HEAVY VEHICLE LOCAL ROAD REPORT

Sydney Metro West – Western Tunnelling Package Clyde/ Rosehill

Document Reference #:	SMWSTWTP-GLO-CLJ-HS-RPT-000001	
Current Revision:		
Issue Date:	14 February 2023	

Document Details

Document Title	Clyde/ Rosehill Heavy Vehicle Local Road Report
Project Name	Sydney Metro West – Western Tunnelling Package
Client	Sydney Metro
Document Reference No.	SMWSTWTP-GLO-CLJ-HS-RPT-000001-E
Revision Date	14 February 2023

Revision History

Rev	Date	Comments
A	28 March 2022	Initial submission
В	1 April 2022	Revised based on comments received
С	16 May 2022	Revised based on comments received
D	7 June 2022	Revised based on comments received
E	14 Feb 2023	Revised based on changes to access and egress into the site:

Document Authorisation

Action Type	Position	Name	Signature	Date Signed
Prepared by	Traffic Manager			14 Feb 23
Reviewed by	Construction Manager			14 Feb 23
I hereby confirm this activity and all associated work, have been appropriately planned and the relevant resources are available to conduct the work in accordance with the agreed method. I hereby approve this activity to commence, as the stated controls applications are the most appropriate and are in accordance with the Risk Matrix.				
Approved by	Deputy Project Director			14 Feb 23

NOTES:

Once <u>all</u> signatures have been obtained, the Document Author is responsible for ensuring the signed and approved hard and soft copies are uploaded on to the project share drive or passed to the Responsible Person for filing.



Table of Contents	
Document Details	
Revision History	
Document Authorisation	
Definitions/ Abbreviations	5
1 EXECUTIVE SUMMARY	7
2 INTRODUCTION	8
2.1 Purpose	9
2.2 Planning approval	9
3 COMPLIANCE	10
3.1 Ministerial Conditions of Approval	10
3.2 Revised Environmental Management Measures	11
4 LEGAL AND OTHER REQUIREMENTS	12
4.1 Relevant Legislation	12
4.2 References and guidelines	12
5 THE EXISTING ENVIRONMENT	13
5.1 Locality and land use	13
5.2 Wentworth Street	17
5.3 Kay Street	
5.4 Unwin Street	
5.5 Shirley Street	
5.6 Martha Street	
5.7 Deniehy Street	
5.8 Tennyson Street	
5.9 Colquhoun Street	
6 SITE OPERATIONS	
6.1.1 Impact on traffic flow6.1.2 Impact on parking	
6.1.3 Impact on active transport users	
6.1.4 Managing cumulative impacts	
7 FLEET MANAGEMENT	
7.1 Road dilapidation report	
7.2 Drivers and operators	
7.3 Proposed vehicle movements	
7.4 EIS routes for Heavy Vehicles	
7.5 Proposed heavy vehicle routes	
7.6 Fleet safety	
7.7 Permits / Over dimensional vehicles	
8 COMMUNITY AND CONSULTATION	36
8.1 Stakeholders	36
8.2 Workforce communications	36



LAING O'ROURKE

List of tables

Table 1: Ministerial Conditions of Approval	10
Table 2: Revised Environmental Management Measures	11
Table 3: Heavy Vehicle movements per hour per phase of works	29
Table 4: Roads to be used by Heavy Vehicles	31
Table 5: Heavy vehicle requirements	33
Table 6: Stakeholder consultation	36
Table 7: Swept path drawing and suitability	38

List of figures

Figure 5-1: Site locality	13
Figure 5-2: Existing land use zoning	14
Figure 5-3: Sensitive receiver locations	15
Figure 5-4: NSW Road Classification Map (source: TfNSW Road Network Classification Map	16
Figure 5-5: PBS Routes (source: TfNSW PBS Network map)	17
Figure 5-6: Existing shared path (source: TfNSW Cycleway finder)	18
Figure 5-7: Speed management device on Unwin Street	20
Figure 5-8: Speed management device on Colquhoun Street	22
Figure 6-1: Shared path warning sign and truck decals	24
Figure 6-2: Sign and decal locations	25
Figure 7-1: EIS Heavy Vehicle moments (source: Chapter 10 EIS)	29
Figure 7-2: EIS nominated heavy vehicle routes	30
Figure 7-3: Proposed heavy vehicle routes & local roads not included in the EIS	32
Figure 7-4: M4 Overpass on Wentworth Street	35
Figure 8-1: Swept path analysis locations	37

List of appendices

A: Swept path analysis	37
B: Written confirmation	39
C: Stakeholder consultation	40
D: Road Dilapidation Report Transmittal	41

GAMUDA Australia LAING O'ROURKE

Definitions/ Abbreviations

Definition
Burwood North Station (not applicable to WTP works)
City of Parramatta Council
Construction Environmental Management Plan
Customer Journey Planning (formerly SCO/ TC)
Clyde site
Clyde Main Stabling Facility
Construction Traffic Management Framework
Construction Traffic Management Plan
Cumberland Council
Delivery Management System
Department of Planning and Environment
Environmental Impact Statement
Environmental Protection Agency
Environment Protection License
Five Dock Station (not applicable to WTP works)
Gamuda and Laing O'Rourke Consortium
Heavy Vehicle Local Road report
Local Traffic Committee (Council)
Ministerial Conditions of Approval
North Strathfield Metro Station (not applicable to WTP works)
Over Size and Over Mass vehicles
Parramatta Metro Station
Roads and Maritime Service (now part of TfNSW)
Road Occupancy License
Road Opening Permit
Sydney Coordination Office (now known as CJP)
Sydney Metro West
Sydney Olympic Park Metro Station
Speed Zone Authorisation
Tunnel Boring Machine
The Bays Station (not applicable to WTP works)
Transport Coordination (formerly SCO now known as CJP)
Traffic Control Group

GAMUDA Australia



WESTERN TUNNELLING PACKAGE SYDNEY METRO HEAVY VEHICLE LOCAL ROAD REPORT CLYDE/ ROSEHILL

Acronym	Definition
TCP	Traffic Control Plan (now known as TGS)
TfNSW	Transport for New South Wales
TGS	Traffic Guidance Scheme (formerly TCP)
TMC	Transport Management Centre
TTLG	Traffic and Transport Liaison Group
REMM	Revised Environmental Management Measure
WMS	Westmead Metro Station



1 EXECUTIVE SUMMARY

This Heavy Vehicle Local Road report (HVLR) has been developed to address the requirements of the Ministerial Conditions of Approval related to the Critical State Significant Infrastructure #10038 Stage 1 of the Sydney Metro West project.

The HVLR identifies the heavy vehicle routes into the sites not identified in the Environmental Impact Statement, the road classification and the suitability of the routes based on swept path analysis and adjacent land uses.

For the Clyde/ Rosehill sites, the routes proposed into site for the works are via Wentworth Street, Kay Street, Unwin Street, Shirley Street, Martha Street, Deniehy Street, Tennyson Street, Grand Ave and Colquhoun St. Deniehy and Tennyson St's will be subsumed within the construction site as will Wentworth Street north of Kay Street. The routes other than Martha Street between Wentworth Street and Deniehy Street, Deniehy Street (entire length), Tennyson Street (entire length) also form part of the Performance Based Standard (PBS) routes as identified on the TfNSW website.

The suitability of the routes has been assessed based on typical Heavy Vehicle sizes eg: semitrailers and truck and dog combinations. The swept paths show that all vehicle types, other than semi-trailer access from Unwin Street into Shirley Street and Martha Street onto Wentworth Street, operate satisfactorily, based on this finding, the use of semi-trailers will not be pursued. Semitrailer access can be provided via the other local streets assessed in this report.

Wentworth Street crosses Martha Street where the M4 Motorway shared path cycleway route is located. Similarly, Martha Street crosses the shared path crossing at the eastern end of Martha Street/ Deniehy Street. Signs have previously been installed to highlight the shared path crossing on Wentworth Street and on the shared path itself. Further signs are proposed to be installed on Martha Street and Deniehy Street. The placement of decals on the shared path on its approach to Martha Street is also proposed to highlight the existence of the shared path to motorists and the presence of trucks to shared path users.



2 INTRODUCTION

Sydney Metro is Australia's biggest public transport project, with the vision "to transform Sydney with a world-class metro." In 2024, Sydney will have 31 metro stations and more than 66 kilometres of new metro rail, revolutionising the way Australia's biggest city travels. By the end of the decade, the network will be expanded to include 46 stations and more than 113 kilometres of world-class metro for Sydney.

Sydney Metro West is a new 24-kilometre metro line with stations confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont and Hunter Street in the Sydney CBD.

On completion in 2030, the Sydney Metro West project will support a growing city and deliver world-class metro services to more communities. This new underground railway will connect Greater Parramatta and the Sydney CBD.

This once-in-a-century infrastructure investment will transform Sydney for generations to come, doubling rail capacity between the two CBDs, linking new communities to rail services, and supporting employment growth and housing supply. The Sydney Metro West project is expected to create about 10,000 direct and 70,000 indirect jobs during construction.

The new 24-kilometre Sydney Metro West tunnel and excavation works for nine new stations will be delivered in three contracts—the Western Tunnelling Package (WTP), the Central Tunnelling Package (CTP) and the Eastern Tunnelling Package (ETP).

The Gamuda Australia and Laing O'Rourke Consortium (GLC) will deliver the Sydney Metro West (SMW) Western Tunnelling Package (WTP), which includes:

- Westmead Station box excavation, including temporary support, stub tunnels, partially mined station cavern and crossover cavern including permanent lining and support
- o Parramatta Station, including excavation of station box and associated support
- Clyde Maintenance and Stabling Facility (MSF), including permanent dive structure, portal, spur running tunnels, spur tunnel junction cavern, bulk earthworks, civil structures, utilities corridor, road crossing and creek diversion
- Rosehill Services Facility, including shaft excavation, permanent lining and lateral support
- A precast segment manufacturing facility at Eastern Creek
- Demolition and site clearance works

Tunnelling between Sydney Olympic Park (SOP) and Westmead. Tunnelling will be undertaken by placing the tunnel boring machines (TBMs) at the Rosehill Services Facility box and retrieved out at the SOP Station Box and then placed back at the Rosehill Services Facility and retrieved at the Westmead Station Box. No surface works are proposed at SOP except for the retrieval of the TBM.



2.1 Purpose

This heavy vehicle Local Road (HVLR) report details the heavy vehicle routes as noted in the Environmental Impact Statement for the project and the proposed routes to be used for the Clyde/ Rosehill site access/ egress.

This report is a sub-plan to the site specific Construction Traffic Management Plan for the Clyde/ Rosehill work sites and has been prepared in accordance with Gamuda Australia and Laing O'Rourke Consortium (GLC) legal, planning and contractual requirements and environmental management system (EMS) including compliance to the Ministerial Conditions of Approval (MCoA), Revised Environmental Management Measures (REMM) and the Construction Traffic Management Framework

This report enables the project to manage potential construction traffic impacts systematically and is applicable to the Clyde site and all project activities.

2.2 Planning approval

Sydney Metro West – Westmead to The Bays Concept and Stage 1 was subject to environmental impact assessment under the NSW Environmental Planning and Assessment Act, 1979 (EP&A Act). It was declared a Critical Stage Significant Infrastructure (CSSI) by the Minister for Planning and Public Spaces.

An Environmental Impact Statement (EIS) was prepared under Division 5.2 of the EP&A Act and in accordance with Part 3 of Schedule 2 of the Environmental Planning and Assessment Regulation, 2000. Following exhibition of the EIS, an Amendment Report and Submissions Report was also prepared, after which the Minister carried out an assessment and made a determination.

The planning approval (Infrastructure Approval SSI 100038) and related environmental assessment documents are located at <u>Sydney Metro West - Concept and Stage 1 (major civil construction between Westmead and The Bays) | Planning Portal - Department of Planning and Environment (nsw.gov.au)</u>



3 COMPLIANCE

3.1 Ministerial Conditions of Approval

The Ministerial Conditions of Approval are listed below in Table 1.

Table 1: Ministerial Conditions of Approval

МСоА	Condition requirement	Document reference
A47	All heavy vehicles used for spoil haulage must be clearly marked on the sides and rear with the project name and application numbers to enable immediate identification by a person viewing the heavy vehicle standing 20m away	Table 5
D86	Local roads proposed to be used by Heavy Vehicles to directly access construction sites that are not identified in the documents listed in Condition A1 of this schedule must be approved by the Planning Secretary and be included in the CTMPs	This report
D87	All requests to the Planning Secretary for approval to use local roads under Condition D86 above must the following a) A swept path analysis	Appendix A
D87	 All requests to the Planning Secretary for approval to use local roads under Condition D86 above must the following b) Demonstration that the use of local roads by Heavy vehicles for the CSSI will not compromise the safety of pedestrians and cyclists of the safety of two way traffic flow on two way roadways 	This report
D87	 All requests to the Planning Secretary for approval to use local roads under Condition D86 above must the following c) Details as to the date of completion of the road dilapidation surveys for the subject local road and 	Appendix D
D87	 All requests to the Planning Secretary for approval to use local roads under Condition D86 above must the following d) Measures that will be implemented to avoid where practicable the use of local roads past schools, aged care facilities and child care facilities during their peak operation times and 	This report
D87	 All requests to the Planning Secretary for approval to use local roads under Condition D86 above must the following e) Written advice from an appropriately qualified professional on the suitability of the proposed Heavy Vehicle route which takes into consideration items a) to d) of this condition 	Appendix B
D88	Before any local road is used by a Heavy Vehicle for the purposes of construction of Stage 1 of the CSSI, a Road Dilapidation Report must be prepared for the road. A copy of the Road Dilapidation Report must be provided to the Relevant Road Authority(s) within three (3) weeks of completion of the survey and at no later than one (1) month before the road being used by Heavy Vehicles associated with the construction of Stage 1 of the CSSI	Section 7.1 and Appendix D

LAING O'ROURKE

МСоА	Condition requirement	Document reference
D89	If damage to roads occurs because of the construction of Stage 1 of the CSSI, the Proponent must either (at the Relevant Road Authority's discretion)	Section 7.1
	a) Compensate the Relevant Road Authority for the damage so caused or	
	 b) Rectify the damage to restore the road to at least the condition it was in pre-work as identified in the Road Dilapidation Report 	
D90	Vehicles associated with the project workforce (including light vehicles and Heavy Vehicles must be managed to: a) Minimise parking on public roads	Section 6.1.2
	Heavy Vehicles must be managed to: b) Minimise idling and queuing on state and regional roads	Section 7
	Heavy Vehicles must be managed to:c) Not carry out marshalling of construction vehicles near sensitive land user(s)	Section 7
	Heavy Vehicles must be managed to:d) Not block or disrupt access across pedestrian or shared user paths at any time unless alternate access is provided and	Section 6.1.3 & Section 7
	Heavy Vehicles must be managed to"e) Ensure spoil haulage vehicles adhere to the nominated haulage routes identified in the CTMPs	Section 7

3.2 Revised Environmental Management Measures

The Revised Environmental Management Measures are listed below in Table 2

Table 2: Revised Environmental Management Measures

REMM#	Condition requirement	Site(s)	Document Reference
TT6	All trucks would enter and exit construction sites in a forward direction, where feasible and reasonable	All	Section 6.1.1
TT7	Construction site traffic would be managed to minimise movements during peak periods	All	Section 6.1.1
TT8	Construction site traffic immediately around construction sites would be managed to minimise vehicle movements through school zones during pick up and drop off times	WMS PMS BNS FDS	Not applicable to Clyde/ Rosehill site



4 LEGAL AND OTHER REQUIREMENTS

4.1 Relevant Legislation

Identified regulatory requirements are:

- An approved and valid Road Occupancy Licence (ROL
- An approved relevant Speed Zone Authorisation (SZA)\
- Australian Road Rules form the basis for state and territory road rules
- *Roads Act, 1993* (NSW) sets out rights along a public road, establishes procedures for a public road and provides the classifications of roads
- Heavy Vehicle National Act 2013 and Regulation, 2013 (NSW)
- Heavy Vehicle (Adoption of National Law) Act, 2013 (NSW)
- Dangerous Goods (Road and Rail Transport) Act, 2008
- Road and Rail Transport (Dangerous Goods) (Road) Regulation, 1998
- Australian Code for the Transport of Dangerous Goods by Road and Rail (National Transport Commission, 2008)
- Dangerous Goods (Road and Rail Transport) Regulation, 2014
- Australia Code for the Transport of Dangerous Goods by Road and Rail Edition 7.7 (National Transport Commission, 2020)
- *Environmental Planning and Assessment Act,* 1979 under which the project approval was granted including the Environmental Impact Statement and Construction Traffic Management Framework

4.2 References and guidelines

The relevant standards, codes and guidelines are noted below:

- AustRoads Cycling Aspects of AustRoads Guides, 2017
- AustRoads Guide to Traffic Management, 2020 Parts 1-13
- AustRoads Guide to Road Design, 2013 to 2021-Parts 1-7
- AustRoads Guide to Road Safety, 2019 to 2021 Parts 1-7
- Roads and Traffic Authority, NSW Guide to Traffic Generating Developments, 2002 and further updates as provided
- Roads and Traffic Authority, NSW Bicycle Guidelines, version 1.2, 2005
- Roads and Maritime QA Specification G10, Traffic Management, 2020
- Roads and Maritime NSW Speed Zoning Guidelines, 2011
- TfNSW Traffic Control at Worksites Manual, version 6.1, 2022 and
- TfNSW NSW Substantiable Design Guidelines, version 4, 2017



5 THE EXISTING ENVIRONMENT

5.1 Locality and land use

The site is located in an industrial area of Western Sydney and is bounded by the M4 Motorway to the south, James Ruse Drive to the west, Unwin Street to the north and Shirley Street to the east as shown on Figure *5-1*

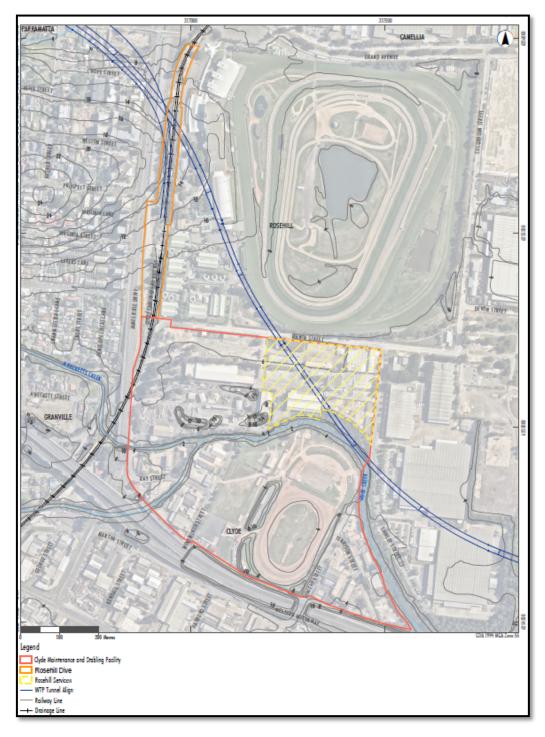


Figure 5-1: Site locality

 The site is located in a highly industrialised area is predominantly zoned industrial uses with recreational uses to the north (Rosehill Gardens Racecourse) and the old Sydney Speedway, which has now been closed. No educational, childcare or community use facilities are provided near the construction site, refer to Figure 5-2.

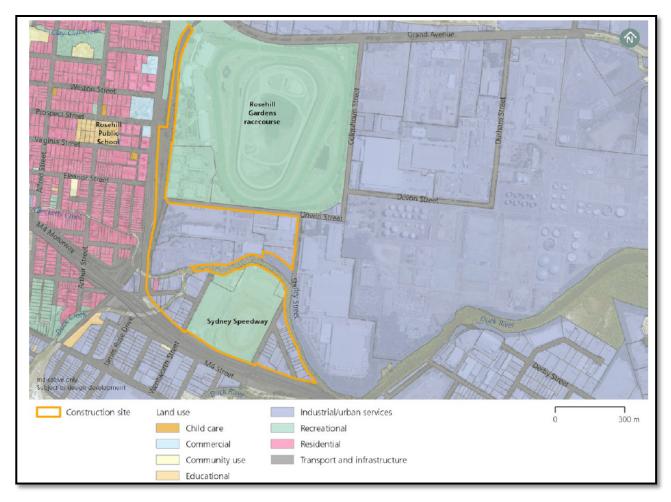


Figure 5-2: Existing land use zoning



LAING O'ROURKE

A review of the existing sensitive receivers and their locations was undertaken by Sydney Metro during the EIS development phase. The result of this review is provided on Figure 5-3. It is noted that no aged care or childcare facilities are located near the Clyde Rosehill sites. Childcare facilities are located to the west of James Ruse Drive, an arterial road.

A land use survey is included as part of the detailed Noise and Vibration Impact Statement (SMWSTWTP-GLO-1NL-NL000-NV-PLN-000002). This is currently in draft and is being informed by construction from the EPA and other stakeholders. Throughout the construction period this detailed Noise and Vibration Impact Statement will be an evolving document.

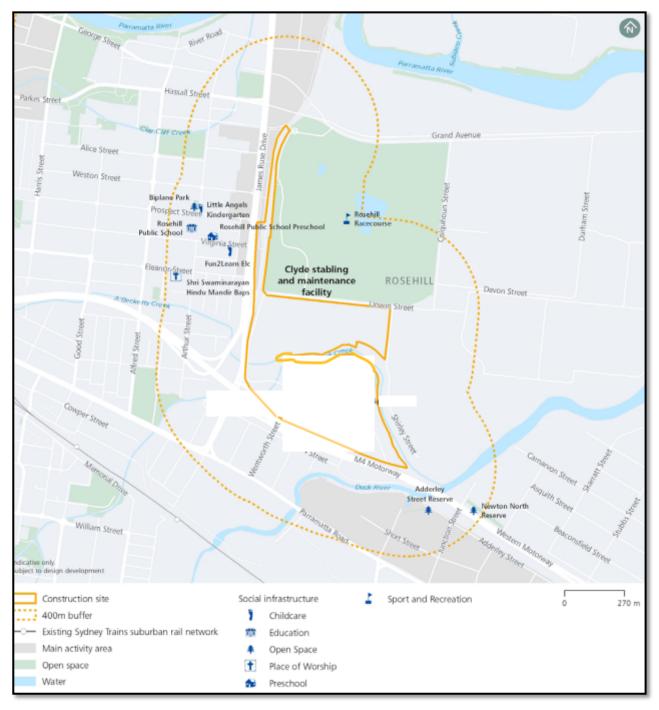


Figure 5-3: Sensitive receiver locations

Access to the M4 Motorway inbound carriageway is available from James Ruse Drive. Access to the M4 Motorway outbound carriageway from Wentworth St is via the Great Western Highway/ Parramatta Road and Church Street and from Grand Ave is via James Ruse Drive on ramp southbound.

Egress from the M4 inbound carriageway is via Church Street, Great Western Highway/ Parramatta Road to access Wentworth St and James Ruse Drive off ramp to access Grand Ave. The egress from the M4 outbound carriageway is via James Ruse Drive, Great Western Highway/ Parramatta Road to access Wentworth St and James Ruse Drive to access Grand Ave. All of these roads are classified as state roads as shown on Figure 5-4.



Figure 5-4: NSW Road Classification Map (source: TfNSW Road Network Classification Map



Surrounding the site, the road network is typically recognised as Performance Based Standard routes allowing the use of greater mass vehicles, refer to Figure 5-5. The use of PBS vehicles will reduce the number of vehicles required for the spoil haulage task in particular. This will be notable during the site operations phase of the project.

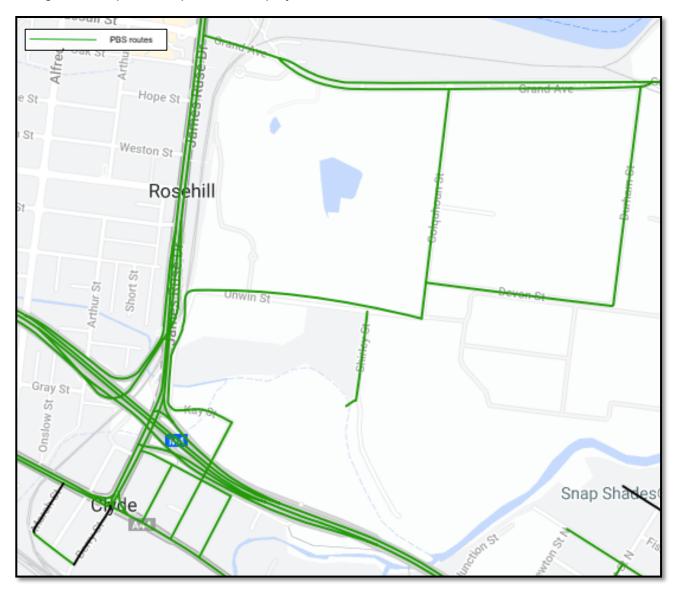


Figure 5-5: PBS Routes (source: TfNSW PBS Network map)

5.2 Wentworth Street

Wentworth Street is a local road under the care and control of the City of Parramatta Council. It starts at the Great Western Highway/ Parramatta Road and ceases at A'becketts Creek, Clyde. Wentworth Street runs in a north south direction. The current speed limit is 50km/hr. The street previously contained a number of industrial uses on the western side between the M4 Motorway and A'becketts Creek, however, with the demolition works by Sydney Metro West, the western side of the streets will contain no premises north of the M4 Motorway overpass. On the eastern side of the street Sydney Helicopters and the old Sydney Speedway were previously located. North of Kay Street, Wentworth Street has been acquired by Sydney Metro from the City of Parramatta Council and Sydney Metro West intends to license Wentworth Street from north of the M4 overpass from



Council. All other land required for the construction and operation of the Sydney Metro West Stage 1 has been acquired by Sydney Metro.

Wentworth Street provides one of two main access/egress points into the Clyde area – the other being Grand Avenue north of Rosehill Gardens Racecourse. No public transport operates within the area or along Wentworth Street.

Traffic signals are located at the intersection of the Great Western Highway/ Parramatta Road, allowing all turn movements by providing a dedicated right turn bay on the Great Western Highway/ Parramatta Road for northbound traffic. A Left Turn on Red is permitted for vehicles egressing from Wentworth Street.

Signalised pedestrian crossings are provided across Wentworth Street and the Great Western Highway/ Parramatta Road (northern approach only). The Wentworth Street crossing includes a red arrow hold, so that vehicles on the Great Western Highway/ Parramatta Road waiting to turn left onto Wentworth Street are held during the pedestrian phase of the traffic signals.

Parking is typically unrestricted along Wentworth Street; however parking is restricted on the approach to the traffic signals on the Great Western Highway/ Parramatta Road intersection.

Wentworth Street has footpaths on both sides of the road the Great Western Highway/ Parramatta Road and the M4 Motorway overpass. Between the M4 Motorway overpass and A'becketts Creek, a footpath is only provided on the western side of the street.

A shared cycle path crosses Wentworth Street at its intersection with Martha Street. No dedicated crossing facilities are provided across Wentworth Street. This shared path is known as the M4 Motorway shared path which connects South Wentworthville in the west to Sydney Olympic Park in the east, refer to Figure 5-6.

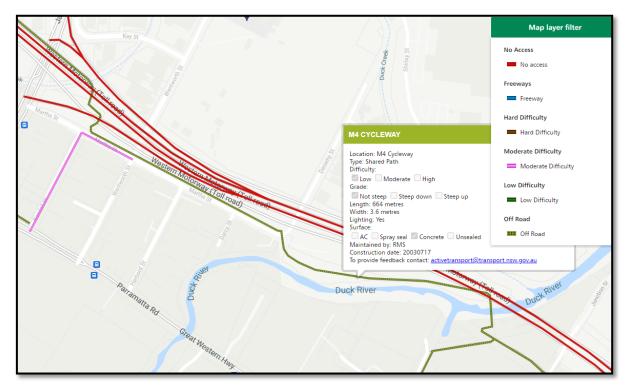


Figure 5-6: Existing shared path (source: TfNSW Cycleway finder)



WHEN PRINTED THIS DOCUMENT IS AN UNCONTROLLED VERSION AND SHOULD BE CHECKED AGAINST THE ELECTRONIC VERSION FOR VALIDITY

5.3 Kay Street

Kay Street is a local road under the care and control of the City of Parramatta Council. It starts at Wentworth Street and ceases at Unwin Street. Kay Street runs in an east west direction. The speed limit is 50km/hr. The street previously contained industrial uses on both sides of the street, however, with the demolition works by Sydney Metro West, all previous tenants have relocated. No public transport operates along Kay Street. Parking is unrestricted along Kay Street. Kay Street has footpaths on both sides of the street. A bridge over Duck Creek is located on Kay Street. It is noted that Sydney Metro intends to license Kay Street from the City of Parramatta Council for the Western Tunnelling Package of works.

5.4 Unwin Street

Unwin Street is a local road under the care and control of the City of Parramatta Council. It starts at Kay Street and ceases at Colquhoun Street. Unwin Street runs in a north south direction between Kay Street and Unwin Street and in an east west direction between Unwin Street and Colquhoun Street. The existing speed limit is 50km/hr. No public transport operates along Unwin Street. Parking is restricted on the western side between Kay Street and Unwin Street between the hours of 630AM-430PM Monday to Friday. There is a small section of 30 minute parking on Unwin Street opposite the Rosehill Gardens entry to the stables. Outside of these locations, parking is generally unrestricted.

Unwin Street between Kay Street and Unwin Street, on the eastern side of the street, also previously contained industrial uses which are vacant. The former Carlingford corridor was previously located to the immediate west of Unwin Street. This rail line was closed in January 2020. Fleet Street is located off Unwin Street. Fleet Street contains a TfNSW and provides a footpath connection to James Ruse Drive (western side). No public transport operates along Unwin Street.

Unwin Street between Unwin Street and Shirley Street on the southern side of the street, also previously contained industrial uses which has relocated. Rosehill Gardens Racecourse is located to the north of Unwin Street. The northern boundary of Unwin Street is bordered by Rosehill Gardens Racecourse.

Unwin Street has a footpath on the eastern side of Unwin Street between Kay Street and Unwin Street and a small section of footpath on the southern side of Unwin Street for approximately 160m from the north south section of Unwin Street.

A bridge over A'Becketts Creek is located on Unwin Street. It is noted that Sydney Metro intends to license Unwin Street from the City of Parramatta Council for the Western Tunnelling Package of works.

Speed management devices are located along the east-west section of Unwin Street, as noted on Figure 5-7.



LAING O'ROURKE



Figure 5-7: Speed management device on Unwin Street

5.5 Shirley Street

Shirley Street is a local road under the care and control of the City of Parramatta Council. It starts at Unwin Street and ceases at Duck River. Shirley Street runs in a north south direction. The existing speed limit is 50km/hr. No public transport operates along Shirley Street. The street previously contained industrial uses on the west side of the street, however, with the demolition works by Sydney Metro West, these premises are no longer operating. Bulky goods premises are located on the eastern side of the street. No public transport operates along Shirley Street. Parking is generally unrestricted along Shirley Street with No Stopping provided towards Unwin Street on the western side. Footpaths are provided on the western side between Unwin Street and 130m south and the eastern side between Unwin Street and 280m south.

5.6 Martha Street

Martha Street is a local road under the care and control of the City of Parramatta Council. It starts at James Ruse Drive and ends at Deniehy Street. Martha Street runs east to west and has a speed limit of 50km/hr. the street has industrial uses on the southern side and the M4 Motorway on the northern side. Parking is unrestricted along both sides of Martha Street. The M4 Motorway shared path is located on the northern side of Martha Street and a footpath is located on the southern side. At the eastern most end the shared path crosses across Martha Street to continue towards the east. There is no public transport along Martha Street.



5.7 Deniehy Street

Deniehy Street is a local road previously under the care and control of the City of Parramatta Council, but this road is now under the Sydney Metro West ownership. Footpaths typically exist only under the M4 Motorway overpass. No public transport operates along Deniehy Street. The buildings in this area will be demolished and the street will be incorporated into the construction site. Parking is unrestricted.

5.8 Tennyson Street

Tennyson Street is a local road previously under the care and control of the City of Parramatta Council, but this road is now under the Sydney Metro West ownership. Footpaths do not exist. No public transport operates along Deniehy Street. The buildings in this area will be demolished and the street will be incorporated into the construction site. Parking is unrestricted.

5.9 Colquhoun Street

Colquhoun Street is a local road under the care and control of the City of Parramatta Council. It starts at Grand Ave and ends at Unwin St. Colquhoun Street runs north to south and has a speed limit of 50km/hr. the street has industrial uses on the eastern side, including the Parramatta Light Rail stabling yard and the Rosehill racecourse on the western side. Parking is unrestricted along both sides of Colquhoun Street. There is no paved footpath although the grass verge on either side can be used by pedestrians. There is no public transport along Colquhoun Street.

Speed management devices are located along Colquhoun Street, as noted on



Figure 5-8: Speed management device on Colquhoun Street





Figure 5-8: Speed management device on Colquhoun Street



5.10 Grand Avenue

Grand Avenue is a local road under the care and control of the City of Parramatta Council. It starts at James Ruse Drive and ceases at the Parramatta River, Clyde. A small section of Grand Ave, east of Colquhoun St is under the control of the Parramatta Light Rail for access and egress to their stabling yard. Grand Ave runs in an east/west direction. The current speed limit is 50km/hr. The avenue contains a number of industrial uses on the northern side, the southern side includes Rosehill racecourse, Parramatta Light Rail stabling yard (under construction) and a number of industrial buildings.

Grand Avenue provides one of two main access/egress points into the Clyde area – the other being Wentworth Avenue. No public transport operates within the area or along Grand Avenue.

Traffic signals are located at the intersection of the James Ruse Drive, allowing all turn movements by providing a dedicated right turn bay on James Ruse Drive for northbound traffic. A shared straight and left turn lane for vehicles egressing from Grand Ave.

Signalised pedestrian crossings are provided across Grand Ave and James Ruse Drive. The Grand Ave crossing includes a red arrow hold, so that vehicles on James Ruse Drive waiting to turn left onto Grand Ave are held during the pedestrian phase of the traffic signals.

Parking is typically unrestricted along Grand Ave; however parking is restricted over the Grand Ave Sydney Trains bridge, at the Parramatta Light Railroad crossing and approaching intersections.

Grand Ave has a paved footpath on the northern side from James Ruse Drive to the Parramatta Light Rail crossing. The remainder of the road has wide grassed verges that could be used by pedestrians. There is no pedestrian access over the Grand Ave bridge at James Ruse Drive on the southern side of the road, the northern side of the bridge has a pedestrian path.



6 SITE OPERATIONS

All work vehicles will enter and exit the construction sites in a forward direction, where reasonable and feasible. Where this is not possible, appropriate management measures will be put in place such as traffic control.

6.1.1 Impact on traffic flow

GLC will ensure that impacts to traffic flow are minimised by:

- Centralised logistics team and monitoring area to identify and regulate truck operations
- Monitoring of access/egress points via Closed Circuit Television (CCTV)
- Managing truck movements along discrete routes to minimise cumulative haulage impacts
- Scheduling where feasible, to avoid operating school zones and high pedestrian activity areas
- Use of Teletrac Navman for real time tracking of vehicles and loads including compliance of vehicles to haul routes, speed limits and mass requirements

6.1.2 Impact on parking

All light and heavy vehicles associated with the works will be catered for on site.

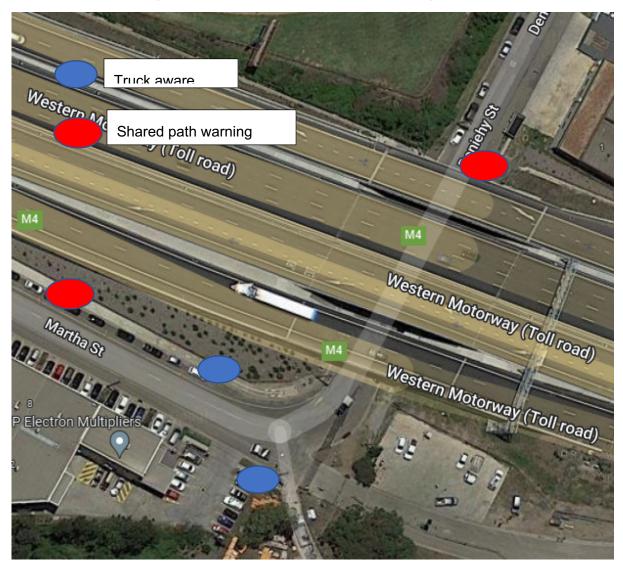
6.1.3 Impact on active transport users

The existing M4 shared path, refer to Figure 5-6, runs along Martha Street requiring crossing of Wentworth Street and at the site entry into Deniehy Street from Martha Street. To ensure that heavy vehicle drivers are aware of the presence. Signage had previously been installed by the early works contractor along Wentworth Street and on Martha Street approaching Wentworth Street. Further signage is proposed to be installed on Martha Street and Deniehy Street to highlight the existence of the shared path crossing point and on the shared path it is proposed to install the existing TfNSW Truck Aware decals. This signage and decal are shown below on Figure 6-1.



Figure 6-1: Shared path warning sign and truck decals





The locations of the signs and proposed decals are shown on Figure 6-2.

Figure 6-2: Sign and decal locations

6.1.4 Managing cumulative impacts

No works have been identified near the Clyde/ Rosehill work sites. The Parramatta Light Rail worksites are located north of Rosehill Gardens Racecourse with their entry being Grand Avenue. To ensure that GLC are aware of other projects and/ or impacts, GLC will attend the following forums.

6.1.4.1 Traffic and Transport Liaison Group (TTLG)

This forum is provided to ensure that the stakeholders who may be affected by the works are informed of the proposed works and the traffic impacts associated with those works. Attendance at these forums typically includes several government agencies at both the state and local level, emergency services, public and private transport operators, pedestrians and cyclists advocacy groups and other stakeholders as nominated by TfNSW. This forum typically meets monthly.



6.1.4.2 Traffic Control Group (TCG)

The TCG is a forum to discuss the proposed traffic management measures during the stages of the works including the impacts on the road and transport network and proposed mitigation measures, any feedback received on the traffic documentation and updates on the program of works. This group will meet as agreed between the members. The TCG members will vary depending on the location of the works. Proposed members include:

- Transport for New South Wales including Sydney Metro; Transport Management Centre: Customer Journey Planning (previously SCO); Greater Sydney Region (previously RMS)
- Local council representatives
- Other contractors required by TfNSW
- Centre of Road and Maritime Safety
- Infrastructure NSW.



7 FLEET MANAGEMENT

Trucks to be used on the project will be compliant with NSW legislation, Sydney Metro's Principal Contractor Health and Safety Standard, relevant Australian Design Rules and vehicle standards and the Heavy Vehicle National Legislation. All heavy vehicle operations will be conducted in accordance with GLC's Chain of Responsibility (CoR) Management Plan including compliance with nominated haulage routes.

A combination of truck types will be used during the works, with trucks being truck and dog, semitrailers, 12.5m single unit trucks and low loaders. Table 10-4 of Chapter 10 Traffic and Transport notes the vehicle types to be used at the Clyde Rosehill site, as noted below.

Construction site	Truck type ¹	
Westmead metro station	Rigid truck and/or truck and dog	
Parramatta metro station	Rigid truck and/or truck and dog	
Clyde stabling and maintenance facility	Rigid truck and/or truck and dog	
Silverwater services facility	Rigid truck and/or truck and dog	
Sydney Olympic Park metro station	Rigid truck and/or truck and dog	
North Strathfield metro station	Rigid truck and/or truck and dog	
Burwood North Station	Rigid truck and/or truck and dog Medium rigid truck	
Five Dock Station	Rigid truck and/or truck and dog	
The Bays Station	Rigid truck and/or truck and dog	

Table 10-4: Construction vehicle types

All vehicles will enter and exit the site in a forward direction.

Construction traffic will be managed to minimise movements during peak periods and through school zones during drop off and pick up times, in particular at the Westmead and Parramatta sites and this will be achieved through scheduling of vehicles and staggered start and finish times. GLC will provide sufficient onsite parking for heavy vehicles associated with the works. This will ensure that vehicles are not idling or queuing on state, regional and local roads. In the event that vehicles are unable to be accommodated on our other sites, vehicles will be directed to the Clyde site as an extended marshalling facility. Given the amount of space available at the Clyde site there is no requirement for any further marshalling facilities.

7.1 Road dilapidation report

Before any local road is used by Heavy Vehicles, a road dilapidation report will be prepared. A copy of that report will be provided to the City of Parramatta Council within three (3) weeks of completion of the survey and no later than one (1) month before the road used by heavy vehicles associated with the project.

If damage to roads occurs as a result of the construction of the project, GLC will either, at City of Parramatta Council's discretion:

• Compensate the City of Parramatta Council for the damage so caused or



Rectify the damage to restore the road to at least the condition it was in pre-work as identified in the Road Dilapidation Report

7.2 Drivers and operators

Operator selection will be based on safety performance criteria. Operators and drivers will be required to have general construction industry induction cards and will be required to attend ongoing general project and site specific inductions.

All operators will be comprehensively trained with regard to community expectations and impacts from heavy vehicle movements through site inductions and attendance at the Sydney Metro Industry Curriculum (SMIT) - Safe Heavy Vehicle Introduction Skills which provides drivers with the knowledge, skills, motivation and confidence to drive heavy vehicles safely and professionally in an urban built up road environments, whilst undertaking a transport task required on the project. The training course focuses on low risk driver behaviours, shared the road safely with vulnerable road users and reinforces heavy vehicle driver knowledge and skill. The project and site inductions will have a particular focus on operator behaviour. The driver induction process will include safety awareness in relation to all road users, particularly pedestrians and cyclists.

7.3 Proposed vehicle movements

Heavy vehicles will transport materials from the work site to authorised disposal sites, where the material is unable to be reused on site. The number of vehicles associated with the Clyde/ Rosehill sites is dependent on the task to be undertaken, as noted in the EIS the site establishment works noted 32 vehicle movements per hour between the hours of 7AM-5PM, equating to 16 trucks per hour, whilst the piling and excavation works, Phase 2 as noted in the EIS, will see vehicle movements per hour, over a 24 hour period. The largest transport task will be associated with the Phase 3 works that include excavation and Tunnel Boring Machine, spoil removal, refer to Figure 7-1.



Е

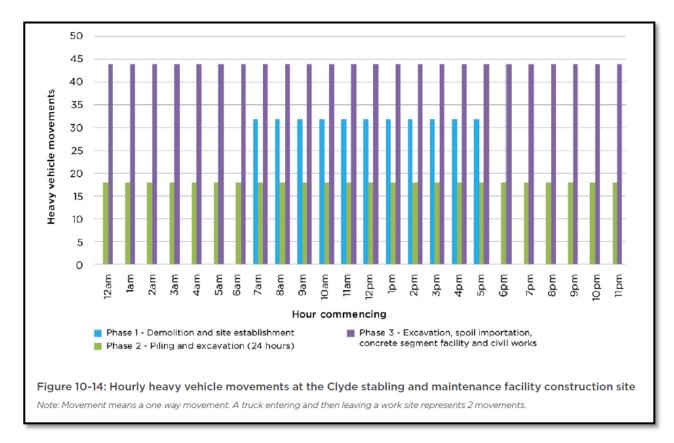


Figure 7-1: EIS Heavy Vehicle moments (source: Chapter 10 EIS)

The heavy vehicle numbers proposed for the Clyde/ Rosehill site for the various phases of the works as noted in Table 3. It should be noted that the heavy vehicle numbers match the EIS.

Phase of works	Working hours	EIS#	GLC#
1	7AM-6PM Mon-Sat	32	32
2	24 hours	18	18
3	24 hours	44	44



7.4 EIS routes for Heavy Vehicles

The EIS nominated Wentworth Street between the Great Western Highway/ Parramatta Road and the M4 Motorway overpass, as the heavy vehicle haulage routes into the site as shown on Figure 7-2.



Figure 7-2: EIS nominated heavy vehicle routes

As noted, the use of Wentworth Street is only nominated between the Great Western Highway/ Parramatta Road through to the M4 Motorway overpass.



7.5 Proposed heavy vehicle routes

There are a number of local roads within the Clyde/ Rosehill area that are required to access/ egress the construction site. The EIS nominates Wentworth St off Parramatta Rd to access and egress the site which restricts the site to only one entry and exit point. GLC propose to utilise, from James Ruse Drive, Grand Ave, Colquhoun St and Unwin St as an entry and exit point into the area. This route is also an OSOM route into site due to the restrictions on Wentworth St. These roads are detailed in Table 4.

Road name	Between	Between	Classification	Two way traffic flow	Parking	Speed limit
Wentworth Street	M4 Motorway Overpass	Duck Creek	Local	Yes	Yes	50km/hr
Kay Street	Wentworth Street	Unwin Street	Local	Yes	Yes	50km/hr
Unwin Street	Kay Street	Colquhoun Street	Local	Yes	Yes	50km/hr
Shirley Street	Unwin Street	Duck Creek	Local	Yes	Yes	50km/hr
Martha Street	Wentworth Street	Deniehy Street	Local	Yes	Yes	50km/hr
Deniehy Street	Martha Street	End of road	Local	Yes	Yes	50km/hr
Tennyson Street	Deniehy Street	End of road	Local	Yes	Yes	50km/hr
Colquhoun Street	Unwin St	Grand Ave	Local	Yes	Yes	50km/h
Grand Avenue	Colquhoun Street	James Ruse Drive	Local	Yes	Yes	50km/h

Table 4: Road	s to he used h	W Heavy	/ Vehicles
		'y i icavy	venicies



WESTERN TUNNELLING PACKAGE SYDNEY METRO HEAVY VEHICLE LOCAL ROAD REPORT CLYDE/ ROSEHILL

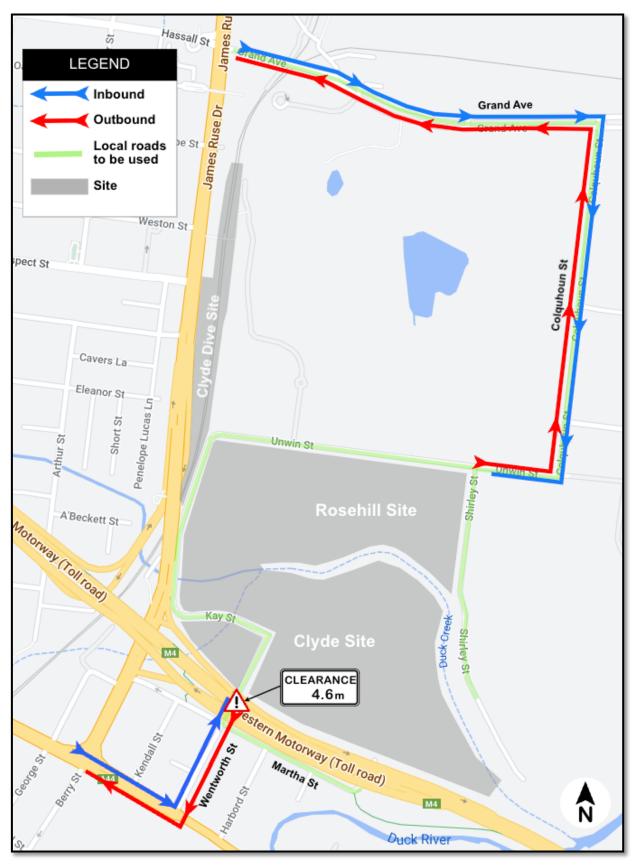


Figure 7-3: Proposed heavy vehicle routes & local roads not included in the EIS



WHEN PRINTED THIS DOCUMENT IS AN UNCONTROLLED VERSION AND SHOULD BE CHECKED AGAINST THE ELECTRONIC VERSION FOR VALIDITY

7.6 Fleet safety

GLC is committed to safety for all aspects of the project with road safety being paramount to the success of the project. To demonstrate this commitment the requirements listed in Table 5.

Table 5:	Heavv	vehicle	requirements
1 01010 01			109011011101110

Requirement(s)	Purpose	Managed by
,	-	
Ensure all heavy vehicles are registered and comply with the Australian Design Rules	Ensure compliance with legislative requirements	Checking prior to attendance at site through subcontractor engagement
		All vehicles will be registered on Plant Assessor
Blind spot elimination or minimise front, side and rear blind spots, including	Ensure compliance with SWTC and increase visibility of active transport	Checking prior to attendance at site through subcontractor engagement
 Class V and VI mirrors as per ADR14.02 where blind spots cannot be permanently eliminated 	users	All vehicles will be registered on Plant Assessor
 The prohibition of accessories that restrict the forward field of vehicles including opaque or chrome bug deflectors 		
Side underrun protection fitted to both sides of the vehicle:	Improved protection for active transport users	Checking prior to attendance at site through subcontractor engagement
 Between the front and rear axle of all rigid (SU) trucks and 		All vehicles will be registered on Plant
 Between the front axle/ landing legs and rear axle of trailers forming part of a combination 		Assessor
Signage placed on heavy vehicles including:	Increasing road safety awareness for all users	Checking prior to attendance at site through
 Rear warning signs alerting other roads users to the dangers of overtaking and 		subcontractor engagement All vehicles will be registered on Plant
Front nearside signs warning pedestrians about walking		Assessor





Е

Requirement(s)	Purpose	Managed by
close to the front of a moving or stationary heavy vehicle		
Full body line and contour conspicuity markings and reflective markings fitted to the drawbar of all trailers	Increasing visibility of heavy vehicles	Checking prior to attendance at site through subcontractor engagement All vehicles will be registered on Plant Assessor
Heavy vehicle drivers to complete the Sydney Metro Safe Heavy Vehicle Driver Induction program or similar	Training and induction to address safety of pedestrians/ cyclists along street frontages	Training and induction process All heavy vehicle operators will be registered on Plant Assessor
All heavy vehicles used for spoil haulage must be clearly marked on the sides and rear with the project name and application number to enable immediate identification by a person viewing the heavy vehicle standing 20m away	Compliance with MCoA	Checking prior to attendance at site through subcontractor engagement All vehicles will be registered on Plant Assessor

7.7 Permits / Over dimensional vehicles

Permit issue for vehicles greater than 4.5 tonnes is through the National Heavy Vehicle Regulator (NHVR). This applies to special purpose vehicles (SPV) such as mobile cranes and other over size/over mass (OSOM) vehicles.

For over dimensional vehicles, generally vehicles that are greater than 25m in length or 3,5m width require a pilot(s). Extremely long or wide vehicles will require an escort (fee payable). Permits will be applied for by the transport operator.

Oversize vehicles will be required at this site for the delivery of large plant and piling rigs. These deliveries will occur outside of peak hours. Contractors will manage their own permits.

The existing M4 Motorway overpass on Wentworth St is currently height limited (4.6m) as noted on Figure 7-4:



LAING O'ROURKE



Figure 7-4: M4 Overpass on Wentworth Street

Where vehicles are unable to be accommodated, an alternative route would be detailed within the accompanying permit application for oversize vehicles with the use of Grand Avenue or James Ruse Drive into the Clyde Dive site being the only other routes available.



8 COMMUNITY AND CONSULTATION

8.1 Stakeholders

Table 6 notes the consultation undertaken in the development of this Heavy Vehicle Local Road report. Appendix C includes the comments received and GLC's responses to those comments.

Stakeholder	Date	Consultation
TCG	17 th March 2022	Presentation
TTLG	31 st March 2022	Presentation
Sydney Metro Project team	1 st April 2022	Submission of HVLR report
CJP	1 st April 2022	Submission of HVLR report
City of Parramatta Council	1 st April 2022	Submission of HVLR report
Sydney Metro Project team	16 May 2022	Resubmission of HVLR report
CJP	16 May 2022	Resubmission of HVLR report
City of Parramatta Council	16 May 2022	Resubmission of HVLR report
Sydney Metro Project team	7 June 2022	Resubmission of HVLR report
CJP	7 June 2022	Resubmission of HVLR report
City of Parramatta Council	7 June 2022	Resubmission of HVLR report
Department of Planning and Environment	28 th June 2022	Approval of HVLR
Sydney Metro Project team	14 th Feb 2023	Resubmission of HVLR report
CJP	14 th Feb 2023	Resubmission of HVLR report
City of Parramatta Council	14 th Feb 2023	Resubmission of HVLR report

Table 6: Stakeholder consultation

8.2 Workforce communications

All personnel, including subcontractors, are required to attend a compulsory project and site induction before commencing any works on site. Similarly, visitors will be required to undertake a visitor's induction. This HVRL report will be included in the Construction Traffic Management Plan (CTMP) and will be included in the site induction for heavy vehicle drivers. A record of all attendees will be maintained.

Toolbox talks will be conducted and will be used to promote the safety and environmental performance including compliance with this report and the approved CTMP.



A : SWEPT PATH ANALYSIS

Swept path analysis was undertaken at the locations as noted on Figure 8-1 and included in Table 7.

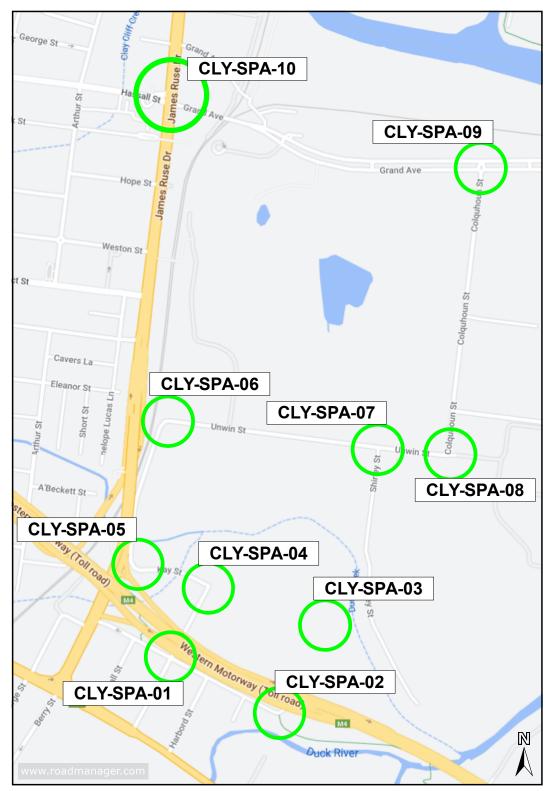


Figure 8-1: Swept path analysis locations

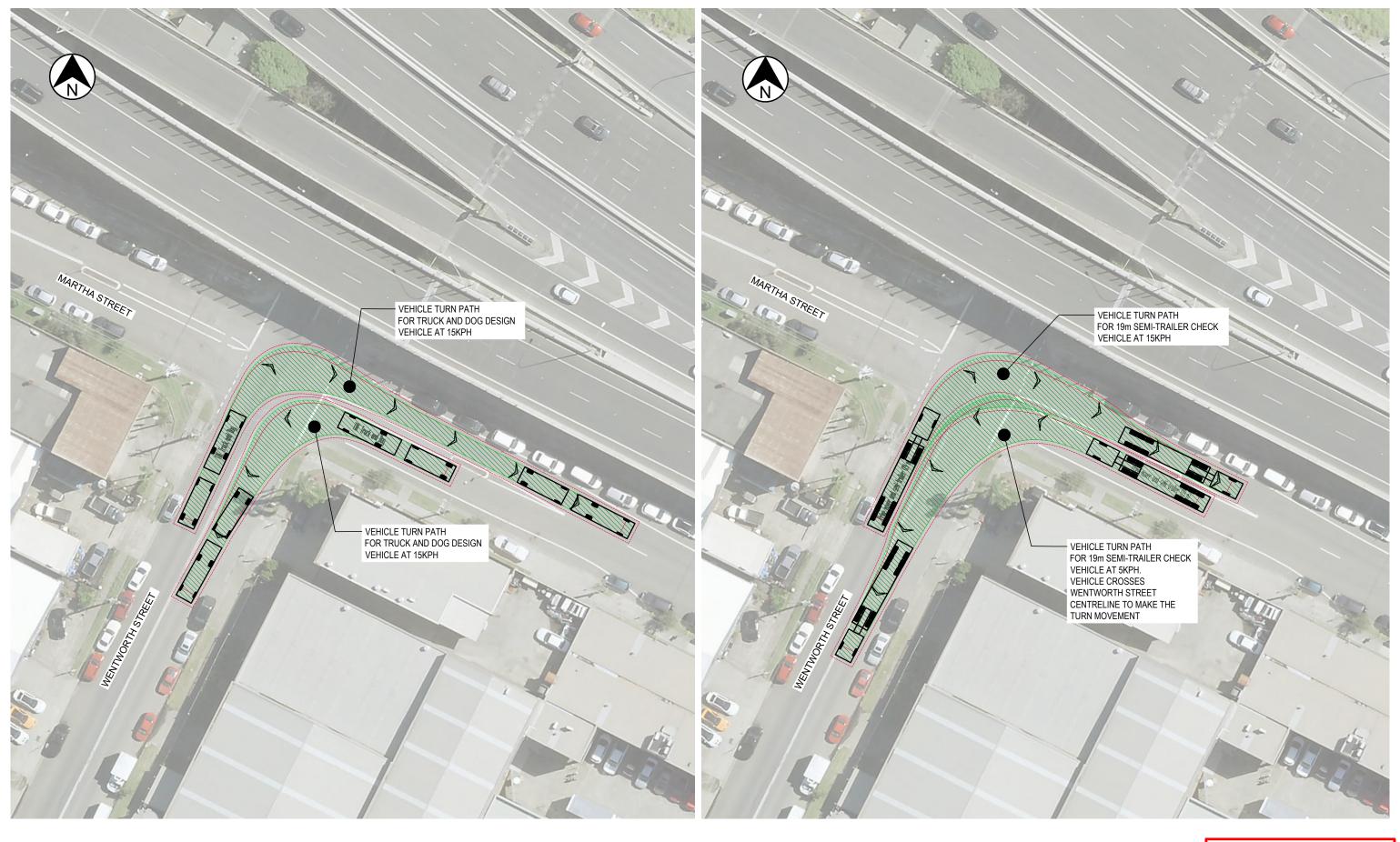


WHEN PRINTED THIS DOCUMENT IS AN UNCONTROLLED VERSION AND SHOULD BE CHECKED AGAINST THE ELECTRONIC VERSION FOR VALIDITY

Drawing #	Location	Suitability	Truck type
CLY-SPA-01	Wentworth St at Martha St	Yes	Truck and dog
CLY-SPA-01	Wentworth St at Martha St	No - Encroaches into opposing carriageway	Semi-trailer
CLY-SPA-02	Martha St at Deniehy St	Yes	Both
CLY-SPA-03	Deniehy St at Tennyson St	Yes	Both
CLY-SPA-04	Wentworth St at Kay St	Yes	Both
CLY-SPA-05	Kay St at Unwin St	Yes	Both
CLY-SPA-06	Unwin St at Unwin St	Yes	Both
CLY-SPA-07	Unwin St at Shirley St	Yes	Truck and dog
CLY-SPA-07	Unwin St at Shirley St	No - Encroaches into opposing carriageway	Semi-trailer
CLY-SPA-08	Unwin St at Colquhoun St	Yes	Both
CLY-SPA-09	Grand Ave at Colquhoun St	Yes	Both
CLY-SPA-10	Grand Ave at James Ruse Drive	Yes	Both

Table 7: Swept path drawing and suitability





VEHICLE TURN PATH LEGEND
VEHICLE VEHICLE (0.5m)
TURN PATH DIRECTION

0	5	10	15	20
SCALE '	1:500m			

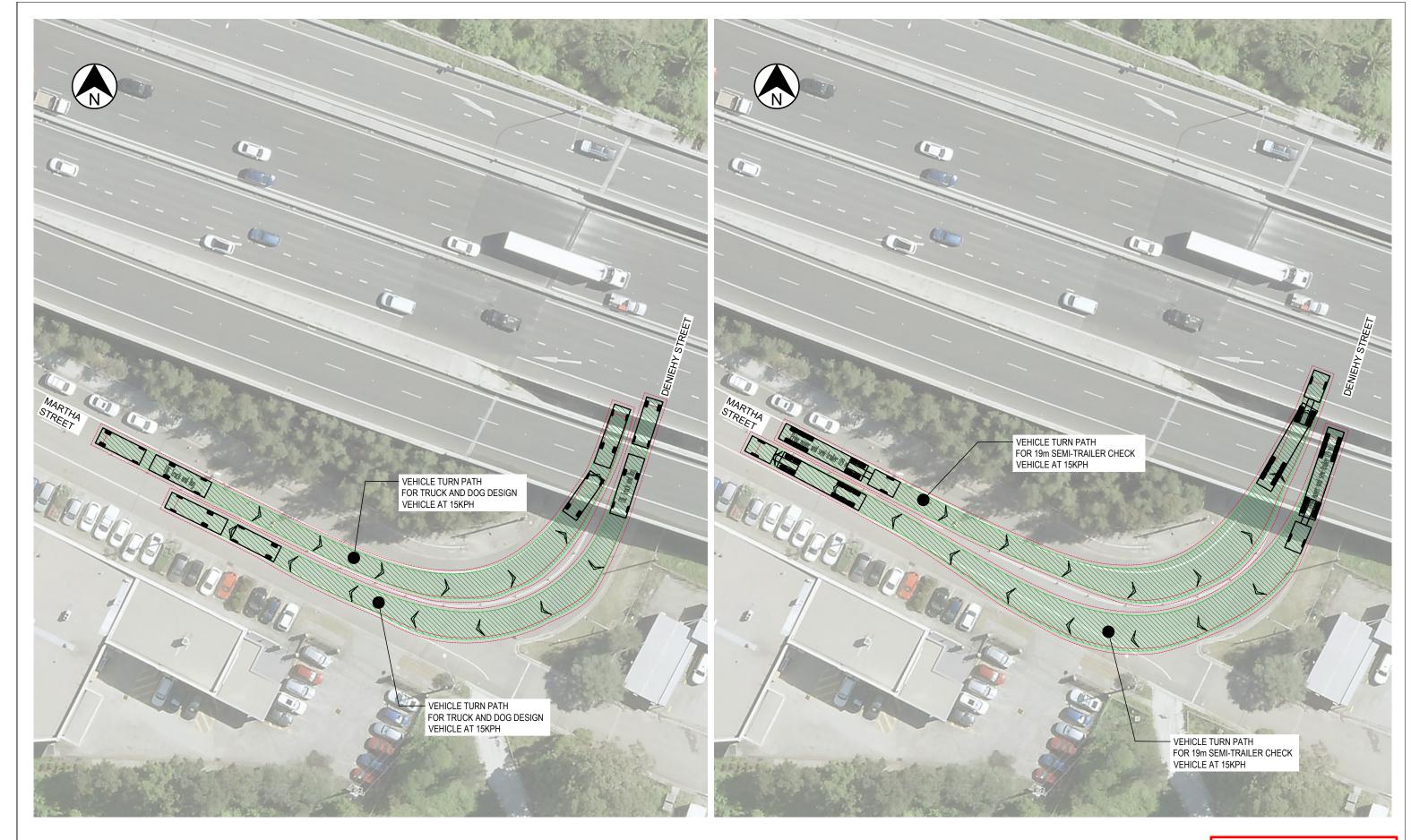
CLY-SPA-01

SYDNEY METRO WESTERN TURNNELING WORKS MARTHA STREET / WENTWORTH STREET

FOR INFORMATION ONLY



220324 WTW Swept Paths.dwg



VEHICLE TURN PATH LEGEND
VEHICLE TYPE VEHICLE VEHICLE VEHICLE CLEARANCE BODY TURN PATH DIRECTION

0	5	10	15	20
SCALE	1:500m			

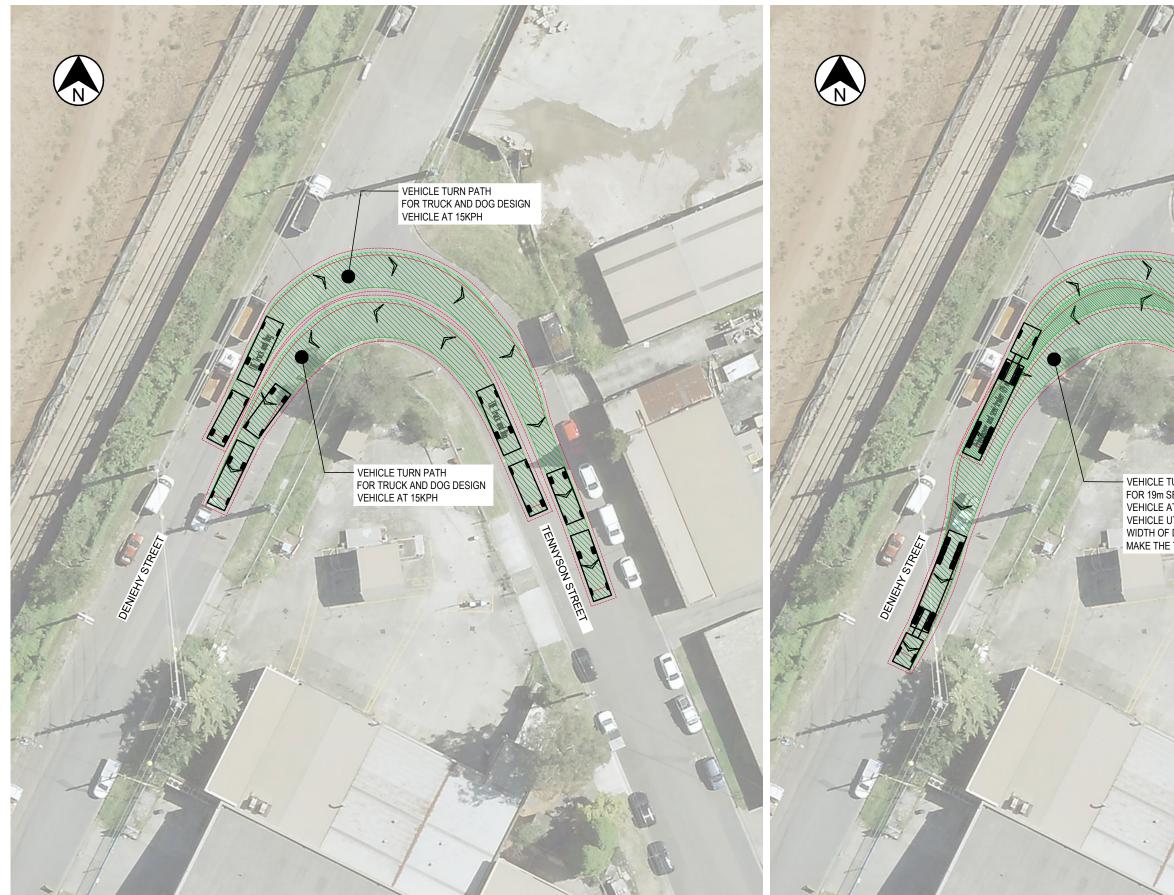
CLY-SPA-02

SYDNEY METRO WESTERN TURNNELING WORKS MARTHA STREET / DENIEHY STREET

FOR INFORMATION ONLY

turnbull

220324 WTW Swept Paths.dwg



VEHICLE TURN PATH LEGEND
VEHICLE TYPE VEHICLE VEHICLE CLEARANCE BODY TURN PATH DIRECTION

0	5	10	15	20
SCALE 1	:500m			

CLY-SPA-03

SYDNEY METRO WESTERN TURNNELING WORKS DENIEHY STREET / TENNYSON STREET

VEHICLE TURN PATH FOR 19m SEMI-TRAILER CHECK VEHICLE AT 15KPH

VEHICLE TURN PATH FOR 19m SEMI-TRAILER CHECK VEHICLE AT 15KPH. VEHICLE UTILISES THE FULL WIDTH OF DENIEHY STREET TO MAKE THE TURN MOVEMENT

TENNYSO

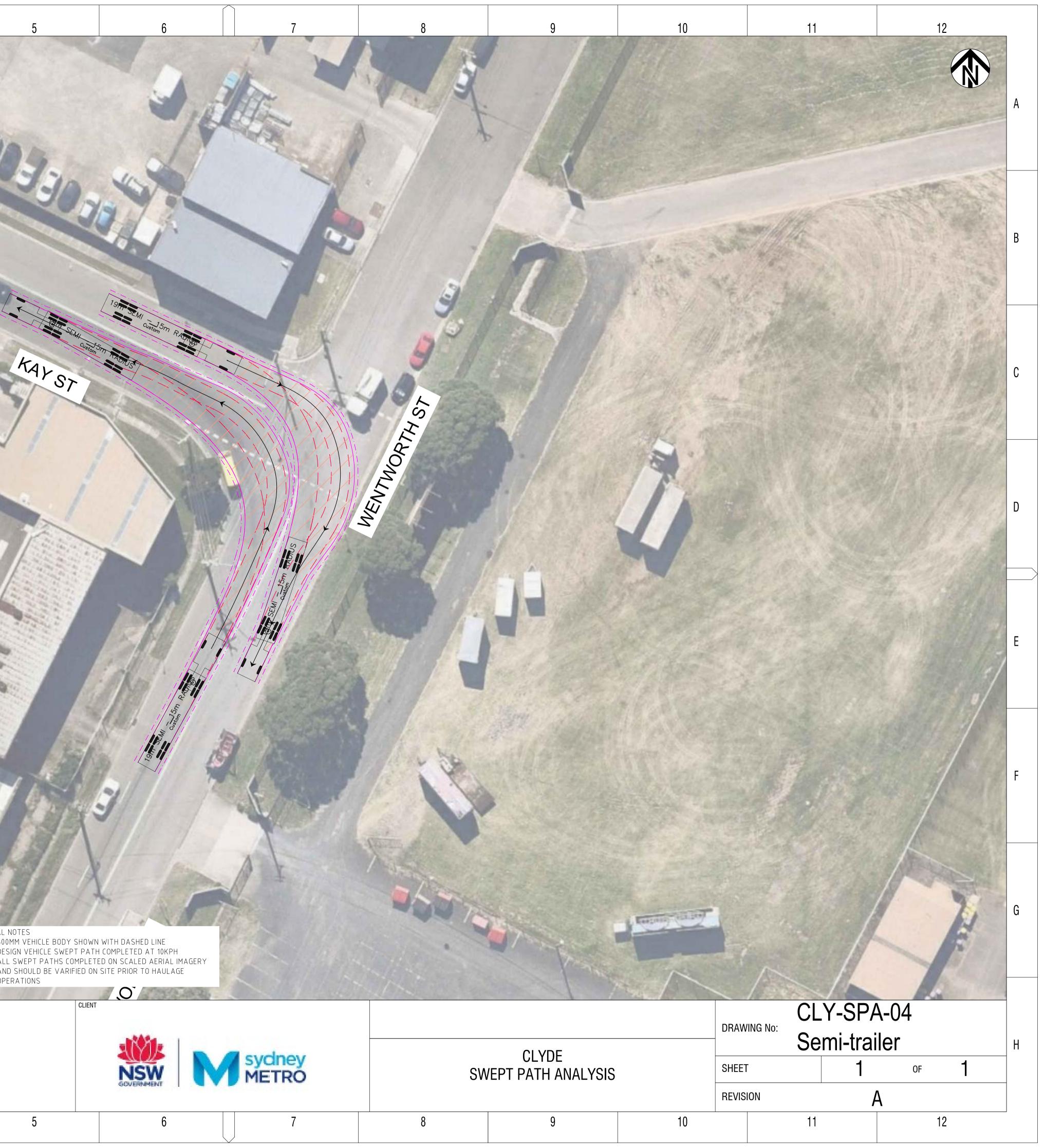
STREE

FOR INFORMATION ONLY

turnbull

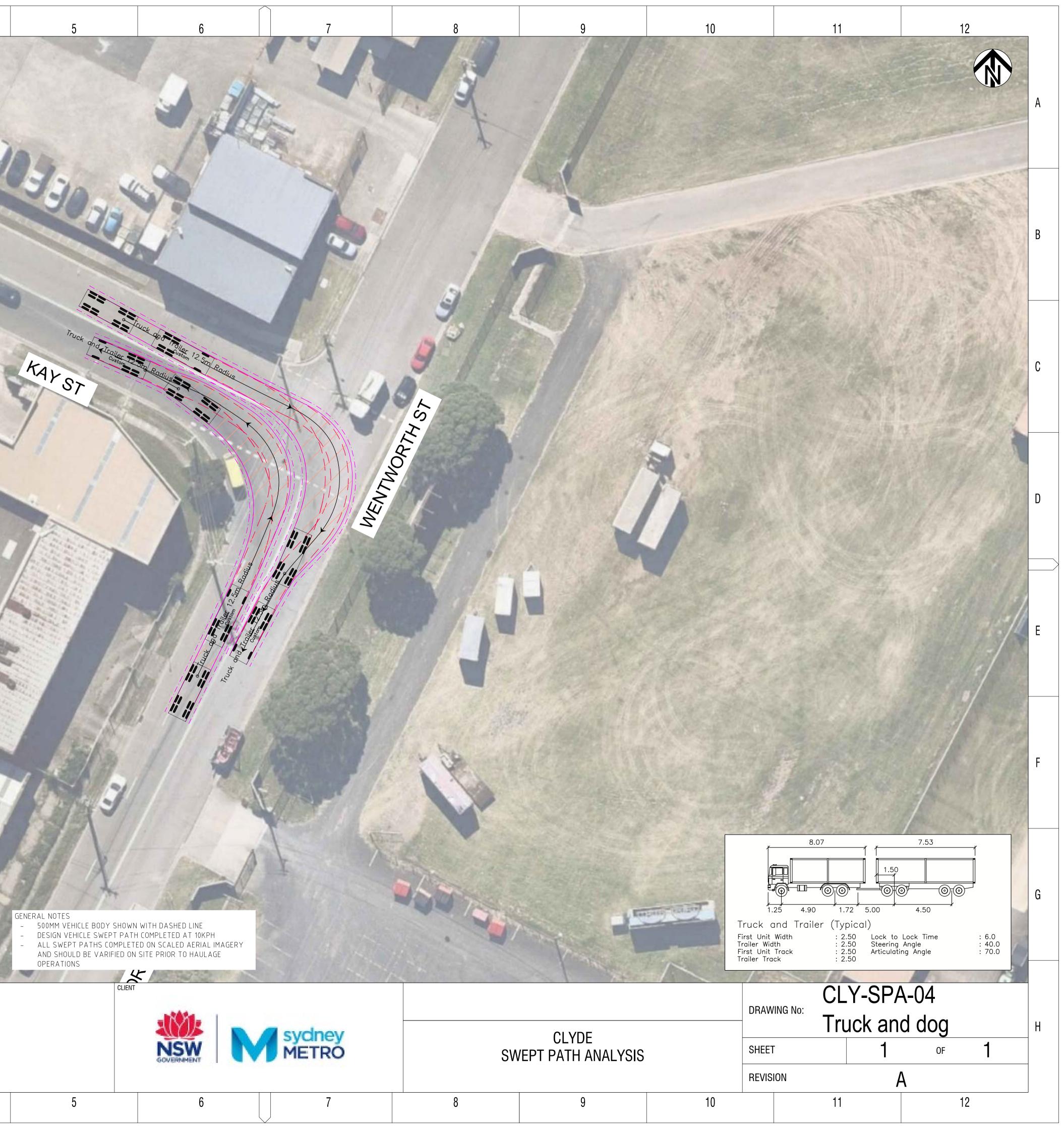
220324 WTW Swept Paths.dwg

	1	2	3	4	
A					
В	KAY ST				
С					K
D		13.70 9.50			
E	1.60 5.40 SEM1 meters	Lock to Lock Time : 6.0 Steering Angle : 28.4 Articulating Angle : 70.0			
F					
G					GENERAL NOTES - SOOMM VE - DESIGN V - ALL SWEI
Н	A SS 16/08/21	INITIAL DRAFT	DRAWN BY: DRW CHECK: APPROVED:	SS PROJECT SL SL	AND SHO OPERATIO
	REV BY DATE COORDINATE SYSTEM: 1	DESCRIPTION HEIGHT DATUM: SCALE: 2	APPD. IND REVIEW:	SL 4	





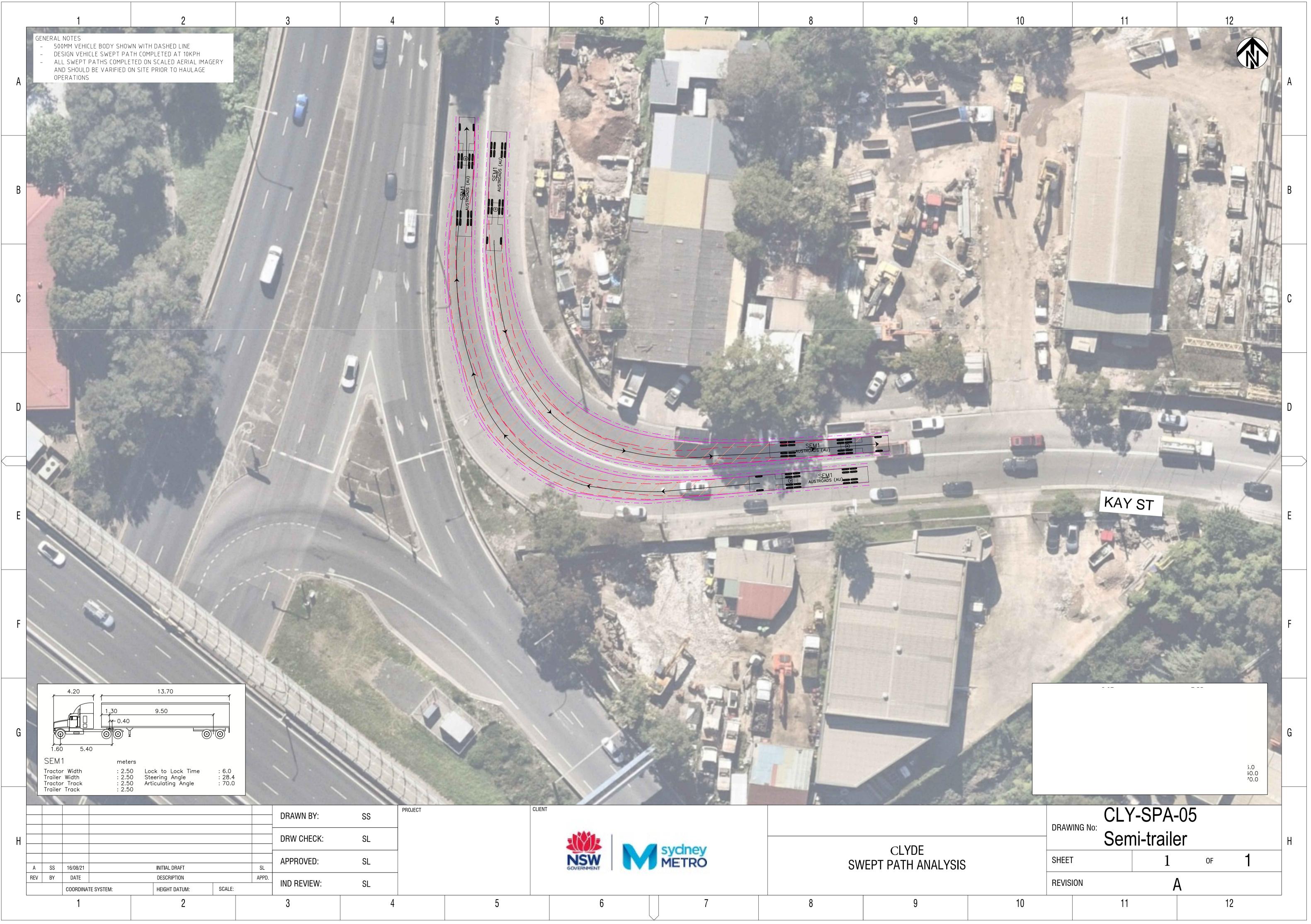
5	6	7	8	9	



	1			1			1		6	2		a second	- 1 PM	
											DRAWN BY:	SS	PROJECT	
Н											DRW CHECK:	SL		
		SS	16/08/21		ITII/I	AL DRAFT			SL		APPROVED:	SL	_	
	REV	BY	DATE			CRIPTION			APF		IND REVIEW:	SL	_	
			COORDINAT	TE SYSTEM:	HEIG	GHT DATUM:		SCALE:				3L		
			1			2					3	4		

ŚT

Ε

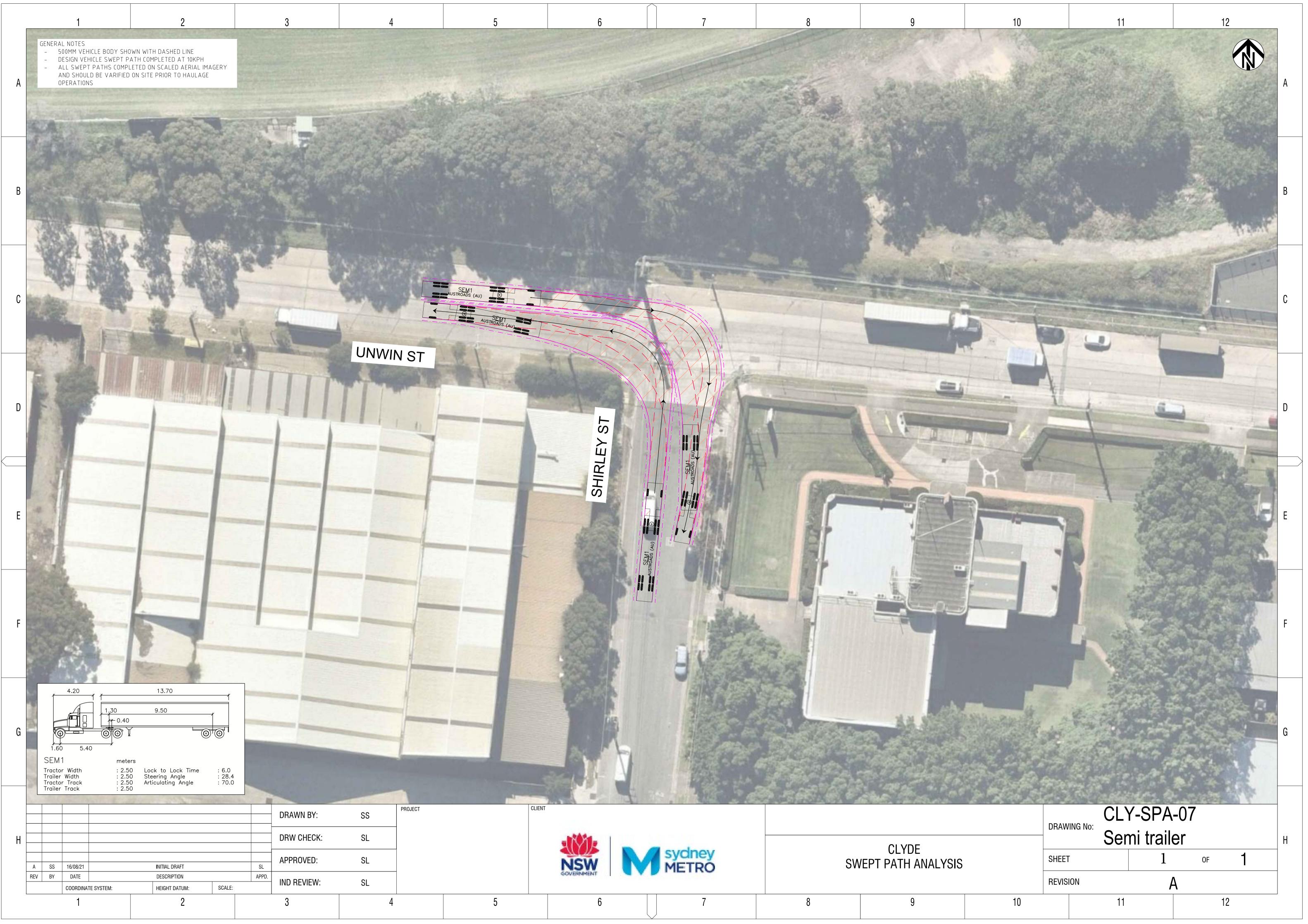


5	6	7	8	9	
					1

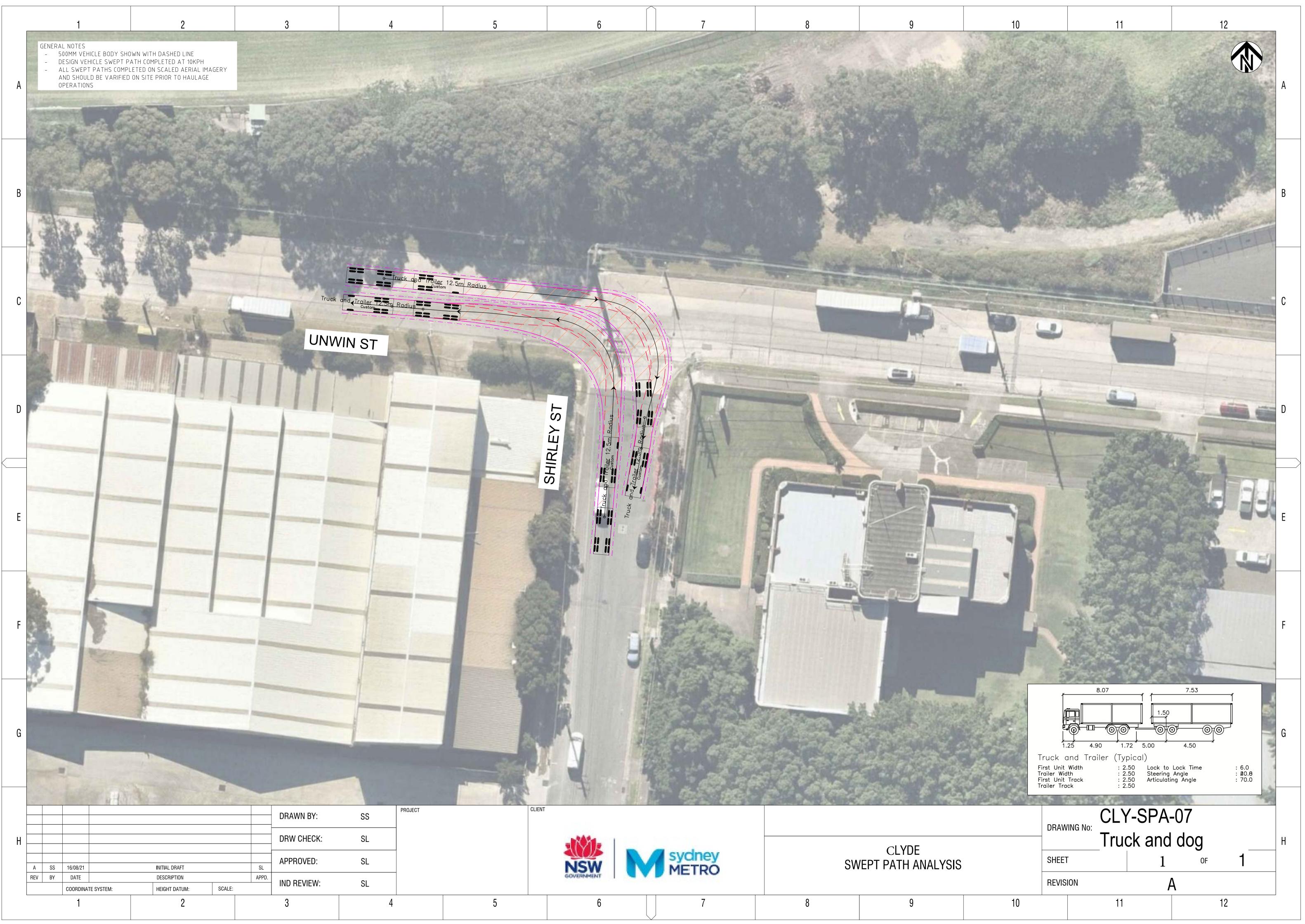


	1 GENERAL NOTES - 500MM VEHICLE BODY SHOW	2		3	4	
A	- DESIGN VEHICLE SWEPT PA	TH COMPLETED AT 10KPH TED ON SCALED AERIAL IMAGERY	7			
	3 1 1					
В						
	-44					
C	N i					
				-		
D						H
						H
E					N	H
						E
F						
	4.20	13.70 1 9.50				
G	1.60 5.40					
	SEM1 mete Tractor Width : 2.50 Trailer Width : 2.50 Tractor Track : 2.50 Trailer Track : 2.50) .4 .0			3
	Trailer Track : 2.50)		DRAWN BY:	SS PRC	JECT
Н				DRW CHECK:	SL	
	A SS 16/08/21	INITIAL DRAFT	SL	APPROVED:	SL	
	REV BY DATE COORDINATE SYSTEM:	DESCRIPTION HEIGHT DATUM: SCAL	APPD.	IND REVIEW:	SL	
	1	2		3	4	

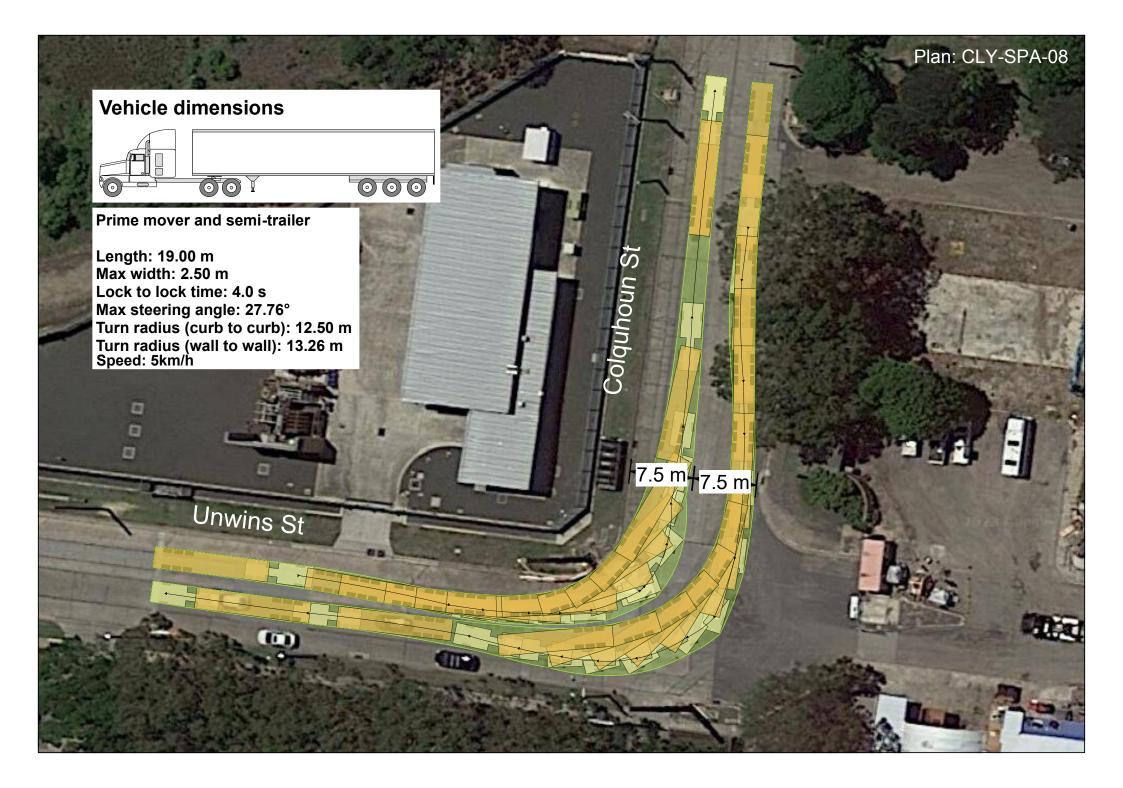


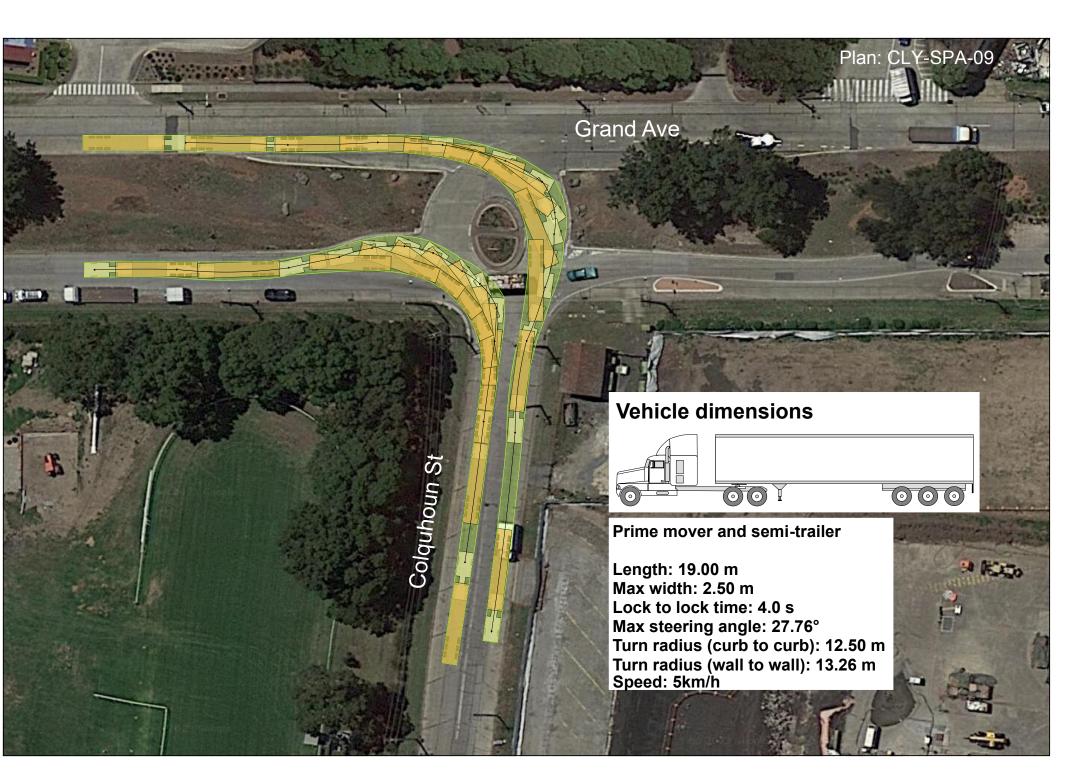


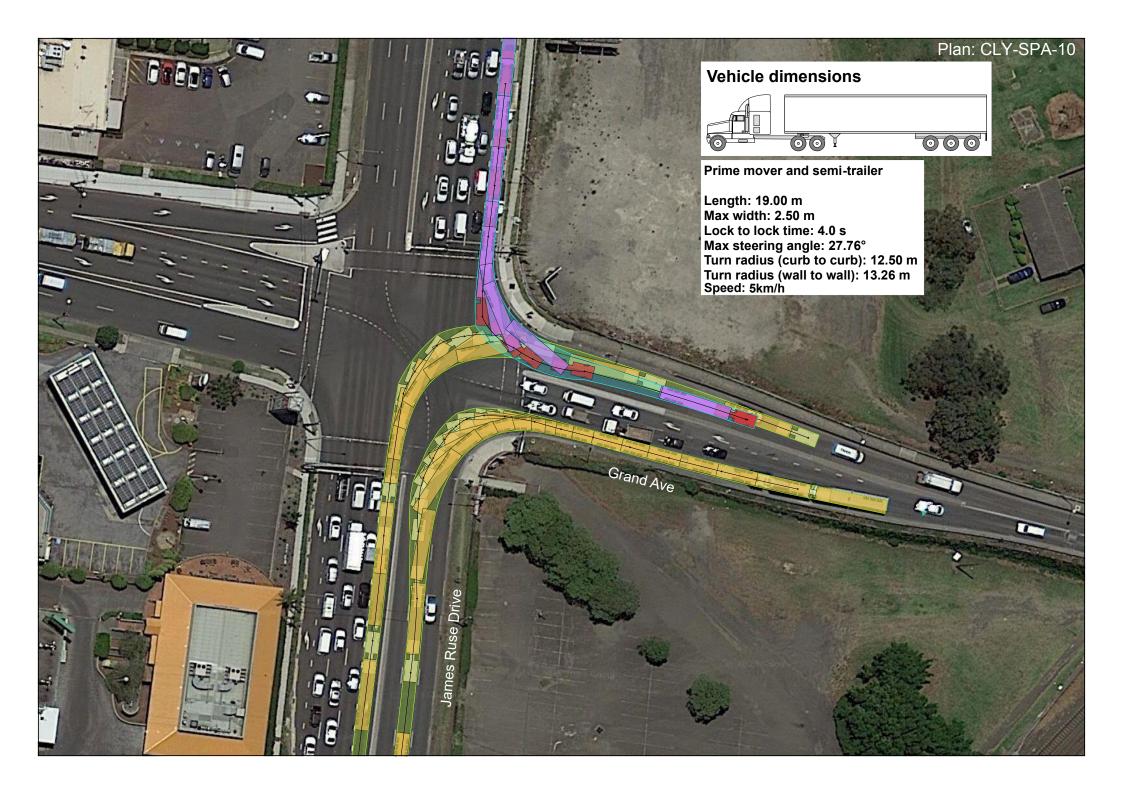
5	6	7	8	9



5	6		7	8	9
		\searrow			







B: WRITTEN CONFIRMATION

GAMUDA Australia

LAING O'ROURKE





ABN: 96 647 479 016

30 March 2022

Sue Lewis Director Sue Lewis Consulting on behalf of Gamuda Australia and Laing O'Rourke Consortium (GLC)

Dear Sue,

Subject: Independent Review of Heavy Vehicle Local Road Report – Sydney Metro West, Western Tunnelling Package

I refer to your request for an assessment of the Heavy Vehicle Local Road Report (Document Ref. No.:SMWSTWTP-GLO-CLJ-HS-RPT-000001-B.01) and to provide comment in relation to the appropriateness and the 'fit for purpose' of the processes/measures proposed in the report.

I am writing to outline my advice in relation to the local road use associated with truck routes access/egress proposed for the Clyde/Rosehill sites as part of the Sydney Metro West – Western Tunnelling Package. I am a Certified Practicing Engineer (Engineers Australia), NER and RPEQ with over 36 years' experience in traffic engineering, road design, risk management, crash investigation and road safety auditing. I am currently accredited as a senior road safety auditor in Victoria, South Australia, Queensland and Tasmania and a Level 3 Road Safety Auditor in NSW.

I have reviewed the document titled Heavy Vehicle Local Road Report (Document Ref. No.:SMWSTWTP-GLO-CLJ-HS-RPT-000001-B.01) supplied. The Ministerial Condition of Approval (MCoA D87) specifically requires:

- Truck Swept Path Analysis;
- Demonstration that the use if the local roads will not compromise the safety of pedestrians and cyclists or traffic flow;
- Road dilapidation requirements;
- Measures to avoid local road use where practical and to avoid schools, aged care facilities and child care facilities during peak operational times.

The proposed routes into the site for the works are via Wentworth Street, Kay Street, Unwin Street, Shirley Street, Martha Street, Deniehy Street and Tennyson Street.

The swept path analysis supplied indicates that all semi-trailer and truck & dog turning movements can be adequately accommodated at all intersections that form part of the proposed heavy vehicle route other than at the following intersections:

- Unwin Street onto Shirley Street;
- Martha Street onto Wentworth Street.

Semi-trailer movements at the above two intersections will not be permitted and drivers will be instructed accordingly during training and induction.

I note that the abutting development along the proposed route is essentially industrial and would therefore already have trucks using the subject roads. The project area and the closed



businesses in the area would result in a reduction in pedestrian activity. It is understood that warning signs had been installed previously where Wentworth Street crosses Martha Street in the vicinity of M4 Motorway shared path cycleway. I note that additional warning signs and decals are proposed to be installed on Martha Street and Deniehy Street.

Given the proposed project area and the prevailing environment being industrial with no aged care or child care facilities or schools being present, the use of the proposed local roads is expected to have limited to no adverse impact on pedestrians and/or sensitive facilities. The proposed heavy vehicle route report appears to meet the requirements outlined in MCoA D87.

Sincerely,

Raj Muthusamy Director / Level 3 Road Safety Auditor Road Safety Audits

C : STAKEHOLDER CONSULTATION







ABN: 96 647 479 016

9 February 2023

Sue Lewis Director Sue Lewis Consulting on behalf of Gamuda Australia and Laing O'Rourke Consortium (GLC)

Dear Sue,

Subject: Independent Review of Heavy Vehicle Local Road Report – Sydney Metro West, Western Tunnelling Package

I refer to your request for an assessment of the Heavy Vehicle Local Road Report (Document Ref. No.:SMWSTWTP-GLO-CLJ-HS-RPT-000001-E, dated 7 February 2023) and to provide comment in relation to the appropriateness and the 'fit for purpose' of the processes/measures proposed in the report.

I am writing to outline my advice in relation to the local road use associated with truck routes access/egress proposed for the Clyde/Rosehill sites as part of the Sydney Metro West – Western Tunnelling Package. I am a Certified Practicing Engineer (Engineers Australia), NER, RPEV and RPEQ with over 36 years' experience in traffic engineering, road design, risk management, crash investigation and road safety auditing. I am currently accredited as a senior road safety auditor in Victoria, South Australia, Queensland and Tasmania and a Level 3 Road Safety Auditor in NSW.

I have reviewed the document titled Heavy Vehicle Local Road Report (Document Ref. No.:SMWSTWTP-GLO-CLJ-HS-RPT-000001-E) supplied. The Ministerial Condition of Approval (MCoA D87) specifically requires:

- Truck Swept Path Analysis;
- Demonstration that the use if the local roads will not compromise the safety of pedestrians and cyclists or traffic flow;
- Road dilapidation requirements;
- Measures to avoid local road use where practical and to avoid schools, aged care facilities and child care facilities during peak operational times.

The proposed routes into the site for the works are via Wentworth Street, Kay Street, Unwin Street, Shirley Street, Martha Street, Deniehy Street and Tennyson Street, Grand Avenue and Colquhoun Street (roundabout) and Grand Avenue and James Ruse Drive (signalised intersection).

The swept path analysis supplied indicates that all semi-trailer and truck & dog turning movements can be adequately accommodated at all intersections that form part of the proposed heavy vehicle route other than at the following intersections:

- Unwin Street onto Shirley Street;
- Martha Street onto Wentworth Street.

Semi-trailer movements at the above two intersections will not be permitted and drivers will be instructed accordingly during training and induction.



I note that the abutting development along the proposed route is essentially industrial and would therefore already have trucks using the subject roads. The project area and the closed businesses in the area would result in a reduction in pedestrian activity. It is understood that warning signs had been installed previously where Wentworth Street crosses Martha Street in the vicinity of M4 Motorway shared path cycleway. I note that additional warning signs and decals are proposed to be installed on Martha Street and Deniehy Street.

Given the proposed project area and the prevailing environment being industrial with no aged care or child care facilities or schools being present, the use of the proposed local roads is expected to have limited to no adverse impact on pedestrians and/or sensitive facilities. The proposed heavy vehicle route report appears to meet the requirements outlined in MCoA D87.

Sincerely,

Raj Muthusamy Director / Level 3 Road Safety Auditor Road Safety Audits

D : ROAD DILAPIDATION REPORT TRANSMITTAL



Gmail - FW: Sydney Metro West - WTP - Clyde Dilapidation Survey - Issued for Information





From: Sam Besim via InEight Document <<u>system@teambinder.com</u>> Sent: Monday, 11 April 2022 5:58 PM To: Kelly, Daniel Subject: Sydney Metro West - WTP - Clyde Dilapidation Survey - Issued for Information



Document Transmittal

Transmittal No:	SMWSTWTP-GLO-TX-000082
Contract No:	WTP - 00013/13065 - Western Tunnelling Works Design and Construction Deed
Sub Contract:	
Date:	11 April 2022, 05:58 PM

Issued	Name
Ву	Sam Besim (Gamuda Laing O'Rourke Consortium)

Issued	Name
То	Tania Page (Sydney Metro) ; Andrew Hendy (Sydney Metro)
Сс	Denniel Custodio (Sydney Metro) ; Demi Tascas (Sydney Metro) ; David Kong (Gamuda Laing O'Rourke

Gmail - FW: Sydney Metro West - WTP - Clyde Dilapidation Survey - Issued for Information

Consortium) ; Matthew Marrinan (Sydney Metro) ; Sarah Lepre (Sydney Metro) ; Daniel Kelly (Gamuda Laing O'Rourke Consortium) ; Simon Hussey (Gamuda Laing O'Rourke Consortium) ; Andy Thompson (Gamuda Laing O'Rourke Consortium) ; Liem Ngo (Gamuda Laing O'Rourke Consortium) ; Hayley Young (Gamuda Laing O'Rourke Consortium) ; Niall Fry (Gamuda Laing O'Rourke Consortium) ; Richard Searle (Parramatta City Council) ; Steph Mifsud (Gamuda Laing O'Rourke Consortium)

Reason for Issue	Issued for Information						
Subject Sydney Metro West - WTP - Clyde Dilapidation Survey - Issued for Information							
Dear Sydney Metro							
Please find attached Road Dilapidation report undertaken for the Clyde area. This dilapidation survey was undertaken in advance of works proposed at the Rosehill and Clyde MSF sites.							
GLC requests Sydney Metro issue the results of the Rod Dilapidation survey to Parramatta City Council in accordance with Condition of Approval D88 .							
Kind Regards, Sam Besim, Document Controller Gamuda Engineering (Australia) Pty Ltd							
A I Suite 26.01, 100 Miller Street, North Sydney, NSW 2060							

Click here to download all Transmittal files.

Item	Document No	Title	Rev	Sts	Туре	Design Lots	Alt Doc No
1		Sydney Metro West - WTP - Clyde Dilapidation Survey	01	S2	SUR		

Sydney Metro West - WTP - Pre-construction Dilapidation - Grand Avenue, and Colquhoun Street - Parramatta - Issued For Information

Sam Besim via InEight Document <system@teambinder.com> Tue 1/31/2023 1:34 PM To: Brendan McNally (GLC) <brendan.mcnally@glcwtp.com.au>



lest

Document Transmittal

Transmitta	No: SMWSTWTP-GLO-TX-001145						
Contract N	WTP - 00013/13065 - Western Tunnelling Works Design and Construction Deed						
Sub Contract:							
Date:	31 January 2023, 01:33 PM						
Issued	Name						

Ву	Sam Besim (Gamuda Laing O'Rourke Consortium)				
Issued	Name				
То	Nasim Sohrabi (Sydney Metro); Nancy Indahwati (Sydney Metro); Berin Gordon (Sydney Metro); Denniel Custodio (Sydney Metro); Kate Brooks (Sydney Metro); Philip Brogan (Sydney Metro); Richard Searle (Parramatta City Council); Sasi Kumar (Parramatta City Council); Sandra Martin (Parramatta City Council)				
Сс	Brendan McNally (Gamuda Laing O'Rourke Consortium); Daniel Kelly (Gamuda Laing O'Rourke Consortium); Christina Kerr (Gamuda Laing O'Rourke Consortium); Adrian Mientus (Gamuda Laing O'Rourke Consortium); Transmittal GLO OpenAccess (Gamuda Laing O'Rourke Consortium); Transmittal SMD OpenAccess (Sydney Metro); Olga Krikelis (Sydney Metro); Angela Lumsden (Gamuda Laing O'Rourke Consortium); Huw Griffiths (Gamuda Laing O'Rourke Consortium); David Leaver (Gamuda Laing O'Rourke Consortium); Sati Bhogal (Gamuda Laing O'Rourke Consortium); Gemma Whittick (Sydney Metro); Sam Besim (Gamuda Laing O'Rourke Consortium)				

Reason for Issue	Issued for Information
Subject	Sydney Metro West - WTP - Pre-construction Dilapidation - Grand Avenue, and Colquhoun Street - Parramatta - Issued For Information

Dear Sydney Metro,

Please find attached - Sydney Metro West - WTP - Pre-construction Dilapidation – Grand Avenue, and Colquhoun Street - Parramatta - Issued For Information.

This Dilapidation survey of local roads is for record purposes only. This has been submitted in accordance with ministerial conditions clause D88.

Kind Regards, Sam Besim, Document Controller Gamuda Engineering (Australia) Pty Ltd M (Aus) I 0413 657 677 E I Sam.Besim@gamuda.com.au www.gamuda.com.au A I Suite 26.01, 100 Miller Street, North Sydney, NSW 2060

Click here to download all Transmittal files.

Item	Document No	Title	Rev	Sts	Туре	Design Lots	Alt Doc No
11		Sydney Metro West - WTP - Pre-construction Dilapidation - Grand Avenue, and Colquhoun Street - Parramatta	01	S2	RPT		

Generated by InEight Document © 2001-2023 InEight Inc

TeamBinder Transmittal Reference: {5A37EEAD-4CC2-4EEB-9980-F86FFB1A67BC}