



Traffic and Transport Management Plan

A sub plan of the Operational Environmental Management Plan.

Information

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Compliance Table

Table 1 CSSI 7400 Relevant Conditions

Reference number	Requirement	Document Reference
D3 (Operational Environmental Management Plan – OEMP)	Where an OEMP is required, the Proponent must include the following OEMP sub-plans in the OEMP: Traffic and Transport	This Plan.
D4	Each of the OEMP sub-plans must include the requirements set out in Condition D2 (a), (b) and (c).	Sections 4 and 5
D2	An OEMP is not required for the CSSI if the Proponent has an Environmental Management System (EMS) or equivalent as agreed with the Secretary, and can demonstrate, to the written satisfaction of the Secretary, that through the EMS: <ul style="list-style-type: none"> (a) The performance outcomes, commitments and mitigation measures, made and identified in the EIS as amended by the documents listed in A1, and requirements specified in the conditions of this approval can be achieved. (b) Issues identified through ongoing risk analysis can be managed. (c) Procedures are in place for rectifying any non-compliance auditing, incident management or any other time during operation. 	Sections 4 and 5
D5	The OEMP sub-plans must be developed in consultation with relevant agencies as identified in Condition D3. Where an agency(ies) request(s) is not included in an OEMP sub-plan, the Proponent must provide the Secretary justification as to why. Details of all information requested by an agency to be included in an OEMP sub-plan as a result of consultation, including copies of all correspondence from those agencies, must be provided with the relevant OEMP sub-plan.	Section 2
D6	The OEMP sub-plans must be submitted to the Secretary as part of the OEMP.	Section 1.2
D12	Traffic on local roads around each station must be monitored 12 months before the CSSI commences operation and for a period of no less than 12 months after commencement of operation. If monitoring indicated unacceptable traffic intrusion on local roads/streets as a result of operation of the CSSI beyond those that could reasonably be predicted in the EIS and/or Interchange Access Plans(s) in Condition E92, appropriate traffic management measures to mitigate the monitored impacts must be implemented following consultation with the Sydney Coordination Office and relevant Road Authorities.	Section 6.1
E75	The CSSI must be designed, constructed and operated with the objective of integrating with existing and proposed road and related transport networks and minimising adverse changes to the safety, efficiency and accessibility of the networks, and facilitate an improved level of service in relation to permanent and operational changes. Detailed design and assessment of related traffic,	Section 4

Reference number	Requirement	Document Reference
	<p>parking, pedestrian and cycle accessibility impacts and changes shall be undertaken:</p> <ul style="list-style-type: none"> in consultation with, and to the reasonable requirements of the Traffic and Transport Liaison Group(s) established under Condition E77; in consideration of existing and future demand, connectivity (in relation to permanent changes), performance and safety requirements; to minimise and manage local area traffic impacts; to ensure access is maintained to property and infrastructure; to meet relevant design, engineering and safety guidelines, including Austroads, Australian Standards and RMS (RTA) requirements. <p>Copies of civil, structural and traffic signal design plans shall be submitted to the Relevant Road Authority for consultation before the commencement of the relevant works.</p>	
E76	<p>Permanent road works, including vehicular access, signalised intersection works, and works relating to pedestrians, cyclists, and public transport users must be subject to safety audits demonstrating consistency with relevant design, engineering and safety standards and guidelines. Safety audits must be prepared in consultation with the Traffic and Transport Liaison Group before the completion and use of the subject infrastructure and must be made available to the Secretary upon request.</p>	Section 5
E77	<p>The Proponent must establish a Traffic and Transport Liaison Group(s) (TTLGs) to inform traffic and transport management during construction and operation of the CSSI. Management measures must be coordinated with and approved by the RMS following endorsement by the Sydney Coordination Office and consultation with the Relevant Roads Authority.</p> <p>The TTLG must comprise representatives from the Relevant Road Authorities(ies) (including the RMS, relevant Councils, and the Barangaroo Delivery Authority as appropriate), transport operators (including bus and taxi operators), emergency services and Port Authority of NSW as required. The TTLG must be consulted on to inform the preparation of the Construction Traffic Management Plan(s) and Interchange Access Plan(s).</p>	Section 4
E78	<p>The Proponent must undertake supplementary analysis and modelling as required by the TTLG to demonstrate that construction and operational traffic can be managed to minimise disruption to traffic network operations, public including changes to and the management of pedestrian, bicycle and public transport networks transport services, pedestrian and cyclist movements. Revised traffic management measures must be incorporated into the Construction Traffic Management Plan(s), Interchange Access Plan(s) and Station Design and Precinct Plan(s).</p>	Section 4
E92	<p>The Proponent must develop and Interchange Access Plan for each station to inform the final design of transport and access facilities and services, including footpaths, cycleways, passenger facilities, parking, traffic and road changes, and integration of public domain and transport initiatives around and at each station. The Interchange Access Plan(s) must consider walking and cycling catchments and take into account:</p> <ul style="list-style-type: none"> station access hierarchy consistent with the transport planning principles defined in the EIS; safe, convenient, efficient and sufficient access to stations and transfer between transport modes (including subterranean connections and the safeguarding of additional entrances in response to land use change and patronage demand); the maintenance or improvement of pedestrian and cyclists' level of service within justified proximity to stations; current transport initiatives and plans; opportunities and constraints presented by existing and proposed transport and access infrastructure and services; patronage changes resulting from land use, population, employment, transport infrastructure and service changes; 	Section 4.2 and Interchange Access Plans (IAPs) which are separately approved

Reference number	Requirement	Document Reference
	<ul style="list-style-type: none"> integration with existing and proposed transport infrastructure and services; pedestrian, cycle, bus, taxi, vehicle and emergency vehicle access and parking infrastructure and service changes; legislative requirements and applicable guidelines; safety audits, including but not limited to a review of traffic facility and cycle changes to ensure compliance with Austroads design criteria; final design, infrastructure, management and service measures and the level of access and service to be achieved for all users; the contents of the Interchange Operations and Maintenance Plan (IOMP) and operational management provisions for future operational requirements, including maintenance, security and management responsibilities. <p>The Interchange Access Plan(s) must be prepared in consultation with the TTLG and the Design Review Panel and must be supported by traffic and transport analysis. Where necessary, consultation must also be undertaken with major landholders adjoining station precincts. The Plan(s) must detail a delivery and implementation program which must be provided to and agreed by the Secretary before commencement of permanent aboveground facilities at any station site.</p>	
E93	<p>In developing the Interchange Access Plan(s), the Proponent must consider:</p> <ul style="list-style-type: none"> traffic and accessibility design requirements; the Station Design and Precinct Plan(s) required by Condition E101. 	Section 4.2 and IAPs which are separately approved
E94	<p>The Proponent must in consultation with the TTLG review the need and opportunities for lift access between Hickson Road and High Street and which meets the objective of increasing the patronage catchment to Barangaroo Station and improved community accessibility. The review must be presented in the Interchange Access Plan and the findings implemented by the Proponent.</p>	Section 4.2.3.2
E96	<p>The Interchange Access Plan(s) must be reviewed by a qualified traffic and transport professional(s), independent of the detailed design process for the CSSI, having regard to the requirements of this approval.</p>	Section 4.2 and IAPs which are separately approved
E97	<p>The Proponent must provide adequate bicycle infrastructure at stations that form part of the project and provide adequate areas for future expansion of that infrastructure.</p>	Section 4.2 and IAPs which are separately approved
E98	<p>The Proponent must undertake an audit of bicycle patronage at stations and end-of-trip facility adequacy 12 and 36 months following commencement of operation of the project to ensure the level of bicycle parking and end-of-trip facilities available are adequate in terms of both quantity and quality. The audit must be undertaken with the Relevant Council(s), RMS, Bicycle NSW and relevant local bike user groups.</p>	Section 6.3

1. Introduction

1.1. Overview and context

Metro Trains Sydney Pty Ltd (MTS) has prepared this Operational Traffic and Transport Sub Plan (TTMP) to identify traffic and transport impacts associated with the Sydney Metro Chatswood to Sydenham project (the Project).

This Plan outlines operational management measures that will be applied to activities across the Project alignment to manage traffic and transport risks.

1.2. Plan purpose

This Plan forms part of the Operational Environmental Management Plan and has been developed to address Conditions of Approval (CoAs) of the Project's Development Consent (CSSI 7400, as modified by CSSI 7400 MODs 1 to 9), which requires the preparation of a TTMP prior to commencement of operation, to the satisfaction of the Secretary of the Department of Planning, Housing and Infrastructure (DPHI), Sydney Coordination Office, Relevant Road Authority and non-private transport operators.

1.3. Background

The Project involves the operation of a metro rail line and associated stations between Chatswood Station and just north of Sydenham Station. The Project passes through the local government areas (LGAs) of Willoughby, North Sydney, Sydney and Marrickville. Key operational components of the Project include:

- About 15.5 kilometres of twin rail tunnels (two tunnels located side-by-side) between Mowbray Road, Chatswood and Bedwin Road, Marrickville. The tunnel corridor extends about 30 metres either side of each tunnel centre line and around all stations.
- About 250 metres of above ground metro tracks between Chatswood Station and the northern dive structure.
- A northern dive structure (about 400 metres in length) and tunnel portal south of Chatswood Station and north of Mowbray Road, Chatswood.
- A southern dive structure (about 400 metres in length) and tunnel portal north of Sydenham Station and south of Bedwin Road, Marrickville.
- Metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street (Gadigal) and Waterloo, as well as underground platforms at Central Station and above ground platforms at Sydenham Station.
- Underground pedestrian links and connections to other modes of transport (such as the suburban rail network) and surrounding land uses.
- Services within each of the stations, including mechanical and fresh air ventilation equipment and electrical power substations.
- A permanent power supply from Surry Hills to Gadigal Station.
- A substation (for traction power supply at Artarmon).
- A services facility (for traction power supply and an operational water treatment plant) adjacent to the southern dive structure.

The Project was subject to assessment by the Department of Planning and Environment (DPE) and approval by the Minister of Planning under part 5.1 of the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act). An Environmental Impact Statement (EIS) was prepared in May 2016 to describe and assess the Project and recommend management measures to address impacts. The EIS went on public exhibition on 11 May 2016 and submissions closed on 27 June 2016. A Submissions and Preferred Infrastructure Report (SPIR) was prepared to document submissions made during the EIS public display and provide responses to each submission. The impacts from operation of the Project are highlighted in the EIS and SPIR. As part of the EIS, a groundwater assessment was prepared (Technical paper 7 – Groundwater). Collectively, the EIS and SPIR will be herein referred to as the Environmental Assessment Documentation (EAD).

The Project was declared Critical State Significant Infrastructure (CSSI) and approval was granted by the Minister of Planning in 9 January 2017 (CSSI 7400), including the following modifications (Development Consent):

- MOD 1 – Victoria Cross and Artarmon Substation (approved 18 October 2017)
- MOD 2 – Central Walk (approved 21 December 2017)
- MOD 3 – Martin Place Metro Station (approved 22 March 2018)
- MOD 4 – Sydenham Station and Metro Facility South (approved 13 December 2017)
- MOD 5 – Blues Point Acoustic Shed (approved 2 November 2018)
- MOD 6 – Administrative Changes (approved 21 February 2019)
- MOD 7 – Administrative Changes (approved 24 June 2020)
- MOD 8 – Blues Point Access Site (approved 25 November 2020)
- MOD 9 – Extension to standard construction hours (approved 30 June 2022).

1.4. Plan scope and objectives

This Plan addresses traffic and transport impacts associated with the Operation and Maintenance phase of the Project (O&M).

The key objective of the TTMP is to ensure all EAD, mitigation measures and licence/permit requirements relevant to traffic and transport are described, scheduled and assigned responsibly, as outlined in:

- The EAD prepared for the Project
- CSSI 7400 Approval
- NSW EPA Environment Protection Licence (EPL)
- All relevant legislation and other requirements described in Section 3.1.

Other objectives of this TTMP are to ensure:

- Traffic and Transport requirements relevant to Operations and Maintenance are clearly identified.
- Outline systems that will be used to support Traffic and Transport management.
- List all environmental aspects and impacts related to Traffic and Transport (with risks and opportunities) and significant related impacts associated with the work.
- Document procedures to be followed to manage the identified aspects and significant impacts, risks and opportunities.
- Clearly indicate the respective environmental management roles and responsibilities of MTS.
- To comply with the relevant requirements of the NSW Government Environmental Management System Guidelines (3rd Edition) (August 2013).

1.5. Sydney Metro context

Sydney Metro is Australia's biggest public transport project.

With the opening of the Chatswood to Sydenham line in August 2024, Sydney has 21 metro stations, revolutionising the way Australia's biggest city travels. Metro means a new generation of world class fast, safe, and reliable metro trains easily connecting customers to where they want to go. Customers don't need timetables – they just turn up and go.

With Sydney Metro's extension into the central business district (CBD) in August 2024, metro rail runs from Sydney's booming Northwest (NW) region, under Sydney Harbour, through new underground stations in the CBD and eventually beyond to the city's southwest.

There will be ultimate capacity for a metro service every two minutes in each direction under the city, carrying around 40,000 customers per hour, a level of service never before seen in Sydney and in line with other metro systems worldwide.

Sydney's first phase of the metro and Australia's first driverless railway, the Metro Northwest Line, opened on 26 May 2019. Services at the 13 metro stations currently operate every four minutes in the peak in each direction.

The 30-kilometre City & Southwest extension will run from the end of the Metro North West Line at Chatswood, under Sydney Harbour, through the CBD and eventually on to Bankstown with seven new metro stations and 11 upgraded stations.

This extension enables a seamless customer experience on the metro, with NRT Group and its Core Contractors, Mass Transit Railway (MTR) Australia as the Integrator and MTS as the Operator & Maintainer Contractor, responsible for delivering an expanded fleet of new metro trains and the core rail systems, as well as operations and maintenance for a period of 10 years.

2. Consultation

In accordance with CoA D3 of the Project's Development Consent, the TTMP must be prepared in consultation with the Customer Journey Planning (CJP), formerly Sydney Coordination Office (SCO), the Relevant Road Authority and non-private transport operators. MTS presented the TTMP to the Traffic and Transport Liaison Group (TTLG) on the 29th of May 2024. The TTLG is composed of parties from the consultation group listed above, therefore this presentation served as MTS' stakeholder consultation. Key issues raised from the consultation are listed below. The TTMP presentation is shown in Appendix D. Furthermore, this TTMP is also being created with the Sydney Metro Authority included within this consultation. Appendix E contains the agenda and attendees of the TTLG for the 29th of May, as well as the minutes from the meeting showing any comments raised from the TTMP presentation. It also contains the email sent from MTS to SMA with the TTMP attached for distribution to the TTLG attendee who requested a copy of the TTMP, therefore closing out all comments raised from the consultation.

Table 2-1 details consultation status and key issues raised.

Table 2-1: Consultation details

Agency	Key issues raised	MTS update	Date Closed
CJP	CJP requested a copy of the TTMP (v2) which was emailed to them on 29 th May, 2024	N/A	26 th June, 2024
Relevant Road Authority	TTLG Meeting on 29 th May, 2024 (reviewed TTMP v2)	N/A	26 th June, 2024
Non-private transport operators	One member of the TTLG requested a copy of TTMP v2	N/A	26 th June, 2024
Sydney Metro Authority	Formatting and text issues.	Sydney Metro reviewed TTMP V3 has confirmed that it is satisfied that all consultation has been adequately closed out, to fully address DPHI comment #4.2	2 nd August, 2024
DPHI	Comment 4.1 – This plan does not adequately reflect the interim arrangements that will be in place at first passenger services. Text needs to be added to this plan explaining that there will be interim arrangements as agreed with the Planning Secretary. A copy of that agreement should also be appended to the subplan once it becomes available.	See Section 4.3 which outlines information regarding Day 1 interim arrangements. See Appendix F which displays the final and endorsed Day 1 interim arrangements for the Metro stations.	2 nd August, 2024
DPHI	Comments 4.2 – Section 2 and 'Table 2-1: Consultation Details' do not provide adequate close out of consultation with government agencies/stakeholders. Please provide details of the consultation for each agency and stakeholder in the manner prescribed by condition A9 of the approval. As DPHI is not the approval authority for this document, Sydney Metro is responsible for satisfying itself that all	Section 2 and Table 2.1 reflects further external consultation details. Appendix E now displays the agenda, attendees and minutes of the TTLG meeting from the 29 th May where MTS presented the TTMP. Appendix E also shows communication between MTS, SMA and an attendee of the TTLG regarding their comment on the TTMP.	2 nd August, 2024

Agency	Key issues raised	MTS update	Date Closed
	consultation has adequately closed out and the subplan should reflect this.		

2.1. TTMP submission and publication

The OEMP and its sub-plans (including this TTMP) was submitted to the DPHI for information one (1) month before the commencement of operation..

The OEMP will also be made publicly available on the MTS website once DPHI have given final approval of the plan to satisfy the requirement of CoA D8 of the Project's Development Consent.

3. Statutory requirements

3.1. Legal and other obligations

The legislation, guidelines and policies considered during development of this Plan are listed below.

- *Disability Discrimination Act 1992*
- *Sydney's Cycling Future* (Transport for NSW, 2013c)
- *Disability Standards for Accessible Public Transport 2002*
- *Australian Standards AS1742, AS 1743 and AS 2890*
- *Austroads' levels of service.*

3.2. Development consent conditions

The Project was declared Critical State Significant Infrastructure (CSSI) and approval was granted by the Minister of Planning in 9 January 2017 (CSSI 7400). The conditions of approval (CoAs) include traffic and transport management requirements to be addressed in the operation phase of the Project. These requirements, and how they are addressed are provided within Table 2 (Compliance Table).

3.3. Revised environmental mitigation measures

Revised environmental mitigation measures (REMMs) associated with operational traffic and transport are listed in the SPIR and outlined in Table 3-1.

Table 3-1: REMMs associated with operational traffic and transport

REMM	Requirement	Document Reference
OpT1	Enhancement of pedestrian infrastructure in the vicinity of Victoria Cross and Martin Place stations would be investigated further in consultation with (as relevant to the location) the CBD Coordination Office, Roads and Maritime Services and the relevant local council. (Victoria Cross Station and Martin Place Station)	Sections 4.2.2 and 4.2.4
OpT2	Access would be maintained to neighbouring properties.	Section 5
OpT3	The design of the interface between the Frank Channon Walk extension and the signalised intersection at Mowbray Road / Hampden Road (including any shared zone proposal) would be developed in consultation with Roads and Maritime Services and Willoughby Council. (Chatswood Dive Site).	Section 4.2.9
OpT4	Transport for NSW would work with local councils to minimise adverse impacts of operation on parking and other kerbside use in local streets, such as loading zones, taxi zones and coach zones.	Section 4
OpT5	During detailed design, Transport for NSW would consult with Inner West Council, Roads and Maritime Services and other stakeholders on strategies to reduce the	Section 4.2.10

REMM	Requirement	Document Reference
	number of staged pedestrian marked foot crossings at the Edinburgh Road / Edgware Road intersection. (Marrickville Dive Site).	

3.4. Revised environmental performance outcomes

Operational desired performance outcomes associated with operational transport and traffic are listed in the SPIR and detailed in Table .

Table 3-2: Operational desired performance outcomes associated with transport and traffic

Desired performance outcome	Environmental performance outcome	Document reference
Transport and traffic Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts. The safety of transport system customers is maintained. Impacts on networks capacity and the level of service are effectively managed. Works are compatible with existing infrastructure and future transport corridors.	<ul style="list-style-type: none"> The Project would appropriately integrate with existing and planned future transport infrastructure including active transport Access to properties would be maintained Metro customers would be provided with a safe and secure service The Project would reduce station crowding, increase rail networks reach and use, improve network resilience, and improve travel times within the global economic corridor. 	Sections 4 and 5

3.5. Roles and responsibilities

Key roles and responsibilities applicable to this Plan are presented in Table 3-. Further details regarding roles and responsibilities are outlined in Section 5.1 of the OEMP.

Table 3-3: Roles and Responsibilities

Roles	Responsibilities
Learning & Development Manager	<p>Work with Environment & Sustainability Advisor to develop training packages addressing environmental risk.</p> <p>Develop and implement the training delivery schedule for the O&M Phase, including environmental and sustainability aspects</p> <p>Operate reasonably independently, in accordance with MTS's policies; quality, safety and environmental management systems; processes and relevant legislation.</p>
Head of Safety, Quality, Risk & Environment	<p>Be an emergency contact and available to be contacted by EPA, DPIE and The Sydney Metro Authority Representatives on a 24-hour basis.</p> <p>Provide environmental oversight, direction and leadership regarding the environmental and sustainability management of the Project.</p> <p>Support the CEO-MTS on MTS operations and the management of stakeholders including, The Sydney Metro Authority, EPA and other State and Federal government bodies and other government agencies.</p> <p>Review the Project's management systems and key management plans to ensure and maintain compliance with the requirements of the MTS IMS, CoA and EPL.</p>

Roles	Responsibilities
Environment & Sustainability Advisor	<p>Ensure environmental incidents are managed and reported (to DPIE, EPA and Parent Companies) in accordance with the planning approval and EPL requirements.</p> <p>Obtain all required approvals to facilitate O&M of the Project, including but not limited to the EPL.</p> <p>Undertake environmental risk assessment, and revisit this through the life of the project through continual review and improvement processes within the IMS.</p> <p>Key point of contact for environmental and planning approvals and sustainability stakeholders, including but not limited to DPIE, EPA, ISCA.</p> <p>Be an emergency contact and available to be contacted by EPA, DPIE and The Sydney Metro Authority Representatives on a 24-hour basis.</p> <p>Notify MTS, OpCo2 and agencies as required in response to environmental incidents and potential incidents.</p> <p>Identify and maintain a register of relevant legal, MTS IMS requirements, contractual and other requirements.</p> <p>Obtain all necessary approvals prior to commencing relevant works.</p> <p>Ensure the project induction includes appropriate training regarding the requirements of this OEMP, the EPL and any other key obligations.</p> <p>Ensure identified risks are analysed and evaluated according to agreed criteria. Regularly review identified risks and controls and maintain a risk register.</p> <p>Ensure regular inspections, observations, monitoring and audits are conducted to check the effectiveness of controls and that compliance is maintained.</p> <p>Review subcontractors' performance and compliance with MTS environmental and sustainability requirements.</p> <p>Enter and close out all environmental incidents in the O&M Phase Reporting System.</p> <p>Identify and implement corrective and preventative actions after incidents and share lessons learned within the MTS team or other projects, as applicable.</p>
GM Safety, Quality, Risk & Environment	<p>O&M related investigations, compliance inspections, and data and trend analysis to mitigate safety and environmental risks.</p> <p>Maintain MTS compliance with relevant environmental standards, and legal and regulatory requirements.</p> <p>Support the Head of Safety, Quality, Risk & Environment with the delivery of key O&M milestones in alignment with MTS legal and regulatory requirements, business objectives and key performance indicators.</p> <p>Ensure preventative and corrective actions requested are completed within appropriate timeframes through efficient monitoring.</p> <p>Expected to operate reasonably independently, in accordance with MTS's policies; quality, safety and environmental management systems; processes and relevant legislation.</p>
GM Engineering & Maintenance Delivery	<p>Responsible for establishing and executing O&M asset management strategy and asset management plan in adherence to the OEMP.</p>
Head of Asset Management	<p>Expected to operate reasonably independently in accordance with MTS's policies, Integrated Management System, processes, Safety Management System and relevant legislation.</p>

Roles	Responsibilities
Infrastructure Engineering Manager	Expected to operate reasonably independently in accordance with MTS's policies. SQRE management system, processes, and relevant legislations.
Infrastructure Delivery Manager	Expected to operate reasonably independently in accordance with MTS's policies. SQRE management system, processes, and relevant legislations.
Head of Strategy, Corporate Relations & Communications	Providing the delivery of internal and external communication (media, government, and stakeholder relations).

3.6. Training

All employees, contractors and utility staff working on the Project will undergo site induction training, in accordance with the Training Management Plan and Section 5.2 of the OEMP. The site induction training will provide initial training on various environmental aspects, including traffic and transport management issues/measures.

Records will be kept of all personnel undertaking the site induction training, including the contents the training, date and name of trainer/s.

Targeted training or specific training will also be provided to personnel with a key role in traffic and transport management, if required.

4. Traffic and transport management strategy

4.1. Strategic traffic and transport impacts

The Project's design aims to avoid or reduce impacts associated with operational traffic and transport. It would improve road traffic conditions by providing a convenient and efficient travel alternative to the use of private car.

The strategic traffic and transport related impacts and benefits of the operation of the project are outlined below.

- Catering for growth in demand.
 - Demand for rail services in Sydney is projected to grow by about 100,000 trips in the AM peak hour by 2036.
- Increased accessibility and trip diversity.
 - Sydney Metro City & Southwest would increase the network rail catchment through the provision of:
 - New stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street (Gadigal), and Waterloo as well as new underground platforms at Central Station and aboveground platforms at Sydenham Station.
 - More direct connections to high-capacity Sydney CBD stations at Martin Place and Pitt Street (Gadigal).
 - Additional interchange capability at Central, Martin Place, Sydenham and Bankstown, enabling increased network connectivity and demand for rail services.
- Reduce train crowding.
- Decreased station crowding.
- Improved conditions for bus customers.
 - Sydney Metro City & Southwest is part of an integrated public transport network with high-quality bus connections to the stations and easy transfers for customers travelling to and from locations beyond walking distance.
- Improved conditions for road users.
 - By encouraging people to use the metro network, Sydney Metro City & Southwest would reduce the number of trips that would otherwise be made on the road network.

Traffic and transport performance outcomes will be validated through operational monitoring and audits, as detailed in Sections 6.1 and 6.3, while commitments and mitigation measures outlined in the EIS for operational traffic and transport performance are achieved through the nominated design features within each subsection as outlined in Section 4.2. Ongoing risk analysis including supplementary analysis and modelling, will also be carried out through operational monitoring once the project is operational, as detailed in Section 5.

4.2. Location and transport integration of each Metro Station

Interchange Access Plans (IAPs) have been developed for each station by applying broad transport and access standards, guidelines, principles and strategies specific to the specific physical and operating environment of the interchange. It consolidates the requirements and aspirations for good customer transfer and identifies potential barriers or risks to achieving them, considering anticipated patronage and movement patterns once metro services are in operation.

The IAPs have been prepared to:

- Respond and comply with CoA E92.
- Provide detailed interchange deliverables.
- Inform the interchange design of transport and access facilities, including footpaths, cycle paths and bike parking, bus stops (temporary transport requirements considered), and car parking.
- Identify customer amenities, shelter, road and traffic management required to ensure easy, accessible, safe and efficient customer transfer.

The plans aim to ensure customers journey is seamless and well integrated across all connecting modes, and that access to/from the metro from other models is easy, efficient and safe. In order to facilitate a range of trips across the multiple of destinations, the Project's stations will act as both origins and destinations for these trips. Each station will vary to the extent that it is a trip origin or destination throughout the day. Some stations will also have a significant internal transfer role between transport modes with a focus on connecting services for customer journeys across Sydney. These network nodes are functionally important for supporting the delivery of efficient travel across the transport network.

Due to the location of each station, particularly within the Sydney CBD, in general, metro customers are not expected to access by driving their car. No car parking is to be provided at any of the metro stations between Chatswood and Sydenham.

All customer designed bike parking area aligned with customer demand profiles, aimed to offer appropriate choices, manage access and network impacts and enable increases in the typical station catchment size.

During operation, the stations will also provide access for operations and maintenance activities. Sufficient space will be provided for the accommodation of buses in the event of planned or unplanned disruption of normal operations.

Transport modes serving each station are shown in Table 4-1.

Table 4-1: Transport modes serving each station

Station	Walking	Cycling	Trains	Light rail	Bus	Ferry	Coaches	Taxi	Kiss-and-ride
Chatswood	✓	✓	✓		✓		✓	✓	✓
Crows Nest	✓	✓			✓			✓	✓
Victoria Cross	✓	✓			✓			✓	✓
Barangaroo	✓	✓			✓	✓	✓	✓	✓
Martin Place	✓	✓	✓		✓			✓	
Gadigal	✓	✓		✓	✓			✓	
Central	✓	✓	✓	✓	✓		✓	✓	✓
Waterloo	✓	✓			✓			✓	✓
Sydenham	✓	✓	✓		✓			✓	✓

4.2.1. Crows Nest Station

Crown Nest Station is located south-east of the St Leonards strategic centre and will provide new options for customers to travel to and from the area.

Table 4-2 summarises the station's features.

Table 4-2: Crows Nest Station features

Feature	Description
Station entry	<ul style="list-style-type: none"> An eastern entry on the corner of Hume Street and Clarke Street A western entry on the Pacific Highway towards Oxley Street.
Transport interchange	Walking, cycling, bus, taxi and kiss-and-ride.
Main features and traffic arrangement	<ul style="list-style-type: none"> Upgraded signalised pedestrian crossing and widened pedestrian crossing at the Pacific Highway/Oxley Street intersection. Formal pedestrian crossings on Clarke and Hume streets Widened pedestrian crossing at the Pacific Highway/Hume Street intersection New bike parking on the corner of Hume Street and the Pacific Highway A new separated cycleway on Hume Street New kiss-and-ride bays on Oxley Street New taxi bays on Clarke Street Implement a changed traffic configuration from a two-way operation to a one-way westbound operation on Hume Street between Pacific Highway and Clarke Street. Existing bus stops close to the station retained and relocated on the Pacific Highway Enhancement of pedestrian crossings at intersections of Oxley Street, Pacific Highway, Hume Street and Clarke Street. Site A and B will have a Class A hoarding after Day 1
Customers	Local retail, leisure, residential and existing employment precincts.

Figure 4-1 provides the station overview.

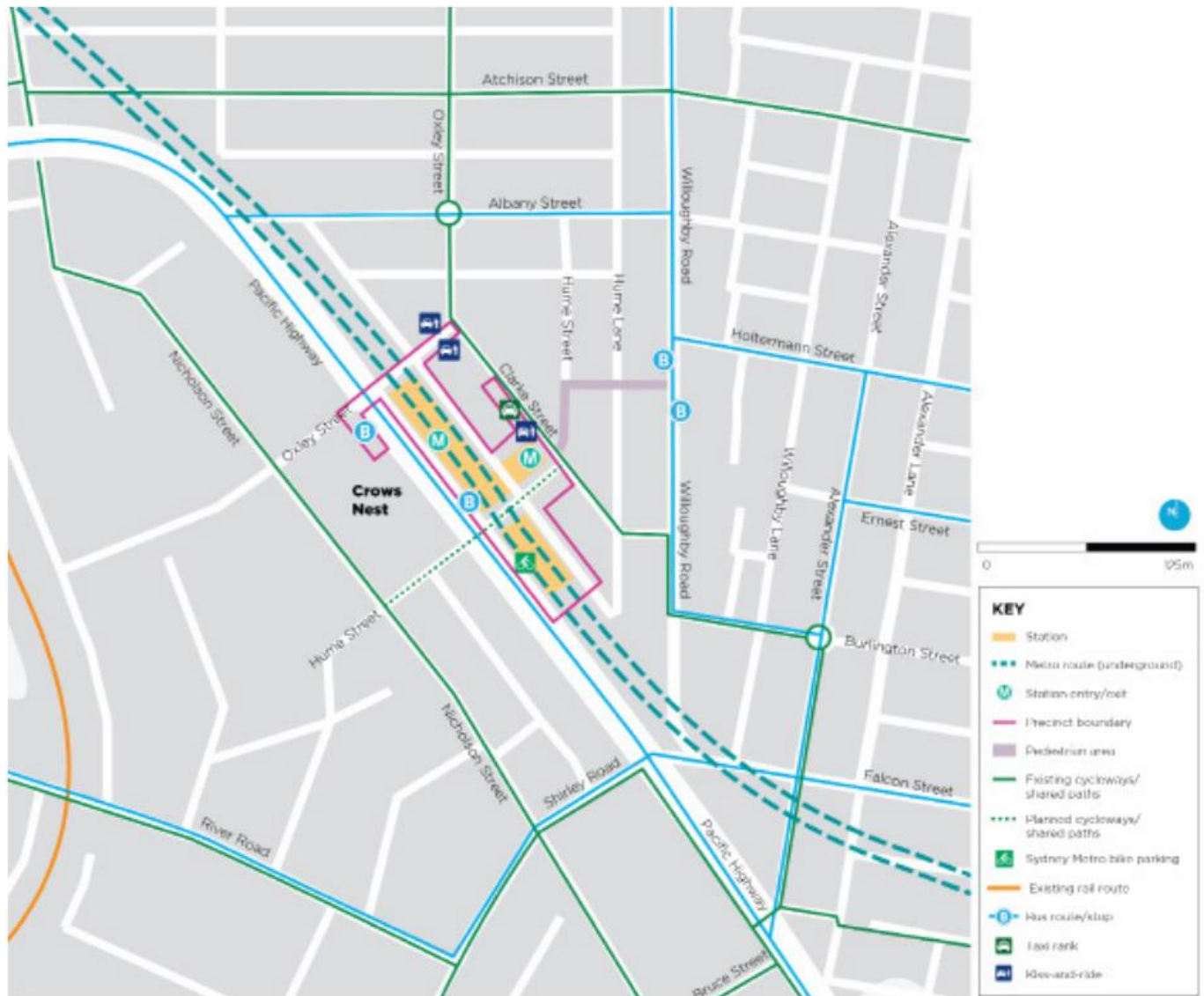


Figure 4-1: Crows Nest Station overview (Source: Interchange Access Plan, Crows Nest, February 2022)

4.2.1.1. Passenger Demand

Forecasts for the 2036 AM peak hour indicate that Crows Nest Station would see approximately 4,600 metro customers boarding and around 5,650 customers alighting, reflecting the mixed-use nature of the area serving both residents and commercial workers.

The forecast arrival modes for the station are:

- Walking – 75 per cent
- Cycling – 1 per cent
- Bus – 17 per cent
- Kiss-and-ride – 7 per cent.

The 2036 AM peak hour demand profile and customer connectivity profiles show the following characteristics:

- Majority of customers accessing and egressing the station by walking.
- Bus makes up a higher access mode than it does for egress mode.
- These observed trends are likely to be reversed in the PM peak.

This demonstrates the need to provide appropriate pedestrian facilities in the vicinity of the site and efficient and seamless transfer between bus stops in the precinct and station entrances.

4.2.1.2. Pedestrian Integration

Patronage forecasts indicate that the station would significantly increase pedestrian flows in the local precinct.

Patronage analysis of the station and streetscape indicates there would be limited impacts to pedestrians and road traffic due to the presence of the station. As a suburban station, the patronage is significantly lower than most Sydney CBD stations, with anticipated volumes being less than 10 people per minute along most footpaths and crossings.

Except for some locations, the majority of footpaths in the area would continue to operate frequently. In both the AM and PM peak periods, the most heavily used footpaths and crossings to access the station would include:

- Oxley Street (southern side) between Clarke Street and Pacific Highway immediately around the station entry
- North-south pedestrian crossing at the intersection of the Pacific Highway and Oxley Street
- Pacific Highway (eastern side) north of Oxley Street

Pedestrian arrivals and departures are expected to be the highest proportion of journeys to and from the station.

The station provides a reduction in the amount of space allocated to vehicles, and the reallocation of space to pedestrians to support increased pedestrian volumes within the precinct. The reallocation of road space will display:

- Increased building setbacks resulting in more space for footpaths.
- New cycleway on Hume Street between Nicholson Street and Clarke Street.
- Reduction of space allocated to roads due to new Clarke Lane shared zone, increased footpath space and new Hume Street cycleway.

Previously to the Project, there were no formal pedestrian crossings on Hume Street, Clarke Street, Clarke Lane or Oxley Street. The Project provides improvements to the pedestrian crossing (signalised and zebra) at surrounding intersections resulting in direct paths of travel along pedestrian desire lines, such as:

- Upgraded signalised pedestrian crossing and widened pedestrian crossings at the Pacific Highway/Oxley Street intersection.
- Formal pedestrian crossings on Clarke Street and Hume Street.
- Widened pedestrian crossing at the Pacific Highway/Hume Street intersection.

It is important to note that for a short period of time a construction hoarding will be installed around the station building which could potentially affect pedestrian movements. Safe pedestrian movement will be ensured and signalised.

4.2.1.3. Cyclist Integration

The station is located close to a well-connected cycle network that links St Leonards, Crows Nest and Cammeray.

An existing on-road marked bicycle route along Clarke Street, directly adjacent to the metro station would provide convenient connections to the cycle routes that are currently well used by cyclists.

The following have been provided to enable efficient cyclist access to the station:

- A new separated on-road cycle route on Hume Street between Clarke Street and Nicholson Street.
- Cycle parking located on Pacific Highway, south of Hume Street (Class B: for about 146 bicycles and weather protected).
- Cycle parking on the footpaths near the station entrances (Class C: for about 30 bicycles and bike parking hoops).

4.2.1.4. Public transport Integration

The existing bus network in the vicinity of the station currently has comprehensive coverage of the potential catchment for the proposed station. The existing bus network, with bus stops located on the Pacific Highway, within 100 metres of the station entrances would provide convenient access to Crows Nest Station. Short and convenient links between bus services and the station would be available via the existing bus facilities in the vicinity of the site.

The following improvements have been implemented:

- The northbound bus stop on the Pacific Highway will be relocated from near Hume Street to south of Oxley Street (minimum 40 metres bus zone).

- The southbound bus stop on the Pacific Highway north of Hume Street will be reinstated (minimum 40 metres bus zone).

4.2.1.5. Road Network Integration

Crows Nest currently experiences low to moderate levels of traffic congestion during peak periods, particularly along the Pacific Highway. Traffic forecasts indicate moderate growth between now and 2036, with traffic demand estimated to grow by approximately 16 per cent by 2036.

To cater for the expected low volume of customers wanting to kiss-and-ride at the station, facilities are provided as per the following:

- Timed accessible space on the western side of Clarke Street, north of the station entrance.
- A taxi rank on the western side of Clarke Street between Oxley Street and Hume Street.
- Kiss-and-ride facilities on the northern and southern sides of Oxley Street between Clarke Lane and Clarke Street, with a minimum of six spaces to accommodate forecast activity during peak periods and appropriate consideration for provision levels outside of peak operating periods.

Review capacity and operation of the kiss-and-ride facilities and taxi spaces will be undertaken within 12 months after operation commences to ensure capacity accommodates demand.

A changed traffic configuration from a two-way operation to a one-way westbound operation on Hume Street between Pacific Highway and Clarke Street to enable Over Station Development (OSD) construction, safe movement of pedestrians and cyclists, and to support future placemaking opportunities.

Given the low forecast vehicular arrivals, the metro station is not anticipated to have a material impact on the operation of the road network in the vicinity of the station.

The operational performance of the Pacific Highway / Oxley Street intersection deteriorates marginally in the AM peak hour, however is unchanged in the PM peak hour. In both peak hours the intersection will operate with the upgraded signalised pedestrian crossing. Therefore, it can be concluded that the introduction of a pedestrian crossing across the northern arm of the Pacific Highway in the vicinity of the station would have a minimal impact on the local road network. Further, the addition of a signalised pedestrian crossing on this arm of the intersection improves the level of access of pedestrians travelling to or from the northwest corner of the intersection.

4.2.2. Victoria Cross Station

Victoria Cross Station is located within the North Sydney CBD, to the north of the existing North Sydney Station, providing an alternative station for travel to and from the area. The station is in close proximity to a number of educational institutions and mixed employment areas along Miller Street, Walker Street and the Pacific Highway.

Table 4-3 summarises the station's features.

Table 4-3: Victoria Cross Station features

Feature	Description
Station entry	<ul style="list-style-type: none"> • Victoria Cross north which is accessible from Miller Street near McLaren Street • Victoria Cross south which is accessible from Miller Street and Denison Street, between the Pacific Highway and Berry Street.
Transport interchange	Walking, cycling, bus, taxi and kiss-and-ride.
Main features and traffic arrangement	<ul style="list-style-type: none"> • New bike parking • New kiss-and-ride bays on McLaren Street • Bus stops on Miller Street near the northern and southern entrance • Wayfinding signage and Sydney Metro information within the North Sydney CBD • Enhancement of pedestrian infrastructure around the station. • Some finishing works will still be undertaken on Miller Street after day 1
Customers	Employment, education and residential precincts.

Figure 4-2 provides the station overview.

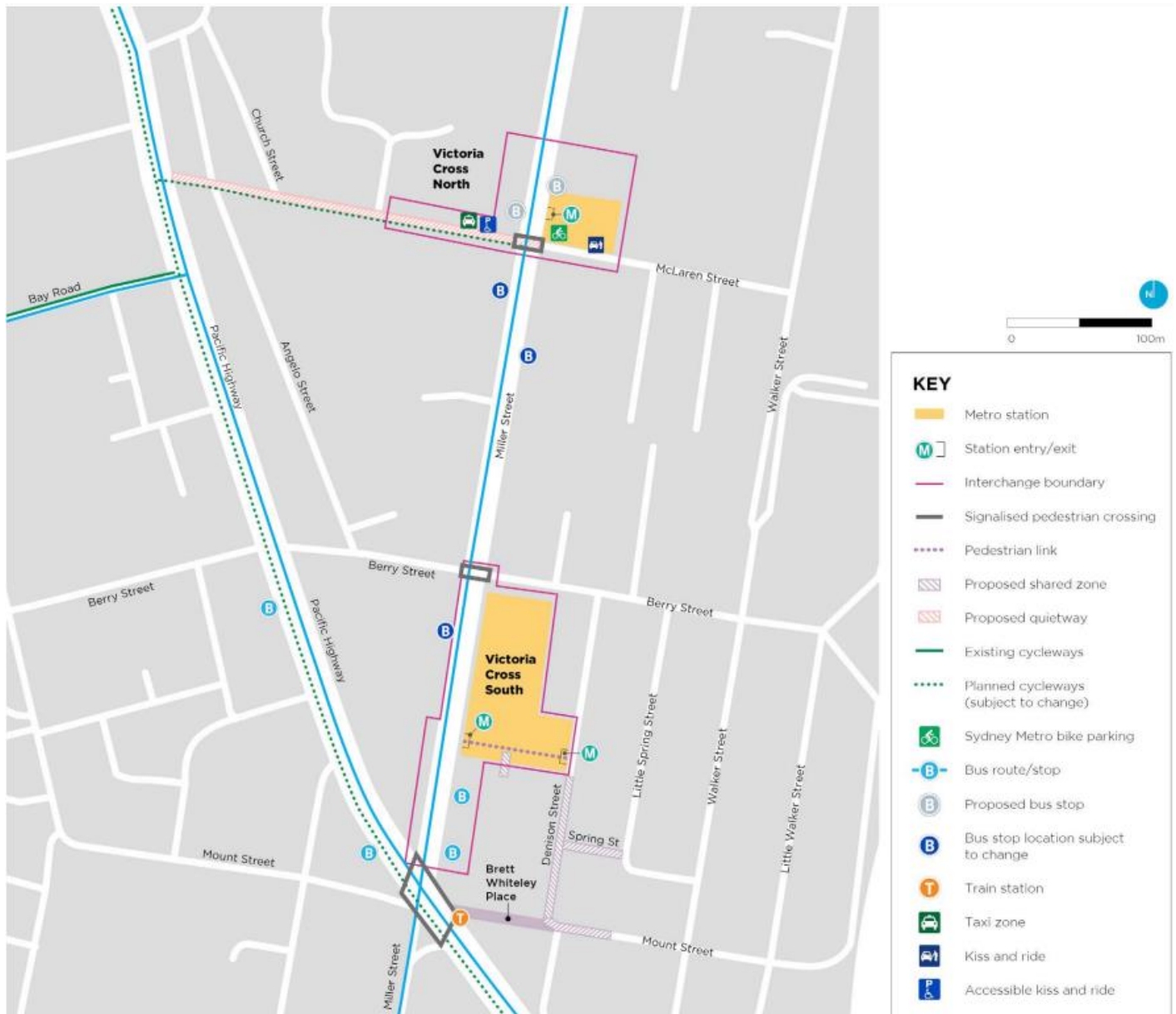


Figure 4-2: Victoria Cross Station overview (Source: Interchange Access Plan, Victoria Cross, February 2023)

4.2.2.1. Passenger demand

Forecasts for the 2036 AM peak hour indicate that Victoria Cross Station would see approximately 4,700 customers boarding and approximately 23,000 customers alighting.

The forecast modes of arrival at the station are:

- Walking – 67 per cent
- Bus – 26 per cent
- Kiss-and-ride – 6 per cent.

The 2036 AM peak hour demand profile and customer connectivity profiles show the following characteristics:

- Majority of customers accessing and egressing the station by walking.
- Bus makes up a higher access mode than it does for egress mode.
- Kiss-and-ride represents a small portion of the total demand generated by customers boarding metro services.
- These observed trends are likely to be reversed in the PM peak.

4.2.2.2. Pedestrian Integration

With a strong existing public transport network of bus and rail, the areas of employment, residential and educational land-uses generate a high volume of localised pedestrian trips accessing public transport modes.

Strong pedestrian desire lines are anticipated from the cluster of bus stops along Miller Street, and the educational facilities to the west. Mount Street also acts as a key pedestrian route to provide east-west access to the commercial uses on either side of the Pacific Highway.

The high proportion of walking journeys expected at the Victoria Cross Station means the pedestrian movement and access to the site has been considered a priority as part of the station design. The following design features have been created to ensure smooth interchange for pedestrians:

- A pedestrian plaza forming the access to the station from Miller Street and Berry Street.
- Direct pedestrian links to Denison Street, providing access to and from the commercial area to the east of the station.
- Wayfinding signage and Sydney Metro information within the North Sydney CBD.

The station supports a reduction of in the amount of space allocated to building footprint and the reallocation of space to pedestrians given the increased pedestrian volumes within the precinct.

Pedestrians safety is ensured via providing:

- Safe integration with existing networks.
- Controlled/signalised direct paths of travel along pedestrian desire lines within low speed environments.

Improvements to pedestrian movements include:

- Widened crossings at Berry Street and Miller Street intersection.
- Safe and efficient access to the southern station entrance to Denison Street as part of public domain works.
- Widened crossing at Pacific Highway at Miller Street intersection.
- Widened crossing at McLaren Street and Miller Street intersection.

It is important to note that for a short period of time, construction hoarding will be installed around the station building which could potentially affect pedestrian movements. Safe pedestrian movement will be ensured and signalised.

4.2.2.3. Cyclist Integration

Existing on road bicycle routes along the Pacific Highway, Berry Street, Angelo Street and Miller Street would provide convenient cycle access to the station. Existing cycle parking facilities located on Mount Street (adjacent to the subsurface entrance to Greenwood Plaza) would also be available to metro customers.

These existing facilities would be complimented by additional cycle parking on Miller Street to the north of the station entrance.

The following have been provided to enable efficient cyclist access to the station:

- Secure bike parking (class B) for a minimum of 160 bike parking spaces.
- Bike rails (Class C) for a minimum of 40 bike parking spaces.

4.2.2.4. Public transport Integration

A number of bus routes operate outside of Victoria Cross Station along Miller Street. These bus routes serve northern and northern beaches suburbs along Pacific Highway, Willoughby Road and Military Road.

Bus services shall be easily and visibly accessible from the station entrance, located as close as feasible to the gateline and no more than 10 metres away. Customer will be able to transfer between bus stops at the station entries using existing footpaths.

New bus stops (40 metres in length) have been provided outside of Victoria Cross North, on both sides of Miller Street.

4.2.2.5. Road network Integration

Existing taxi ranks are located at:

- Miller Street South of Berry Street.

- McLaren Street east of Miller Street.

There are no existing kiss-and-ride or park-and-ride facilities, and there is an accessible parking area in McLaren Street.

The existing taxi stands have been maintained and a taxi rank have been provided on the north side of McLaren Street, west of Miller Street.

Five kiss-and-ride spaces have been provided on the north side of McLaren Street, east of Miller Street, near the intersection of Victoria Cross North.

Given the low forecast vehicular arrivals (around six per cent), the metro station is not anticipated to have a material impact on the operational performance of the road network in the vicinity of the site during operation.

4.2.3. Barangaroo Station

Barangaroo Station is located at the northern end of Hickson Road, south of Munn Street, in Millers Point. The station will improve access to the Walsh Bay Arts and Culture Precinct, as well as providing easy access to Central Barangaroo, Barangaroo Reserve and Millers Point. The station will further reinforce the Sydney CBD as the anchor of global Sydney providing direct western access to the city.

Table 4-4 summarises the station's features.

Table 4-4: Barangaroo Station features

Feature	Description
Station entry	Entry via a new entrance located at the northern plaza at Barangaroo Reserve near Nawi Cove.
Transport Interchange	Walking, cycling, bus, coaches, ferry, taxi and kiss-and-ride.
Pedestrian environment	The overall pedestrian environment in the catchment accommodates pedestrian movement associated with commercial, mixed-use, residential, entertainment and tourist areas to the north, east and south of the station.
Main features and traffic arrangement	<ul style="list-style-type: none"> • DDA-compliant station entries to maximise accessibility for all customers • New marked pedestrian crossings on Hickson Road • New bike parking hoops for 110 bicycles • New bus bays on the western and eastern side of Hickson Road • New kiss-and-ride, taxi zone and coach bay on the western side of Hickson Road.

Figure 4-3 provides the station overview.

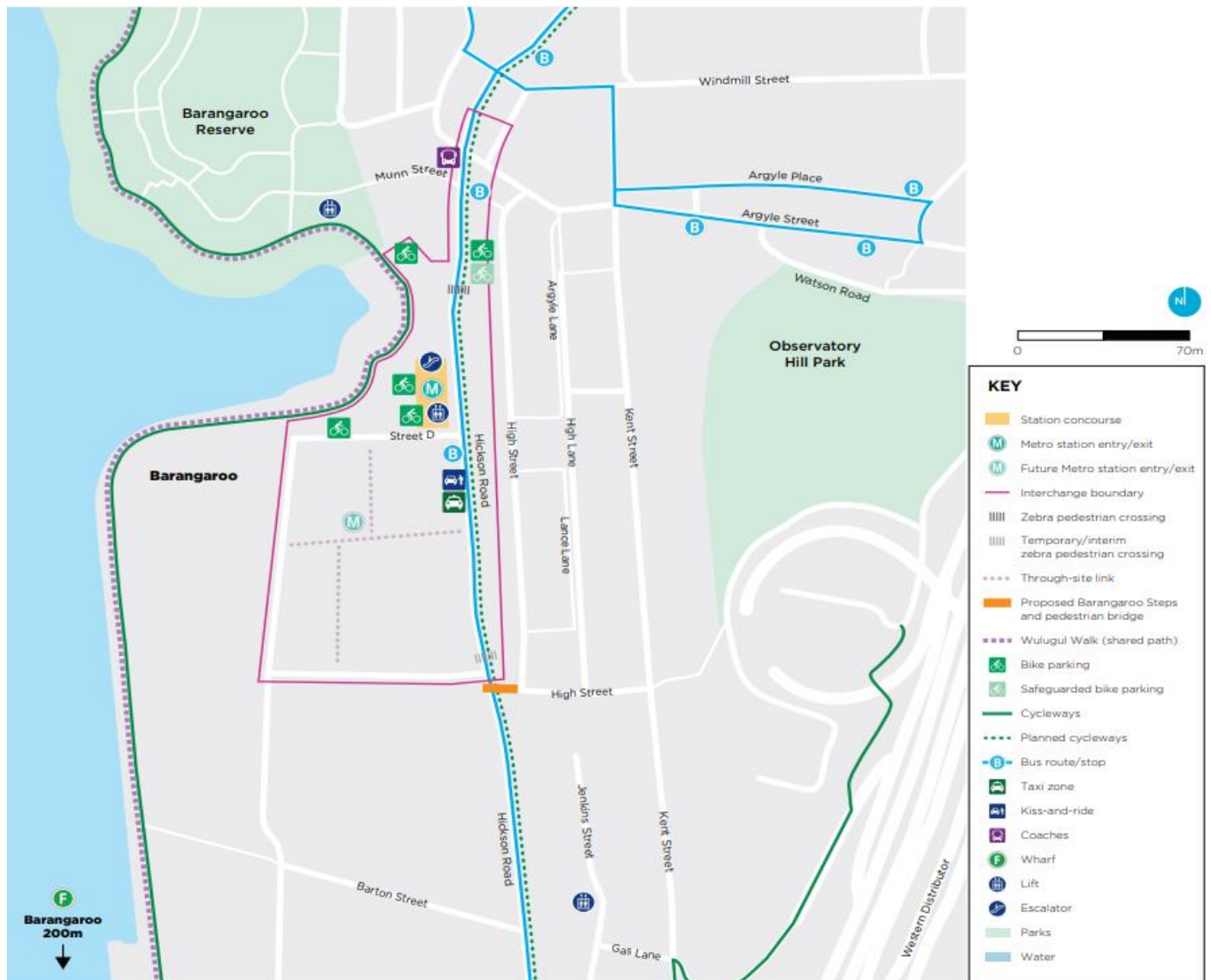


Figure 4-3: Barangaroo Station overview (Source: Interchange Access Plan, Barangaroo, September 2022)

4.2.3.1. Passenger demand

Forecasts for the 2036 AM peak hour indicate that Barangaroo Station would see approximately 900 metro customers boarding and approximately 6,525 customers alighting. This reflects the predominant commuter use of the station to access employment centres within Barangaroo and in the Sydney CBD.

The forecast modes of arrival at the station are:

- Walking – 57 per cent
- Cycling – 3 per cent
- Bus – 39 per cent
- Kiss-and-ride – 1 per cent.

It is anticipated that the majority of the departures from the station would be walking trips to local commercial buildings, with minimal transfer to bus or ferry and negligible volumes by private vehicle.

The 2036 AM peak hour demand profile and customer connectivity profiles show the following characteristics:

- Majority of customers accessing and egressing the station by walking. It is anticipated that the majority of the pedestrian departures would be walking trips to local commercial buildings, with minimal transfer to bus or ferry and negligible volumes by private vehicle.
- These observed trends are likely to be reversed in the PM peak.

4.2.3.2. Pedestrian Integration

Based on the future residential and employment populations for travel zones within the walking catchment of the proposed station, the forecast direction of walk only arrivals and departures indicates that arrivals to the station would be primarily from the south from future residents of Central Barangaroo and Barangaroo South precincts. Ninety per cent of all station exits during the morning peak hour are anticipated to travel to the south towards the Barangaroo South commercial precinct.

Pedestrians would use the footpaths along Hickson Road, as well as the new network of footpaths through Barangaroo South and the Foreshore Walkway.

The high proportion of walking journeys expected at the Barangaroo Station means the pedestrian movement and access to the station has been considered a priority as part of the design development. Pedestrian facilities in the vicinity of the station would be developed in consultation with Infrastructure NSW. At this stage, these include providing:

- A new marked raised pedestrian crossing on Hickson Road adjacent to the station plaza, north of the station entrance.
- A pedestrian footpath on the eastern kerb of Hickson Road from the High Street Stairs to the project boundary under Windmill Street. Provide a pedestrian footpath on the western kerb of Hickson Road from Street C to the project boundary under Windmill Street.
- Implement a proposed crowd-management plan at Barangaroo Station during major events.
- Improve existing wayfinding signage to the Cutaway lift and 30 the Bond to ensure customers are aware of existing access options.

4.2.3.3. Cyclist integration

An existing on-road cycle path exists along Hickson Road adjacent to the station. Cycle paths are also currently provided throughout Barangaroo Reserve and will be integrated within the Barangaroo development along the Wulugul Walk shared path to Pyrmont Bridge, which would provide additional cycle links to the station.

A new separated bi-directional on-road bicycle path has been provided along the eastern side of Hickson Road between High Street stairs and Windmill Street, which will be connected to existing cycling infrastructure.

To enable integration of these cycle paths with the station, cycle parking facilities have been provided in close proximity to the station entrance and the cycle network (along Street D). A minimum of 55 class C bike hoops have been provided with capacity for 110 bicycles, in addition to a safeguard for class B bike parking facility.

4.2.3.4. Public transport integration

A number of bus services operate along Hickson Road which provide interchange with metro.. Two new bus stops have been provided within the station interchange on Hickson Road:

- Hickson Road – one stop, northbound, south of Street D.
- Hickson Road – one stop, southbound, north of the station entrance, underneath Munn Street bridge.

Customer interchange with the Barangaroo Ferry Hub is via pedestrian footpaths along Wulugul Walk.

4.2.3.5. Road network integration

To cater for the very low volumes of customers anticipated to arrive or depart the station by car, the following have been provided south of the station entrance:

- A new taxi stand on the western side of Hickson Road south of Street D.
- A new kiss-and-ride facility located on the western side of Hickson Road south of Street D.

The mode split of customers entering and exiting the station by car is anticipated to be very low. As such, impacts on the road network are expected to be negligible.

4.2.4. Martin Place Station

Martin Place Station is a new underground station with direct connections to suburban and intercity services at the existing station at Martin Place. The station will service Sydney's financial district, the Macquarie Street civic precinct, the Pitt Street retail zone and Martin Place (Sydney CBD's primary east-west pedestrian corridor). Martin Place interchange overlaps with adjacent interchanges, such as Town Hall, Wynyard and St James stations.

Table 4-5 summarises the station's features.

Table 4-5: Martin Place Station features

Feature	Description
Station entry	<ul style="list-style-type: none"> A northern entry via a pedestrian plaza opening to Castlereagh, Hunter and Elizabeth streets A southern entry via a pedestrian plaza opening to Martin Place and Castlereagh Street An underground walkway will be provided from Martin Place to Hunter Street Retained underground pedestrian connection to the MLC Centre.
Transport interchange	Walking, cycling, bus, suburban rail, intercity rail and taxi.
Main features and traffic arrangements	<ul style="list-style-type: none"> New underground pedestrian link between the existing suburban and intercity Martin Place Station platforms and the metro station platforms New bike parking on Castlereagh Street at both station entries Existing bus stops retained on Elizabeth and Castlereagh streets Existing taxi ranks close to the station retained.
Customers	Employment, civic, commercial, retail, entertainment, and recreational precincts.

Figure 4-4 provides the station overview.



Figure 4-4: Martin Place Station overview (Source: Interchange Access Plan, Martin Place, April 2023)

4.2.4.1. Passenger demand

Forecasts for the 2036 AM peak hour indicate that Martin Place Station would see around 4,700 metro customers boarding and around 23,000 customers alighting. This reflects the heavy employment density within the precinct.

The forecast modes of arrival at the station are:

- Walking – 67 per cent
- Kiss-and-ride – 6 per cent
- Bus – 26 per cent.

The 2036 AM peak hour demand profile and customer connectivity profiles show the following characteristics:

- Majority of customers will egress the station during the AM peak hour.
- Majority of people egressing the station are walking.
- These observed trends are likely to be reversed in the PM peak.

4.2.4.2. Pedestrian integration

The station will support two new access points and a potential future access point as follows:

- A new northern access point south of Hunter Street between Castlereagh Street and Elizabeth Street.
- A new southern access point south of Martin Place between Castlereagh Street and Elizabeth Street.
- A potential future access point safeguarded to the south of O'Connell Street and/or to the west of Bligh Street.

As the station catchment has a high mode share for walking to bus and rail transfer, the interchange design has considered prioritizing pedestrian improvements, kerbside zones and ensuring a safe and convenient transfer between modes.

Direct pedestrian access is provided to Martin Place, which provides a pedestrianised eastwest link. Existing footpaths on Castlereagh and Elizabeth streets form north-south connections in the vicinity of the station. Signalised pedestrian crossings are located at Martin Place on Elizabeth Street and Castlereagh Street, as well as at the Hunter Street intersections with Elizabeth and Castlereagh Streets. In the vicinity of Martin Place, George Street is also pedestrianised as part of the CBD and South East Light Rail project which provides an additional pedestrian friendly link for passengers.

A new underground pedestrian link between the existing suburban Martin Place Station platforms and the metro station platforms is provided to facilitate suburban train – metro interchange without the need for customers to travel to the surface.

Transfer to and from bike parking has been provided on the footpath outside the northern and southern station entry. Transfer to and from light rail have been provided within the paid area and covers the T4 Eastern Suburbs and Illawarra Line, reducing congestion at Town Hall Station. Existing 'No parking' zones in close proximity to the station will be able to be used for kiss-and-ride and ride transfers.

The station has provided easy transfer to existing bus stops on Castlereagh and Elizabeth streets, which will be accessible via existing pedestrian desire lines. Easy access will also be available to existing taxi ranks and set-down areas:

- Pitt Street, between Hunter Street and King Street.
- Castlereagh Street between Hunter Street and King Street.
- Elizabeth Street between Hunter Street and King Street.
- Phillip Street north of Hunter Street adjacent to Chifley Square.

New pedestrian infrastructure has been provided, including:

- A 2.5 metre wide footpath extension along the eastern side of Castlereagh Street between (and including) Martin Place and the southern station entry including adjustments to traffic signal infrastructure.
- Widening of the southern leg of Castlereagh Street signalised crossing at Hunter Street intersection including changes to the associated line markings, kerb ramps and traffic signal infrastructure.
- Removal of existing concrete median-island and replacing with complaint line marking and upgrading kerb ramps to standard at the intersection of Elizabeth Street and Martin Place.
- Removal of existing concrete median-island along Elizabeth Street, near intersection with Hunter Street, and replacing with complaint line markings and upgrading kerb ramps to the standards.
- Safeguard for the future provision of pedestrian underground connections to Bligh Street and/or O'Connell Street, to connect with the future Hunter Street Station.

- A 'soft wall' opening to the concourse level of the Martin Place South to allow future access from the MLC Centre to be delivered by others.
- Close the non-DDA compliant existing underground pedestrian connections (Castlereagh Street stairs) from the existing Martin Place Station to Martin Place to align with CoS Martin Place vision.

4.2.4.3. Cyclist integration

Existing cycle networks and open space surrounding Martin Place Station includes:

- Separated bi-directional on-road cycleway on Pitt Street north-south cycleway between King Street and Bridge Street.
- Separated bi-directional on-road cycleway - King Street east-west cycleway between Pitt Street and Elizabeth Street.
- Shared paths through Hyde Park North and Hyde Park South.
- Shared path through The Domain.
- Dedicated bicycle parking on numerous footpaths.

A number of cycle facilities are currently being implemented as part of the City Centre Access Strategy in the Sydney CBD area which would improve safety and convenience for cyclists.

Some on-street cycle parking facilities are currently available at the intersection of Martin Place and Castlereagh Street. This facility could be used by metro customers.

To enable cycle interchange with the station, new cycle parking facilities with a minimum of 20 bicycle parking spaces (10 Class C bike hoops) have been provided on the footpaths immediately outside the Martin Place North plaza. A minimum of 4 bicycle parking spaces (2 Class C bike hoops) have also been provided on the footpaths immediately outside the Martin Place South plaza.

4.2.4.4. Public transport integration

Safe, convenient, efficient and sufficient pedestrian access and transfer to and from the station and between transport modes was developed through the design process.

A new underground pedestrian link between the existing Martin Place train station platforms and the Martin Place Metro station platforms have been provided, ensuring convenient integration between suburban rail and the metro.

A number of bus routes operate within the vicinity of Martin Place Station, particularly along Elizabeth and Castlereagh streets, Elizabeth Street is a key north-south bus route through the Sydney CBD. Castlereagh Street is also a designated north-south bus route. These bus routes, and associated bus stops would provide convenient interchange opportunities between bus and metro services. Customers transferring from nearby bus services and Sydney Metro (and vice-versa) will use existing footpaths, signalised intersections, and subterranean connections to safely transfer between modes.

The northern station entrance on Castlereagh Street would provide a connection to the new light rail station located on George Street, near its intersection with Hunter Street. Alternatively, connections could be made from the southern station entrance, along Martin Place and the pedestrianised George Street. This would provide an appropriate connection for the small proportion of passengers expected to interchange between the metro and light rail.

4.2.4.5. Road network integration

Existing taxi facilities on Castlereagh Street, Elizabeth Street, Martin Place and Phillip Street at Hunter Street intersection within the vicinity of the station entrances have been retained and can be used by metro customers to interchange between metro and taxi services. There is an existing kiss & ride location on the eastern side of Phillip Street north of Hunter Street will be retained and can be used for Sydney Metro customers.

As no customers are anticipated to access to station by vehicle, the impact on operational performance of the road network in the vicinity of the site would be insignificant.

4.2.5. Gadigal Station

Gadigal Station is a new underground station strategically located at Pitt Street, at the junction of Sydney's southern CBD and the midtown retail precinct. The station service the retails areas on George Street and Pitt Street, the civic and entertainment uses on George Street and the emerging southern Sydney CBD residential developments between Park Street and Belmore Park.

Gadigal Station interchange overlaps with nearby interchanges, such as Town Hall, Museum and St James stations.

Table 4-6 summarises the station's features.

Table 4-6: Gadigal Station features

Feature	Description
Station entry	<p>Entry is via two new pedestrian plazas at Pitt Street:</p> <ul style="list-style-type: none"> Pitt Street North is accessed from the northern footpath of Park Street between Pitt Street and Castlereagh Street Pitt Street South is accessed from the southern footpath of Bathurst Street between Pitt Street and Castlereagh Street.
Transport interchange	Walking, cycling, bus, light rail and taxi.
Main features and traffic arrangements	<ul style="list-style-type: none"> New bike parking on Park Street and Bathurst Street DDA-compliant station entries to maximise accessibility for all customers Footpath widening in Bathurst Street, immediately outside the station south entry, to accommodate pedestrian demand Integrate with existing bus stops on Park and Castlereagh streets to support seamless modal interchange. A 2.5-metre kerb extension along northern kerb of Park Street, just east of the intersection with Pitt Street. Gadigal North will have some finishing works still being undertaken at the entrance after day 1
Customers	Midtown retail, employment, entertainment, and residential precincts.

Figure 4-5 provides the station overview.

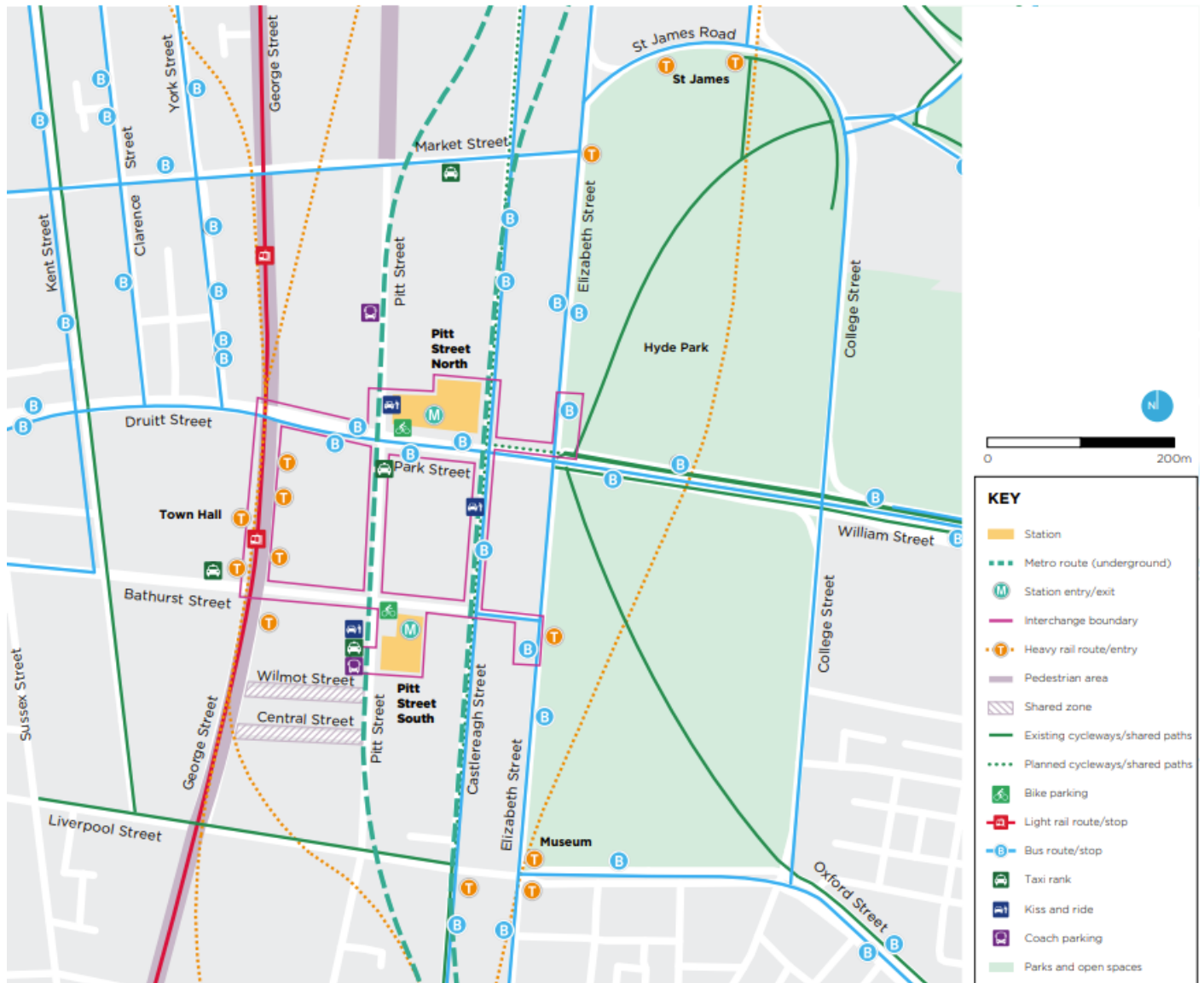


Figure 4-5: Gadigal Station overview (Source: Interchange Access Plan, Pitt Street, June 2022)

4.2.5.1. Passenger demand

Forecasts for the 2036 AM peak hour indicate that Gadigal Station would see approximately 3,000 metro customers boarding and approximately 13,800 customers alighting. This reflects the mix of residential, commercial and retail uses within the area.

The forecast modes of arrival at the station are:

- Walking – 45 per cent
- Bus – 54 per cent
- Kiss-and-ride – 1 per cent.

It is anticipated that almost all exits would be walking trips to local commercial land uses, with some transfer to bus.

The 2036 AM peak hour demand profile and customer connectivity profiles show the following characteristics:

- Alighting will be higher than boarding to the metro service during AM peak.
- Walking is the dominant mode share for egress in the AM peak.
- Connectivity between metro and bus services is important for customers boarding Metro services in the AM peak.
- Kiss-and-ride represents a small proportion of the total demand generated by customers boarding metro services.

- These observed trends are likely to be reversed in the PM peak.

4.2.5.2. Pedestrian integration

The station supports two access points with safe, convenient and direct pedestrian routes:

- The northern access is on the northern side of Park Street, between Pitt and Castlereagh streets.
- The southern access is on the southern side of Bathurst Street, between Pitt and Castlereagh streets.

Both entrances incorporate sufficient pedestrian space to accommodate the forecast number of entries and exits at the station.

Given the high pedestrian demand, the following improvements have been provided to ensure an easy, safe and seamless transfer between modes:

- Bathurst Street and Pitt Street intersection: the signalised pedestrian crossing across the south approach of the intersection has been widened.
- The southern kerb of Bathurst Street (into adjacent parking lane) from Pitt Street east has been widened to access driveway into 137-139 Bathurst Street, Sydney.
- A 2.5 metres kerb extension has been installed along northern kerb of Park Street, just east of the intersection with Pitt Street.
- Park Street and Pitt Street intersection: the width of the signalised pedestrian crossing across the Pitt Street (north) approach of the intersection with Park Street has been widened.

Patronage analysis and pedestrian modelling of the station and streetscape have identified three locations where there is potential for impacts to pedestrians and/or traffic due to the presence of the station. These locations are:

- Park Street mid-block near the station access due to the presence of a major bus interchange.
- Intersection of Pitt Street and Park Street.
- Intersection of Pitt Street and Bathurst Street.

4.2.5.3. Cyclist integration

To enable cycle interchange with the station, cycle parking is provided within 50 metres of the gatelines for the Pitt Street North and Pitt Street South plaza:

- Five Class C bike parking spaces for ten bikes close to the northern station entrance on Park Street.
- Five Class C bike parking spaces for ten bikes close to the southern station entrance on Bathurst Street.

4.2.5.4. Public transport integration

Existing bus stops are located outside the northern station entrance on Park Street, which provide direct interchange opportunities with the metro station. Bus stops are also located on Castlereagh and Elizabeth streets north and south of the station. The following bus stops are located in close proximity to the station:

- Castlereagh Street: one extended stop, southbound, between Park and Bathurst streets.
- Park Street: one extended stop, eastbound, between Pitt and Castlereagh streets.
- Park Street – one extended stop, westbound, between Pitt and Castlereagh streets.

Direct connections are possible to the light rail station on George Street. The distance between this southern station entry and the light rail station is less than 200 metres, providing an efficient interchange.

4.2.5.5. Road network integration

Existing taxi facilities are available on Pitt Street between Park and Bathurst streets, south of the intersection with Bathurst Street for Gadigal Station North and on Pitt Street immediately south of the Bathurst Street intersection for Gadigal Station South. These provide easy and convenient taxi connections to both the northern and southern station entrances with nearby taxi ranks.

Existing kiss-and-ride facilities on Pitt Street and Castlereagh Street are also available for metro customers within a short walking distance.

The mode split of customers entering and exiting the station by car is anticipated to be very low. As such, impacts on the road network are expected to be negligible.

4.2.6. Central Station

Central Station is positioned at the nexus of Sydney's rail network, serving as a critical interchange for suburban, intercity and regional rail services, as well as road based buses, coaches and light rail services. The Central Station upgrade includes new metro platforms below the existing platforms 13, 14 and 15 and expanded facilities to accommodate additional passenger demand to the existing station.

Table 4-7 summarises the station's features.

Table 4-7: Central station features

Station entries	<ul style="list-style-type: none"> Existing western station entry from Railway Square and Broadway, connecting to the Devonshire Street Tunnel. Existing western station entry from the Western Forecourt, connecting to the Grand Concourse and Northern Concourse. <ul style="list-style-type: none"> Safeguard potential extension of Central Walk and on-street connections. Existing Northern entry to the metro platforms from Eddy Avenue. Existing northern station entry from Eddy Avenue and Pitt Street, connecting to the Grand Concourse and Northern Concourse. <ul style="list-style-type: none"> Existing northern station entry from the Porte Cochere of the Grand Concourse, connecting to L1 Dulwich Hill Light Rail. A new eastern entry via a pedestrian plaza connecting to Central Walk and opening to the eastern side of Chalmers Street. Existing eastern station entries from Devonshire Street, connecting to the Devonshire Street Tunnel, and the corner of Chalmers and Elizabeth Streets connecting to the T4 Eastern Suburbs and Illawarra Line Concourse. Existing eastern station entry from Elizabeth Street, connecting to the Northern Concourse.
Transport interchange	Walking, cycling, inter-state rail, intercity rail, suburban rail, light rail, bus, coach, taxi and kiss-and-ride (includes point to point service types).
Main features and traffic arrangement	<ul style="list-style-type: none"> Transfer to train services via Central Walk, and existing underground paid and unpaid pedestrian connections. New on road light rail route along Chalmers Street and Eddy Avenue. Existing kiss-and-ride, taxi ranks, bike parking and bus stops retained. A cycleway along Chalmers Street and Eddy Avenue has been delivered as part of the CBD and Southeast Light Rail project. Enhancement of pedestrian and cycling infrastructure around the station. Wayfinding signage and Sydney Metro information will be provided. Improvements to pedestrian infrastructure at the Western Forecourt, Eddy Avenue and Pitt Street colonnades, Devonshire Street Tunnel, Hay Street ramp and Lower Carriage Lane.
Customers	<ul style="list-style-type: none"> Southern CBD employment, education, entertainment and residential precincts. Interchange to and from metro services and other modes of transport. Sydney gateway for travellers to and from interstate and NSW regions.

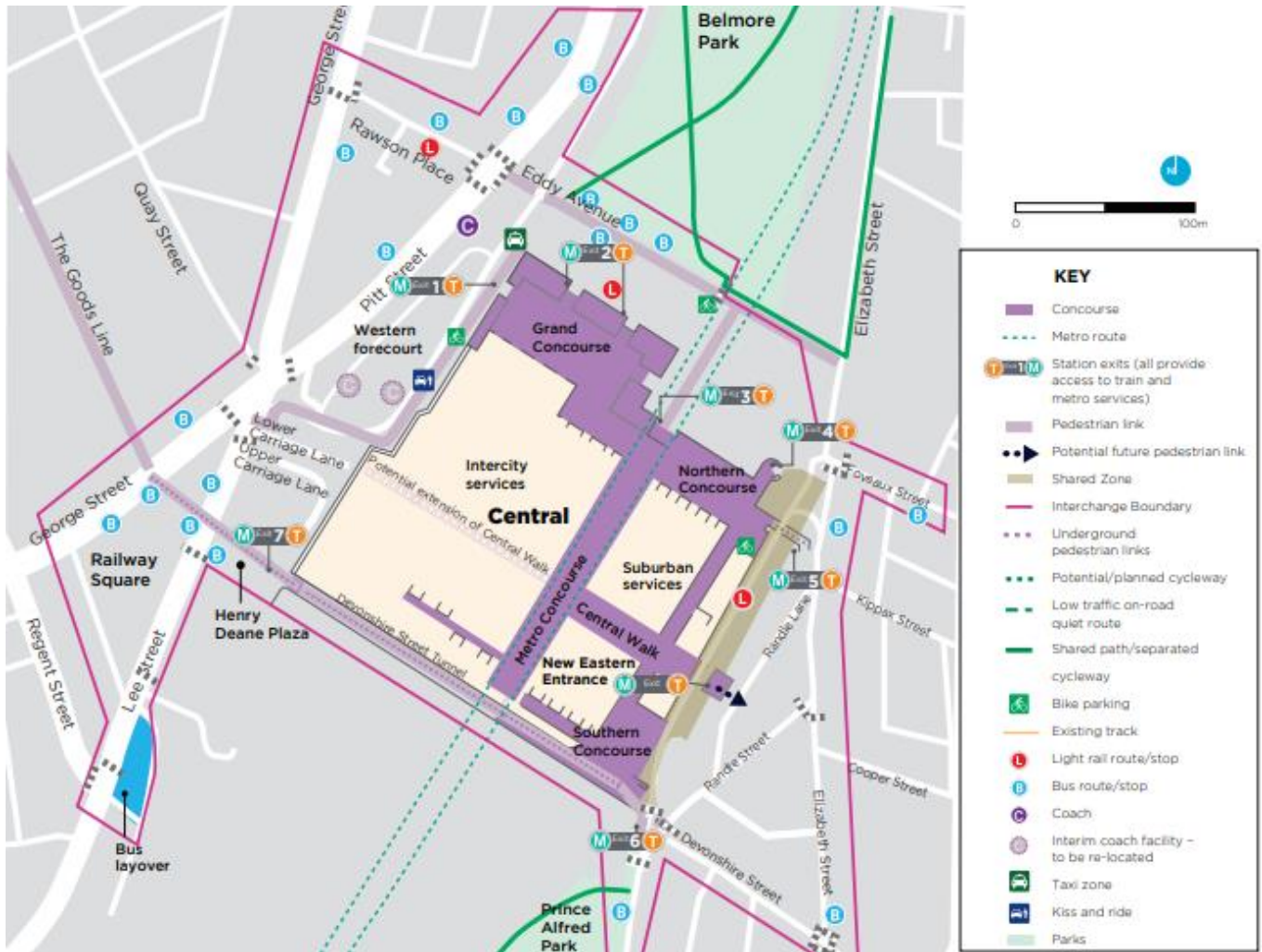


Figure 4-6: Central Station overview (Source: Interchange Access Pla, Central, October, 2020).

4.2.6.1. Passenger demand

Forecasts for the 2036 AM peak hour indicate that Central Station would see approximately 10,150 metro customers boarding and approximately 12,750 customers alighting. The forecast modes of arrival at the station are:

- Walking – 7 per cent
- Bus – 8 per cent
- Light Rail – 5 per cent
- Heavy Rail – 80 per cent.

The 2036 AM peak hour demand profile and customer connectivity profiles present the following characteristics:

- Boardings and alightings of the Metro services will be similar during peaks.
- A high proportion of customers alighting the Metro service will exit the station and walk to a destination in the AM peak.
- Connectivity between Metro platforms and Sydney Trains, NSW Trains, Sydney light rail and bus services is equally important for customers alighting Metro services in the AM peak.
- The majority of customers boarding Metro service will transfer onto the service from Sydney Trains or NSW Trains platforms.
- Walking to the station, and transfers from bus or Sydney light rail services combined represents a small proportion of the total demand generated by customers boarding Metro services.
- These observed trends are likely to be reversed in the PM peak and align with Central Station's role as a major transport hub.

The Metro concourse, Central Walk, new eastern entrance and Northern Concourse enhancement's play a vital role in supporting operational pedestrian demands generated by CSW Central upgrade.

4.2.6.2. Pedestrian integration

The metro platforms and concourse have been designed using forecast patronage data and therefore will accommodate the anticipated pedestrian movements within Central Station. Design objectives for pedestrian movement include provision of adequate space for safe and comfortable movement of increased pedestrian volumes, as well as more legible and consistent wayfinding and improved safety through activation, quality paving, better lighting and CCTV.

Enhancement to the Northern Concourse combined with the new Eastern Entry Central Walk and Sydney Metro Concourse improves station access to the north and east along with addressing internal connectivity, accessibility, legibility, amenity and capacity functionality goals. Over 20 new lifts and escalators aid faster, easy and safe customer access and enhance station operating conditions.

The new eastern station entrance provides accessible paths of travel through to Central Walk and the new Sydney Metro Concourse, connecting platforms, and the recently installed Sydney light rail platforms in Chalmers Street. This new building structure also provides a new pedestrian through link opportunity to Randle Lane.

4.2.6.3. Cyclist integration

The Central Station precinct is well located on Sydney's strategic cycleway, which provide cyclist accessibility to the station precinct from all directions, both in the form of shared paths as well as dedicated cycleways. New or amended cycle connections and upgrades to the cycleway are investigated further as part of a future precinct-wide cycle strategy to further improve cyclist accessibility. No additional connections to existing and proposed cycle routes are proposed under the CSW Project.

The project works includes bicycle user facility enhancements to the recently upgraded Chalmers Street streetscape with the inclusion of an additional 44 bicycle parking spaces in the public domain. These new facilities meet the estimated mode share demand for cycling, are open to all customers and situated close to station entries and key cycle routes.

4.2.6.4. Public transport integration

The CSW project will provide improved customer experience for rail-to-rail transfers. The following transfer arrangements will be provided between the train services and metro platforms:

- Central Walk will connect the Sydney Metro concourse providing an accessible connection between the suburban platforms 16-23 and the metro platforms.
- The Sydney Metro concourse will connect with the Southern Tunnel providing access between the metro platforms to the intercity platforms 4-11 via stairs.
- The Sydney Metro concourse will connect with the Northern Concourse, connecting with the Grand Concourse providing an accessible connection between the metro platforms and inter-city platforms 1-14.

Within Central Station, metro customers would be able to use existing access options to interchange with bus services in the vicinity of Central Station as well as the new Chalmers St entrance to interchange with light rail services and coach services providing regional connections at Western forecourt.

4.2.6.5. Road network integration

Customers accessing the metro platforms at Central Station are able to use existing drop-off facilities such as the drop-off area within the western forecourt of Central Station.

The mode split of customers entering and exiting the metro platforms by car is anticipated to be very low. As such, impacts on the road network are expected to be negligible.

4.2.7. Waterloo Station

Waterloo Station is a new underground station within the centre of the Waterloo precinct. The new Waterloo Station has two entrances, accessible from Raglan street near the corner of Cope Street and mid-block of Cope Street. The station will serve to connect nearby commercial, community and residential facilities and support future residential development and urban renewal initiatives.

Figure 4-8 outlines the station features.

Table 4-8: Waterloo station features

Feature	Description
Station entries	<ul style="list-style-type: none"> Corner of Raglan and Cope streets. Mid-block on Cope Street.
Transport interchange	<ul style="list-style-type: none"> Walking, cycling, bus, taxi and kiss-and-ride
Main features and traffic arrangement	<ul style="list-style-type: none"> New pedestrian crossings on Raglan, Wellington and Cope streets. New taxi, kiss-and-ride bays and bike parking. New on-road marked cycle link on Wellington Street. Existing bus stops retained northbound along Botany Road. Relocation of the bus stops southbound, mid-block. Botany Road between Raglan and Wellington streets. The new station entrance is a plaza entrance that incorporates sufficient pedestrian space to accommodate the forecast number of entries and exits at the station. Wellington Cycleway delayed to 2025, bus stop mid-block of Botany Rd delayed to 2027-29
Customers	<ul style="list-style-type: none"> Residential, education and commercial precincts.

Figure 4-7 and 4-8 provide the station overview.

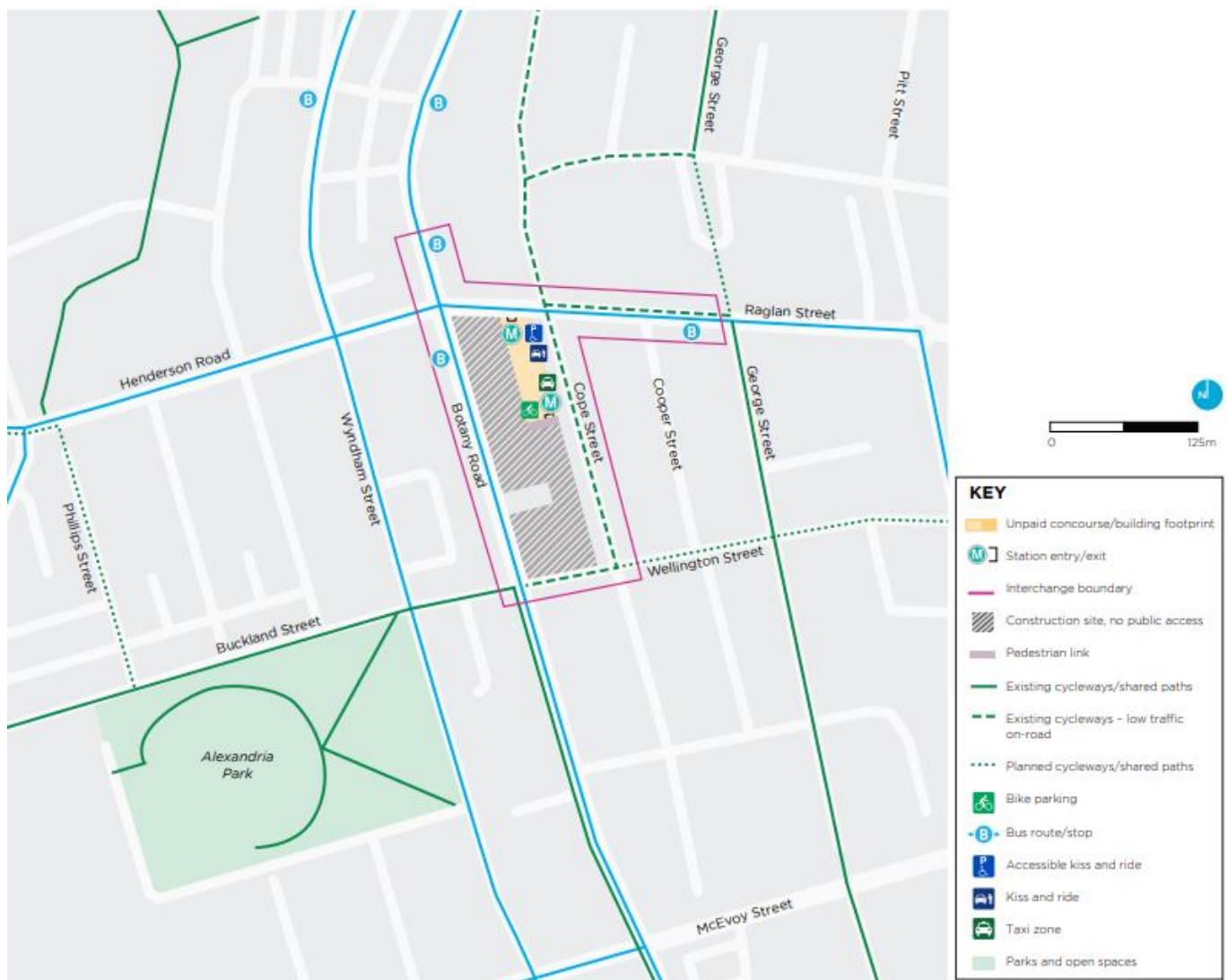


Figure 4-7: Waterloo Station overview – Day one (Source: Interchange Access Plan, Waterloo, February, 2024)



Figure 4-8: Waterloo Station overview – Final (Source: Interchange Access Plan, Waterloo, February, 2024)

4.2.7.1. Passenger demand

Preliminary forecasts for the 2036 AM peak hour indicate that around 6,800 customers would be entering the station and around 4,300 customers would be exiting the station. This reflects the residential and commercial catchment of the station.

The forecast modes of arrival at the station are:

- Walking – 76 per cent
- Cycling – 1 per cent
- Bus – 19 per cent
- Kiss-and-ride – 4 per cent.

The 2036 AM peak hour demand profile and customer connectivity profiles present the following characteristics:

- Boardings will be higher than alightings of the Metro services during the AM peak.
- Walking is the dominant mode share for egress and access in the AM peak.
- Connectivity between Metro platforms and bus services is equally important for customers boarding and alighting Metro services in the AM peak.
- Kiss and ride represents a small proportion of the total demand generated by customers boarding Metro services.

- These observed trends are likely to be reversed in the PM peak.

The development of Waterloo Metro Station and interchange facilities serves to cater for these demand forecasts, as demonstrated in the following sections.

4.2.7.2. Pedestrian integration

The existing pedestrian network is well served by an existing network of footpaths surrounding the Metro Quarter at Waterloo, all of which have been widened to cater for the forecasted increased pedestrian volumes.

Pedestrian refuges are located on all arms of the roundabouts at Cope and Raglan streets and Cope and Wellington streets, and signalised crossing facilities are located at the intersections of Botany Road and Raglan Street, and Botany Road and Wellington Street.

The new station includes the following infrastructure to accommodate the predicted pedestrian volumes in and around Waterloo station:

- Four signalised pedestrian crossings at the intersection of Cope and Raglan streets.
- Two new pedestrian zebra crossings at the intersection of Cope and Wellington streets (north and east approaches).
- Mid-block zebra crossing on Cope Street between Raglan and Wellington streets.
- Widening of the signalised pedestrian crossing across Botany Road at the south and north approach to the intersection with Raglan Street and Henderson Road.
- Footpath widening on all of the footpaths on the station side of the roadways surrounding the station precinct.
- Through-site links in the Waterloo Metro Quarter.

4.2.7.3. Cyclist integration

The new Waterloo Station serves as the main bike parking hub for the city stations as part of the CSW Project. The Waterloo station precinct includes more than 200 Class B bike parking spaces and more than 40 Class C bike parking spaces. These spaces are located within the station by Opal access and are easily accessed by patrons via the Cope Street entrance. The Project also introduces a new separated cycleway on Wellington Street between Botany Road and Cope Street, linking to existing and future cycling infrastructure.

The station and interchange will be designed to allow bicycles to connect with and move through the precinct and be able to board Sydney Metro services. These provisions satisfy the estimated bike parking demand while encouraging cycling as a way to access the Metro network.

4.2.7.4. Public Transport Integration

Bus services comprise a significant portion of forecasted passengers arriving and egressing from the Waterloo Metro Quarter Precinct (38% of those egressing and 19% of those accessing). Bus stations within vicinity of the Quarter are easily and visibly accessible from the station entrance, located as close as feasible to the Waterloo gate line as possible.

Existing bus stops on Botany Road between Raglan Street and Wellington Street are generally located within an easy walking distance of the station entry on Botany Road. To enable better integration with the metro station entry, the southbound bus stop on Botany Road is relocated further north pending completion of the Waterloo Metro Quarter northern precinct. The northbound and southbound bus stops provide convenient interchange to and from the Sydney CBD to the north and Mascot, Matraville and East Gardens to the south. A new westbound bus stop has also been added on Raglan St west of Raglan Walk pending completion of the Northern Waterloo Metro Quarter precinct. There is sufficient public domain and footpath space to accommodate pedestrian flows from the stations to bus stops including queuing space at the bus stops.

4.2.7.5. Road network integration

To accommodate the small number (four per cent in the AM peak hour) of customers anticipated to access the station by road, accessible kiss-and-ride, kiss-and-ride facilities and a taxi rank is provided on the west side of Cope Street, just south of its intersection with Raglan Street, providing convenient access to the station entry.

4.2.8. Sydenham Station

Sydenham Station serves as a key interchange point for the Sydney Metro and Sydney Trains Networks. The station acts as an anchor for the surrounding area, providing an opportunity for renewal and redevelopment of the surrounding precinct, as well as providing access to a significant pool of labour for local industry.

Table 4-9 outlines the station features.

Table 4-9: Sydenham station features

Feature	Description
Station entries	<ul style="list-style-type: none"> A new northern entry via a pedestrian plaza opening to Railway Parade and Sydenham Road. A new southern entry via a pedestrian plaza opening to Burrows Avenue.
Transport interchange	<ul style="list-style-type: none"> Walking, cycling, bus, suburban rail, taxi, kiss and ride, and park and ride.
Main features and traffic arrangement	<ul style="list-style-type: none"> New aerial concourse over the rail lines between the corner of Railway Parade and Sydenham Road and Burrows Avenue. New bike parking in the plazas at the new northern entrances. New kiss and ride zones on Burrows Avenue and Sydenham Road. Upgraded and extended bus stops provided on Railway Parade. New signalised crossing on Sydenham Road. Wayfinding signage and Sydney Metro information will be provided.
Customers	<ul style="list-style-type: none"> Industrial, commercial, retail, residential and recreational precincts.

Figure 4-9 shows the station overview.

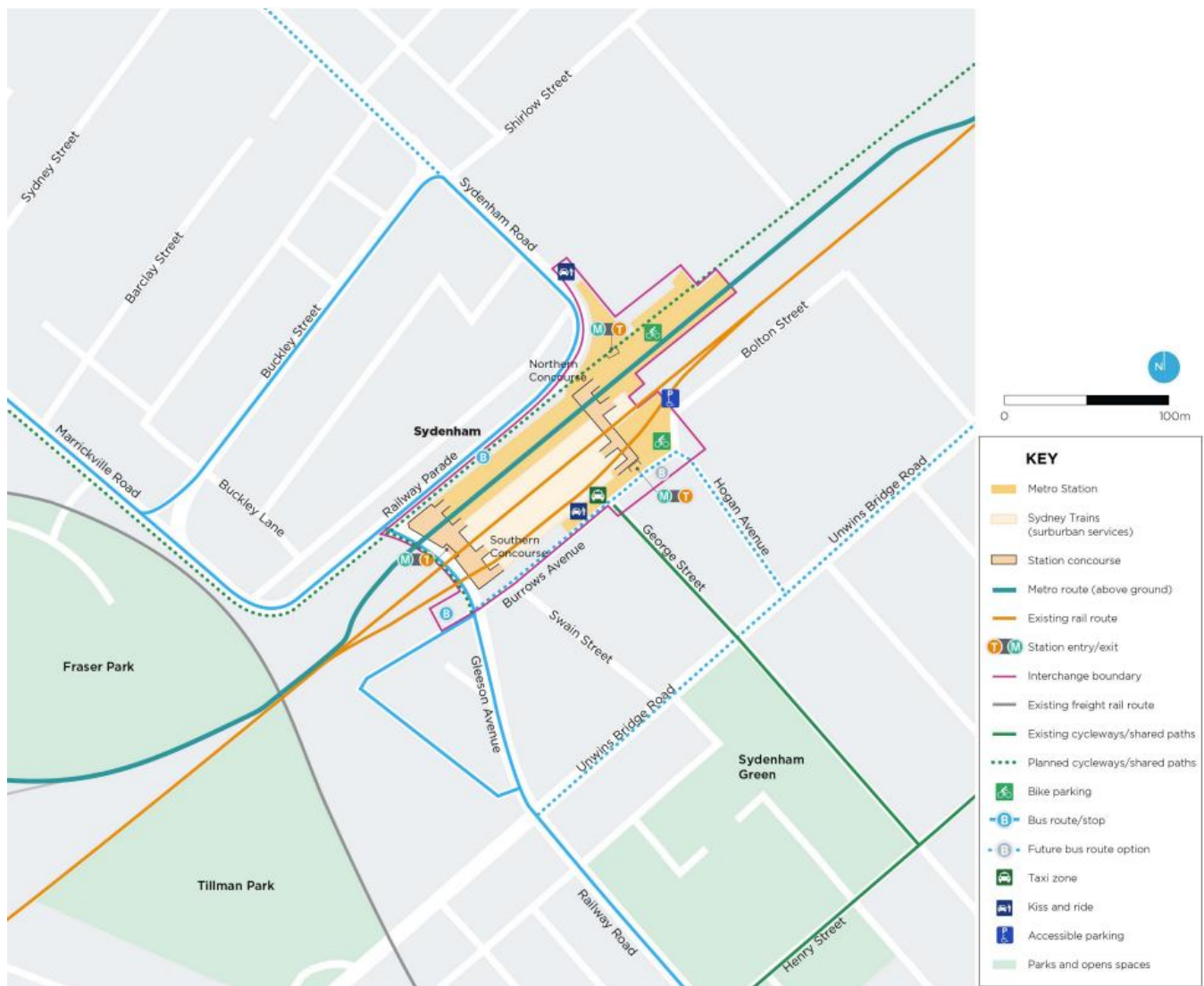


Figure 4-9: Sydenham Station overview (Source: Interchange Access Plan, Sydenham, January 2019)

4.2.8.1. Passenger Demand

An MTR, John Holland and UGL Rail Company



Forecasts for the 2036 AM peak hour indicate that Sydenham Station would see approximately 6,245 metro customers accessing and approximately 5,660 customers egressing the station (Metro and Sydney Trains combined). The forecast modes of arrival at the station are:

- Walking – 55 per cent
- Cycling – 1 per cent
- Bus – 6 per cent
- Kiss-and-ride – 17 per cent
- Park-and-ride – 20 per cent.

The 2036 AM peak hour demand profile and customer connectivity profiles present the following characteristics:

- The majority of customers alighting the Metro service will exit the station and walk to a destination in the AM peak.
- A large portion (around 37% of customers will be dropped off and/or picked up using either the kiss and ride of park and ride services.
- These observed trends are likely to be reversed in the PM peak and align with Central Station's role as a major transport hub.
- The Metro concourse, Central Walk, new eastern entrance and Northern Concourse enhancement's play a vital role in supporting these and other internal and external station movements along with helping to tackle current station operational deficiencies.

4.2.8.2. Pedestrian Integration

Station access is improved through two new access points. These include:

- A new northern access will be on the corner of Railway Parade and Sydenham Road.
- A new southern access will be on Burrows Avenue, near Bolton Street.
- The current western entry on Gleeson Avenue would be retained.

Pedestrian movements to and from station access points is improved through a range of features within the precinct, including:

- A new plaza providing pedestrian connections to the footpath and bus stops on Railway Parade, and the footpaths on Sydenham Road to industrial areas.
- A new signalised pedestrian crossing on Sydenham Road to parking and industrial areas.
- A new plaza providing pedestrian connections to taxi and kiss-and-ride zones on Burrows Avenue, and motorbike and accessible parking on Bolton Street.
- A new pedestrian crossing on Burrows Avenue, providing access to potential future bus stops and residential areas
- A pedestrian facility on George Street at Burrows Avenue.

Spatial consideration for pedestrians within the station itself is enhanced through a combined plaza function.

4.2.8.3. Cyclist Integration

Cycle connectivity surrounding Sydenham is poor, particularly because of the high volume, high speed road network. The closest cycle routes to the station are via George Street between Burrows Avenue and Unwins Bridge Road.

A minimum of 120 bicycle parking spaces will be provided within the interchange for day one of Sydney Metro operations, in addition to the 36 existing spaces. Space for a minimum of 60 bicycle parking spaces is to be safeguarded within the interchange for a total amount of 180 Sydney Metro bicycle parking spaces.

Provision of bicycle parking facilities is expected to accommodate existing and forecast demand, with further allowance to enable future growth in cycling demand and mode share. Demand for cycle parking will also be monitored after metro opening to ensure sufficient cycle facilities are provided.

Given the anticipated mode percentage of passengers accessing and egressing the station by bicycle, the provision of additional cycle parking is expected to accommodate existing and forecast demand, with the allowance to provide connectivity to the Marrickville Cycle Strategy.

4.2.8.4. Public Transport Integration

Upgrades to the existing bus interchanges and transfer infrastructure as part of the Precinct upgrade include:

- Upgraded and extended bus stands on Railway Parade with capacity for at least one articulated and one standard rigid bus.
- A bus-capable stop on the southern side of Burrows Avenue between George Street and Hogan Avenue to accommodate future potential bus routes, identified for flexibility.
- Investigate improvements to the intersection of Gleeson Avenue/Burrows Avenue to facilitate safe and accessible pedestrian transfer to and from buses.

High quality provisions are included within the precinct to enhance safety, wayfinding and transport efficiency:

- Controlled (signalised), direct paths of travel along key pedestrian desire lines to bus interchange areas.
- Marked pedestrian crossings adjacent to the station to provide safe and efficient connections to interchange facilities.
- Sufficient public domain and footpath space to accommodate pedestrian flows in the vicinity of the station.

4.2.8.5. Road Network Integration

Vehicle drop-off interchange and transfer makes up a relatively significant portion of passenger demand for the precinct. There are existing taxi zones at Railway Parade, south of Sydenham Road and Burrows Avenue, between Swain Street and George Street, as well as an existing kiss and ride zone at Burrows Avenue between Swain and George Streets. The increase in road integration demand would be facilitated by the addition of one new taxi space at Burrows Avenue, along with the relocation of the existing taxi zone on Railway Parade to Burrows Avenue to consolidate taxi zones and provide additional space for buses on Railway Parade.

The provision of a new kiss-and-ride zone on Sydenham Road, in addition to the existing kiss and ride on Burrows Avenue, enables this function from both sides of the station.

4.2.9. Chatswood Dive

4.2.9.1. Pedestrians and cyclists

Nelson Street currently provides an active transport link between the Pacific Highway and Frank Channon Walk, a shared path running along the western side of the rail corridor from Nelson Street to Chatswood Station and the Chatswood commercial centre. Nelson Street also provides east-west connectivity across the T1 North Shore Rail Line between the Pacific Highway and Orchard Road, along with Mowbray Road to the south and Albert Avenue to the north. Surveys carried out in December 2015 identified in the AM peak hour a total of 16 pedestrians and five cyclists crossing Nelson Street bridge in both directions.

As part of the project, Frank Channon Walk (a shared path currently connecting Chatswood Station to Nelson Street) has been extended from Nelson Street to Mowbray Road on the western side of the rail line to provide an enhanced facility for pedestrians and cyclists and provide continued access between Chatswood Station and residential areas to the south. Those travelling from residential areas to the south-east of the rail line will need to use the underpass adjacent to Chatswood Oval to cross the rail line and access Frank Channon Walk. Orchard Road, running parallel to Frank Channon Walk on the eastern side of the rail line, can also be used as an alternative north-south route for journeys between the Chatswood retail areas and residential areas to the south.

For some pedestrians or cyclists travelling between Chatswood Station and residential areas to the south, this results in an additional travel distance of around 50 to 100 metres; whilst for others it would result in a reduction in travel distances of around 50 to 100 metres.

Due to the extension of Frank Channon Walk and the availability of alternative facilities in the area the closure of Nelson Street bridge is not anticipated to result in significant impacts for pedestrians and cyclists.

The provision of traffic signals at the Mowbray Road / Hampden Road intersections provides additional pedestrian connectivity across Mowbray Road between the existing pedestrian crossings at the Pacific Highway and Orchard Road and a direct link to the extended Frank Channon Walk.

The design of the interface between the Frank Channon Walk extension and the signalised intersection at Mowbray Road / Hampden Road has been developed in consultation with Transport for NSW and Willoughby Council.

4.2.9.2. Road network

The primary role of Nelson Street overbridge is for use by motorists travelling southbound on the Pacific Highway to access Mowbray Road westbound via Orchard Road.

Nelson Street also provides local access for properties located to the east of the T1 North Shore Rail Line. Following closure of the Nelson Street bridge, these residents will need to use alternative road to cross the rail line such as Mowbray Road or Albert Avenue which could result in a marginal increase to travel times.

In addition, it is anticipated that the traffic signals introduced at Mowbray Road / Hampden Road for the construction phase have been retained during operation.

4.2.10. Marrickville Dive

Traffic signals have been introduced at the Edinburgh Road / Bedwin Road / Edgeware Road intersection to improve traffic safety during the construction phase. These signals have been retained for operation.

During detailed design, Transport for NSW has consulted with Inner West Council, Roads and Maritime Services and other stakeholders on strategies to reduce the number of staged pedestrian marked foot crossings at the Edinburgh Road / Edgeware Road intersection. Improvements have been implemented by both the Project and Inner West Council.

4.3. Day 1 First Passenger Services Arrangements

On Day 1 of First passenger services, there will be interim traffic and transport arrangements in place due to several Metro stations not having construction completed. Those stations are Crows Nest, Victoria Cross, Barangaroo, Martin Place, Gadigal and Waterloo. These stations will all have different traffic and transport arrangements than what is described in Section 4.2 above.

Appendix F displays the final and endorsed Day 1 traffic and transport arrangements for these stations. MTS will manage the traffic and transport of these stations as per these interim arrangements until construction has been completed and then the management is reverted progressively to the final ongoing arrangements per Section 4.2

5. Operational management and maintenance

Overall, the Project appropriately integrates with existing and planned future transport infrastructure. Metro customers would be provided with a safe and secure service with more direct routes to key destinations, reducing crowding at stations with a high-capacity link through the Sydney CBD across Sydney Harbour while increasing other rail catchment areas.

Each interchange precinct is allocated with efficient transport modes. Interchange features at each station have been appropriately designed to achieve operational predicted customers demand and would efficiently interact with the existing network.

All stations also provide appropriate access for operation and maintenance activities and sufficient space have been provided for the accommodation of buses in the event of planned or unplanned disruption of normal operations. Access to neighbouring properties will be maintained as much as reasonable and practicable.

Supplementary analysis and modelling will be undertaken as required by the Traffic and Transport Liaison Group(s) (TTLGs) to demonstrate that operational traffic can be managed to minimise disruption to traffic network operations, public including changes to and the management of pedestrian, bicycle and public transport networks transport services, pedestrian and cyclist movements. Revised traffic management measures will be incorporated into this Plan, IAPs and Station Design and Precinct Plan(s).

An Interchange Operations and Maintenance Plan (IOMP) will be prepared to allocate clear responsibility for all aspects of day-to-day running of the station interchange and to ensure that nominated infrastructure and assets are monitored and maintained to a high standard while maintaining the safety of metro customers.

Operations and maintenance provisions will be documented in accordance with the IOMP and include:

- Description of the asset owners, operators and maintainers.
- Asset operations description.
- Asset maintenance arrangements.

Vehicles would be required to access operational ancillary infrastructure, stations and tunnel portals to undertake periodic maintenance activities. The expected maintenance access frequency is outlined in Table 5-1. Due to the

anticipated number of vehicles and the expected frequency of access, maintenance access is not expected to result in any impacts to the surrounding road network.

Table 5-1 Maintenance access requirements

Location	Access requirement	Vehicle type	Frequency
Stations and services buildings	Delivery of consumables and minor waste removal	Light and utility vehicles	Daily
	Maintenance inspections	Light and utility vehicles	Weekly to fortnightly
	Significant deliveries and waste removal	Tipper trucks	Weekly
	Major maintenance and replacement of large plant items	Heavy rigid trucks and cranes	Occasional
Substations (Artarmon substation, Victoria Cross Station, Barangaroo Station, Gadigal Station and southern services facility)	Visual inspections	Light vehicles	Fortnightly
	Replacement of consumables	Light and utility vehicles	Quarterly
	Major maintenance and replacement of large plant items	Heavy rigid trucks and cranes	Yearly
Water treatment plant (southern services facility)	Delivery of consumables and waste removal	Light vehicles and heavy rigid trucks	Weekly
Tunnel portals	Inspections and testing of track and in-tunnel equipment	Light vehicles	Weekly
	Track and equipment maintenance	Light and utility vehicles	Occasional

5.1. Traffic and transport operational risks

Traffic and Transport aspects and impacts have been identified through review of the EAD and IAPs, environmental reports, contractual documents, consultation with Sydney Metro Authority and the D&C Contractor and MTS experience.

MTS applies a risk management approach throughout the operational life of the Sydney Metro network in line with the Risk Management Plan to identify, assess, control and review environmental risks and harness opportunities, as detailed in Section 4.2 of the OEMP.

Table 5-2 presents potential operational risks associated with operational traffic and transport.

Table 5-2 Risk Assessment

	Risk Rating					Revised Risk Rating		
Description of Potential Risks / Impacts	Consequence	Likelihood	Risk Rating	Mitigation	Implementation Strategy/ Plan / Process / Procedure	Consequence	Likelihood	Risk Rating
Reduced local parking due to workforce and personnel parking on local streets during maintenance and possession works.	C4	L4	D - Low	<p>Provide safe commuter facilities for active transport (e.g. cycling and walking).</p> <p>Keep bicycle storage facilities free and safe to access. Ensure walkways are clean, safe and easily accessible.</p> <p>Undertaking of significant maintenance and repair works during night and weekend possessions and overnight between passenger services, to reduce impact on available commuter parking.</p> <p>Access would be maintained to neighbouring properties (EIS ID: OptT2).</p> <p>Use of MTS' weekly environmental checklist to list all risks, hazards and incidents.</p> <p>Metro customers will be provided with a safe and secure service.</p> <p>Regular maintenance of all plant, equipment and assets.</p>	<p>Risk Assessment Process.</p> <p>Provision of adequate parking wherever parking is located.</p> <p>Provision of significant parking facilities at stations.</p> <p>Traffic and Transport Management Plan.</p> <p>Use of MTS' safety software system Intalex to record all incidents.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720714 – Training and Instruction.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720720 – Asset Management.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720722 –</p>	C5	L5	D - Low

					Management of Incidents.			
Nuisance caused by workforce and personnel parking adjacent residents and businesses during maintenance and possession works.	C4	L4	C - Medium	<p>Safe commuter facilities for active transport (e.g. cycling and walking).</p> <p>Undertaking of significant maintenance and repair works during night and weekend possessions and overnight between passenger services, to reduce impact on available commuter parking.</p> <p>Access would be maintained to neighbouring properties (EIS ID: OptT2).</p> <p>Use of MTS' weekly environmental checklist to list all risks, hazards and incidents.</p> <p>Regular maintenance of all plant, equipment and assets.</p>	<p>Risk Assessment Process.</p> <p>Provision of adequate parking wherever parking is located.</p> <p>Provision of significant parking facilities at stations.</p> <p>Traffic and Transport Management Plan.</p> <p>Use of MTS' safety software system Intalex to record all incidents.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720714 – Training and Instruction.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720720 – Asset Management.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720722 – Management of Incidents.</p>	C5	L5	D - Low

Increased local traffic due to increased workforce and personnel travelling to / from work around SMTF.	C4	L4	C - Medium	<p>Maximising pedestrian accessibility to the stations. (EIS ID: OpT1).</p> <p>Provision of cycle storage facilities at stations.</p> <p>Provision of commuter car parking at selected stations.</p> <p>Consideration of peak period movements in assigning shift hours and changeover patterns for maintenance staff.</p> <p>Preparation of workplace travel plans for entities that would provide alternative modes for journeys to/from work.</p>	<p>Risk Assessment Process.</p> <p>Provision of adequate parking wherever parking is located.</p> <p>Provision of significant parking facilities at stations.</p> <p>Traffic and Transport Management Plan.</p> <p>Use of MTS' safety software system Intalex to record all incidents.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720714 – Training and Instruction.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720720 – Asset Management.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720722 – Management of Incidents.</p>	C5	L5	D - Low
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Customers cannot safely access the metro stations via car, bicycle and/or walking	C4	L4	C - Medium	<p>Provide safe commuter facilities for active transport (e.g. cycling and walking).</p> <p>Keep bicycle storage facilities free and safe to access. Ensure walkways are clean, safe and easily accessible. Kiss and ride spots are used appropriately.</p> <p>Access would be maintained to neighbouring properties (EIS ID: OptT2).</p> <p>Use of MTS' weekly environmental checklist to list all risks, hazards and incidents.</p> <p>Regular maintenance of all plant, equipment and assets.</p>	<p>Risk Assessment Process.</p> <p>Provision of adequate parking wherever parking is located.</p> <p>Provision of significant parking facilities at stations.</p> <p>Traffic and Transport Management Plan .</p> <p>Use of MTS' safety software system Intalex to record all incidents.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720714 – Training and Instruction.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720720 – Asset Management.</p> <p>NWRLOTS-NRT-SWD-RS-FRW-720722 – Management of Incidents.</p>	C5	L5	D - Low
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5.2. Community response

Table 5-3 outlines MTS' community response process that will be used for any complaints made to MTS for all traffic and transport issues that are under the responsibility of MTS (includes on property of the Metro Stations. It must be noted that all public roads surrounding the Metro stations are under the ownership and responsibility of the local councils and any issues or complaints regarding those should be made to the Local council directly.

Table 5-3: Community Response Process

An environmental enquiry or complaint is received via TfNSW's Customer Information service on 131 500 and online at www.transport.info .			
Step	Action	Timeframe	
		Operational hours	Engineering hours
1	Initial contact <ul style="list-style-type: none">TfNSW notifies MTS of enquiry or complaint (operational hours).MTS receives complaints where 131 500 is diverted (engineering hours).SMA/TfNSW-related online enquiry or complaint is received by MTS via Salesforce.	<ul style="list-style-type: none">Immediately.131 500 phone calls are entered into Salesforce and responsibility assigned to MTS.Web-based enquiry or complaint is entered into Salesforce and responsibility assigned to MTS.	<ul style="list-style-type: none">Immediately.131 500 passed off to MTS-designated number between 12am – 6am.Web-based form entries are provided to MTS the next business day by TfNSW.
2	Investigation For complaints, MTS Customer Information Delivery Partner (ISC) investigates and contacts complainant to seek any additional information.	Within 24 hours when only trains are operating.	<ul style="list-style-type: none">Within two hours or as agreed with complainant when maintenance and repair works are occurring in Environmental Protection Licence licenced premise.Within 24 hours when only trains are operating or not within EPL licenced premise.
3	Escalation (Beyond a usual operational issue) Where is cannot be resolved by the MTS SMCIC, DCRC or GMOCE, for dissemination, coordination of Subject Matter Expert or SMA/TfNSW involvement (as required) and response.	Within two business days.	
4	Review SME involvement, review of complaint, investigate work practices and mitigations. Develop response including proposed monitoring and any proposed additional mitigation measures.	Within five business days.	
5	Resolve MTS CRO communicates the resolution with complainant.	Target five business days. Where a complaint requires a detailed investigation, may require significant mitigation* and may take longer than 20 days, the complainant will be kept informed of progress on a regular basis until the matter is resolved.	
* Significant mitigation is defined by MTS to be mitigation that: a. has a cost of more than \$10,000; or b. will require further noise modelling to determine the scope of reasonable and feasible mitigation measures (e.g., height and size of noise barriers, or specifications for at-property treatments).			

6. Monitoring and review

6.1. Monitoring requirements

Table 6-1 details monitoring actions that will be undertaken during operation associated with traffic and transport management.

Table 6-1: Summary of monitoring requirements associated with traffic and transport

Monitoring details	Frequency	Responsibility
Traffic on local roads around each station will be monitored for a period of no less than 12 months after commencement of operation. If monitoring indicates unacceptable traffic intrusion on local roads/streets as a result of operation beyond those that could reasonable be predicted in the EIS and/or the IAPs, appropriate traffic management measures to mitigate the monitored impacts will be implemented following consultation with the Customer Journey Planning and relevant Road Authorities.	12 months after commencement of operation. (CoA D12)	Sydney Metro

6.2. Incident and emergency response

In the event of an environmental incident or unpredicted impacts associated with traffic and transport during operation of the Project, it is the responsibility of all personnel to report the incident or the event immediately to the Environment & Sustainability Advisor and the Head of Safety, Quality, Risk & Environment.

All environmental incidents are to be reported and managed in accordance with the Pollution Incident Response Management Plan (PIRMP) and the Incident Management Framework (IMF). Incidents are classified based on the incidents severity as shown in the IMF.

All incidents will be managed and reported according to Section 7 of the OEMP. Emergency management arrangements are detailed in the Emergency Management Plan- Sydney Metro Northwest and City & Southwest (MTS-SCF-PL-35117). A Site Incident Management Plan (SIMP) has been prepared for each station.

6.3. Environmental auditing

Environmental audits will be undertaken in accordance with the indicative audit schedule provided in Table 15 of the OEMP, which includes an environmental audit, a sustainability audit and an operation performance audit. All environmental audits will be carried out in accordance with Section 8.2 of the OEMP.

An audit of bicycle patronage at stations and end-of-trip facility adequacy will be undertaken 12 and 36 months following commencement of operation to ensure the level of bicycle parking and end-of-trip facilities available are adequate in terms of both quantity and quality. The audit must be undertaken with the Relevant Council(s), RMS, Bicycle NSW and relevant local bike user groups.

Permanent road works, including vehicular access, signalised intersection works, and works relating to pedestrians, cyclists, and public transport users will be subject to safety audits demonstrating consistency with relevant design, engineering and safety standards and guidelines. Safety audits will be prepared in consultation with the TTLG before the completion and use of the subject infrastructure and must be made available to the Secretary upon request.

Permanent road works, including vehicular access, signalised intersection works, and works relating to pedestrians, cyclists, and public transport users will be subject to safety audits demonstrating consistency with relevant design, engineering and safety standards and guidelines. Safety audits will be prepared in consultation with the TTLG before the completion and use of the subject infrastructure and must be made available to the Secretary upon request.

6.4. Non-conformance, corrective and preventative actions

All non-compliances, non-conformances and resulting corrective actions associated with groundwater management will be managed in accordance with Section 8.4 of the OEMP.

6.5. Internal reporting

Internal reporting requirements are outlined in Section 8.5 of the OEMP.

7. Review and improvement

Review and improvement of this Plan will be undertaken in accordance with the Conditions of Approval, the Quality Management Plan and Section 9 of the OEMP. Continuous improvement will be achieved by the ongoing evaluation of environmental management performance and effectiveness of this Plan against environmental policies, objectives and targets.

7.1. Management reviews

Management reviews will be undertaken annually or as required as part of the MTS continual improvement process. Reviews will consider the suitability and effectiveness of the environmental management system and effectiveness and proper implementation of this TTMP. This may include the wider management team and a review of systems from other functional areas.

The review will consider:

- Opportunities to improve efficiencies of traffic and transport management processes and practices.
- Client and agency feedback.
- Consideration of non-conformances and deficiencies.
- Consideration of effectiveness of corrective and preventative actions.
- Changes or development in the MTS IMS.

The outcomes of the reviews may result in the amendment of this TTMP or related documents, revision to the IMS, risk assessment review, re-evaluation of the Project's objectives and targets as well as feeding into other Project documents. Necessary system improvements would be identified and raised as corrective actions. Any changes to this TTMP would be managed in accordance with Section 9.2.

The outcomes of the reviews may result in the amendment of this TTMP or related documents, revision to the IMS, risk assessment review, re-evaluation of the Project's objectives and targets as well as feeding into other Project documents. Necessary system improvements would be identified and raised as corrective actions. Any changes to this TTMP would be managed in accordance with Section 9.2.

7.2. Revision of this plan

Continual improvement is achieved through constant measurement and evaluation, audit and review of the effectiveness of the Plan, and adjustment and improvement of the TTMP, Project environmental outcomes and the MTS IMS. Annual management reviews provide specific opportunities to identify improvements in the IMS and/or this TTMP. This TTMP would be updated as required:

- To consider changes to the environment or generally accepted environmental management practices, new risks to the environment, any hazardous substances, contamination or changes in law.
- Where requested or directed by the DPE or any other authority.
- In response to internal or external audits or quarterly management reviews.

The updated plan will be endorsed by the Environment & Sustainability Advisor and approved internally by the MTS CEO.

Minor changes may be approved by the Head of Safety, Quality, Risk and Environment, as follows.

Minor changes would typically include those that:

- Are editorial in nature (e.g. staff and Agency/Authority name changes).
- Do not increase the magnitude of impacts on the environment when considered individually or cumulatively.
- Are in response to audit findings or periodic reviews.
- Do not compromise the ability of the Project to meet approval or legislative requirements.

A

APPENDIX

Appendix A - Document control

Document information

Document Number:	SMCSWTS2-MTS-CSW-TF-PLN-002803
Version:	04
Issue Date:	12/09/2024
Network	City & Southwest

Approval record

Function	Position	Name	Signature	Date
Prepared by:	Environment & Sustainability Advisor	Peter Scioscia		
Reviewed by:	Head of Safety, Quality, Risk & Environment	Melissa Northey		
Approved by:	General Manager Safety, Quality, Risk & Environment	Amanda Calvez		
Approved by:	A/General Manager Engineering & Maintenance Delivery	Michael Leah		
Approved by:	MTS Chief Executive Officer	Daniel Williams		
Endorsed by:	MTR Representative	Ronnie Tong		
Authorised by:	OpCo2 Delivery Director	Phil Dark		
Approved by:	NRT Chief Executive Officer	Steve Herman		

Amendment record

Date	Rev	Amendment description	By
14/05/2024	01	Initial release.	Peter Scioscia
28/06/2024	02	Updated as per external stakeholder consultation	Peter Scioscia
23/07/2024	03	Updated as per DPHI comments	Peter Scioscia
12/09/2024	04	Further update as per DPHI comments	Peter Scioscia

B

APPENDIX

Appendix B - List of Acronyms

Acronym	Definition
ANZ SMEs	Australian & New Zealand Small & Medium Enterprises
ARI	Average Recurrence Interval
AS	Australian Standard
CBD	Central Business District (of Sydney)
CCRA	Climate Change Risk Assessment
CCRAAS	Climate Change Risk Assessment & Adaptation Study
CDS	Chatswood Dive Site
CEO	Chief Executive Officer
CJP	Customer Journey Planning
CLIP	Community Liaison Implementation Plan
CoA	Conditions of Approval
CSW	City and Southwest
D&C	Design & Construction
D&D	Design & Delivery
D&DJV	Design & Delivery Joint Venture
DPE	NSW Department of Planning, Industry & Environment
DPHI	Department of Planning, Housing and Infrastructure
DPI	NSW Department of Primary Industries
DSI	Detailed Site Investigation
E&S	Environmental & Sustainability
EAD	Environmental Assessment Documentation
ECRL	Epping to Chatswood Rail Line
ECSM	Electricity Consumption Software Model
EEC	Endangered Ecological Community
EIS	Environmental Impact Statement
EMP	Emergency Management Plan

EMS	Environmental Management System
EP&A	Environmental Planning & Assessment
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
EWMS	Environmental Work Method Statements
FTE	Full Time Equivalent
GM	General Manager
GRI	Global Reporting Initiative
HR	Human Resources
HSE	Health, Safety, Environment
IAP	Interchange Access Plan
ICN	Industry Capability Network
IEQ	Indoor Environment Quality
IMF	Incident Management Framework
IMS	Integrated Management System
IOMP	Interchange Operations and Maintenance Plan
IR	Industrial Relations
IS Rating Tool	Infrastructure Sustainability Rating Tool
ISCA	Infrastructure Sustainability Council of Australia
ISO	International Standards Organisation
KPIs	Key Performance Indicators
LMA	Licensed Maintenance Areas
CoA	Conditions of Approval
MDS	Marrickville Dive Site
MP	Martin Place Station
MTS	Metro Trains Sydney Pty Ltd
NABERS	National Australian Built Environment Rating System
NCIE	National Centre for Indigenous Excellence
NRT	Northwest Rapid Transit

NVMP	Operational Noise & Vibration Management Plan
NW	Northwest
NWRL	Northwest Rail Link
O&M	Operation & Maintenance
OEH	NSW Office of Environment & Heritage
OEMP	Operational Environmental Management Plan
OPESP	Operations Phase Environment and Sustainability Management Plan
ONVR	Operational Noise and Vibration Review
OpCo / OpCo2	NRT Group
OTS	Operations, Trains & Systems
PAS	Public Announcement System
PIMS	Project Integrated Management System
PIRMP	Pollution Incident Response Management Plan
PMS	Project Management System
POEA Act	Protection of the Environment Operations Act 1997
PPP	Public Private Partnership
PRL	Parramatta Rail Link
REF	Review of Environmental Factor
REMMs	Revised Environmental Mitigation Measures
RMS	NSW Roads and Maritime Services
ROMs	Rail Operating Manuals
RTRF	Rapid Transit Rail Facility
SCLP	Stakeholder & Community Liaison Plan
SCO	Sydney Coordination Office
SEAG	Skills & Employment Advisory Group
SH&E	Safety, Health & Environment
SQRE	Safety, Quality, Risk and Environment
SIMP	Site Incident Management Plan
SJV	Service Joint Venture

SMA	Sydney Metro Authority (an independent agency of TfNSW)
SMTF	Sydney Metro Train Facility
SMS	Safety Management System
SPMS	Server Payment Monitoring System
SQE	Safety, Quality & Environment
SROI	Social Return on Investment
SSI	State Significant Infrastructure
TAFE	Technical & Further Education
TfNSW	Transport for NSW
TTMP	Operational Traffic and Transport Management Plan
TNA	Training Needs Analysis
VC	Victoria Cross Station
WAP	Works Approval Protocol

C

APPENDIX

Appendix C - Related documents

Note: some documents will be closely interconnected and will need to be reviewed when this one is changed. Others are simply related content that supplement the material in this document.

Document Number	Document Title	Review
SMCSWTS2-MTS-CSW-EM-PLN-002107	Carbon and Energy Management Plan	Yes
NWRLOTS-NRT-ADM-EM-PRO-720473-01	Fauna Handling Procedure	Yes
SMCSWTS2-MTS-1NL-EM-PLN-002711	Flooding and Hydrology Plan	Yes
NWRLOTS-NRT-PRD-PM-PLN-000874	Flora & Fauna Management Plan	Yes
SMCSWTS2-MTS-1NL-EM-PLN-002712	Groundwater Management Plan	Yes
SMCSWTS2-MTS-CSW-HE-PLN-002100	Heritage Management Plan	No
NWRLOTS-NRT-ADM-PM-PLN-721419	Human Resource Plan	No
NWRLOTS-NRT-ADM-PM-PLN-721417	Incident Management Plan	No
NWRLOTS-NRT-SWD-FA-POL-723353	MTS Procurement Policy	No
SMCSWTS2-MTS-CSW-EM-PLN-002106	Noise and Vibration Management Plan	Yes
NWRLOTS-NRT-ADM-EM-PRO-720474-01	Noise & Vibration Monitoring Procedure	No
SMCSWTS2-MTS-CSW-EM-PLN-002697	Operational Environmental Management Plan	Yes
SMCSWTS2-MTS-CSW-EM-PLN-002105	Operations Phase Environment and Sustainability Plan	Yes
NWRLOTS-NRT-ADM-EN-PLN-720416	Pollution Incident Response Management Plan	Yes
NWRLOTS-NRT-ADM-PM-PLN-721403	Quality Management Plan	No
NWRLOTS-NRT-ADM-PM-PLN-721405	Risk Management Plan	No
NWRLOTS-NRT-SWD-AM-PLN-723029	Severe Weather Conditions Response Plan	No
NWRLOTS-NRT-SWD-RS-FRW-720717	SMS Element 17: Procurement and Contract Management	No
NWRLOTS-NRT-ADM-EM-PRO-720472-01	Spill Management Procedure	Yes
NWRLOTS-NRT-ADM-EN-PLN-720252	Stakeholder Community Involvement Plan	No
NWRLOTS-NRT-ADM-PM-PLN-721415	Training Management Plan	No
NWRLOTS-NRT-ADM-EM-PRO-720475-01	Unexpected Heritage Finds Procedure	No
NWRLOTS-NRT-ADM-EM-PRO-720476-01	Unexpected Contaminated Finds Procedure	Yes
NWRLOTS-NRT-ADM-EM-PRO-720471-01	Waste Resource Management Procedure	Yes

NWRLOTS-NRT-ADM-EM-PRO-720478-01	Water Quality Monitoring Program	Yes
NWRLOTS-NRT-ADM-EM-PRO-720479-01	Weed Management Procedure	Yes

D

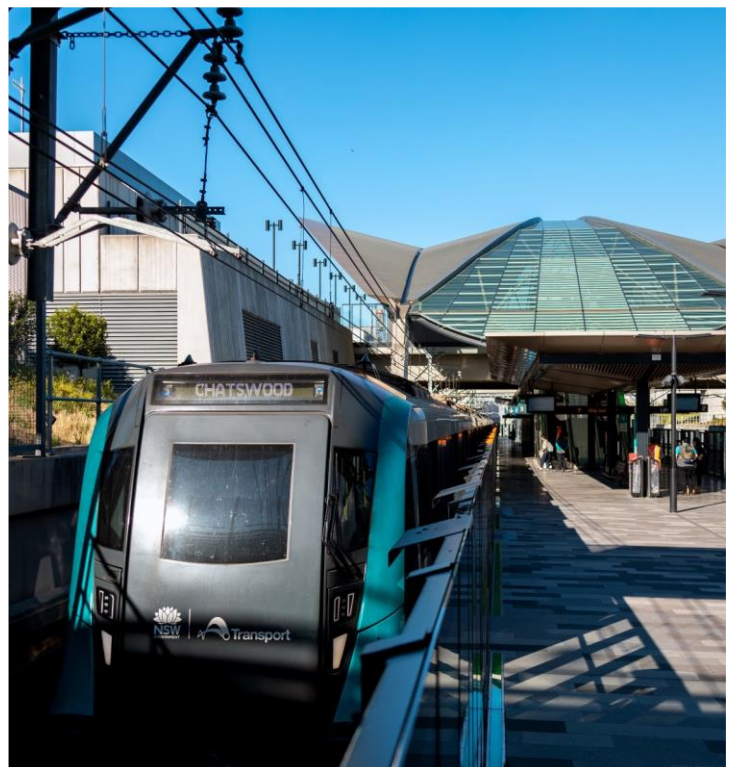
APPENDIX

Appendix D - TTLG Presentation



TTMP objectives

- Address the Project's conditions of approval (CoAs), Revised Environmental Mitigation Measures (REMMs) and revised environmental performance outcomes
- Provide operational management measures across the Project alignment to manage traffic and transport risks
- Integrate with existing and proposed road and related transport networks
- Minimise adverse changes to the safety, efficiency and accessibility of the networks
- Facilitate and improved level of service in relation to permanent and operational changes.





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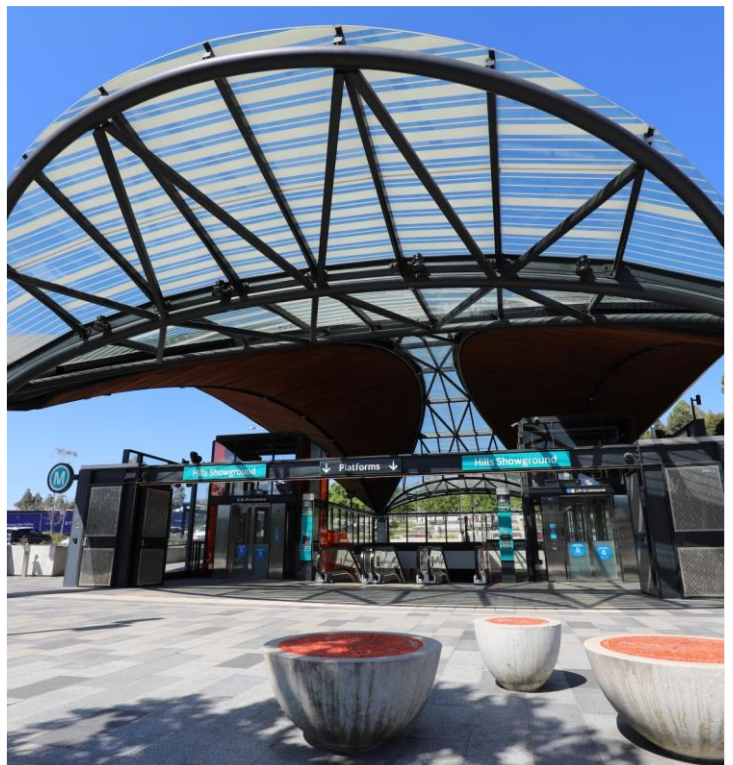


Consultation

This presentation complies with the relevant planning requirements for consultation; however, this presentation and/or plan are available for stakeholders to review

The following stakeholders are consulted:

- TTLG
- the Customer Journey Planning (CJP), formerly Sydney Coordination Office (SCO)
- the Relevant Road Authority and
- non-private transport operators.





Training

- All employees, contractors and utility staff will undergo site induction training. The site induction training will provide initial training on various environmental aspects, including traffic and transport management issues/measures.
- **Targeted training or specific training will also be provided to personnel with a key role in traffic and transport management, if required.**

Strategic Traffic and Transport impacts and benefits

- **Improve road traffic conditions by providing a convenient and efficient travel alternative to the use of private car**
- **Catering for growth in demand**
- **Increased accessibility and trip diversity**
- **Reduce train crowding and station crowding**
- Improved conditions for bus customers (high-quality bus connections to the stations and easy transfers for customers)
- Improved conditions for road users (by encouraging people to use the metro network)
- Increased station patronage as a result of the Project
- Increased strain on existing infrastructure in the absence of design features.

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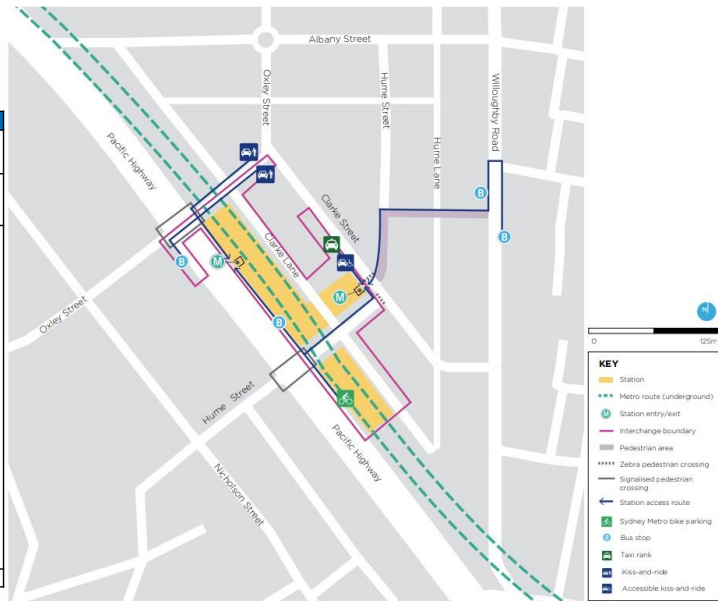
Transport modes serving each station:

Station	Walking	Cycling	Trains	Light rail	Bus	Ferry	Coaches	Taxi	Kiss-and-ride
Chatswood	✓	✓	✓		✓		✓	✓	✓
Crows Nest	✓	✓			✓			✓	✓
Victoria Cross	✓	✓			✓			✓	✓
Barangaroo	✓	✓			✓	✓	✓	✓	✓
Martin Place	✓	✓	✓		✓			✓	
Gadigal	✓	✓		✓	✓			✓	
Central	✓	✓	✓	✓	✓		✓	✓	✓
Waterloo	✓	✓			✓			✓	✓
Sydenham	✓	✓	✓		✓			✓	✓

- The majority of customers would be accessing and egressing the stations by walking
- Due to the location of each station (within Sydney CBD), in general, metro customers are not expected to access by driving their car
- New station developments have been designed to maintain access to property infrastructure
- During operation, stations will also provide access for maintenance activities
- **Supplementary analysis and modelling** will be undertaken during operation to demonstrate that operational traffic can be managed to minimize disruption to traffic network operations.

Crows Nest Station

Feature	Description
Station entry	<ul style="list-style-type: none"> An eastern entry on the corner of Hume Street and Clarke Street A western entry on the Pacific Highway towards Oxley Street.
Transport interchange	Walking, cycling, bus, taxi and kiss-and-ride.
Main features and traffic arrangement	<ul style="list-style-type: none"> Upgraded signalised pedestrian crossing and widened pedestrian crossing at the Pacific Highway/Oxley Street intersection. Formal pedestrian crossings on Clarke and Hume streets Widened pedestrian crossing at the Pacific Highway/Hume Street intersection New bike parking on the corner of Hume Street and the Pacific Highway A new separated cycleway on Hume Street New kiss-and-ride bays on Oxley Street New taxi bays on Clarke Street Implement a changed traffic configuration from a two-way operation to a one-way westbound operation on Hume Street between Pacific Highway and Clarke Street. Existing bus stops close to the station retained and relocated on the Pacific Highway Enhancement of pedestrian crossings at intersections of Oxley Street, Pacific Highway, Hume Street and Clarke Street. Site A and B will have a Class A hoarding from Day 1
Customers	Local retail, leisure, residential and existing employment precincts.



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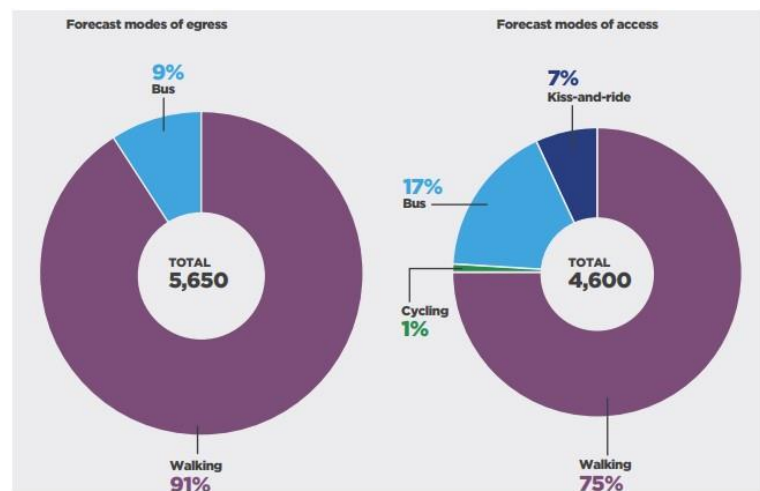
An MTR, John Holland and UGL Rail Company

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Crows Nest Station passenger demand

The 2036 AM peak hour demand profile and customer connectivity profiles show:

- Majority of customers accessing and egressing the station by walking
- Bus makes up a higher access mode than it does for egress mode
- These observed trends are likely to be reversed in the PM peak.

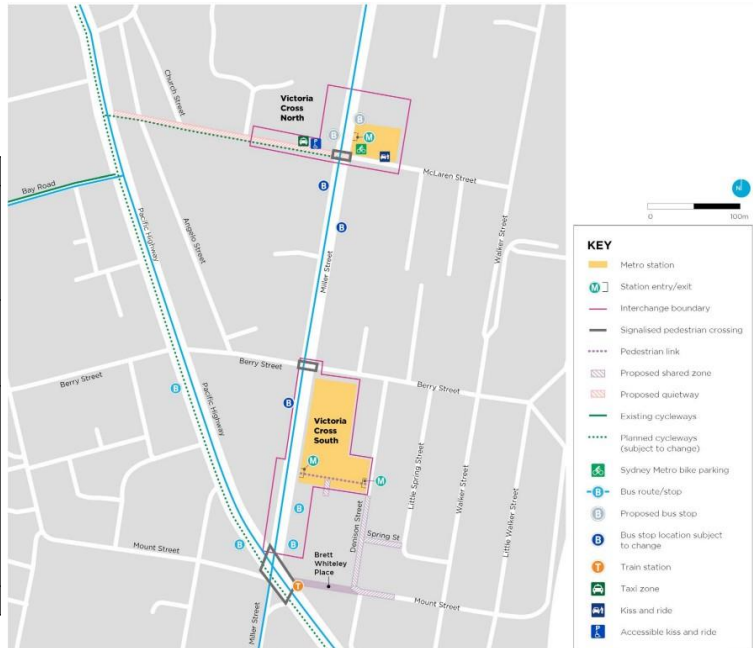


2036 1-hour AM peak demand and mode splits
(Sydney Metro Chatswood to Sydneyham Environmental Impact Statement)

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Victoria Cross Station

Feature	Description
Station entry	<ul style="list-style-type: none"> Victoria Cross north which is accessible from Miller Street near McLaren Street Victoria Cross south which is accessible from Miller Street and Denison Street, between the Pacific Highway and Berry Street.
Transport interchange	Walking, cycling, bus, taxi and kiss-and-ride.
Main features and traffic arrangement	<ul style="list-style-type: none"> New bike parking New kiss-and-ride bays on McLaren Street Bus stops on Miller Street near the northern and southern entrance Wayfinding signage and Sydney Metro information within the North Sydney CBD Enhancement of pedestrian infrastructure around the station. Some finishing works will still be undertaken on Miller Street after day 1
Customers	Employment, education and residential precincts.



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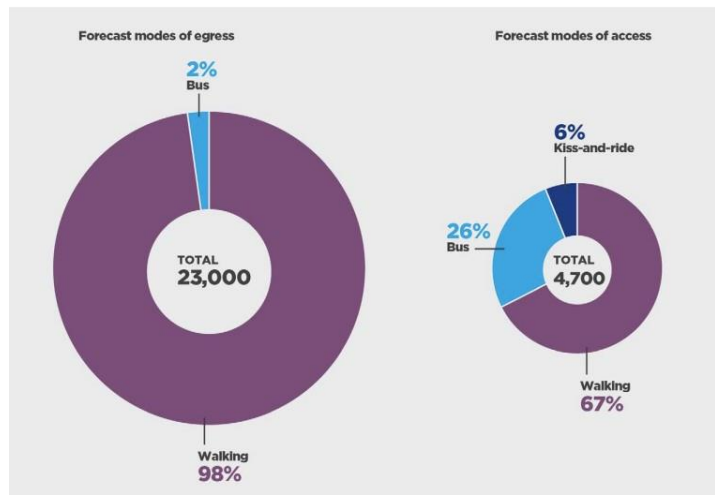
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Victoria Cross Station passenger demand

The 2036 AM peak hour demand profile and customer connectivity profiles show:

- Majority of customers accessing and egressing the station by walking
- Bus makes up a higher access mode than it does for egress mode
- Kiss-and-ride represents a small portion of the total demand generated by customers boarding metro services
- These observed trends are likely to be reversed in the PM peak.



2036 3.5-hour AM peak demand and mode splits (PTPM4.1 City and Southwest Final Business Case 2026 and 2036 Project LUT1 Scenarios (Run 143 and Run 144))

Note: The cyclist transfer volumes are not shown as they aren't included in the PTPM model.

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Martin Place Station

Feature	Description
Station entry	<ul style="list-style-type: none"> A northern entry via a pedestrian plaza opening to Castlereagh, Hunter and Elizabeth streets. A southern entry via a pedestrian plaza opening to Martin Place and Castlereagh Street An underground walkway will be provided from Martin Place to Hunter Street Retained underground pedestrian connection to the MLC Centre.
Transport interchange	Walking, cycling, bus, suburban rail, intercity rail and taxi.
Main features and traffic arrangements	<ul style="list-style-type: none"> New underground pedestrian link between the existing suburban and intercity Martin Place Station platforms and the metro station platforms New bike parking on Castlereagh at both station entries Existing bus stops retained on Elizabeth and Castlereagh streets Existing taxi ranks close to the station retained.
Customers	Employment, civic, commercial, retail, entertainment, and recreational precincts.



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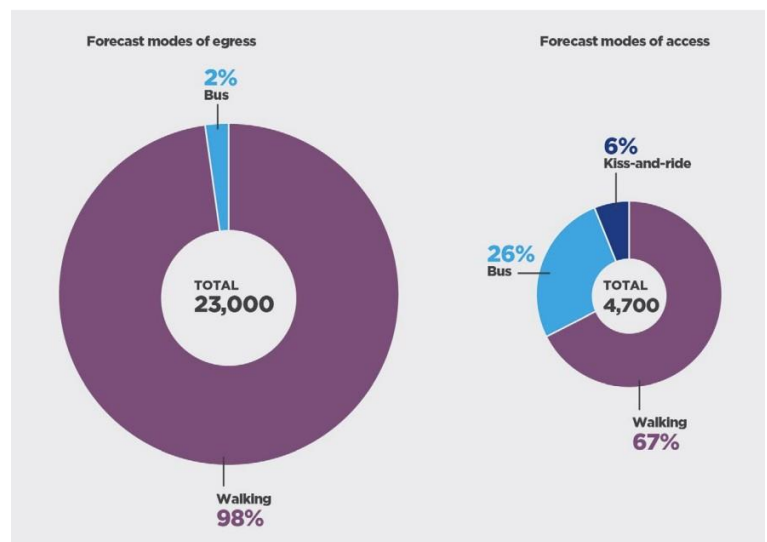
An MTR, John Holland and UGL Rail Company

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Martin Place Station passenger demand

The 2036 AM peak hour demand profile and customer connectivity profiles show:

- Majority of customers will egress the station during the AM peak hour
- Majority of people egressing the station are walking
- These observed trends are likely to be reversed in the PM peak.



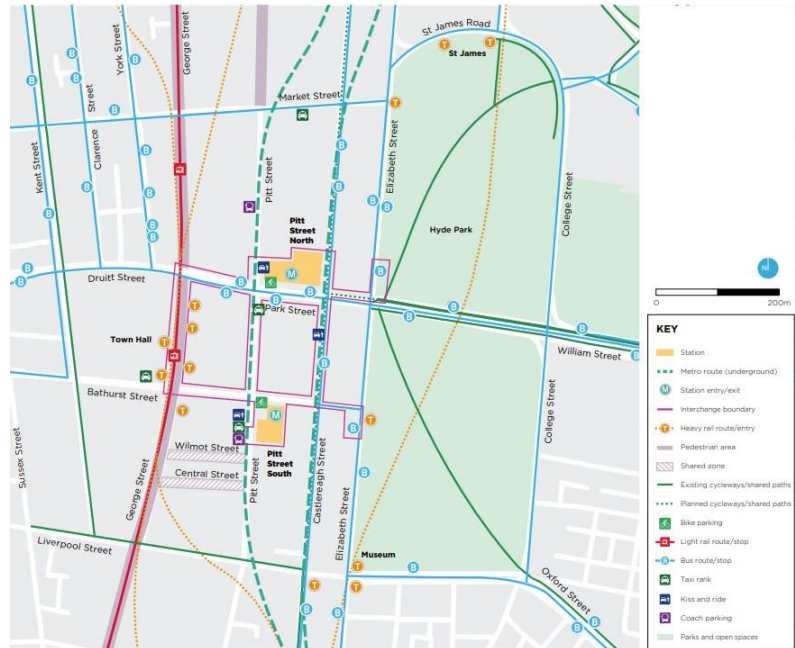
2036 3.5-hour AM peak demand and mode splits
(PTPM4.1 City and Southwest Final Business Case 2026 and 2036 Project LUTI Scenarios (Run 143 and Run 144))

Note: The cyclist transfer volumes are not shown as they aren't included in the PTPM model.

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Gadigal Station

Feature	Description
Station entry	<p>Entry is via two new pedestrian plazas at Pitt Street:</p> <ul style="list-style-type: none"> Pitt Street North is accessed from the northern footpath of Park Street between Pitt Street and Castlereagh Street Pitt Street South is accessed from the southern footpath of Bathurst Street between Pitt Street and Castlereagh Street.
Transport interchange	Walking, cycling, bus, light rail and taxi.
Main features and traffic arrangements	<ul style="list-style-type: none"> New bike parking on Park Street and Bathurst Street DDA-compliant station entries to maximise accessibility for all customers Footpath widening in Bathurst Street, immediately outside the station south entry, to accommodate pedestrian demand Integrate with existing bus stops on Park and Castlereagh streets to support seamless modal interchange. A 2.5-metre kerb extension along northern kerb of Park Street, just east of the intersection with Pitt Street. Gadigal North will have some finishing works still being undertaken at the entrance after day 1
Customers	Midtown retail, employment, entertainment, and residential precincts.



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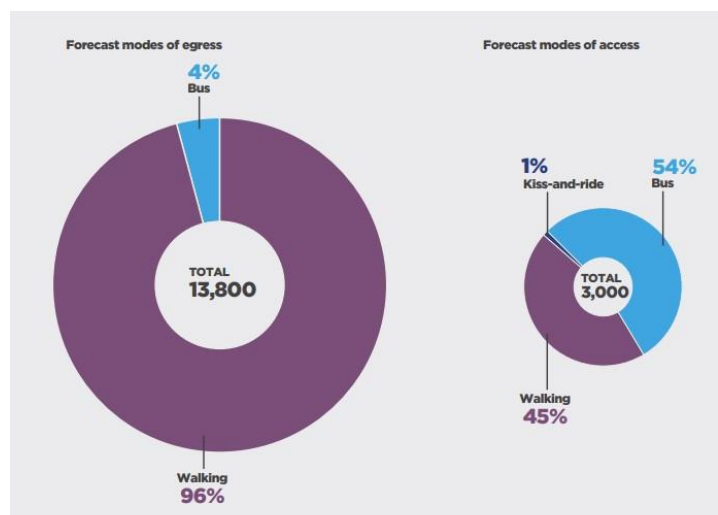
An MTR, John Holland and UGL Rail Company

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Gadigal Station passenger demand

The 2036 AM peak hour demand profile and customer connectivity profiles show:

- Alighting will be higher than boarding to the metro service during AM peak
- Walking is the dominant mode share for egress in the AM peak
- Connectivity between metro and bus services is important for customers boarding Metro services in the AM peak
- Kiss-and-ride represents a small proportion of the total demand generated by customers boarding metro services
- These observed trends are likely to be reversed in the PM peak.

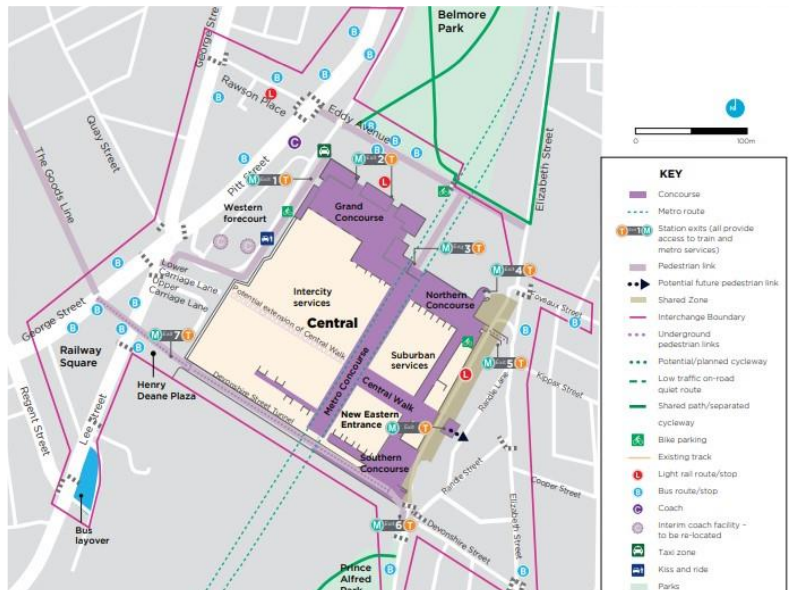


2036 3.5-hour AM peak demand and mode split.
(PTPM4.1 City & Southwest Final Business Case 2026 and 2036 Project LUT1 Scenarios (Run 143 and Run 144))

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Central Station

Feature	Description
Station entries	<ul style="list-style-type: none"> Existing western station entry from Railway Square and Broadway, connecting to the Devonshire Street Tunnel. Existing western station entry from the Western Forecourt, connecting to the Grand Concourse and Northern Concourse. Safeguard potential extension of Central Walk and on -street connections. Existing Northern entry to the metro platforms from Eddy Avenue. Existing northern station entry from Eddy Avenue and Pitt Street, connecting to the Grand Concourse and Northern Concourse. Existing northern station entry from the Porte Cochere of the Grand Concourse, connecting to L1 Dulwich Hill Light Rail. A new eastern entry via a pedestrian plaza connecting to Central Walk and opening to the eastern side of Chalmers Street. Existing eastern station entries from Devonshire Street, connecting to the Devonshire Street Tunnel, and the corner of Chalmers and Elizabeth Streets connecting to the T4 Eastern Suburbs and Illawarra Line Concourse. Existing eastern station entry from Elizabeth Street, connecting to the Northern Concourse.
Transport interchange	Walking, cycling, inter-state rail, intercity rail, suburban rail, light rail, bus, coach, taxi and kiss-and-ride (includes point to point service types).
Main features and traffic arrangement	<ul style="list-style-type: none"> Transfer to train services via Central Walk, and existing underground paid and unpaid pedestrian connections. New on road light rail route along Chalmers Street and Eddy Avenue. Existing kiss-and-ride, taxi ranks, bike parking and bus stops retained. A cycleway along Chalmers Street and Eddy Avenue has been delivered as part of the CBD and Southeast Light Rail project. Enhancement of pedestrian and cycling infrastructure around the station. Wayfinding signage and Sydney Metro information will be provided. Improvements to pedestrian infrastructure at the Western Forecourt, Eddy Avenue and Pitt Street colonnades, Devonshire Street Tunnel, Hay Street ramp and Lower Carriage Lane.
Customers	<ul style="list-style-type: none"> Southern CBD employment, education, entertainment and residential precincts. Interchange to and from metro services and other modes of transport. Sydney gateway for travellers to and from interstate and NSW regions.



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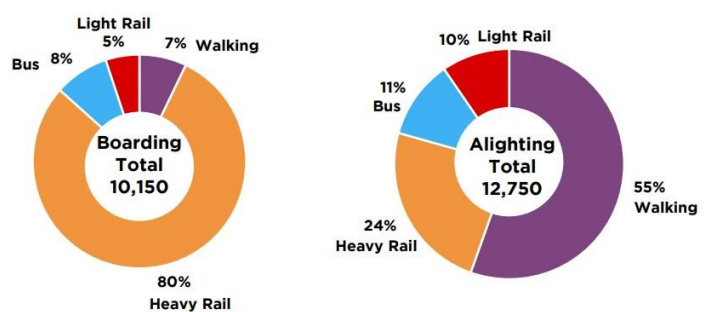
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Central Station passenger demand

The 2036 AM peak hour demand profile and customer connectivity profiles show:

- Boardings and alighting of the Metro services will be similar during peaks.
- A high proportion of customers alighting the Metro service will exit the station and walk to a destination in the AM peak.
- Connectivity between Metro platforms and Sydney Trains, NSW Trains, Sydney light rail and bus services is equally important for customers alighting Metro services in the AM peak.
- The majority of customers boarding Metro service will transfer onto the service from Sydney Trains or NSW Trains platforms.
- Walking to the station, and transfers from bus or Sydney light rail services combined represents a small proportion of the total demand generated by customers boarding Metro services.
- These observed trends are likely to be reversed in the PM peak and align with Central Station's role as a major transport hub.

2036 AM Peak Hour Metro Demand and Mode Split



2036 1-hour AM peak Sydney Metro demand and mode splits at Central Station
(PTPM4.1 City and Southwest Final Business Case 2026 and 2036 Project LUT1 Scenarios (Run 143 and Run 144))

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Waterloo Station

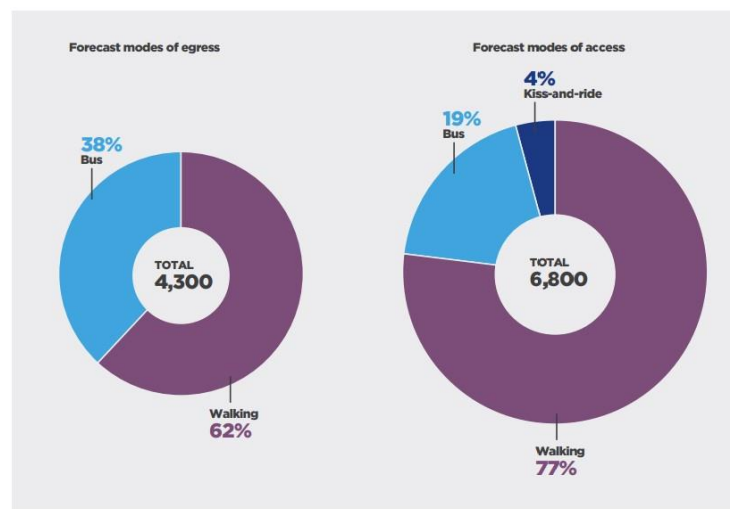
Feature	Description
Station entries	<ul style="list-style-type: none"> Corner of Raglan and Cope streets. Mid-block on Cope Street.
Transport interchange	<ul style="list-style-type: none"> Walking, cycling, bus, taxi and kiss-and-ride
Main features and traffic arrangement	<ul style="list-style-type: none"> New pedestrian crossings on Raglan, Wellington and Cope streets. New taxi, kiss-and-ride bays and bike parking. New on-road marked cycle link on Wellington Street. Existing bus stops retained northbound along Botany Road. Relocation of the bus stops southbound, mid-block Botany Road between Raglan and Wellington streets. The new station entrance is a plaza entrance that incorporates sufficient pedestrian space to accommodate the forecast number of entries and exits at the station. Wellington Cycleway delayed to 2025, bus stop mid-block of Botany Rd delayed to 2027-29. Updated map now shows two entrances for Day 1 operation
Customers	<ul style="list-style-type: none"> Residential, education and commercial precincts.



Waterloo Station passenger demand

The 2036 AM peak hour demand profile and customer connectivity profiles show:

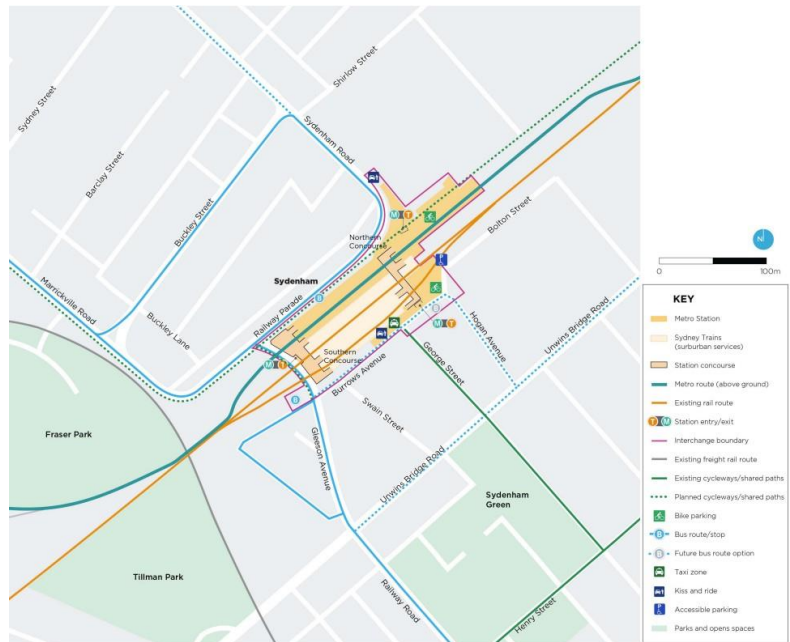
- Boardings will be higher than alightings of the Metro services during the AM peak
- Walking is the dominant mode share for egress and access in the AM peak
- Connectivity between Metro platforms and bus services is equally important for customers boarding and alighting Metro services in the AM peak
- Kiss and ride represents a small proportion of the total demand generated by customers boarding Metro services
- These observed trends are likely to be reversed in the PM peak.



2036 3.5-hour AM peak demand and mode splits (PTPM4.1 City and Southwest Final Business Case 2026 and 2036 Project LUT1 Scenarios (Run 143 and Run 144))
Note: The cyclist transfer volumes are not shown as they aren't included in the PTPM model

Sydenham Station

Feature	Description
Station entries	<ul style="list-style-type: none"> A new northern entry via a pedestrian plaza opening to Railway Parade and Sydenham Road. A new southern entry via a pedestrian plaza opening to Burrows Avenue.
Transport interchange	<ul style="list-style-type: none"> Walking, cycling, bus, suburban rail, taxi, kiss and ride, and park and ride.
Main features and traffic arrangement	<ul style="list-style-type: none"> New aerial concourse over the rail lines between the corner of Railway Parade and Sydenham Road and Burrows Avenue. New bike parking in the plazas at the new northern entrances. New kiss and ride zones on Burrows Avenue and Sydenham Road. Upgraded and extended bus stops provided on Railway Parade. New signalised crossing on Sydenham Road. Wayfinding signage and Sydney Metro information will be provided.
Customers	<ul style="list-style-type: none"> Industrial, commercial, retail, residential and recreational precincts.



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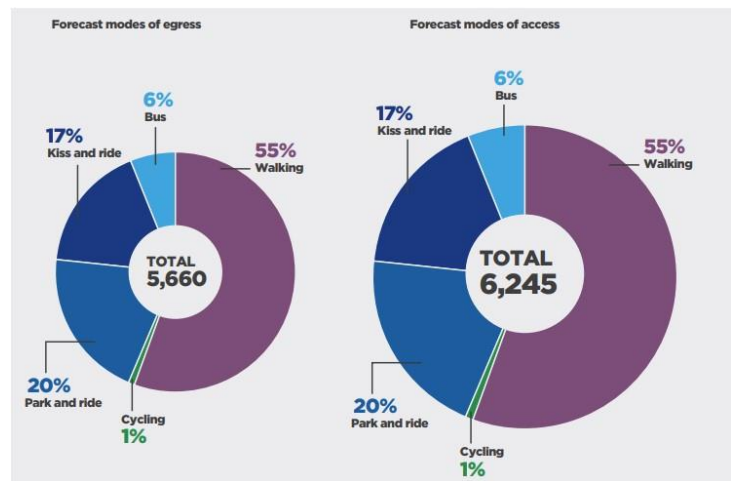
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Sydenham Station passenger demand

The 2036 AM peak hour demand profile and customer connectivity profiles show:

- Boardings and alightings of the Metro services will be similar during peaks;
- The majority of customers alighting the Metro service will exit the station and walk to a destination in the AM peak.
- A large portion (around 37% of customers will be dropped off and/or picked up using either the kiss and ride of park and ride services.
- These observed trends are likely to be reversed in the PM peak and align with Central Station's role as a major transport hub.
- The Metro concourse, Central Walk, new eastern entrance and Northern Concourse enhancement's play a vital role in supporting these and other internal and external station movements along with helping to tackle current station operational deficiencies.



2026 Daily demand and mode split – for Sydney Metro and Sydney Trains combined
(Sydney Metro Chatswood to Sydenham Environmental Impact Statement – Sydenham Station and Sydney Metro Trains Facility South Modification Report)

Note: Transfers between Sydney Metro and Sydney Trains not included

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Marrickville Dive

- Traffic signals have been introduced at the Edinburgh Road / Bedwin Road / Edgeware Road intersection to improve traffic safety during the construction phase. These signals have been retained for operation
- During detailed design, Transport for NSW has consulted with Inner West Council, Roads and Maritime Services and other stakeholders on strategies to reduce the number of staged pedestrian marked foot crossings at the Edinburgh Road / Edgeware Road intersection. Improvements have been implemented by both the Project and Inner West Council.

Chatswood Dive

- Pedestrians and cyclists :
 - ✓ Frank Channon Walk (a shared path currently connecting Chatswood Station to Nelson Street) has been extended from Nelson Street to Mowbray Road on the western side of the rail line to provide an enhanced facility for pedestrians and cyclists and provide continued access between Chatswood Station and residential areas to the south. Those travelling from residential areas to the south-east of the rail line will need to use the underpass adjacent to Chatswood Oval to cross the rail line and access Frank Channon Walk. Orchard Road, running parallel to Frank Channon Walk on the eastern side of the rail line, can also be used as an alternative north-south route for journeys between the Chatswood retail areas and residential areas to the south
 - ✓ Due to the extension of Frank Channon Walk and the availability of alternative facilities in the area the closure of Nelson Street bridge is not anticipated to result in significant impacts for pedestrians and cyclists.
 - ✓ The provision of traffic signals at the Mowbray Road / Hampden Road intersections provides additional pedestrian connectivity across Mowbray Road between the existing pedestrian crossings at the Pacific Highway and Orchard Road and a direct link to the extended Frank Channon Walk.
 - ✓ The design of the interface between the Frank Channon Walk extension and the signalised intersection at Mowbray Road / Hampden Road has been developed in consultation with Roads and Maritime Services and Willoughby Council.
- Road network :
 - ✓ The primary role of Nelson Street overbridge is for use by motorists travelling southbound on the Pacific Highway to access Mowbray Road westbound via Orchard Road. To maintain this movement, an all vehicle right turn movement is provided from the Pacific Highway southbound to Mowbray Road westbound and altered traffic light phasing to account for this new movement.
 - ✓ Nelson Street also provides local access for properties located to the east of the T1 North Shore Rail Line. Following closure of the Nelson Street bridge, these residents will need to use alternative road to cross the rail line such as Mowbray Road or Albert Avenue which could result in a marginal increase to travel times.
 - ✓ Traffic signals introduced at Mowbray Road / Hampden Road for the construction phase have been retained during operation.

Operational Management and Maintenance

- The Project appropriately integrates with existing and planned future transport infrastructure
- Metro customers would be provided with a safe and secure service with more direct routes to key destinations, reducing crowding at stations
- Each interchange precinct is allocated with efficient transport modes
- Interchange features at each station have been appropriately designed to achieve operational predicted customers demand and would efficiently interact with the existing network
- All stations also provide appropriate access for operation and maintenance activities and sufficient space have been provided for the accommodation of buses in the event of planned or unplanned disruption of normal operations
- **Access to neighbouring properties will be maintained as much as reasonable and practicable.**

Operational Management and Maintenance

- An Interchange Operations and Maintenance Plan (IOMP) will be prepared to allocate clear responsibility for all aspects of day -to-day running of the station interchange and to ensure that nominated infrastructure and assets are monitored and maintained to a high standard while maintaining the safety of metro customers
- Operations and maintenance provisions will be documented in accordance with the IOMP and include:
 - ✓ Description of the asset owners, operators and maintainers
 - ✓ Asset operations description
 - ✓ Asset maintenance arrangements .



Emergency Response

- Emergency response associated with traffic and transport will be managed:
 - ✓ In accordance with the OEMP
 - ✓ As detailed in the Emergency Management Plan - Sydney Metro Northwest and City & Southwest
 - ✓ As stated in the Site Incident Management Plan (SIMP) prepared for each station.



Monitoring

Monitoring details	Frequency
Traffic on local roads around each station will be monitored for a period of no less than 12 months after commencement of operation. If monitoring indicates unacceptable traffic intrusion on local roads/streets as a result of operation beyond those that could reasonably be predicted in the EIS and/or the IAPs, appropriate traffic management measures to mitigate the monitored impacts will be implemented following consultation with the Customer Journey Planning and relevant Road Authorities.	12 months after commencement of operation.

Community Response

- Applied for any complaints associated with traffic and transport issues that are under MTS responsibility.



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An environmental enquiry or complaint is received via TfNSW's Customer Information service on 131 500 and online at www.transport.nsw.gov.au.

Step	Action	Timeframe	
		Operational hours	Engineering hours
1	Initial contact • TfNSW notifies MTS of enquiry or complaint (operational hours). • MTS receives complaints where 131 500 is diverted (engineering hours). • SMA/TfNSW-related online enquiry or complaint is received by MTS via Salesforce.	<ul style="list-style-type: none"> Immediately. 131 500 phone calls are entered into Salesforce and responsibility assigned to MTS. Web-based enquiry or complaint is entered into Salesforce and responsibility assigned to MTS. 	<ul style="list-style-type: none"> Immediately. 131 500 passed off to MTS-designated number between 12am – 6am. Web-based form entries are provided to MTS the next business day by TfNSW.
2	Investigation For complaints, MTS Customer Information Delivery Partner (ISC) investigates and contacts complainant to seek any additional information.	Within 24 hours when only trains are operating.	<ul style="list-style-type: none"> Within two hours or as agreed with complainant when maintenance and repair works are occurring in Environmental Protection Licence licenced premise. Within 24 hours when only trains are operating or not within EPL licenced premise.
3	Escalation (Beyond a usual operational issue) Where is cannot be resolved by the MTS SMCIC, DCRC or GMOCE, for dissemination, coordination of Subject Matter Expert or SMA/TfNSW involvement (as required) and response.	Within two business days.	
4	Review SME involvement, review of complaint, investigate work practices and mitigations. Develop response including proposed monitoring and any proposed additional mitigation measures.	Within five business days.	
5	Resolve MTS CRO communicates the resolution with complainant.	Target five business days. Where a complaint requires a detailed investigation, may require significant mitigation* and may take longer than 20 days, the complainant will be kept informed of progress on a regular basis until the matter is resolved.	

* Significant mitigation is defined by MTS to be mitigation that:
 a. has a cost of more than \$10,000; or
 b. will require further noise modelling to determine the scope of reasonable and feasible mitigation measures (e.g., height and size of noise barriers, or specifications for at-property treatments).

TTMP Review

Annual management reviews provide specific opportunities to identify improvements. The TTMP will be updated as required:

- To consider changes to the environment or generally accepted environmental management practices, new risks to the environment, any hazardous substances, contamination or changes in law
- Where requested or directed by the DPHI or any other authority
- In response to internal or external audits or quarterly management reviews.



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Thank you and any questions?

E

APPENDIX

Appendix E – External Stakeholder Consultation

Agenda, attendees and minutes of the 29th of May 2024 TTLG meeting

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Sydney Metro City & Southwest – Traffic & Transport Liaison Group (TTLG) meeting No. 88 – Minutes



SAFETY & WELLBEING



COLLABORATION



INTEGRITY



INNOVATION



EXCELLENCE



ACHIEVEMENT

Date/Time:	Wednesday 29 th May 2024 11:00am – 12:30pm		
Location:	MS Teams video conference		
Chair:	Jake Coles (JC)		
Attendees:	Agency	Discipline	
Ahsanul Amin	AAM	Sydney Metro	Transport Planning
Garry Hitchcox	GHi	Sydney Metro	Transport Planning
Shobhan Baranwal	SBa	Sydney Metro	Transport Planning
John Ieroklis	JI	Sydney Metro	Environment
Michael Acs	MA	Sydney Metro	Project Manager
Frankie Passerelli	FP	Customer Journey Planning	Short term bus changes
Jake Coles	JC	Customer Journey Planning	Traffic and Transport
Johnathan Kontalis	JKo	Customer Journey Planning	TTP bus operations
Rabih Bekdache	RB	Customer Journey Planning	Short term bus changes
Mohammed Irfan	Mlr	Planning & Programs	Network & Safety
Nicole Li	NLi	Planning & Programs	Metro Interface
Nihal Khurshid	NK	Planning & Programs	Network & Safety
Khaled Dib	KDi	Planning & Programs	Metro Interface
Zakaria Ahmad	ZA	Planning & Programs	Metro Interface
Victor Dorrel	VDo	AW Edwards	Crows Nest contractor
Rory Geerin	RG	BESIX Watpac	Barangaroo contractor
Joshua Faull	JFa	City of Sydney	Traffic & Transport
Wei Jing	WJ	CPB	Gadigal Station ISD
Michael Huy	MHu	Inner West Council	Traffic & Transport
Okba Mahdy	OMa	JHG	Waterloo contractor
Lucy Woodley	LWo	Lendlease	Victoria Cross contractor
David Wilson	DW	MTS	City Stations Operations
Peter Scioscia	PSc	MTS	City Stations Operations
Gavin McConnell	GMc	North Sydney Council	Traffic & Transport

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Apologies:			
Adam Cordukes	ACo	Sydney Metro	Health & Safety
Anila Sethi	ASe	Sydney Metro	Project Engineer
Bakos Patros	BPa	Sydney Metro	Projects-Site Engineer
Conor Dunne	CDu	Sydney Metro	Barangaroo contract mgt.
Gaya Prem Kumar	GPK	Sydney Metro	Project Delivery
Gordon Farrelly	GFa	Sydney Metro	Transport Planning
Haider Bukhari	HB	Sydney Metro	Crows Nest contract mgt
Hailey Clonts	HCl	Sydney Metro	Project Delivery
Imelda Utojo	IUt	Sydney Metro	Project Delivery
Imogen Markus	IM	Sydney Metro	Transport Planning
Jack Weston	JW	Sydney Metro	Gadigal Station contract mgt.
Kate McElhone	KM	Sydney Metro	Project Delivery
Muhammad Shakeel	MSh	Sydney Metro	Project Delivery
Nita Hutapea	NHu	Sydney Metro	Transport Planning
Philip Kacir	PKa	Sydney Metro	Project Manager
Richard Shepherd	RSh	Sydney Metro	Transport Planning
Ryan Kane	RK	Sydney Metro	Project Interface
Sajid Shaikh	SSh	Sydney Metro	SSJ contract mgt.
Tammy Aylett	TA	Sydney Metro	Health & Safety
Toby Johnston	TJ	Sydney Metro	Project Delivery
Daniel Ngo	DNg	Customer Journey Planning	CBD approach operations
David Osborne	DOs	Planning & Programs	Network & Safety
Amy Walgers	AW	Customer Journey Planning	CBD approach operations
Dee De Silva	DDe	Customer Journey Planning	TTP bus operations
Giovanny Ramirez	GR	Customer Journey Planning	Traffic and Transport
Jay Shanmugam	JSh	Customer Journey Planning	TTP bus operations
Jim Niahos	JN	Customer Journey Planning	Temp. Shutdown Trans.Plan
Fraser Leishman	FL	Planning & Programs	Metro Interface
Kath Hawkins	KHa	Planning & Programs	Network & Safety
Ram Sriharan	RSr	Planning & Programs	Network & Safety
Tarun Malviya	TMa	Planning & Programs	Metro Interface
Luke Wilby	LWi	Transport for NSW	Safer Transport, Regulations



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Megan Parker	MP	Transport for NSW	Cities & Active Transport
Mounira Hijazi	MHi	Transport for NSW	Operational Communications
Ben Lomax	BLo	BESIX Watpac	Barangaroo contractor
Daniel Gooch	DGo	BESIX Watpac	Barangaroo contractor
Imran Khan	IKh	City of Canterbury Bankstown	Traffic & Transport
Shereny Selim	SSe	City of Canterbury Bankstown	Traffic & Transport
Terry Hawi	TH	City of Canterbury Bankstown	Traffic & Transport
Trevor Le	TL	City of Canterbury Bankstown	Traffic & Transport
Tegan Mitchell	TMi	City of Sydney	Traffic & Transport
Tom Bershtein	TBe	City of Sydney	Traffic & Transport
Ashish Kayastha	AKa	CPB Contractor	Gadigal Station ISD
Ramin Mohina	RMo	CPB Contractor	Gadigal Station ISD
Jakob Kessler	JKe	CPB Contractor	Gadigal Station ISD
Jun Leon	JLe	Downer	Southwest Package 5 & 6
Gary Penberthy	GPe	Haslin	Southwest Package 4
Allan Borg	AB	Inner West Council	Traffic & Transport
David Givargiz	DGi	JHG	Waterloo contractor
Farah Haddad	FHa	JHG	Waterloo contractor
Nick Alba	NAI	JHG	Waterloo contractor
Harmesh Gill	HGi	JHLOR	SSJ contractor
Wajid Ghafoor	WGH	JHLOR	SSJ contractor
Danjels Reedman	DRe	Lendlease	Martin Place contractor
Michael Tan	MTa	Lendlease	Martin Place contractor
Karl Cronan	KCr	NSW Ambulance	Emergency Services
James McMahon	JMc	NSW Fire & Rescue	Zone Manager
Luke Slechta	LSI	RMA Group	Chatswood Dive Site



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Item	Agenda item	Action By	Due Date
1.	Welcome & Acknowledgement of Country: <i>I like to acknowledge Aboriginal peoples are the traditional owners and custodians of this land on which we all meet today. I pay my respects to Elders, past & present and recognise and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of NSW.</i>	JC	
2.	Confirmation of Minutes	JC	
3.	Actions arising from the previous meeting	JC	Next TTLG
4.	City and Southwest – Crows Nest	VDo	
5.	City and Southwest – Victoria Cross WAD	LWo	
6.	City and Southwest – Barangaroo	RGe	
7.	City and Southwest – Waterloo ISD & OSD development	OMa	
8.	City and Southwest – Sydenham to Bankstown	WGh	
9.	City and Southwest – MTS – City Stations T&TM Plan	PSc	
10.	Other matters/ General Business:	All	
11.	Next TTLG will be on Wednesday 26 th June 2024	JC	

TTLG Meeting No.	Date	Time	Location	Contact:
88	Wednesday 29 th May 2024	11:00am	MS Teams	Ahsanul Amin 0427941329

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City and Southwest – MTS Operational Traffic and Transport Management Sub-Plan

Peter Scioscia (PSc) presented the following items.

TTMP Objectives:

- Address the Project's conditions of approval (CoAs), Revised Environmental Mitigation Measures (REMMs) and revised environmental performance outcomes
- Provide operational management measures across the Project alignment to manage traffic and transport risks
- Integrate with existing and proposed road and related transport networks
- Minimize adverse changes to the safety, efficiency and accessibility of the networks
- Facilitate and improved level of service in relation to permanent and operational changes.

Consultation:

- This presentation complies with the relevant planning requirements for consultation.
- The following stakeholders are consulted:
 - TTLG
 - the Customer Journey Planning (CJP), formerly Sydney Coordination Office (SCO)
 - the Relevant Road Authority and
 - non-private transport operators.

Training:

9.
 - All employees, contractors and utility staff will undergo site induction training. The site induction training will provide initial training on various environmental aspects, including traffic and transport management issues/measures.
 - Targeted training or specific training will also be provided to personnel with a key role in traffic and transport management, if required.

Strategic Traffic and Transport impacts and benefits:

- Improve road traffic conditions by providing a convenient and efficient travel alternative to the use of private car
- Catering for growth in demand
- Increased accessibility and trip diversity
- Reduce train crowding and station crowding
- Improved conditions for bus customers (high-quality bus connections to the stations and easy transfers for customers)
- Improved conditions for road users (by encouraging people to use the metro network)
- Increased station patronage as a result of the Project
- Increased strain on existing infrastructure in the absence of design features.

Interchange Access Plans (IAPs):

- IAP's have been developed for each station by applying broad transport and access standards, guidelines, principles and strategies.
- IAP objectives:
 - Respond and comply with CoA E92
 - Provide detailed interchange deliverables
 - Inform the interchange design of transport and access facilities (footpaths, cycle paths, bike parking, bus stops)



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- Identify customers amenities, shelter, road and traffic management required to ensure easy, accessible, safe and efficient customer transfer.

Transport modes serving each station:

Station	Walking	Cycling	Trains	Light rail	Bus	Ferry	Coaches	Taxi	Kiss-and-ride
Chatswood	✓	✓	✓		✓		✓	✓	✓
Crows Nest	✓	✓			✓			✓	✓
Victoria Cross	✓	✓			✓			✓	✓
Barangaroo	✓	✓			✓	✓		✓	✓
Martin Place	✓	✓	✓		✓			✓	
Gadigal	✓	✓			✓			✓	
Central	✓	✓	✓	✓	✓		✓	✓	✓
Waterloo	✓	✓			✓			✓	✓
Sydenham	✓	✓	✓		✓			✓	✓

- The majority of customers would be accessing and egressing the stations by walking
- Due to the location of each station (within Sydney CBD), in general, metro customers are not expected to access by driving their car
- New station developments have been designed to maintain access to property infrastructure
- During operation, stations will also provide access for maintenance activities
- Supplementary analysis and modelling will be undertaken during operation to demonstrate that operational traffic can be managed to minimize disruption to traffic network operations.

Summaries of features and passenger demands from the IAPs were presented for each station.

Marrickville Dive:

- Traffic signals have been introduced at the Edinburgh Road / Bedwin Road / Edgeware Road intersection to improve traffic safety during the construction phase. These signals have been retained for operation
- During detailed design, Transport for NSW has consulted with Inner West Council, Roads and Maritime Services and other stakeholders on strategies to reduce the number of staged pedestrian marked foot crossings at the Edinburgh Road / Edgeware Road intersection. Improvements have been implemented by both the Project and Inner West Council.

Chatswood Dive:

- Pedestrians and cyclists:
 - Frank Channon Walk (a shared path currently connecting Chatswood Station to Nelson Street) has been extended from Nelson Street to Mowbray Road on the western side of the rail line to provide an enhanced facility for pedestrians and cyclists and provide continued access between Chatswood Station and residential areas to the south. Those travelling from residential areas to the south-east of the rail line will need to use the underpass adjacent to Chatswood Oval to cross the rail line and access Frank Channon Walk. Orchard Road, running parallel to Frank Channon Walk on the eastern side of



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- the rail line, can also be used as an alternative north-south route for journeys between the Chatswood retail areas and residential areas to the south
- Due to the extension of Frank Channon Walk and the availability of alternative facilities in the area the closure of Nelson Street bridge is not anticipated to result in significant impacts for pedestrians and cyclists.
- The provision of traffic signals at the Mowbray Road / Hampden Road intersections provides additional pedestrian connectivity across Mowbray Road between the existing pedestrian crossings at the Pacific Highway and Orchard Road and a direct link to the extended Frank Channon Walk.
- The design of the interface between the Frank Channon Walk extension and the signalised intersection at Mowbray Road / Hampden Road has been developed in consultation with Roads and Maritime Services and Willoughby Council.
- Road network:
 - The primary role of Nelson Street overbridge is for use by motorists travelling southbound on the Pacific Highway to access Mowbray Road westbound via Orchard Road. To maintain this movement, an all vehicle right turn movement is provided from the Pacific Highway southbound to Mowbray Road westbound and altered traffic light phasing to account for this new movement.
 - Nelson Street also provides local access for properties located to the east of the T1 North Shore Rail Line. Following closure of the Nelson Street bridge, these residents will need to use alternative road to cross the rail line such as Mowbray Road or Albert Avenue which could result in a marginal increase to travel times.
 - Traffic signals introduced at Mowbray Road / Hampden Road for the construction phase have been retained during operation.

Operational Management and Maintenance:

- The Project appropriately integrates with existing and planned future transport infrastructure
- Metro customers would be provided with a safe and secure service with more direct routes to key destinations, reducing crowding at stations
- Each interchange precinct is allocated with efficient transport modes
- Interchange features at each station have been appropriately designed to achieve operational predicted customers demand and would efficiently interact with the existing network
- All stations also provide appropriate access for operation and maintenance activities and sufficient space have been provided for the accommodation of buses in the event of planned or unplanned disruption of normal operations
- Access to neighbouring properties will be maintained as much as reasonable and practicable.
- An Interchange Operations and Maintenance Plan (IOMP) will be prepared to allocate clear responsibility for all aspects of day-to-day running of the station interchange and to ensure that nominated infrastructure and assets are monitored and maintained to a high standard while maintaining the safety of metro customers
- Operations and maintenance provisions will be documented in accordance with the IOMP and include:
 - Description of the asset owners, operators and maintainers
 - Asset operations description
 - Asset maintenance arrangements.



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Emergency Response:

- Emergency response associated with traffic and transport will be managed:
 - In accordance with the OEMP
 - As detailed in the Emergency Management Plan – Sydney Metro Northwest and City & Southwest
 - As stated in the Site Incident Management Plan (SIMP) prepared for each station

Monitoring:

- Traffic on local roads around each station will be monitored for a period of no less than 12 months after commencement of operation. If monitoring indicates unacceptable traffic intrusion on local roads/streets as a result of operation beyond those that could reasonably be predicted in the EIS and/or the IAPs, appropriate traffic management measures to mitigate the monitored impacts will be implemented following consultation with the Customer Journey Planning and relevant Road Authorities.
- Frequency: 12 months after commencement of operation.

Community Response:

- Applied for any complaints associated with traffic and transport issues that are under MTS responsibility.

An environmental enquiry or complaint is received via TfNSW's Customer Information service on 131 500 and online at www.transport.nsw.gov.au.

Step	Action	Timeframe	
		Operational hours	Engineering hours
1	Initial contact • TfNSW notifies MTS of enquiry or complaint (operational hours). • MTS receives complaints where 131 500 is diverted (engineering hours). • SMA/TfNSW-related online enquiry or complaint is received by MTS via Salesforce.	<ul style="list-style-type: none"> Immediately. 131 500 phone calls are entered into Salesforce and responsibility assigned to MTS. Web-based enquiry or complaint is entered into Salesforce and responsibility assigned to MTS. 	<ul style="list-style-type: none"> Immediately. 131 500 passed off to MTS-designated number between 12am – 6am. Web-based form entries are provided to MTS the next business day by TfNSW.
2	Investigation For complaints, MTS Customer Information Delivery Partner (ISC) investigates and contacts complainant to seek any additional information.	Within 24 hours when only trains are operating.	<ul style="list-style-type: none"> Within two hours or as agreed with complainant when maintenance and repair works are occurring in Environmental Protection Licence licenced premise. Within 24 hours when only trains are operating or not within EPL licenced premise.
3	Escalation (Beyond a usual operational issue) Where is cannot be resolved by the MTS SMCIC, DCRC or GMOCE, for dissemination, coordination of Subject Matter Expert or SMA/TfNSW involvement (as required) and response.	Within two business days.	
4	Review SME involvement, review of complaint, investigate work practices and mitigations. Develop response including proposed monitoring and any proposed additional mitigation measures	Within five business days.	
5	Resolve MTS CRO communicates the resolution with complainant.	Target five business days. Where a complaint requires a detailed investigation, may require significant mitigation* and may take longer than 20 days, the complainant will be kept informed of progress on a regular basis until the matter is resolved.	

* Significant mitigation is defined by MTS to be mitigation that

- a. has a cost of more than \$10,000; or
- b. will require further noise modelling to determine the scope of reasonable and feasible mitigation measures (e.g., height and size of noise barriers, or specifications for at-property treatments)



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Agenda Item	Minutes
	<p>TTMP Review:</p> <ul style="list-style-type: none"> Annual management reviews provide specific opportunities to identify improvements. The TTMP will be updated as required: <ul style="list-style-type: none"> To consider changes to the environment or generally accepted environmental management practices, new risks to the environment, any hazardous substances, contamination or changes in law. Where requested or directed by the DPE or any other authority. In response to internal or external audits or quarterly management reviews. <p>Comments/Discussions:</p> <ul style="list-style-type: none"> JC asked who the consultation was happening with in CJP. PSc is not sure but will work with AA to identify the right people. JC mentioned this would need to involve a broader section of CJP and requested the full T&T report for CJP review/comment. AA will send this through to JC to distribute to the relevant people in CJP.
10.	<p>Other matters:</p> <ul style="list-style-type: none"> None
11.	<p>Next Meeting:</p> <p>The next TTLG meeting is scheduled for Wednesday 26th June 2024.</p>
<p>Meeting ended at 11:35am.</p>	

attendees and minutes of the 26th June 2024 TTLG meeting confirming distribution of TTMP to TTLG members

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**Sydney Metro City & Southwest – Traffic & Transport Liaison Group (TTLG) meeting
No. 89 – DRAFT Minutes**



SAFETY & WELLBEING



COLLABORATION



INTEGRITY



INNOVATION



EXCELLENCE



ACHIEVEMENT

Date/Time:	Wednesday 26 th June 2024 11:00am – 12:30pm		
Location:	MS Teams video conference		
Chair:	Jake Coles (JC)		
Attendees:	Agency	Discipline	
Ahsanul Amin	AAM	Sydney Metro	Transport Planning
Alison Xian	AX	Sydney Metro	Surveillance
Anila Sethi	ASe	Sydney Metro	Project Engineer
Garry Hitchcox	GHi	Sydney Metro	Transport Planning
John Nguyen	JNg	Sydney Metro	Project Manager
Richard Shepherd	RSh	Sydney Metro	Transport Planning
Shobhan Baranwal	SBa	Sydney Metro	Transport Planning
Tammy Aylett	TA	Sydney Metro	Health & Safety
Amy Walgers	AW	Customer Journey Planning	CBD approach operations
Jake Coles	JC	Customer Journey Planning	Traffic and Transport
David Osborne	DOs	Planning & Programs	Network & Safety
Mohammed Irfan	Mlr	Planning & Programs	Network & Safety
Kath Hawkins	KHa	Planning & Programs	Network & Safety
Khaled Dib	KDi	Planning & Programs	Metro Interface
Zakaria Ahmad	ZA	Planning & Programs	Metro Interface
Victor Dorrel	VDo	AW Edwards	Crows Nest contractor
Rory Geerin	RG	BESIX Watpac	Barangaroo contractor
Terry Hawi	TH	City of Canterbury Bankstown	Traffic & Transport
Michael Huy	MHu	Inner West Council	Traffic & Transport
Okba Mahdy	OMa	JHG	Waterloo contractor
Lucy Woodley	LWo	Lendlease	Victoria Cross contractor
Jerimia Tukadra	JT	North Sydney Council	Traffic & Projects
Apologies:			
Adam Cordukes	ACo	Sydney Metro	Health & Safety

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Bakos Patros	BPa	Sydney Metro	Projects-Site Engineer
Conor Dunne	CDu	Sydney Metro	Barangaroo contract mgt.
Gaya Prem Kumar	GPK	Sydney Metro	Project Delivery
Gordon Farrelly	GFa	Sydney Metro	Transport Planning
Haider Bukhari	HB	Sydney Metro	Crows Nest contract mgt
Hailey Clonts	HCl	Sydney Metro	Project Delivery
Imelda Utojo	IUt	Sydney Metro	Project Delivery
Imogen Markus	IM	Sydney Metro	Transport Planning
Jack Weston	JW	Sydney Metro	Gadigal Station contract mgt.
John Ieroklis	JI	Sydney Metro	Environment
Kate McElhone	KM	Sydney Metro	Project Delivery
Michael Acs	MA	Sydney Metro	Project Manager
Muhammad Shakeel	MSh	Sydney Metro	Project Delivery
Nita Hutapea	NHu	Sydney Metro	Transport Planning
Philip Kacir	PKa	Sydney Metro	Project Manager
Ryan Kane	RK	Sydney Metro	Project Interface
Sajid Shaikh	SSh	Sydney Metro	SSJ contract mgt.
Toby Johnston	TJ	Sydney Metro	Project Delivery
Daniel Ngo	DNg	Customer Journey Planning	CBD approach operations
Dee De Silva	DDe	Customer Journey Planning	TTP bus operations
Frankie Passerelli	FP	Customer Journey Planning	Short term bus changes
Giovanny Ramirez	GR	Customer Journey Planning	Traffic and Transport
Jay Shanmugam	JSh	Customer Journey Planning	TTP bus operations
Jim Niahos	JN	Customer Journey Planning	Temp. Shutdown Trans.Plan
Johnathan Kontalis	JKo	Customer Journey Planning	TTP bus operations
Rabih Bekdache	RB	Customer Journey Planning	Short term bus changes
Fraser Leishman	FL	Planning & Programs	Metro Interface
Nicole Li	NLi	Planning & Programs	Metro Interface
Nihal Khurshid	NK	Planning & Programs	Network & Safety
Ram Sriharan	RSr	Planning & Programs	Network & Safety
Tarun Malviya	TMa	Planning & Programs	Metro Interface
Luke Wilby	LWi	Transport for NSW	Safer Transport, Regulations
Megan Parker	MP	Transport for NSW	Cities & Active Transport

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Mounira Hijazi	MHi	Transport for NSW	Operational Communications
Ben Lomax	BLo	BESIX Watpac	Barangaroo contractor
Daniel Gooch	DGo	BESIX Watpac	Barangaroo contractor
Imran Khan	IKh	City of Canterbury Bankstown	Traffic & Transport
Shereny Selim	SSe	City of Canterbury Bankstown	Traffic & Transport
Trevor Le	TL	City of Canterbury Bankstown	Traffic & Transport
Joshua Faull	JFa	City of Sydney	Traffic & Transport
Tegan Mitchell	TMi	City of Sydney	Traffic & Transport
Tom Bershtein	TBe	City of Sydney	Traffic & Transport
Ashish Kayastha	AKa	CPB Contractor	Gadigal Station ISD
Jakob Kessler	JKe	CPB Contractor	Gadigal Station ISD
Ramin Mohina	RMo	CPB Contractor	Gadigal Station ISD
Wei Jing	WJ	CPB Contractor	Gadigal Station ISD
Jun Leon	JLe	Downer	Southwest Package 5 & 6
Gary Penberthy	GPe	Haslin	Southwest Package 4
Allan Borg	AB	Inner West Council	Traffic & Transport
David Givargiz	DGi	JHG	Waterloo contractor
Farah Haddad	FHa	JHG	Waterloo contractor
Nick Alba	NAI	JHG	Waterloo contractor
Harmesh Gill	HGi	JHLOR	SSJ contractor
Wajid Ghafoor	WGH	JHLOR	SSJ contractor
Danjels Reedman	DRe	Lendlease	Martin Place contractor
Michael Tan	MTa	Lendlease	Martin Place contractor
David Wilson	DW	MTS	City Stations Operations
Peter Scioscia	PSc	MTS	City Stations Operations
Gavin McConnell	GMc	North Sydney Council	Traffic & Transport
Karl Cronan	KCr	NSW Ambulance	Emergency Services
James McMahon	JMc	NSW Fire & Rescue	Zone Manager
Luke Slechta	LSI	RMA Group	Chatswood Dive Site



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Item	Agenda item	Action By	Due Date
1.	Welcome & Acknowledgement of Country: <i>I like to acknowledge Aboriginal peoples are the traditional owners and custodians of this land on which we all meet today. I pay my respects to Elders, past & present and recognise and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of NSW.</i>	JC	
2.	Confirmation of Minutes	JC	
3.	Actions arising from the previous meeting	JC	Next TTLG
4.	City and Southwest – Crows Nest	VDo	
5.	City and Southwest – Victoria Cross WAD	LWo	
6.	City and Southwest – Waterloo ISD & OSD development	OMa	
7.	City and Southwest – Sydenham to Bankstown	WGh	Absent
8.	Other matters/ General Business:	All	
9.	Next TTLG will be on Wednesday 24 th July 2024	JC	

TTLG Meeting No.	Date	Time	Location	Contact:
89	Wednesday 26 th June 2024	11:00am	MS Teams	Ahsanul Amin 0427941329



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Agenda Item	Minutes
	Welcome & Acknowledgement of Country JC welcomed all to the meeting with an Acknowledgement of Country.
	Confirmation of Minutes The TTLG members confirmed that the Minutes from the previous TTLG meeting were an accurate record of the meeting.
	Actions arising from the previous meeting <ul style="list-style-type: none"> • AA distributed MTS Operational Traffic & Transport Management Plan to CJP for review/ comments. • LWo sent larger version of the Denison Street proposed works drawings to North Sydney Council for review.

Email to Sydney Metro Authority regarding external stakeholder comments after consultation

MTS Traffic and Transport Management Plan


Peter Scioscia
 To: Ahsanul Amin


 Reply
  Reply All
  Forward
 

Mon 24/06/2024 4:42 PM

You forwarded this message on 25/06/2024 10:35 PM.


 SMCSWTS2-MTS-CSW-TF-PLN-002803 - Traffic and Transport Management Plan.pdf 3 MB

Hi Ahsanul,

We are sending out our plans to all external stakeholders after the consultation period has ended and we have updated our operational plans.

I've attached MTS' Traffic and Transport Management Plan. Please distribute out to the TTLG team for their information, or if they have any comments on it.

Thanks,

Peter Scioscia
 Environment and Sustainability Advisor
 Metro Trains Sydney
 47 Tallawong Road
 Tallawong NSW 2762
 PO Box 3839
 Rouse Hill Village 2155
 M: 0492 233 352
 E: Peter.Scioscia@metrotrains-sydney.com.au




OneBusinessOneLine




Email from Sydney Metro Authority to external stakeholder who requested copy of TTMP

MTS Operational Traffic & Transport Management Plan (TTMP) - CJP Consultation

 Ahsanul Amin <Ahsanul.AMIN@transport.nsw.gov.au>
To: Jake Coles; Giovanni Ramirez cordoba

 Reply  Reply All  Forward  

Wed 29/05/2024 4:31 PM

 This message was sent with High importance.

 SMCSWTS2-MTS-CSW-TF-PLN-002803 - Traffic and Transport Management Plan-FINAL.pdf 2 MB

Hi Jake (and Gio),

Please find the attached Operational TTMP from the MTS (Metro Trains Sydney) as presented to the TTLG meeting today, as you requested. This TTMP has been prepared to satisfy following planning condition D3:

"In accordance with CoA D3 of the Project's Development Consent, the TTMP must be prepared in consultation with the Customer Journey Planning (CJP), formerly Sydney Coordination Office (SCO), the Relevant Road Authority and non-private transport operators."

In addition to the above, The OEMP (Operational Environmental Management Plan) and its sub-plans (including this TTMP) will be submitted to the DPHI for information no later than one (1) month before the commencement of operation unless another timeframe is agreed with the Secretary.

The OEMP will also be made publicly available on the MTS website before the commencement of operation and first passenger services to satisfy the requirement of CoA D8 of the Project's Development Consent.

To satisfy the above Planning Conditions this TTMP has been prepared and presented to the TTLG meeting today.

FYI, this TTMP is a summary of all the IAPs (Interchange Access Plans) which was prepared in consultation with the CJP and Road Authority (P&P) and relevant Councils and was presented at the TTLG meeting.

Sydney Metro is aiming to submit this TTMP to DPHI on Monday 3rd June 2024 unless CJP have any comments/objection or need additional time to review/comments.


Thank you, Jake for your help in this matter and please let me know if you have any questions regarding the above.







Kind regards,

Ahsanul Amin | 0427941329 | Transport Planning
Customer and Service Planning | sydneymetro.info

Email from Sydney Metro to MTS confirming no further comments from external stakeholders.

RE: DPHI comments regarding MTS TTMP


 Ahsanul Amin <Ahsanul.AMIN@transport.nsw.gov.au>
To: Peter Scioscia


  Reply  Reply All  Forward  

Mon 22/07/2024 4:12 PM

 This message was sent with High importance.

This message is part of a tracked conversation. [Click here to find all related messages or to open the original flagged message.](#)

 Sydney Metro City & Southwest TTLG Meeting No. 88 Final Minutes - 29 May 2024.pdf 1 MB

 MTS Operational Traffic & Transport Management Plan (TTMP) - CJP Consultation Outlook item

Hi Peter,

Please find the attached FINAL TTLG Meeting Minute confirming presented at the TTLG and consulted with all relevant stakeholders (including but not limited to Councils, TfNSW, Planning & Program in Greater Sydney, all Emergency Services). They all have received copy of your presentation and the attached Minute and have no comments.

In addition, please find copy of the email where the report was sent to CJP-TfNSW and have no comments; which now close the relevant condition.

Thank you.

Kind regards,

Ahsanul Amin
Manager - Traffic & Transport Advisory | City & Southwest
Customer, Operations & Outcomes
Sydney Metro

I work flexibly. Unless it suits you, I don't expect you to read or respond to my emails outside your normal work hours.

E: ahsanul.amin@transport.nsw.gov.au
M 0427 941 329

Level 43, 680 George Street, Sydney NSW 2000
PO Box K659, Haymarket NSW 1240
sydneymetro.info



An MTR, John Holland and UGL Rail Company



Email from Transport for NSW to SMA closing out their consultation

RE: MTS Operational Traffic Transport Plan



Garry Hitchcox <Garry.HITCHCOX@transport.nsw.gov.au>
To: Julia Diamond
Cc: Sam Fard; Ahsanul Amin

Reply Reply All Forward

Fri 2/08/2024 11:08 AM

Hi Julia,

MTS has consulted at the TTLG meeting in May 2024 regarding the MTS Operational Traffic Transport Plan.

The TTLG secretariat distributed MTS Operational Traffic & Transport Management Plan to TTLG members that includes Sydney Coordination Office, Relevant Road Authority and non-private transport operators for review/ comments.

No comments or objections were received from the TTLG members, and this was confirmed at the TTLG meeting in July 2024.

The consultation requirements for this planning condition have been adequately closed out.

Regards, Garry

F

APPENDIX

Appendix F: City Stations and Precincts – Day 1 Plans (Final and Endorsed)

City Stations & Precincts



Day 1 Plans (Final and Endorsed)

18 July 2024
sydneymetro.info

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An MTR, John Holland and UGL Rail Company



Traffic and Transport Management Plan
SMCSWTS2-MTS-CSW-TF-PLN-002803 | version 04
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Disclaimer

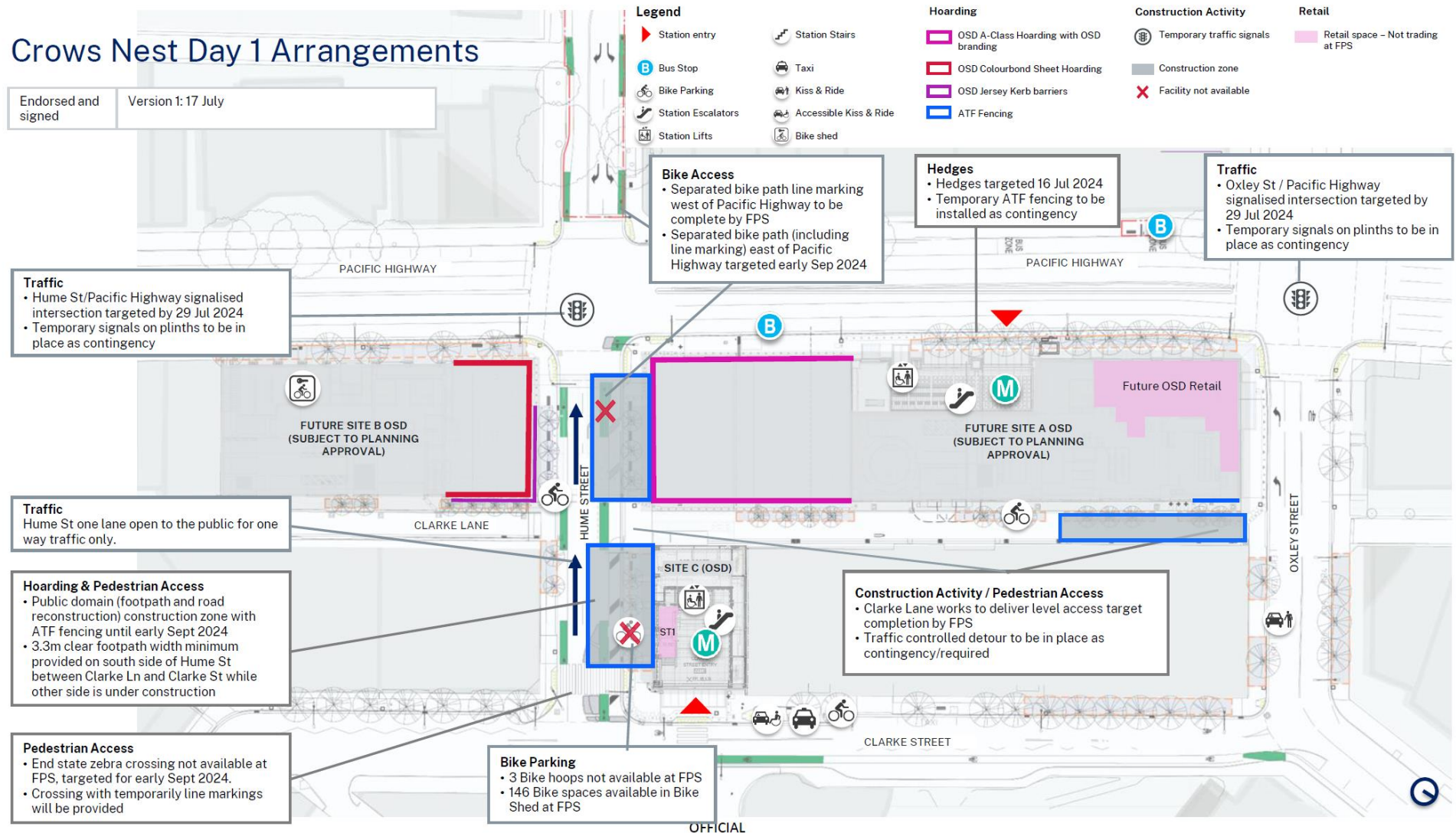
- The following plans provide the most accurate description of arrangements for each station precinct that will be in place for first passenger service (target date: 4 Aug 2024)
- Details captured reflect information collected at the point in time indicated in each plan, as endorsed by the relevant delivery lead.
- This information is not to be shared outside of the agreed list of stakeholders. Please contact the Customer, Station and Precincts Panel Chair for any requests to share this information with other stakeholders.

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Crows Nest Day 1 Arrangements

Endorsed and signed
Version 1: 17 July



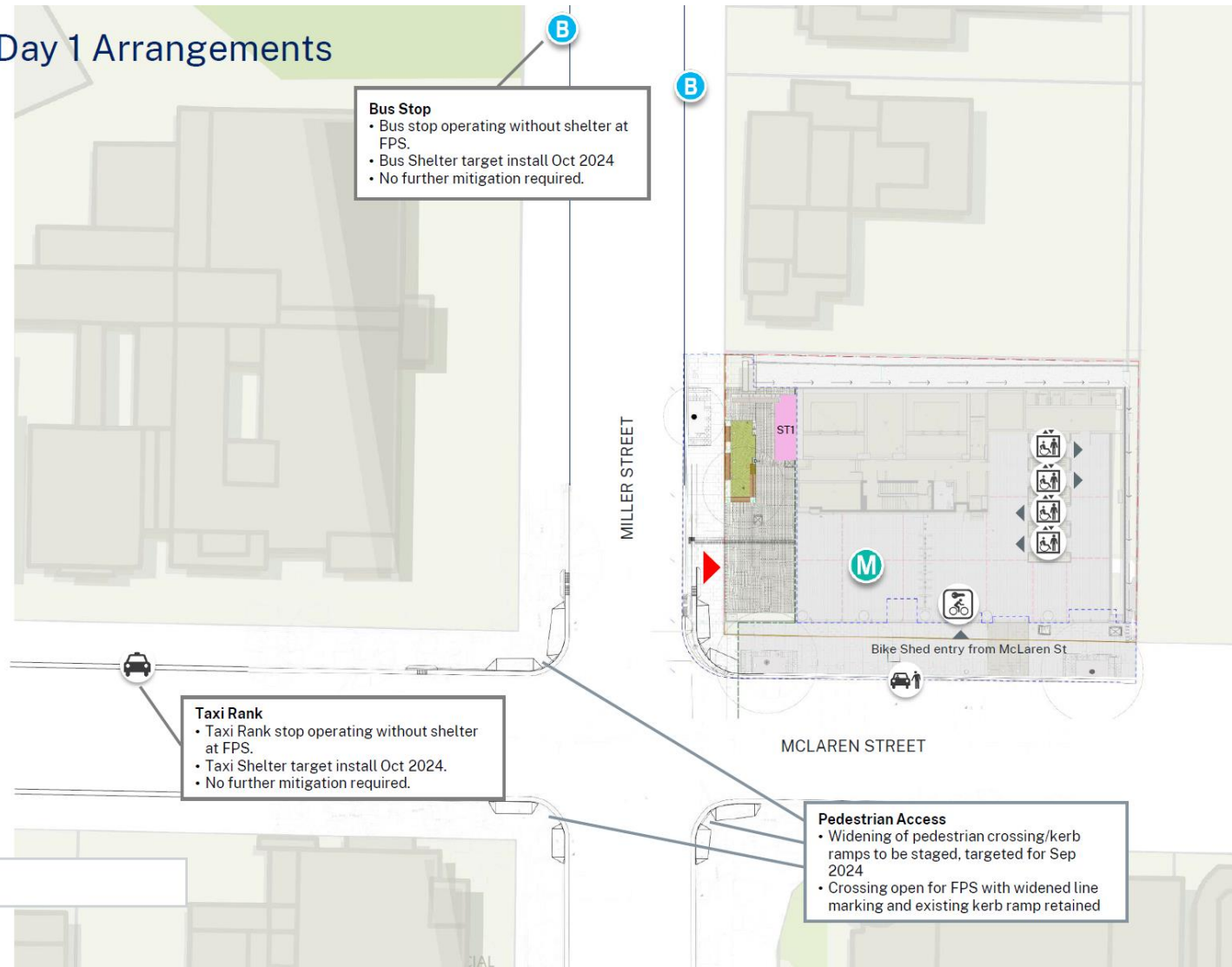
Victoria Cross North Day 1 Arrangements

Legend

-  Station entry
-  Bus Stop
-  Bike Parking
-  Bike Shed
-  Station Escalators
-  Station Lifts
-  Station Stairs
-  Taxi
-  Kiss & Ride

Retail

-  Sydney Metro Retail space - Not available for FPS



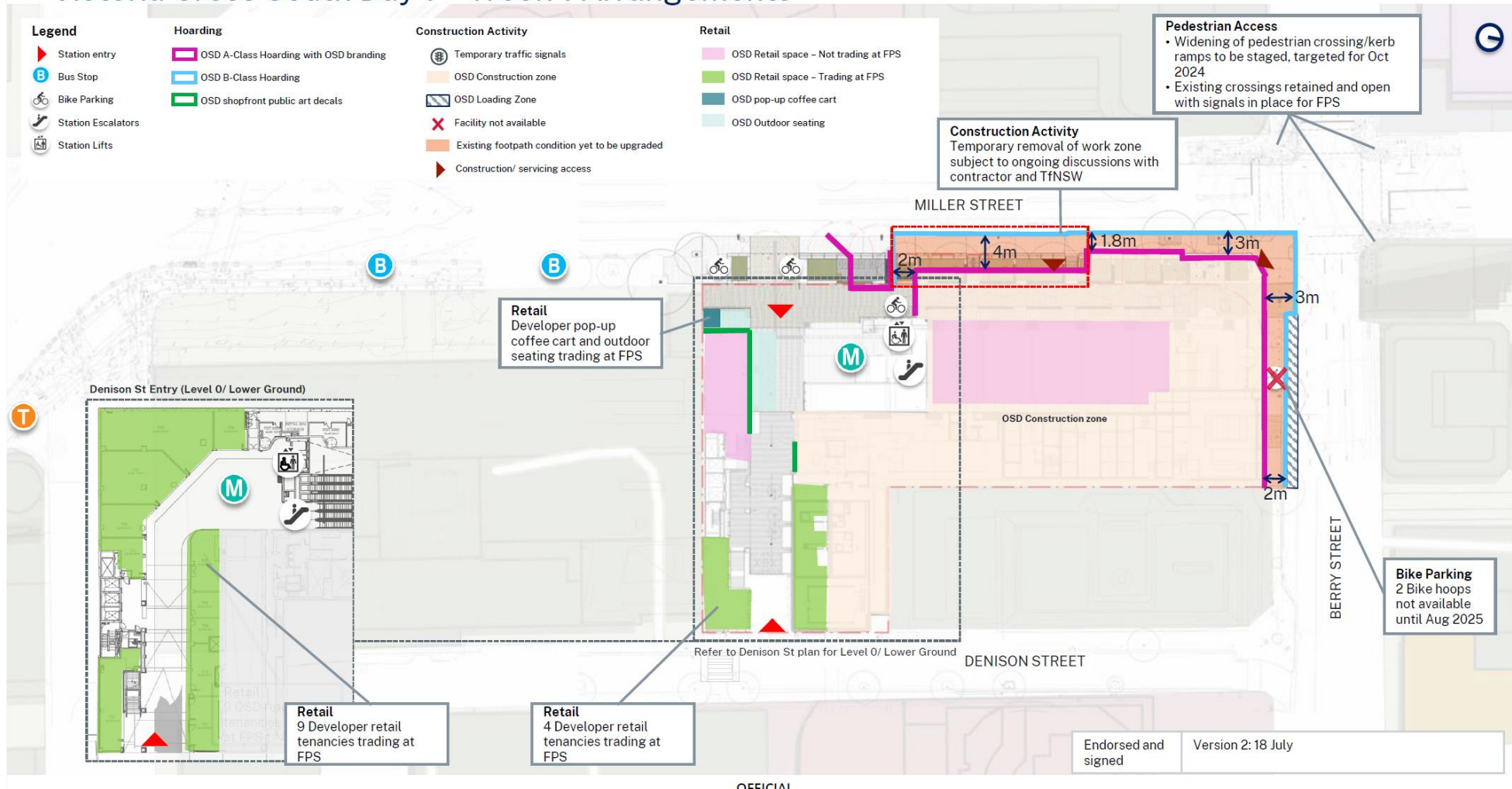
Endorsed and
signed

Version 1: 16 July

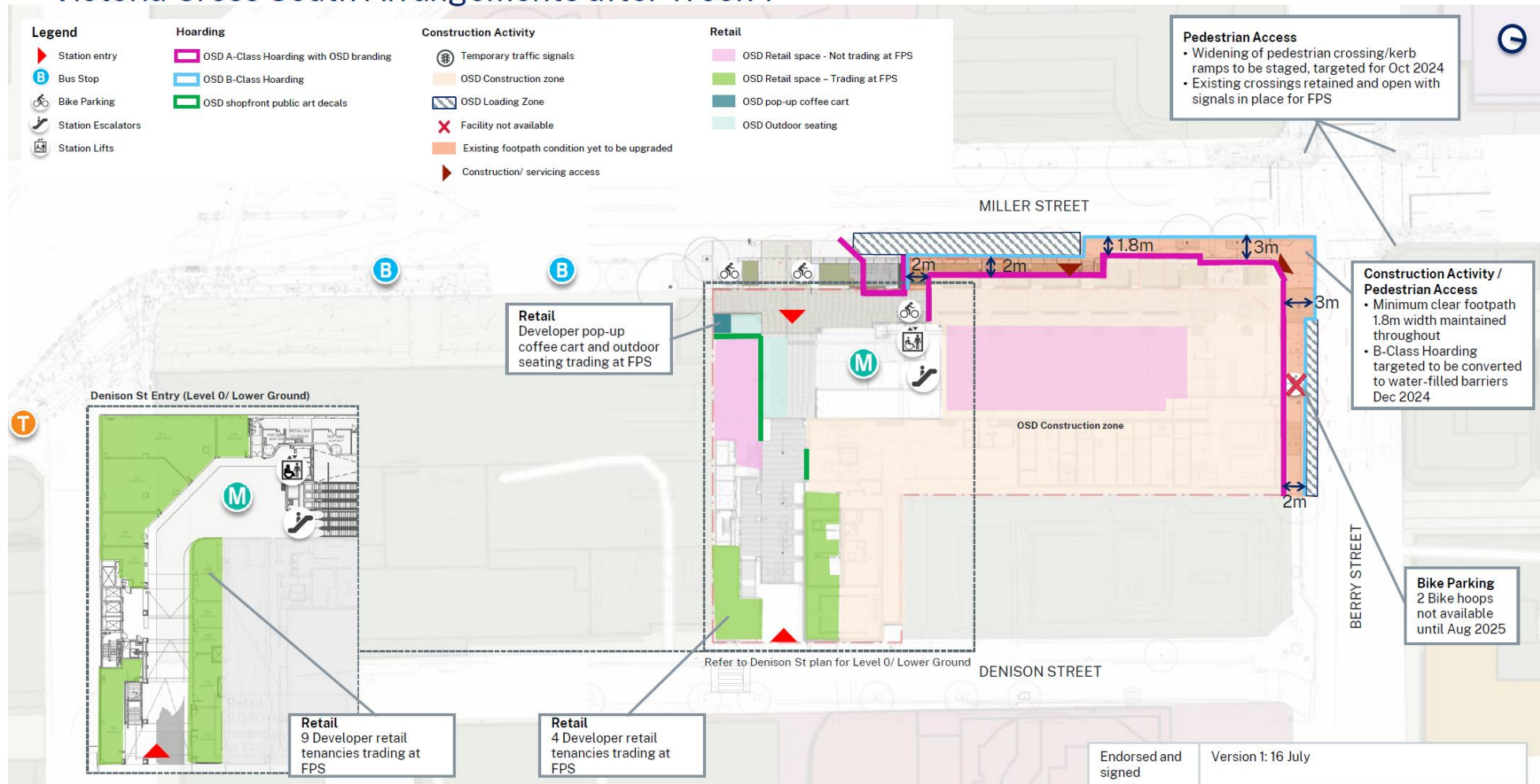


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Victoria Cross South Day 1 + Week 1 Arrangements

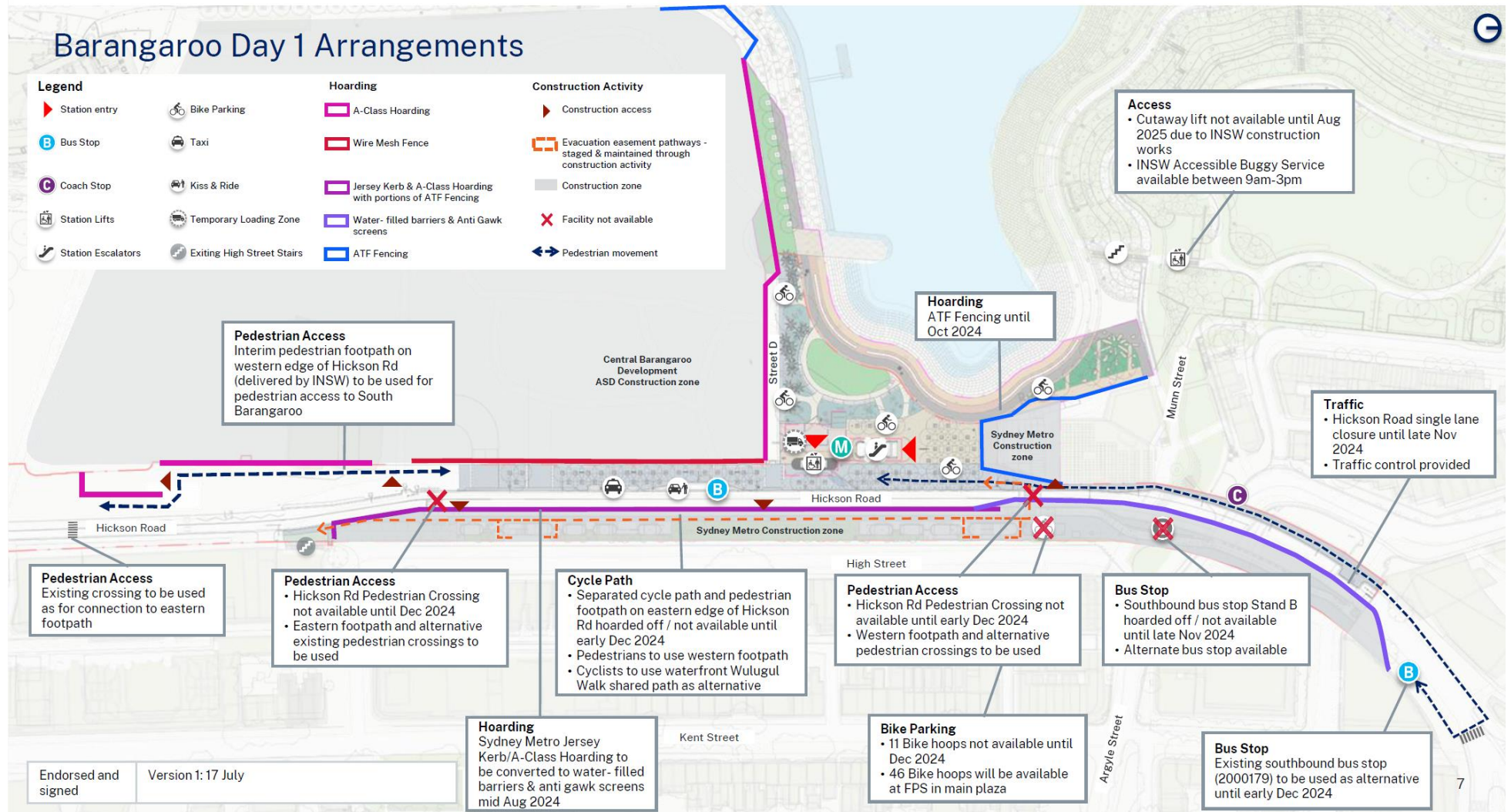


Victoria Cross South Arrangements after Week 1



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Martin Place Day 1 Arrangements

Endorsed and
signed

Version 2: 17 July










Access

- Sydney Trains unpaid link access not open until mid to late Sep 2024
- Alternate access with updated wayfinding in place

Access

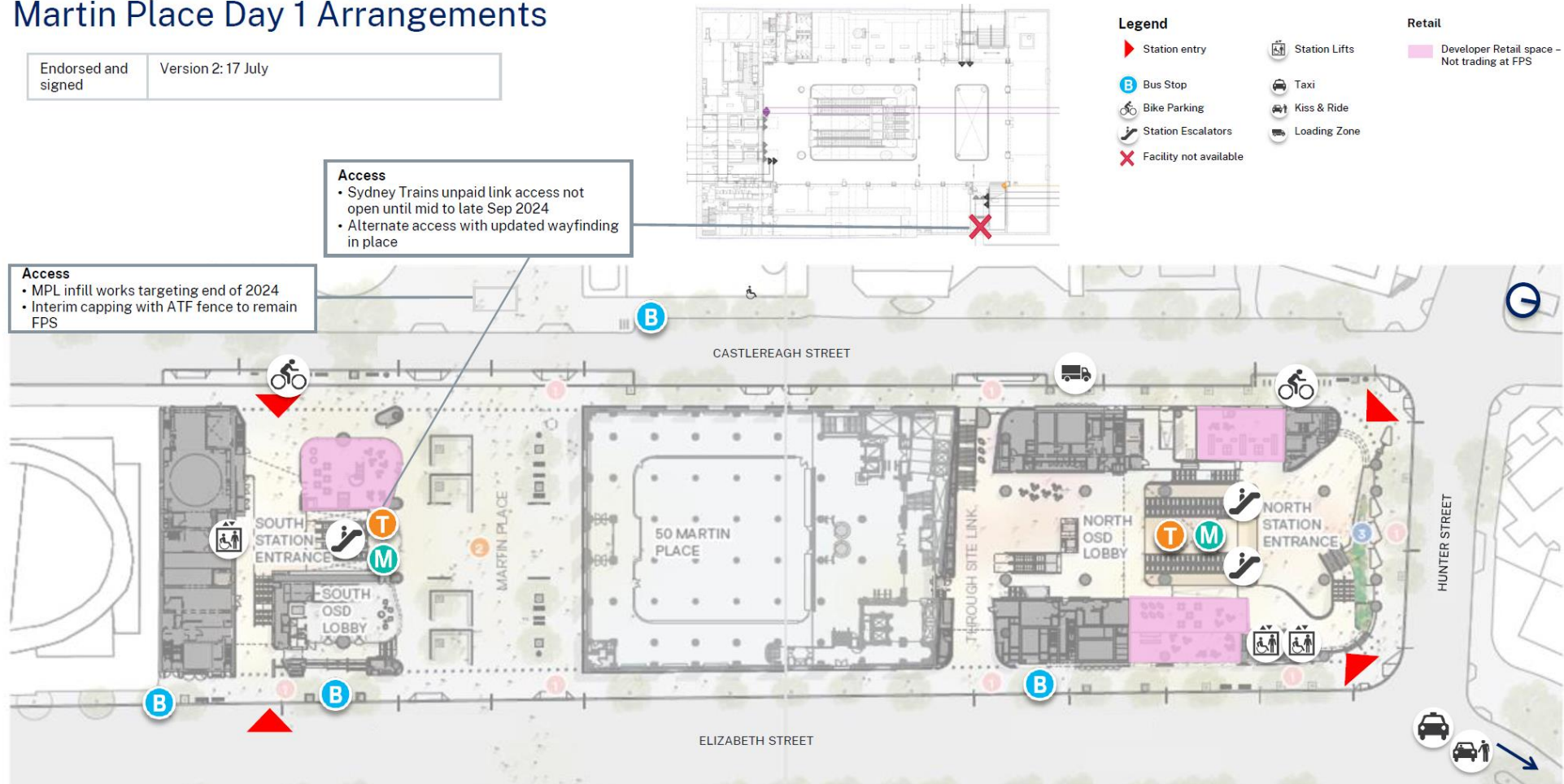
- MPL infill works targeting end of 2024
- Interim capping with ATF fence to remain FPS

Legend

-  Station entry
-  Bus Stop
-  Bike Parking
-  Station Escalators
-  Facility not available
-  Station Lifts
-  Taxi
-  Kiss & Ride
-  Loading Zone

Retail

-  Developer Retail space – Not trading at FPS



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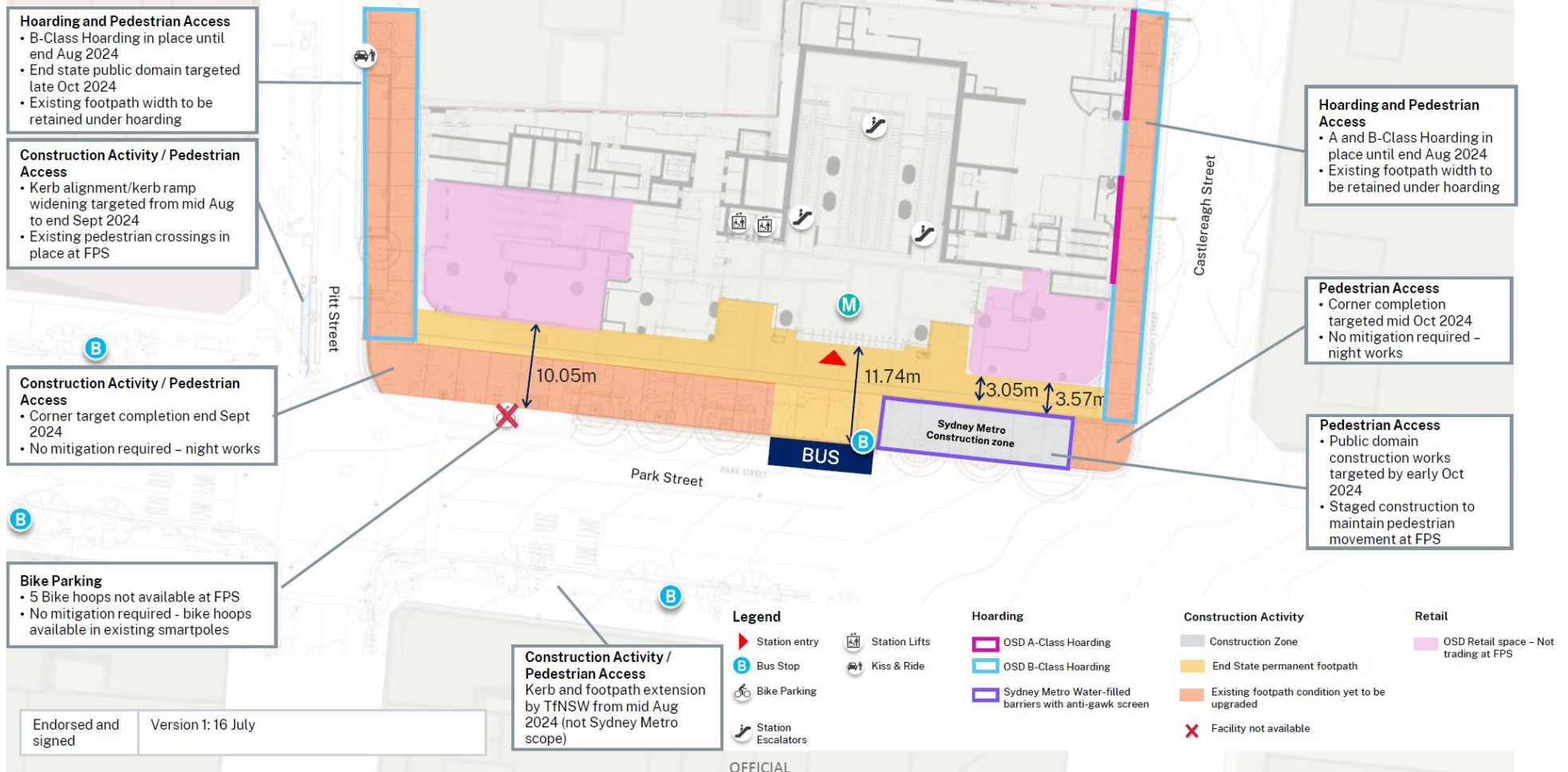


An MTR, John Holland and UGL Rail Company

Traffic and Transport Management Plan
SMCSWTS2-MTS-CSW-TF-PLN-002803 | version 04
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Gadigal North Day 1 Arrangements

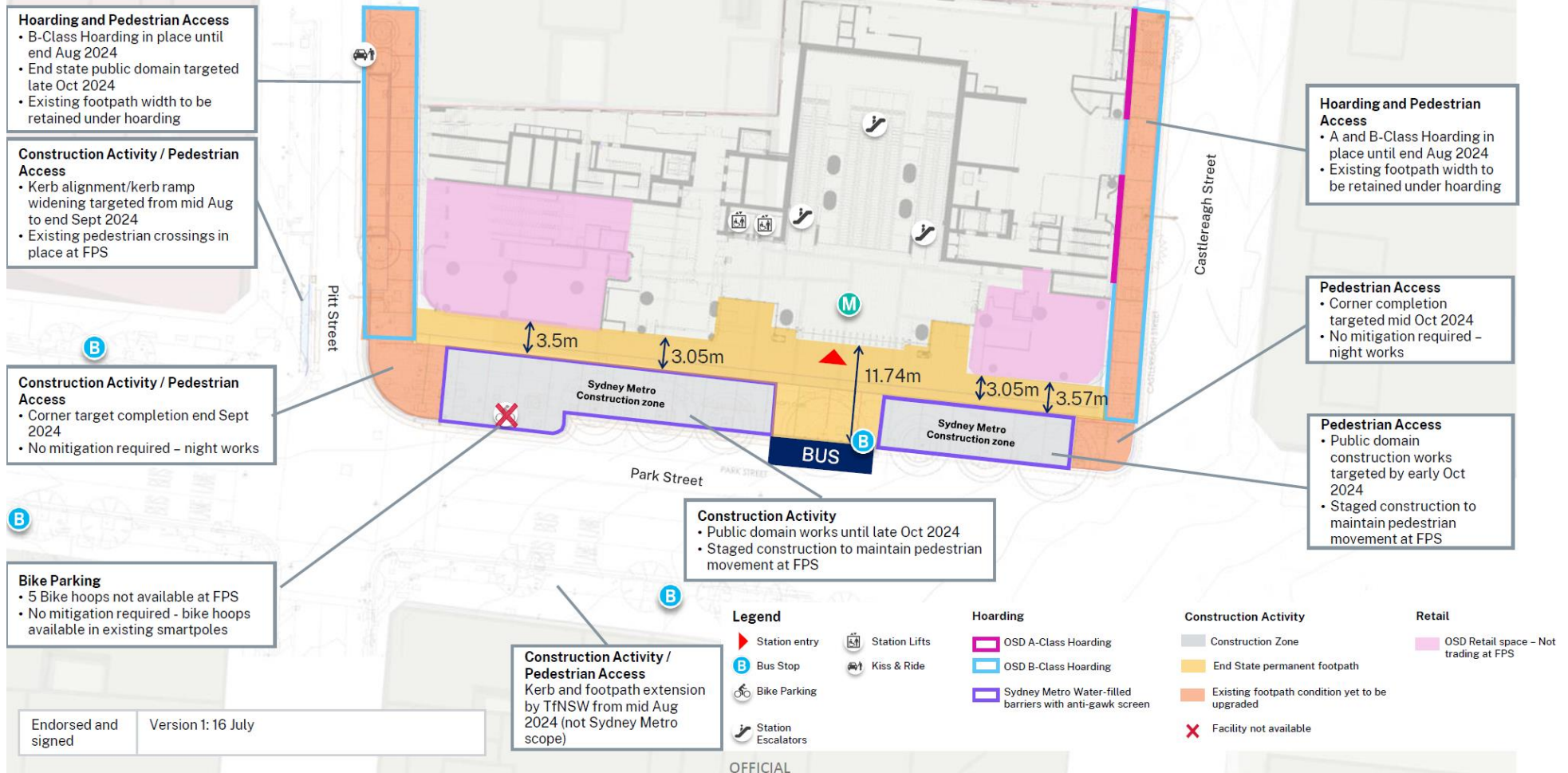
+ Week 1 (until 11 Aug)



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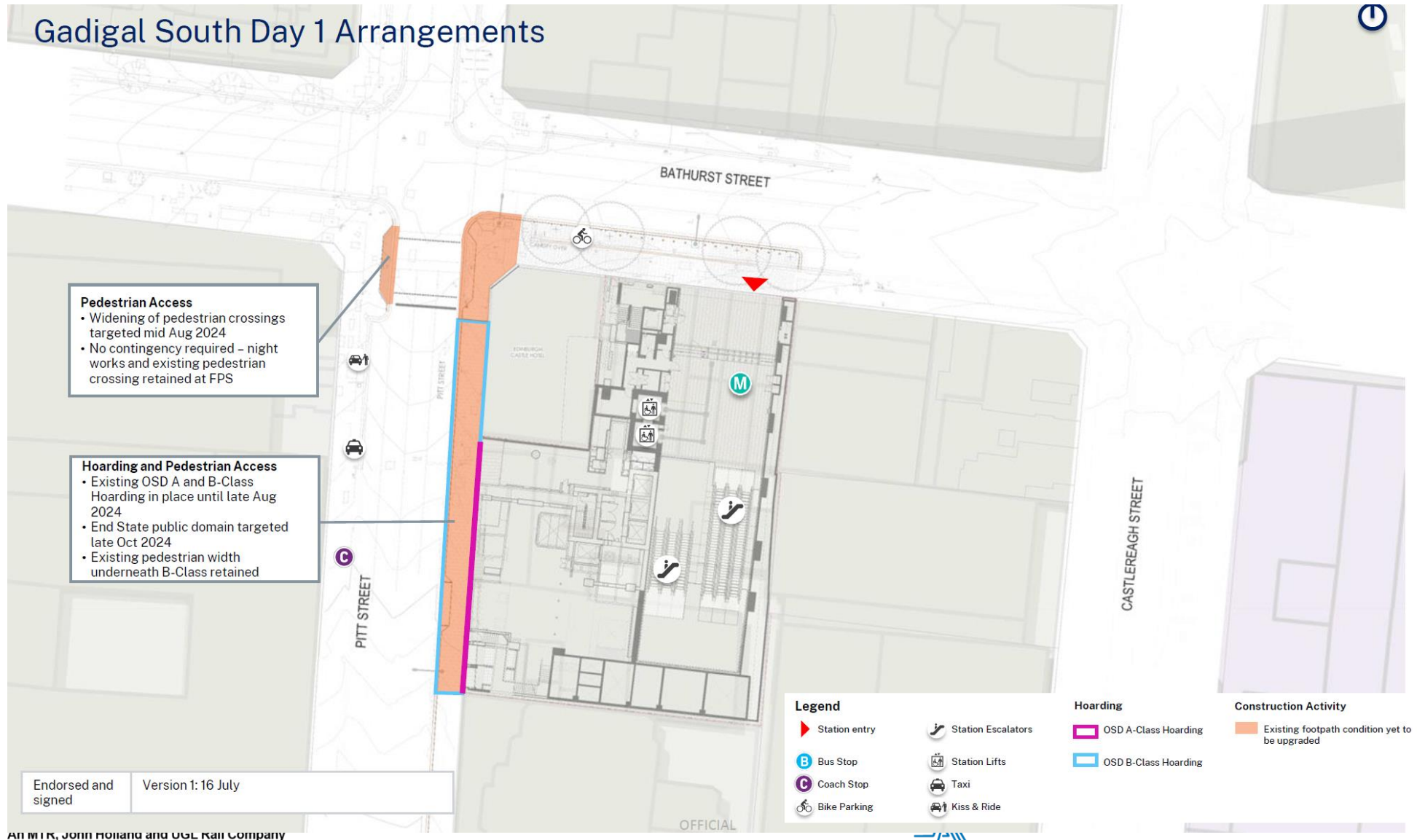
Gadigal North Post Week 1 Arrangements

(from 12 Aug – after City2Surf)



An MTR, John Holland and UGL Rail Company

Gadigal South Day 1 Arrangements
















Waterloo Day 1 Arrangements



Endorsed and
signed

Version 2: 16 July

Legend

-  Station entry
-  Bus Stop
-  Emergency Possession Bus Stop
-  Bike Parking
-  Bike hub
-  Station Escalators
-  Station Lifts
-  Station Stairs
-  Taxi
-  Kiss & Ride
-  Accessible Kiss & Ride
-  Temporary Loading Zone
-  Upper Plaza MTS Storage Area


Hoarding

-  A-Class Hoarding
-  B-Class Hoarding

Construction Activity

-  Construction/ servicing access
-  Emergency, servicing and construction access only
-  Work zone on public domain
-  OSD construction zone
-  Facility not available
-  Temporary traffic signals

Retail

-  Sydney Metro Retail space - Not trading at FPS

Traffic & Pedestrian Access

- Permanent signals not available for FPS, targeting Sep 2024
- Temporary arrangements to manage traffic/safe pedestrians crossing, subject to TfNSW approval

Access and Hoarding

- Raglan Walk - Emergency/ servicing access only with A-Class hoarding around until Northern Precinct completion

Pedestrian Access

- Raglan Street West work zone - Class B removed, 3.5m clear footpath width minimum. Vehicle movements into loading dock supervised at all times
- Resurfaced make good provision until North Precinct completion

Traffic & Pedestrian Access

- Raglan St/ Botany Rd intersection temporary signals on plinths provided until Sep 2024
- Raglan St corner to be resurfaced with signal works by Sep 2024
- Kerb ramp at northeast corner of intersection (heading West) not available until September 2024, temporary detour signage to be provided

Traffic

- Cope Street one-way traffic only until Sep 2024

Pedestrian Access

- Mid-block crossing

Access

- 1m typical clear width for station emergency egress
- Driveway (with gate on Cope St) to be managed by the WLD to support Northern Precinct construction

Hoarding

- Pedestrian access maintained under Class B hoarding, 3.5m typical clear width until December 2024

Pedestrian Access

- Cope St east-west crossing not available until September 2024
- Mid-block crossing available as an alternative
- North south wombat crossing provided

Traffic & Pedestrian Access

- Wellington Street open to traffic under traffic control to manage Wellington Street work zone until June 2025

Pedestrian Access

- Botany Road work zone
- Make good provision with 2.5m clear footpath width minimum until North Precinct completion

Traffic

- Botany Road slip lane work zone
- Make good provision with 2.5m typical clear footpath width minimum until Central Precinct completion

Hoarding

- Botany Rd south and Wellington St work zone
- Pedestrian access maintained under continuous Class B hoarding, 2.5m typical clear width minimum until June 2025

An MTR, John Holland and UGL Rail Company

Department of Planning, Housing & Infrastructure



Our ref: SSI-7400-PA-538

Sydney Metro
PO Box K659
Haymarket, NSW, 1240

Attention: [REDACTED] – Senior Environment Manager

16/08/2024

Subject: Sydney Metro City and Southwest – Chatswood to Sydenham
Arrangements for Outstanding Items at Commencement of Passenger Services

Dear [REDACTED]

Thank you for submitting your letter *Sydney Metro SSI 7400 – Discretion to Alter Requirements of Condition E101 in accordance with Condition A7*, dated 13 June 2024, in accordance with condition A7. I understand that you are seeking the agreement of the Planning Secretary to alternative arrangements to deliver elements of the Station Design and Precinct Plans (SDPP) as required by Condition E101 of SSI-7400. This relates to items that will not be delivered prior to first passenger services (FPS).

I have considered each SDPP element and, as nominee of the Planning Secretary, determine each item as outlined below in Table 1 below:

Table 1 – Determination

Station/Site	DPHI Reference	Element	Determination
Crows Nest	CN1	Staged installation of seats in the public domain – to be delivered under a separate planning pathway.	An alternative arrangement is agreed as outlined in the attached direction.
Crows Nest	CN2	Staged installation of trees in the public domain – to be delivered under a separate planning pathway.	An alternative arrangement is agreed as outlined in the attached direction.



Station/Site	DPHI Reference	Element	Determination
Crows Nest	CN3	Site C OSD– being delivered under SSD-13852803.	Agreed that this item is not required to be delivered prior to FPS.
Crows Nest	CN4	Site A + B Over Station Development (OSD) and associated retail. Sydney Metro have built the cold shell for some retail associated with site A+B developments – to be delivered under separate planning approvals.	Agreed that this item is not required to be delivered prior to FPS. Please make all reasonable efforts to ensure that retail spaces are occupied as soon as possible after first passenger service.
Crows Nest	CN5	Site C entrance Café is not yet tenanted. Cold shell will be complete. Separate planning approval for fitout / use of the retail space will be obtained.	Agreed that this item is not required to be delivered prior to FPS. Please make all reasonable efforts to ensure that retail spaces are occupied as soon as possible after first passenger service.
Victoria Cross	VC1	Staged completion of landscaping and public domain elements on Miller Street.	An alternative arrangement is agreed as outlined in the attached direction.
Victoria Cross	VC2	The heritage interpretation for Victoria Cross consists of information panels integrated into the public domain. The north will be installed for FPS, but the south will come later with the completion of the Miller St public domain, following completion of construction of the OSD.	An alternative arrangement is agreed as outlined in the attached direction.
Victoria Cross	VC3	40 class C bike hoops are located in the public domain. 36 will be delivered for FPS and 4 will come later with the completion of the Miller Street public domain, following completion of construction of the OSD.	An alternative arrangement is agreed as outlined in the attached direction.
Victoria Cross	VC4	The commercial OSD and associated retail activation on Miller St is in progress but will not be complete for FPS. It is being delivered under SSD-10294.	An alternative arrangement is agreed as outlined in the attached direction.

Station/Site	DPHI Reference	Element	Determination
Victoria Cross	VC5	Change in design of Miller Street Public Domain – Trees pulled back from footpath into landscape zone, reconfiguration of trees in response to this, breaking up of landscape zone with through footpaths to increase permeability.	An alternative arrangement is agreed as outlined in the attached direction.
Victoria Cross	VC6	Change in tree species outside Northern Entry – Western boundary London Plane Tree that was scheduled to be removed to be replaced with feature Jacaranda tree has now been retained. The new proposed Jacaranda tree has been changed to Zelkova serrata 'Green Vase Japanese Elm, the feature trees already proposed for Miller St South.	Tree species substitution is agreed. See attached direction.
Victoria Cross	VC7	Northern entrance public art deleted.	Deletion of artwork at Northern Entrance is agreed.
Victoria Cross	VC8	Changes to Miller St Retail Dining interface edge. Design has developed and the seat edge defining the private dining zone from footpath has been replaced with a garden bed and metal balustrade.	An alternative arrangement is agreed as outlined in the attached direction. The proposed design change is agreed.
Barangaroo	B1	Elements of the public domain, on the eastern edge of Hickson Road will not be completed for FPS.	Extension granted for the delivery of the element to 1 April 2025.
Barangaroo	B2	Pedestrian Crossing - Provide a new marked raised pedestrian crossing on Hickson Road adjacent to the station plaza, north of the station entry.	Extension granted for the delivery of the element to 1 April 2025.
Barangaroo	B3	Hickson Rd eastern footpath - Provide a pedestrian footpath on the eastern kerb of Hickson Road from the High Street Stairs to the project boundary under Windmill Street.	Extension granted for the delivery of the element to 1 April 2025.

Station/Site	DPHI Reference	Element	Determination
Barangaroo	B4	Bike Hoops - Provide a minimum of 55 class C bike hoops (capacity for 110 bicycles) Works in progress to deliver 55 bicycle hoops. Target completion of 44 bicycle hoops from mid-June 2024. The remaining 11 bicycle hoops are targeted for completion by end of 2024.	Extension granted for the delivery of the element to 1 April 2025.
Barangaroo	B5	Bike Path - Provide a separated bi-directional on-road bicycle path on Hickson Road between the northern station entry and the foreshore route.	Extension granted for the delivery of the element to 1 April 2025.
Barangaroo	B6	Coach parking spot - Provide a new coach bay on Hickson Road northbound under Munn Street bridge.	Extension granted for the delivery of the element to 1 April 2025.
Barangaroo	B7	The Central Barangaroo development integrated station entrance.	Agreed that this item is not required to be delivered prior to FPS.
Barangaroo	B8	Removal of 2 trees located within grid of tree close to entry. Avenue of trees along Hickson Rd unaffected.	Tree removal agreed.
Barangaroo	B9	Removal of 2 trees close to northern end of southern cluster of services pods.	Tree removal agreed.
Martin Place	MP1	Changes to pedestrian link and Eastern Suburbs Line (ESL) paid link connection including the cladding materiality, size and colour.	The design change is agreed, however see attached direction requiring an update to the relevant SDPP to be submitted to DPHI.
Gadigal	G1	Park Street public domain - Public domain work will not be complete including, paving, kerb extension, trees, street furniture and lighting.	Extension granted to 1 April 2025.
Gadigal	G2	Bathurst Street public domain -Public domain work will not be complete including, paving, trees, street furniture and lighting.	Extension granted to 1 April 2025.

Station/Site	DPHI Reference	Element	Determination
Gadigal	G3	Park St kerb extension - Install a 2.5-metre kerb extension along northern kerb of Park Street, just east of the intersection with Pitt Street. This will be completed in stages pending hoarding removal in July/August.	Extension granted to 1 April 2025.
Gadigal	G4	Park St/ Pitt St intersection - Park Street and Pitt Street intersection: widen the width of the signalised pedestrian crossing across the Pitt Street (north) approach of the intersection with Park Street. this will be completed in stages pending hoarding removal in July/August.	Extension granted to 1 April 2025.
Gadigal	G5	Bike hoops - Provide 5 bike rails (Class C) for 10 bikes close to the northern station entrance on Park Street. This will be completed in stages pending hoarding removal in July/August.	Extension granted to 1 April 2025.
Gadigal	G6	Park St bus stop - Ensure the bus stop immediately outside Park Street frontage of Pitt Street Station includes design elements to support use by both mobility-impaired and visually impaired customers, all-weather protection and adequate seating to meet future customer demand. This will be completed in stages pending hoarding removal in July/August.	Extension granted to 1 April 2025.
Gadigal	G7	Bathurst Street Kerb Extension.	Extension granted to 1 April 2025.
Gadigal	G8	Bathurst/ Pitt Intersection.	Extension granted to 1 April 2025.
Gadigal	G9	OSD development, loading docks and associated retail activation - integrated with over station development, subject to SSD 10376 and SSD 10375.	Agreed that this item is not required to be delivered prior to FPS.

Station/Site	DPHI Reference	Element	Determination
Gadigal	G10	Heritage interpretation - The SDPP discussed many opportunities for heritage interpretation. The design has been developed since to combine information in a video presentation projected onto a sandstone wall at platform level.	Agreed that the Heritage Interpretation plan will prevail where inconsistent with the SDPP.
Waterloo	W1	Cope St/ Raglan pedestrian crossing - Provide a signalised pedestrian crossing at the Cope Street and Raglan Street intersection on all legs.	Extension granted to 1 October 2024.
Waterloo	W2	Cope Street Plaza.	An alternative arrangement is agreed as outlined in the attached direction.
Waterloo	W3	OSD and associated public domain/ retail - Raglan Walk, Grit Lane, Church Square, Church Yard, Church Walk Northern Precinct, Southern Precinct.	Agreed that this item is not required to be delivered prior to FPS.
Waterloo	W4	Station Retail - 3 spaces in north and 2 spaces in south, noting fit out and use of retail spaces is subject to separate planning process.	Agreed that this item is not required to be delivered prior to FPS.
Waterloo	W5	OSD associated public art - OSD associated public art focused on Cope Street Plaza, and being delivered under the relevant SSD consent.	Agreed that this item is not required to be delivered prior to FPS.
Waterloo	W6	Pedestrian crossing at Cope St/Wellington St intersection (E-W).	Extension granted to 1 October 2024.
Marrickville Dive Site and Trains Facility South	M1	Heritage interpretation public art on boundary fence at Edinburgh Road and Railway Parade.	Heritage interpretation public art is agreed. Extension granted to 1 April 2025.

As nominee of the Planning Secretary, I also issue the direction provided as Attachment A to this letter under condition A5 of SSI 7400.

Please ensure this letter and the attached direction are published on the project website as soon as possible.

If you wish to discuss the matter further, please contact [REDACTED] at [REDACTED]

Yours sincerely



Director
Infrastructure Management

As nominee of the Planning Secretary

Department of Planning, Housing and Infrastructure



Attachment A Planning Secretary's Direction

Condition A5 of SSI 7400

Date of Direction: 16 August 2024
Reference Number: SSI-7400-PA-538

As nominee of the Planning Secretary, I direct Sydney Metro as follows in Table 1:

Table 1 **Directions**

	Direction
1	Completely deliver items CN1 and CN2 within 12 months of first occupation of the OSDs under SSD-9579 or SSD-61400212, whichever comes first.
2	Completely deliver items VC1, VC2, VC3, VC4, VC5, VC6, and VC8 within 12 months of first occupation of the OSD under SSD-10294.
3	Submit to the Department by 1 October 2024 an updated SDPP that details the final design of the Pedestrian Link and the Eastern Suburbs Line paid link connections at Martin Place Station (item MPI).
4	Completely deliver item W2 within 12 months of first occupation of the OSD under SSD-10437.
5	Publish this direction on your website within 7 days.



In this direction, terms and expressions have the following meanings in Table 2:

Table 2: Definitions

Term or Expression	Meaning
The Department	The Department of Planning, Housing and Infrastructure.
The Project	All works and activities approved under SSI-7400.
Submit to the Department	The lodgment of a document to the Department using the NSW Major Projects Planning Portal.

The items referred to in directions 1-4 are the Station Design and Precinct Plan elements described in Table 3:

Table 3: Item Numbers

Station/ Site	Item Number	Description
Crows Nest	CN1	Staged installation of seats in the public domain.
Crows Nest	CN2	Staged installation of trees in the public domain.
Victoria Cross	VC1	Staged completion of landscaping and public domain elements on Miller Street.
Victoria Cross	VC2	The heritage interpretation for Victoria Cross consists of information panels integrated into the public domain. The north will be installed for FPS, but the south will come later with the completion of the Miller St public domain, following completion of construction of the OSD.
Victoria Cross	VC3	40 class C bike hoops are located in the public domain. 36 will be delivered for FPS and 4 will come later with the completion of the Miller Street public domain, following completion of construction of the OSD.
Victoria Cross	VC4	The commercial OSD and associated retail activation on Miller St is in progress but will not be complete for FPS. It is being delivered under SSD10294.
Victoria Cross	VC5	Change in design of Miller Street Public Domain – Trees pulled back from footpath into landscape zone, reconfiguration of trees in response to this, breaking up of landscape zone with through footpaths to increase permeability.

Station/ Site	Item Number	Description
Victoria Cross	VC6	Change in tree species outside Northern Entry – Western boundary London Plane Tree that was scheduled to be removed to be replaced with feature Jacaranda tree has now been retained. The new proposed Jacaranda tree has been changed to Zelkova serrata 'Green Vase Japanese Elm, the feature trees already proposed for Miller St South.
Victoria Cross	VC8	Changes to Miller St Retail Dining interface edge. Design has developed and the seat edge defining the private dining zone from footpath has been replaced with a garden bed and metal balustrade.
Martin Place	MP1	Changes to pedestrian link and Eastern Suburbs Line (ESL) paid link connection including the cladding materiality, size and colour.
Waterloo	W2	Cope Street Plaza.