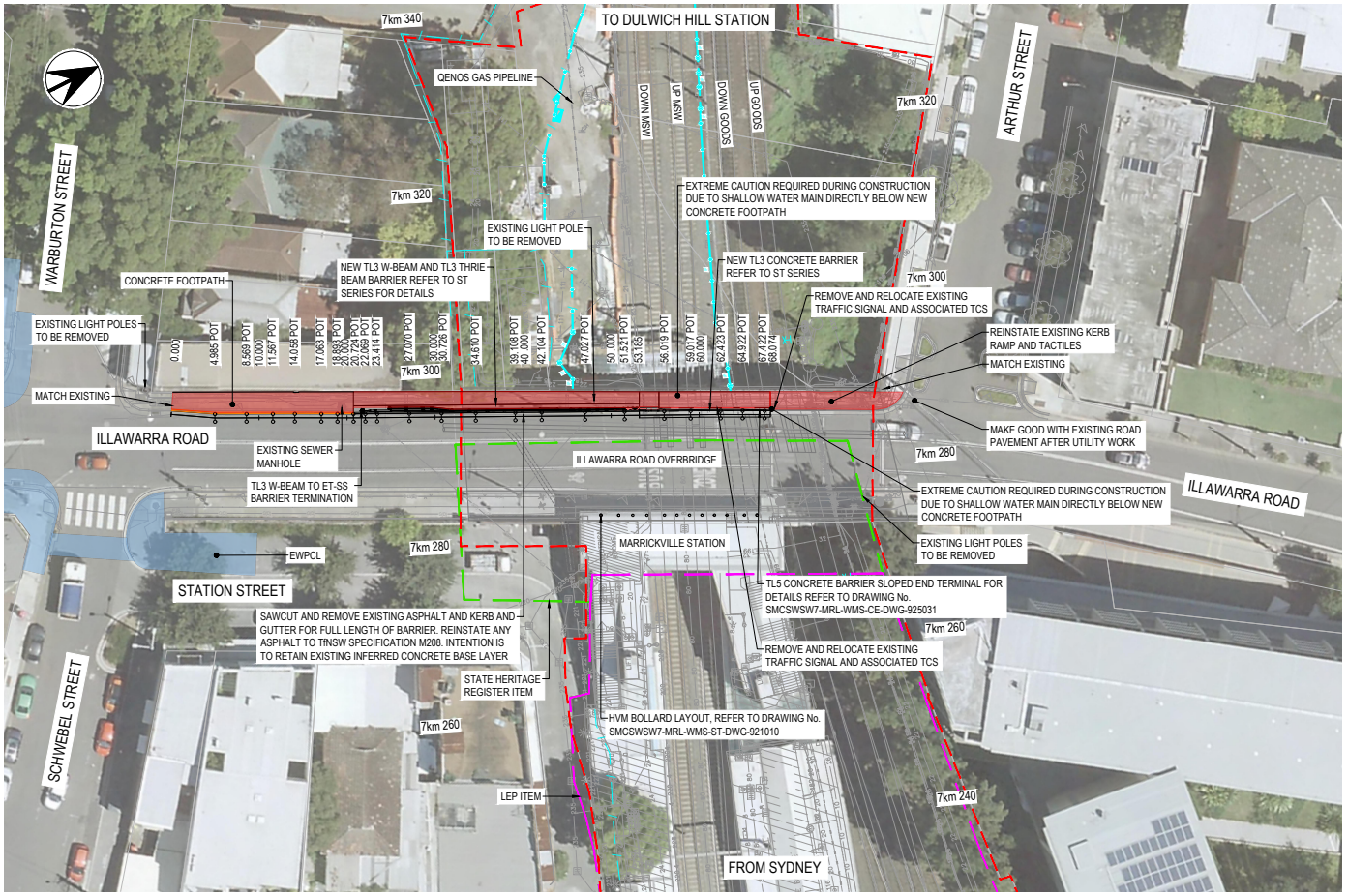
Plotted by Tony Jing



LEGEND

- PROPERTY BOUNDARY
- NEW CONCRETE FOOTPATH
- EWPCL INTERFACE
- MTM FENCE

NOTE

1. FOR GENERAL NOTES REFER TO DRAWING SMCSWSW7-MRL-WMS-CE-DWG-921011 TO 921019.

LAYOUT PLAN
SCALE 1:250

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

00	APPROVED FOR CONSTRUCTION	BS / XX.XX.25	CW / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	BS / 18.10.24	AB / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	BS / 28.06.24	AB / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE: AS SHOWN

SCALE 1:250

aurecon
AURECON CML

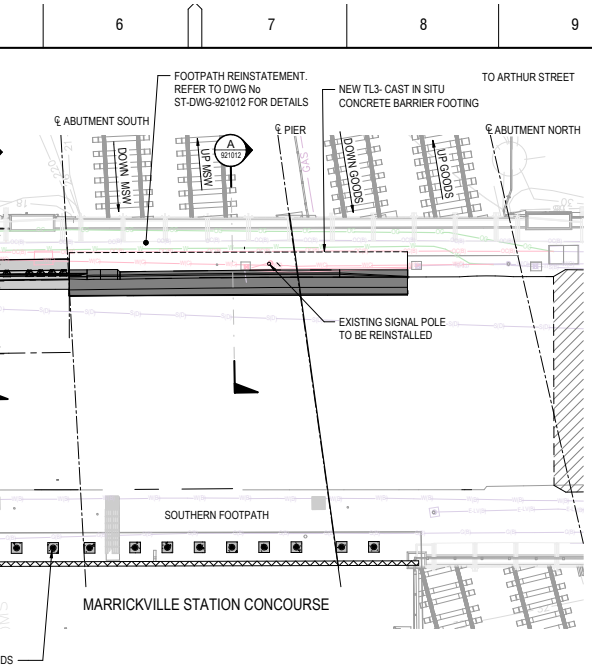
DRAWN MIA DOMINGO XX.XX.2025
DESIGNED BARADA SAMANTARAY XX.XX.2025
DRG CHECK TONY JING XX.XX.2025
DESIGN CHECK ANTHONY CLARKE XX.XX.2025
APPROVED SCOTT HENDERSON XX.XX.2025

IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
GENERAL ARRANGEMENT

FILE No. | SHEET: 1 OF 1 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-CE-DWG-921101 | 00 | EDMS No.

DF 801554



PLAN
SCALE 1 : 100

NOTES

1. FOR GENERAL NOTES AND SYSTEM WIDE TYPICAL DETAILS REFER TO DWG No's SMCSWSW7-MRL-WEC-CE-DWG-921011 TO SMCSWSW7-MRL-WEC-CE-DWG-921041.
2. FOR LEGEND REFER TO DWG No SMCSWSW7-MRL-WMS-CE-DWG-921005.
3. DIMENSIONS EXTRACTED FROM SURVEY MODEL MAY CONTAIN DISCREPANCIES TO THE AS-BUILT INFORMATION. ALL DIMENSIONS TO BE VERIFIED ON SITE BY THE CONTRACTOR PRIOR TO INSTALLATION.
4. EXISTING REINFORCEMENT SHALL BE SCANNED TO CONFIRM THE ACTUAL POSITION BY THE CONTRACTOR ON SITE PRIOR TO MODIFICATION, FABRICATION AND INSTALLATION.
5. THE NEW SECTION OF FOOTPATH SHALL BE IN ACCORDANCE WITH THE LOCAL COUNCIL'S SPECIFICATION.
6. CONCRETE FOOTPATH IN ACCORDANCE WITH CIVIL DESIGN SPECIFICATION. REFER TO DWG No SMCSWSW7-MRL-WEC-CE-DWG-931031 TO 931041 FOR DETAILS.
7. THE BRIDGE LOAD RATING BASED ON THE AS-IS CONDITION WAS CALCULATED TO BE 0.94<1 FOR A T44 ROAD VEHICLE AS DETERMINED WITHIN THE AGJV LOAD RATING REPORT 2019 (SMCSWSSJ-JHL-WEC-ST-REP-251003). CONSTRUCTION VEHICLES SHALL NOT DECREASE THIS LOAD RATING FURTHER WHILST UNDERTAKING THE PROJECT WORKS.
8. FOR INFORMATION OF UTILITY RELOCATIONS OR UPGRADE WORKS REFER TO DESIGN DWG No SMCSWSW7-MRL-WMS-UT-DWG-921101.
9. THE LOCATION OF ANY EXISTING UTILITIES SHALL BE CONFIRMED ON SITE BEFORE WORKS PROCEED. THE CONTRACTOR SHALL PROTECT EXISTING UTILITIES AND STRUCTURES DURING CONSTRUCTION.
10. NOTWITHSTANDING THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHERE TEMPORARY WORKS DESIGN ARE REQUIRED, IT IS NOTED AT THIS SITE THAT TEMPORARY STABILITY AND STRENGTH OF THE EXISTING STRUCTURE IS IMPACTED BY THE PROPOSED DEMOLITION ACTIVITIES.
11. SECTION, CALLOUTS, VIEW AND DETAIL CROSS REFERENCES WITHIN THE STRUCTURAL SET TO REFER TO ST DISCIPLINE DRAWINGS ONLY.

LEGEND

GEOTECHNICAL INVESTIGATION LOCATIONS

NOTE FOR CONSTRUCTION WORKS

W1. THE WORKS ARE IN CLOSE PROXIMITY TO EXISTING SERVICES AND STRUCTURES. THE INFORMATION SHOWN ON THIS DRAWING IS BASED ON INFORMATION PROVIDED BY OTHERS. PRIOR TO COMMENCEMENT OF ANY EXCAVATION WORKS, THE CONTRACTOR IS TO POSITIVELY LOCATE ALL EXISTING SERVICES AND STRUCTURES TO CONFIRM LOCATION IN PLAN AND DEPTH MATCHES THE DESIGN SET-OUT.
W2. WHERE EXCAVATION IS REQUIRED, THE EXCAVATION MUST BE PROTECTED FROM COLLAPSE SO NO DAMAGE TO ADJACENT UTILITIES OR STRUCTURES OCCURS.

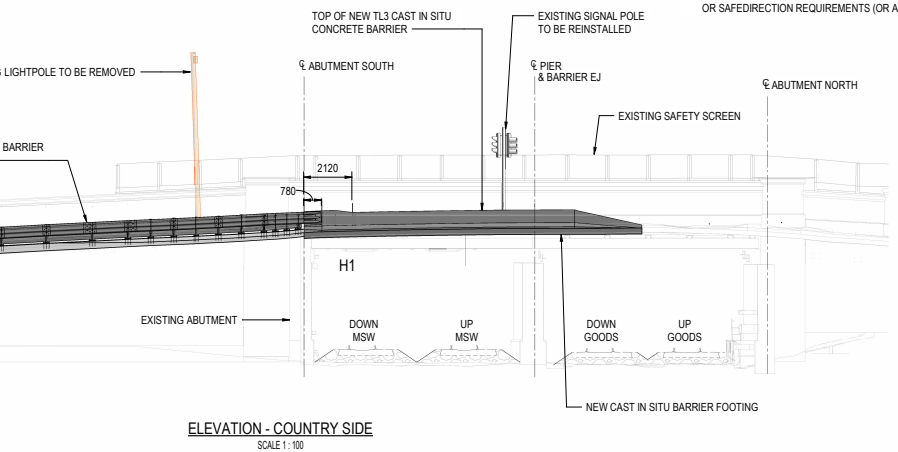
CITY SIDE

6 7 8 9 10 11 12

A B C D

NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921010.
2. ET-SS END TERMINAL SHALL BE CONSTRUCTED IN ACCORDANCE TO INGAL REQUIREMENTS (OR APPROVED EQUIVALENT) WITH REFERENCE TO INGAL DRAWING No SS-STD-014, ET-SS TL3 ON BASEPLATE GENERAL ARRANGEMENT.
3. W-BEAM AND THRIE-BEAM SHALL BE CONSTRUCTED IN ACCORDANCE WITH INGAL OR SAFEDIRECTION REQUIREMENTS (OR APPROVED EQUIVALENT).



ELEVATION - COUNTRY SIDE

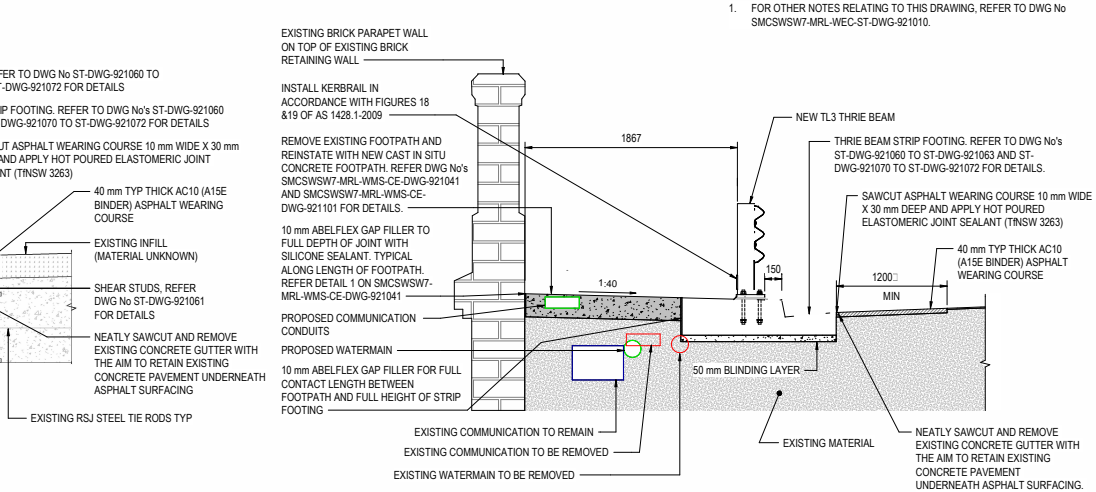
SCALE 1 : 100

6 7 8 9 10 11 12

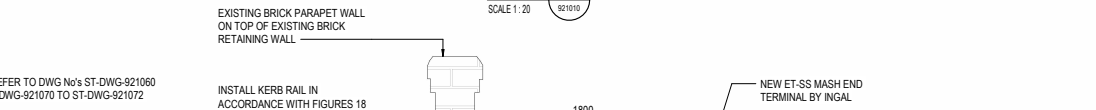
A B C D

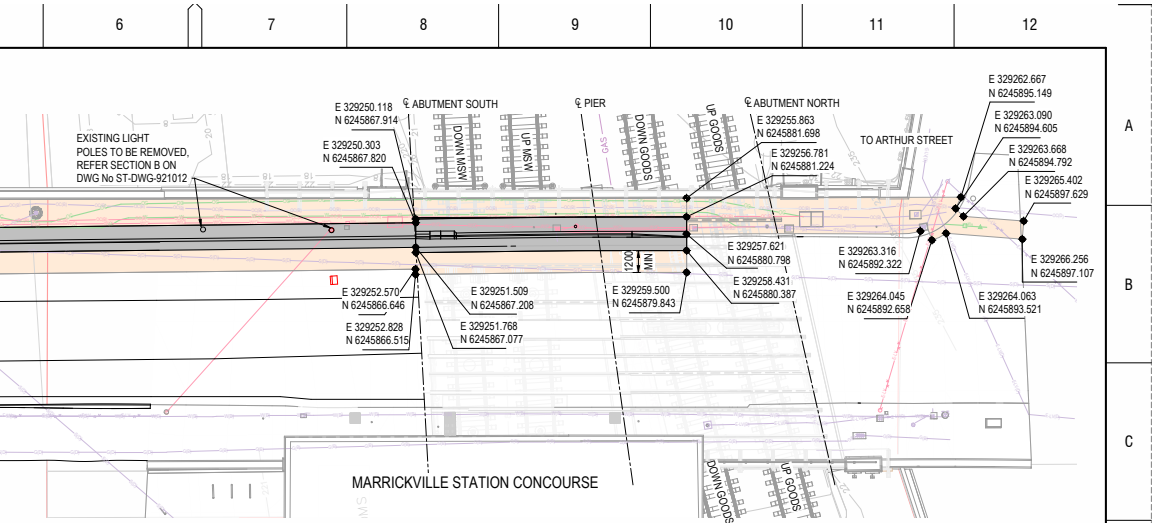
NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No SMCSWSW7-MRL-WEC-ST-DWG-921010.



SECTION B
SCALE 1 : 20
921010





N WORK

NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921010.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TEMPORARY WORKS SUPPORTS AND DESIGN AS REQUIRED FOR THE BRIDGE OR UTILITIES DURING DEMOLITION WORKS. REFER TO SMCSWSWZ-MRI-WEC-CE-DWG-921011 FOR MORE TEMPORARY WORKS NOTES.

EXISTING LIGHTPOLE REMOVED

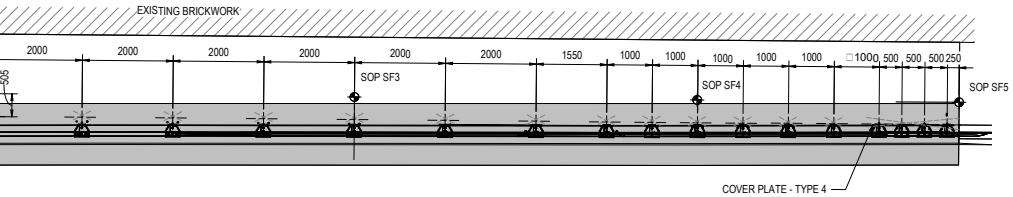
6 7 8 9 10 11 12

A B C D

TABLE 1 - FOOTPATH SOP SCHEDULE			
MARK	EASTING (m)	NORTHING (m)	ELEVATION (m)
SF1	329235.589	6245838.876	13.002
SF2	329239.603	6245846.783	13.421
SF3	329244.266	6245855.976	13.904
SF4	329247.674	6245862.697	14.266
SF5	329250.279	6245867.832	14.550

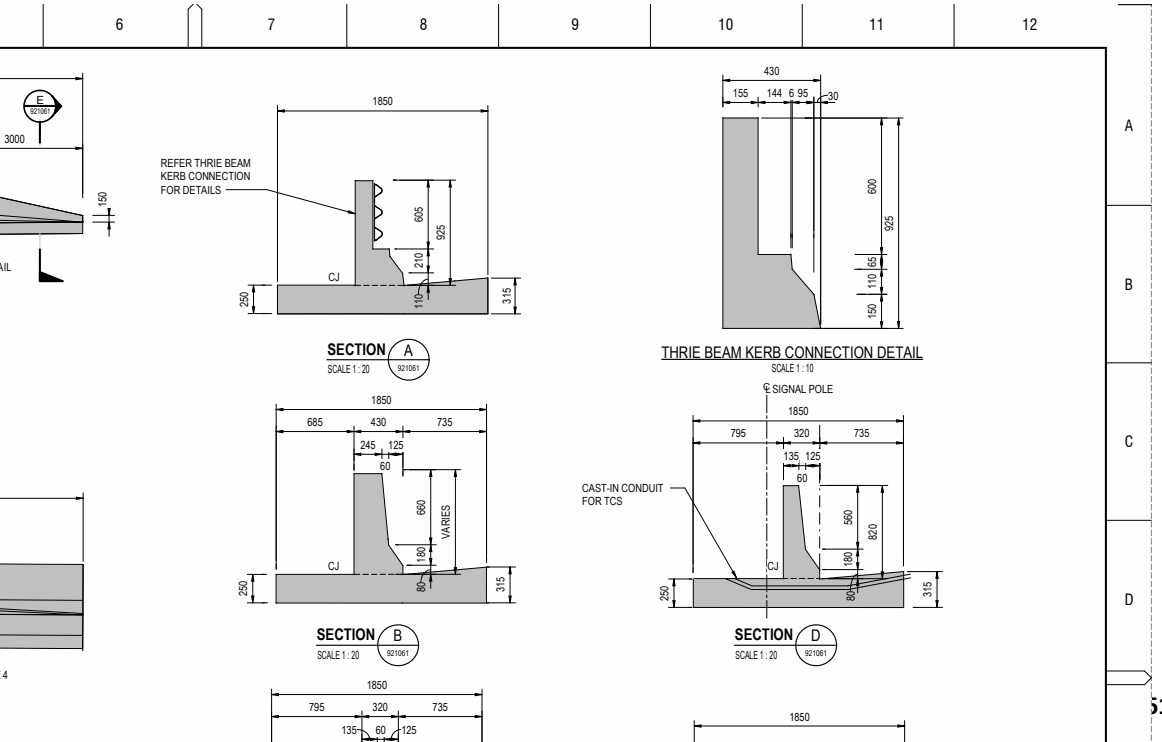
NOTES

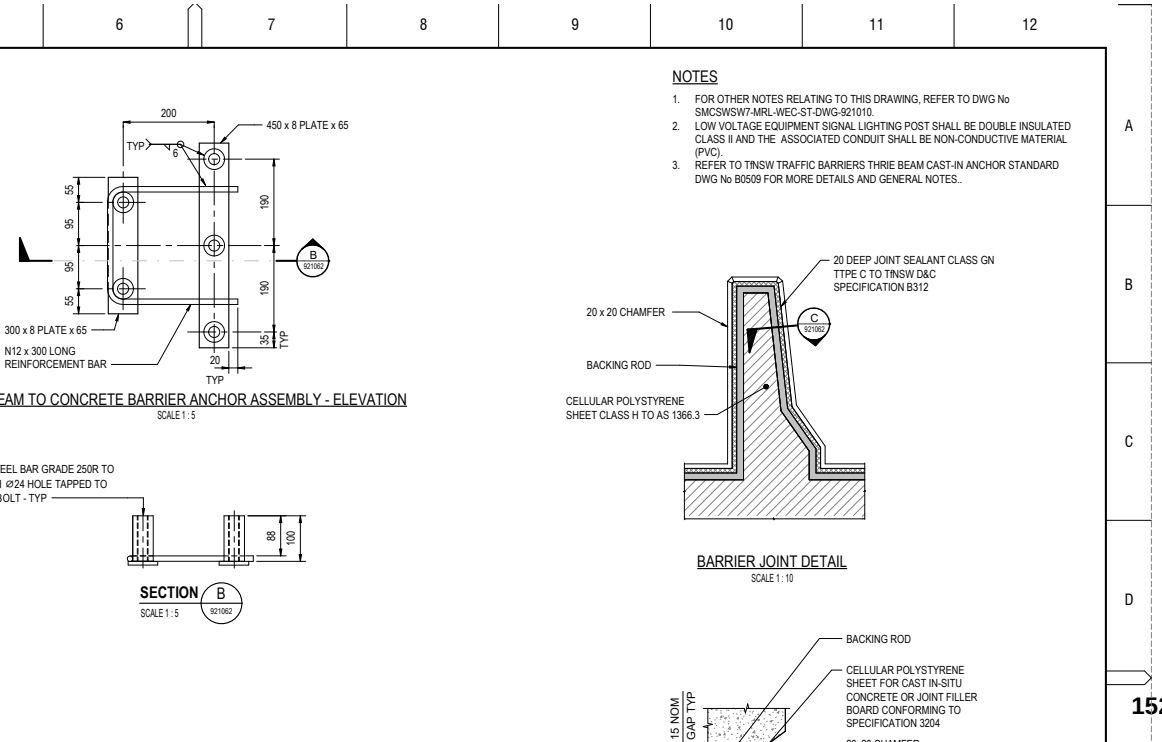
1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921010.
2. CONCRETE EXPOSURE CLASSIFICATION: B1 TO AS 5100
3. MINIMUM COMPRESSIVE STRENGTH OF ALL CONCRETE: 40 MPa
4. EDGES SHALL BE CHAMFERED 20 x 20 AND RE-ENTRANT ANGLES FILLETED 20 x 20 UNLESS OTHERWISE SPECIFIED.
5. CONCRETE WORKS TO COMPLY WITH TfNSW SPECIFICATION QA B80.
6. HOLD DOWN ANCHORS SHOWN INDICIATIVELY ONLY. ET-SS END TERMINAL HOLD DOWN ANCHORS SHALL BE CONSTRUCTED IN ACCORDANCE TO INGAL REQUIREMENTS (OR APPROVED EQUIVALENT) WITH REFERENCE TO INGAL DRAWING No SS-STD-014, ET-SS TL3 ON BASEPLATE GENERAL ARRANGEMENT.
7. HOLD DOWN ANCHORS SHOWN INDICIATIVELY ONLY. TYPICAL HOLD DOWN ANCHORS SHALL BE CONSTRUCTED IN ACCORDANCE WITH INGAL OR SAFEDIRECTION REQUIREMENTS (OR APPROVED EQUIVALENT) WITH REFERENCE TO INGAL DRAWING No's EZY-HC-009 AND EZY-SM-102 OR SAFEDIRECTION DRAWING No's SD-RB-01009 AND SD-RB-02017.
8. ASSUMED SOIL CONDITIONS: φ = 33 DEG, γ = 18 kN/m3 AND BETTER THAN MINIMUM MANUFACTURERS REQUIREMENTS TO INGAL DRAWING No EZY-HC-009. THE ACTUAL GROUND CONDITIONS SHALL BE CONFIRMED ONSITE BY SQGE DURING CONSTRUCTION.



THRIE BEAM AND W-BEAM STRIP FOOTING - PLAN

SCALE 1 : 50


6
7
8
9
10
11
12
A
B
C
D
E
921061
3000
150
1850
REFER THRIE BEAM
KERB CONNECTION
FOR DETAILS
605
925
210
CJ
250
110
315
SECTION A
SCALE 1 : 20
921061
430
155
144
6
95
30
600
925
65
110
150
THRIE BEAM KERB CONNECTION DETAIL
SCALE 1 : 10
1850
685
430
735
245
125
60
660
VARIES
180
CJ
250
80
315
SECTION B
SCALE 1 : 20
921061
℄ SIGNAL POLE
1850
795
320
735
135
125
60
CAST-IN CONDUIT
FOR TCS
560
820
180
CJ
250
80
315
SECTION D
SCALE 1 : 20
921061
1850
795
320
735
135
60
125
1850


6
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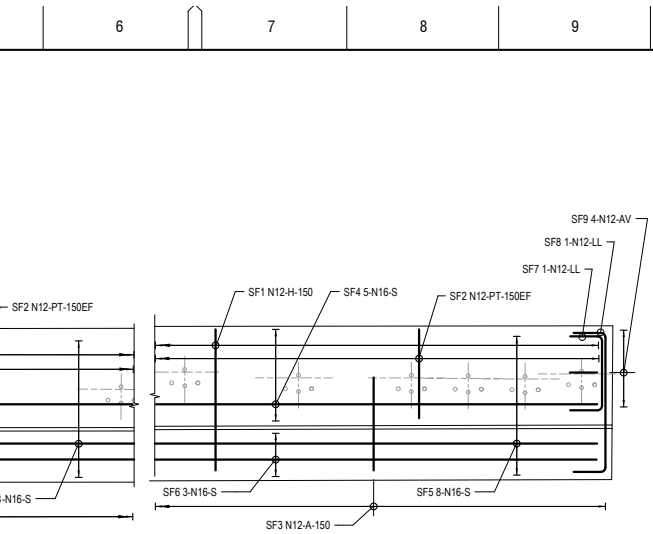
12
A
B
C
D
200
450 x 8 PLATE x 65
TYP
6
55
95
95
55
190
190
B
921062
300 x 8 PLATE x 65
N12 x 300 LONG
REINFORCEMENT BAR
35
TYP
20
TYP
EAM TO CONCRETE BARRIER ANCHOR ASSEMBLY - ELEVATION
SCALE 1 : 5
EEL BAR GRADE 250R TO
Ø24 HOLE TAPPED TO
OLT - TYP
88
100
SECTION B
SCALE 1 : 5
921062
NOTES
1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No SMCSWSW7-MRL-WEC-ST-DWG-921010.
2. LOW VOLTAGE EQUIPMENT SIGNAL LIGHTING POST SHALL BE DOUBLE INSULATED CLASS II AND THE ASSOCIATED CONDUIT SHALL BE NON-CONDUCTIVE MATERIAL (PVC).
3. REFER TO TINSW TRAFFIC BARRIERS THRIE BEAM CAST-IN ANCHOR STANDARD DWG No B0509 FOR MORE DETAILS AND GENERAL NOTES..
20 DEEP JOINT SEALANT CLASS GN
TTPE C TO TINSW D&C
SPECIFICATION B312
20 x 20 CHAMFER
C
921062
BACKING ROD
CELLULAR POLYSTYRENE
SHEET CLASS H TO AS 1366.3
BARRIER JOINT DETAIL
SCALE 1 : 10
BACKING ROD
CELLULAR POLYSTYRENE
SHEET FOR CAST IN-SITU
CONCRETE OR JOINT FILLER
BOARD CONFORMING TO
SPECIFICATION 3204
15 NOM
GAP TYP

6 7 8 9 10 11 12

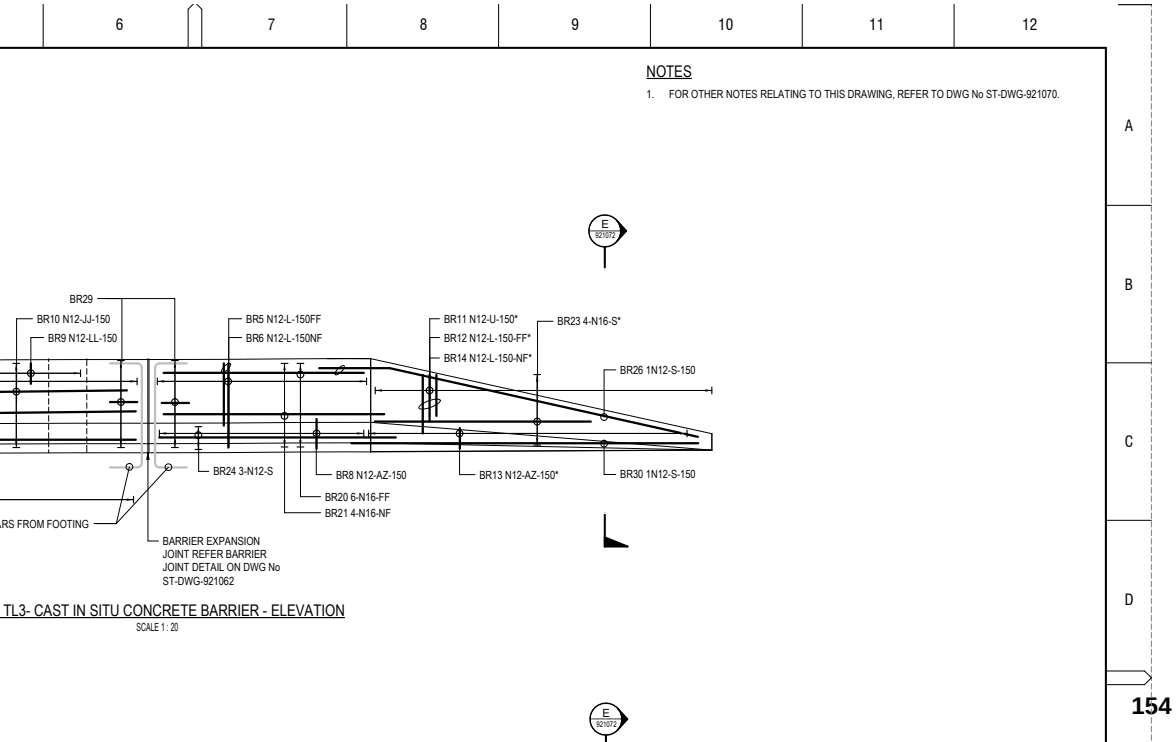
A B C D

NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921010.
2. REINFORCING BARS SHALL BE GRADE D500N TO AS/NZS 4571 UNLESS NOTED OTHERWISE.
3. REQUIRED CONCRETE COVER TO REINFORCEMENT NEAREST TO THE CONCRETE FACE SHALL BE 55 mm FOR THE OFF-BRIDGE STRIP FOOTING ENSURING THE CONCRETE IS PROTECTED FROM GROUND BY A DAMP-PROOF MEMBRANE AND 45 mm FOR THE ON-BRIDGE STRIP FOOTING.
4. FOR BAR DEVELOPMENT LENGTH AND SPLICES REFER TO DWG No's SMCSWSW7-MRL-WEC-CE-DWG-921014.
5. * DENOTES VARIABLE LENGTH BAR.
6. REINFORCEMENT MAY BE DISPLACED BY UP TO 50 mm MAX AND WHERE NECESSARY TO CLEAR DOWELS OR ANCHOR BOLTS.
7. SPLAY REINFORCEMENT AT ENDS OF BARRIER DUE TO TERMINAL AND NEAR INTERFACE TO THE THRIE BEAM DUE TO CHANGES WITHIN THE HORIZONTAL ALIGNMENT. MIN CENTRE TO CENTRE DISTANCE OF 75 AND MAX SPACING AS PER BARMARK.
8. HOLD DOWN ANCHORS SHOWN INDICATIVELY ONLY. REFER TO NOTES 6 AND 7 OF DRAWING No ST-DWG-921060 FOR MORE DETAILS.



FORCEMENT PLAN


6
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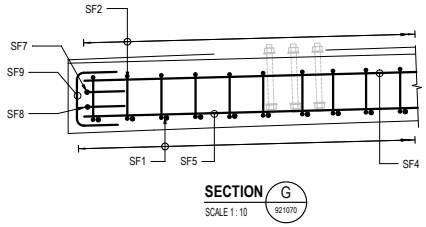
11
12
A
B
C
D
NOTES
1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921070.
E 921072
BR29
BR10 N12-JJ-150
BR9 N12-LL-150
BR5 N12-L-150FF
BR6 N12-L-150NF
BR11 N12-U-150*
BR12 N12-L-150-FF*
BR14 N12-L-150-NF*
BR23 4-N16-S*
BR26 1N12-S-150
BR24 3-N12-S
BR8 N12-AZ-150
BR13 N12-AZ-150*
BR30 1N12-S-150
BR20 6-N16-FF
BR21 4-N16-NF
RS FROM FOOTING
BARRIER EXPANSION
JOINT REFER BARRIER
JOINT DETAIL ON DWG No
ST-DWG-921062
TL3- CAST IN SITU CONCRETE BARRIER - ELEVATION
SCALE 1 : 20
E 921072

6 7 8 9 10 11 12

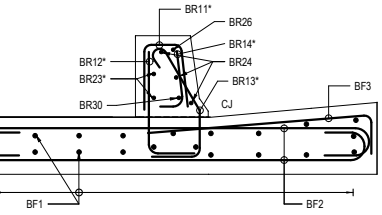
A B C D

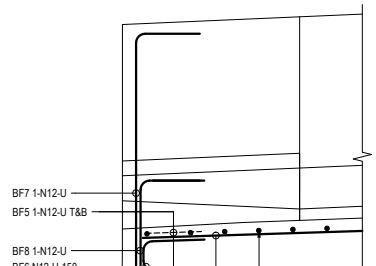
NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921070.



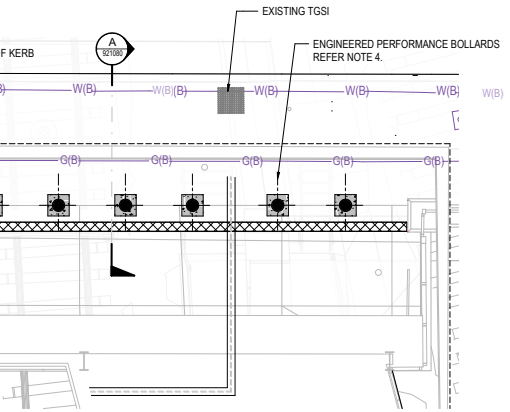
SECTION G
SCALE 1 : 10
921070





6 7 8 9 10 11 12

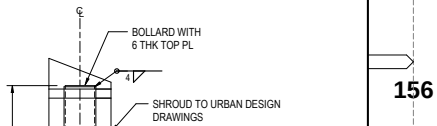
A B C D

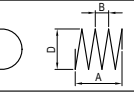
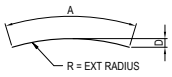
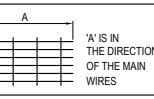
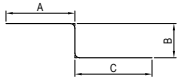
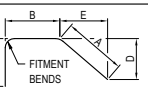
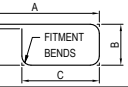
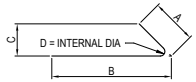
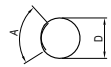
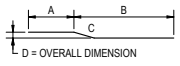
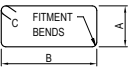


OLLARDS

NOTES

1. FOR OTHER NOTES RELATING TO THIS DRAWING, REFER TO DWG No ST-DWG-921010.
2. DIMENSION ESTIMATED BASED ON EXISTING DATA. TO BE CONFIRMED ON SITE. SITE CREW SHALL INFORM DESIGN ENGINEER IF THIS DIMENSION VARIES BY MORE THAN -50 mm.
3. EXISTING CONCRETE PATH ASSUMED TO BE >=20 MPa CONCRETE REINFORCED WITH CRACK CONTROL REINFORCEMENT ONLY (E.G. SL82). CONCRETE STRENGTH, DEPTH OF CONCRETE AND REINFORCEMENT PRESENCE SHALL BE VALIDATED ON SITE VIA TWO CONCRETE CORE SAMPLE CYLINDER TESTS.
4. REFER TO URBAN DESIGN DWG No's SMCSWSW7-MRL-WMS-UD-DWG-921001 TO SMCSWSW7-MRL-WMS-UD-DWG-921080 FOR LAYOUT AND FINISH OF BOLLARDS.
5. LOCATION OF ALL EXISTING SERVICES AND EJ ARE SHOWN INDICATIVELY ONLY AS NO SURVEY DATA IS AVAILABLE.
6. THE MAXIMUM AMOUNT OF CONCRETE THAT SHALL BE BROKEN BACK FOR PLACEMENT OF ANY BOLLARD SHALL BE 100 mm (DEEP MEASURED AT THE CENTRE LINE OF THE BOLLARD) x 500 mm x 500 mm.
7. ALL HOLES IN THE FOOTPATH SHALL BE DRILLED AND CLEANED IN ACCORDANCE WITH THE POST-INTALLED CHEMICAL ANCHOR MANUFACTURER'S SPECIFICATION. ALL HOLES MUST BE DRILLED AND NOT CORED. REINFORCEMENT MUST NOT BE CUT DURING DRILLING.
8. DRILLING OF HOLES FOR THE CHEMICAL ANCHORS SHALL BE BASED ON THE DIAMETER RECOMMENDED BY THE ANCHOR MANUFACTURER.
9. SCANNING IS REQUIRED TO LOCATE THE POSITION AND DEPTH OF THE REINFORCEMENT PRIOR TO POST INSTALLATION OF THE ANCHORS.
10. TRIAL INSTALLATIONS ARE REQUIRED AT EACH BOLLARD PRIOR TO INSTALLATION OF POST-INSTALLED ANCHORS. THE TRIAL INSTALLATION SHALL CONSIST OF A MINIMUM OF FOUR POST-INSTALLED ANCHORS WITH REQUIRED SPACING AND EMBEDMENT DEPTH AS SHOWN ON THIS DRAWING. PULL-OUT TEST SHALL BE CARRIED OUT FOR ALL TRIAL INSTALLED ANCHORS TO A PROOF LOAD OF 30 kN. ONCE PULL-OUT TEST RESULTS MEET THE SPECIFIED PROOF LOAD, THE CONTRACTOR SHALL PROCEED WITH POST-INSTALLATION OF ALL ANCHORS. NOTIFY THE DESIGNER IMMEDIATELY OTHERWISE.
11. THE BOLLARDS HAVE BEEN DESIGNED FOR AN ULTIMATE 30 kN LATERAL LOAD APPLIED AT AN EFFECTIVE HEIGHT OF 700 mm.



STRALIAN STANDARD SHAPE	SHAPE CODE	AUSTRALIAN STANDARD SHAPE
	R	
	RC	
	T	
	A	
	CC	
		

BAR MARKING LEGEND

THE METHOD USED TO LABEL REINFORCEMENT ON THE DRAWINGS IS AS FOLLOWS:

A1 10-N16-S-300EF

- INFORMATION FOR PLACING
- SPACING ALONG LIMIT LINE
- BAR SHAPE CODE
- BAR SIZE IN MILLIMETERS
- BAR STRUCTURAL PROPERTIES
- NUMBER OF BARS IN THE SET
- BAR NUMBER IN SEQUENCE
- STRUCTURE ELEMENT DENOTATION

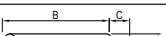
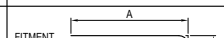
WHERE THE BAR SPACING IS APPROXIMATE ONLY, THE FOLLOWING FORMAT SHALL BE USED:
A1 10-N16-S-300EF APPROX

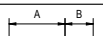
STRUCTURE ELEMENT DENOTATIONS COMMONLY USED ARE:
SF FOR THRIE BEAM STRIP FOOTING
BF FOR CAST IN SITU CONCRETE BARRIER FOOTING
BR FOR CAST IN SITU CONCRETE BARRIER

INFORMATION FOR PLACING:
NF FOR NEAR FACE
FF FOR FAR FACE
EF FOR EACH FACE
* FOR VARIABLE LENGTH BAR
NSOP FOR NOT SHOWN ON PLAN FOR CLARITY

REINFORCEMENT NOTES

AUSTRALIAN STANDARD BAR SHAPES ARE IN ACCORDANCE WITH AS 1100.501.
BAR SIZE IS THE NOMINAL DIAMETER IN MILLIMETERS, OR THE AS/NZS 4671 FABRIC NUMBER.
THE GRADE OF REINFORCEMENT, IF NOT STATED ON THE DRAWINGS, SHALL BE D500N TO AS/NZS 4671.
DIMENSIONS SHOWN ON BAR SHAPES DIAGRAMS ARE MEASURED FROM OUTSIDE FACES OF THE BARS AND ARE IN MILLIMETERS.
THE INCLUDED ANGLE OF ANY BEND SHALL BE RIGHT ANGLE IF NO DIMENSION SHOWN.
BARS OF DIAMETER GREATER THAN 24mm SHALL NOT BE REBENT.
BAR BENDING AND HOOK DETAILS SHALL BE IN ACCORDANCE WITH SECTION 5.13 OF AS 5100-BRIDGE DESIGN.

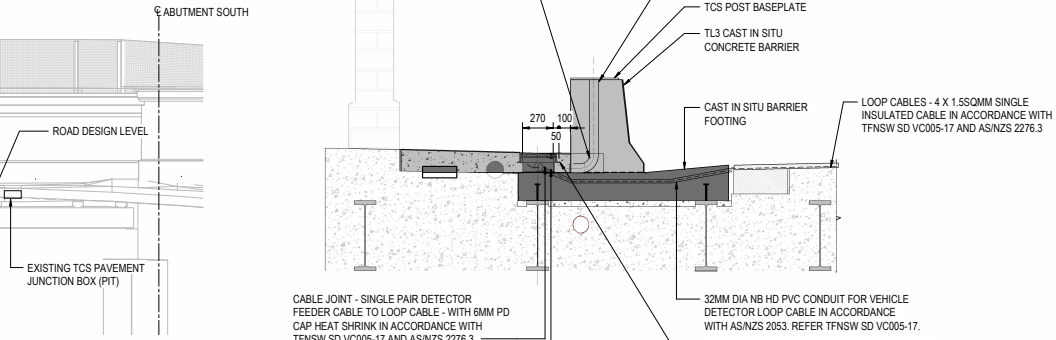
AND MARITIME SERVICES STANDARD SHAPES	SHAPE CODE	ROADS AND MARITIME SERVICES STANDARD SHAPES
		

SHAPE CODE	NON STANDARD SHAPE	SHAPE CODE	NON STANDARD SHAPE
			

6 7 8 9 10 11 12

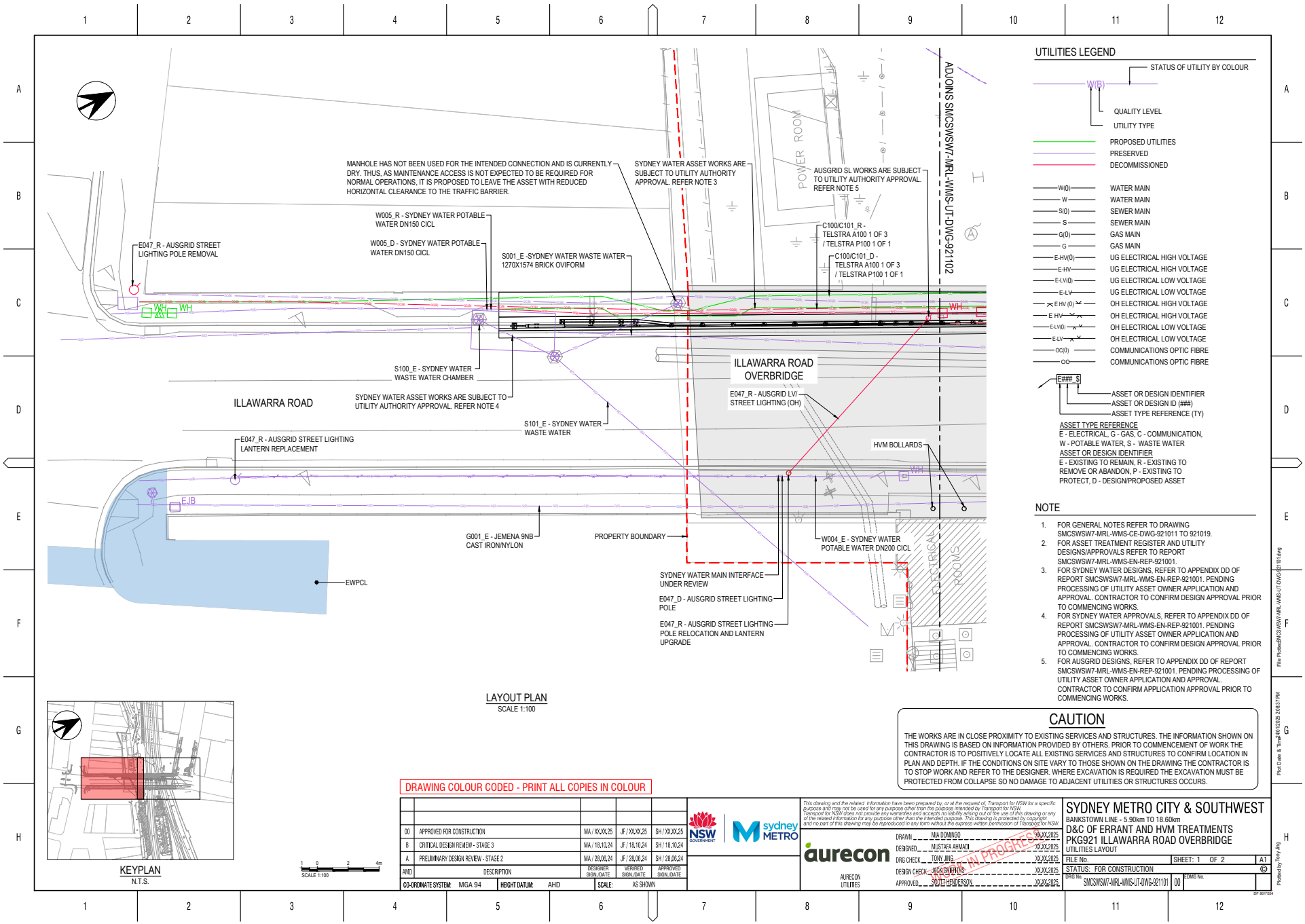
NOTES

1. FOR GENERAL NOTES AND SYSTEM WIDE TYPICAL DETAILS TO DWG No'S SMCSWSW7-MRL-WEC-CE-DWG-921011 TO SMCSWSW7-MRL-WEC-CE-DWG-921041



TCS DETAIL AT BARRIER
SCALE 1 : 20

A B C D



LAYOUT PLAN
SCALE 1:100

UTILITIES LEGEND

STATUS OF UTILITY BY COLOUR
W(B)
QUALITY LEVEL
UTILITY TYPE

- PROPOSED UTILITIES
- PRESERVED
- DECOMMISSIONED

W(0)	WATER MAIN
W	WATER MAIN
SI(0)	SEWER MAIN
S	SEWER MAIN
G(0)	GAS MAIN
G	GAS MAIN
E-HV(0)	UG ELECTRICAL HIGH VOLTAGE
E-HV	UG ELECTRICAL HIGH VOLTAGE
E-LV(0)	UG ELECTRICAL LOW VOLTAGE
E-LV	UG ELECTRICAL LOW VOLTAGE
E HV (0)	OH ELECTRICAL HIGH VOLTAGE
E HV	OH ELECTRICAL HIGH VOLTAGE
E-LV(0)	OH ELECTRICAL LOW VOLTAGE
E-LV	OH ELECTRICAL LOW VOLTAGE
OC(0)	COMMUNICATIONS OPTIC FIBRE
OC	COMMUNICATIONS OPTIC FIBRE

E### _S
- ASSET OR DESIGN IDENTIFIER
- ASSET OR DESIGN ID (###)
- ASSET TYPE REFERENCE (TY)

ASSET TYPE REFERENCE
E - ELECTRICAL, G - GAS, C - COMMUNICATION, W - POTABLE WATER, S - WASTE WATER
ASSET OR DESIGN IDENTIFIER
E - EXISTING TO REMAIN, R - EXISTING TO REMOVE OR ABANDON, P - EXISTING TO PROTECT, D - DESIGN/PROPOSED ASSET

NOTE

1. FOR GENERAL NOTES REFER TO DRAWING SMCSWSW7-MRL-WMS-CE-DWG-921011 TO 921019.
2. FOR ASSET TREATMENT REGISTER AND UTILITY DESIGNS/APPROVALS REFER TO REPORT SMCSWSW7-MRL-WMS-EN-REP-921001.
3. FOR SYDNEY WATER DESIGNS, REFER TO APPENDIX DD OF REPORT SMCSWSW7-MRL-WMS-EN-REP-921001. PENDING PROCESSING OF UTILITY ASSET OWNER APPLICATION AND APPROVAL. CONTRACTOR TO CONFIRM DESIGN APPROVAL PRIOR TO COMMENCING WORKS.
4. FOR SYDNEY WATER APPROVALS, REFER TO APPENDIX DD OF REPORT SMCSWSW7-MRL-WMS-EN-REP-921001. PENDING PROCESSING OF UTILITY ASSET OWNER APPLICATION AND APPROVAL. CONTRACTOR TO CONFIRM DESIGN APPROVAL PRIOR TO COMMENCING WORKS.
5. FOR AUSGRID DESIGNS, REFER TO APPENDIX DD OF REPORT SMCSWSW7-MRL-WMS-EN-REP-921001. PENDING PROCESSING OF UTILITY ASSET OWNER APPLICATION AND APPROVAL. CONTRACTOR TO CONFIRM APPLICATION APPROVAL PRIOR TO COMMENCING WORKS.

CAUTION

THE WORKS ARE IN CLOSE PROXIMITY TO EXISTING SERVICES AND STRUCTURES. THE INFORMATION SHOWN ON THIS DRAWING IS BASED ON INFORMATION PROVIDED BY OTHERS. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR IS TO POSITIVELY LOCATE ALL EXISTING SERVICES AND STRUCTURES TO CONFIRM LOCATION IN PLAN AND DEPTH. IF THE CONDITIONS ON SITE VARY TO THOSE SHOWN ON THE DRAWING THE CONTRACTOR IS TO STOP WORK AND REFER TO THE DESIGNER. WHERE EXCAVATION IS REQUIRED THE EXCAVATION MUST BE PROTECTED FROM COLLAPSE SO NO DAMAGE TO ADJACENT UTILITIES OR STRUCTURES OCCURS.

KEYPLAN
N.T.S.

SCALE 1:100

DRAWING COLOUR CODED - PRINT ALL COPIES IN COLOUR

00	APPROVED FOR CONSTRUCTION	MA / XX.XX.25	JF / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	MA / 18.10.24	JF / 18.10.24	SH / 18.10.24
A	PRELIMINARY DESIGN REVIEW - STAGE 2	MA / 28.06.24	JF / 28.06.24	SH / 28.06.24
AMD	DESCRIPTION	DESIGNER SIGN./DATE	VERIFIED SIGN./DATE	APPROVED SIGN./DATE

CO-ORDINATE SYSTEM: MGA 94 | HEIGHT DATUM: AHD | SCALE: AS SHOWN

NSW GOVERNMENT | sydney METRO

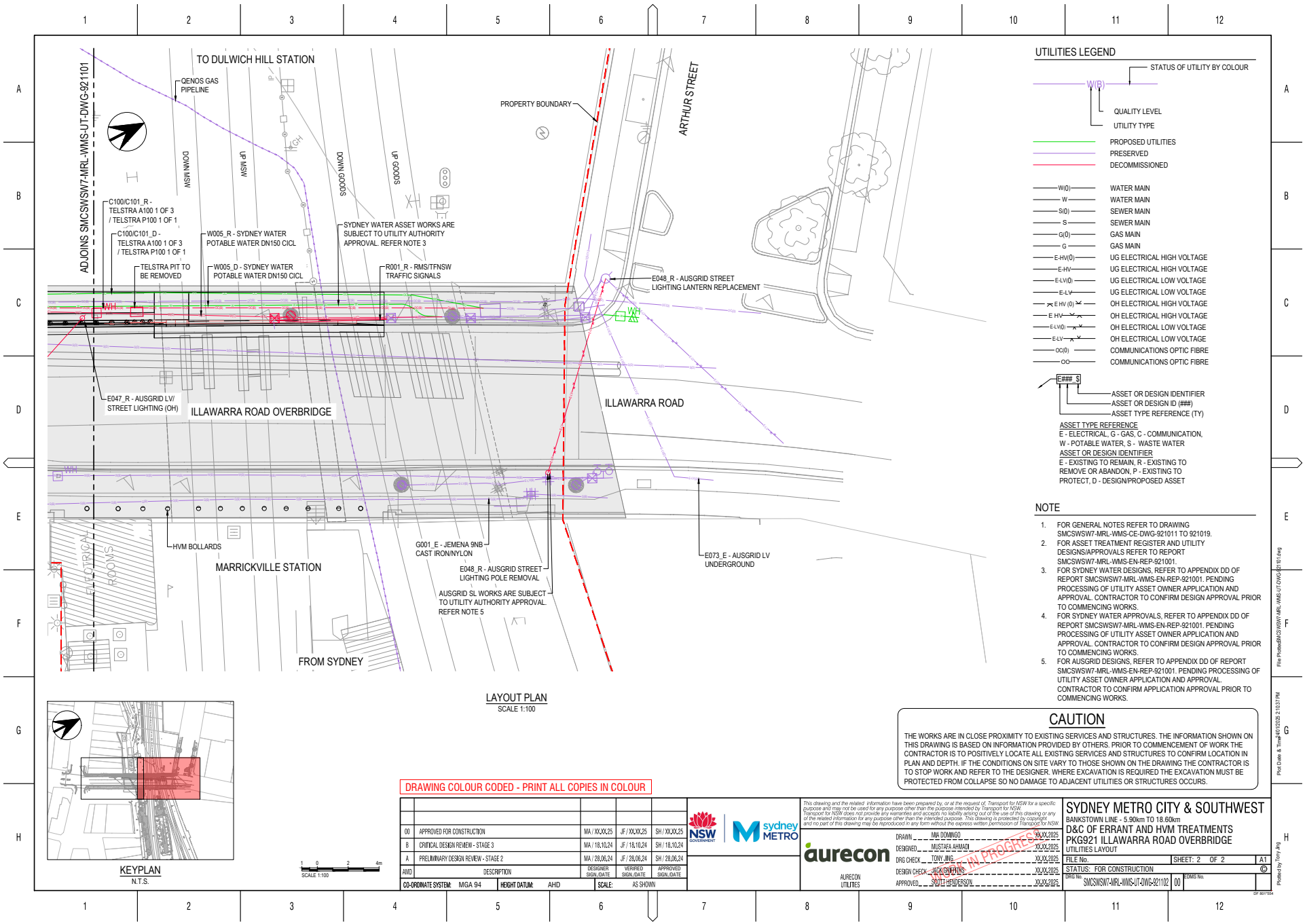
aurecon
AURECON UTILITIES

DRAWN MIA DOMINGO XX.XX.2025
DESIGNED MUSTAFA AHMADI XX.XX.2025
DRG CHECK TONY JING XX.XX.2025
DESIGN CHECK JACK ROBERTS XX.XX.2025
APPROVED SCOTT HENDERSON XX.XX.2025

IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
UTILITIES LAYOUT

FILE No. | SHEET: 1 OF 2 | A1
STATUS: FOR CONSTRUCTION
DRG No. SMCSWSW7-MRL-WMS-UT-DWG-921101 | 00 | EDMS No.



LAYOUT PLAN
SCALE 1:100

KEYPLAN
N.T.S.

SCALE 1:100

UTILITIES LEGEND

STATUS OF UTILITY BY COLOUR
W(B)
QUALITY LEVEL
UTILITY TYPE

PROPOSED UTILITIES
PRESERVED
DECOMMISSIONED

W(0)	WATER MAIN
W	WATER MAIN
SI(0)	SEWER MAIN
S	SEWER MAIN
G(0)	GAS MAIN
G	GAS MAIN
E-HV(0)	UG ELECTRICAL HIGH VOLTAGE
E-HV	UG ELECTRICAL HIGH VOLTAGE
E-LV(0)	UG ELECTRICAL LOW VOLTAGE
E-LV	UG ELECTRICAL LOW VOLTAGE
E HV (0)	OH ELECTRICAL HIGH VOLTAGE
E HV	OH ELECTRICAL HIGH VOLTAGE
E-LV(0)	OH ELECTRICAL LOW VOLTAGE
E-LV	OH ELECTRICAL LOW VOLTAGE
OC(0)	COMMUNICATIONS OPTIC FIBRE
OO	COMMUNICATIONS OPTIC FIBRE

E### _$
ASSET OR DESIGN IDENTIFIER
ASSET OR DESIGN ID (###)
ASSET TYPE REFERENCE (TY)

ASSET TYPE REFERENCE
E - ELECTRICAL, G - GAS, C - COMMUNICATION, W - POTABLE WATER, S - WASTE WATER
ASSET OR DESIGN IDENTIFIER
E - EXISTING TO REMAIN, R - EXISTING TO REMOVE OR ABANDON, P - EXISTING TO PROTECT, D - DESIGN/PROPOSED ASSET

NOTE

1. FOR GENERAL NOTES REFER TO DRAWING SMCSWSW7-MRL-WMS-CE-DWG-921011 TO 921019.
2. FOR ASSET TREATMENT REGISTER AND UTILITY DESIGNS/APPROVALS REFER TO REPORT SMCSWSW7-MRL-WMS-EN-REP-921001.
3. FOR SYDNEY WATER DESIGNS, REFER TO APPENDIX DD OF REPORT SMCSWSW7-MRL-WMS-EN-REP-921001. PENDING PROCESSING OF UTILITY ASSET OWNER APPLICATION AND APPROVAL. CONTRACTOR TO CONFIRM DESIGN APPROVAL PRIOR TO COMMENCING WORKS.
4. FOR SYDNEY WATER APPROVALS, REFER TO APPENDIX DD OF REPORT SMCSWSW7-MRL-WMS-EN-REP-921001. PENDING PROCESSING OF UTILITY ASSET OWNER APPLICATION AND APPROVAL. CONTRACTOR TO CONFIRM DESIGN APPROVAL PRIOR TO COMMENCING WORKS.
5. FOR AUSGRID DESIGNS, REFER TO APPENDIX DD OF REPORT SMCSWSW7-MRL-WMS-EN-REP-921001. PENDING PROCESSING OF UTILITY ASSET OWNER APPLICATION AND APPROVAL. CONTRACTOR TO CONFIRM APPLICATION APPROVAL PRIOR TO COMMENCING WORKS.

CAUTION

THE WORKS ARE IN CLOSE PROXIMITY TO EXISTING SERVICES AND STRUCTURES. THE INFORMATION SHOWN ON THIS DRAWING IS BASED ON INFORMATION PROVIDED BY OTHERS. PRIOR TO COMMENCEMENT OF WORK THE CONTRACTOR IS TO POSITIVELY LOCATE ALL EXISTING SERVICES AND STRUCTURES TO CONFIRM LOCATION IN PLAN AND DEPTH. IF THE CONDITIONS ON SITE VARY TO THOSE SHOWN ON THE DRAWING THE CONTRACTOR IS TO STOP WORK AND REFER TO THE DESIGNER. WHERE EXCAVATION IS REQUIRED THE EXCAVATION MUST BE PROTECTED FROM COLLAPSE SO NO DAMAGE TO ADJACENT UTILITIES OR STRUCTURES OCCURS.

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00	APPROVED FOR CONSTRUCTION	MA / XX.XX.25	JF / XX.XX.25	SH / XX.XX.25
B	CRITICAL DESIGN REVIEW - STAGE 3	MA / 18.10.24	JF / 18.10.24	SH / 18.10.24
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NSW GOVERNMENT | sydney METRO

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APPROVED	SCOTT HENDERSON	XX.XX.2025

IN PROGRESS

SYDNEY METRO CITY & SOUTHWEST
BANKSTOWN LINE - 5.90km TO 18.60km
D&C OF ERRANT AND HVM TREATMENTS
PKG921 ILLAWARRA ROAD OVERBRIDGE
UTILITIES LAYOUT

FILE No. | SHEET: 2 OF 2 | A1
STATUS: FOR CONSTRUCTION
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Item 4

Item No: **LTC0225(1) Item 4**

Subject: **182-189 VICTORIA ROAD AND 28-30 FAVERSHAM STREET, MARRICKVILLE (WICKS PARK) - TRAFFIC INTERSECTION ASSESSMENT (MIDJUBURI-MARRICKVILLE WARD/SUMMER HILL ELECTORATE/INNER WEST PAC)**

Prepared By: James Nguyen - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

That no further right turn restrictions outside the current morning peak period (7am-9.30am Mon-Fri) be implemented from Victoria Road into the private road at Wicks Place.

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

This report outlines the traffic intersection assessment at Victoria Road and the private access road of Wicks Place, Marrickville. The assessment found low right turning volumes and low levels of queuing at this intersection and no further right turn restrictions are necessary at this stage.

BACKGROUND

A notice of motion (Item:C024(2) Item 27 Notice of Motion: Wicks Park) was raised at the Ordinary Council Meeting on 25 June 2024 requesting for the assessment of the right turn movement from Victoria Road into the Wicks Place development to determine if this movement is causing significant congestion and safety issues on Victoria and Sydenham Roads, and whether a right turn restriction is necessary.

DISCUSSION

The right turn movement from Victoria Road into the private road of Wicks Place is restricted during the morning peak period and signposted as 'No Right Turn 7am-9.30am Mon-Fri'. Council officer's commissioned an intersection count to assess peak right turn volumes outside the restricted hours to assess the intersection performance. The intersection counts were completed during the following peak periods:

- Wednesday 18 September 2024, 11am-1pm and 4pm-6pm
- Saturday 21 September 2024, 11am-1pm

The results are presented in Table 1 below:

Table 1 – Traffic intersection counts (right turn movements)

Day	Time	Right turn movements (total vehicles)
Wednesday 18 September 2024	12noon-1pm	7
Wednesday 18 September 2024	4.30pm-5.30pm	17
Saturday 21 September 2024	12noon-1pm	9

Council officer's subsequently prepared a SIDRA model to assess the level of queuing with these right turn volumes. The results are provided below:

Table 2 - SIDRA results - Queuing assessment

Day	Time	Right turn movements (total vehicles)	Vehicle Queue – average (no. of vehicles)	Vehicle Queue – 95th percentile (no. of vehicles)
Wednesday 18 September 2024	12noon-1pm	7	0.0	0.1
Wednesday 18 September 2024	4.30pm-5.30pm	17	0.1	0.3
Saturday 21 September 2024	12noon-1pm	9	0.0	1

Table 2 above uses a 4.5 second critical gap, and a 3 second follow-up headway. The results from the SIDRA model were assessed further and calibrated with a site inspection.

Council officer's completed an evening peak hour site inspection on 4 December 2024 between 4.30pm to 5.30pm to assess queuing on-site. For the one (1) hour period, there were 11 right turning vehicles. The queues for each right turning instance is recorded below in Table 3 and the frequencies of queuing are presented in Table 4.

Table 3 - On-site queuing assessment results

Instance (right turn)	No. of queued vehicles before turn
1	6
2	0
3	0
4	0

5	2
6	0
7	4
8	5
9	0
10	1
11	0

Table 4 - Summary of on-site queuing results

No. of queued vehicles	Frequency
0	6
1	1
2	1
3	0
4	1
5	1
6	1

Table 5 - Site observations – Queuing assessment

Day	Time	Right turn movements (total vehicles)	Vehicle Queue – average (no. of vehicles)	Vehicle Queue – 95th percentile (no. of vehicles)
Wednesday 4 December 2024	4.30pm-5.30pm	11	1.57	5.5

Based on Tables 3 and 4, the site visit completed recorded an average of 1.57 vehicles queued per instance, with most right turns recording no vehicles queuing (6 instances). The 95th percentile queue is approximately 5.5 vehicles. This is shown in Table 5 above.

Site observations recorded more conservative queuing results compared to the SIDRA model. Both the SIDRA model and site observations suggest there is no significant queuing caused by the right turn from Victoria Road into Wicks Place. This is likely due to the low number of vehicles, and opposing traffic flow arriving in 'bunches' which allows for large gaps that was observed on-site. Larger queuing instances occur, when a right turning vehicle arrives at the start of the bunching of the opposing traffic flow as per instances 1, 7 and 8 in Table 3.

Accordingly, based on these results, no further right turn restrictions from Victoria Road to Wick Place is necessary at this stage.

FINANCIAL IMPLICATIONS

There are no financial implications associated with the implementation of the proposed recommendations outlined in the report.

ATTACHMENTS

Nil.

Item 5

Item No: **LTC0225(1) Item 5**

Subject: **ALBERMARLE STREET, MARRICKVILLE – TEMPORARY FULL ROAD CLOSURE OF RAIL OVERBRIDGE SOUTH OF CHALLIS STREET - SYDNEY METRO SWM4 WORKS CTMP (MIDJUBURI-MARRICKVILLE WARD / SUMMER HILL ELECTORATE / INNER WEST PAC)**

Prepared By: Jennifer Adams - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

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RECOMMENDATION

That the proposed temporary full road closure of Albermarle Street (between Challis Avenue and Kays Avenue East), Marrickville for a 56-hour period in alignment with Rail Possession occurring from Friday, 28th March to Monday, 31st March.2025 (contingency period of two weeks) be approved, in order to carry out errant and hostile vehicle mitigation works on the Rail Overbridge subject to, but not limited to, the following conditions:

1. **A Road Occupancy License be obtained by the applicant from the Transport Management Centre;**

2. **All affected residents and businesses, including the NSW Police Local Area Commander, Fire & Rescue NSW and the NSW Ambulance Services be notified in writing, by the applicant, of the proposed temporary road closure at least 7 days in advance of the closure with the applicant making reasonable provision for stakeholders; and**

3. **The occupation of the road carriageway must not occur until the road has been physically closed.**

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

An application has been received from Martinus on behalf of Sydney Metro (SWM4) for the temporary full road closure of the rail over bridge on Albermarle Street just south of Challis Avenue, Marrickville for a 56-hour period in alignment with Rail Possession Weekend 39, occurring from Friday 28th March to Monday 31st March.2025. It is recommended that the proposed temporary full road closure be approved, subject to the conditions outlined in this report.

BACKGROUND

The Southwest Metro works will convert and upgrade the existing T3 Bankstown Line between Sydenham station to Bankstown station to metro standards. To meet the test level safety standards for metro operations, the Southwest Metro project requires the delivery of safety critical works to secure critical points from errant and hostile vehicles at station overbridges, non-station overbridges and non-bridge locations along the Southwest Metro rail corridor.

The scope of this Errant and Hostile Vehicle Project includes the installation of anti-throw screens, concrete bollards, and rail barriers along the alignment, as well as other associated works where required. Works on the Albermarle Street overbridge require a temporary full road closure of Albermarle Street (between Challis Avenue and Kays Avenue East), Marrickville. The overbridge will be closed to all vehicles and pedestrians. Detours will be in place for the full duration of the closure. Traffic controllers will be on-site and traffic movements will be managed in accordance with the attached CTMP. A crane will be in use to lift beams into place.

OFFICER COMMENTS

Albermarle Street, between Challis Avenue and Kays Avenue East, carries around 1,600 vehicles per day. At the railway overbridge the width of the road is approximately 5.7 metres in width. It is noted that the full road closure will divert traffic to either Wardell Road in the west or Livingstone Road in the west.

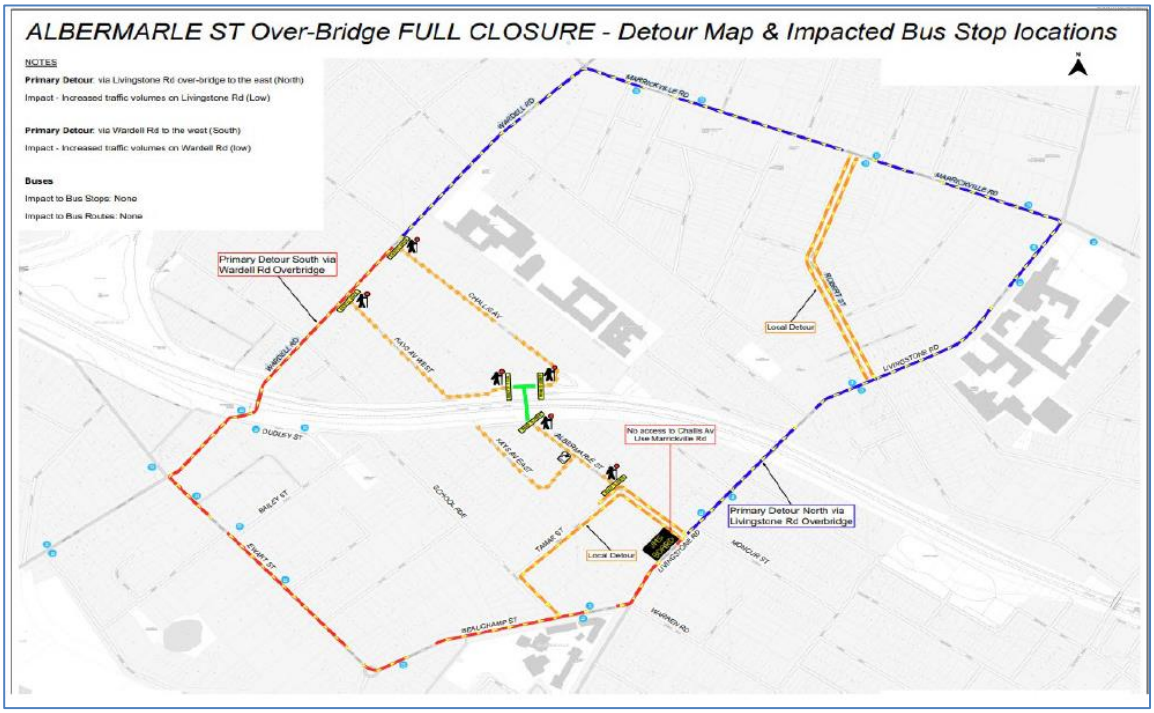
Scope of works

Off structure beams will be installed on the overbridge using a crane. The crane will be located on the Challis Avenue (north) side of the bridge.

A section of the cu de sac along Challis Avenue, adjacent to house number 35-37 to 41 A, will be occupied and designated as a temporary laydown area from Friday dayshift to Monday morning. Crane and material deliveries will utilise Challis Avenue Street, and workers will have pedestrian access to the site.
Delivery vehicles will use Challis Avenue to access the drop-off area. Freight vehicles will travel north along Wardell Road and make a right turn at its intersection. Additionally, small construction vehicles will require access via Albermarle Street as an alternative route, particularly once the work zone is established and obstructed by materials and equipment on the bridge.

Construction Traffic Management Plan (CTMP)

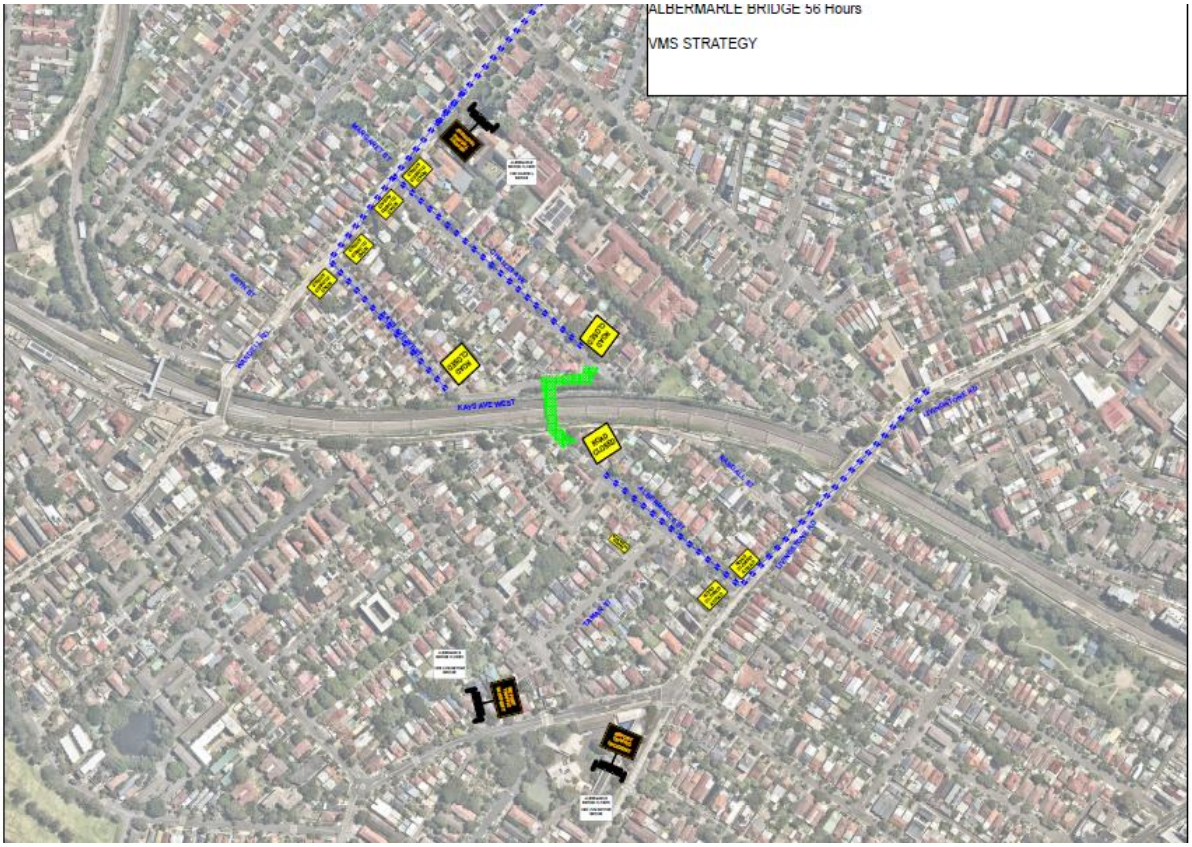
The overbridge will be closed to all vehicles and pedestrians and detours will be in place for the full duration of the closure. Vehicles detoured will be required to use either Wardell Road or Livingstone Road. No bus route will be impacted by the closure.



Traffic controllers will be on site and supplied TGSs are reproduced below. A copy of the CTMP is attached at the end of this report. VMS boards will be used.

Item 5


Manifest
81 x Barrel
10 x DETOUR LEFT
6 x Traffic Controller
5 x DETOUR IN FRONT
5 x SPEED LIMIT 40 ROAD WORK
4 x DETOUR AHEAD
4 x ROAD CLOSED
3 x Portable boom barrier ahead sign
3 x PREPARE TO STOP
3 x Road Closed Ahead
3 x Traffic Control Vehicle
3 x WORKERS AHEAD
2 x END DETOUR
2 x FOOTPATH CLOSED
2 x LOCAL TRAFFIC ONLY
2 x Portable boom barrier position
1 x SIDE ROAD CLOSED
Legend
Work Area
Traffic controller
Barrel
Safety Zone
Pedestrian Detour
Access impacted residents
Barrel Trailer with OSM delivery
Crane
Crowd Control Fencing
Traffic Control Vehicle
MARTINUS
THIS TGS SHALL BE SETUP IN ACCORDANCE WITH THE TfNSW TRAFFIC CONTROL AT WORK SITES MANUAL 8.1 & AUSTRALIAN STANDARDS AS 1742.3:2019
N



FINANCIAL IMPLICATIONS

There are no financial implications associated with the implementation of the proposed recommendations outlined in the report.

PUBLIC CONSULTATION

The proposed road closure has been advertised on Council's website in accordance with the *Roads Act 1993*.

The applicant is to notify all affected residents and businesses in writing at least 7 days prior to the commencement of works.

CONCLUSION

It is recommended that the proposed temporary full road closure be approved, subject to but not limited to the conditions and recommendations outlined in this report.

ATTACHMENTS

1.⇩ SMCSWSW7-MRL-WEC-TF-PLN-000960 Albermarle CTMP

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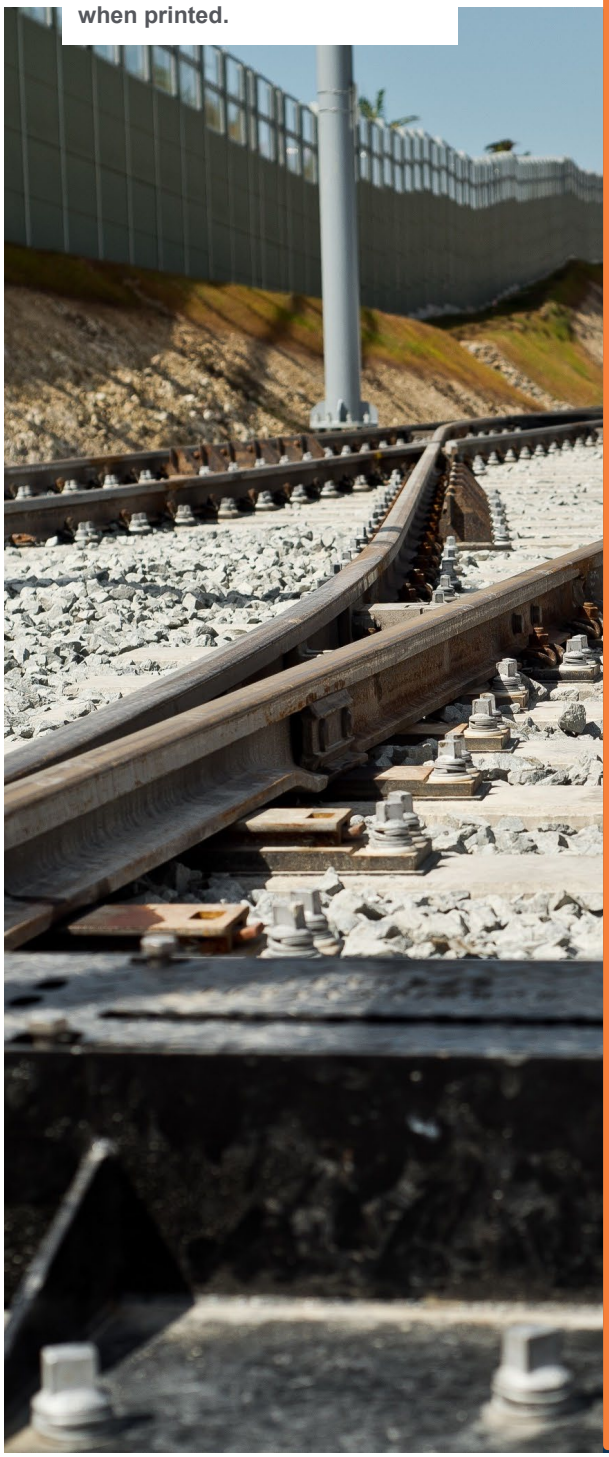

MARTINUS

NSW GOVERNMENT | sydney METRO

ALBERMARLE STREET 56 HOURS CLOSURE TRAFFIC MANAGEMENT PLAN

Sydney Metro SWM4

Design and Construction of Errant and Hostile Vehicle Mitigation Treatments for the Southwest Metro Project

CONTRACT NUMBER: CI-1136000

PROJECT DOCUMENT NUMBER:

Document Control

DOCUMENT TITLE:	Albermarle Street 56 Hours Closure Traffic Management Plan			
DOCUMENT OWNER:	Carlos Hood			
PREPARED BY:	Carlos Hood	TITLE:	Traffic Coordinator	
SIGNATURE:			DATE:	30/01/2025
REVIEWED BY:	Billy Kung	TITLE:	Traffic Manager	
SIGNATURE:			DATE:	30/01/2025

Approved by

NAME	TITLE	SIGNATURE	DATE
Luis Barroso	Construction Manager		30/01/2025

Revision History

REVISION	REVISION DATE	AMENDMENT	DATE TO CLIENT
A	30 January 2025		30/01/2025

GLOSSARY

Specific terms, abbreviations and acronyms used throughout this plan are listed and described below:

Table 1: Terms, Abbreviations & Acronyms

TERM	DESCRIPTION
RMS	Roads and Maritime Services
TfNSW	Transport for New South Wales
MR	Martinus
ROL	Road Occupancy Licence
SZA	Speed Zone Authorisation
TGS	Traffic Guidance Scheme
TCWS	RMS Traffic Control at Work Sites Manual
CJM	Customer Journey Management
CJP	Customer Journey Planning
TMP/ SSTMP	Site Specific Traffic Management Plan
VMP	Vehicle Movement Plan
VMS	Variable Message Signs
AAWT	Annual Average Weekday Traffic
NHVR	National Heavy Vehicle Regulator
WB	Westbound
EB	Eastbound
NB	Northbound
SB	Southbound

1 INTRODUCTION

1.1 Overview

The Southwest Metro works will convert and upgrade the existing T3 Bankstown Line between Sydenham station to Bankstown station to metro standards. To meet the test level safety standards for metro operations, the Southwest Metro project requires the delivery of safety critical works to secure critical points from errant and hostile vehicles at station overbridges, non-station overbridges and non-bridge locations along the Southwest Metro rail corridor.

The scope for the Construction of Errant and Hostile Vehicle Mitigation Treatments (hereafter known as the Project), generally includes:

- Errant vehicle mitigation (EVM) treatments consisting of:
  - Eight (8) station overbridge barriers
  - Seven (7) non-station road-over-rail overbridge barriers; and
  - 67 non-bridge locations along the southwest corridor
- Hostile vehicle mitigation (HVM) treatments in the eight (8) station precincts
- Road upgrades (kerbside ramps) across various locations
- Fencing, finishing works and other streetscaping elements across various locations
- Remediation works.

Figure 1 Project Overview

1.2 Location

This TMP documents the proposed temporary traffic staging arrangement for the Albermarle Street Overbridge. **Figure 2** show the location of the TMP.

Figure 2 Albermarle Street Site Location

1.3 Timing

This TMP is scheduled for implementation in alignment with Rail Possession Weekend 39, occurring from Friday, 28th March to Monday, 31st March. For details on construction start and finish times, refer to the Hour-by-Hour program in Appendix C.

Table 1 TMP Timing

Location	Start Date	End Date	Location & Scope
Albermarle Street	WE 28 March	31 March	Installation of OSB adjacent to existing overbridge

1.4 Proposed Scope of Works

The purpose of this TMP is to detail how the Off Structure Beam (OSB) at Albermarle Street to be installed based on two separate scenarios and focussing on impact to the traffic and public. This TMP outline outlines two scenarios subject to Rail Possession Date and various approvals.

Implementation of this TMP enables the following construction activities (subject to IFC design drawing):

- Enabling Works/ Utilities relocation & Protections Works
- Installation of Off Structure Beam

The works required to implement either of the scenario in this TMP include, but are not limited to:

- Pedestrian detour
- Full Road Closure
- Establish Temporary Work Site Over the weekend
- Installing Concrete barriers
- Bus stop relocation
- Detour establishment and local access

Figure 3 shows the Albermarle Street **existing traffic context**.

Figure 4 shows the Albermarle Street **proposed 56 hours traffic context**.

Figure 3 Albermarle Street existing traffic context

2 PROPOSED SCOPE

2.1 Albermarle Bridge Crane Mobilisation

2.1.1 Challis Avenue Street Temporary Laydown Area

A section of the cu de sac along Challis Avenue, adjacent to house number 35-37 to 41 A, will be occupied and designated as a temporary laydown area from Friday dayshift to Monday morning. Crane and material deliveries will utilize Challis Avenue Street, and workers will have pedestrian access to the site.

2.1.2 Challis Avenue Mobilisation and Transportation

The Crane will establish at the intersection of Challis Ave and Albermarle St reducing impact to existing OHW and enable the crane to lift the beam from Challis Ave over the ARTC and SM lines. This closure will be required to facilitate the complete installation of the OSB during the planned ARTC possession weekend 39.

The closure would involve the following traffic context:

- Full road closed Albermarle Street and implement a detour
- Occupying a section Challis Ave as laydown/ drop off area as detail in Figure 4
- Intermittent closure of pedestrian footpath over Albermarle St bridge during truck unloading and OSB lift.

Delivery vehicles will use Challis Avenue to access the drop-off area. Freight vehicles will travel north along Wardell Road and make a right turn at its intersection. Additionally, small construction vehicles will require access via Albermarle Street as an alternative route, particularly once the work zone is established and obstructed by materials and equipment on the bridge. Details of the proposed delivery and access routes are illustrated in the maps below.

Figure 4 Nominated Delivery Route for Challis Avenue Laydown Area

2.1.2.1 Access and Egress

During the Weekend, Albermarle Bridge will be full closed, and directory sign will be in place to encourage driver to use alternative route and detour traffic to Foord Avenue. Detail of the detour Map refer to section 3.1.

Due to the limited space, All steelworks will be unloaded from the trucks on the eastern side of the crane, which will be positioned at the corner of Challis Avenue and Albermarle Street. The Off-Structure Beams (OSBs) will be lifted off the trucks using a 500-tonne slew crane and maneuverer over the Albermarle St bridge. They will then be placed onto temporary propping set up on the western side of the crane and dressed prior to lifting into place.

Challis Ave temporary laydown area will be accessed by construction-related vehicles via the same delivery route along Challis Avenue Street as shown in Figure 4. It will primarily be used for delivering the crane's counterweights and segments of the off-structure beam. Over the weekend, traffic controllers will manage local access where possible and ensure pedestrian safety by using flags and tiger tails along the footpath if it is still accessible subject to process onsite.

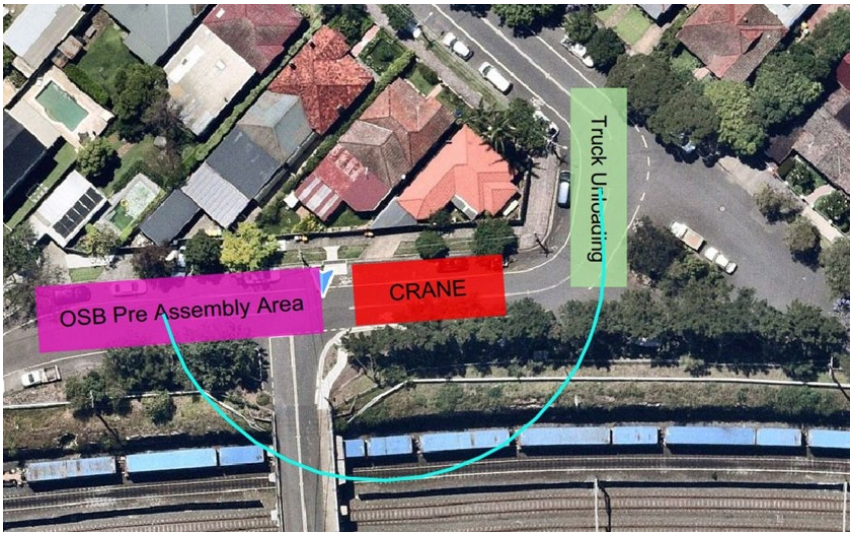

Figure 5 Proposed Albermarle Bridge Site Layout during the closure

3 TRAFFIC IMPACT & MITIGATION

3.1 Detour for local Residence

Albemarle Bridge typically service as a local road bridge to allow residents of Kays Av west, Challis Avenue and Albermarle Street to cross the rail corridor without using major road such as Livingstone Road and Wardell Road. It is primary use by residents only. Once the bridge is closed, resident is required utilise either Wardell Road or Livingstone Road. Detail is capture in the detour map in Appendix B. A snippet of the diagram is also include below.

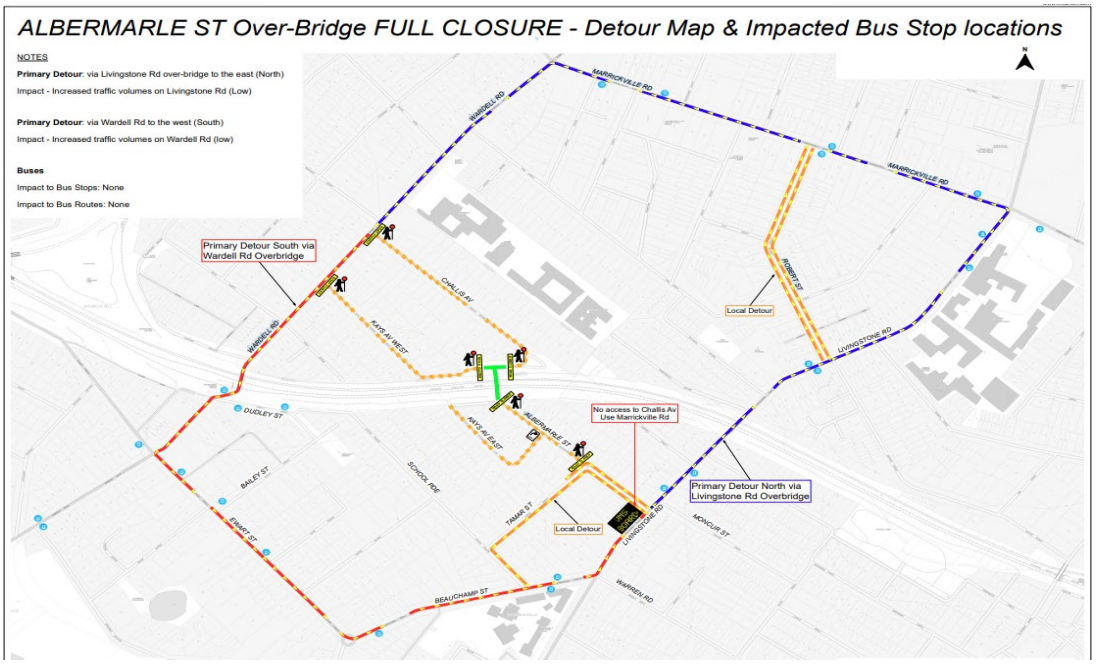

Figure 6 Proposed detour map for impacted residence

3.2 Impact on Public Transport

No bus stop or bus route is impacted by the proposed closure. The closure of Albermarle Bridge will not impact any public transport, as the bridge does not serve as a public transport route and primarily accommodates local suburban traffic.

3.3 Impact on Pedestrians and Cyclists

Pedestrian access to Albermarle Bridge will not be available through out the weekend, as it is unsafe to allow pedestrian movement over the rail bridge once the existing fence and barrier are removed. Without physical separation between the rail corridors along the existing footpath, this condition is deemed unsafe. Where feasible, TC can request for temporary access vis proposed work zone based on site conditions and project timing. After careful assessment, there is no suitable alternative pedestrian detour is available in the ambient of the area.

3.4 Impact on Parking and parking restrictions

No parking spaces will be permanently removed—this is strictly a temporary measure to facilitate the lift delivery and laydown operations. Martinus will obtain council approval before occupying any parking spaces under traffic control.

3.5 Impact on Driveway Access

Albermarle Bridge primarily serves local traffic and residential properties. Most of the local access will be maintained under the direction of onsite traffic control. If any specific driveway access is impacted by our work, the Community Team will directly reach out in advance to seek mutual agreement as part of the community communication strategy. Project notifications will include the expected access plan, and a community hotline, along with an onsite supervisor's contact, will be available for emergency access if needed.

3.6 Impact on Emergency Services

This Traffic Management Plan (TMP) does not propose any detours or impacts on local access. As a result, minimal impact on emergency services is expected. Ensuring emergency access remains a top priority, and space will be provided whenever practical and safe.

3.7 Impact on Major Events

No impact on major events is expected because of this TMP.

4 OTHER CONSIDERATIONS

4.1 Daily Checklist

4.1.1 Major delivery

Separate council approval will be obtained for all major deliveries that required to utilise local street and route assessment to be determined subject to Contractor's origin and destination. Escort vehicle or other form of traffic management to be provided to ensure the movement is supported and managed. Dedicated TGS is drafted to manage vehicle in and out to cater deliveries, detail refer to Appendix B.

4.1.2 Post Installation Daily Checklist

The Safety Team will conduct a post-installation audit to ensure the installation is complete and secure. This will include verifying that all proposed fencing, designed under the temporary design process, is properly secured to withstand wind loads and environmental dynamics, preventing it from becoming an obstacle on the roadway when not in operation and eliminating any potential safety risks to road users. Regular checks and maintenance of the fencing will be managed by the onsite crew and Safety Officer to ensure ongoing compliance. Additionally, a weekly onsite checklist will be implemented to ensure quality and safety standards are consistently maintained following the installation.

4.1.3 Risk Assessment

Due to site constraints, the minimum barrier installation length cannot be achieved. A risk assessment has been conducted to assess the departure from the minimum barrier installation length. Refer to Appendix D. Furthermore, the barrier design statement in section 4.1.4 below describes the mitigation methods Martinus has considered to ensure that the work area and arrangement is a safe as reasonably possible.

4.1.4 Temp Barrier Arrangement

A concrete barrier has been chosen as the preferred physical separation to establish the parameter especially once the existing protective screen and fence is demolished, considering the potential for errant vehicles to encroach into the proposed work zone.

It is acknowledged that a shorter barrier length may result in greater deflection than the standard allowance. However, this is mitigated by the following factors:

- The speed limit to adjacent local Street will be reduced to 40 km/h during implementation.
- The proposed arrangement will be in place for only one weekend while works are ongoing, minimizing the likelihood of the barriers being struck.
- Temporary traffic control measures will be in place throughout the closure, with additional delineation implemented if required.

Lastly, this arrangement is necessary to facilitate works for the installation of errant vehicle mitigation measures, ultimately enhancing safety in the area.

APPENDICES

Appendix A – Traffic Guidance Scheme & Swept Path

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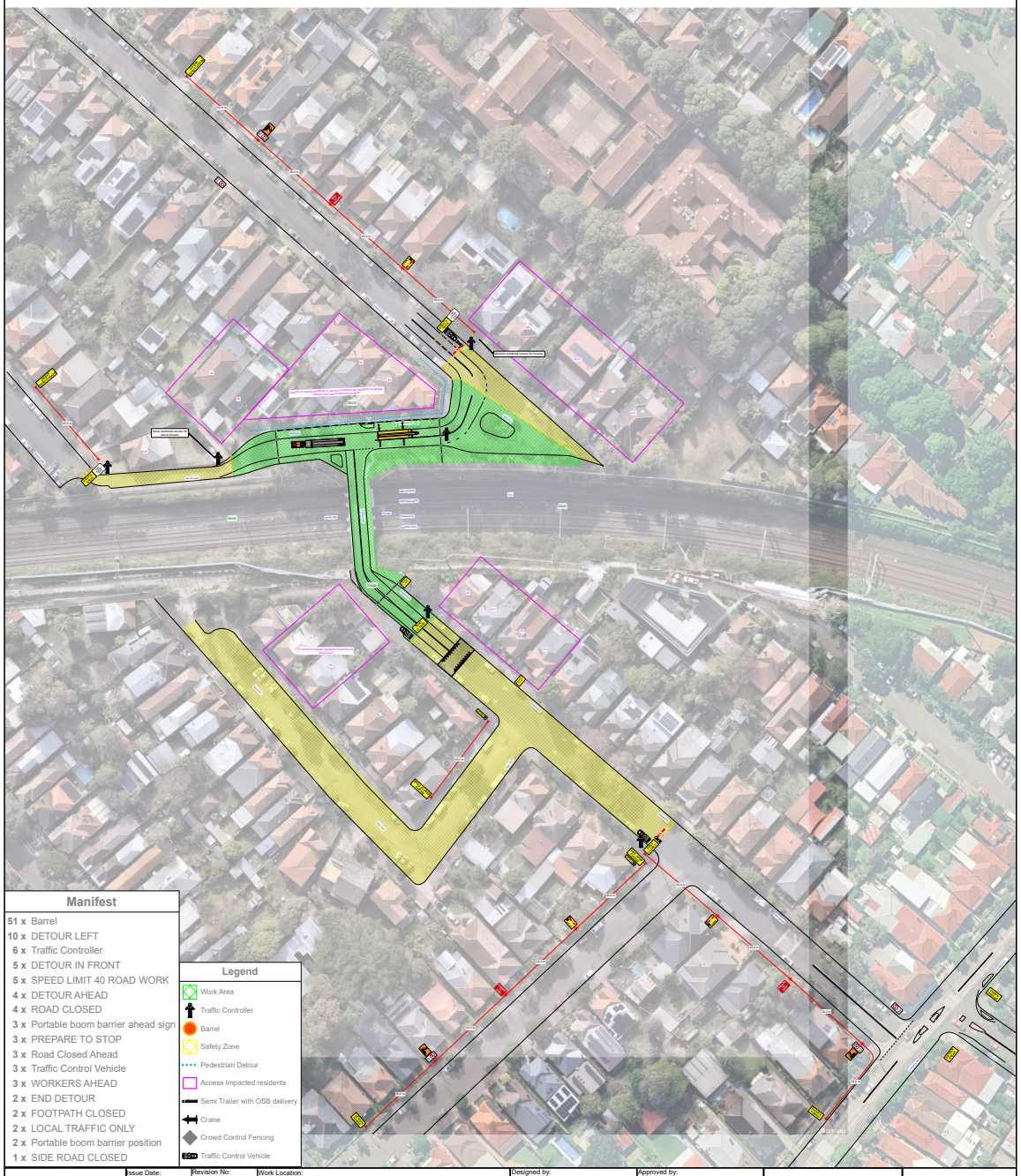

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ALBERMARLE ST Over-Bridge FULL CLOSURE - Detour Map & Impacted Bus Stop locations

NOTES

Primary Detour: via Livingstone Rd over-bridge to the east (North)

Impact - Increased traffic volumes on Livingstone Rd (Low)

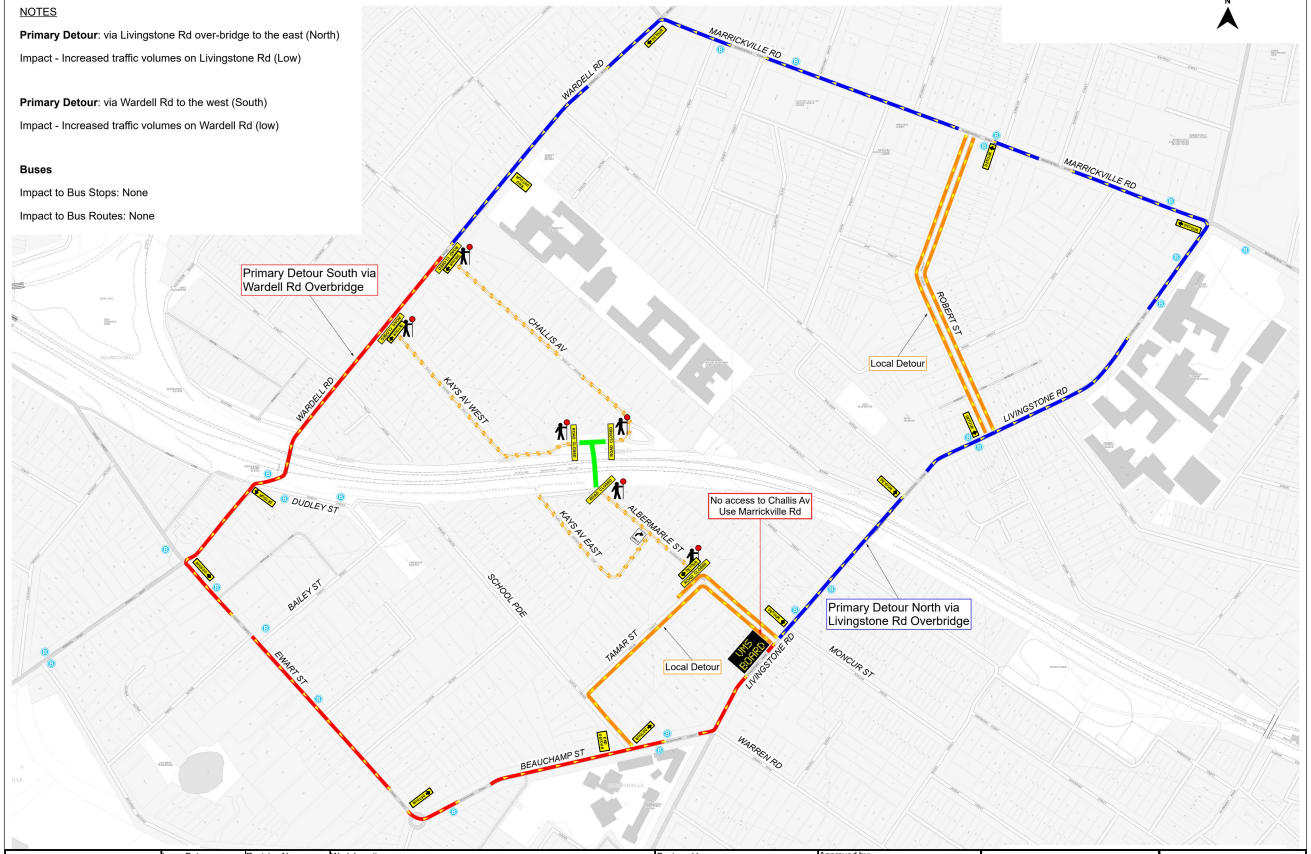
Primary Detour: via Wardell Rd to the west (South)

Impact - Increased traffic volumes on Wardell Rd (low)

Buses

Impact to Bus Stops: None

Impact to Bus Routes: None



MARTINUS Sydney Metro SWM4 CIRA	Issue Date: 03/02/2025 Scale: N/A Existing Speed Limit: 50 km/h Duration: Short Term G10 HP:	Revision No: 01 Closure type: Road Closure Detour Road Lay-out: 2 Way, Single-Lane Page No: 2 of 2	Work Location: Ambermarle St, Marrickville Work Scope: OSB Delivery & Lift Title: Ambermarle St OSB 56 HR TGS No: MAR-CIRA-Z3-TGS-AMB-AL-2201	Designed by: Carlos Hood Qualification No: TCT1001220 Role: Traffic Coordinator Signature: C.HOOD Implementer Name:	Approved by: Billy Kung Qualification No: TCT1001220 Role: Traffic Manager Signature: Implementer Qualification No:	THIS TGS SHALL BE SETUP IN ACCORDANCE WITH THE TINSW TRAFFIC CONTROL AT WORK SITES MANUAL 6.1 & AUSTRALIAN STANDARDS AS 1742.32019	N

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Appendix B – VMS strategy & Detour Map

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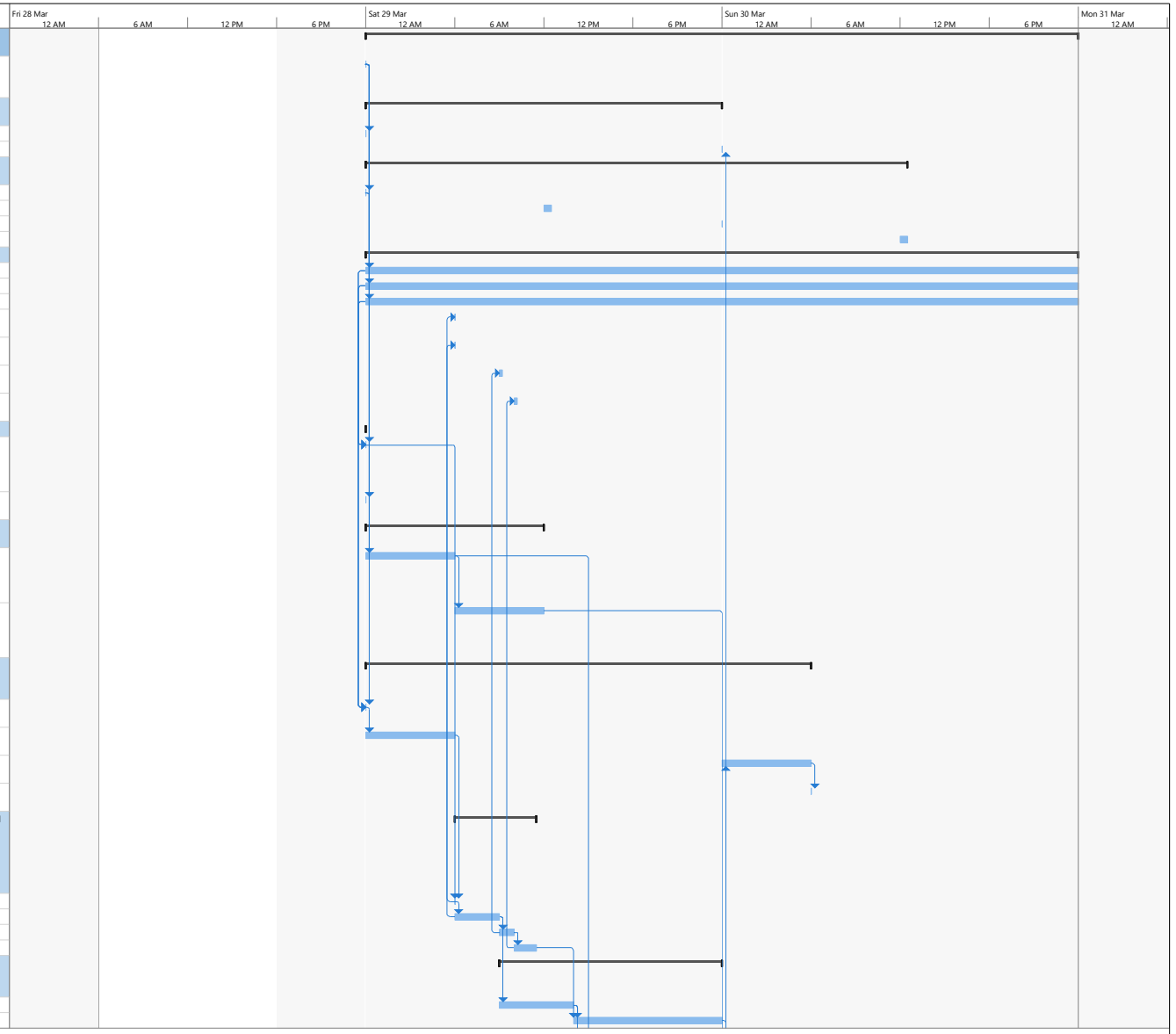
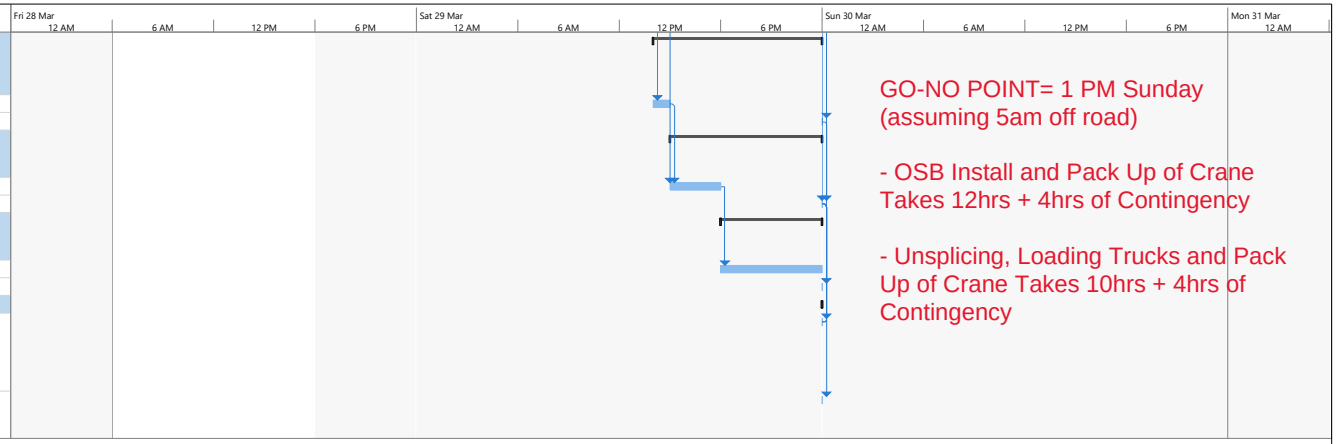
Appendix C – Hour by Hour Program & Risk Assessment

ID	Task Name	Duration	Start	Finish
1	**Albermarle Installation Program**	**48.5 hrs**	**28 March 2025 11:00 PM**	**30 March 2025 11:30 PM**
2	Critical decision to proceed with installation	0.5 hrs	28 March 2025 11:00 PM	28 March 2025 11:30 PM
3	**Power Line Isolation**	**29.5 hrs**	**28 March 2025 11:30 PM**	**30 March 2025 5:00 AM**
4	Isoloation	4 hrs	28 March 2025 11:30 PM	29 March 2025 3:30 AM
5	De-Isolation	4 hrs	30 March 2025 1:00 AM	30 March 2025 5:00 AM
6	**Pre Start Meetings**	**36.5 hrs**	**29 March 2025 12:00 AM**	**30 March 2025 12:30 PM**
7	Shift 1 Pre Start	0.5 hrs	29 March 2025 12:00 AM	29 March 2025 12:30 AM
8	Shift 2 Pre Start	0.5 hrs	29 March 2025 12:00 PM	29 March 2025 12:30 PM
9	Shift 3 Pre Start	0.5 hrs	30 March 2025 12:00 AM	30 March 2025 12:30 AM
10	Shift 4 Pre Start	0.5 hrs	30 March 2025 12:00 PM	30 March 2025 12:30 PM
11	**Road Closures**	**48 hrs**	**28 March 2025 11:30 PM**	**30 March 2025 11:30 PM**
12	Kays Ave West	48 hrs	28 March 2025 11:30 PM	30 March 2025 11:30 PM
13	Challis Ave	48 hrs	28 March 2025 11:30 PM	30 March 2025 11:30 PM
14	Albermarle St	48 hrs	28 March 2025 11:30 PM	30 March 2025 11:30 PM
15	Wardell RD Deliver 1	0.2 hrs	29 March 2025 6:30 AM	29 March 2025 6:42 AM
16	Wardell RD Delivery 2	0.2 hrs	29 March 2025 7:30 AM	29 March 2025 7:42 AM
17	Wardell RD Delivery 3	0.2 hrs	29 March 2025 9:00 AM	29 March 2025 9:12 AM
18	Wardell RD Delivery 4	0.2 hrs	29 March 2025 10:00 AM	29 March 2025 10:12 AM
19	**Site Mobilisation**	**5 hrs**	**28 March 2025 11:30 PM**	**29 March 2025 4:30 AM**
20	Set up of System 30 temporary props	4 hrs	29 March 2025 12:30 AM	29 March 2025 4:30 AM
21	Setup Light towers	1 hr	28 March 2025 11:30 PM	29 March 2025 12:30 AM
22	**Preparation of existing structure**	**12 hrs**	**29 March 2025 12:00 AM**	**29 March 2025 12:00 PM**
23	Removal of Screens and Balustrade (Country Side)	6 hrs	29 March 2025 12:00 AM	29 March 2025 6:00 AM
24	Removal of Screens and Balustrade (City Side)	6 hrs	29 March 2025 6:00 AM	29 March 2025 12:00 PM
25	**Crane Mobilisation / Demobilisation**	**30.5 hrs**	**29 March 2025 12:30 AM**	**30 March 2025 7:00 AM**
26	Setup of 150t setup crane	1 hr	29 March 2025 12:30 AM	29 March 2025 1:30 AM
27	Setup of 500t Slew Crane	5 hrs	29 March 2025 1:30 AM	29 March 2025 6:30 AM
28	Packup 500t slew crane	5 hrs	30 March 2025 1:00 AM	30 March 2025 6:00 AM
29	Packup 150t setup crane	1 hr	30 March 2025 6:00 AM	30 March 2025 7:00 AM
30	**Delivery and Placement of OSB's and installing onto temporary propping**	**5 hrs**	**29 March 2025 6:30 AM**	**29 March 2025 11:30 AM**
31	Segment 1	1 hr	29 March 2025 6:30 AM	29 March 2025 7:30 AM
32	Segment 2	1.5 hrs	29 March 2025 7:30 AM	29 March 2025 9:00 AM
33	Segment 3	1 hr	29 March 2025 9:00 AM	29 March 2025 10:00 AM
34	Segment 4	1.5 hrs	29 March 2025 10:00 AM	29 March 2025 11:30 AM
35	**Bolted Splicing and final fitout of OSB's**	**10 hrs**	**29 March 2025 9:00 AM**	**29 March 2025 7:00 PM**
36	Country Side	5 hrs	29 March 2025 9:00 AM	29 March 2025 2:00 PM
37	City Side	5 hrs	29 March 2025 2:00 PM	29 March 2025 7:00 PM



ID	Task Name	Duration	Start	Finish
38	**Rigging OSB's and Pile Cap Preparation for Installation**	**6 hrs**	**29 March 2025 2:00 PM**	**29 March 2025 8:00 PM**
39	Country Side	1 hr	29 March 2025 2:00 PM	29 March 2025 3:00 PM
40	City Side	1 hr	29 March 2025 7:00 PM	29 March 2025 8:00 PM
41	**Lifting and Placement of OSB's**	**8 hrs**	**29 March 2025 3:00 PM**	**29 March 2025 11:00 PM**
42	Country Side	3 hrs	29 March 2025 3:00 PM	29 March 2025 6:00 PM
43	City Side	3 hrs	29 March 2025 8:00 PM	29 March 2025 11:00 PM
44	**Protective Coatings Review / Repairs**	**7 hrs**	**29 March 2025 6:00 PM**	**30 March 2025 1:00 AM**
45	Country Side	2 hrs	29 March 2025 6:00 PM	29 March 2025 8:00 PM
46	City Side	2 hrs	29 March 2025 11:00 PM	30 March 2025 1:00 AM
47	**Demobilisation**	**2 hrs**	**29 March 2025 11:00 PM**	**30 March 2025 1:00 AM**
48	Approval from Alfabs supervisor to Demobilise the crane	2 hrs	29 March 2025 11:00 PM	30 March 2025 1:00 AM
49	Packup temporary propping	2 hrs	29 March 2025 11:00 PM	30 March 2025 1:00 AM



GO-NO POINT= 1 PM Sunday (assuming 5am off road)

- OSB Install and Pack Up of Crane Takes 12hrs + 4hrs of Contingency

- Unsplicing, Loading Trucks and Pack Up of Crane Takes 10hrs + 4hrs of Contingency

Project: Albermarle Installation
Date: 30 January 2025 1:37 PM

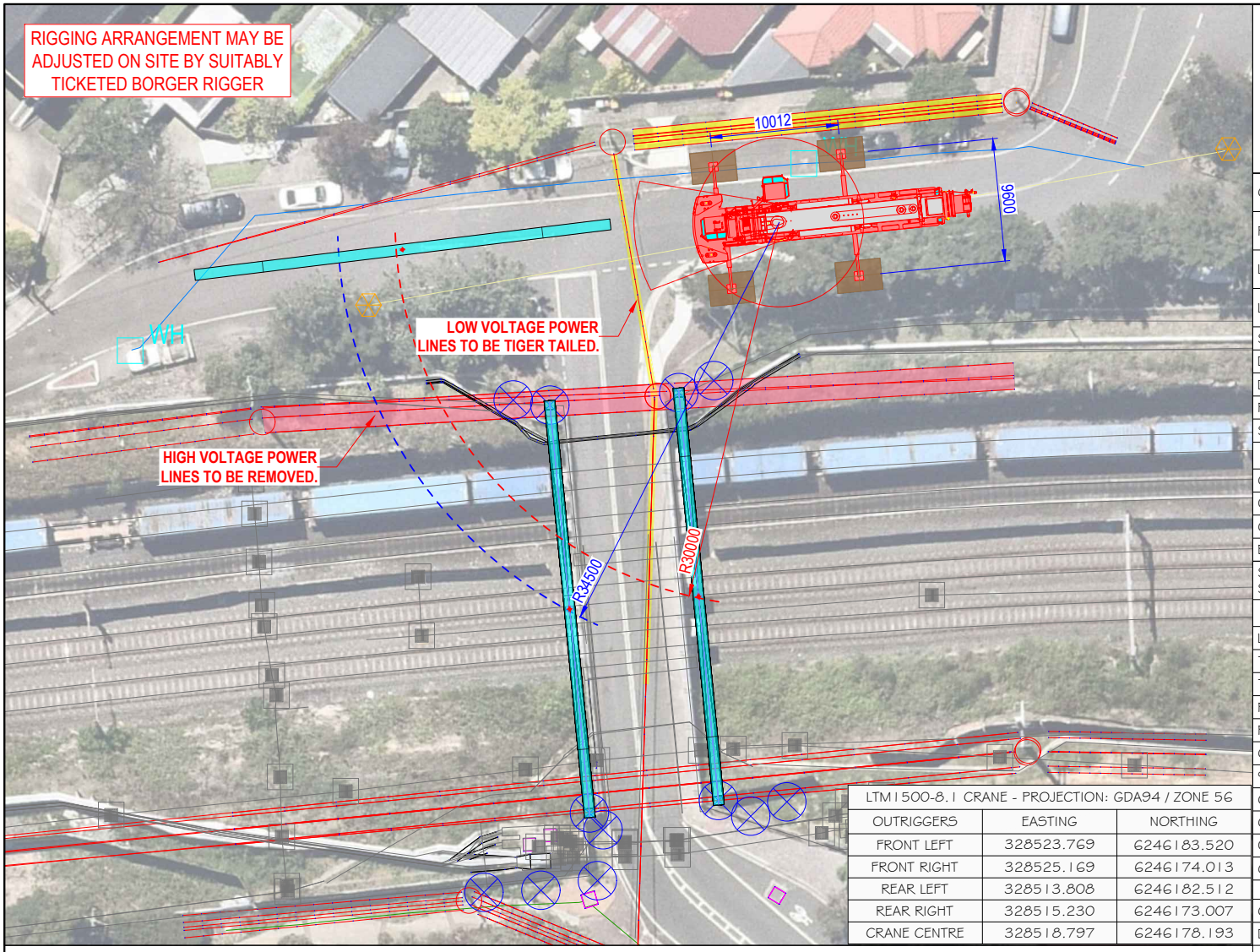
Task, Split, Milestone, Summary, Project Summary, Inactive Task, Inactive Milestone, Inactive Summary, Manual Task, Duration-only, Manual Summary Rollup, Manual Summary, Start-only, Finish-only, External Tasks, External Milestone, Deadline, Progress, Manual Progress

Page 2

IDENTIFICATION					
No.	Hazard	Impact	Location	Initial Risk	Specific Control
1	OSB not fitting	1) Can't Install OSB 2) require onsite cutting/modifications 3) nowhere to install	All	H	1) 3D scan bridge - check against fab model 2) Asbuilt ragbolt installation - check against fab model 3) trial assembly with bolt locations setout and 3D scan
2	Crane availability	can't install OSB	All	M	
3	crane breakdown	delays can't install OSB	All	L	fitter on stand down standby crane
4	storage area if OSB not installed	storage needed	All	L	return heavy vehicle permits additional TGS/TMP
5	TMP's	can't proceed with the works	All	M	- submit TMP's - check for clashing weekend closures
6	below ground services	damage to services can't setup crane crane overturning	All	H	- temporary works assessment - detailed site investigation - adjust outrigger location
7	above ground services	- can't setupcrane - fatality - overhead wire contact - downing overhead wires - redundant 33kV not removed	All	H	- temporary removal - place crane clear of wirse - change lifting arrangement - tiger tails - isolation for Sydney trains 11kV and 1500V - removal of 33kV - trained and designated spotters - height/slew restrictors - 1500V Martinus OHW team on standby to certify damaged OHW
8	inclement weather	- limited access - conflicting work crews - limited lift windows	All	H	- as long as possible lift windows - go/no-go plan pre-weekend asssessment on go/no go
~~9~~	ARTC Interface	- can't re energise - delays possession handback - duration of testing	All	~~H~~	- coordinate with ARTC/Metro contractors - Plan B e.g. night install or WE52 - seek instruction off SM to work on ARTC weekend - metro line interface? - pos neg bridge EWP's EWP's on metro line

10	E+B	- can't re-energise - delay possession handback - duration of testing	All	M	- coordinate/develop testing plan with martinus OHW crew - engage Jason Styles to review E+B - review AFC design reeport - AFC design
11	OSB not fabricated in time	- cost - reputation - program impact	All	H	- track ALFABS fabrication program and monitor weekly with yard surveillance - confirm cancellation periods for plant, labour etc.
12	Material procurement	- can't install - temp install arrangements req. - additional work	All	M	- develop materials list - track materials list - Engineer to inspect materials on arrival and store safely
13	Equipment bookings	- can't install - can't install safely - delays to program	All	M	- fitter for weekend - auto electrician for weekend - hirail inspections - standby plant - standby float - fuel truck onsite
14	labour bookings	- can't install - can't install safely - delays to program	All	M	- superintendent develop detailed program with engineer - superintendent book labour - engineers chase inductions/competencies for crew roster - develop crew roster
15	Transport from ALFABS - breakdown - car crash - loss of load - bring down powerlines - using non-approved HV route - tight access	- delay to OSB arrival - delay to OSB install - can't install - OSB stuck offsite	All	M	- fitter for trucks on standby - spare prime mover - delivered as early as possible - HVNL compliance e.g. HV route, load restraint - survey OHW's close to site - detaield drive through from main road - parking reservation at locations determined by swep path - community door knock + TGS
16	ALFABS Resources WE	- issues with install - can't install - delays to install - potential safety issues - handback late	All	M	- ALFABS + Borgers roster - Review ALFABS CV - Martinus install duntroon
17	Martinus Resources WE	- issues with install - can't install - delays to install - potential safety issues - handback late	All	L	-roster - hour by hour program - possession manager allocated - escalation channel - matching the right managers - staggered shifts - manae Sydney Metro
18	Martinus Resources lead in	- planning not as detailed as should be - bookings missed	All	L	Plan on reosurces/Actions

Appendix D – Lift Studies



LTM1500-8.1 CRANE - PROJECTION: GDA94 / ZONE 56		
OUTRIGGERS	EASTING	NORTHING
FRONT LEFT	328523.769	6246183.520
FRONT RIGHT	328525.169	6246174.013
REAR LEFT	328513.808	6246182.512
REAR RIGHT	328515.230	6246173.007
CRANE CENTRE	328518.797	6246178.193

ALFABS - SWM4 SOUTHWEST METRO
932 ALBERMARLE ST, MARRICKVILLE
BRIDGE GIRDER INSTALL - 33.0T

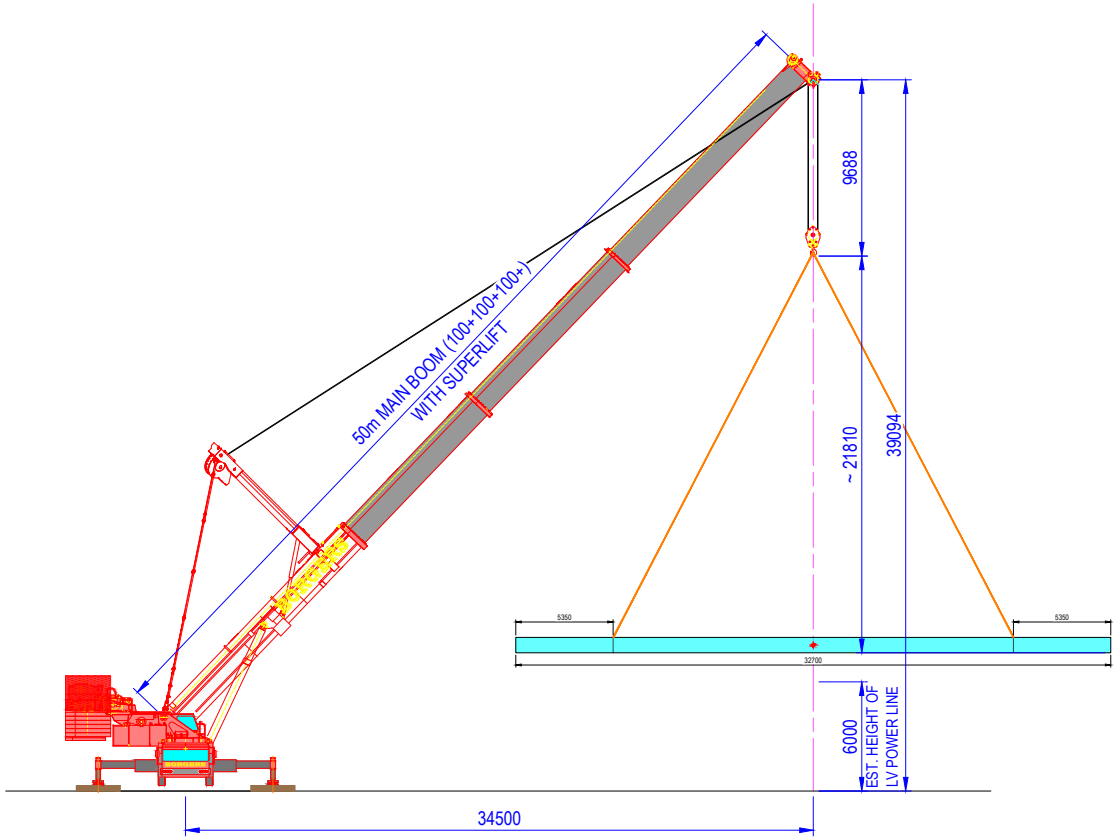
BORGER CRANES
A NEW STRENGTH IN LIFTING
PH. (02) 9832 1044
FAX. (02) 9832 1033

CLIENT		ALFABS	
PROJECT		SWM4 SOUTHWEST METRO	
LOCATION		932 ALBERMARLE ST, MARRICKVILLE	
LIFT DESCRIPTION		BRIDGE GIRDER INSTALL - 33T	
SUPERVISOR		ADAM LITTLE	
DRAWN BY		AL / YH	
DRAWING NUMBER		YH25011	
PAGE	1 OF 2	REV.	PRELIM.
SCALE	1:300 @ A3	DATE	17.01.2025

CRANE DETAIL		
CRANE MODEL	LTM1500-8.1	
OUTRIGGER (W x L)	9.6m(W) x 10.0m(L)	
COUNTERWEIGHT	165.0 t	
BOOM LENGTH	50.00 m	
SUPERLIFT (Y-GUY), SPACER OR FLY JIB	SUPERLIFT	

LIFT STUDY		
LIFT WEIGHT	28.00 t	33.00 t
TOTAL FIXED WEIGHT	4.00 t	4.00 t
TOTAL LIFT WEIGHT	32.00 t	37.00 t
PICK UP RADIUS	34.5 m	30.0 m
PLACE RADIUS	34.5 m	30.0 m
CHART CAPACITY	37.30 t	45.50 t
% OF CHART CAP.	85.79 %	81.32 %
CRANE PAD LENGTH	3.5 m	
CRANE PAD WIDTH	2.4 m	
OUTRIGGER WEIGHT	168.6 t	
GROUND PRESSURE	200.7 kPa	
(PRESSURE = OUTRIGGER WEIGHT x 10 / PAD AREA)		
CHART WIND SPEED	12.8 m/s	46.1 km/h
DERATED WIND SPEED	-	-

RIGGING ARRANGEMENT MAY BE ADJUSTED ON SITE BY SUITABLY TICKETED BORGER RIGGER



BORGER CRANES
A NEW STRENGTH IN LIFTING
PH. (02) 9832 1044
FAX. (02) 9832 1033

CLIENT		ALFABS	
PROJECT		SWM4 SOUTHWEST METRO	
LOCATION		932 ALBERMARLE ST, MARRICKVILLE	
LIFT DESCRIPTION		BRIDGE GIRDER INSTALL - 33T	
SUPERVISOR		ADAM LITTLE	
DRAWN BY		AL / YH	
DRAWING NUMBER		YH25011	
PAGE	2 OF 2	REV.	PRELIM.
SCALE	1:250 @ A3	DATE	17.01.2025

CRANE DETAIL		
CRANE MODEL	LTM1500-8.1	
OUTRIGGER (W x L)	9.6m(W) x 10.0m(L)	
COUNTERWEIGHT	165.0 t	
BOOM LENGTH	50.00 m	
SUPERLIFT (Y-GUY), SPACER OR FLY JIB	SUPERLIFT	

LIFT STUDY		
LIFT WEIGHT	28.00 t	33.00 t
TOTAL FIXED WEIGHT	4.00 t	4.00 t
TOTAL LIFT WEIGHT	32.00 t	37.00 t
PICK UP RADIUS	34.5 m	30.0 m
PLACE RADIUS	34.5 m	30.0 m
CHART CAPACITY	37.30 t	45.50 t
% OF CHART CAP.	85.79 %	81.32 %
CRANE PAD LENGTH	3.5 m	
CRANE PAD WIDTH	2.4 m	
OUTRIGGER WEIGHT	168.6 t	
GROUND PRESSURE	200.7 kPa	
(PRESSURE = OUTRIGGER WEIGHT x 10 / PAD AREA)		
CHART WIND SPEED	12.8 m/s	46.1 km/h
DERATED WIND SPEED	-	-

ALFABS - SWM4 SOUTHWEST METRO
932 ALBERMARLE ST, MARRICKVILLE
BRIDGE GIRDER INSTALL - 33.0T

Item 5

LTM 1500 -- 000073097 Code: 0022 B216 5D00
Operating mode: T3Y Y15° 50m --

ISO DIN

T3Y	--
Y15° 50m	

typ1 21.02

m > < t

CODE >0022<

B216 5D00

m	31.7	31.7	36.9	36.9	36.9	42.1	47.3	50.0
8.0			165.0					
9.0	162.0	143.0	152.0	153.0		143.0	133.0	114.0
10.0	149.0	140.0	141.0	142.0	132.0	133.0	125.0	114.0
12.0	128.0	129.0	122.0	123.0	122.0	116.0	111.0	108.0
14.0	111.0	111.0	107.0	108.0	108.0	105.0	99.0	97.0
16.0	96.0	97.0	95.0	95.0	97.0	93.0	90.0	88.0
18.0	84.0	85.0	83.0	84.0	86.0	84.0	83.0	81.0
20.0	75.0	75.0	73.0	74.0	76.0	75.0	75.0	74.0
22.0	66.0	67.0	65.0	66.0	68.0	66.0	67.0	68.0
24.0	59.0	60.0	58.0	59.0	61.0	59.0	60.0	61.0
26.0	53.0	54.0	52.0	53.0	55.0	53.0	55.0	55.0
28.0	45.0	45.5	47.0	47.5	50.0	48.5	49.5	50.0
30.0	36.0	36.5	42.5	43.5	46.0	44.0	45.0	45.5
32.0			37.0	39.5	42.0	40.0	41.0	41.5
34.0			30.0	31.5	34.5	36.5	37.5	38.0
36.0						33.5	34.5	35.0
38.0						28.6	32.0	32.0
40.0						23.0	29.3	29.6
42.0							27.1	27.4
44.0							24.1	25.4
46.0							15.0	23.5
48.0								17.7
* n *	15	13	15	14	12	13	12	10
1	46+	0+	92+	92+	0+	92+	92+	100+
2	46+	92+	92+	46+	92+	92+	92+	100+
3	46+	46+	0+	46+	92+	46+	92+	100+
%								
m/s	14.3	14.3	12.8	12.8	12.8	12.8	12.8	12.8
TAB ***	394	394	394	394	394	394	394	394

T3Y	--	165.0 t	10.0 x 9.6 m	360°
Y15° 50m				

1 (1)

Attachment 1

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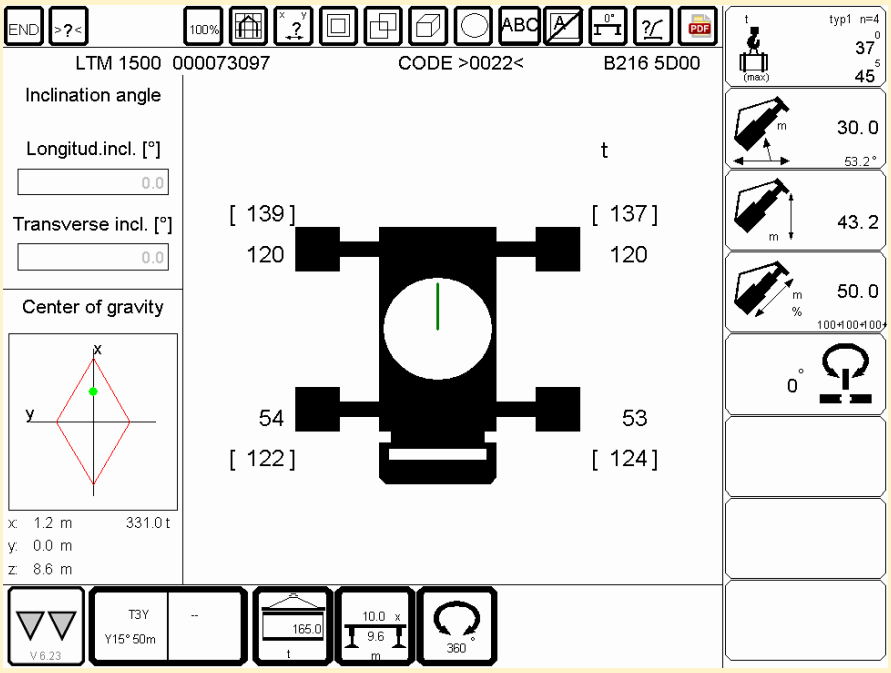
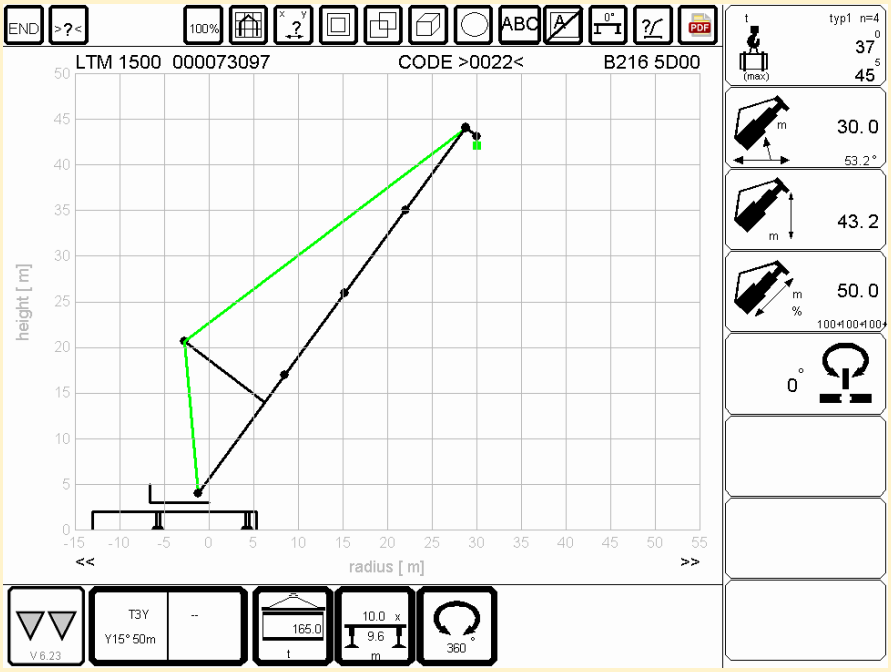
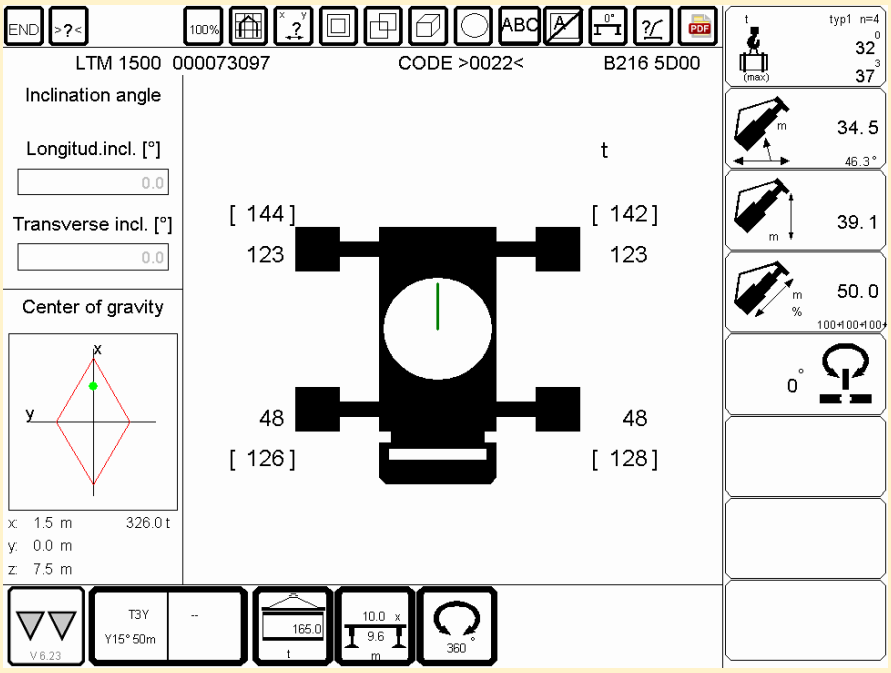
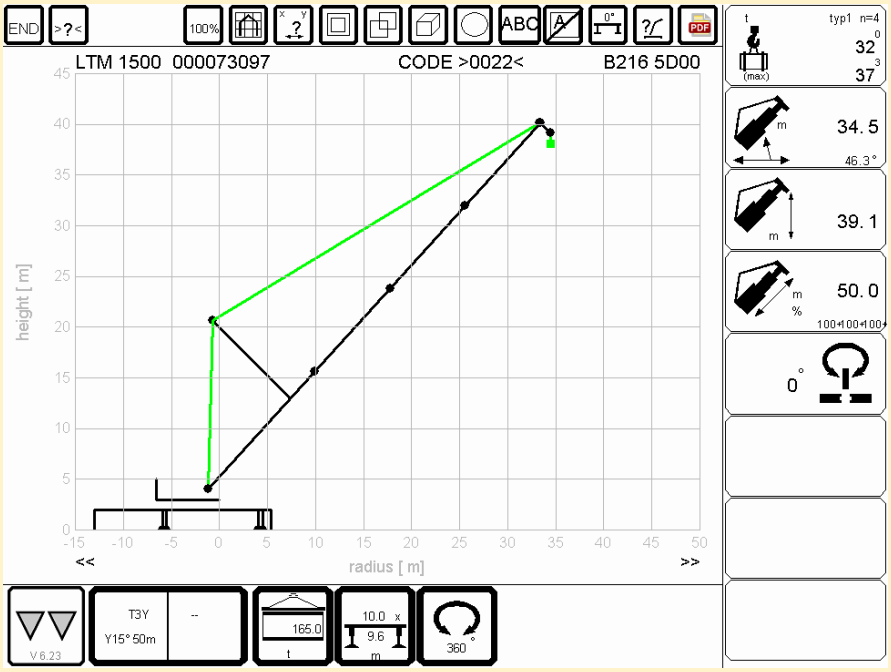
Operating mode: T3Y Y15° 50m --



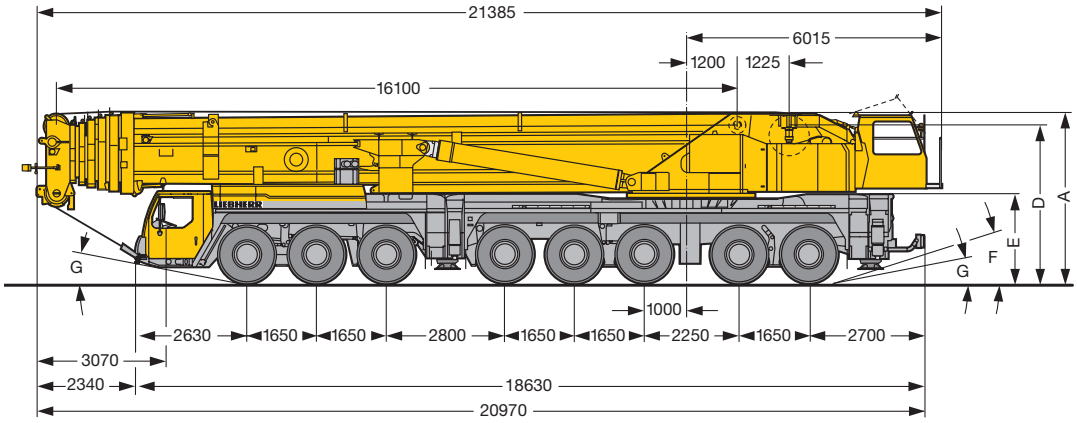


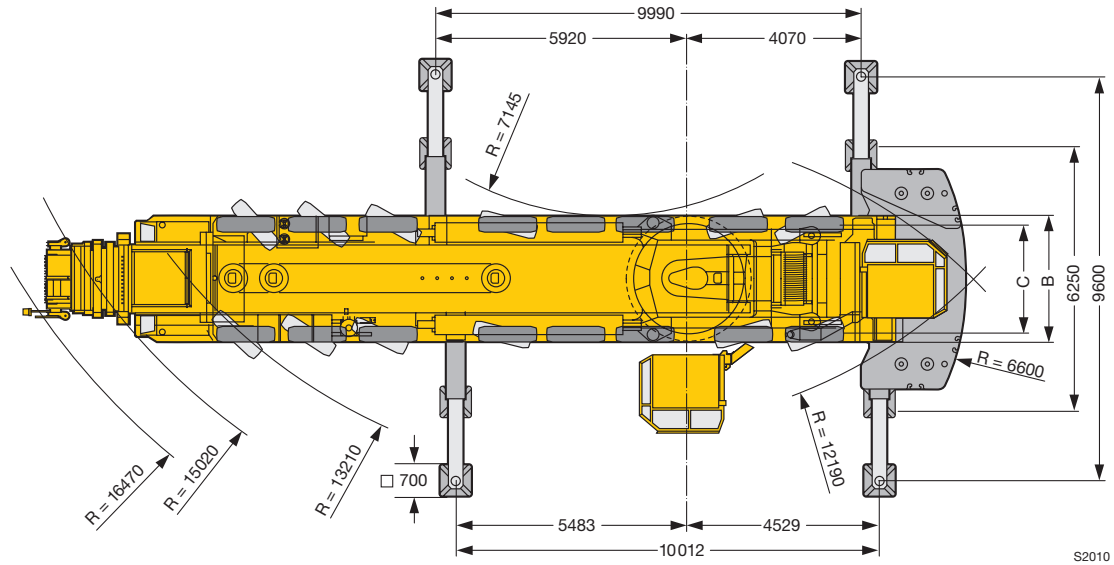
LTM 1500 -- 000073097 Code: 0022 B216 5D00
Operating mode: T3Y Y15° 50m --





Maße
Dimensions
Encombrement · Dimensioni
Dimensiones · Габариты крана





Bereifung 14.00 R 25 · Tyres 14.00 R 25 · Pneumatiques 14.00 R 25 · Pneumatici: 14.00 R 25 · Neumáticos: 14.00 R 25 · Шины: 14.00 R 25

	Maße · Dimensions · Encombrement · Dimensioni · Dimensiones · Размеры mm						
	A	B	C	D	E	F	G
14.00 R 25	3950	3000	2612	3660	1925	17°	10°
16.00 R 25	4000	3000	2552	3710	1975	19°	12°
20.5 R 25	4000	3230	2702	3710	1975	19°	12°

Item 5

Gewichte
Weights
Poids · Pesi
Pesos · Нагрузки

Achse · Axle Essieu · Asse Eje · Мосты	1	2	3	4	5	6	7	8	Gesamtgewicht · Total weight t Poids total · Peso totale t Peso total · Общий вес, т
t	12	12	12	12	12	12	12	12	96*

* mit 50 m Teleskopausleger / with 50 m long telescopic boom / avec flèche télescopique de 50 m / con braccio telescopico da 50 m / con 50 m de pluma telescópica / телескопическая стрела 50 м

Traglast · Load · Forces de levage t Portata · Capacidad de carga t Грузоподъемность, т	Rollen · No. of sheaves Poulies · Pulegge Poleas · Канатных блоков	Stränge · No. of lines Brins · Tratti portanti Reenvíos · Запасовка	Gewicht · Weight kg Poids· Peso kg Peso · Собст. вес, кг
274,1	13	27	6100
247,7	11	23	3700
171,1	7	15	2700
84,7	3	7	2600
37,4	1	3	1400
12,5	–	–	700

Geschwindigkeiten
Working speeds
Vitesses · Velocità
Velocidades · Скорости

			1	2	3	4	5	6	7	8	9	10	11	12	R 1	R 2	
	14.00 R 25	km/h	5,2	6,7	8,7	11,1	14,1	18	23,8	30,5	39,5	50,6	64,2	75	5,6	7,2	37,4 %
	16.00 R 25 20.5 R 25		5,7	7,3	9,4	12,1	15,3	19,6	25,9	33,2	43	55,1	69,8	80	6,1	7,9	33,9 %

Antriebe · Drive Mécanismes · Meccanismi Accionamiento · Приводы	stufenlos · infinitely variable en continu · continuo regulable sin escalonamiento · бесступенчато	Seil Ø / Seillänge · Rope diameter / length Diamètre / Longueur du câble · Diametro / lunghezza fune Diámetro / longitud cable · Диаметр / длина троса	Max. Seilzug · Max. single line pull Effort au brin maxi. · Mass. tiro diretto fune Tiro máx. en cable · Макс. тяговое усилие
1	0 - 130 m/min für einfachen Strang · single line m/min au brin simple · per tiro diretto · a tiro directo м/мин при однократной запасовке	25 mm / 620 m	126 kN
2	0 - 145 m/min für einfachen Strang · single line m/min au brin simple · per tiro diretto · a tiro directo м/мин при однократной запасовке	25 mm / 620 m	126 kN
3	0 - 130 m/min für einfachen Strang · single line m/min au brin simple · per tiro diretto · a tiro directo м/мин при однократной запасовке	25 mm / 1050 m	126 kN
360°	0 - 1 min^{-1} об/мин		
	ca. 70 s bis 83° Auslegerstellung · approx. 70 seconds to reach 83° boom angle env. 70 s jusqu'à 83° · circa 70 secondi fino ad un'angolazione del braccio di 83° aprox. 70 segundos hasta 83° de inclinación de pluma · ок. 70 сек.до выставления стрелы на 83°		
	ca. 330 s für Auslegerlänge 16,1 m – 50 m · approx. 330 seconds for boom extension from 16.1 m – 50 m env. 330 s pour passer de 16,1 m – 50 m · circa 330 secondi per passare dalla lunghezza del braccio di 16,1 m a 50 m aprox. 330 segundos para telescopar la pluma de 16,1 – 50 m · ок. 330 сек. до выставления от 16,1 м до 50 м		

Attachment 1

Appendix E –

Item 6

Item No: **LTC0225(1) Item 6**

Subject: **BEATTIE STREET AT MULLENS STREET, BALMAIN - PROPOSED RAISED PEDESTRIAN CROSSING (BALUDARRI-BALMAIN WARD/BALMAIN ELECTORATE/LEICHHARDT PAC)**

Prepared By: Charbel El Kazzi - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

That the attached detailed design plan (Design Plan No.10321-A) for the proposed new raised pedestrian crossing on Beattie Street west of Mullens Street, Balmain be approved.

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Livable, connected neighborhoods and transport

EXECUTIVE SUMMARY

Council is planning to improve safety in Beattie Street, Balmain by constructing a raised pedestrian crossing west of Mullens and Montague Streets to replace two existing kerb ramps. The proposal aims to improve pedestrian and motorist safety by better defining safe pedestrian crossing points and addresses pedestrian safety and driver behavior at this location.

This project is one of the recommendations from the Balmain Local Area Traffic Management (LATM) study adopted by Council on 10 October 2023.

The proposal will require a new 'No Stopping' sign to be installed in Beattie Street on the south side of the new raised pedestrian crossing as per attached plan. This will result in the loss of one (1) on street parking space in Beattie Street.

BACKGROUND

The Balmain Local Area Traffic Management (LATM) study adopted by Council on 10 October 2023, recommended the design and construction of a raised pedestrian crossing in Beattie Street, west of Mullens and Montague Streets, Balmain.

The detailed design plan shown in *Attachment 1* outlines the proposed works on Beattie Street, Balmain and includes the following:

- Construct a new raised concrete pedestrian crossing to replace the existing kerb ramps (refer to attached plans).
- Construct "gutter bridges" with heel safe grating to provide safe access over existing kerb and gutter to the new raised pedestrian crossing (where required).
- Realign the kerb & gutter as needed to widen the footpath and provide the room needed for the new raised pedestrian crossing.
- Adjust the footpaths as required to match the new kerb alignments on both sides of the street. New pavers and new asphalt footpaths will be provided to match existing footpaths as best as possible (pavers subject to availability).
- Remove the existing speed cushion in Beattie Street.

- Provide new lighting to the new raised pedestrian crossing which complies with the current lighting standards.
- Install a new 'No Stopping' (10m from the proposed crossing) sign on the south side of Beattie Street to satisfy sight distance requirements at departure side of the new pedestrian crossing.
- Install associated pavement line marking and signage as required.

The traffic and roadway features of Beattie Street at Mullens Street is tabled below:

Street Name	**Lilyfield Road**
Kerb to Kerb Width (m)	9.6m
Carriageway Type	Two-way, one travel lane each direction. Bicycle logo mixed traffic arrangement.
Classification	Local Road
Speed Limit	40km/h
85th Percentile Speed	35.3km/h
Average Traffic Volume	3,000 veh/day
Available TfNSW recorded crash history last 5 years (2018-2023)	2018 – RUM code 30 (Rear End) – Car - Minor injury - Mullens Street at Beattie Street 2021 – RUM code 49 (Parking/u turn) – Bicycle - Minor injury – Roundabout at Mullens and Beattie Street 2023 – RUM code 21 (Right through) - Bicycle - Minor injury – Roundabout at Mullens and Beattie Street
Parking Arrangements	Parking permitted on both sides

DISCUSSION

A letter outlining the proposal was issued to the properties shown in the distribution map below. one (1) submission was received in response to this proposal and is summarised within the below table.

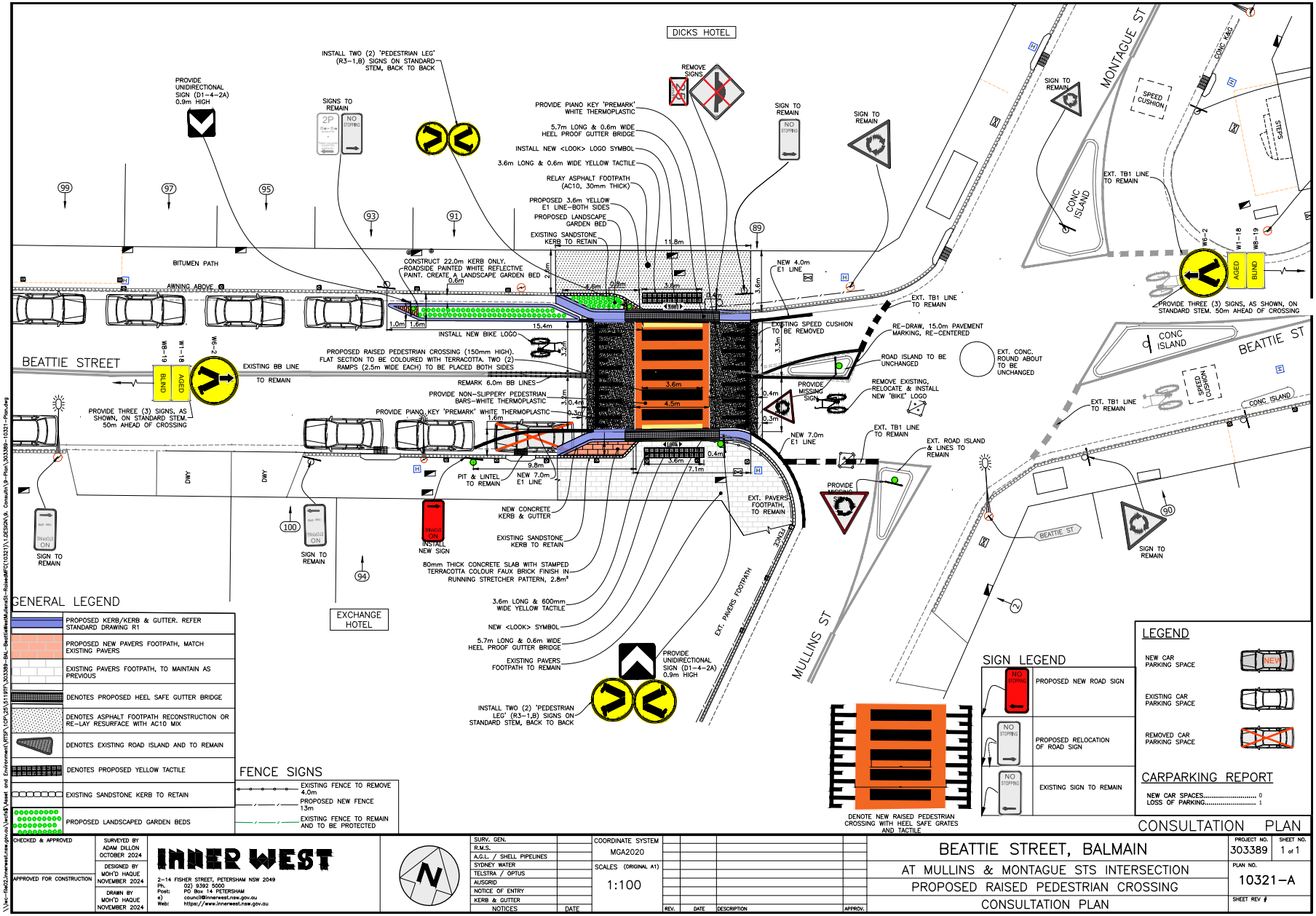
Resident Concerns	Officer Feedback
Large vehicles routinely illegally park out the front of 91 Beattie St outside of Dicks Hotel in within the 'No Stopping' zone and legally out the front exchange of Beattie Street obstructing pedestrian visibility.	Council has decided to provide an extended landscaped kerb blister island within the 'No Stopping' zone of the north side of Beattie Street to prevent illegal parking within this area and has amended the design accordingly. The small space on the south side of Beattie Street is on the departure side of the pedestrian crossing and thus will not impact on approach site distances to the pedestrian crossing. Raising the pedestrian crossing will also improve site distances for vehicles on both approaches. Additionally, parking within this locale is in high demand and therefore the removal of an additional space is not supported.

FINANCIAL IMPLICATIONS

The works are expected to cost approximately $90,000 and are to be funded under Council's Capital Works Program.

ATTACHMENTS

1.⇩ Raised Pedestrian Crossing Beattie St at Mullen St, Balmain Detailed Plan 10321-A


DICKS HOTEL
MONTAGUE ST
BEATTIE STREET
BEATTIE ST
MULLINS ST
EXCHANGE HOTEL
INSTALL TWO (2) 'PEDESTRIAN LEG' (R3-1,8) SIGNS ON STANDARD STEM, BACK TO BACK
PROVIDE UNIDIRECTIONAL SIGN (D1-4-2A) 0.9m HIGH
SIGNS TO REMAIN
REMOVE SIGNS
SIGN TO REMAIN
PROVIDE PIANO KEY 'PREMARK' WHITE THERMOPLASTIC
5.7m LONG & 0.6m WIDE HEEL PROOF GUTTER BRIDGE
INSTALL NEW <LOOK> LOGO SYMBOL
3.6m LONG & 0.6m WIDE YELLOW TACTILE
RELAY ASPHALT FOOTPATH (AC10, 30mm THICK)
PROPOSED 3.6m YELLOW E1 LINE-BOTH SIDES
PROPOSED LANDSCAPE GARDEN BED
EXISTING SANDSTONE KERB TO RETAIN
CONSTRUCT 22.0m KERB ONLY. ROADSIDE PAINTED WHITE REFLECTIVE PAINT. CREATE A LANDSCAPE GARDEN BED
NEW 4.0m E1 LINE
BITUMEN PATH
AWNING ABOVE
INSTALL NEW BIKE LOGO
PROPOSED RAISED PEDESTRIAN CROSSING (150mm HIGH), FLAT SECTION TO BE COLOURED WITH TERRACOTTA, TWO (2) RAMPS (2.5m WIDE EACH) TO BE PLACED BOTH SIDES
EXISTING BB LINE TO REMAIN
REMARK 6.0m BB LINES
PROVIDE NON-SLIPPERY PEDESTRIAN BARS-WHITE THERMOPLASTIC
PROVIDE PIANO KEY 'PREMARK' WHITE THERMOPLASTIC
PROVIDE THREE (3) SIGNS, AS SHOWN, ON STANDARD STEM, 50m AHEAD OF CROSSING
PIT & LINTEL TO REMAIN
NEW 7.0m E1 LINE
INSTALL NEW SIGN
NEW CONCRETE KERB & GUTTER
EXISTING SANDSTONE KERB TO RETAIN
80mm THICK CONCRETE SLAB WITH STAMPED TERRACOTTA COLOUR FAUX BRICK FINISH IN-RUNNING STRETCHER PATTERN, 2.8m²
3.6m LONG & 600mm WIDE YELLOW TACTILE
NEW <LOOK> SYMBOL
5.7m LONG & 0.6m WIDE HEEL PROOF GUTTER BRIDGE
EXISTING PAVERS FOOTPATH TO REMAIN
EXT. PAVERS FOOTPATH
EXISTING SPEED CUSHION TO BE REMOVED
RE-DRAW, 15.0m PAVEMENT MARKING, RE-CENTERED
ROAD ISLAND TO BE UNCHANGED
EXT. CONC. ROUND ABOUT TO BE UNCHANGED
REMOVE EXISTING, RELOCATE & INSTALL NEW 'BIKE' LOGO
PROVIDE MISSING SIGN
EXT. TB1 LINE TO REMAIN
EXT. ROAD ISLAND & LINES TO REMAIN
CONC ISLAND
SPEED CUSHION
STEPS
CONC KERB
PROVIDE THREE (3) SIGNS, AS SHOWN, ON STANDARD STEM. 50m AHEAD OF CROSSING
DENOTE NEW RAISED PEDESTRIAN CROSSING WITH HEEL SAFE GRATES AND TACTILE
GENERAL LEGEND
PROPOSED KERB/KERB & GUTTER. REFER STANDARD DRAWING R1
PROPOSED NEW PAVERS FOOTPATH, MATCH EXISTING PAVERS
EXISTING PAVERS FOOTPATH, TO MAINTAIN AS PREVIOUS
DENOTES PROPOSED HEEL SAFE GUTTER BRIDGE
DENOTES ASPHALT FOOTPATH RECONSTRUCTION OR RE-LAY RESURFACE WITH AC10 MIX
DENOTES EXISTING ROAD ISLAND AND TO REMAIN
DENOTES PROPOSED YELLOW TACTILE
EXISTING SANDSTONE KERB TO RETAIN
PROPOSED LANDSCAPED GARDEN BEDS
FENCE SIGNS
EXISTING FENCE TO REMOVE 4.0m
PROPOSED NEW FENCE 13m
EXISTING FENCE TO REMAIN AND TO BE PROTECTED
SIGN LEGEND
PROPOSED NEW ROAD SIGN
PROPOSED RELOCATION OF ROAD SIGN
EXISTING SIGN TO REMAIN
LEGEND
NEW CAR PARKING SPACE
EXISTING CAR PARKING SPACE
REMOVED CAR PARKING SPACE
CARPARKING REPORT
NEW CAR SPACES..... 0
LOSS OF PARKING..... 1
CONSULTATION PLAN
CHECKED & APPROVED
APPROVED FOR CONSTRUCTION
SURVEYED BY ADAM DILLON OCTOBER 2024
DESIGNED BY MOH'D HAQUE NOVEMBER 2024
DRAWN BY MOH'D HAQUE NOVEMBER 2024
INNER WEST
2-14 FISHER STREET, PETERSHAM NSW 2049
Ph. 02) 9392 5000
Post: PO Box 14 PETERSHAM
e) council@innerwest.nsw.gov.au
Web: https://www.innerwest.nsw.gov.au
SURV. GEN.
R.M.S.
A.G.L. / SHELL PIPELINES
SYDNEY WATER
TELSTRA / OPTUS
AUSGRID
NOTICE OF ENTRY
KERB & GUTTER NOTICES
COORDINATE SYSTEM MGA2020
SCALES (ORIGINAL A1) 1:100
REV. DATE DESCRIPTION APPROV.
BEATTIE STREET, BALMAIN
AT MULLINS & MONTAGUE STS INTERSECTION
PROPOSED RAISED PEDESTRIAN CROSSING
CONSULTATION PLAN
PROJECT NO. 303389
SHEET NO. 1 of 1
PLAN NO. 10321-A
SHEET REV #

Item 7

Item No: **LTC0225(1) Item 7**

Subject: **RENWICK STREET & MARION STREET, LEICHHARDT - PROPOSED INTERSECTION LINE MARKING UPGRADES (BALUDARRI-BALMAIN WARD/BALMAIN ELECTORATE/LEICHHARDT PAC)**

Prepared By: Jackie Ng - Graduate Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

That the proposed intersection line marking upgrades at the Renwick Street and Marion Street, Leichhardt intersection shown in *Attachment 1* be approved.

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

This report outlines safety concerns raised by residents at the intersection of Renwick Street and Marion Street, Leichhardt. A high volume of parents, students and children can be observed by the public using this crossing point due to the proximity of the childcare and public school. A review has been undertaken and proposes to upgrade the existing line marking at the intersection, which improves driver visibility and clarity for pedestrians and vehicle movements at this intersection.

BACKGROUND

Council has received concerns from residents regarding the intersection of Renwick Street and Marion Street, Leichhardt. The site is highly used by all road users as it is within close proximity to the Norton Street shopping village, Leichhardt Public School and Child Care Centre.

The current position of the 'Give Way' line marking across Renwick Street requires cars to slow down and give way well before being able to adequately see oncoming traffic on Marion Street. Visibility is further exacerbated due to the high building alignment of the corner property for drivers entering Marion Street. Additionally, with the 'Give Way' line is located before the pedestrian kerb ramp, occasional confusion and hesitation was observed between vehicles and pedestrians.

It is proposed that the following line marking treatments are installed at the intersection as shown in *Attachment 1*:

- Install 20m length double separation (BB) lines on Marion Street on the west and east approach to Renwick Street;
- Install 10m length double separation (BB) lines on Renwick Street;
- Reposition existing give way (TB and TB1) lines, as shown in the attached plan.
- Install painted hatched island on the south side of Marion Street, west of Renwick Street

The proposed works does not impact on any on-street parking spaces.

DISCUSSION

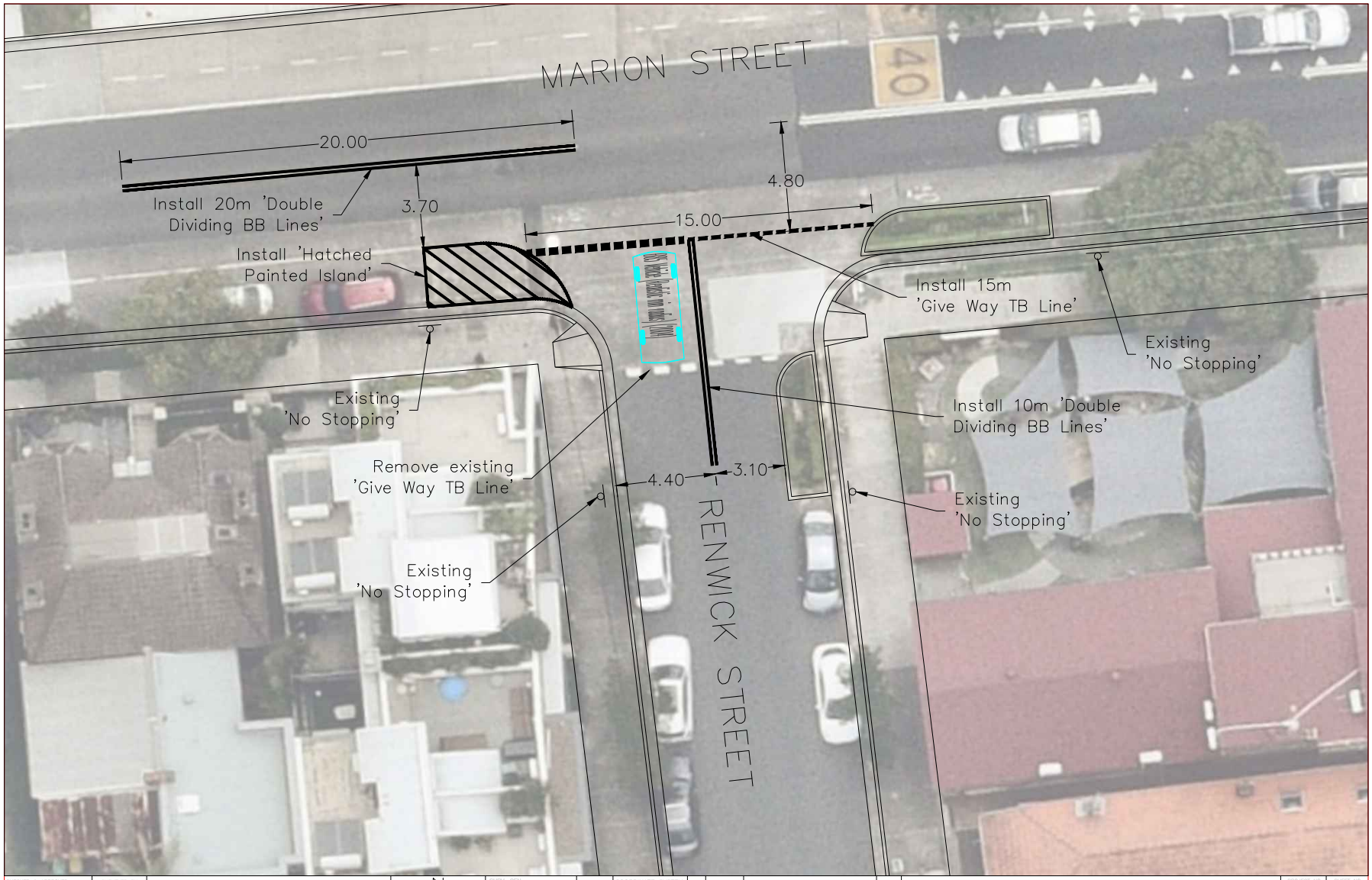
No consultation was conducted as the proposal does not affect any on-street parking spaces.

FINANCIAL IMPLICATIONS

The cost of installation of the proposed line marking can be funded within Council's signs and line marking budget.

ATTACHMENTS

1.⇩ Renwick Street & Marion Street, Leichhardt - Proposed Intersection Line Marking Upgrade


MARION STREET
RENWICK STREET
20.00
Install 20m 'Double Dividing BB Lines'
3.70
4.80
15.00
Install 'Hatched Painted Island'
Install 15m 'Give Way TB Line'
Existing 'No Stopping'
Existing 'No Stopping'
Install 10m 'Double Dividing BB Lines'
Remove existing 'Give Way TB Line'
4.40
3.10
Existing 'No Stopping'
Existing 'No Stopping'
INNER WEST
N
1:1000
PROPOSED INTERSECTION UPGRADES
LINE MARKING
RENWICK STREET & MARION STREET
LEICHHARDT
1 of 1

Item 8

Item No: **LTC0225(1) Item 8**

Subject: **ROBERT STREET, ROZELLE - MINSTRY OF SOUND TRAFFIC MANAGEMENT PLAN (BALUDARRI-BALMAIN WARD/BALMAIN ELECTORATE/LEICHHARDT PAC)**

Prepared By: Amir Falamarzi - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

That the Traffic Management Plan (TMP) for Ministry of Sound 2025 at the White Bay Power Station proposed on 4-5 April and 11-12 April 2025 be approved subject to the following conditions:

a) **the event organisers notify the community including residents and businesses of the proposed event, changes to traffic and parking in the area;**
b) **road closures are only implemented by order of NSW police to ensure public safety during event egress;**
c) **all barricades and necessary signposting shall be provided by the event organisers and maintained during the period of the event by TfNSW-accredited marshals, or Police engaged by the applicant;**
d) **all traffic control facilities are to be installed in accordance with Australian Standard 1742.3;**
e) **the event organiser shall indemnify Inner West Council against all claims for damage or injury that may result from the activity or occupation of part of the public way during the activity. The event organiser must provide documentary evidence of public risk insurance cover of at least $20,000,000 indemnifying Council; and**
f) **the event organiser shall be responsible for the reimbursement for the cost of repair of any damage caused to the public way, or as a result of the activities.**

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

Ministry of Sound 2025 event is scheduled to take place at White Bay Power Station (WBPS) on Roberts Street Rozelle, which will host a music party on four separate dates Fridays and Saturdays 4-5 April, and 11-12 April 2025.

The Traffic Management Plan (TMP) was prepared and aims to provide safe pedestrian access routes to the site through a proposed pedestrian crossing point in Robert Street, pick-up and drop-off zone for private vehicles and taxis along Robert Street and Mullens Street.

BACKGROUND

Orbit for TMRW Events has submitted a TMP application for the 2025 Ministry of Sound at the WPBS which will host a music party on four separate dates including Fridays and Saturdays 4-5 April, and 11-12 April 2025. The Testament event last took place in Sydney at White Bay Power Station in 2024 and will return this year.

It is expected that approximately 4,000 people will attend the event. During the event dates, traffic setup will start at 12pm, event will start at 4pm and event will finish at 12am. Figure 1 shows the location of the event and affected

Figure 1: Ministry of Sound Testament Event Location (in Yellow) noting the surrounding roads affected (In Blue)

DISCUSSION

The proposed TMP (Attachment 1) includes two Traffic Guidance Schemes (TGS): one for typical operation and another for the egress road closure contingency plan, which will be implemented under the direction of NSW Police for pedestrian safety. The TMP includes the following features:

<u>Traffic management on Robert Street and Mullens Street</u>

- Waterfilled barriers, bollards and crowd control barriers will be installed along Robert Street and Mullens Street to manage traffic, pick up/ drop off zone and facilitate pedestrian access
- The event organisers will barricade all parking spaces within the event area the night before the event commences, including Robert Street between Crescent Street and No.58 Robert Street (both sides) and Mullens Street between Robert Street and Mansfield Street (east side) to set up the proposed TGS.
- Pick up/drop of zones will be installed on Robert Street (both sides) 80m east of the intersection of Robert Street and Mullens Street.
- U-turn bay will be installed on Robert Street in front of Port access road ramp during egress time.
- To support the event area, the right-turn lanes from Robert Street onto Victoria Road and from Robert Street onto Mullens Street, Rozelle, will be closed during the pedestrian egress period with formal road closures if required. This will occur under NSW Police direction if the crowd cannot be controlled to ensure pedestrian safety.
- There is limited street parking available for participants of the event. The event organiser will promote public transport as the best way of getting to the event due to its proximity to regular bus services.

- No vehicles will be permitted access to the event site via the Northern Forecourt (existing traffic loop) other than emergency vehicles.
- Two VMS board signs will be installed on Robert Street with one at the intersection of Mullens Street and another one at the intersection of Buchanan Street before and during the events to inform road users of changes in traffic condition.

NSW Police engagement

- The Leichhardt Police Area Command (PAC) will be involved in the planning of Ministry of Sound testament event Rozelle, via Council's Traffic Committee including aspects relating to use of the roadway, closure of selected roads and hostile vehicle mitigation. They will be formally notified at least two weeks prior to the event taking place.
- User Pays Police will be engaged by the event organisers based on guidance from PAC, in conjunction with the relevant Security Management Plan.

Pedestrian access

- Pedestrian access lanes and crossing will be implemented along and across Roberts Street to provided pedestrians safe access to the event area.
- Traffic controllers will be stationed at the proposed pedestrian crossing to facilitate safe pedestrian movement.

Access for local residents and businesses

- Pedestrian access lanes and crossings will be implemented along and across Robert Street to provide pedestrians with safe access to the event area.
- Traffic controllers will be stationed at the proposed pedestrian crossings to facilitate safe pedestrian movement.

Hostile vehicles mitigation

- The Event Organiser may, in conjunction with the nominated Security Advisor, produce a Hostile Vehicle Mitigation (HVM), and Target Hardening Plan for the event.

Access for emergency vehicles

- A minimum four metre emergency lane will be maintained along the entire closure, beyond the HVM vehicles. There will be no event infrastructure in the emergency lane.
- Traffic controllers will be onsite to assist emergency vehicle through the closure points. While HVM measures will be in place, a driver for all vehicles will always be present in case the vehicle needs to be moved to allow access for emergency vehicles.

Buses

- Buses will be permitted around the closure at all times of the event, a traffic controller will manage the ingress/egress during event hours. No buses or bus stops will be affected by the closure for the event.

Taxis

- Taxi and ride-share providers will have specific drop/collection areas along Mullens Street that will be installed for the event and will continue to have access to the road network around the closures as per other road users.

Cycle routes

- The closure of Robert Street will not significantly affect designated cycling routes through Rozelle.
- Cyclists will still be able to dismount and walk their bikes around the event site. All existing cycle routes will remain in place and operational around the event site.

Special event clearways

- The need for a special event clearway has been considered irrelevant due to the event's location and duration.

PUBLIC AND EMERGENCY NOTIFICATION

The event organiser will notify all residents and businesses impacted by the event, including confirmation of restricted vehicle movements during event operating times. This will include reviewing any necessary changes to commercial waste collection times and/or locations. A notification letter drop will be arranged by the event organiser two weeks prior to the event.

NSW Fire & Rescue and NSW Ambulance will be notified at least two weeks prior to the event.

FINANCIAL IMPLICATIONS

There are no financial implications associated with the implementation of the proposed recommendations outlined in the report.

ATTACHMENTS

1.⇩ Ministry of Sound 2025 Traffic Management Plan

Item 8

TRAFFIC MANAGEMENT PLAN

Ministry of Sound Testament

White Bay Power Station

Friday 4th, Saturday 5th, Friday 11th and Saturday 12th April 2025

PREPARED FOR

ORBIT

FOR TMRW EVENTS

by CATO Location Services

Attachment 1

TABLE OF CONTENTS

STATEMENT OF CONFIDENTIALITY & NON-DISCLOSURE

This Transport Management Plan (TMP) contains proprietary and confidential information. All content is submitted to the recipients with the understanding that the recipients agree not to use or disclose any information contained herein except in the context of its business dealings with CATO and for the purposes of implementing the plans presented in the document. The recipient of this document agrees to inform present and future employees or agents of the recipient who view or have access to its content of its confidential nature.

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DOCUMENT CONTROL

This document is uncontrolled once printed – the final version with specifications and site diagrams will be locked for printing and restricted by password.

A copy of the final version will be supplied to the event organiser prior to the event.

Version	Prepared by	Date	Comments	Reviewed by
1.0	Craig Hunter	29/01/2025	First Draft	Kieran Cato

DEFINITIONS

Term	Definition
TMP	Transport Management Plan
TGS	Traffic Guidance Scheme
VMS	Variable Message Sign
HVM	Hostile Vehicle Mitigation
TMC	Transport Management Centre
SMP	Security Management Plan
TfNSW	Transport for NSW

REFERENCE DOCUMENTS

Title	Version
Guide to Traffic and Transport Management for Special Events	v4, July 2024
Traffic Control at Worksites Technical Manual	v6.1, February 2022
Workplace Health and Safety ACT NSW	2011
Workplace Health and Safety ACT Amendments NSW	2023
Workplace Health and Safety Regulations NSW	2017
Safe Work NSW website – www.safeworkaustralia.nsw.gov.au	Current website
Working near Sydney Light Rail – www.transdev.com.au/solutions/work-access-permits/	Current website.
Safe Work Code of Practice – First Aid in the workplace	January 2020
Safe Work Code of Practice – Hazardous Manual Tasks	August 2019
Safe Work Code of Practice – Managing the risks of plant in the workplace	December 2022
Safe Work Code of Practice – How to manage work health and safety risks	August 2019
Safe Work Guideline – Traffic Management: Guide for Events	April 2021

1. GENERAL EVENT INFORMATION

1.1. EVENT SUMMARY

Ministry of Sound Testament event is back in 2025 at White Bay Power Station on Roberts Street Rozelle, which will host a music party on four separate dates Friday 4th, Saturday 5th, Friday 11th and Saturday 12th April 2025.

Ministry of Sound music events started in the 90's and continued through till the late 2000's, so you couldn't be in better hands to get retro via old-school 90s and 00s music. The Testament event last took place in Sydney at White Bay Power Station in 2024 and will return again this year.

With 23 years' history across recorded music, events, artist bookings and management, TMRW Music Group are Australia's most widely experienced and respected electronic music company. We represent Australia's leading electronic artists, as well as some of the world's leading music brands, including original super club Ministry of Sound, PNAU, Grammy nominated Fisher and one of Edinburgh Fringe Festival's most enduring acts, Hot Dub Time Machine. We have produced some of the most renowned music events and festivals including Ministry of Sound Classical, weekly super club events Pacha and Ministry of Sound Club, Norman Jay's Good Times, Weekend in Residence with Sasha & John Digweed, Eighty-Six events and Faction.

Placemaking NSW, Event Managers and CATO Location Services wish to acknowledge the Gadigal and Wangal band of the Eora nation as the Traditional Custodians of the local area.

1.2. TRAFFIC IMPACT SUMMARY

This TMP needs to be produced in conjunction with SMP/Crowd management plan so we can deliver an infrastructure Crowd and transport management plan. The event security provider will produce the SMP/Crowd management plan.

Ministry of Sound testament event Rozelle involves stop/slow traffic control on Robert Street between Mullens Street and Buchanan Street, Rozelle.

To support the event area the following location is to be closed at pedestrian egress period with formal road closures if required, also known as a "hard road closure" in the event the crowd cannot be controlled/under police direction for pedestrian safety.

- Robert St right hand turn lane on to Victoria Rd, Rozelle
- Robert St right hand turn lane on to Mullens St, Rozelle

Pedestrian access will be maintained along all existing footpaths and crossings along streets surrounding the event area. Pedestrian access lanes and crossing will be implemented along Roberts Street to provided pedestrians safe access to the event area. To further manage any pedestrian impacts due to the event please refer to the Security Management Plan by contacting the event organiser as listed in section 1.4 of this document

1.3. EVENT DETAILS

Event Dates:	Friday 4th, Saturday 5th, Friday 11th and Saturday 12th April 2025
Event Times:	1600-2400
Event Venue:	White Bay Power Station, Rozelle
Expected Attendance:	Approximately 4,000 people
Bump In Start:	0800 Friday 4th and Friday 11th April 2025
Traffic Setup Start:	1200 Friday 4th, Saturday 5th, Friday 11th and Saturday 12th April 2025
Event Starts:	1600 Friday 4th, Saturday 5th, Friday 11th and Saturday 12th April 2025
Event Finishes:	2400 Saturday 5th, Sunday 6th, Saturday 12th and Sunday 13th April 2025
Traffic Closure Start:	1600 Friday 4th, Saturday 5th, Friday 11th and Saturday 12th April 2025
Traffic Closure End:	0100 Saturday 5th, Sunday 6th, Saturday 12th and Sunday 13th April 2025
Bump Out Start:	0600 Sunday 6th April and Sunday 13th April 2025

1.4. KEY EVENT CONTACTS

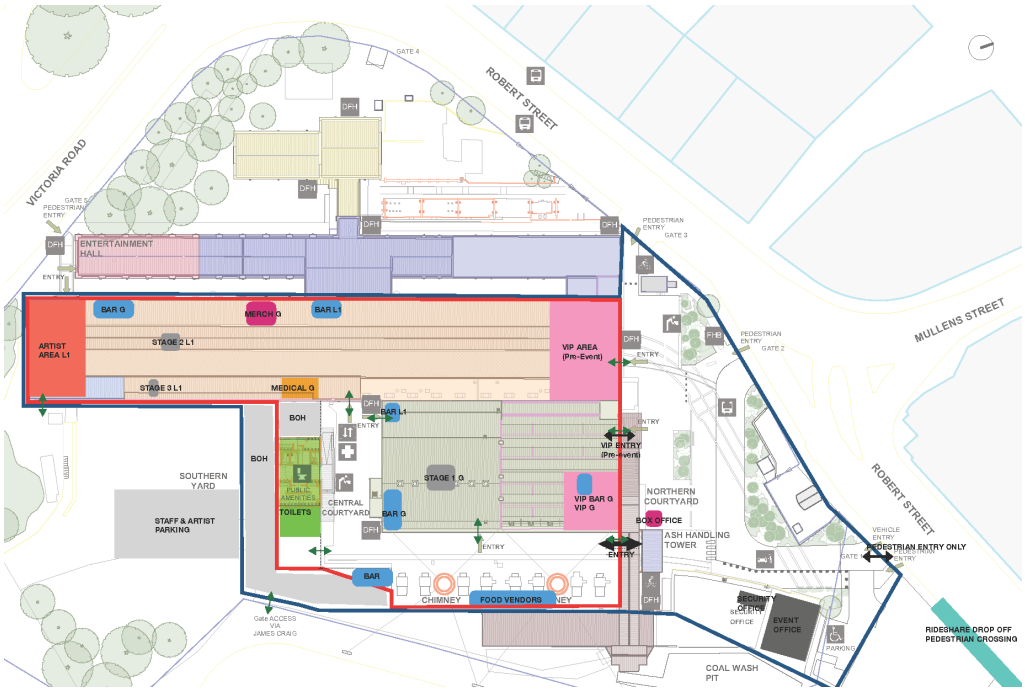
Event Organiser:	Orbit for TMRW Events
Event Manager:	Courtney Duka
Event Manager Phone:	0437 421 524
Event Manager Email:	Courtney@orbit.company
Venue Owner:	Placemaking NSW
Venue Manager:	Chris Jarvis
Venue Owner Phone:	0461 305 329
Venue Manager Email:	chris.jarvis@property.nsw.gov.au
Police Area Command:	Leichhardt PAC
Police Contact:	Peter Hibbert
Police Phone:	02 9552 8099
TfNSW Contact:	TBC
TfNSW Phone:	TBC
TfNSW Email:	TBC
Traffic Control Provider:	CATO Location Services
Traffic Control Contact:	Craig Hunter
Traffic Control Phone:	0482 806 958
Traffic Control Email:	craig@catolocationservices.com.au

2. EVENT LOCATION

Ministry of Sound Testament event is being held at the newly reopened White Bay Power Station on Roberts Street, Rozelle.

Ministry of Sound Testament Event Location ***(Listed in Yellow) noting the surrounding roads affected (In Blue)***

2.1. EVENT SITE MAP



A detailed event site plan is being prepared and will be updated closer to the event within the Event Management Plan. Refer to the Event Organiser in section 1.4 of this document for the latest site plan.

3. WORKPLACE HEALTH & SAFETY

3.1. RISK ASSESSMENT PLANS

A Risk Management approach is a fundamental part of the planning for any event. The safety risk identification, assessment and control processes are legal obligations (as per the WHS Act and Regulation 2011) and should be aligned with AS/NZS ISO 31000 Risk Management – Principles and Guidelines. Broader event risk management is best practice and a fundamental part of due diligence.

Orbit Company has compiled Risk Assessments and site-specific safety plans for the events that are not included in this Transport Management Plan.

This section of the Transport Management Plan describes the possible issues/risks that may interfere with the event and the action to be taken to minimise the disturbance of the event.

Issues / Risks	Applicable	Action Taken
All one-way streets are as described	YES	Road closures, barricade and signage installed. Point duty by authorised Traffic Controllers.
Block access to local businesses	YES	Confirm list of letters to residents, businesses, and car parks. Advertisement of event to general public.
Block Police vehicle access	YES	Confirm access and consultation of routes to and within areas affected by closures with Emergency Services. HVM vehicles can be temporarily moved if required to allow for access. A driver will be available to facilitate this action
Block Ambulance access	YES	Confirm access and consultation of routes to and within areas affected by closures with Emergency Services. HVM vehicles can be temporarily moved if required to allow for access. A driver will be available to facilitate this action
Block fire station access	N/A	Normal access to fire station facilities are maintained. Confirm access and consultation of routes to and within areas affected by closures with Emergency Services. HVM vehicles can be temporarily moved if required to allow for access. A driver will be available to facilitate this action
Block heavy vehicle access	YES	All heavy vehicles are diverted before the closure.
Restricted movements banned turns, heavy/high vehicles	YES	All vehicles are diverted before the closure.
Block Public facility (football oval, car park etc.)	YES	Confirm list of letters to residents, businesses, and car parks. Advertisement of event to general public.
Block public transport access	NO	None required.

Can route use alternatives such as bicycle tracks, paths, parks, bush tracks etc.?	N/A	None required
Construction – existing, proposed that may conflict	N/A	None required
Numbers of lanes and their width are as described	YES	As described in lane closure TGS
Road signage existing/temporary	YES	None required Temporary signage Installed and removed by CATO. Special Event Clearway signage will be installed by the TfNSW.
Route impeded by traffic calming devices?	YES	Detour route
Signalised intersections (flashing yellow? Point duty?)	NO	As required by NSW Police
Tidal flows	N/A	None required
Traffic generators shopping centres, schools, churches, industrial area, hospitals	YES	Advertisement of event to general public.
Traffic movement contrary to any Notice	YES	Under the direction of traffic controllers and NSW police
Traffic signals are as described	YES	Controlled by TMC/NSW police
Turning lanes are as described	YES	None required
Letter Drop Zone Maps to indicate precincts mailed	YES	Notification to be arranged by Event Organiser 2 weeks prior
Heavy Weather	YES	Heavy weather may cause crowds to depart early or organiser consider delaying/cancelling the event
Flood hazard in event area	YES	Event organiser, TMC/TfNSW and Police provide diversions around flooded area.
Flood hazard at the parking area	NO	None required
Parking during Wet weather	YES	Local Car parks and street parking, area close is elevated.
Bush fire hazard	NO	For major local/regional bushfire hazard affecting general public health or transport to greater Sydney, take direction from NSW Police
Accident on surrounding roads	YES	If CCTV, monitored by TMC. Facilitate emergency response to area.
Breakdown on surrounding roads	YES	If CCTV, monitored by TMC. Facilitate emergency response to area.
Block public transport access	YES	Divert general public to next available transport, considering safety and circumstances. Relevant transport agency to employ appropriate steps to accommodate.

Delayed Event	YES	At the discretion of the event organiser
Cancellation of Event	YES	Cancellation of any aspect of the event will be communicated by the event organiser.
Security and crowed related issues of participants/general public	YES	Provided by event security provider.
Security of very important persons (VIP's)	YES	Provided by event organiser.
Operations beyond night fall	YES	None required
Vehicles parked in clearways	YES	Third-party tow truck entity to provide support to remove vehicles as a safety measure

3.2. PUBLIC LIABILITY INSURANCE

TMRW Events has Public Liability Insurance to the value of $20,000,000. This policy covers all activities taking place as part of Ministry of Sound testament event Rozelle, A copy of the current policy is contained in this document.

All contractors completing activities as part of this event are also required to hold a valid Public Liability Insurance to the value of $20,000,000.

All companies producing advice or providing consulting services on event are required to have a minimum Public Liability Insurance to the value of $5,000,000.

3.3. NSW POLICE FORCE

The Leichhardt Police Area Command (PAC) will be involved in the planning of Ministry of Sound testament event Rozelle, via Council's Traffic Committee including aspects relating to use of the roadway, closure of selected roads and hostile vehicle mitigation. They will be formally notified at least two weeks prior to the event taking place.

User Pays Police will be engaged by the event organisers based on guidance from PAC, in conjunction with the relevant Security Management Plan.

3.4. NSW FIRE & RESCUE AND NSW AMBULANCE

NSW Fire & Rescue and NSW Ambulance will be notified at least two weeks prior to the event taking place.

3.5. EVENT DELAYS, POSTPONEMENT OR CANCELLATION

Any decision to delay, postpone or cancel the event due to weather impacts or any other reason will be made by the Event Organiser and follow their protocols for emergency management. Once any decision is made in this regard it will be communicated to all relevant stakeholders as per the event's Emergency Management Plan.

4. TRAFFIC AND TRANSPORT MANAGEMENT

4.1. EVENT IMPACT ON ROAD NETWORK

Every effort has been made to minimise the disruption to road users, residents and businesses by implementing local access closure points. Access is maintained outside of the event area throughout the event. Road closures are only implemented by order of NSW police to ensure public safety during event egress.

4.2. VEHICLE ACCESS TO THE EVENT SITE

To ensure public safety, all vehicle access will be at the discretion of the Event Manager and will be strictly limited to walking pace only. Limited access to the event site and road closure will be permitted as follows:

Core management and artist access during event period will be via the Southern Yard Only, Vehicles must submit details to the Event Manager to add to the vehicle schedule at least 2 days before the event.

Vehicles must display a car park pass, provided by the event, that contains car and driver details. They will not be able to access this area without the car park pass.

No vehicles will be permitted access to the event site via the Northern Forecourt (existing traffic loop) other than emergency vehicles.

4.3. SPECIAL EVENT CLEARWAYS

The need for a special event clearway has been considered irrelevant due to the event's location and duration. The event organisers have engaged Cato Location Services to barricade all parking spaces within the event area the night before the event commences.

The following streets will be barricaded to accommodate the event area as per TGS MOS1-3A.

Name	Cross Streets	Side
Robert St	Between Mullens St and Buchanan St	Both Sides
Mullens St	Between Crescent St and Mansfield St	Both Sides

There is limited street parking available for participants of the event, the event organiser will promote public transport as the best way of getting to the event due to its proximity to regular bus services.

For more information: https://transportnsw.info/trip#/trip

4.4. IMPACTS ON PUBLIC TRANSPORT

Ministry of Sound testament event will be held in Rozelle on Friday 4th , Saturday 5th , Friday 11th and Saturday 12th April 2025.

4.4.1. BUSES

Buses will be permitted around the closure at all times of the event, a traffic controller will manage the ingress/egress during event hours. No buses or bus stops will be affected by the closure for the event.

All other services around Rozelle will remain unaffected. The bus service provider, Transport for NSW, will advise public transport users via their websites and apps. Advice will also be provided on the event page on Council's website and social media platforms.

4.4.2. TRAIN SERVICES

It is anticipated that there will be no impact on Sydney Trains services, their passengers or operations, as there are no services in the area.

4.4.3. TAXI AND RIDE-SHARE PROVIDERS

Taxi and ride-share providers will have specific drop/collection areas that will be installed for the event and will continue to have access to the road network around the closures as per other road users. Taxis will have a designated route to the specific collection area, map has been provided below for the proposed taxi route.

Taxi route to temporary taxi zone *(In Blue)*

4.5. CHANGES TO CYCLE ROUTES

The closure of Robert Street will not significantly affect designated cycling routes through Rozelle. Cyclists will still be able to dismount and walk their bikes around the event site. All existing cycle routes will remain in place and operational around the event site.

4.6. HOSTILE VEHICLE MITIGATION

The closure of the streets is designed to provide an extended pedestrian-friendly area for the event to operate in and for pedestrians to participate.

The Event Organiser may, in conjunction with the nominated Security Advisor, produce a Hostile Vehicle Mitigation, and Target Hardening Plan for the event. Cato Location Services can also provide this service.

When the closures are installed, applicable hostile vehicle mitigation (HVM) vehicles or barriers will be placed at each entry point as noted on the HVM Risk Assessment at the direction of the nominated HVM Security Advisor to prevent access to the site by unauthorised or errant vehicles. A driver for each vehicle will always be present in case the vehicle needs to be moved to allow access for emergency vehicles.

Once the HVM install is complete, the nominated Security Advisor will be on site to authorise the implementation, the positioning and suitability of all devices.

Authorisation is to be granted from the Event Manager for vehicles to be moved once in position for access when required.

4.7. RE-OPENING ROADS AFTER THE EVENT

The road closures on Robert Street are planned to re-open at midnight Sunday, however this may occur earlier if the road is clear and it is safe to do so under orders from NSW police or event organisers.

4.8. TRAFFIC CONTROL

The implementation of the traffic guidance schemes, including road closures, will be supervised by an accredited Traffic Manager from CATO Location Services.

Temporary traffic control equipment, barricades, and signage must be placed in accordance with the Traffic Guidance Schemes by qualified traffic controllers who possess a TfNSW execute traffic guidance schemes certification.

Other qualifications that are required by the authorised traffic controllers include (but not limited to):

- General Construction Induction (also known as “White Card”)
- Traffic Controller Licence (also known as “Blue Card”)
- Implement Traffic Control Licence (also known as “Yellow Card”)
- Prepare Work Zone TMP Licence (also known as “Orange Card”)

5. MINIMISING IMPACT ON THE NON-EVENT COMMUNITY

5.1. ACCESS FOR LOCAL RESIDENTS AND BUSINESSES

The road closure area for Ministry of Sound testament event Rozelle includes a number of businesses fronting Robert Street. Pedestrian access to these businesses and residences will be maintained, Businesses and resident vehicle access will be permitted around the event site.

The Event Organiser will notify all residents and businesses impacted by the event including confirmation of the restricted vehicle movements during the event operating times. This will include reviewing any requirements for changes to commercial waste collection times and/or locations.

5.2. ACCESS FOR EMERGENCY VEHICLES

A minimum four metre emergency lane will be maintained along the entire closure, beyond the HVM vehicles. There will be no event infrastructure in the emergency lane. Traffic controllers will be onsite to assist emergency vehicle through the closure points. While HVM measures will be in place, a driver for all vehicles will always be present in case the vehicle needs to be moved to allow access for emergency vehicles.

5.3. ADVERTISING TRAFFIC MANAGEMENT ARRANGEMENTS

The Event Organiser will advertise the road closures via social media and on Council's website. A letterbox drop will be conducted to all resident and businesses in the immediately vicinity of the event sites and road closures as well as the surrounding streets in Rozelle.

5.4. EVENT PROMOTION

The Event Organiser will promote Ministry of Sound testament event Rozelle and the road closures taking place using a variety of methods in the weeks preceding the event including:

- Council's social media platforms
- Council's website
- Local signage where available

5.5. VARIABLE MESSAGE SIGNS

TGS: MOS1-5

Location 1	Messages	
	PRIOR TO EVENT DAY 1 AND 2 0700 (FRI 28/03/25) TO 0700 (FRI 04/04/25) PRIOR TO EVENT DAY 3 AND 4 0800 (SUN 06/04/25) TO 0700 (FRI 11/04/25)	EVENT DAY 1 AND 2 0700 (FRI 04/04/25) TO 0800 (SUN 06/04/25) EVENT DAY 3 AND 4 0700 (FRI 11/04/25) TO 0800 (SUN 13/04/25)
Robert St, (Facing south)	MUSIC EVENT MINISTRY OF SOUND _____ EVENT DATES 4TH, 5TH, 11TH AND 12TH OF APRIL _____ ROBERT ST ROAD WORK 8AM TILL 1AM	MUSIC EVENT TODAY 4PM TILL MIDNIGHT _____ ROBERT ST ROAD WORK 8AM TILL 1AM _____ ROAD WORK ON SIDE ROAD

TGS: MOS1-6

Location 2	Messages	
	PRIOR TO EVENT DAY 1 AND 2 0700 (FRI 28/03/25) TO 0700 (FRI 04/04/25) PRIOR TO EVENT DAY 3 AND 4 0800 (SUN 06/04/25) TO 0700 (FRI 11/04/25)	EVENT DAY 1 AND 2 0700 (FRI 04/04/25) TO 0800 (SUN 06/04/25) EVENT DAY 3 AND 4 0700 (FRI 11/04/25) TO 0800 (SUN 13/04/25)
Robert St, (Facing north)	MUSIC EVENT MINISTRY OF SOUND _____ EVENT DATES 4TH, 5TH, 11TH AND 12TH OF APRIL _____ ROBERT ST ROAD WORK 8AM TILL 1AM	MUSIC EVENT TODAY 4PM TILL MIDNIGHT _____ ROBERT ST ROAD WORK 8AM TILL 1AM _____ ROAD WORK AHEAD

6. APPROVALS

6.1. EVENT ORGANISER APPROVAL

TMP Approved by: .....
(Name)

.....
(Signature) (Date)

6.2. AUTHORISATION TO REGULATE TRAFFIC

Council's traffic management requirements have been met. Regulation of traffic is therefore authorised for all non-classified roads described in the risk management plans and this TMP.

Regulation of Traffic Authorised by:

.....
(Council)

.....
(Name)

.....
(Signature) (Date)

The Transport for New South Wales (TfNSW) traffic management requirements have been met. Regulation of traffic is therefore authorised for all classified roads described in the risk management plans and this TMP.

Regulation of Traffic Authorised by:

.....
(TfNSW)

.....
(Name)

.....
(Signature) (Date)

6.3. PUBLIC LIABILITY INSURANCE

7. ATTACHMENTS

7.1. TRAFFIC GUIDANCE SCHEMES

TGSs are provided on the following pages showing:

- The overall location and TGS plan.
- Bump In, Bump out TGS.
- Barricading TGS.
- The traffic management measures in place to facilitate the egress road closure contingency TGS plan under direction of NSW police.
- VMS TGS plan.

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LOCAL GOVERNMENT PROCUREMENT APPROVED CONTRACTOR

TMAA TRAFFIC MANAGEMENT ASSOCIATION OF AUSTRALIA

Climate Active Carbon Neutral ORGANISATION

CA+O TGS FOR EVENTS

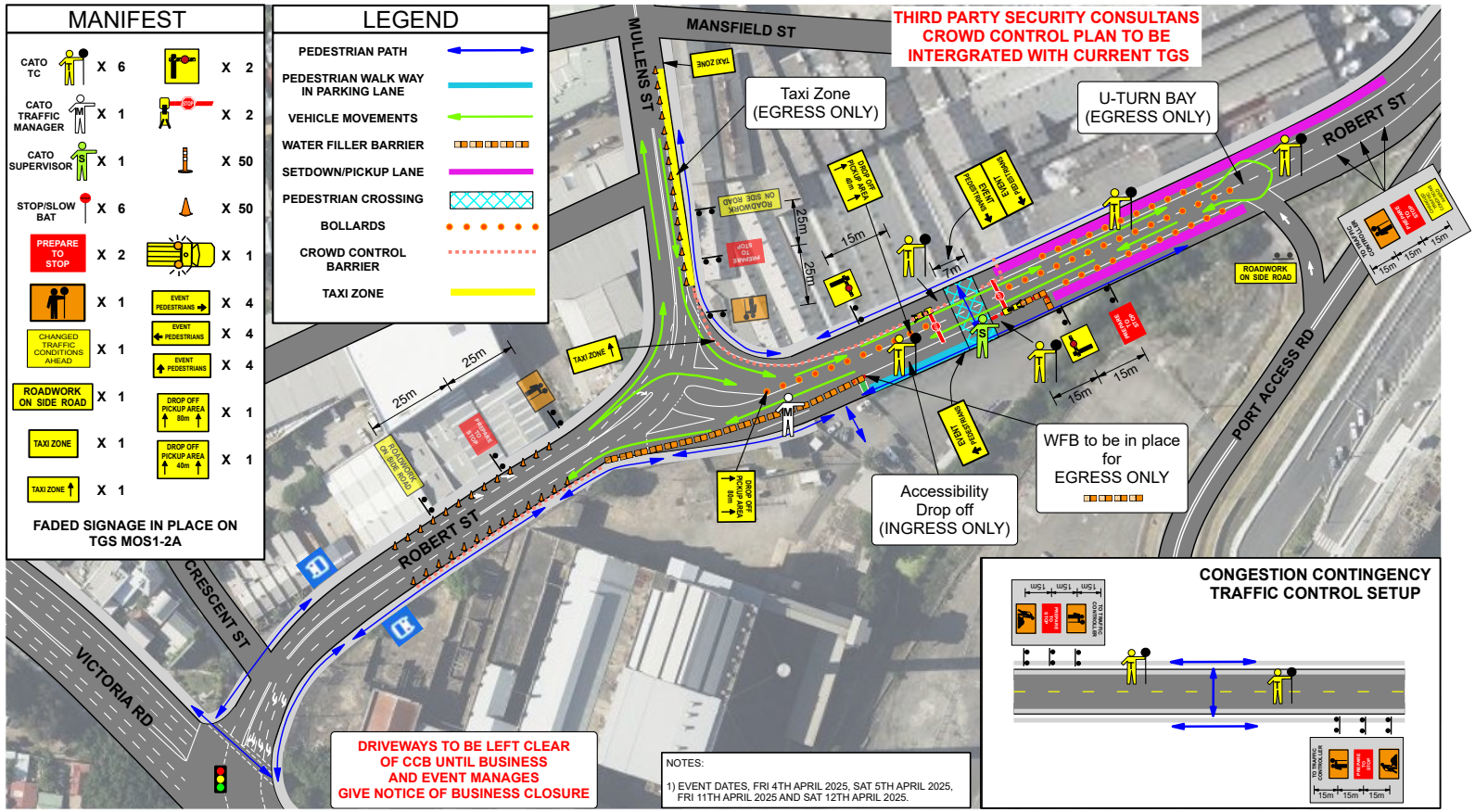
MANIFEST

CATO TC	X 6		X 2
CATO TRAFFIC MANAGER	X 1		X 2
CATO SUPERVISOR	X 1		X 50
STOP/SLOW BAT	X 6		X 50
PREPARE TO STOP	X 2		X 1
	X 1	EVENT PEDESTRIANS	X 4
CHANGED TRAFFIC CONDITIONS AHEAD	X 1	EVENT PEDESTRIANS	X 4
		EVENT PEDESTRIANS	X 4
ROADWORK ON SIDE ROAD	X 1	DROP OFF PICKUP AREA 80m	X 1
TAXI ZONE	X 1	DROP OFF PICKUP AREA 40m	X 1
TAXI ZONE	X 1		

FADED SIGNAGE IN PLACE ON TGS MOS1-2A

LEGEND

- PEDESTRIAN PATH
- PEDESTRIAN WALK WAY IN PARKING LANE
- VEHICLE MOVEMENTS
- WATER FILLER BARRIER
- SETDOWN/PICKUP LANE
- PEDESTRIAN CROSSING
- BOLLARDS
- CROWD CONTROL BARRIER
- TAXI ZONE



DRAWN BY:	CRAIG HUNTER	TCT 0015830	
APPROVED BY:	KIERAN CATO	TCT 0040880	

POLICY: Cato Location Services P/L do not accept responsibility of any traffic guidance scheme if the traffic management is not implemented by Cato Location Services P/L

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☐ DETOUR ☐ VMS ☐ ROLLING BLOCK ☐ LANE MERGE
☒ STOP/SLOW ☒ PEDESTRIAN ☐ BARRICADING ☐ BUS PLAN
☐ VMP ☐ CONTRA FLOW ☐ PORTABLE SIGNS ☐ SIGNAGE PLAN

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PROJECT:	Ministry of Sound Testament		
CLIENT:	ORBIT Co Pty Ltd		
LOCATION:	Robert Street, Rozelle		
CONTACT:	Courtney Duka	PHONE:	0437 421 524
ORIGINAL SIZE:	A4 LANDSCAPE	COUNCIL:	Inner West Council

N NTS

APPROVAL REQUIRED:		EVENT TIMES:
LOCAL	☒	START: 1600
STATE	☒	FINISH: 2400
INSW	☐	TC SET UP: 1200
OTHER	☐	TC PACK DOWN: 0100

PLAN No:	MOS1-1		
VARIANT:	TYPE:	REV:	
(A)	TGS	0.0	
EVENT DATES:	AS PER NOTES		
DATE:	21/01/2025		

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TMAA TRAFFIC MANAGEMENT ASSOCIATION OF AUSTRALIA

Climate Active Carbon Neutral ORGANISATION

CA+O TGS FOR EVENTS

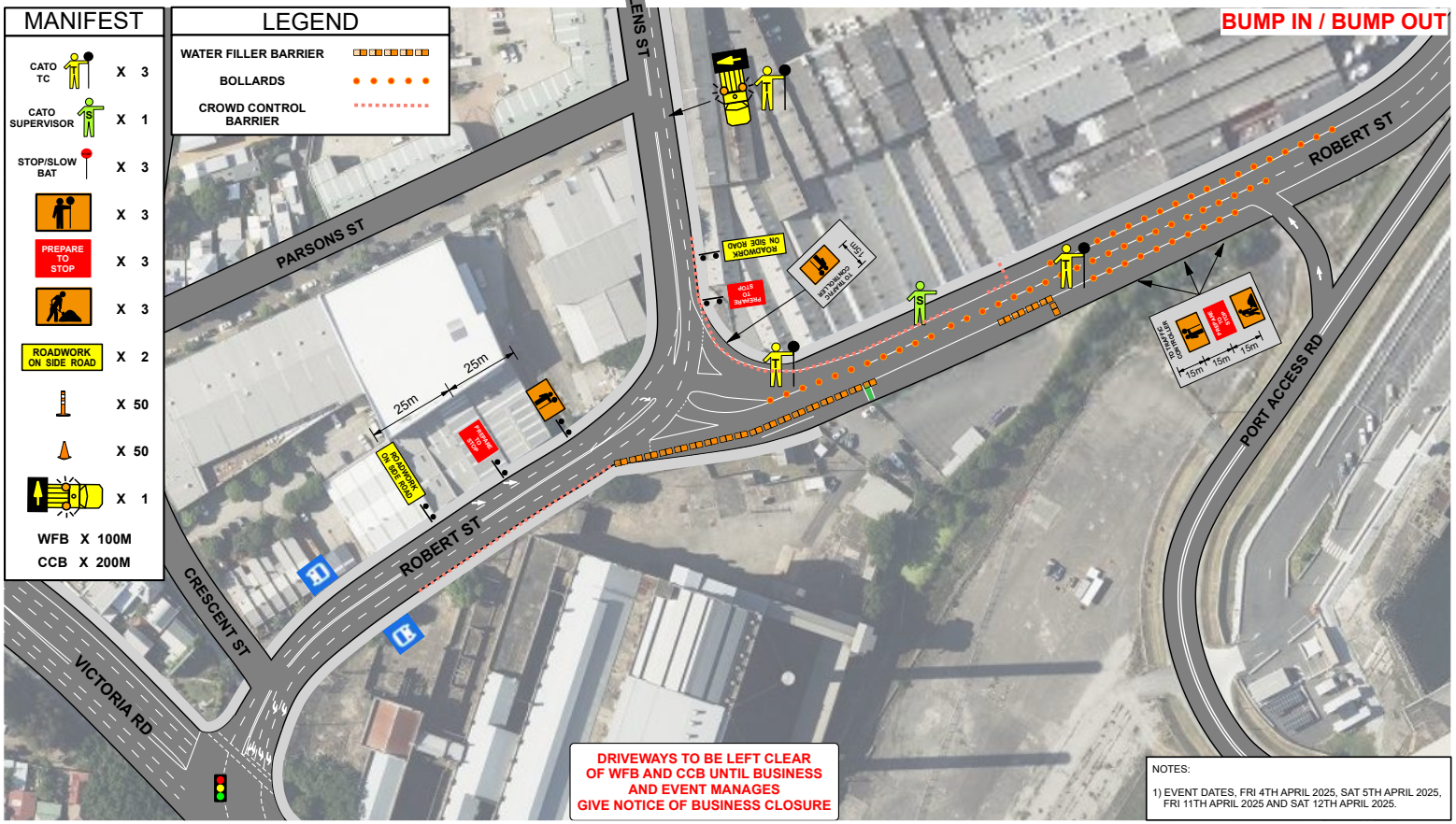
MANIFEST

CATO TC	X 3
CATO SUPERVISOR	X 1
STOP/SLOW BAT	X 3
	X 3
PREPARE TO STOP	X 3
	X 3
ROADWORK ON SIDE ROAD	X 2
	X 50
	X 50
	X 1

WFB X 100M
CCB X 200M

LEGEND

WATER FILLER BARRIER
BOLLARDS
CROWD CONTROL BARRIER



NOTES:

1) EVENT DATES, FRI 4TH APRIL 2025, SAT 5TH APRIL 2025, FRI 11TH APRIL 2025 AND SAT 12TH APRIL 2025.

DRAWN BY:	CRAIG HUNTER	TCT 0015830	
APPROVED BY:	KIERAN CATO	TCT 0040880	

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☐ DETOUR ☐ VMS ☐ ROLLING BLOCK ☐ LANE MERGE
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PROJECT: Ministry of Sound Testament
CLIENT: ORBIT Co Pty Ltd
LOCATION: Robert Street, Rozelle
CONTACT: Courtney Duka
PHONE: 0437 421 524
ORIGINAL SIZE: A4 LANDSCAPE
COUNCIL: Inner West Council

APPROVAL REQUIRED:	
LOCAL	☒
STATE	☒
INSW	☐
OTHER	☐

EVENT TIMES:
START: 1600
FINISH: 2400
BUMP IN:
FRI 4th APRIL 2025 0800-1200
FRI 11th APRIL 2025 0800-1200
BUMP OUT:
SUN 6TH APRIL 2025, 0600
SUN 13th APRIL 2025, 0600

PLAN No: MOS1-2
VARIANT: (A) TYPE: TGS REV: 0.0
EVENT DATES: AS PER NOTES
DATE: 21/01/2025

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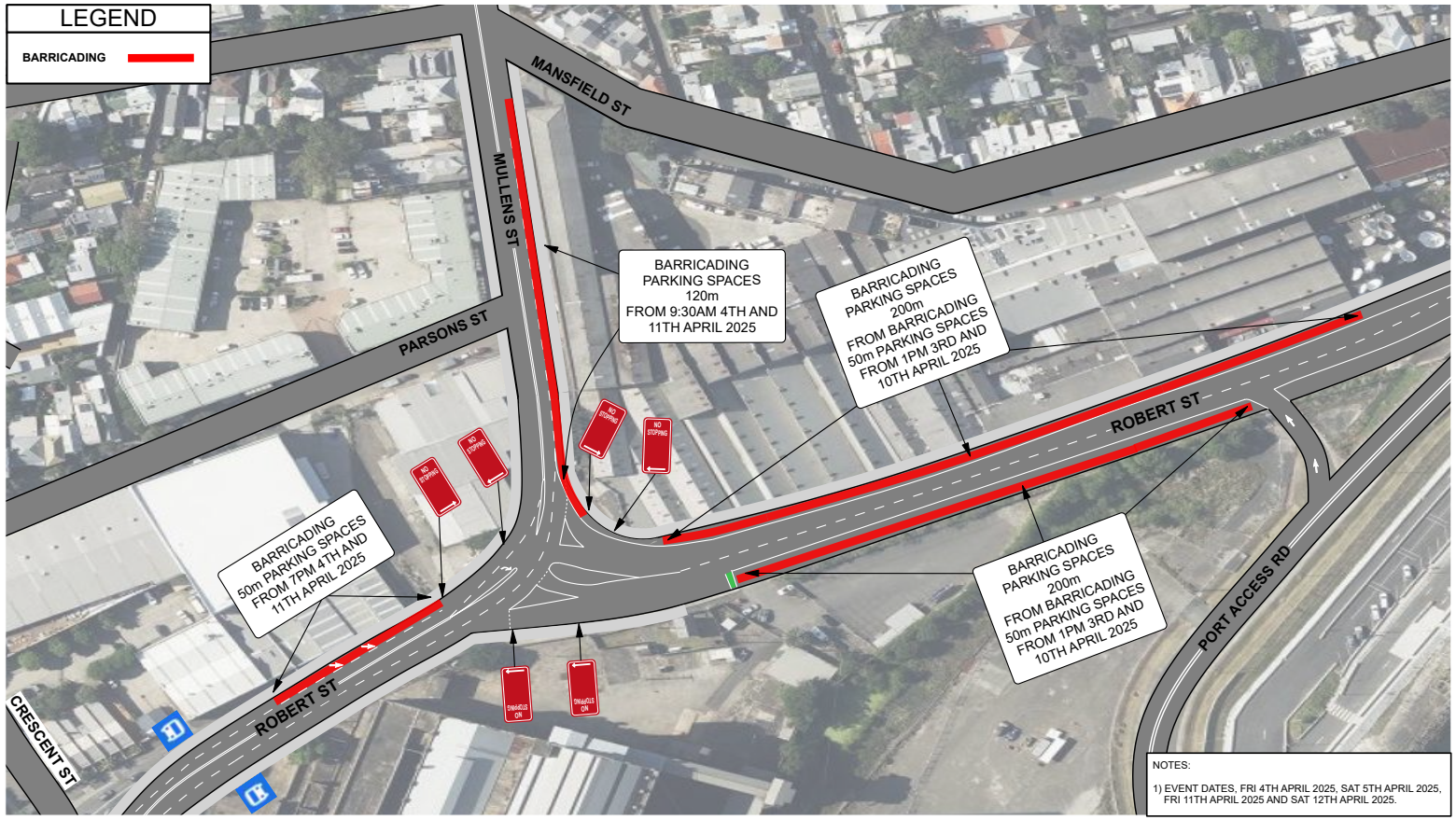
LOCAL GOVERNMENT PROCUREMENT APPROVED CONTRACTOR

TMAA TRAFFIC MANAGEMENT ASSOCIATION OF AUSTRALIA

Climate Active Carbon Neutral ORGANISATION

CA+O TGS FOR EVENTS



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CLIENT: ORBIT Co Pty Ltd
LOCATION: Robert Street, Rozelle
CONTACT: Courtney Duka
PHONE: 0437 421 524
ORIGINAL SIZE: A4 LANDSCAPE
COUNCIL: Inner West Council
N NTS

APPROVAL REQUIRED:
LOCAL ☒
STATE ☐
INSW ☐
OTHER ☐

EVENT TIMES:
START: 1600
FINISH: 2400

PLAN No: MOS1-3
VARIANT: (A) TYPE: TGS REV: 0.0
EVENT DATES: AS PER NOTES
DATE: 29/01/2025

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LOCAL GOVERNMENT PROCUREMENT APPROVED CONTRACTOR

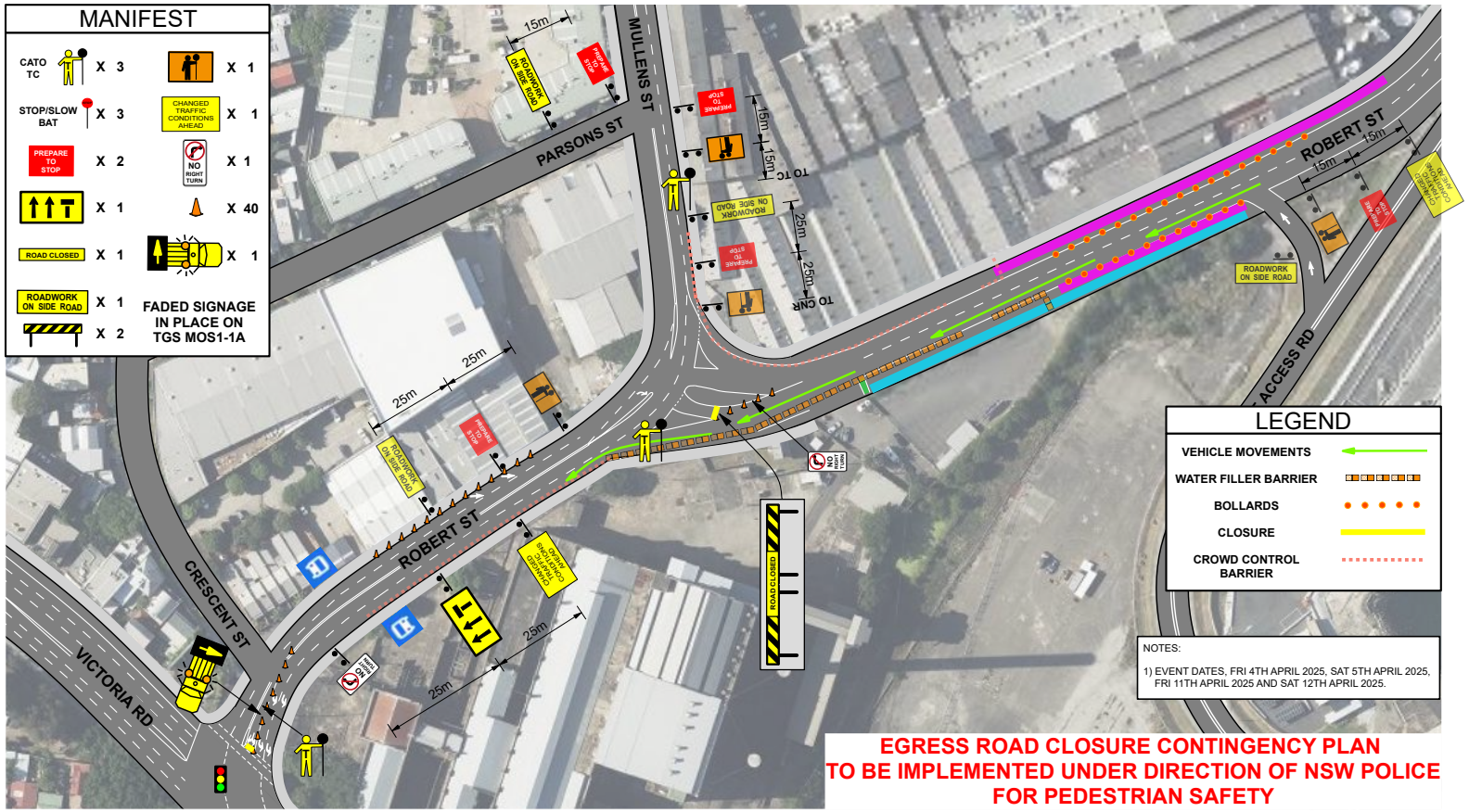
TMAA TRAFFIC MANAGEMENT ASSOCIATION OF AUSTRALIA

Climate Active Carbon Neutral ORGANISATION

CA+O TGS FOR EVENTS

MANIFEST

CATO TC	X 3		X 1
STOP/SLOW BAT	X 3	CHANGED TRAFFIC CONDITIONS AHEAD	X 1
PREPARE TO STOP	X 2	NO RIGHT TURN	X 1
	X 1		X 40
ROAD CLOSED	X 1		X 1
ROADWORK ON SIDE ROAD	X 1	FADED SIGNAGE IN PLACE ON TGS MOS1-1A	
	X 2		



EGRESS ROAD CLOSURE CONTINGENCY PLAN TO BE IMPLEMENTED UNDER DIRECTION OF NSW POLICE FOR PEDESTRIAN SAFETY

DRAWN BY:	CRAIG HUNTER	TCT 0015830	
APPROVED BY:	KIERAN CATO	TCT 0040880	

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N NTS

APPROVAL REQUIRED:	
LOCAL	☒
STATE	☒
INSW	☐
OTHER	☐

EVENT TIMES:
START: 1600
FINISH: 2400
SET UP: 2230
PACK DOWN: 0200

PLAN No: MOS1-4
VARIANT: (A) TYPE: TGS REV: 0.0
EVENT DATES: AS PER NOTES
DATE: 21/01/2025

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Climate Active Carbon Neutral ORGANISATION

CA+O TGS FOR EVENTS

	PRIOR TO EVENT DAY 1 AND 2 0700 (FRI 28/03/25) TO 0700 (FRI 04/04/25) PRIOR TO EVENT DAY 3 AND 4 0800 (SUN 06/04/25) TO 0700 (FRI 11/04/25)	EVENT DAY 1 AND 2 0700 (FRI 04/04/25) TO 0800 (SUN 06/04/25) EVENT DAY 3 AND 4 0700 (FRI 11/04/25) TO 0800 (SUN 13/04/25)
FRAME 1	MUSIC EVENT MINISTRY OF SOUND	MUSIC EVENT TODAY 4PM TILL MIDNIGHT
FRAME 2	EVENT DATES 4TH, 5TH, 11TH AND 12TH OF APRIL	ROBERT ST ROAD WORK 8AM TILL 1AM
FRAME 3	ROBERT ST ROAD WORK 8AM TILL 1AM	ROAD WORK ON SIDE ROAD

NOTES:

1) EVENT DATES, FRI 4TH APRIL 2025, SAT 5TH APRIL 2025, FRI 11TH APRIL 2025 AND SAT 12TH APRIL 2025.

DRAWN BY:	CRAIG HUNTER	TCT 0015830	
APPROVED BY:	KIERAN CATO	TCT 0040880	

POLICY: Cato Location Services P/L do not accept responsibility of any traffic guidance scheme if the traffic management is not implemented by Cato Location Services P/L

CA+O

☐ DETOUR ☒ VMS ☐ ROLLING BLOCK ☐ LANE MERGE
☐ STOP/SLOW ☐ PEDESTRIAN ☐ BARRICADING ☐ BUS PLAN
☐ VMP ☐ CONTRA FLOW ☐ PORTABLE SIGNS ☐ SIGNAGE PLAN

1. THIS TRAFFIC GUIDANCE SCHEME HAS BEEN DRAWN IN ACCORDANCE WITH AS 1742.3 AND "TRAFFIC CONTROL AT WORKSITES" MANUAL V6.1.

2. SIGNS & DEVICES ARE TO PLACED IN ACCORDANCE WITH THIS TGS, MODIFICATION MAYBE MADE BY PERSONS HOLDING A RMS "PWZTMP" QUALIFICATION ONLY.

3. ALL SIGNS AND DEVICES USED MUST COMPLY WITH AUSTRALIA STANDARD AS1742.3

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PROJECT: Ministry of Sound Testament

CLIENT: ORBIT Co Pty Ltd

LOCATION: Robert Street, Rozelle

CONTACT: Courtney Duka PHONE: 0437 421 524

ORIGINAL SIZE: A4 LANDSCAPE COUNCIL: Inner West Council

N NTS

APPROVAL REQUIRED:	
LOCAL	☒
STATE	☒
INSW	☐
OTHER	☐

EVENT TIMES:

START: 1600

FINISH: 2400

SET UP:

PACK DOWN:

PLAN No: MOS1-5

VARIANT: (A) TYPE: TGS REV: 0.0

EVENT DATES: AS PER NOTES

DATE: 29/01/2025

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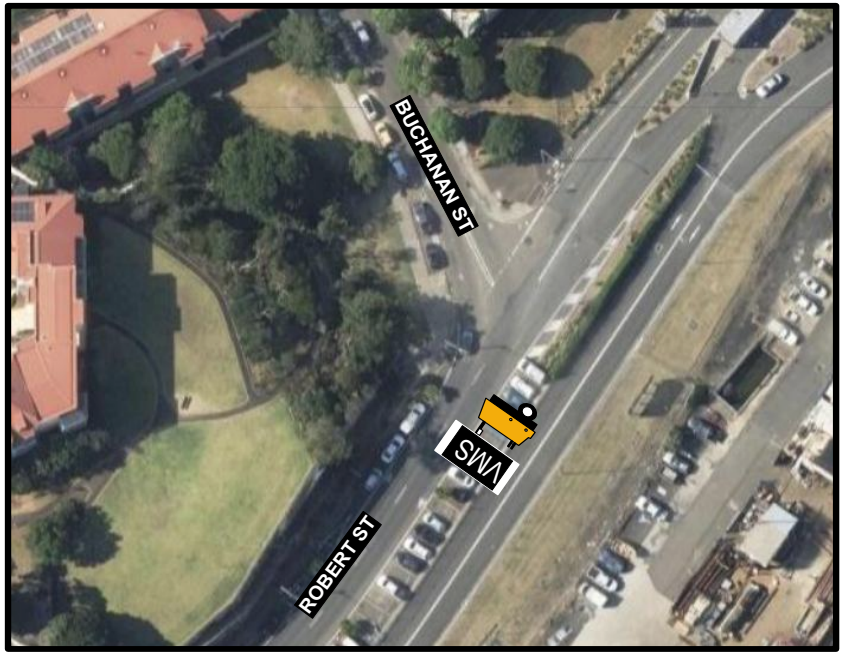
LOCAL GOVERNMENT PROCUREMENT APPROVED CONTRACTOR

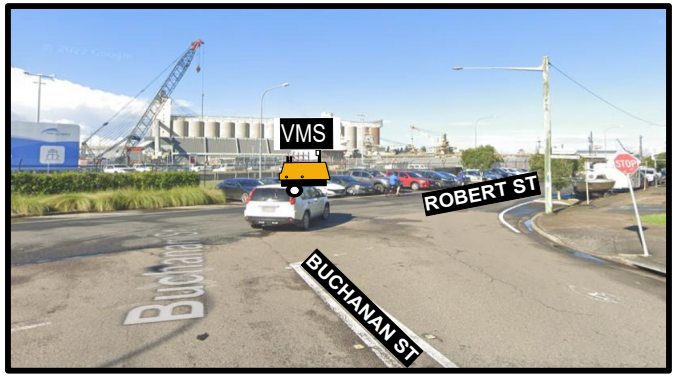
TMAA TRAFFIC MANAGEMENT ASSOCIATION OF AUSTRALIA

Climate Active Carbon Neutral ORGANISATION

CA+O TGS FOR EVENTS



	PRIOR TO EVENT DAY 1 AND 2 0700 (FRI 28/03/25) TO 0700 (FRI 04/04/25) PRIOR TO EVENT DAY 3 AND 4 0800 (SUN 06/04/25) TO 0700 (FRI 11/04/25)	EVENT DAY 1 AND 2 0700 (FRI 04/04/25) TO 0800 (SUN 06/04/25) EVENT DAY 3 AND 4 0700 (FRI 11/04/25) TO 0800 (SUN 13/04/25)
FRAME 1	MUSIC EVENT MINISTRY OF SOUND	MUSIC EVENT TODAY 4PM TILL MIDNIGHT
FRAME 2	EVENT DATES 4TH, 5TH, 11TH AND 12TH OF APRIL	ROBERT ST ROAD WORK 8AM TILL 1AM
FRAME 3	ROBERT ST ROAD WORK 8AM TILL 1AM	ROAD WORK AHEAD



NOTES:

1) EVENT DATES, FRI 4TH APRIL 2025, SAT 5TH APRIL 2025, FRI 11TH APRIL 2025 AND SAT 12TH APRIL 2025.

DRAWN BY:	CRAIG HUNTER	TCT 0015830	
APPROVED BY:	KIERAN CATO	TCT 0040880	

POLICY: Cato Location Services P/L do not accept responsibility of any traffic guidance scheme if the traffic management is not implemented by Cato Location Services P/L

CA+O

☐ DETOUR ☐ STOP/SLOW ☐ VMP ☒ VMS ☐ PEDESTRIAN ☐ CONTRA FLOW ☐ ROLLING BLOCK ☐ BARRICADING ☐ PORTABLE SIGNS ☐ LANE MERGE ☐ BUS PLAN ☐ SIGNAGE PLAN

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PROJECT:	Ministry of Sound Testament		
CLIENT:	ORBIT Co Pty Ltd		
LOCATION:	Robert Street, Rozelle		
CONTACT:	Courtney Duka	PHONE:	0437 421 524
ORIGINAL SIZE:	A4 LANDSCAPE	COUNCIL:	Inner West Council

N NTS

APPROVAL REQUIRED:		EVENT TIMES:
LOCAL	☒	START: 1600
STATE	☒	FINISH: 2400
INSW	☐	SET UP:
OTHER	☐	PACK DOWN:

PLAN No:	MOS1-6	
VARIANT:	TYPE:	REV:
(A)	TGS	0.0
EVENT DATES:	AS PER NOTES	
DATE:	29/01/2025	

Item 9

Item No: **LTC0225(1) Item 9**

Subject: **LILYFIELD ROAD, LILYFIELD - BUS ZONE REMOVAL (BALUDARRI-BALMAIN WARD/BALMAIN ELECTORATE/LEICHHARDT PAC)**

Prepared By: Amir Falamarzi - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

That removal of the existing Bus Zones on Lilyfield Road, in front of No.147 and No.158 Lilyfield Road, Lilyfield be approved.

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

Council has been advised that the two Bus Stops in Lilyfield Road between Perry Lane and Rayner Street are now redundant due to revised bus routes in the area. As these stops are no longer operational, it is proposed that the Bus Zones be removed and reinstated as unrestricted parking.

BACKGROUND

Council has been advised that there have been changes in the bus routes in Lilyfield Road and Bus Stops ID 204077 and ID 204084 are no longer operational and will be removed by Transit Systems. The corresponding Bus Zone signs as shown in Figure 1 are proposed to be removed as part of this change.

Figure 1: The locations of the Bus Zone infrastructure

DISCUSSION

The removal of the proposed Bus Stops will include removal of associated J-stem signs, tactile paving, concrete slab and street bench (in front of No.147 Lilyfield Road) as illustrated in Figure 2 and 3.

The removal of Bus Zone signs will result in the reinstatement of two (2) unrestricted parking spaces on Lilyfield Road between the existing 'No Stopping' zone east of Perry Lane and the driveway of No.147 Lilyfield Road. The removal of the Bus Stop outside No.158 Lilyfield Road will reinstate one (1) parking space.

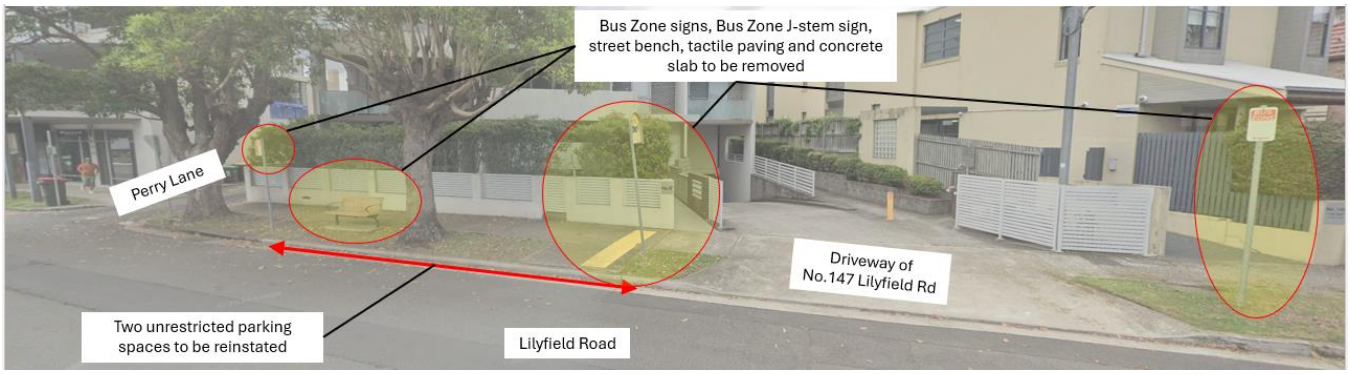


Figure 2: Bus Zone infrastructure removal outside No.147 Lilyfield Road, Lilyfield

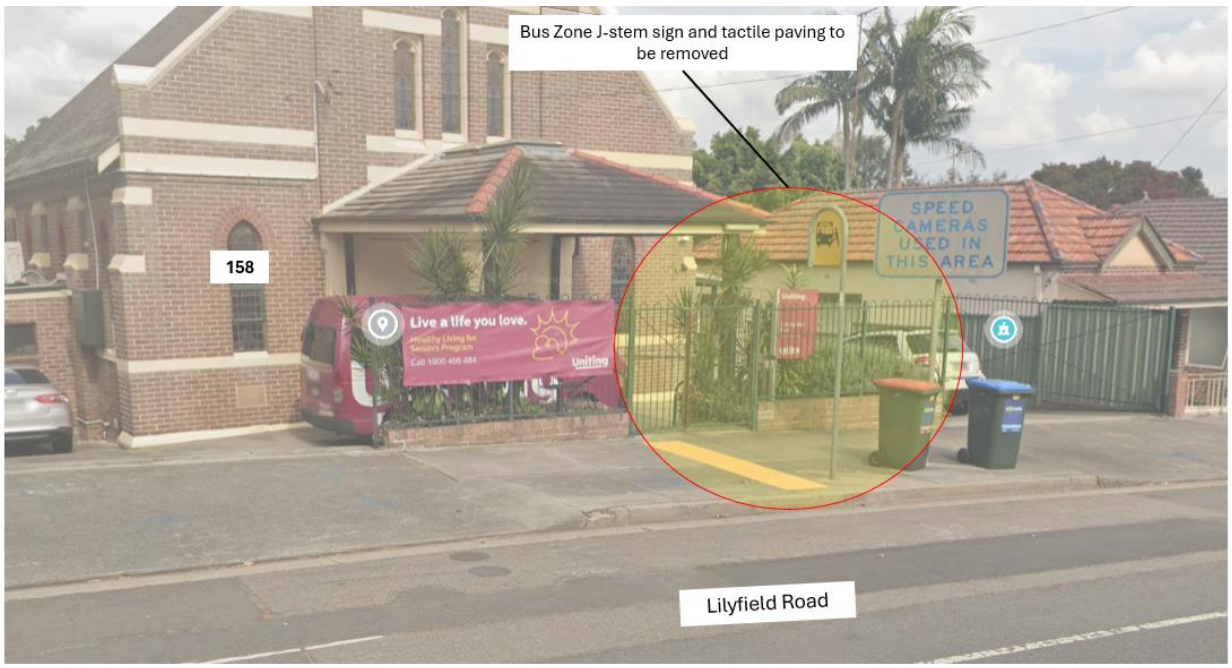


Figure 3: Bus Zone infrastructure removal outside No.158 Lilyfield Road, Lilyfield

FINANCIAL IMPLICATIONS

These minor works can be accommodated under Council's operational budget.

ATTACHMENTS

Nil.

Item No: **LTC0225(1) Item 10**

Subject: **ROBERT STREET AT HOLDEN STREET, ASHFIELD- NEW AT-GRADE PEDESTRIAN (ZEBRA) CROSSING- AMENDED PLAN (DJARRAWUNANG-ASHFIELD WARD/SUMMER HILL ELECTORATE/BURWOOD PAC)**

Prepared By: Boris Muha - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

That the detailed amended design plan (10302-A) for a proposed new at-grade pedestrian (zebra) crossing in Robert Street at its intersection with Holden Street, Ashfield, with associated signs and line marking (as shown in Attachment 1) be approved.

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

Council at its meeting on the 18 March 2024 (through its Traffic Committee 11 December 2023) approved in principle a series of proposed pedestrian (zebra) crossings and kerb extension treatments (under concept) with other auxiliary works (relocation of bus stops, inclusion of raised platform thresholds) for improved pedestrian and road safety around and near to the Cardinal Freeman (Retirement) Village, Ashfield.

This report describes and shows the amended detailed design plan of one of the proposed treatments involving the placing of a pedestrian (zebra) crossing in Robert Street, at the intersection of Holden Street, Ashfield. This work is programmed and envisaged to be constructed in the 2025/2026 financial year, subject to funding.

BACKGROUND

The detailed design plan proposal was initially reported to Local Traffic Committee at its meeting on 9 December 2024. The Representative for the Transport for NSW raised concerns regarding the crossing not being entirely at the intersection nor offset from the intersection by a vehicle length (approximately 6 metres). Due to this, vehicles could stop partially over the pedestrian crossing which could reduce motorist sightlines to pedestrians wishing to cross.

The item was deferred to allow for further investigations regarding the proposed location of the crossing and other potential options.

DISCUSSION

The following information was provided in the discussion at the traffic committee meeting on the 9 December 2024 and is re-produced in this report with the amended plan detail as reported below and as shown in the plan *Attachment 1.*

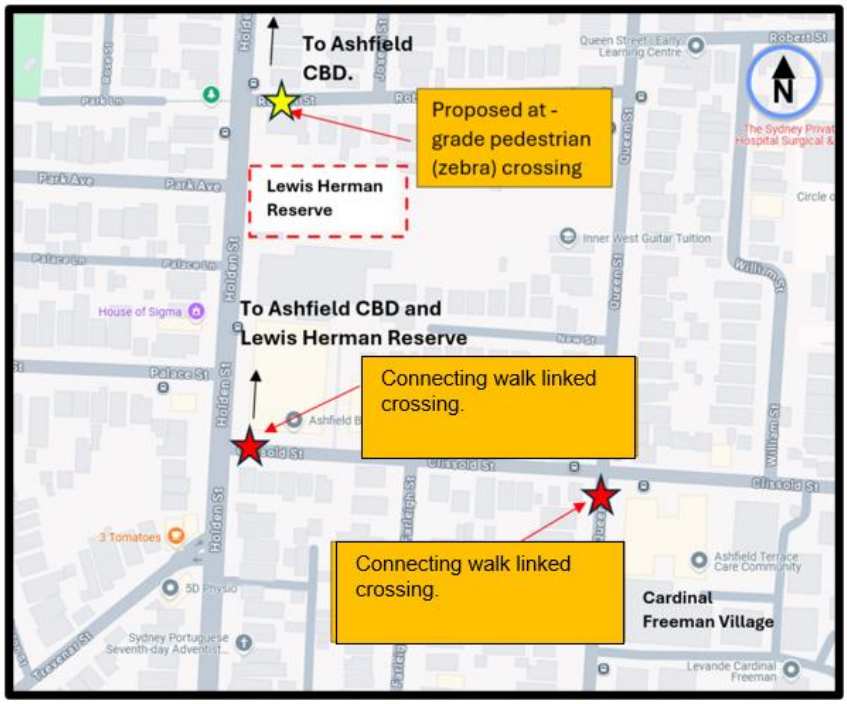


Figure 1. Locality Plan

Street Name	Robert Street at Holden Steet
Carriageway width (m) kerb to kerb	Approx. 6.4m.
Carriageway type	Two-way, one travel lane each direction.
Classification	Local
Speed Limit km/h	50
85th percentile speed km/h	30
Vehicles per day (vpd)	2500
Last available 5 years of TfNSW recorded crash history	NIL in last 5 years in Robert Street at the intersection with Holden Street.
Parking arrangements	Parking is available in the northern side however there are 'No Stopping' restrictions on the southern side.
Side street(nearest or along)	Holden Street.

Table 1. Road Network detail.

The Plan

The following works are proposed and are illustrated on the amended plan shown in *Attachment 1*.

Robert Street, Ashfield (Plan No. 10302):

- Resurface the road pavement with new asphalt and provide new pedestrian crossing markings and associated signage to formalise a new pedestrian crossing;
- Remove old kerb pram ramps and construct new in line kerb ramps on either side of the new pedestrian crossing in Robert Street at its intersection with Holden Street;

- Reconstruct some kerb and gutter with new concrete kerb & gutter (generally where shown on the plans);
- Remove existing pits and pipes and provide new concrete dish drain across the intersection;
- Remove some damaged concrete footpaths and construct new concrete footpaths;
- Undertake some minor returfing works in the grass verge area to match new works; and
- Install new signage associated with the works.

Parking Changes

The works are fully contained within the existing 'No Stopping' zones of Robert Street Therefore, the proposal will not result any loss of parking.

Streetlighting

The new pedestrian crossing will require new lighting for it to meet the minimum lighting safety and compliance standards. This may involve either 1 or 2 new flood lights provided on either side each of the new raised pedestrian crossings (on either existing or new power poles). *The attached plans indicatively show the locations of the proposed new flood lights and power poles, with the final location to be confirmed during the lighting design development phase of the project by qualified Electrical Consultant.*

Other Information

Council would normally raise pedestrian (zebra) crossings for ease of pedestrian access; however, in this case, the existing underground drainage and utilities in the vicinity of the proposed crossing raises the concern of additional excavation works which are deemed to be complex. As such Council has resorted to surface drainage works which features readjustments to the kerb and gutter as well as the installation of a dish drain, and resort to proposing an at-grade crossing in this case.

The proposed crossing links up with other proposed crossings to connect walking path movements to various desired destinations (e.g. Herman Lewis Reserve and Ashfield CBD.)- see *Figure 1.*

Amended Plan detail

Investigations reveal that the crossing could be set back within Robert Street by 5.5m from the STOP line, which is considered sufficient in length for a general size vehicle (i.e. a car) not to stop over the crossing.

Any further movement of the crossing back into Robert Street will impact on parking and interfere with an existing light pole to the southern side of road. The crossing would be away in sight view of traffic turning left and right from Holden Street if moved further into Robert Street.

The original (consultation) plan is shown below in *Figure 2* below to compare to the amended plan in *Attachment 1*.

The original plan also showed pram ramp re-construction to the crossing. It is proposed under the amended plan to include in line kerb ramps for narrow footpaths permitted under Australian Standards in lieu of the proposed pram ramps which were shown in the original consultation plans. The footpath on either side of the ramp is transitioned down to a lower path level onto the crossing, allowing improved landing and turning in and off the crossing.

The amended plan does not show an approach centre line in Robert Street. This is to avoid the hindering of traffic movement around the parked cars in Robert Street (as shown in the amended plan), and the occasional wide turning of larger vehicles from Holden Street. No centre line exists in Robert Street. The traffic volumes in Robert Street are considered low, nor has there been any recorded accident history to necessitate the need for line marking.

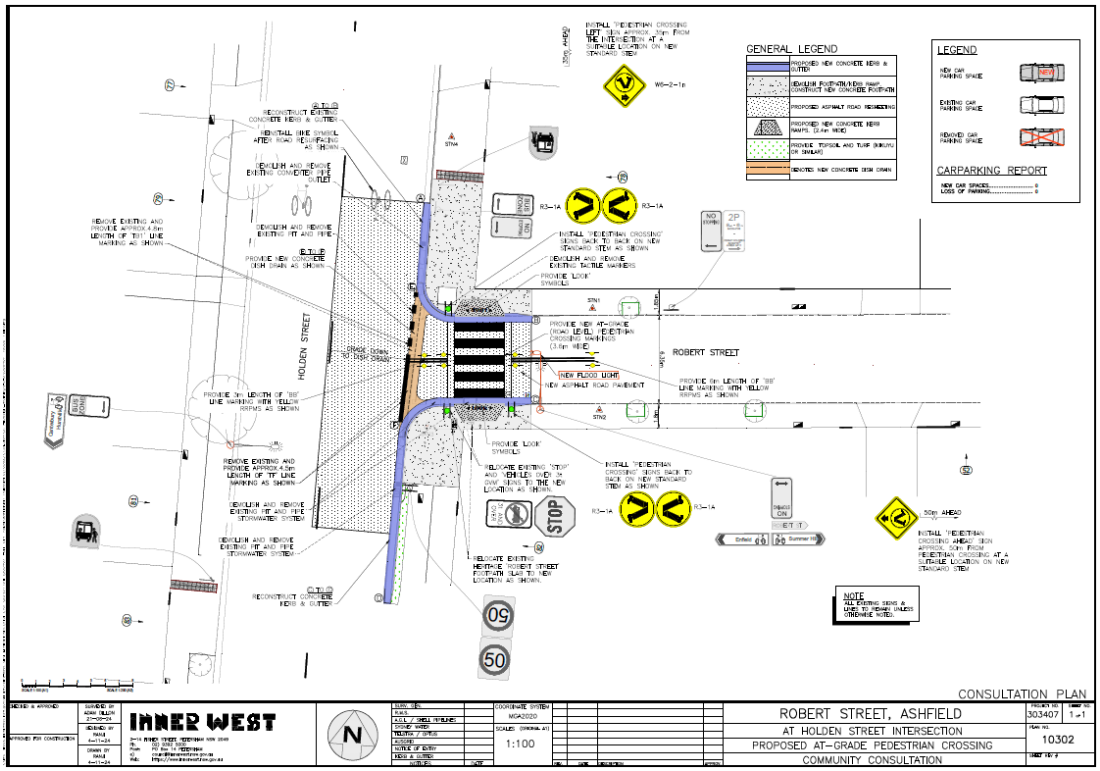


Figure 2-Original consultation plan.

FINANCIAL IMPLICATIONS

The project is listed in Council's Traffic Facilities Capital Works program to be carried out in 2025/2026, subject to grant funding approval. The work is estimated to be around $92,000.

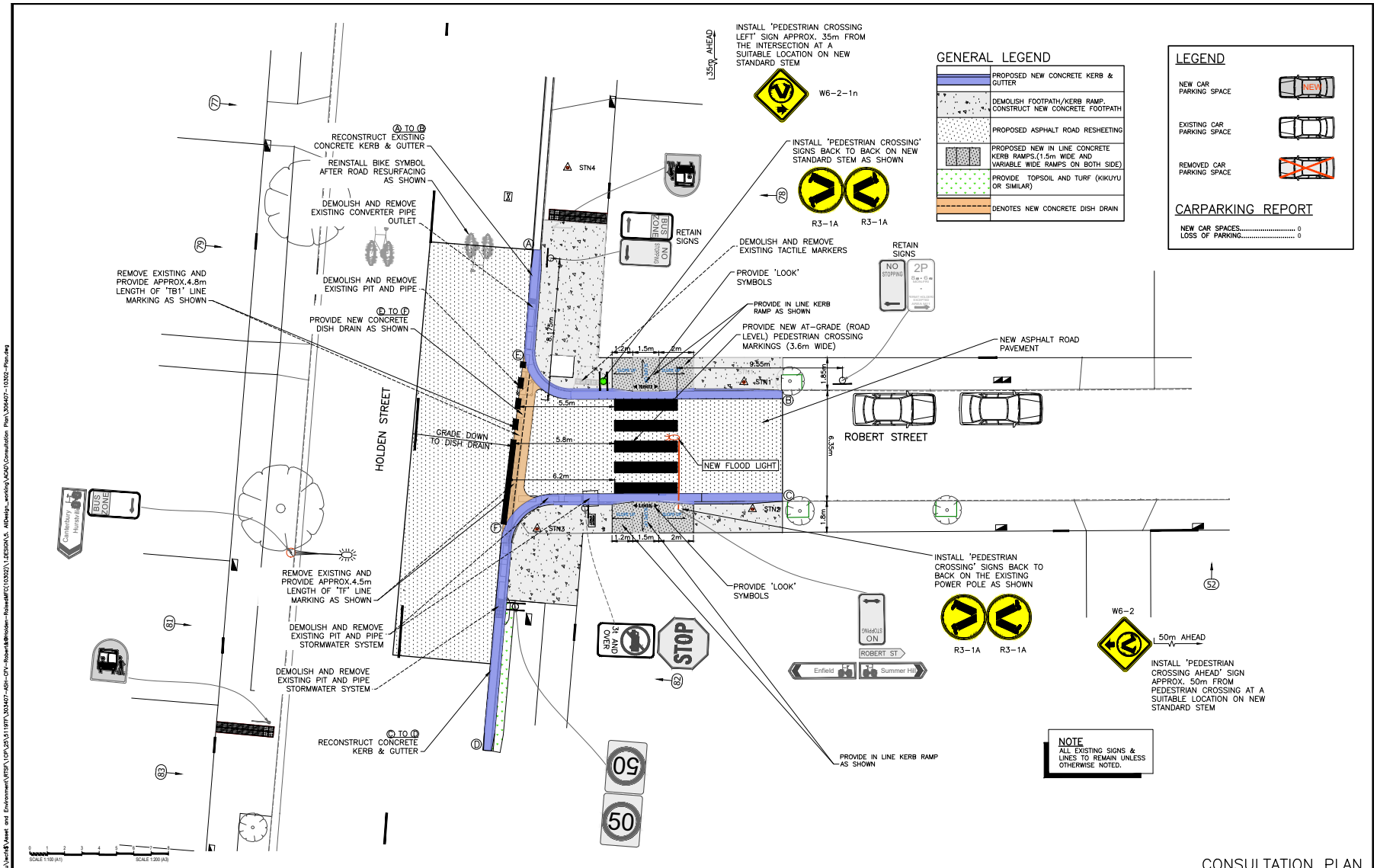
CONSULTATION

The relocation of the crossing a short distance into Robert Street is considered only to serve as a minor amendment not bearing any further or real impact upon the community. Therefore no additional consultation was undertaken.

Only one response was received to the original proposal with a resident concerned that a vehicle giving way to pedestrians may obstruct traffic on Holden Street. This concern is addressed by the revised proposal.

ATTACHMENTS

1.⇩ Amended plan-Proposed at-grade crossing in Robert Street at Holden Street, Ashfield.


INSTALL 'PEDESTRIAN CROSSING LEFT' SIGN APPROX. 35m FROM THE INTERSECTION AT A SUITABLE LOCATION ON NEW STANDARD STEM
35m AHEAD
W6-2-1n
INSTALL 'PEDESTRIAN CROSSING' SIGNS BACK TO BACK ON NEW STANDARD STEM AS SHOWN
R3-1A
R3-1A
GENERAL LEGEND
PROPOSED NEW CONCRETE KERB & GUTTER
DEMOLISH FOOTPATH/KERB RAMP. CONSTRUCT NEW CONCRETE FOOTPATH
PROPOSED ASPHALT ROAD RESHEETING
PROPOSED NEW IN LINE CONCRETE KERB RAMPS.(1.5m WIDE AND VARIABLE WIDE RAMPS ON BOTH SIDE)
PROVIDE TOPSOIL AND TURF (KIKUYU OR SIMILAR)
DENOTES NEW CONCRETE DISH DRAIN
LEGEND
NEW CAR PARKING SPACE
EXISTING CAR PARKING SPACE
REMOVED CAR PARKING SPACE
CARPARKING REPORT
NEW CAR SPACES..... 0
LOSS OF PARKING..... 0
RECONSTRUCT EXISTING CONCRETE KERB & GUTTER
Ⓐ TO Ⓑ
REINSTALL BIKE SYMBOL AFTER ROAD RESURFACING AS SHOWN
DEMOLISH AND REMOVE EXISTING CONVERTER PIPE OUTLET
RETAIN SIGNS
DEMOLISH AND REMOVE EXISTING TACTILE MARKERS
PROVIDE 'LOOK' SYMBOLS
PROVIDE IN LINE KERB RAMP AS SHOWN
PROVIDE NEW AT-GRADE (ROAD LEVEL) PEDESTRIAN CROSSING MARKINGS (3.6m WIDE)
NEW ASPHALT ROAD PAVEMENT
REMOVE EXISTING AND PROVIDE APPROX.4.8m LENGTH OF 'TB1' LINE MARKING AS SHOWN
DEMOLISH AND REMOVE EXISTING PIT AND PIPE
Ⓔ TO Ⓕ
PROVIDE NEW CONCRETE DISH DRAIN AS SHOWN
HOLDEN STREET
GRADE DOWN TO DISH DRAIN
NEW FLOOD LIGHT
ROBERT STREET
REMOVE EXISTING AND PROVIDE APPROX.4.5m LENGTH OF 'TF' LINE MARKING AS SHOWN
DEMOLISH AND REMOVE EXISTING PIT AND PIPE STORMWATER SYSTEM
DEMOLISH AND REMOVE EXISTING PIT AND PIPE STORMWATER SYSTEM
Ⓒ TO Ⓓ
RECONSTRUCT CONCRETE KERB & GUTTER
PROVIDE 'LOOK' SYMBOLS
INSTALL 'PEDESTRIAN CROSSING' SIGNS BACK TO BACK ON THE EXISTING POWER POLE AS SHOWN
R3-1A
R3-1A
W6-2
50m AHEAD
INSTALL 'PEDESTRIAN CROSSING AHEAD' SIGN APPROX. 50m FROM PEDESTRIAN CROSSING AT A SUITABLE LOCATION ON NEW STANDARD STEM
PROVIDE IN LINE KERB RAMP AS SHOWN
NOTE
ALL EXISTING SIGNS & LINES TO REMAIN UNLESS OTHERWISE NOTED.
STOP
50
50
CONSULTATION PLAN
CHECKED & APPROVED
APPROVED FOR CONSTRUCTION
SURVEYED BY ADAM DILLON 21-06-24
DESIGNED BY RANJI 4-11-24
DRAWN BY RANJI 4-11-24
INNER WEST
2-14 FISHER STREET, PETERSHAM NSW 2049
Ph. (02) 9392 5000
Post: PO Box 14 PETERSHAM
e) council@innerwest.nsw.gov.au
Web: https://www.innerwest.nsw.gov.au
SURV. GEN.
R.M.S.
A.G.L. / SHELL PIPELINES
SYDNEY WATER
TELSTRA / OPTUS
AUSGRID
NOTICE OF ENTRY
KERB & GUTTER
NOTICES
DATE
COORDINATE SYSTEM MGA2020
SCALES (ORIGINAL A1) 1:100
REV.
DATE
DESCRIPTION
APPROV.
ROBERT STREET, ASHFIELD
AT HOLDEN STREET INTERSECTION
PROPOSED AT-GRADE PEDESTRIAN CROSSING
COMMUNITY CONSULTATION
PROJECT NO. 303407
SHEET NO. 1 of 1
PLAN NO. 10302-A
SHEET REV #

Item No: **LTC0225(1) Item 11**

Subject: **GOODSELL STREET, ST PETERS - REQUEST FOR AN EXTENSION TO TIMES AND DAYS OF THE EXISTING RESIDENTIAL PARKING SCHEME (MIDJUBURI - MARRICKVILLE WARD / HEFFRON ELECTORATE / INNER WEST PAC)**

Prepared By: Jennifer Adams - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

1. **That the existing '2P 8.30am-6pm Mon-Fri', Permit Holders Excepted Area M12' resident parking restrictions on the northern side of Goodsell Street between Council Street and the units at no. 1 Goodsell Street be amended to '2P 8am to 10pm, Permit Holders Excepted Area M12' to provide all week parking opportunities for local residents.**

2. **That the existing '2P 8.30am-6pm Mon-Fri', Permit Holders Excepted Area M12' resident parking restrictions on the southern side of Goodsell Street between Council Street and May Lane be amended to '2P 8am to 10pm Mon-Fri, Permit Holders Excepted Area M12' to provide weekday parking opportunities for local residents and to provide opportunities for other users of local facilities as well.**

3. **That the '2P 8.30am-6pm Mon-Fri, Permit Holders Excepted Area M12' parking adjacent to no. 1 Goodsell Street to be amended to '2P 8am-6pm Mon-Fri, Permit Holders Excepted Area M12'.**

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

A petition has been received from 41 residents of Goodsell Street, St Peters for an extension to times and days of the existing Resident Parking Scheme (RPS) in their street. Concerns were also raised with possible greater demands for parking in the area after current Camdenville Oval Upgrade works are completed.

This report provides the results of the recent resident parking scheme investigation in Goodsell Street, St Peters and recommends the modification of existing resident parking restrictions from '2P 8.30am-6pm Mon-Fri, Permit Holders Excepted Area M12' to a combination of '2P 8am-10pm, Permit Holders Excepted Area M12', '2P 8am to 10pm Mon-Fri, Permit Holders Excepted Area M12'and '2P 8am-6pm Mon-Fri, Permit Holders Excepted Area M12'.

BACKGROUND

A petition signed by 41 local residents in Goodsell Street has been received for the provision of an extension to times and days of the existing Resident Parking Scheme in their street.

The existing M12 permit parking area in Goodsell Street, St Peters was implemented in 2008 after a petition was received by a number of residents at that time. The head petitioner at the time advised that on street parking spaces is Goodsell Street were heavily utilised by train

commuters and the parking situation became more difficult for residents due to the new block of residential units at No.1 Goodsell Street. Subsequently Council adopted the recommendation that '2P - 8.30AM-6.00PM Mon-Fri - Permit Holders Excepted - Area M12' parking restrictions be installed on both sides of Goodsell Street, between Council Street and May Lane, St Peters; Residents of the new development at 1 Goodsell Street were not eligible to participate in the scheme. The RPS was installed in July 2008.

Following the receipt of the current petition, Council Officers have recently carried out a parking utilisation survey in Goodsell Street on a typical Saturday and the results indicated high utilisation of on-street parking, so in late November 2024 a Resident Parking survey was undertaken of all residential properties in Goodsell Street, St Peters between Council Street and May Lane and also of residents in adjoining Council Street (10 Properties). This report details the results of the recent parking utilisation survey and Resident Parking survey.

DISCUSSION

Goodsell Street is a local residential street that runs east-west between Council Street and King Street (Princes Highway) and is in close proximity to St Peters Railway Station. It is 12.8 metres wide with one travel lane in each direction. Both parallel and angle parking is permitted on both sides of the street. At present, resident parking restrictions are in place for the parallel and angle parking on both sides of the street between Council Street and May Lane.

Parking Utilisation Survey:

A parking utilisation survey was undertaken in Goodsell Street, St Peters on a typical Saturday early November 2024 (between 7.00am and 7.00pm) to gauge current on-street parking utilisation. The results of the survey are summarised in the following table:

On-street parking survey results (weekend)

Street Name (Section & side)	No. parking spaces	Parking Utilisation Rate					
		7.00 AM	10.00 AM	1.00 PM	4.00 PM	7.00 PM	Average utilisation rate
Goodsell Street, St Peters							
Council Street to King Street (north side)	48	77.1%	81.1%	87.5%	87.5%	93.8%	**85.4%**
King Street to Council Street (south side)	56	89.3%	89.3%	94.6%	91.1%	89.3%	**90.7%**
Average utilisation rate		83%	85%	91%	89%	92%	

Average overall rate = 88%

The results of the weekend parking survey for Goodsell Street showed that the street had an average overall occupancy of 88% which exceeds Council's 85% threshold for parking occupancy for consideration for implementation or extension of a residential parking scheme.

Subsequently, a Resident Parking questionnaire survey was undertaken in Goodsell Street to gauge resident's support of an extension of time and days of the existing residential parking scheme.

Council proposed to expand the existing M12 RPS with the following proposal:

- Implement '2P 8.30AM - 10PM Monday to Sunday, Permit Holders Excepted, Area M12' on both sides of Goodsell Street between Council Street and May Lane, St Peters.

Council Policy/Guidelines

Council's adopted Policy for the introduction or extension of a Permit Parking Area states *"that before implementing a resident parking scheme in any area, a survey of residents be undertaken to ascertain the level of support for such a scheme and that such support should be in excess of 65% of submissions received provided that rate of return of submissions is reasonable (higher than 30%)"*.

"In completing this analysis Council may differentiate responses from those developments excluded from participation in a Resident Parking Scheme (Table 7.1)." (non-eligible properties).

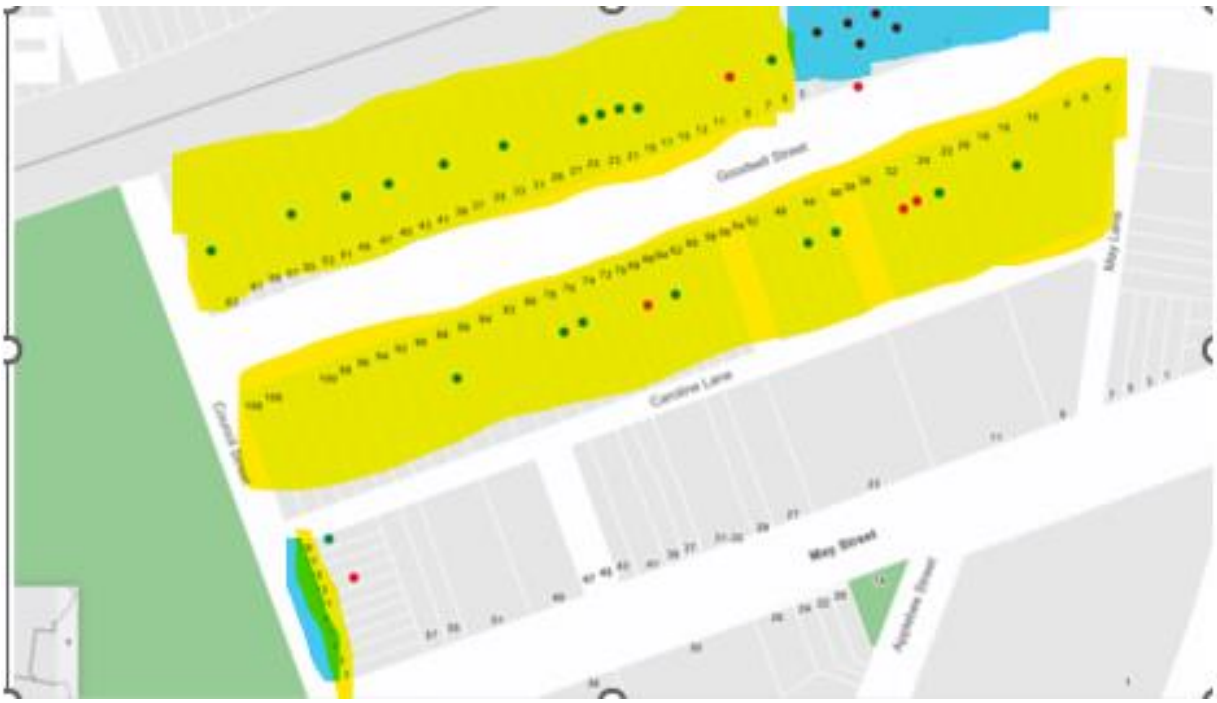
Table 7.1 Developments Excluded from Permit Parking Schemes

LG Area	Development Type Excluded	Approved after
Camperdown, Dulwich Hill, Enmore, Lewisham, Marrickville, Newtown, Petersham, Stanmore, Sydenham St Peters, and Tempe. *(Former Marrickville LGA)*	Development involving land use changes, new commercial and /or multi-unit housing developments or where conditions of development consent exclude participation in a permit parking scheme.	1999

PUBLIC CONSULTATION

A total of 132 consultation letters were hand delivered to owners/occupiers of both eligible and non-eligible properties in Goodsell Street between May Lane and Council Street and also to Council Street residents, St Peters on 29 November 2024. Submissions closed on Friday 20 December 2024**.**

Distribution of letters are highlighted in the diagram below. Yellow being eligible properties and blue non-eligible.



At the end of the survey period thirty-one (31) responses were received. Twenty (20) were in support of the proposal and eleven (11) opposed the proposal. The overall response rate was 24%, and of that 35.5% opposed the proposal and 64.5% supported it.

Number of properties	-	132
Number of properties responded	-	31
Number of properties supported	-	20
Response Rate	-	24%
Support Rate	-	64.5%

There are 80 eligible properties in Goodsell Street, St Peters. Even through letters detailing the proposal were delivered to the multi-unit development at 1 Goodsell Street and to 10 residencies in Council Street, in general Council places a higher emphasis on responses from the residents of the single unit dwellings (in Goodsell Street) when making a determination when dealing with resident parking schemes.

The return and support rates of eligible Goodsell Street (eligible) properties are given below.

Number of eligible properties	-	80
Number of eligible properties responded	-	23
Number of eligible properties supported	-	19
Eligible Response Rate	-	29%
Eligible Support Rate	-	83%

Council guidelines state that there should be a response rate of 30% of households that were surveyed, with 65% of respondents supporting the proposal. In this case, the return rate and support rate of eligible Goodsell Street residents confirm support for an extension to times and days of the existing Resident Parking Scheme (RPS) in the street.

Note: In order to best gauge the level of support of directly affected residents, the response-rate analysis in this case was conducted on the basis of considering only single unit dwellings in Goodsell Street.

The return and support rates of residents surveyed in Council Street are given below.

Number of properties	-	10
Number of properties responded	-	2
Number of properties supported	-	1
Response Rate	-	20%
Support Rate	-	10% (50% of respondents)

The return and support rates of non-eligible residents surveyed at 1 Goodsell Street are given below.

Number of properties	-	42
Number of properties responded	-	6
Number of properties supported	-	0
Response Rate	-	14%
Support Rate	-	0%

Of the 11 objections it is noted that 6 were received from 1 Goodsell Street residents (non-eligible) and 4 from single dwelling units in Goodsell Street (eligible) and one from a resident in Council Street.

Key concerns / issues raised from the responses of eligible residents in Goodsell Street supporting the proposal have been summarised below:

- As residents, we face significant challenges finding parking during match days and weekends, which makes it incredibly difficult to manage daily routines, especially when returning home from work.
- 2-hour parking restrictions won't help the lack of parking when football is played in Camdenville Oval. There is a general lack of parking spaces, and it can be extremely difficult to find a parking spot when there are games being played.
- With the current upgrade of Camdenville Oval and its increased usage, the parking situation will no doubt only get worse for residential parking.
- The new Camdenville Oval improvements will worsen the already problematic parking situation on Goodsell Street.
- Request the Council to consider adding dedicated parking spaces for the soccer ground.
- new businesses taking up much of the street parking with their own vehicles or customers' vehicles.
- include the 7 parking spots in Council Street with the new restrictions and the parking spots next to the toilet block at Camdenville oval.
- 3 support marking out of parking to maximise parking spaces through clear parking bays

Key concerns / issues raised by objectors to the proposal (both eligible and non-eligible residents) include the following:

- The proposed changes to the existing RPS are overly restrictive and deny visitors parking flexibility, particularly on the weekends.
- The proposed changes would have detrimental effects on our community and family, friends and partners who want to come and visit us.
- it would be difficult for our guests to visit on the weekends for over 2 hours without the risk of a fine. This area is a residential area and there should be no restrictions to parking times over the weekend as this would hinder our social activities should we choose to have guests over.
- I do not support the proposal in its current form. My view is the proposed expansion of the RPS hours/days needs to be based on evidence. Collect evidence/observations to understand if there is greater demand for parking during the night after 6pm. I am not convinced that there will be a greater demand for parking after 6pm i.e. Camdenville Oval is predominantly used during daytime hours.

- parking around amateur sporting events needs some more patrolling/ attention as this can cause issues of illegal and double parking on the street. Also, illegal parking around Caroline lane of trade vehicles needs attention and is often a more frustrating issue.
- The reason that the parking gets full on some weekdays with people parking and using the station is because overstaying the 2-hour max is seldom monitored by rangers.

As a result of the feedback received, especially concerns with regards to availability of parking on the weekends an adjustment to the final proposal has been made. This looks to address issues of lack of parking as a result of lack of parking in the evenings whilst attempting to find a balance between resident needs and visitors on the weekend. The 2P parking restriction have therefore been extended into the weeknights as well as the weekend for the northern side which will discourage long term parking during weekend periods as well as weekday periods whilst on the southern side the restrictions have been extended into the evening to discourage long term parking during the evenings. There is a small section of 2P parking adjacent to the unit block adjacent to no. 1 Goodsell Street which will remain essentially unchanged.

Concern is valid also that restrictions in Council Street may need to be amended in the near future due to vehicles parking out the available parking on weekends. It is noted that when the original RPS went into Goodsell Street in July 2008 not long after a petition was received from residents in Council Street, St Peters stating that the parking situation had become more difficult for residents in their street following the recent introduction of the RPS in Goodsell Street. Subsequently, RPS – M12 restrictions were installed on the east side of Council Street between May Street and Goodsell Street, St Peters in July 2009.

Resident Parking Schemes are intended to give priority parking to those who may be disadvantaged by others taking the limited parking spaces available. Eligible residents may obtain a maximum of 2 permits per dwelling house provided they have no off-street parking. This is reduced by one permit for each off-street parking space.

CONCLUSION

Council guidelines state that there should be a response rate of 30% of households that were surveyed, with 65% of respondents supporting the proposal. In this case, the return rate and support rate (29% and 83% respectively) of eligible Goodsell Street residents confirm support for an extension to times and days of the existing Resident Parking Scheme (RPS) in the street.

It is recommended to change existing '2P 8.30am-6pm Mon-Fri, Permit Holders Excepted Area M12' resident parking restrictions on the northern side of Goodsell Street between Council Street and the units at no. 1 Goodsell Street to 2P 8am to 10pm and to change the existing '2P 8.30am-6pm Mon-Fri, Permit Holders Excepted Area M12' resident parking restrictions on the southern side of Goodsell Street between Council Street and May Lane to '2P 8am to 10pm Mon-Fri, Permit Holders Excepted Area M12' in order to provide residents with greater opportunities to find parking and also to balance the needs of residents with other users and visitors.

To ensure a consistent start time for Resident Parking restrictions, it is further recommended that the '2P 8.30am-6pm Mon-Fri, Permit Holders Excepted Area M12' parking adjacent to no. 1 Goodsell Street to be amended to '2P 8am-6pm Mon-Fri, Permit Holders Excepted Area M12'.

ATTACHMENTS

Nil.

Item 12

Item No: **LTC0225(1) Item 12**

Subject: **LEICHHARDT OVAL SPECIAL EVENT PARKING SCHEME 2025 (BALUDARRI-BALMAIN WARD/BALMAIN ELECTORATE/LEICHHARDT PAC)**

Prepared By: Jason Scoufis - Coordinator Traffic Investigations and Road Safety

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

That the Special Event Parking Scheme (SE) in the roads surrounding Leichhardt Oval be activated for the following three days during the times of 12:00 pm – 8:00pm for NRL Fixtures in 2025:

a) Sunday 27 April 2025;
b) Sunday 20 July 2025; and
c) Sunday 24 August 2025.

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

The existing signs on streets surrounding Leichhardt Oval that read '1P during sporting fixtures at Leichhardt Oval, Authorised Residents Vehicles Excepted Area LY', are being replaced with '1P Special Events Permit Holders Excepted Area SE' restrictions, in order to update the signs to the latest TfNSW requirements.

BACKGROUND

At the Local Traffic Committee held in May 2024, a report was considered relating to the Leichhardt Oval TMP and Special Event Parking Zone and it in part recommended the following which was subsequently endorsed by Council:

> *That existing '1P during sporting fixtures at Leichhardt Oval, Authorised Residents Vehicles Excepted Area LY', on streets surrounding Leichhardt Oval be replaced with '1P Special Events Permit Holders Excepted Area SE', including Special Event Parking – Major Entry, Special Event Parking – Repeater, and Special Event Parking – End signage be installed as shown in Attachment 2.*

The days and times that the Special Event Parking Scheme will be active in 2025 are detailed below which comprises of three NRL Fixtures at Leichhardt Oval in 2025:

NRL Game	Date	NRL Kick Off	Special Event Parking Scheme Hours
Round 8 - Wests Tigers vs Cronulla sharks	Sunday 27th April 2025	4:00pm	12:00pm-8:00pm
Round 20 – Wests Tigers vs Gold Coast Titans	Sunday 20th July 2025	2:00pm	12:00pm-8:00pm
Round 25 – Wests Tigers vs North Queensland Cowboys	Sunday 24th August 2025	4:00pm	12:00pm-8:00pm

Only during these times detailed above, the one hour parking restriction will be enforceable. At all other times throughout the year the one hour parking restrictions will not be applicable.

CONSULTATION

Residents entitled to parking permits will be notified via letter prior to the scheme being active.

FINANCIAL IMPLICATIONS

The cost of installation of the proposed signposting can be funded within Council's signs and line marking budget.

ATTACHMENTS

Nil.

Item 13

Item No: **LTC0225(1) Item 13**

Subject: **PROPOSED PARKING RESTRICTION OPERATIONAL HOURS EXTENSION - ROZELLE SOUTH PRECINCT (BALUDARRI-BALMAIN WARD/ BALMAIN ELECTORATE/ LEICHHARDT PAC)**

Prepared By: Felicia Lau - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

That the existing parking restriction in the Rozelle South precinct currently signposted as '2P 8am-8pm Area R1 Permit Holder Excepted', '2P 8am-6pm Mon-Fri Area R1 Permit Holder Excepted' and '2P 8am-10pm Mon-Fri Area R1 Permit Holder Excepted' be changed to '2P 8am-10pm Area R1 Permit Holder Excepted' on the following streets:

- **Evans Street between Denison Street and Victoria Road**
- **Catherine Street**
- **Keniff Street**
- **Elizabeth Street**
- **Prince Street**
- **Gordon Street between Lilyfield Road and Victoria Road**
- **Maney Street**
- **Graham Street**
- **Quirk Street**
- **Hornsey Street**
- **Burt Street between No.30 and Gordon Street**
- **Lilyfield Road between No.65 and Victoria Road**

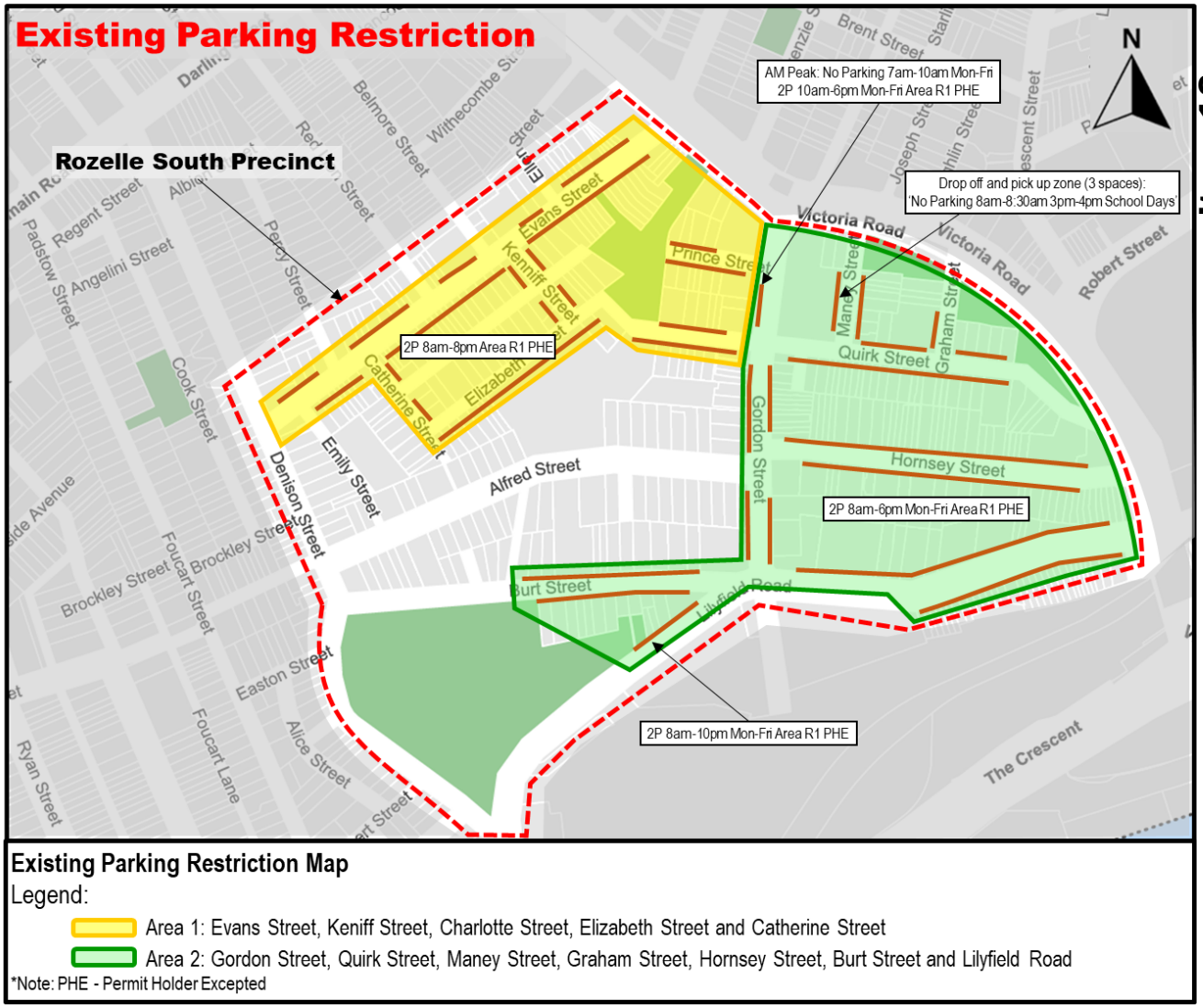
STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

This report outlines the results of the Community Engagement undertaken regarding changes to the existing resident parking scheme operational hours in Rozelle South precinct as shown in Figure 1 below.



Existing Parking Restriction Map

Legend:

Area 1: Evans Street, Keniff Street, Charlotte Street, Elizabeth Street and Catherine Street

Area 2: Gordon Street, Quirk Street, Maney Street, Graham Street, Hornsey Street, Burt Street and Lilyfield Road

*Note: PHE - Permit Holder Excepted

Figure 1: Existing Parking Restriction

BACKGROUND

Residents within the Rozelle South precinct have raised concerns regarding difficulty finding on-street parking due to after-hours and long-term visitors occupying on-street parking spaces. The popularity of restaurants, performance venues, and a new school has brought visitors to the area and contributing to the parking pressure in this precinct.

The Rozelle South precinct is bounded by Lilyfield Road, Denison Street, Evans Street, and Victoria Road.

Council has reviewed the existing Resident Parking Scheme (RPS) operational hours and has proposed to unify the operational hours for Rozelle South precinct R1 Area parking restriction. This will normalise the parking restrictions in the area, particularly during night where visitors to certain venues may exceed well beyond 6pm on both weekdays and weekends.

Community Engagement was undertaken proposing changes to the existing RPS hours extended to 10pm everyday, as shown in Figure 2 below.

Figure 2: Proposed Parking Restriction

DISCUSSION

Between November and December 2024, Council undertook Community Engagement inviting residents to provide feedback regarding a proposal to normalise the RPS operational hours to 10pm everyday.

The results at the conclusion of the Community Engagement received a support rate of **67%** for the proposal in the Rozelle South precinct. Accordingly, it is recommended that the proposal (shown in Figure 2) for changes to the RPS operational hours to '2P 8pm-10pm Permit Holder Excepted'. All other specific parking zones, such as Mobility Parking, 'No Parking', and 'No Stopping' restrictions will be retained.

A summary of comments including Council response on each issue is tabled below.

Resident/Stakeholder Comments	Officer's Response
This will further restrict residents with multiple vehicles to park in the street	The proposed changes are intended to establish a balance for the community to meet the parking needs of both residents and visitors to the area.
Enforcement is required to ensure that measures are effective	Council parking enforcement team will schedule enforcement to all areas with parking restrictions.
Extended hours would assist. Preferably	A 2 hour parking limit provides a better

convert the 2 hour parking limit to 1 hour	balance to residential areas for visitors. Council do not intend to exclude visitors from parking in the precinct as 1 hour stay would not be practical for visitors to some local businesses. Hence a 1P is not supported at this stage.
Why does the changes not apply to Red Lion Street?	The current proposal is to extend the RPS operational hours to 10pm, and Red Lion Street parking restriction already ends at 10pm.
Prefer the parking restriction to end at 11pm to restrict visitors to the businesses at least till 9pm before restriction ends.	Existing RPS within the LGA's urbanised areas generally ends at 10pm to ensure consistency with other areas it is proposed that the RPS ends at 10pm.
Parking problem will improve	Noted and Council will monitor the parking conditions after the changes are implemented.
Maney Street is used as a rat run, it should be closed off at Victoria Road	This is not part of the proposal presented at this time. Council officers will investigate this separately and will provide a response when completed.

FINANCIAL IMPLICATIONS

There are no financial implications associated with the implementation of the proposed recommendations outlined in the report.

ATTACHMENTS

Nil.

Item No: **LTC0225(1) Item 14**

Subject: **BRIGHTON STREET, PETERSHAM - HEAVY VEHICLE ACCESS (DAMUN - STANMORE WARD/ NEWTOWN ELECTORATE/ INNER WEST PAC)**

Prepared By: Zara Helal - Traffic Engineer

Authorised By: Manod Wickramasinghe - Traffic and Transport Planning Manager

RECOMMENDATION

That the report be received and noted.

STRATEGIC OBJECTIVE

This report supports the following strategic directions contained within Council's Community Strategic Plan:

2: Liveable, connected neighbourhoods and transport

EXECUTIVE SUMMARY

Council at its meeting held on 3 September 2024 considered a Notice of Motion regarding Pedestrian Safety on Brighton Steet, Petersham and resolved to write to Transport for NSW seeking advice on how existing heavy vehicle restrictions on Brighton Street can be better enforced and what other measures Council can take to deter heavy vehicle through access. This report summaries advice from Transport for NSW, Council's Regulatory Services team and provides an update on capital works.

BACKGROUND

Council at its meeting held on 3 September 2024 considered a Notice of Motion regarding Pedestrian Safety on Brighton Steet, Petersham, and resolved in part:

That Council write to Transport for NSW seeking advice on how existing heavy vehicle restrictions on Brighton Street can be better enforced and what other measures Council can take to deter heavy vehicle through access.

That as part of the Petersham North LATM Plan endorsed by the Traffic Committee, Council investigate and expedite measures to prevent speeding and improve pedestrian safety on Brighton Street, including but not limited to:

a) reducing the speed limit to 40km/h;
b) installation of raised pedestrian crossings on Brighton Street at the Petersham Park gate, Palace Street and Railway Street intersections;
c) installation of a pedestrian island; and
d) installation of additional speed humps and kerb blisters.

That Council receive a report back on the above to the Traffic Committee.

DISCUSSION

Transport for NSW has responded, as detailed below to the Notice of Motion regarding heavy vehicles in Brighton Street and have provided information on how existing heavy vehicle restrictions on Brighton Street can be better enforced and what other measures Council can take to deter heavy vehicle through access:

NSW heavy vehicle compliance is managed by the National Heavy Vehicle Regulator (NHVR). Local council officers can become authorised to carry out local road heavy vehicle enforcement of Road Rules, to regulate mass (weight) and length of heavy vehicles on signposted local roads, by engaging directly with Transport for NSW.

Council's Senior Manager Regulatory Services has advised that Council, like many other Councils did not opt in for the enforcement of heavy vehicles on local roads as minimum qualification requirements, specialised training and additional equipment is required to be authorised and undertake this type of enforcement. Officers would be authorised to undertake traffic stops by pulling vehicles over, directing vehicles not to move, requiring drivers to produce their licences among other things. Our local roads are not suitable for effecting traffic stops in this manner. In addition, NSW Police can already enforce this on local roads and can stop vehicles anywhere.

Despite the above, Regulatory Services has contacted Transport for NSW and is making further enquiries regarding any other available options that would assist Council in enforcing mass restrictions.

As part of the Petersham North LATM, Council had received concerns by residents regarding speeding vehicles on Brighton Street, Petersham, particularly those travelling from West Street. These concerns are exacerbated given the proximity of Brighton Street to a preschool and Petersham Park, and the frequency of heavy vehicles accessing Brighton Street as a rat run despite existing heavy vehicle restrictions. These concerns were considered as part of the Petersham North Local Area Traffic Management (LATM) plan endorsed by the Traffic Committee in June 2024.

Regarding the resolution relating to the LATM plan, the following is advised:

a) Reducing the speed limit to 40km/h; - The conversion of the Stanmore – Petersham area to 40 km/h is Priority B. This is anticipated to be implemented in the next few years as part of the InnerWest@40 project rollout which reduces speed limits on all out the speed limit reduction throughout the LGA.
b) Installation of raised pedestrian crossings at:
    - Brighton Street (eastern leg) at Brighton Street/Railway Street intersection
    - Brighton Street (eastern leg) of Brighton Street/Palace Street intersection
    - Brighton Street (western leg) of Brighton Street/Palace Street intersection
    - Brighton Street between Wentworth Street and The Avenue - raised threshold to be upgraded to a raised pedestrian (zebra) crossing
    - Palace Street (southern leg) of Brighton Street/Palace Street intersection
    - Railway Street (southern leg) at Brighton Street/Railway Street intersection.
c) Installation of a continuous footpath treatment to cross The Avenue at Brighton Street
d) Installation of a speed hump in Brighton Street between Crystal Lane West and Crystal Street.

Council staff will be preparing detailed design plans for these pedestrian crossings, continuous footpath treatments and speed humps with construction commencing from FY25/26 onwards with priority being placed on the raised pedestrian crossings on Brighton Street between Wentworth Street and The Avenue, Brighton Street at Palace Street (western leg) and Brighton Street at Railway Street intersections. A separate grant application has also been made under the 'Active Transport Fund' in relation to works identified in the Petersham North LATM.

Furthermore, in order to provide additional warning for trucks, it is also recommended that larger signs be installed to replace the existing 'No Trucks Vehicles over 3t GVM' signs at both ends of Brighton Street and additional similar signs with supplementary arrows to provide advice to truck drivers on approach to the intersection.

ATTACHMENTS

Nil.