

# Southwest Metro Package 3 Construction Traffic Management Plan (CTMP)

SMCSWSW8-JHL-WBK-TF-PLN-000001

Document and Revision History

Document Details	
Title	Southwest Metro Package 3 CTMP
Client	Sydney Metro City & Southwest
Client reference no.	SMCSWSW8-JHL-WBK-TF-PLN-000001
JHLOR JV contract no.	J54

Revisions

Revision	Date	Description	Prepared by	Reviewed by
A	19 August 2024	Initial release	A. Constantin	A. Constantin
B	19 September 2024	Comments Register added to the Appendices & Conditions of Approval (CoA) and Construction Environmental Management Framework (CEMF) included in Section 1	A. Constantin	A. Constantin
C				
D				
E				
F				
G				
H				
I				

Management reviews

Review date	Details	Reviewed by

Controlled: NO Copy no.: Uncontrolled: YES

## Table of Contents

<b>1. Compliance Matrix .....</b>	<b>3</b>
1.1 Conditions of Approval (CoA) .....	3
1.2 Construction Environmental Management Framework (CEMF) .....	4
1.3 Revised Environmental Mitigation Measures (REMMs) .....	6
<b>2. General Information .....</b>	<b>10</b>
2.1 Purpose .....	10
2.2 Objectives .....	10
2.3 Scope .....	10
2.4 Proposed Works .....	11
2.5 General Requirements .....	25
<b>3. Impacts Related to Vehicle Movements and Work Area .....</b>	<b>26</b>
3.1 Swept Path Analysis .....	26
3.2 Parking Spaces .....	28
<b>4. Traffic Management .....</b>	<b>31</b>
4.1 Site Access .....	31
4.2 Traffic Impacts .....	31
4.3 Detours .....	31
4.4 Dilapidation Report .....	31
<b>5. Traffic Routing .....</b>	<b>33</b>
5.2 Pedestrian Management .....	34
5.3 Cyclist Management .....	40
5.4 Traffic Modelling .....	40
5.5 Temporary Removal of Car Parking Spaces .....	40
5.6 Public Transport and Bus Operators .....	46
<b>6. Traffic Signage and Control .....</b>	<b>48</b>
<b>7. Delineation at Work Site – Travel Paths .....</b>	<b>48</b>
<b>8. Traffic Controllers .....</b>	<b>48</b>
<b>9. Work on Footpaths .....</b>	<b>48</b>
9.1 Pedestrian Safety Points .....	48
<b>10. Road Safety Audit .....</b>	<b>48</b>
<b>11. Reference Documentation .....</b>	<b>48</b>
<b>Appendices .....</b>	<b>49</b>
Appendix 1 – Traffic Guidance Schemes & Signage Plan .....	49
Appendix 2 – Swept Paths .....	50
Appendix 3 – Road Safety Audit .....	51
Appendix 4 – Comments Register .....	54
Appendix 5 – SWM3 Additional TGS Plans .....	55
Appendix 6 – SWM3 Additional Swept Paths .....	56



## 1. Compliance Matrix

The Project was assessed as a Critical State Significance Infrastructure (CSSI) by the Minister for Planning by virtue of clause 5 of Schedule 5 of the State Environmental Planning Policy (State and regional Development) 2011 (NSW) and section 5.13 of the Environmental Planning and Assessment Act 1979 (NSW). The Minister's Conditions of Approval (CoA) were granted on 12 December 2018 with conditions. A Construction Traffic Management Plan is required in accordance with the Conditions of Approval. Additionally, a number of Revised Environmental Mitigation Measures (REMMs) relating to traffic management are applicable to the Southwest Metro Early Works (SMEW) and have been referenced accordingly below.

### 1.1 Conditions of Approval (CoA)

Clause	Requirement	Document Reference or Response
A19	<p>"Lunch sheds, office sheds, portable toilet facilities, and the like, that are not identified as an ancillary facility in the documents listed Condition A1, can be established where they satisfy the following criteria:</p> <p>(a) are located within the Construction boundary; and</p> <p>(b) have been assessed by the ER to have -</p> <p>(i) minor amenity impacts to surrounding residences and businesses, after consideration of matters such as compliance with the Interim Construction Noise Guideline (DECC, 2009), traffic and access impacts, dust and odour impacts, and visual (including light spill) impacts, and</p> <p>(ii) minor environmental impact with respect to waste management and flooding, and</p> <p>(iii) no impacts on biodiversity, soil and water, and heritage items beyond those already approved under other terms of this approval.</p>	Section 5.5
E46	<p>"The Proponent must establish a Traffic and Transport Liaison Group(s) (TTLGs) to inform traffic and transport management measures during Construction and Operation of the CSSI. Management measures must be coordinated with the RMS following engagement with the Sydney Coordination Office and consultation with the Relevant Roads Authority.</p> <p>The TTLG must comprise representatives from the Relevant Road Authority(ies), transport operators (including bus and taxi operators) and emergency services as required. The TTLG must be consulted to inform preparation of the Construction Traffic Management Plan(s).</p>	Section 2.1
E47	<p>Construction Traffic Management Plans (CTMPs) must be prepared for each Construction site or stage (or Low Impact Activity where required) in accordance with the CEMF and relevant Austroads, Australian Standards and RMS requirements. The CTMPs must be submitted to the RMS following engagement with the Sydney Coordination Office and before Construction commences at the relevant Construction site or stage. A copy of the Construction Traffic Management Plans must be submitted to the Planning Secretary for information.</p>	This Plan 1.2
E49	<p>Before any local road is used by a heavy vehicle for the purposes of Construction of the CSSI, a <b>Road Dilapidation Report</b> must be prepared for the road. A copy of the <b>Road Dilapidation Report</b> must be provided to the relevant council(s) within four (4) weeks of completion of the survey and at least two (2) weeks before the road is used by heavy vehicles associated with the Construction of the CSSI.</p>	Section 4.4

Clause	Requirement	Document Reference or Response
E50	If damage to local roads occurs as a result of Construction of the CSSI, the Proponent must either:  (a) compensate the relevant road authority for the damage so caused. The amount of compensation may be agreed with the relevant road authority; or  (b) rectify the damage to restore the road to at least the condition it was in pre-Construction as identified in the <b>Road Dilapidation Report(s)</b> .	Section 4.4
E51	During Construction, all reasonably practicable measures must be implemented to maintain pedestrian and vehicular access to, and parking in the vicinity of, businesses and affected properties. Disruptions are to be avoided, and where avoidance is not possible, minimised. Where disruption cannot be minimised, alternative pedestrian and vehicular access must be provided, and opportunities for parking arrangements must be investigated in consultation with affected businesses/properties and implemented before the disruption. Adequate signage and directions to businesses/properties must be provided before, and for the duration of, any disruption.	Section 4 Section 5.2 Section 5.3
E52	Safe pedestrian and cyclist access must be maintained around Work sites during Construction. In circumstances where pedestrian and cyclist access is restricted or removed due to Construction activities, an alternate route which complies with the relevant standards must be provided and signposted.	Section 5.2 Section 5.3

## 1.2 Construction Environmental Management Framework (CEMF)

Clause	Requirement	Document Reference or Response
8.1	<p>Construction Traffic Management Objectives</p> <p><input type="checkbox"/> Construction traffic management will be managed using the following documentation, where relevant:</p> <ol style="list-style-type: none"> <li>Construction Traffic Management Plan;</li> <li>Traffic Management Plan (For each work site)</li> <li>Traffic Staging Plan (for road works);</li> <li>Traffic Control Plan (for road works);</li> <li>Vehicle Movement Plan (internal to construction site);</li> <li>Pedestrian Management Plan (around construction sites); and</li> <li>Parking Management Plan (loss of parking).</li> </ol> <p><input type="checkbox"/> Principal Contractors will develop and implement a Construction Traffic Management Plan for their scope of works. The Construction Traffic Management Plan will as a minimum:</p> <ol style="list-style-type: none"> <li>Implement the traffic and transport mitigation measures as detailed in the environmental approval documentation;</li> <li>Be developed in consultation with the relevant road authority, CBD Coordinator General (CCO) and / or transport operator;</li> <li>Set out the overall traffic management resources, processes and procedures for the management of traffic and transport during construction of the Project Works and Temporary Works.</li> <li>Identify types and volumes of construction vehicles and associated route and time restrictions;</li> <li>Identify traffic generation from other major infrastructure developments, impact from construction traffic and haulage routes; and</li> </ol>	<p>This document is the Construction Traffic Management Plan and also includes:</p> <p>Appendix 1&amp;5 – Traffic Guidance Schemes</p> <p>Parking Strategy - Section 3.2.3</p> <p>Pedestrian Management – Section 5.2</p>

Clause	Requirement	Document Reference or Response
	<p>vi. Identify potential activities that could result in the disruption to traffic and transport networks, including pedestrian, cyclist and public transport networks and during special events.</p> <p>The individual construction traffic plans listed in (a) are to comply with and address the requirements of RMS Traffic Control at Worksites Manual AS 1742.3, Manual of uniform traffic control devices Part 3: Traffic control for works on roads, relevant Austroads Guides, and RMS Supplements to Austroads and Australian Standards s and during special events.</p> <p>The process for the development of Traffic Management Plans (TMP) including the minimum requirements as detailed in Specification G10 and as required by the relevant road authorities.</p> <p>The process for the development of Traffic Staging Plans (TSP) including the minimum requirements for these TSP including road design drawings showing traffic lane configurations for traffic passing through the site during various construction stages, including details of road alignment and geometry, intersection layouts, provision for buses and cyclists, work areas and pedestrian areas, drainage, signs and pavement</p> <p>The process for the development of Traffic Control Plans (TCP). The TCPs will set out the specific traffic and transport management arrangements to be implemented at specific locations during the construction of the Project Works and Temporary Works.</p> <p>The process for the development of Vehicle Movement Plan (VMP). The content of a VMP will include:</p> <ol style="list-style-type: none"> <li>A diagram showing the preferred travel paths for vehicles associated with a work site entering, leaving or crossing the through traffic stream. A VMP may be combined with or superimposed on a TCP; and</li> <li>The vehicle entry and exit points into the work area, and indicate clearly that these are the only points where interface with through traffic is permitted.</li> </ol> <p>The process for the development of a Pedestrian Movement Plan (PMP). The content of the PMP will include:</p> <ol style="list-style-type: none"> <li>A diagram showing the allocated travel paths for workers or pedestrian around or through a worksite. A PMP may be combined or superimposed on a TCP; and</li> <li>A diagram showing all signs and devices used to guide the workers or pedestrians.</li> </ol> <p>The process for the development of a Parking Management Plan (PkMP). The PkMP will identify:</p> <ol style="list-style-type: none"> <li>Parking requirements and on and offsite parking arrangements and associated impacts;</li> <li>Remote parking arrangements and associated access between sites and public transport nodes;</li> <li>Communication and parking management measures; and</li> <li>Proposals for relocation of impacted users for any Sydney CBD kerbside use impacts during the construction period.</li> </ol> <p>TfNSW and its Contractors will undertake liaison with agencies and the community regarding traffic management. This may involve:</p> <ol style="list-style-type: none"> <li>Establishment of a Traffic and Transport Liaison Group which could consist of representatives from Sydney Metro Contractors, TfNSW, CCO, WestConnex, RMS, TMC, NSW Police, relevant councils, emergency services, and bus operators. The group would review and provide feedback on: <ul style="list-style-type: none"> <li><input type="checkbox"/> Road Occupancy Licence (ROL) applications to monitor potential cumulative impacts from multiple ROLs operating concurrently in one area;</li> </ul> </li> </ol>	

Clause	Requirement	Document Reference or Response
	<ul style="list-style-type: none"> <li><input type="checkbox"/> Be consulted on the preparation of Construction Traffic Management Plans and supporting plans; and</li> <li><input type="checkbox"/> Consultation with the CCO, RMS, TMC and others in relation to the approval of Construction Traffic Management Plans, supporting Plans, or related licences for works within and external to the CBD.</li> </ul>	
8.3	<b>Construction Traffic Management</b> <ul style="list-style-type: none"> <li>▪ Examples of traffic mitigation measures include: <ul style="list-style-type: none"> <li>i. Minimising heavy vehicle movements during peak traffic times;</li> <li>ii. Avoidance of local roads for heavy vehicle routes, where feasible;</li> <li>iii. Providing for safe pedestrian and cyclist movements around the worksites; and</li> <li>iv. Where feasible and reasonable, contractors will provide its workforce with satellite car parking and buses to transport them to the worksites.</li> </ul> </li> </ul>	Section 4

### 1.3 Revised Environmental Mitigation Measures (REMMs)

Clause	Requirement	Document Reference or Response	Responsible Party
TC1	<p>Guided by the Temporary Transport Strategy, detailed temporary transport plan/s would be developed prior to construction to manage the movement of people along the T3 Bankstown Line during possession periods. The plans would be developed in consultation with key stakeholders (including the Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, Sydney Trains, local councils, emergency services, and bus operators), and would address the requirements specified by the Temporary Transport Strategy. The development of each plan would consider, as a minimum:</p> <ul style="list-style-type: none"> <li>▪ a review of the road network constraints along any proposed rail replacement bus route</li> <li>▪ further traffic analysis of key intersections used by rail replacement buses</li> <li>▪ potential impacts to local road networks affected by rail passengers diverting to cars to reach their destinations</li> <li>▪ the design of temporary facilities at bus stop locations in consultation with the relevant road authority</li> <li>▪ expected changes to parking demand at other stations, displacement of existing parking, and any upgrades that may be required.</li> </ul>	The CTMP complements the temporary transport strategies.	TfNSW
TC2	<p>Sydney Metro would consult with Transport for NSW, Roads and Maritime Services, the State Transit Authority, the Inner West and Canterbury-Bankstown councils, and bus operators, to identify opportunities to minimise impacts to bus layovers and existing bus stops during operation of rail replacement buses.</p>	The CTMP complements the temporary transport strategies.	TfNSW

Clause	Requirement	Document Reference or Response	Responsible Party
TC3	The impacts on the surrounding road network of lane closures resulting from bridge works across the rail corridor would be assessed in detail, to identify the suite of management measures to be implemented for each closure required. This would be undertaken in consultation with Transport for NSW, Roads and Maritime Services, the Sydney Coordination Office, the Inner West and Canterbury-Bankstown councils, emergency services, and relevant bus operators. Planning for partial bridge closures would consider bus rerouting and timetabling, with the intention of minimising impacts to bus customers and bus operators.	Not applicable to SWM3 Works	N/A
TC4	<b>Parking Impacts during construction</b> Opportunities to reduce the loss of existing on and off street car parking (including the amount of spaces reduced and the time associated with this reduction) would be reviewed during detailed design and construction planning.	Section 3.2 Section 5.5	Principal Contractor
TC5	Where parking spaces are lost or access is impeded, particularly for extended periods, alternative parking would be provided wherever feasible and reasonable. This would include consideration of other privately owned (or vacant) land within close proximity to affected stations.	Section 3.2 Section 5.5	Principal Contractor
TC6	Further consideration of the need for intersection modifications would be undertaken, to improve intersection performance at locations most affected by the addition of construction heavy vehicles and rail replacement buses. This would be undertaken in consultation with Transport for NSW, Roads and Maritime Services, the Sydney Coordination Office, and the relevant road authority. The improvements considered would include: <ul style="list-style-type: none"> <li>modification to the existing traffic signal phasing</li> <li>lane priority changes</li> <li>changing lane designations (line markings and signage)</li> <li>kerbside changes (such as removing on street parking or implementing no standing zones at peak times to increase lane capacity)</li> <li>physical geometric changes (such as minor kerb cut-backs to enable large vehicles to safely move through intersections)</li> <li>restricting turning movements where traffic demand is low.</li> </ul>	The CTMP complements the temporary transport strategies.  Modifications to existing network not applicable to SWM3 Works	TfNSW
TC7	Where existing cycle facilities (e.g. bike parking) would be temporarily unavailable at a station, suitable replacement facilities would be provided while the facility is unavailable.	Section 5.3	Principal Contractor

Clause	Requirement	Document Reference or Response	Responsible Party
TC8	<p>A construction traffic management plan would be prepared and implemented prior to construction. The plan would be prepared in accordance with the Construction Environmental Management Framework, and would detail, as a minimum:</p> <ul style="list-style-type: none"> <li>▪ how traffic would be managed when construction works are being carried out</li> <li>▪ the activities proposed and their impact on the road network and on road users</li> <li>▪ how these impacts would be addressed.</li> </ul> <p>The plan would be prepared in consultation with the Traffic and Transport Liaison Group, and would be approved by the relevant authority before construction commences.</p>	The CTMP is this document.	Principal Contractor TTLG
TC9	Modification of existing bus stops, or implementation of new stops and alterations to service patterns, would be carried out by Sydney Metro in consultation with the Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, the Inner West and Canterbury-Bankstown councils, and bus operators.	Section 5.6	TfNSW
TC10	<p>Sydney Metro would undertake an extensive community awareness and information campaign before changes to public transport services are implemented. This would include a range of communication activities such as:</p> <ul style="list-style-type: none"> <li>▪ information at stations</li> <li>▪ wayfinding signage</li> <li>▪ clearly marked bus stop locations</li> <li>▪ letter box drops</li> <li>▪ web based information and transport 'app' where changes to travel are found in a single place</li> <li>▪ information via 131 500</li> <li>▪ advertising in local papers</li> <li>▪ email information bulletins.</li> </ul>	Under the Sydney Metro Overarching Community Communication Strategy, a project specific Community Communication Strategy has been developed.	TfNSW Principal Contractor
TC11	Consideration of special events would be undertaken as part of construction work programming. For special events that require specific traffic and pedestrian management, measures would be developed and implemented in consultation with Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, the Inner West and Canterbury-Bankstown councils, and the organisers of the event.	Section 5	Principal Contractor
TC12	Vehicle access to and from construction sites would be managed to ensure pedestrian, cyclist, and motorist safety. Depending on the location, this may require manual supervision, barrier placement, temporary traffic signals, modifications to existing traffic signals, or police assistance.	Section 3.1.3	Principal Contractor

Clause	Requirement	Document Reference or Response	Responsible Party
TC13	Construction vehicles (including contractor staff vehicles) would be managed to: <ul style="list-style-type: none"> <li>▪ minimise parking or queuing on public roads</li> <li>▪ minimise use of residential streets to gain access to work sites or compounds</li> <li>▪ minimise vehicle movements near schools, particularly during school start and finish times.</li> </ul>	Section 4	Principal Contractor Vehicle Operators
TC14	Directional signage and line marking would be used to direct and guide drivers, pedestrians, and other road users past construction compounds and work sites, and on the surrounding road network. This may be supplemented by variable message signs to advise drivers of potential delays, traffic diversions, speed restrictions, or alternate routes.	Appendix 1 & 5 – Traffic Control Plans	Principal Contractor Traffic Controllers
TC15	Construction sites would be managed to minimise construction worker parking on surrounding streets. A worker car parking strategy would be developed in consultation with the relevant local council to identify measures to reduce the impact on the availability of on street and off street parking. The strategy would identify potential mitigation measures including alternative parking locations. The strategy would encourage contractor staff to: <ul style="list-style-type: none"> <li>▪ use public transport</li> <li>▪ car share</li> <li>▪ park in a designated off site area and access construction sites via shuttle bus.</li> </ul>	Section 3.2.3	Principal Contractor
TC16	In the event of a traffic related incident, co-ordination would be carried out with the Sydney Coordination Office and Transport Management Centre's Operations Manager.	Section 3.6	Principal Contractor Sydney Coordination Office Transport Management Centre's Operations Manager
TC17	The community would be notified in advance of proposed road and pedestrian network changes through appropriate forms of community notification.	A project specific Community Communication Strategy has been developed	Principal Contractor
TC18	A condition survey would be undertaken to confirm changes to routes proposed to be used by pedestrians and/or cyclists are suitable (e.g. suitably paved and lit), with identified modification requirements discussed with the Inner West and/or Canterbury-Bankstown councils and implemented prior to use of the routes.	Section 5.2 Section 5.3	Principal Contractor



## 2. General Information

### 2.1 Purpose

The purpose of this Construction Traffic Management Plan (CTMP) is to ensure the safety of the public and maintain an accessible and efficient road network for all road users during the Southwest Metro Package 3 (SWM3) works.

This document is provided as an addendum to the Sydenham Station and Junction, Southwest Metro Corridor Works & Bankstown Early Works CTMPs. As such, details covered in the other plans may be included for reference, but supporting documents and information will not be duplicated in this CTMP. See below CTMP document numbers for reference:

- Sydenham Station & Junction Works (SSJ) - SMCSWSSJ-JHL-WSS-CM-PLN-000654
- Southwest Metro Corridor Works (SWM3) - SMCSWSSJ-JHL-WEC-TF-PLN-000052
- Bankstown Early Works (BEW) - SMCSWSSJ-JHL-WBK-TF-PLN-000001

JHLOR will inform of any traffic and transport management measures through the Traffic and Transport Liaison Group (TTLG) and the Traffic Committee Group (TCG) meetings held monthly and fortnightly respectively.

### 2.2 Objectives

The following traffic management objectives will apply to the construction of the project:

- Minimise disruption to traffic operation, road users, public transport users, bus operators, pedestrians, cyclists, and access to adjoining properties
- Maximise the safety of the workers, by isolating work areas from traffic flows, applying low exposure work methods, education and the installation of appropriate traffic control measures
- Limit obstructions and restrictions, and when required, provide alternatives to maintain access for local community, transport operators, over-size load movements and commercial developments

Objectives are otherwise as per main CTMP.

### 2.3 Scope

The works consist of the following items:

- Set up of site compounds
- Site establishment of works
- Delivery and storage of materials
- Ongoing site management
- Traffic Signal works

This CTMP aims to manage and mitigate the impacts of construction traffic and road works and sets out the responsibilities and strategies involved in ensuring a safe environment is maintained for drivers, pedestrians, cyclists, and workers.

All workers, employees, subcontractors, employers and the management team, involved in the construction of the project shall adhere to this CTMP.

This CTMP will be in use until the December 2025 to accommodate the overall works.

The location of the proposed work area is shown in Figure 1.



## 2.4 Proposed Works

### 2.4.1 Works Timing

The proposed timeline for the works outlined in this CTMP is shown in Table 1.

Table 1 – Works Timing

Works	Description	Duration	Start Date	End Date
<b>Southwest Metro Package 3 (SWM3)</b>				
<b>Sydenham to Bankstown Corridor</b>				
<b>Rail Gate Access</b>	Utilising existing gates for access/laydowns in the rail corridor. Use of short-term lane closures to facilitate access under ROL/Council Permits	N/a	<b>Currently being used as per existing CTMPs</b>	December 2025
<b>HV Pole/Wire Removal</b>	Partial/Full Road (short-term) closures under ROL/Council Permits of Local Streets to remove the HV wires and poles	N/a	From September 2024	N/a
<b>Bankstown</b>				
<b>Main Compound</b>	Occupying existing BEW Compound on North Terrace, South Terrace Bus Layover and the rail corridor	N/a	<b>Currently being used as per existing CTMPs</b>	December 2025
<b>Satellite Compound</b>	Occupying an additional portion of the South Terrace bus layover footpaths	4-6 months	TBC	TBC
<b>Satellite Compound</b>	Occupying a portion of the North Terrace & Appian Way Intersection to undertake drainage, TCS and footpath/pavement works	4-6 months	September 2024	TBC
<b>HV Pole/Wire Removal</b>	Partial/Full Road (short-term) closure of Stacey St bridge under ROLs/Council Permits to remove the HV wires and poles	3 shifts	September 2024	N/a
<b>Punchbowl</b>				
<b>Satellite Compound</b>	Partially occupying Warren Park, council parking on Urunga Pde and parking on TAHE land adjacent to The Boulevard to facilitate site amenities	16 months	September 2024	December 2025
<b>Satellite Compound</b>	Occupying Breust Place and adjacent footpaths to undertake utility works, road and footpath adjustments	3 months	September 2024	December 2024
<b>Scaffolding</b>	Occupying a single lane on Punchbowl Rd and the adjacent footpath to install scaffold and demolish the Parcel Office	TBC	TBC	TBC
<b>HV Pole/Wire Removal</b>	Partial/Full Road (short-term) closure of Punchbowl Rd bridge under ROLs/Council Permits to remove the HV wires and poles	3 shifts	From October 2024	N/a

<b>Wiley Park</b>				
<b>Satellite Compound</b>	Occupying council/TAHE parking on The Boulevard to facilitate site amenities	16 months	September 2024	December 2025
<b>Satellite Compound</b>	Occupying the footpath adjacent to Wiley Park Station to undertake footpath works	4 months	September 2024	December 2024
<b>HV Pole/Wire Removal</b>	Partial/Full Road (short-term) closure of King Georges Rd bridge under ROLs/Council Permits to remove the HV wires and poles	3 shifts	From October 2024	N/a
<b>Lakemba</b>				
<b>Satellite Compound</b>	Occupying council/TAHE parking on The Boulevard and Railway Pde to facilitate site amenities	16 months	September 2024	December 2025
<b>Satellite Compound</b>	Occupying the footpath adjacent to Lakemba Station entry points (The Boulevard and Railway Pde) to undertake footpath and landscaping works	4-6 months	September 2024	February 2025
<b>HV Pole/Wire Removal</b>	Partial/Full Road (short-term) closure of Moreton St bridge under ROLs/Council Permits to remove the HV wires and poles	3 shifts	From October 2024	N/a
<b>Belmore</b>				
<b>Satellite Compound</b>	Occupying TAHE parking adjacent to Tobruk Ave to facilitate site amenities	16 months	September 2024	December 2025
<b>Campsie</b>				
<b>Satellite Compound</b>	Occupying TAHE parking on Lilian St to facilitate site amenities	16 months	September 2024	December 2025
<b>Satellite Compound</b>	Occupying footpath/road on Beamish St to undertake footpath, kerb, gutter, road pavement and traffic signal works on the Beamish/South Pde Intersection	4 months	October 2024	February 2025
<b>HV Pole/Wire Removal</b>	Partial/Full Road (short-term) closure of Loch St bridge under ROLs/Council Permits to remove the HV wires and poles	3 shifts	From October 2024	N/a
<b>Canterbury</b>				
<b>Main Compound</b>	Occupying the property at 15 Close St	16 months	<b>Currently being used as per existing CTMPs</b>	December 2025
<b>Satellite Compound</b>	Occupying council parking on Charles St to facilitate site amenities. Currently leased by Sydney Metro.	16 months	<b>Currently being used as per existing CTMPs</b>	December 2025

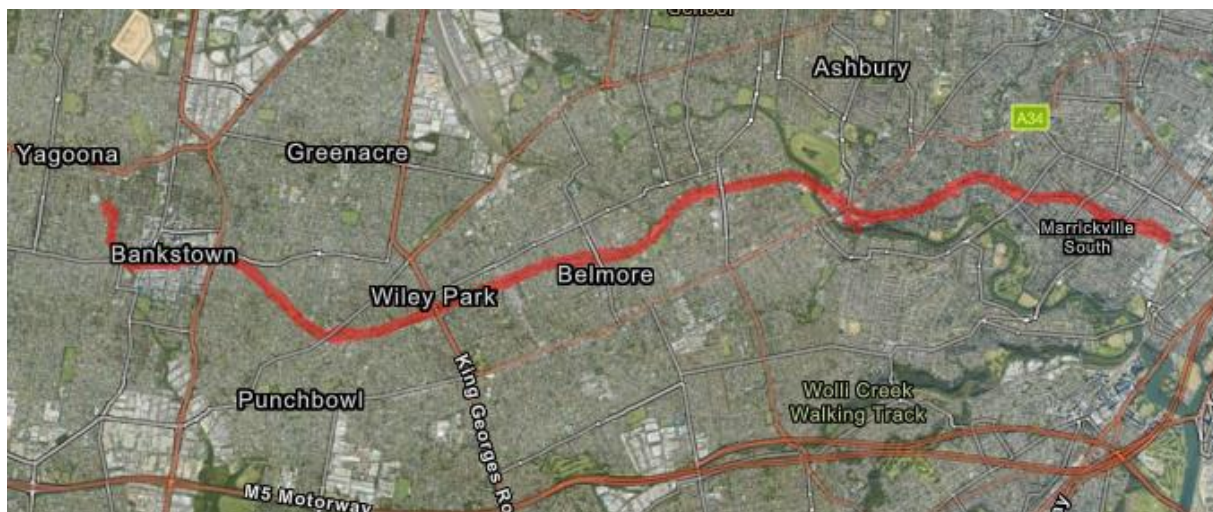
<b>Satellite Compound</b>	Occupying footpath/road under ROLs/Council Permits on Broughton St, Canterbury Rd and Charles St to facilitate footpath, lighting install and roofing works	TBC	September 2024	TBC
<b>HV Pole/Wire Removal</b>	Partial/Full Road (short-term) closure of Canterbury Rd, Charles St, Wairoa St bridges under ROLs/Council Permits to remove the HV wires and poles	9 shifts	From October 2024	N/a
<b>Hurlstone Park</b>				
<b>Satellite Compound</b>	Occupying council/TAHE parking adjacent to Floss St carpark to facilitate site amenities	16 months	September 2024	December 2025
<b>Satellite Compound</b>	Occupying Council footpath on the corner Crinan St/Floss St carpark and Duntroon St to facilitate anti-throw screen install and landscaping works	1 month	October 2024	November 2024
<b>Satellite Compound</b>	Partially occupying Council footpaths on Duntroon to facilitate fencing and landscaping works	1 month	October 20234	November 2024
<b>HV Pole/Wire Removal</b>	Partial/Full Road (short-term) closure of Melford St, Foord Ave, Crinan St and Garnett St bridges under ROLs/Council Permits to remove the HV wires and poles	12 shifts	From October 2024	N/a
<b>Dulwich Hill</b>				
<b>Satellite Compound</b>	Occupying TAHE land adjacent to Ewart Ln to facilitate site amenities and carpark asphaltting works.	16 months	Current	December 2025
<b>Satellite Compound</b>	Occupying Council land on Bedford Crescent to undertake landscaping works.	3 months	January 2025	April 2025
<b>Satellite Compound</b>	Occupying Council footpath on Wardell Rd to facilitate footpath/landscaping works (staged closure).	4 months	September 2024	January 2025
<b>HV Pole/Wire Removal</b>	Partial/Full Road (short-term) closure of Livingston Rd, Wardell Rd and Ness Ave bridges under ROLs/Council Permits to remove the HV wires and poles	9 shifts	From October 2024	N/a
<b>Marrickville</b>				
<b>Satellite Compound</b>	Occupying council land on Station St to facilitate site amenities.	16 months	September 2024	December 2025
<b>Satellite Compound</b>	Occupying council footpath between Station St to Victoria Rd to undertake hoarding/footpath construction	6 months	September 2024	March 2025

<b>HV Pole/Wire Removal</b>	Partial/Full Road (short-term) closure of Victoria Rd bridge under ROLs/Council Permits to remove the HV wires and poles	3 shifts	From October 2024	N/a
<b>Sydenham</b>				
<b>Satellite Compound</b>	Occupying Sydney Metro land to facilitate material laydown. Access via Edinburgh Rd.	16 months	September 2024	December 2025
<b>Satellite Compound</b>	Occupying TAHE land to facilitate material laydown. Access via Way St.	16 months	September 2024	December 2025

### 2.4.2 Work Zone Areas

The proposed work zone areas for the stages listed in Table 1 are shown in Figure 1.

Figure 1 –Work Zone



### 2.4.3 Main Compounds at Bankstown & Canterbury

The two main compounds have been established as part of the SWMC and BEW Packages. There are no changes to their current arrangement or traffic requirements.

The removal of the compounds is expected around December 2025 at the completion of the works. The removal process will be a similar operation to the installation process, with an estimated 10-20 truck movements and all works contained within the carparks.

During the occupation of the compounds, we will have limited vehicular access to light vehicles and small delivery trucks only. The daily vehicle movements are expected to be around 30 movements with a peak of about 5 per hour.

#### 2.4.3.1 Bankstown Site Plan Extensions for SWM3 Works

The adjustments to the existing Main Compound on North Terrace had been implemented early 2024 after consultation and approval by the relevant parties. This compound will remain in place until December 2025 or earlier if the scope has been completed prior to this date. The site footprint, access/egress and truck movements will remain as per the existing arrangement detailed in the BEW CTMP (SMCSWSSJ-JHL-WBK-TF-PLN-000001).



The North Terrace main compound extends towards Bankstown Station to include new areas for construction works and access requirements. Part of this extension is to utilise an existing layback and potentially construct a new layback in accordance with City of Canterbury Bankstown Council standard drawings and specifications. To secure the site, the use of chain-link fencing/waterfilled barriers with gawk screens will be implemented. Refer to Appendix 5 in the BEW CTMP (SMCSWSSJ-JHL-WBK-TF-PLN-000001) for the compound TGS plans.

Similar to the BEW CTMP (SMCSWSSJ-JHL-WBK-TF-PLN-000001) TGS plan 10, the South Terrace Bus Layover compound has been extended in July 2024 to include the Parcel Office footprint to facilitate the SWM3 construction activities. This was consulted and approved by the relevant stakeholders.

Refer to the Figure 2 below which shows the extensions of the existing BEW main compound on North Terrace & South Terrace.

Figure 2 – Site Plan – North Terrace & South Terrace Main Compound Extensions (Green Line)



**Red Line** – Existing arrangement

**Green Line** – Extension of compounds

Approximately three stages of temporary satellite compounds will be implemented within the South Terrace bus layover to undertake works on the existing footpath. Draft TGS plans have been developed and included in Appendix 1. Further consultation with the relevant stakeholders is to be undertaken prior to occupying this area.

Satellite compounds and lane closures on the North Terrace/Appian Way intersection will be required during the construction of the new drainage and signalised pedestrian crossing. Further details will be provided once the TCS design has been finalised and approved by TfNSW and TGS plans drafted.

#### 2.4.3.2 Site Overview and Description of Traffic Management Measures

##### **Main Compound (North Terrace)**

Articulated Vehicle (AV) movements out of the compound are to be undertaken using traffic control where required.

##### **Satellite Compound (South Terrace)**

It is understood that heavy vehicles and truck movements will be a left in entry through South Terrace access and exit through the western signalised intersection of Restwell Street and South Terrace.

#### 2.4.4 [Site Plan at Punchbowl](#)

The scope of works at Punchbowl Station includes the following works:

- Full closure of Breust Place – road construction works. Completion anticipated within one stage.
- Partial closure of Warrens Park – landscaping works.

Figure 3 – Additional Land – Punchbowl



Breust Place will undergo a full closure. Vehicles will be detoured via Quine Lane (refer to Figure 4). As this is suitable for one lane of traffic only, traffic control will be in place to ensure one direction is moving at any time.

Breust Place does not facilitate much through movement, with most traffic in the area likely to instead use Wattle Street, a classified Regional Road. Breust Place mostly services a small number of shops and has a key pedestrian link to Punchbowl Station, so there may be demand for vehicles to use it as a pick-up/drop-off area for train patrons.

Upon finalisation of the dates of the closure, a plan will be developed to direct traffic away from this street, with the goal that only local traffic uses the route through Quine Lane. TGS plans are being developed and will be included in Appendix 1. Further consultation with the relevant stakeholders is to be undertaken prior to occupying this area.



Figure 4 – Detour Route



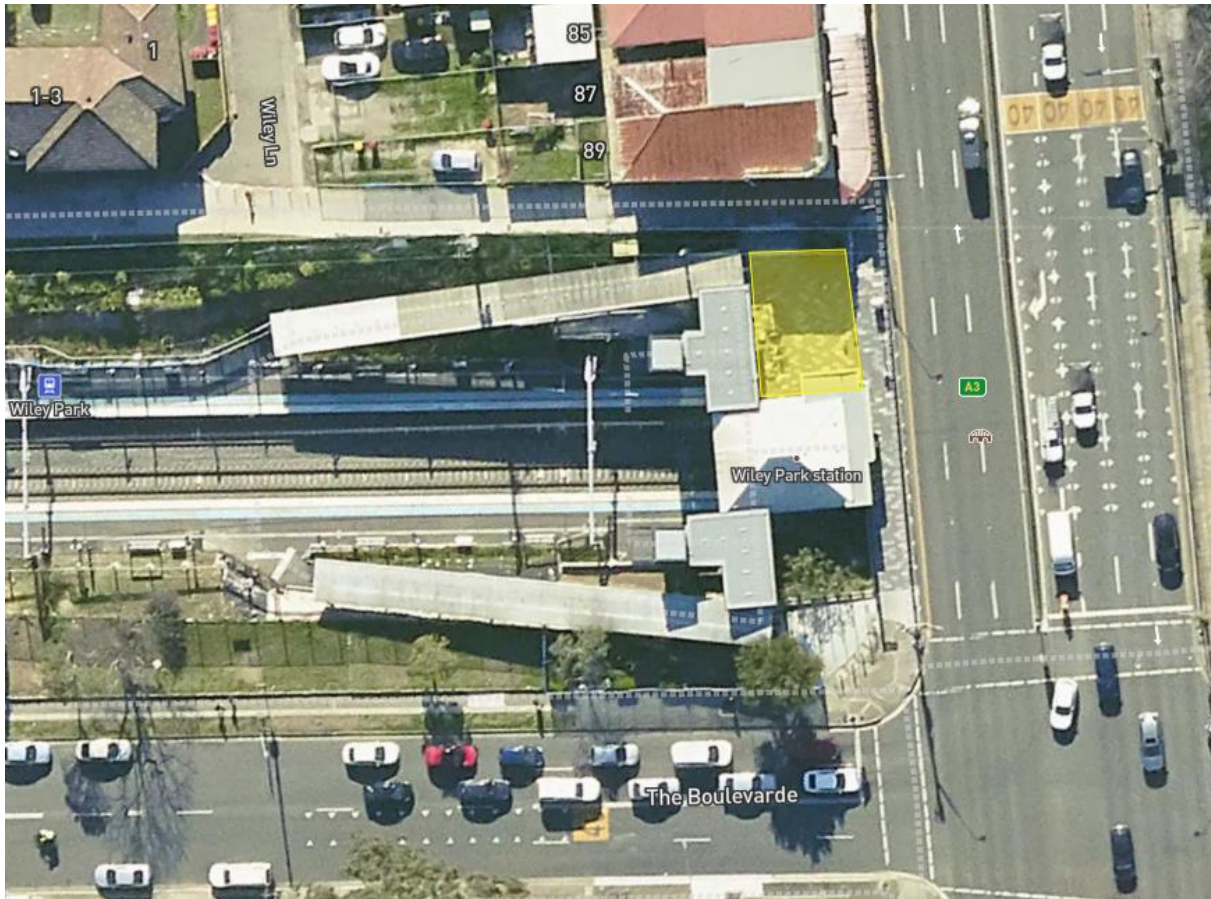
#### 2.4.5 [Site Plan at Wiley Park](#)

The works at Wiley Park Station consist of the following:

- Partial closure of the public space on King Georges Rd in front of the Station– public domain works

Extents of the additional land that will be required for the proposed works are shown below in the Figure 5. There are no proposed traffic closures on King Georges Rd and the existing pedestrian footpath will not be impacted.

Figure 5 – Additional Land – Wiley Park



#### 2.4.6 [Site Plan at Lakemba](#)

The works at Lakemba Station consist of the following:

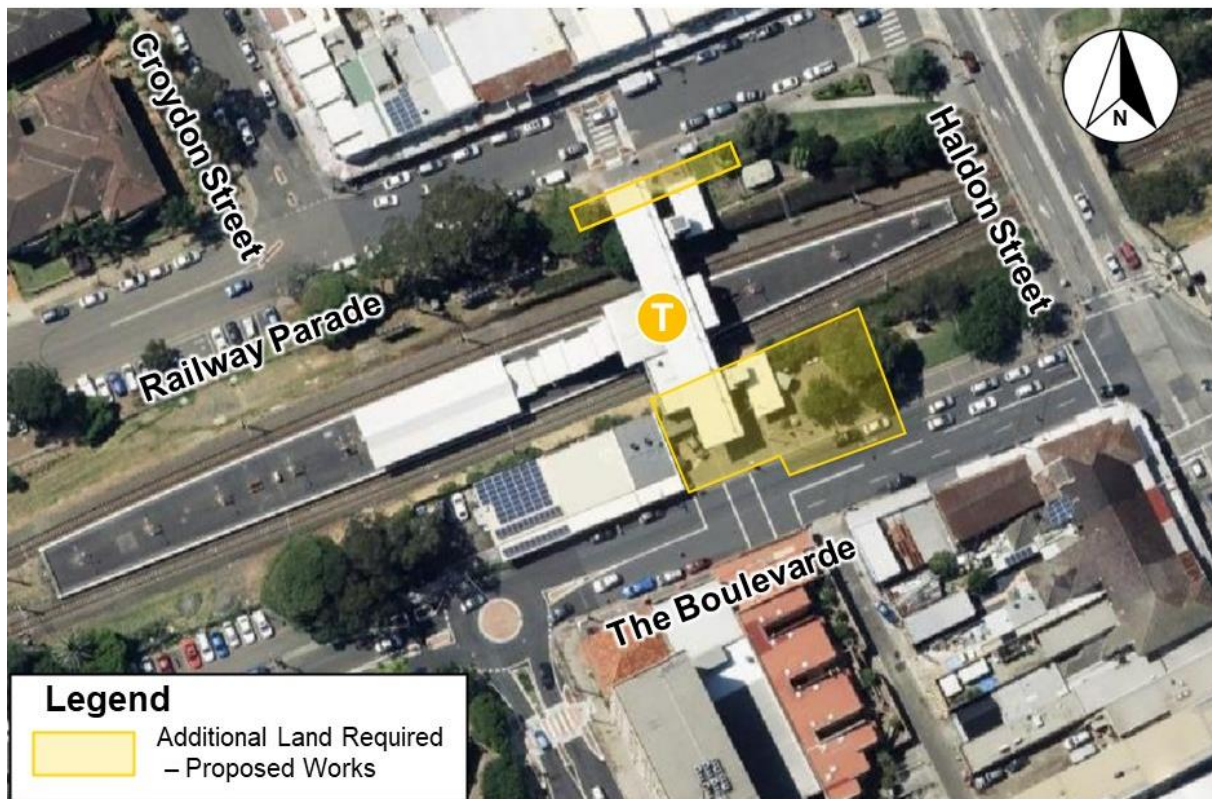
- Partial closure of the public space on Railway Parade (south side) – landscaping works
- Partial closure of the public space on The Boulevard (north side) – landscaping works
- Partial closure of the kerbside lane on The Boulevard (north side) – construction of two pram ramps and line-marking of three taxi spaces.

Extents of the additional land that will be required for the proposed works are shown below in Figure 6.

The proposed works will result in partial short-term closure of the kerbside lane on The Boulevard and Railway Parade. Staged TGS plans to be provided and consulted with the relevant stakeholders prior to implementation. This will be included in Appendix 1.



Figure 6 – Additional Land – Lakemba



#### 2.4.7 [Site Plan at Campsie](#)

The scope of works at Campsie Station will include the following:

- Partial closure of the footpath on the south-western corner of Beamish Street / North Parade
- Full closure of Lilian Lane
- Full closure of footpath on north-western corner of Lillian Lane / Beamish Street intersection
- Staged closure of the northern leg of the Beamish Street / Lilian Lane intersection

Extents of the additional land that will be required for the proposed works are shown below in Figure 7.

Lilian Lane will be fully closed for the duration of works. This lane operates one-way eastbound, with public on-street and private off-street parking located along it. For the duration of works, vehicles will be detoured via Dewar Street → Anzac Square → Amy Street → Beamish Street. The closure of western leg of the intersection is to be communicated to TfNSW and TMC in case amendments to the signal operation is required.

The northern leg of the Beamish Street / South Parade / Lilian Lane intersection will be closed in a staged manner. Vehicle movements in both directions will be retained during the works. These impacts are shown below in Figure 8.

Staged TGS plans to be developed and consulted with the relevant stakeholders prior to implementation. To be included in Appendix 1.



Figure 7 – Additional Land – Campsie

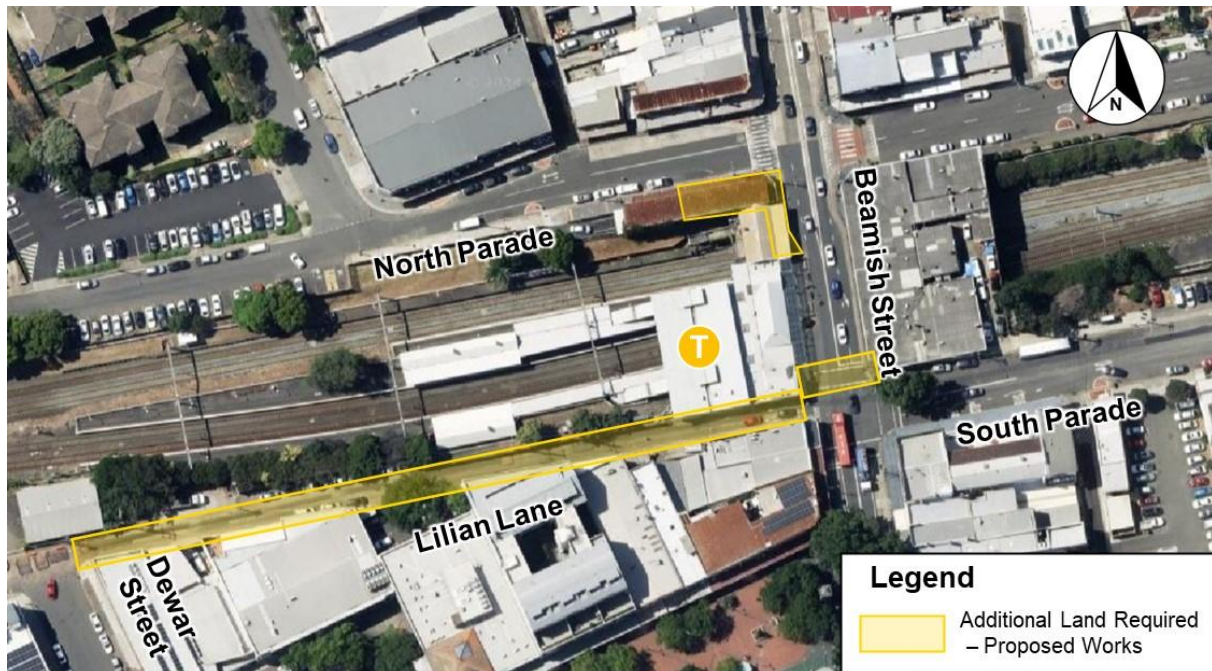


Figure 8 – Vehicle Routes and Traffic Impacts – Campsie





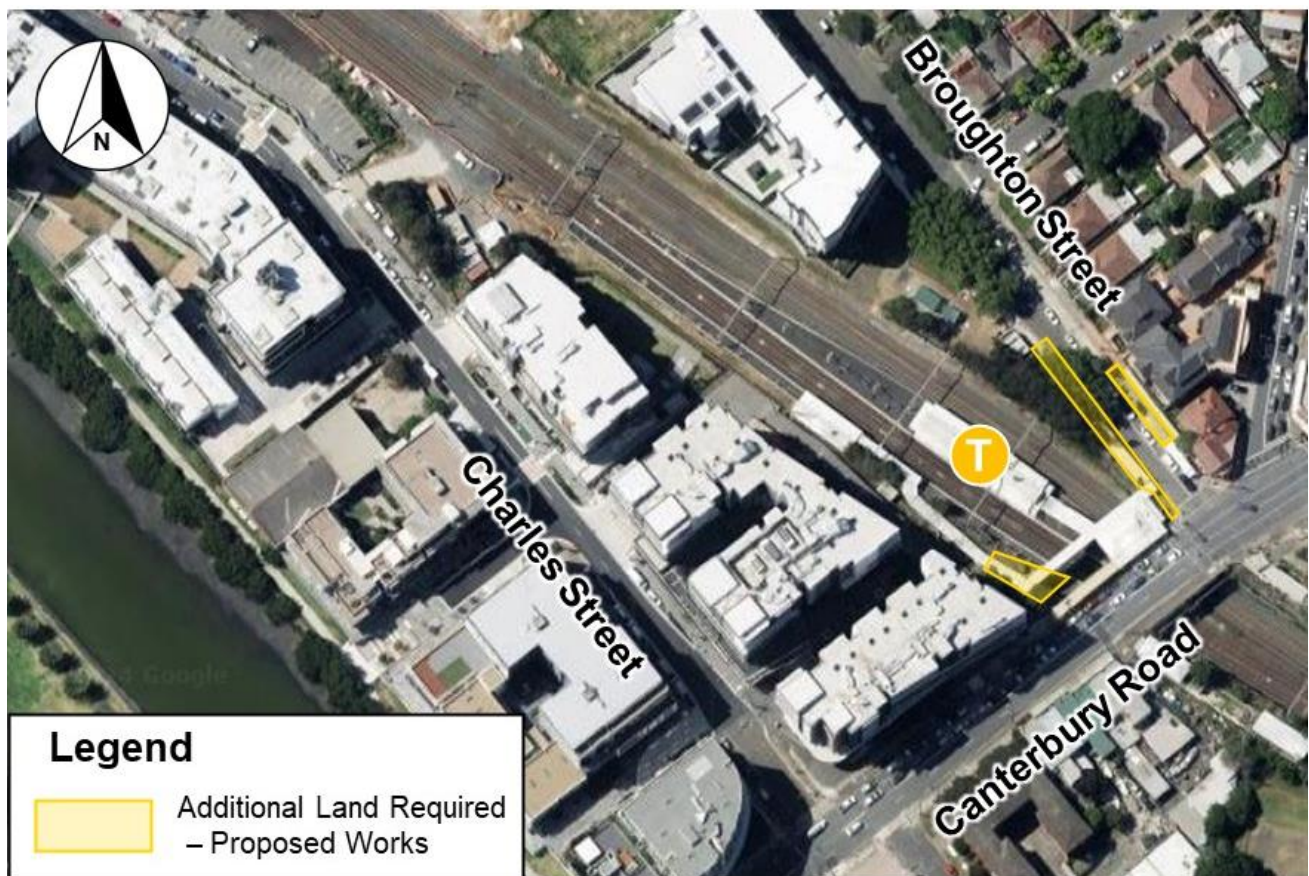
### 2.4.8 [Site Plan at Canterbury](#)

The scope of works at Canterbury Station will include the following:

- Partial closure of Broughton Street (north side)
- Partial closure of Broughton Street (south side)
- Partial closure of East-west footpath connection (between Charles Street and Station).

Extents of the additional land that will be required for the proposed works are shown below in Figure 9. Staged TGS plans to be developed and consulted with the relevant stakeholders prior to implementation. To be included in Appendix 1.

Figure 9 – Additional Land – Canterbury



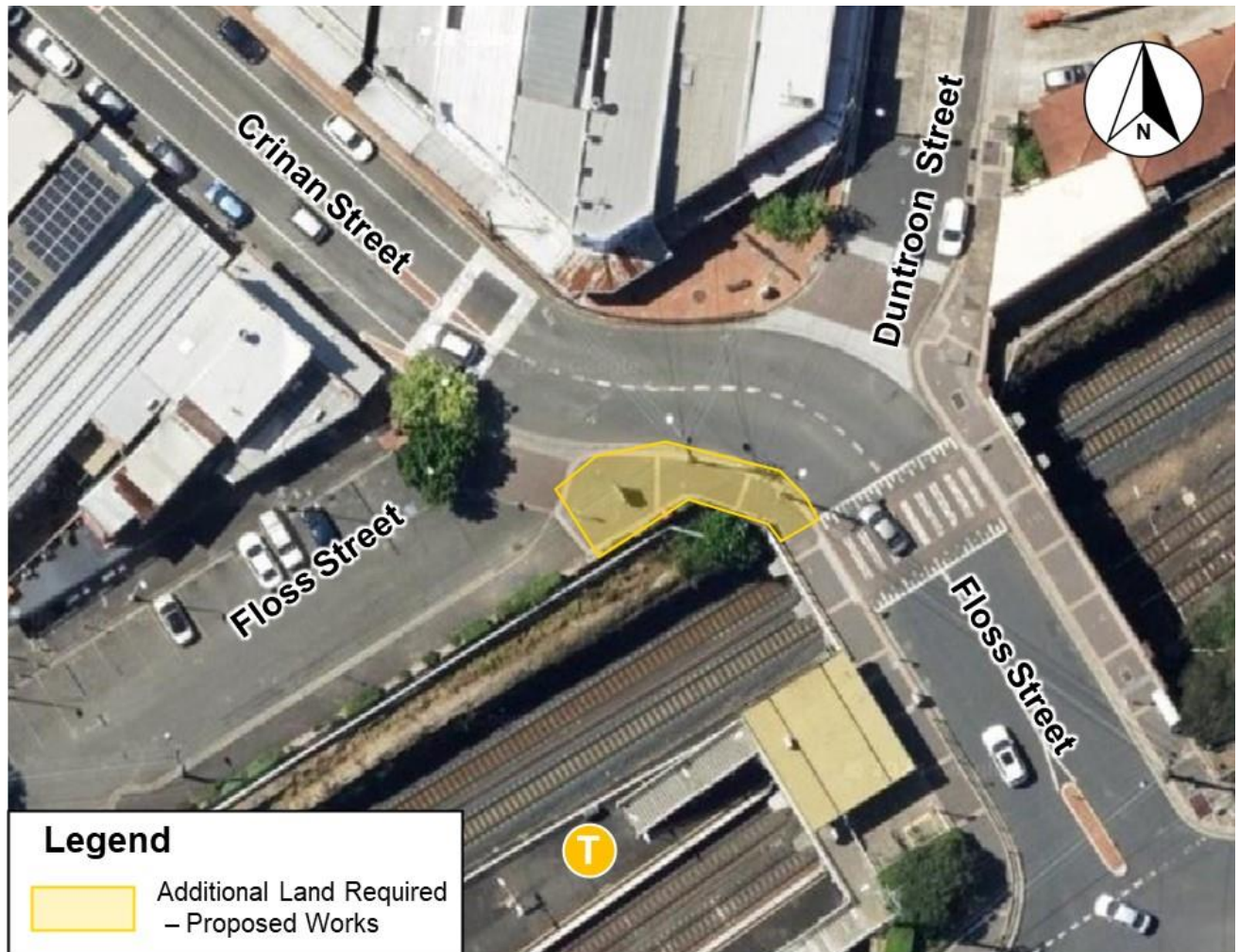
### 2.4.9 [Site Plan at Hurlstone Park](#)

The scope of works at Hurlstone Park Station will include the following:

- Partial closure of footpath on Floss St (south side): anti-throw screen installation

Extents of the additional land that will be required for the proposed works are shown below in Figure 10. Staged TGS plans to be developed and consulted with the relevant stakeholders prior to implementation. To be included in Appendix 1.

Figure 10 – Additional Land – Hurlstone Park



#### 2.4.10 [Site Plan at Dulwich Hill](#)

The scope of works at Dulwich Hill Station will include the following:

- Full closure of the footpath west of Bedford Crescent:
- Removal of bike rack near Wardell Street / Bedford Crescent (south-eastern corner)
- Full closure of footpath along Wardell Road
- Partial closure of footpath connecting Wardell Road with Ewart Lane.

Extents of the additional land that will be required for the proposed works are shown below in Figure 11.

Staged TGS plans to be developed and consulted with the relevant stakeholders prior to implementation. To be included in Appendix 1.



Figure 11 – Additional Land – Dulwich Hill



#### 2.4.11 [Site Plan at Marrickville](#)

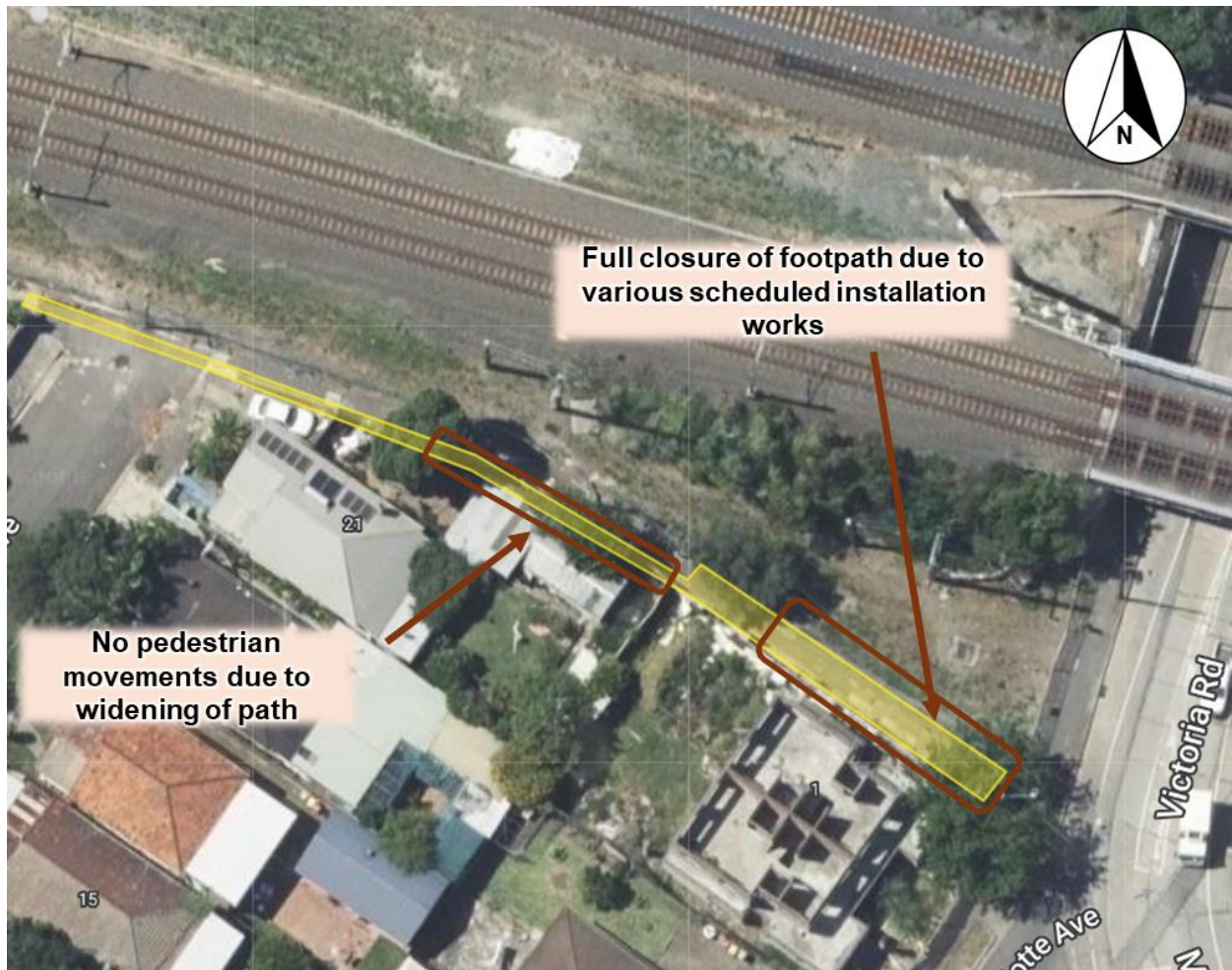
The scope of works at Marrickville Station will include the following:

- Full closure of footpath between Victoria Road/Myrtle Street and Riverdale Avenue. This is currently closed for the Sydney Metro Project.

Extents of the additional land that will be required for the proposed works are shown below in Figure 12.

Staged TGS plans to be developed and consulted with the relevant stakeholders prior to implementation. To be included in Appendix 1.

Figure 12 – Additional Land – Marrickville



#### 2.4.12 [Site Plan at Sydenham](#)

There is no construction scope at Sydenham but part of the SWM3 Wros, we plan to occupy a laydown area within Sydney Metro land to facilitate the project laydown requirements.

Extents of the additional land that will be required for the proposed works are shown below in Figure 13.

Figure 13 – Additional Land – Sydenham





## 2.5 General Requirements

### 2.5.1 [Key Personnel](#)

Table lists the key personnel involved with these works:

Table 2 – Key Personnel

Name	Position	Phone Number
Sean Robertson	Project Manager	0437 475 070
Brenton Holmes	Construction Manager	0412 900 494
Andrew Constantin	Interface & Traffic Manager	0418 650 493
James Sheeran	Community Place Manager	0429 378 336
Trafek Traffic Management (staff name to be confirmed)	Traffic Controller (Blue Card)	TBC
Trafek Traffic Management (staff name to be confirmed)	Implement TCPs (Yellow Card)	TBC
Trafek Traffic Management (staff name to be confirmed)	Prepare a Work Zone Traffic Management Plan	TBC

### 3. Impacts Related to Vehicle Movements and Work Area

#### 3.1 Swept Path Analysis

To provide a better analysis of the vehicle movements along the site extension, swept path analysis has been undertaken to assess key routes as well as access gates of the site extension.

The vehicle profiles of a 20m articulated vehicle (AV) and an 8.8m Medium-Rigid Vehicle (MRV) with 5m trailer (truck and dog) were used. The truck and dog combination was a custom-created vehicle and is an *estimate only*. The truck and dog movements should be tested, and the vehicle verified with the haulage company prior to implementation.

Swept paths were undertaken on scaled Nearmap images and are an estimate only of vehicle manoeuvrability. All movements should be tested and approved prior to implementation.

Refer to Appendix 2 – Swept Paths for details on the truck movement impacts.

##### 3.1.1 Main Compounds at Bankstown & Canterbury

The two main compounds have been established as part of the SWMC and BEW Packages. There are no changes to their current arrangement access/egress requirements. Refer to the relevant CTMP for the swept path analysis previously completed which includes the surrounding streets.

##### 3.1.2 South Terrace Bus Layover Satellite Compound

The satellite compound in the South Terrace Bus Layover has been established as part of the BEW Package. There are no changes its current access/egress requirements. Refer to the BEW CTMP for the swept path analysis previously completed which includes the surrounding streets.

##### 3.1.3 Additional Swept Paths for SWM3 Works

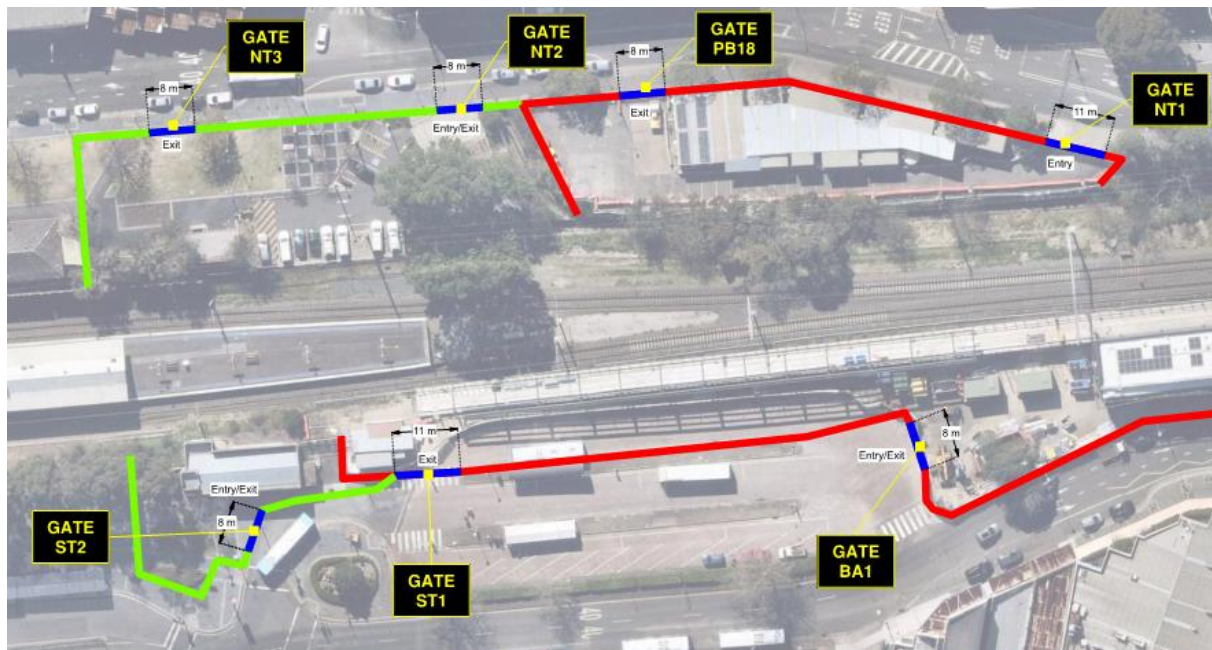
All new entry and exit movements at Bankstown have been **highlighted** and assessed in the Table 3 below and Appendix 2. Refer to Figure 13 for Gate locations.

Table 3 – Bankstown Access Gate Swept Path Analysis

Access Gate	Movement	AV (20.0m)	HRV (12.5m)	MRV (8.8m)
NT1	North Terrace Left-turn Entry 1	N/A	Pass	Pass
PB18	North Terrace Right-turn Exit 1	N/A	Pass	Pass
NT2	North Terrace Left-turn Entry 2	N/A	Pass	Pass
NT2	North Terrace Right-turn Exit 2	N/A	Pass	Pass
NT3	North Terrace Left -turn Exit 3	N/A	Pass	Pass
BA1	South Terrace Left-turn Entry 1	Pass	Pass	Pass
ST1	South Terrace Left-turn Exit 1	Pass – with minor kerb adjustments	Pass	Pass
ST2	South Terrace Straight Entry 2	Pass	Pass	Pass
ST2	South Terrace Right-turn Exit 2	N/A	Pass	Pass
ST2	South Terrace Right-turn Exit 3	N/A	Pass	Pass

Figure 13 – Bankstown Site Access/Egress Gates





The existing rail gates in the table below have been included in this CTMP for **information only**. These gates have already been assessed and will be utilities for SWM3 Works. Refer to the approved SSJ/SWMC CTMPs; SMCSWSSJ-JHL-WSS-CM-PLN-000654 and SMCSWSSJ-JHL-WEC-TF-PLN-000052. The **highlighted** gates have been reassessed for 12.5m HRV access/egress. The swept paths included in Appendix 6.

Table 4 – SSJ/SWMC Gates Utilised by SWM3 Works

	Gate ID	Suburb	Frontage Road	Largest Allowable Vehicle	Additional Comments / Restrictions
8	Access 8	Marrickville	Carrington Rd	12.5m HRV	None
10	Access 10	Tempe	Way St	12.5m HRV	None
SY2	M24 6.331D	Marrickville	Victoria Rd	Light Vehicle	None
SY3	M24 6.335U	Marrickville	Victoria Rd	12.5m Heavy Rigid Vehicle (HRV)	Overruns kerb on access. Note 4.0m height restriction
MA1	M24 6.718D	Marrickville	Warburton St	8.8m Medium Rigid Vehicle (MRV)	TC/Parking removal may be required for all vehicles
DU1	M24 7.900D	Dulwich Hill	Ewart Lane	8.8m MRV	None
DU2	M24 8.038D	Dulwich Hill	Ewart Lane	12.5m HRV	Minor adjustments may be required to the site boundary
DU5	M24 8.229D	Dulwich Hill	Ewart St (West of Terrace Rd)	8.8m MRV	None
HP3	M24 8.880D	Hurlstone Park	Railway Street	12.5m HRV	Parking Space removal required for HRV only.
CB1	M24 10.300D	Canterbury	Charles St	12.5m HRV	None
CB2	M24 10.300D	Canterbury	20 Charles St	12.5m HRV	None
CB3	M24 10.331U	Canterbury	Broughton St (Opp John St)	12.5m HRV	None
CB7	M24 11.282D	Canterbury	South Parade (Opp Park)	8.8m MRV	Parking Space removal required for MRV Only

<b>CP5</b>	M24 12.696U	Campsie	Hall St	12.5m HRV	Minor vegetation works may be required
<b>BE1</b>	M24 13.193D	Belmore	Tobruk Ave Car Park	SRV	One-way restriction on Tobruk Avenue and Acacia Lane
<b>BE2</b>	M24 13.374D	Belmore	Bridge Rd	12.5m HRV	Minor adjustments may be required to the site boundary
<b>BE5</b>	M24 13.827D	Belmore	The Boulevarde	12.5m HRV	Parking Space removal required for HRV Only
<b>BE7</b>	M24 14.086D	Belmore	The Boulevarde	12.5m HRV	None
<b>LA2</b>	M24 14.533D	Lakemba	The Boulevarde	8.8m MRV	None
<b>LA6</b>	M24 14.943D	Lakemba	The Boulevarde	8.8m MRV	None
<b>WP4</b>	M24 15.763D	Wiley Park	The Boulevarde	8.8m MRV	None
<b>WP8</b>	M24 16.121U	Wiley Park	Urunga Parade	12.5m HRV	3t weight restriction on Cornelia Street
<b>PB6</b>	M24 16.795D	Punchbowl	South Terrace	12.5m HRV	None
<b>PB11</b>	M24 17.642D	Punchbowl	South Terrace	12.5m HRV	None
<b>PB15</b>	M24 18.223D	Bankstown	South Terrace	12.5m HRV	None
<b>PB16</b>	M24 18.428D	Bankstown	South Terrace	Light Vehicle	None
<b>BA2</b>	M24 18.958U	Bankstown	Depot Place	12.5m HRV	None
<b>11</b>	Access 11	Sydenham	Murray St/Edinburgh Rd	12.5m HRV	None

## 3.2 Parking Spaces

### 3.2.1 Main Compounds at Bankstown & Canterbury

The two main compounds have been established as part of the SWMC and BEW Packages. There are no changes to their current arrangement access/egress requirements. Refer to the relevant CTMP.

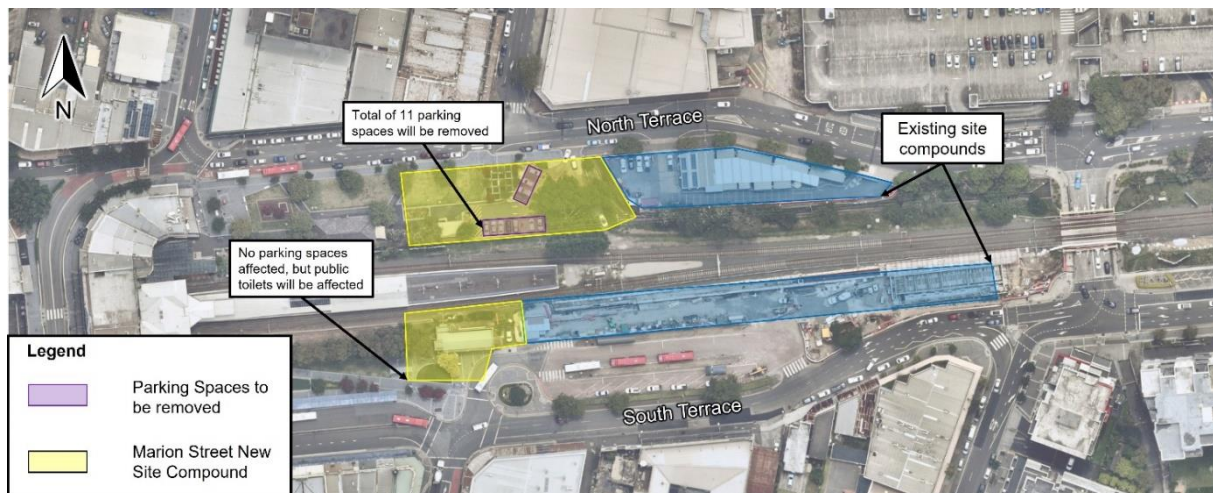
### 3.2.2 Extension to the Main Compound on North Terrace

Additionally, it is understood that approximately 11 more public car parking spaces are to be lost during construction with the extension of the main compound on North Terrace. This is consistent with the 90 spaces identified in the EIS Table 10.31, that is 66 spaces in total, 24 below the EIS number for Bankstown. The lease of this area is currently under negotiations between Canterbury-Bankstown Council and Sydney Metro with the intention to be transferred over for the duration of the works.

No public parking spaces are to be impacted for the extension of the site compound along South Terrace without further assessment.



Figure 14 – North &amp; South Terrace Compound Extension: Parking Spaces Lost



In addition, the new proposed gate NT3 (left in & left out) on North Terrace will remove 4 parking spaces which are currently signposted as:

- Drop Off & Pick Up Only,
- No Parking Mon-Fri 7am-11am and
- Parking 15min Mon-Fri 11am – 6pm and Sat 8.30am – 12pm

These are not dedicated commuter spaces as identified in the EIS, therefore are not counted towards the number.

To facilitate this, the existing signpost and signs will be shifted 20m towards Bankstown Station. Refer to the Figure 15 below.

Figure 15 – North Terrace Compound Extension: Shifting Signpost



### 3.2.3 [Project Plant/Site Vehicle Parking Strategy](#)

Project parking impacts during construction are predicted to occur during standard construction hours and weekend possession/shutdowns. Plant would be delivered outside the rail gate prior to the start of works and enter the corridor as soon as it is safe to do so. Following the completion of works the plant would be removed from the area at the earliest convenience. The supply chain partners and the general work force would be encouraged in the first instance to car pool or use public transport if feasible. It is noted that demand on parking is lower during the weekend possessions due to train shutdowns and weekday traffic and that the SWM3 works (other than at Bankstown are typically >400m away from the stations).

To minimise the impacts to public parking this parking strategy has been completed for plant and site worker vehicle parking across the worksites. The outcomes of this strategy would be captured in the Traffic Guidance Schemes (TGS) and presented to RMS/Council and captured in the minutes of meetings.

This system is continuously reviewed, the construction, environmental and community notification teams work in conjunction to identify parking risks and investigate solutions where all involved parties are satisfied. The complaint's register is regularly maintained and complaints are investigated and handled periodically. Where a higher demand of parking is required, Council permits will be requested for additional short-term parking requirements. This strategy would be incorporated into the possession planning process.

Refer to Section 1 of the SWMC CTMP (SMCSWSSJ-JHL-WEC-TF-PLN-000052) for Related Conditions of Approval (CoA) and Revised Mitigation Measures (REMMs) that are considered for this strategy.

## 4. Traffic Management

### 4.1 Site Access

#### 4.1.1 [Access Requirements](#)

To provide a safe entry and exit to the work zone JHLORJV will:

- Ensure heavy vehicles do not queue on residential streets. Trucks will layover within the worksite boundary and other approved locations where necessary.
- Ensure that vehicles will enter and exit the work area in a forward direction. Should reversing movements be deemed necessary, a TGS must be used.

Pedestrians will be managed at the site accesses using traffic controllers where deemed necessary. Where possible, pedestrians will be directed to the opposite side of the road via signalised crossings.

Cyclists are affected in the same manner as light vehicles.

#### 4.1.2 [Hoarding and Site Boundaries](#)

No permanent fencing will be used for these works. Temporary fencing or waterfilled/concrete barriers and gawk screens will be installed to delineate temporary site compounds. Where locations fall outside of the project boundary, the arrangements will be consulted and approved by the relevant stakeholders.

### 4.2 Traffic Impacts

The main impact to traffic from the works is potential for increased delays due to short-term lane closures affecting vehicle movements. This will occur outside of peak hours and is expected to have negligible effects on traffic flow. If the requirement for long-term closures during Rail Possession Shutdowns, the relevant stakeholders will be consulted and a detailed sub-TMP will be provided for review and endorsement.

#### 4.2.1 [Holding of Traffic](#)

Holding of traffic is necessary for the haulage manoeuvres to and from SWM3 works sites in the following instances:

- When a truck is accessing the site via gate access, the following traffic is to be held for the duration of the manoeuvre:

Traffic controllers are to be used in these instances.

### 4.3 Detours

There is currently one permanent pedestrian detour approved and in place on South Terrace, Bankstown. Refer to the BEW CTMP for relevant details.

Some other traffic/pedestrian detours are required to facilitate the SWM3 Works and have been included in Section 1.4.

TGS plans will be developed and consulted with the relevant stakeholders prior to undertaking these works.

### 4.4 Dilapidation Report

One of the hold points for this project is the use of local roads by heavy vehicles. The release of the hold point is the road dilapidation report, completed by a professional nominated by the principal contractor.

Before any local road is used by a heavy vehicle for the purposes of Construction 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 council(s) within four (4) weeks of completion of the survey and at least two (2) weeks before the road is used by heavy vehicles associated with the Construction of the CSSI.

If damage to local roads occurs as a result of Construction of the CSSI, the Proponent must either:

- compensate the relevant road authority for the damage so caused. The amount of compensation may be agreed with the relevant road authority
- rectify the damage to restore the road to at least the condition it was in pre-Construction as identified in the Road Dilapidation Report(s)



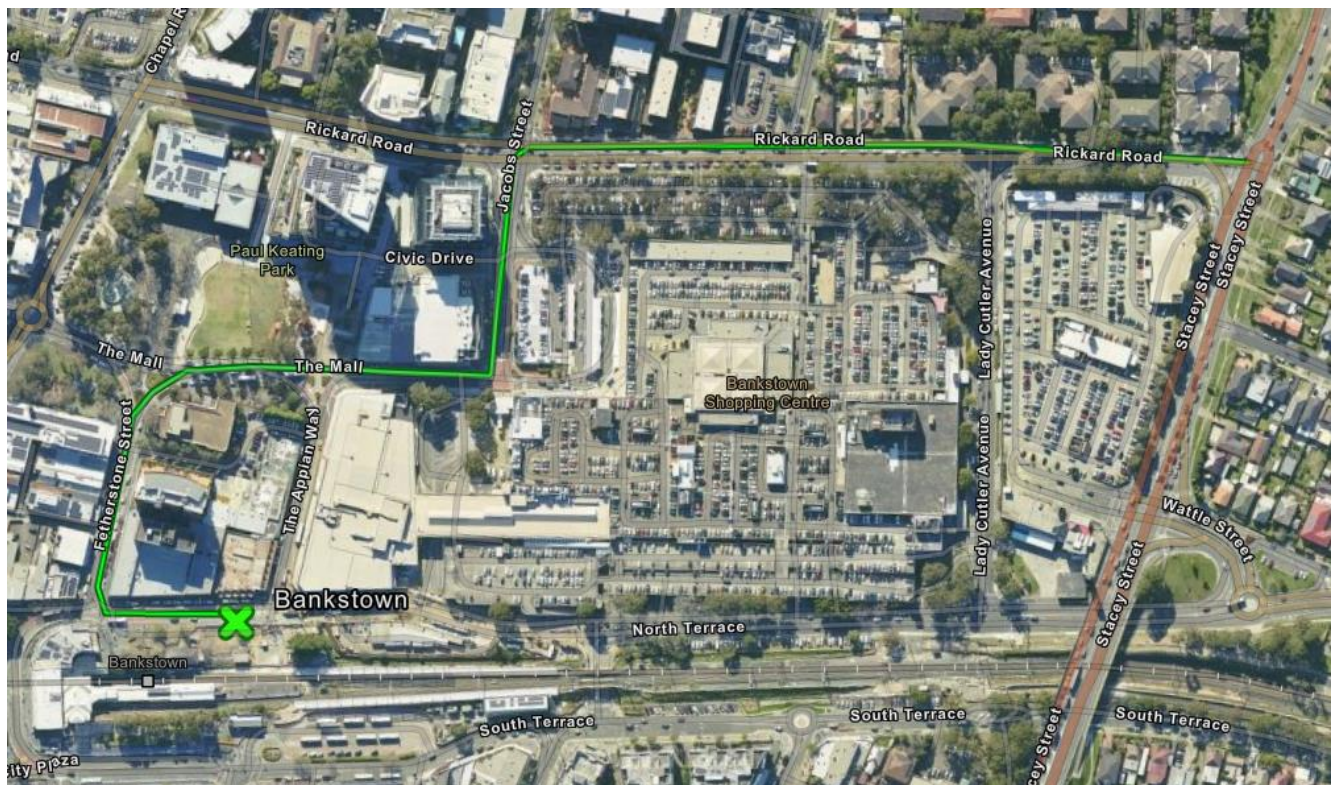
## 5. Traffic Routing

### 5.1.1 Truck Haulage Routes

An additional haulage route has been assessed for the SWM3 works to facilitate the left-turn egress from the new gate located on North Terrace just west of The Appian Way intersection. The new haulage route has been assessed for a 12.5m HRV turning right onto Featherstone St via right-turn on The Mall via left-turn on Jacob St via right-turn on Rickard Rd to return to the approved haulage route using Stacey St. Refer to the Figure 16 below.

Figure 16 – Additional Truck Haulage Route

#### X- New Gate NT3



### 5.1.2 Truck Volumes and Hours of Operation

There will be different peak truck movements through each gate and site, which are included in the approved SWMC & BEW CTMPs. Where possible, these movements are to occur outside of peak hours to minimise impact on the road network.

#### 5.1.2.1 Additional SWM3 Works Gate Access at Bankstown

Gates PB18, NT1, ST1 and BA1 are existing gates. The remaining gates in are new gates.

- The new North Terrace gates NT2 & NT3 will have estimated at 4 trucks/hour with 15-min cycle time. The existing gates NT1 and PB18 will remain as per the existing truck movements.
- The South Terrace gates BA1, NT2 & NT3 will have estimated at 4 trucks/hour with 15-min cycle time.
- Peak occurs during load out of spoil and site establishment.
- Sporadic deliveries at any time.

### 5.1.3 [Approvals](#)

A Road Occupancy Licence/Council permit are required for the proposed lane closures.

An application will be submitted by JHLOR JV prior to implementing any closure.

### 5.1.4 [Traffic Guidance Schemes](#)

Traffic Guidance Schemes (TGSs) will set out the specific traffic management arrangements to be implemented during the construction phase.

TGSs will be created for these works and will be available in Appendix 1 – Traffic Guidance Schemes.

Existing speed limits of 40km/h may need to be extended during some traffic control operations.

TGSs are to be created in line with the requirements of TfNSW Traffic Control at Worksites Manual Version 6.

TGSs must be signed off and approved by a person who holds a valid TfNSW “Prepare a Work Zone Traffic Management Plan” qualification.

TGSs must be approved by the relevant authorities before they are used in the project.

Additional TGSs will be created as required and as the project scope is developed in further detail.

## 5.2 [Pedestrian Management](#)

### 5.2.1 [Pedestrian Movement Plans](#)

Pedestrian Movement Plans (PMPs) are required for each instance where changes to pedestrian routes are required, such as closing footpaths. PMPs are to be developed in accordance with TfNSW Traffic Control at Worksites Manual Version 6, and CEMF Clause 8.1. Pedestrian management measures are shown in Appendix 1 – Traffic Guidance Schemes.

PMPs have been overlayed on the corresponding Traffic Guidance Schemes for the site.

### 5.2.2 [Pedestrian Considerations](#)

#### 5.2.2.1 [Bankstown](#)

The lane closures on South Terrace at South Terrace / West Terrace will also close the adjacent northern footpath for the duration of the utility connection works. Pedestrians will be detoured to the opposite footpath via signalised crossing at South Terrace / West Terrace.

During the duration of the satellite and main compound, the northern footpath along South Terrace, between West Terrace and the bus terminal, will be occupied. Pedestrians will be detoured to the opposite footpath via signalised crossings at South Terrace / West Terrace and South Terrace / Restwell Street/ Bankstown City Plaza. Minor pedestrian detours will be in place to facilitate the footpath works on the South Terrace. These works will be staged. Refer to Appendix 1 for TGS plans.

Some works on the southern footpath on North Terrace will result in detouring pedestrians around the work zone using the northern footpath.

Traffic Signal works on the North Terrace/The Appian Way intersection will require pedestrian detours. These plans will be developed and included in the CTMP them in due course.

TGS plans will be developed for these works and will include PMPs



### 5.2.2.2 [Punchbowl](#)

Impacts to active transport facilities are minimal with two pedestrian crossings to be closed along Breust Place. Footpaths will otherwise remain open for use or will only experience minor partial closures.

Additionally, as part of the landscaping works within Warren Park, the park and its footpaths will be partially closed. Minor detours will be in place during this closure.

Figure 17 – Pedestrian Impacts



### 5.2.2.3 [Lakemba](#)

There will be minor impacts to pedestrians. Works on the footpath are to be undertaken in a manner to retain pedestrian routes where possible. There may be minor closures of the footpath to complete two kerb ramps, and to linemark the taxi zone.

If a full closure is required, pedestrians will be detoured via the signalised crossing on The Boulevard.

Figure 18 – Pedestrian Impacts



#### 5.2.2.4 [Campsie](#)

There are only limited sections of footpaths along Lilian Lane, however, pedestrians were observed to walk along the edge of the road. During the closure of Lilian Lane, pedestrians will be detoured via Anzac Mall.

During the full closure of the north-western corner of the Beamish Street / Lilian Lane intersection, pedestrians will be detoured via the other pedestrian crossing legs.

Otherwise, impacts to pedestrians will be minimal, with minor detours in place.

These impacts are illustrated below in Figure 19.



Figure 19 – Pedestrian Impacts



#### 5.2.2.5 [Canterbury](#)

The works will include partial closures of footpaths and removal of bike storage facilities along Broughton Street and south of Canterbury Station, shown below in Figure 20.

The footpaths will undergo partial closures. Pedestrian access is expected to be always maintained with minor detours in place.



Figure 20 – Pedestrian Impacts



#### 5.2.2.6 [Hurlstone Park](#)

Impacts to active transport facilities are minimal, being partial closure of the footpath on the Floss Street overbridge at differing times due to the installation of the anti-throw screen. Pedestrian routes will be maintained during works with minor detours only.

Figure 21 – Pedestrian Impacts





### 5.2.2.7 Dulwich Hill

The closure to the footpath on the western end of Bedford Crescent will be staged, with one direction open at all times.

The footpath between Ewart Lane and Wardell Road will be fully closed during works. Pedestrians will be detoured via Ewart Lane and Wardell Road. There are no footpaths along the Ewart Lane portion of this route, however, this is consistent with the remaining sections of Ewart Lane.

Figure 22 – Pedestrian Impacts



### 5.2.2.8 Marrickville

Full closure of the footpath as shown in the Figure below is currently in place as part to the Sydney Metro Project. Part of the SWM3 works is to construct a new footpath in this location so the closure will remain in place until works have been completed.

Figure 23 – Pedestrian Impacts



### 5.3 Cyclist Management

There are not expected to be any cyclist-specific impacts due to the works. Cyclists will experience the same impacts to their routes as light vehicles. At Marrickville Station, we will be relocating two bike racks from Station Street to Schwebel Street, as agreed with Inner West Council.

### 5.4 Traffic Modelling

Traffic modelling has not been undertaken and is not deemed necessary as the nature of the impacts and volumes of traffic movements is already understood by the approval authorities.

### 5.5 Temporary Removal of Car Parking Spaces

#### 5.5.1 Punchbowl

The SWM3 works along Breust Place will result in a loss of approximately on-street 33 parking spaces during the closure of Breust Place. This is shown in Figure 24 below.

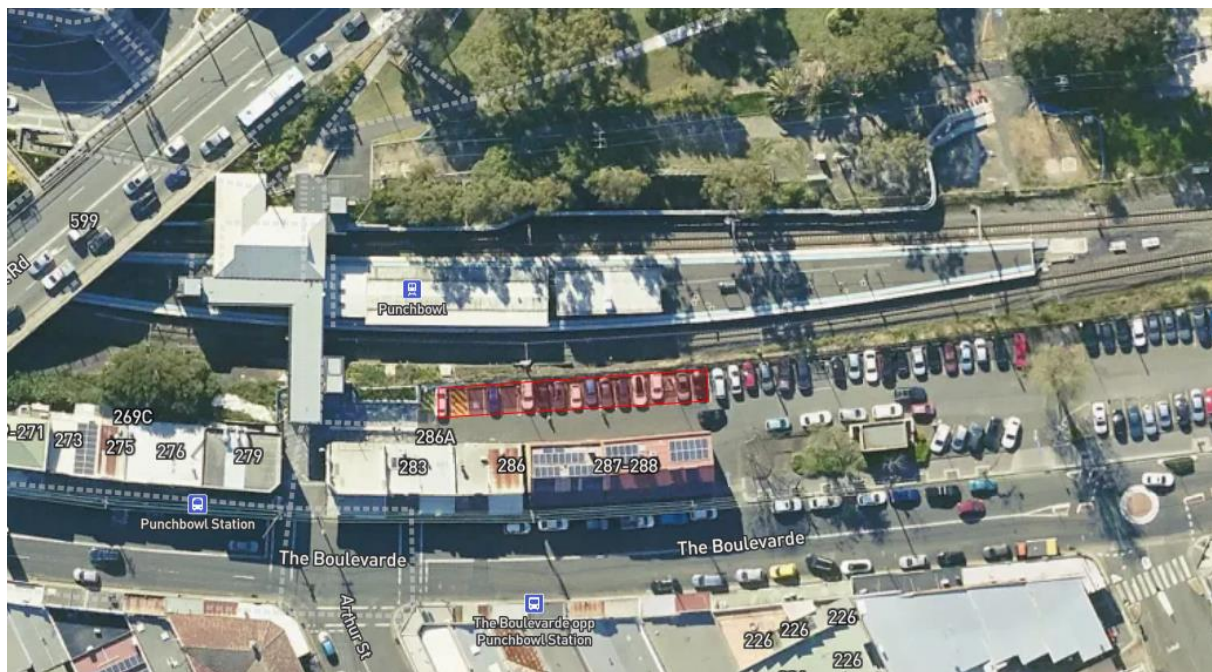
An additional 14 parking spaces adjacent to The Boulevard within the TAHE carpark will be occupied to implement temporary site facilities and laydown to be used during construction. TGS plan for the installation will be developed and consulted with stakeholders prior to installation. Refer to the Figure 25 below.



Figure 24 – Parking Impacts



Figure 25 – Parking Impacts

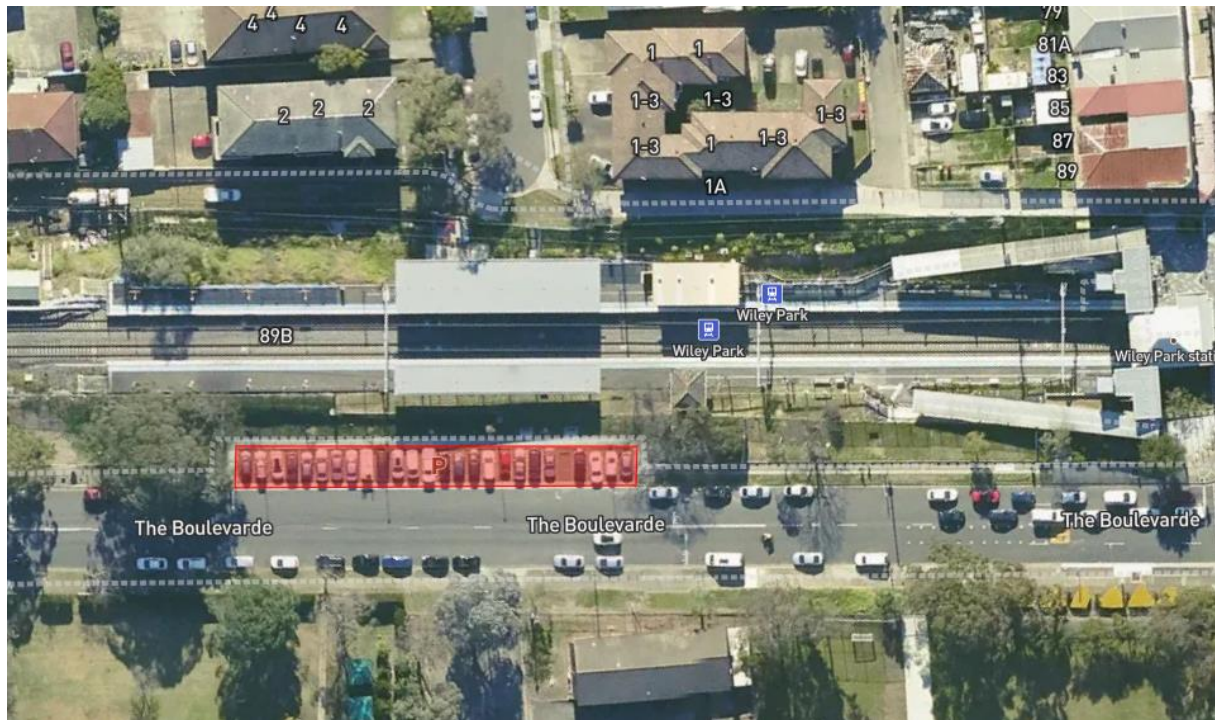


### 5.5.2 [Wiley Park](#)

Part of the SWM3 works, an additional 24 parking spaces on The Boulevard within TAHE land will be occupied to implement temporary site facilities and laydown to be used during construction. The pedestrian walkway will be maintained. TGS plan for the installation will be developed and consulted with stakeholders prior to installation. Refer to the Figure 26 below.



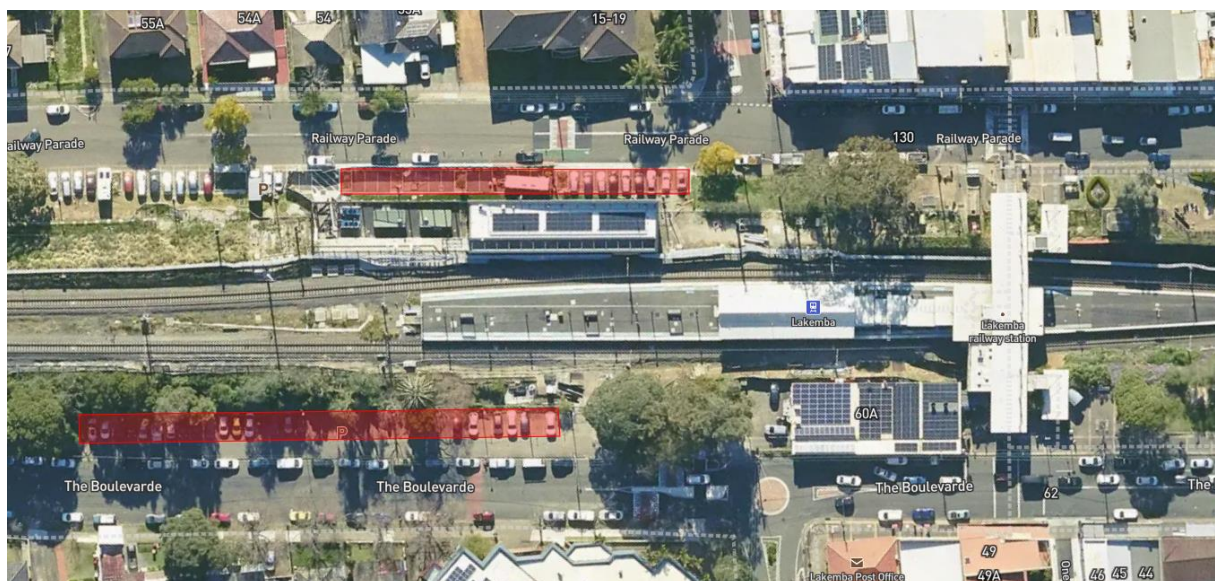
Figure 26 – Parking Impacts



### 5.5.3 [Lakemba](#)

There are currently 20 parking spaces on Railway Parade which have removed for previous scope. Part of the SWM3 works, an additional 30 parking spaces on The Boulevard within TAHE land will be occupied to implement temporary site facilities and laydown to be used during construction. The pedestrian walkway will be maintained but may be reduced to from 2m to 1.5m to accommodate the width of the waterfilled barriers. TGS plan for the installation will be developed and consulted with stakeholders prior to installation. Refer to the Figure 27 below.

Figure 27 – Parking Impacts





#### 5.5.4 Belmore

The carpark (TAHE) adjacent to Tobruk Avenue has already been occupied by Sydney Metro contractors. Part of the SWM3 works, we plan to continue occupying this carpark to implement temporary site facilities and laydown to be used during construction. TGS plan for the installation will be developed and consulted with stakeholders prior to installation. Refer to the Figure 28 below.

Figure 28 – Parking Impacts



#### 5.5.5 Campsie

There are currently 6 parking spaces on Lilian St within TAHE land which will be occupied to implement temporary site facilities and laydown to be used during construction SWM3 works. There is no pedestrian walkway. TGS plan for the installation will be developed and consulted with stakeholders prior to installation.



Figure 29 – Parking Impacts



### 5.5.6 Canterbury

The Council carpark adjacent to Charles St has already been occupied by Sydney Metro. Part of the SWM3 works, we plan to continue occupying this carpark to implement temporary site facilities and laydown to be used during construction. TGS plan for the installation will be developed and consulted with stakeholders prior to installation. Refer to the Figure 30 below.

Figure 30 – Parking Impacts



### 5.5.7 [Hurlstone Park](#)

The TAHE parking located within the Council carpark adjacent to Floss St will be occupied as part of the SWM3 works to implement temporary site facilities and laydown to be used during construction. TGS plan for the installation will be developed and consulted with stakeholders prior to installation. Refer to the Figure 31 below.

Figure 31 – Parking Impacts

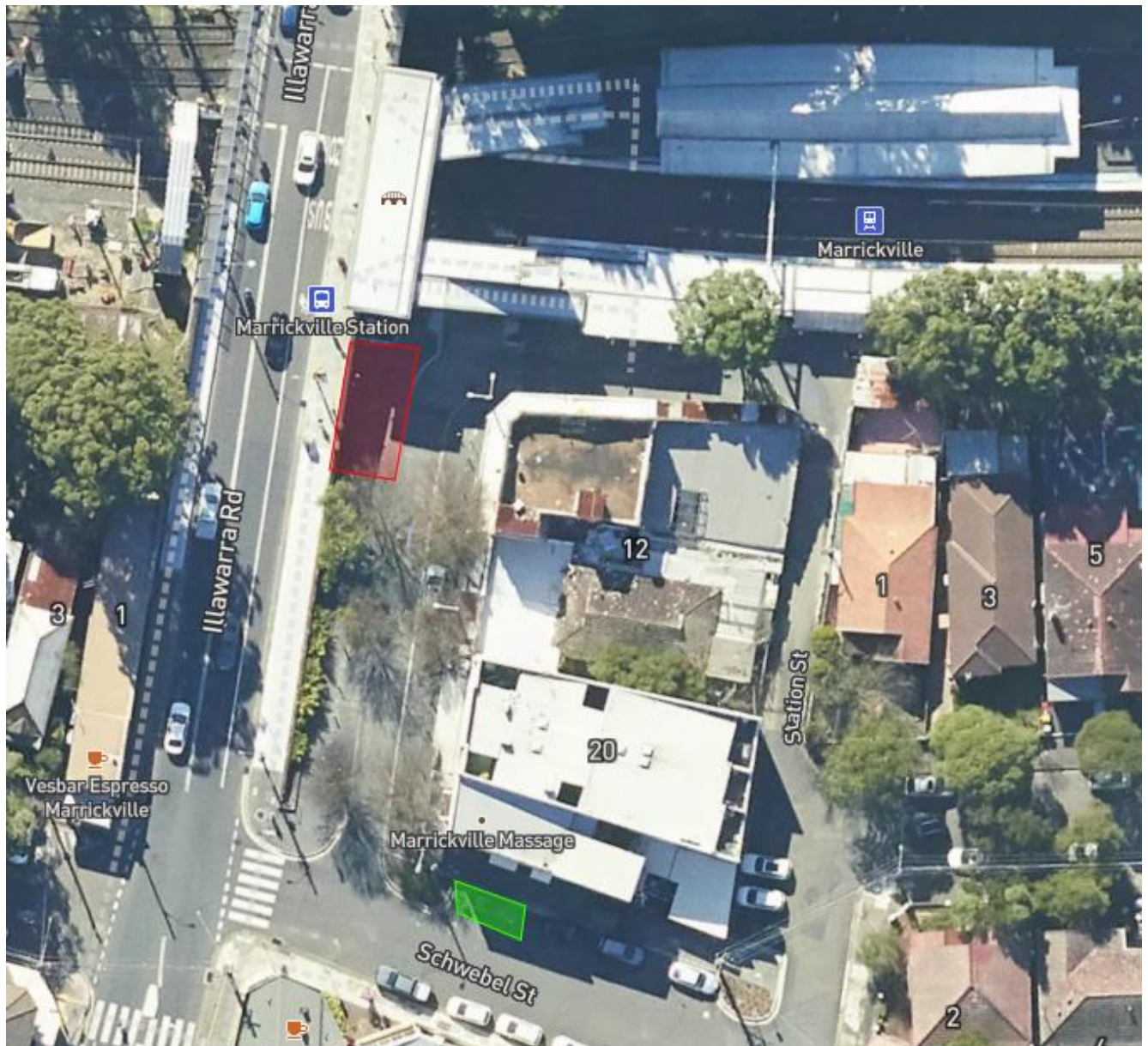


### 5.5.8 [Marrickville](#)

The disabled car space on Station St will be removed as part of the SWM3 Works to implement temporary site facilities and laydown to be used during construction. The disabled parking on Schwebel St is to be utilised in lieu of Station St. Refer to the Figure 32 below.



Figure 32 – Parking Impacts



## 5.6 Public Transport and Bus Operators

### 5.6.1 Bankstown

The bus interchange is significantly important during rail possessions as the rail replacement services use this interchange area in addition to regular services. It has been agreed that the capacity of the bus interchange will not be impacted during the Shutdown period and we will remove the works zone to allow the full operation of the bus interchange during this possession.

Aside from the occupation of the bus interchange area, there are no foreseen impacts to public transport from the proposed works. The existing lane widths utilised by public transport services will not be narrowed from what is existing.



### 5.6.2 Punchbowl

The proposed works will impact two bus stops (Stop ID 2196124 and 2196133) and the S14 bus route (Lakemba to Mount Lewis via Roselands) along Breust Place as shown below in figure.

Further consultation is required with TfNSW to discuss the bus route diversion and stop relocation. Detouring the route via Wattle Street would be an approximately 1.3km detour.

Quine Lane may not be suitable for the diverted bus route, as it is only around 4.0m wide and may have obstructions such as waste bins within the travel lane. This is subject to further investigation.

Figure 33 – Public Transport Impacts



### 5.6.3 Replacement Bussing During Extended Rail Shutdown

The CTMP has been developed in consultation with the relevant bussing authorities to ensure replacement bussing during the extended rail shutdown will not be affected. Where construction works will affect the proposed bus replacement services, further consultation with the relevant stakeholders will be undertaken prior to works proceeding.

## 6. Traffic Signage and Control

As per main CTMP.

## 7. Delineation at Work Site – Travel Paths

As per main CTMP.

## 8. Traffic Controllers

As per main CTMP.

## 9. Work on Footpaths

### 9.1 Pedestrian Safety Points

As per main CTMP.

## 10. Road Safety Audit

A Road Safety Audit (RSA) was undertaken on 24/09/2021. The RSA has been included in Appendix 2 – .Responses to the RSAs are also provided in this Appendix.

Any RSAs undertaken will be shared with relevant stakeholders (including SCO/TMC).

## 11. Reference Documentation

- SM ES-ST-214: G10 Traffic and Transport Management
- SM PS-ST-221: Sydney Metro Principal Contractor Health and Safety Standard
- TfNSW Traffic Control at Worksites Manual. Version 6
- Sydenham To Bankstown Environmental Impact Statement: Technical Paper 1 – Traffic, Transport and Access Assessment
- Relevant Austroads Guides
- TfNSW Supplements to Austroads and Australian Standards
- AS 1742.3 Manual of uniform traffic control devices Part3: Traffic control devices for works on roads
- Minister's Conditions of Approval
- Revised Environmental Mitigation Measures
- Construction Environmental management Framework
- Staging Report - Sydney Metro City and Southwest.
- Sydenham to Bankstown Revised Mitigation Measures (REMMs)
- Sydenham to Bankstown Conditions of Approval (CoA) SSI 8256

## Appendices

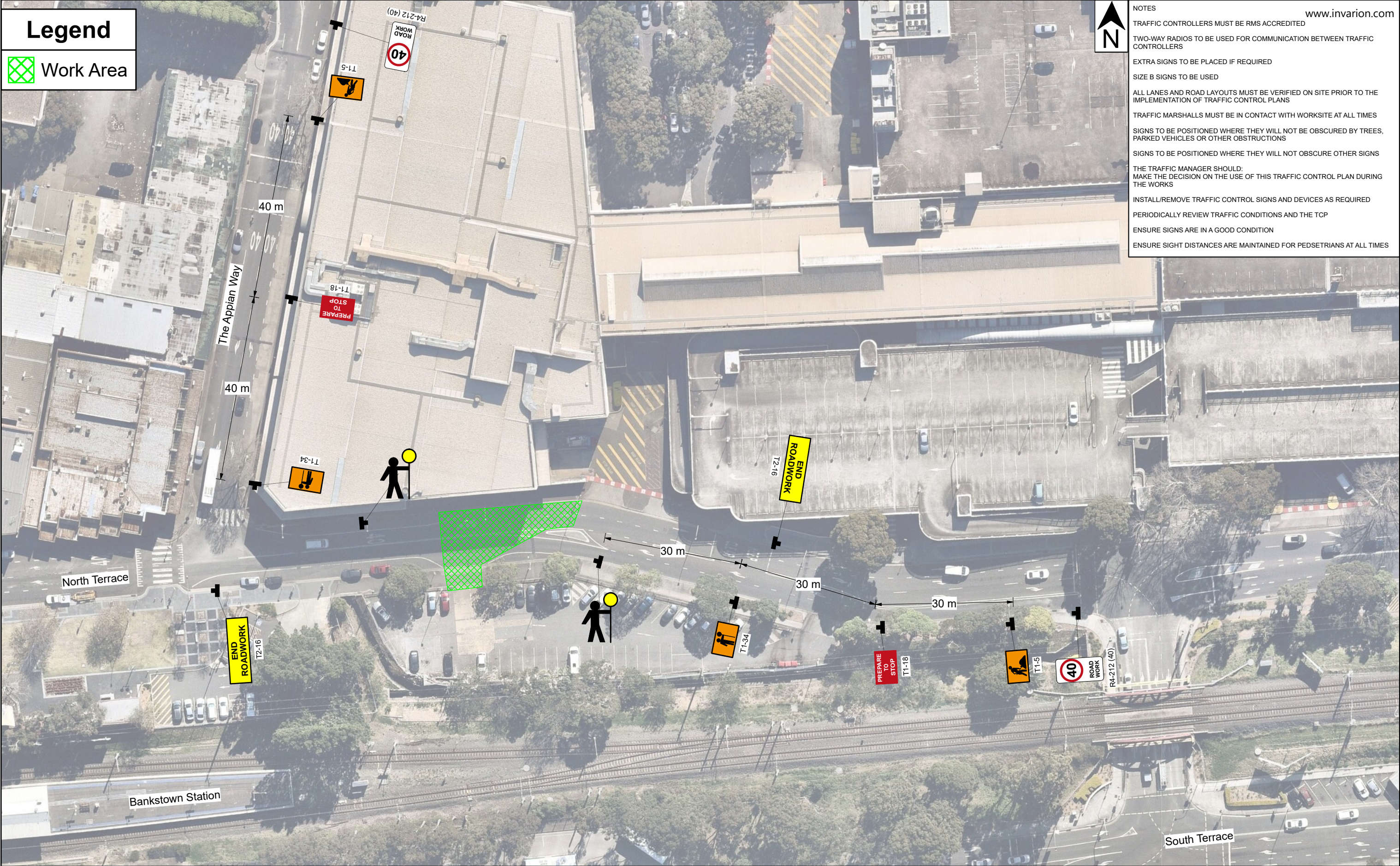
### Appendix 1 – Traffic Guidance Schemes & Signage Plan

The following Traffic Guidance Schemes (TGSs) are provided. These will be updated with the Traffic Control Supplier if necessary, as the works progress and resubmitted if changed, for approval.

Table 35 – Traffic Guidance Schemes

TCP Number	Location	Description of Control
1.	Main Compound	TGS for semi-trailer deliveries to Main Compound, however light vehicle and small trucks with single rear axle do not require a TGS
2.	Bus Layover Area, near South Terrace	WE16: TGS for Weekend 16 configuration of the bus layover area
3.	South Terrace	Pedestrian Footpath Closure on northern side of South Terrace
4.	South Terrace / West Terrace	TGS for Stage 1 of Sewer Works
5.	South Terrace / West Terrace	TGS for Stage 2 of Sewer Works
6.	South Terrace / West Terrace	TGS for AV left turn from South Terrace to West Terrace
7.	South Terrace / West Terrace	TGS for AV right turn from South Terrace to West Terrace
8.	West Terrace / Raymond Street	TGS for AV left turn from West Terrace to Raymond Street
9.	South Terrace	TGS for heavy vehicle exit movement from gate on South Terrace (near number 218 South Terrace)
10.	Bus Layover Area, near South Terrace	TGS for Partial Bus Layover Closure, Pedestrian Footpath Closure and Signage Plan for Temporary Bus Layovers on South Terrace and West Terrace
<b>SOUTH TERRACE-003</b>	South Terrace	TGS for single lane closure and footpath closure for deliveries
<b>SOUTH TERRACE-005</b>	Between South and North Terrace (bridge)	TGS for footpath closure for stormwater works. Pedestrian diversion in place.
<b>220150</b>	South Terrace	TGS for single lane closure for stormwater/sewer tie-in works
<b>220151</b>	South Terrace	TGS for single lane closure for stormwater/sewer tie-in works
<b>220152</b>	South Terrace	TGS for single lane closure for stormwater/sewer tie-in works
<b>220153</b>	South Terrace	TGS for single lane closure for Ausgrid works
<b>220154</b>	South Terrace	TGS for single lane closure for Ausgrid works
<b>220157</b>	South Terrace	TGS for single lane closure for stormwater/sewer tie-in works
<b>NORTH TERRACE - 001</b>	North Terrace	TGS for single lane closure for tree removal works (nightshift)
<b>NORTH TERRACE - 002</b>	North Terrace	TGS for single lane closure for tree removal works (dayshift)
<b>SOUTH TERRACE-001</b>	South Terrace	TGS for footpath occupation for landscaping works
<b>SOUTH TERRACE-005</b>	South Terrace	TGS for single lane closure for landscaping works





Legend

Work Area

- NOTES
- [www.invarion.com](http://www.invarion.com)
- TRAFFIC CONTROLLERS MUST BE RMS ACCREDITED
- TWO-WAY RADIOS TO BE USED FOR COMMUNICATION BETWEEN TRAFFIC CONTROLLERS
- EXTRA SIGNS TO BE PLACED IF REQUIRED
- SIZE B SIGNS TO BE USED
- ALL LANES AND ROAD LAYOUTS MUST BE VERIFIED ON SITE PRIOR TO THE IMPLEMENTATION OF TRAFFIC CONTROL PLANS
- TRAFFIC MARSHALLS MUST BE IN CONTACT WITH WORKSITE AT ALL TIMES
- SIGNS TO BE POSITIONED WHERE THEY WILL NOT BE OBSCURED BY TREES, PARKED VEHICLES OR OTHER OBSTRUCTIONS
- SIGNS TO BE POSITIONED WHERE THEY WILL NOT OBSCURE OTHER SIGNS
- THE TRAFFIC MANAGER SHOULD:  
MAKE THE DECISION ON THE USE OF THIS TRAFFIC CONTROL PLAN DURING THE WORKS
- INSTALL/REMOVE TRAFFIC CONTROL SIGNS AND DEVICES AS REQUIRED
- PERIODICALLY REVIEW TRAFFIC CONDITIONS AND THE TCP
- ENSURE SIGNS ARE IN A GOOD CONDITION
- ENSURE SIGHT DISTANCES ARE MAINTAINED FOR PEDSETRIANS AT ALL TIMES

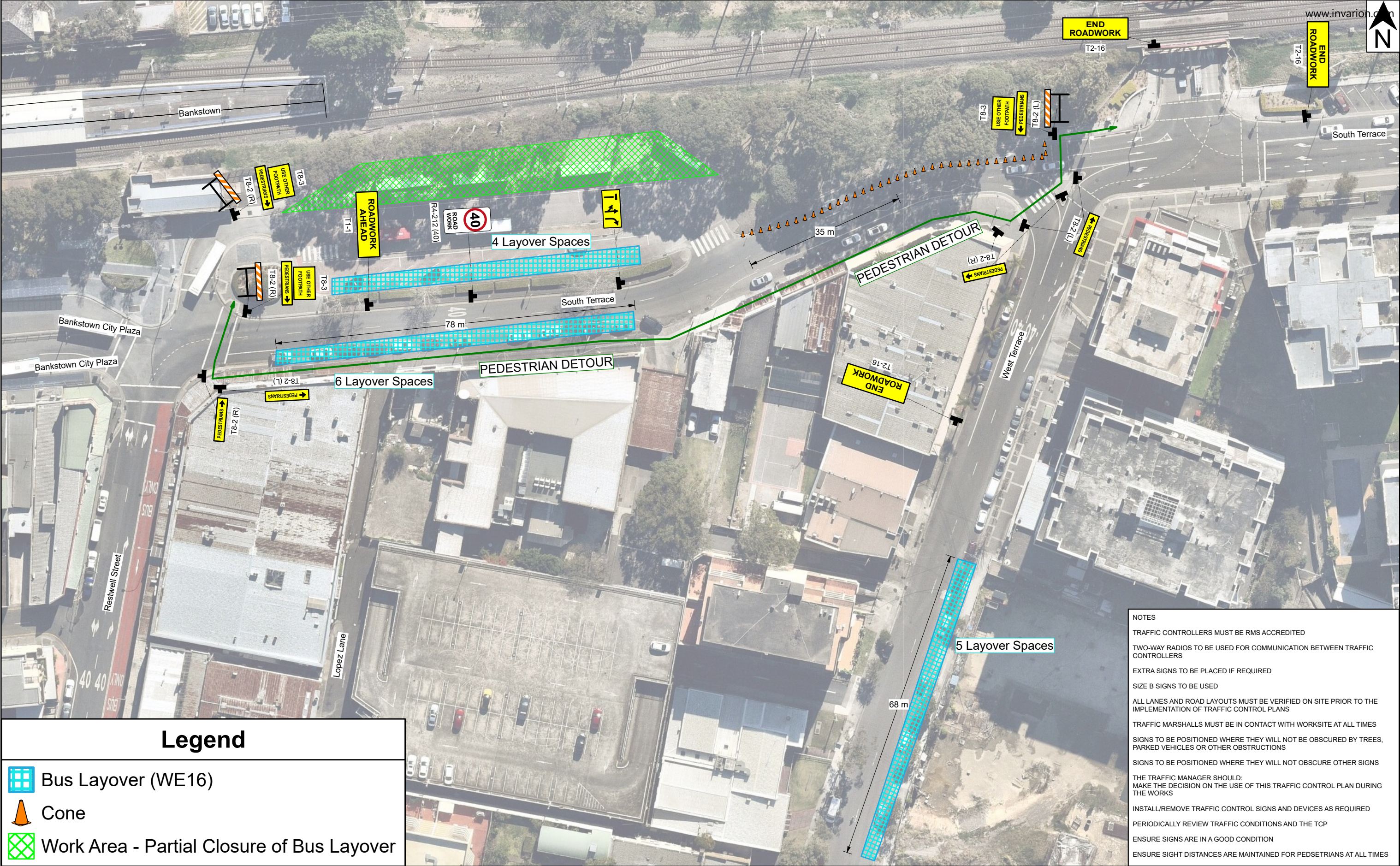
**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL TCP	M.H	17/09/21


APPROVED  
ALEX GREY  
PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN  
CARD NO. 0051873071  
EXPIRY 30/11/2021


Project	BANKSTOWN STATION CTMP	Design	M.H	Drawn	M.H	Checked	A.G
Title	MAIN COMPOUND AV ACCESS	<b>FOR CONSTRUCTION</b>		Date		17/09/2021	
		Project Number	P3519	Sheet Number	1	Issue	001







Legend

 Bus Layover (WE16)

 Cone

 Work Area - Partial Closure of Bus Layover



**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

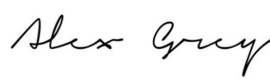
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)

**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS		Drawn	Date
Issue	Revisions/Descriptions		
001	INITIAL TCP	M.H	17/09/21
002	UPDATE TO INCLUDE BUS LAYOVER AREAS	M.H	06/10/21
002	UPDATE BUS LAYOVER AREAS	M.H	07/10/21

APPROVED

ALEX GREY  
PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN  
CARD NO. 0051873071  
EXPIRY 30/11/2021



Project	BANKSTOWN STATION CTMP		
Title	WE16 LANE CLOSURE AND PEDESTRIAN DETOUR		

Design	M.H	Drawn	M.H	Checked	A.G
FOR CONSTRUCTION				Date	07/10/2021
Project Number	P3519	Sheet Number	2	Issue	003



Legend



- NOTES
- TRAFFIC CONTROLLERS MUST BE RMS ACCREDITED
  - TWO-WAY RADIOS TO BE USED FOR COMMUNICATION BETWEEN TRAFFIC CONTROLLERS
  - EXTRA SIGNS TO BE PLACED IF REQUIRED
  - SIZE B SIGNS TO BE USED
  - ALL LANES AND ROAD LAYOUTS MUST BE VERIFIED ON SITE PRIOR TO THE IMPLEMENTATION OF TRAFFIC CONTROL PLANS
  - TRAFFIC MARSHALLS MUST BE IN CONTACT WITH WORKSITE AT ALL TIMES
  - SIGNS TO BE POSITIONED WHERE THEY WILL NOT BE OBSCURED BY TREES, PARKED VEHICLES OR OTHER OBSTRUCTIONS
  - SIGNS TO BE POSITIONED WHERE THEY WILL NOT OBSCURE OTHER SIGNS
  - THE TRAFFIC MANAGER SHOULD:  
MAKE THE DECISION ON THE USE OF THIS TRAFFIC CONTROL PLAN DURING THE WORKS
  - INSTALL/REMOVE TRAFFIC CONTROL SIGNS AND DEVICES AS REQUIRED
  - PERIODICALLY REVIEW TRAFFIC CONDITIONS AND THE TCP
  - ENSURE SIGNS ARE IN A GOOD CONDITION
  - ENSURE SIGHT DISTANCES ARE MAINTAINED FOR PEDSETRIANS AT ALL TIMES



**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

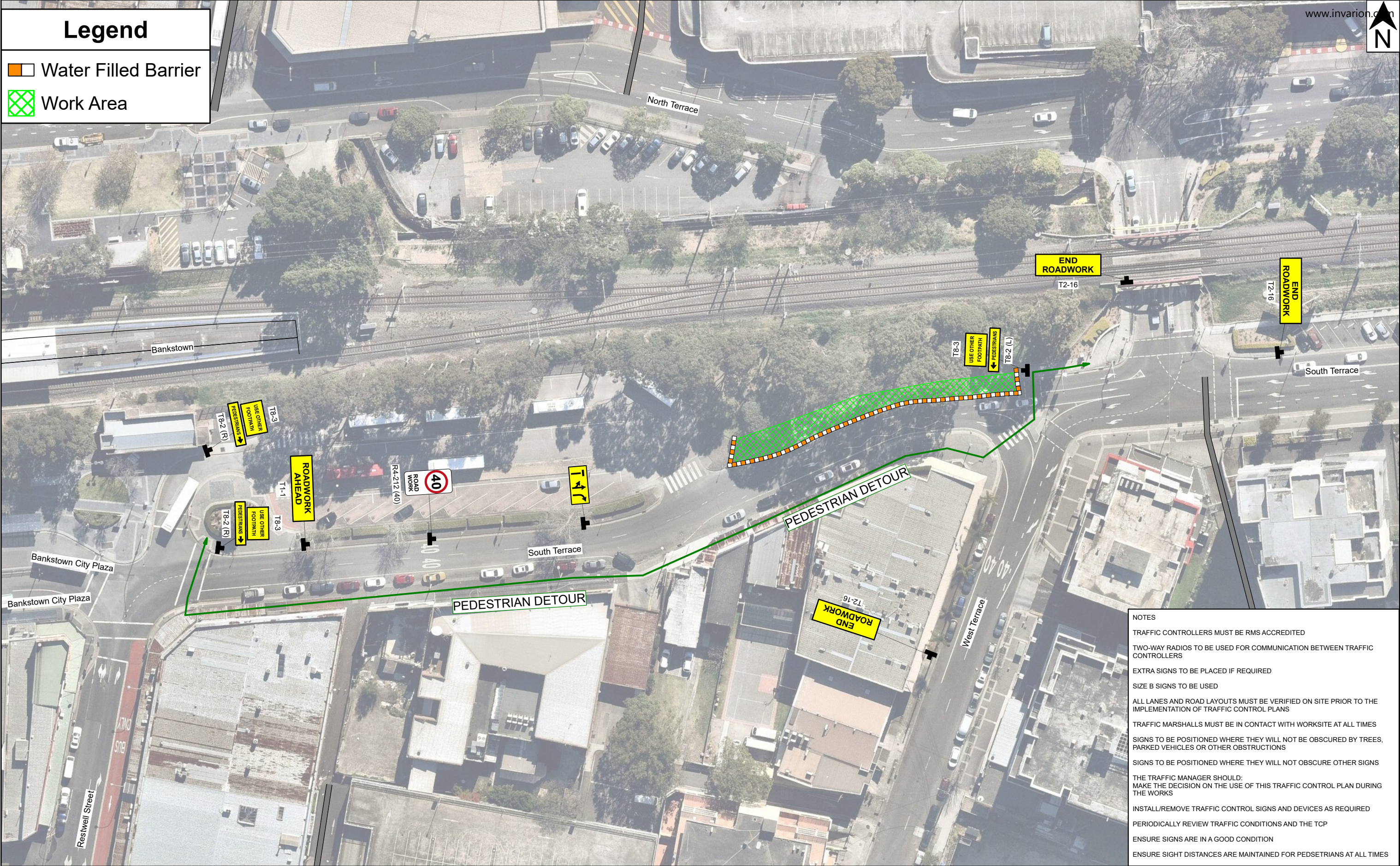
REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL TCP	M.H	17/09/21

APPROVED  
ALEX GREY  
PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN  
CARD NO. 0051873071  
EXPIRY 30/11/2021

*Alex Grey*

Project	BANKSTOWN STATION CTMP		
Title	Design	Drawn	Checked
	M.H	M.H	A.G
PEDESTRIAN DETOUR	FOR CONSTRUCTION		
	Project Number	Sheet Number	Issue
	P3519	3	001





**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)

**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS		Drawn	Date
Issue	Revisions/Descriptions		
001	INITIAL TCP	M.H	27/09/21

APPROVED

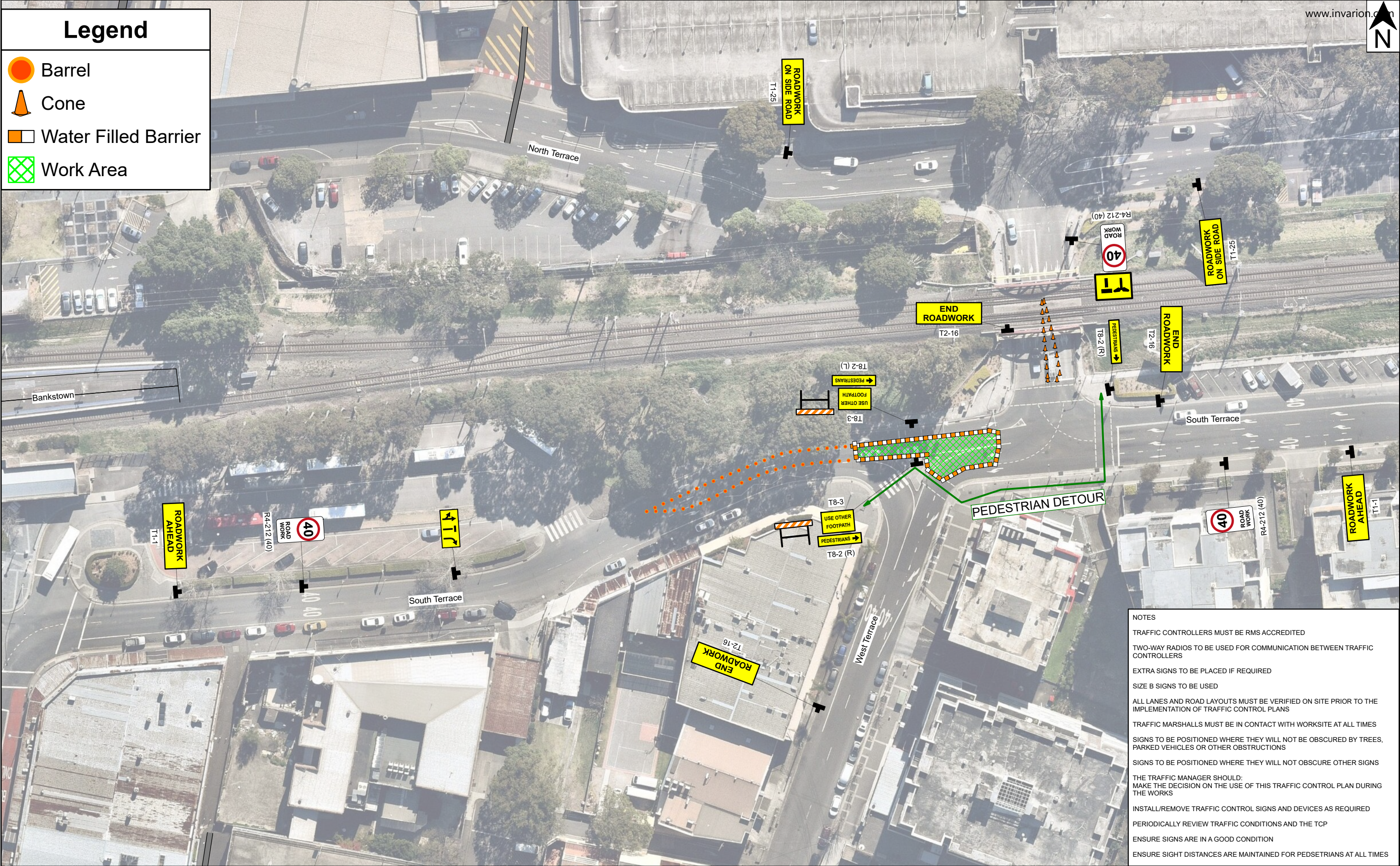
ALEX GREY  
PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN  
CARD NO. 0051873071  
EXPIRY 30/11/2021

*Alex Grey*

Project	BANKSTOWN STATION CTMP		
Title	SEWER WORKS - STAGE 1		

Design	M.H	Drawn	M.H	Checked	A.G
FOR CONSTRUCTION				Date	27/09/2021
Project Number	P3519	Sheet Number	4	Issue	001





Legend

Barrel

Cone

Water Filled Barrier

Work Area

NOTES

TRAFFIC CONTROLLERS MUST BE RMS ACCREDITED

TWO-WAY RADIOS TO BE USED FOR COMMUNICATION BETWEEN TRAFFIC CONTROLLERS

EXTRA SIGNS TO BE PLACED IF REQUIRED

SIZE B SIGNS TO BE USED

ALL LANES AND ROAD LAYOUTS MUST BE VERIFIED ON SITE PRIOR TO THE IMPLEMENTATION OF TRAFFIC CONTROL PLANS

TRAFFIC MARSHALLS MUST BE IN CONTACT WITH WORKSITE AT ALL TIMES

SIGNS TO BE POSITIONED WHERE THEY WILL NOT BE OBSCURED BY TREES, PARKED VEHICLES OR OTHER OBSTRUCTIONS

SIGNS TO BE POSITIONED WHERE THEY WILL NOT OBSCURE OTHER SIGNS

THE TRAFFIC MANAGER SHOULD:  
MAKE THE DECISION ON THE USE OF THIS TRAFFIC CONTROL PLAN DURING THE WORKS

INSTALL/REMOVE TRAFFIC CONTROL SIGNS AND DEVICES AS REQUIRED

PERIODICALLY REVIEW TRAFFIC CONDITIONS AND THE TCP

ENSURE SIGNS ARE IN A GOOD CONDITION

ENSURE SIGHT DISTANCES ARE MAINTAINED FOR PEDSETRIANS AT ALL TIMES

Gold Coast

Suite 26, 58 Riverwalk Avenue, Robina QLD 4226

P: (07) 5562-5377

W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

Brisbane

Level 2, 428 Upper Edward Street, Spring Hill 4000

P: (07) 3831-4442

E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)

Sydney

Studio 203, 3 Gladstone Street, Newtown NSW 2042

P: (02) 9557 6202

REVISIONS		Drawn	Date
Issue	Revisions/Descriptions	M.H	
001	INITIAL TCP		27/09/21

APPROVED

ALEX GREY

PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN

CARD NO. 0051873071

EXPIRY 30/11/2021

Project	BANKSTOWN STATION CTMP	Design	M.H	Drawn	M.H	Checked	A.G
Title	SEWER WORKS - STAGE 2	<div>FOR CONSTRUCTION</div>				Date	27/09/2021
		Project Number	P3519	Sheet Number	5	Issue	001



Legend

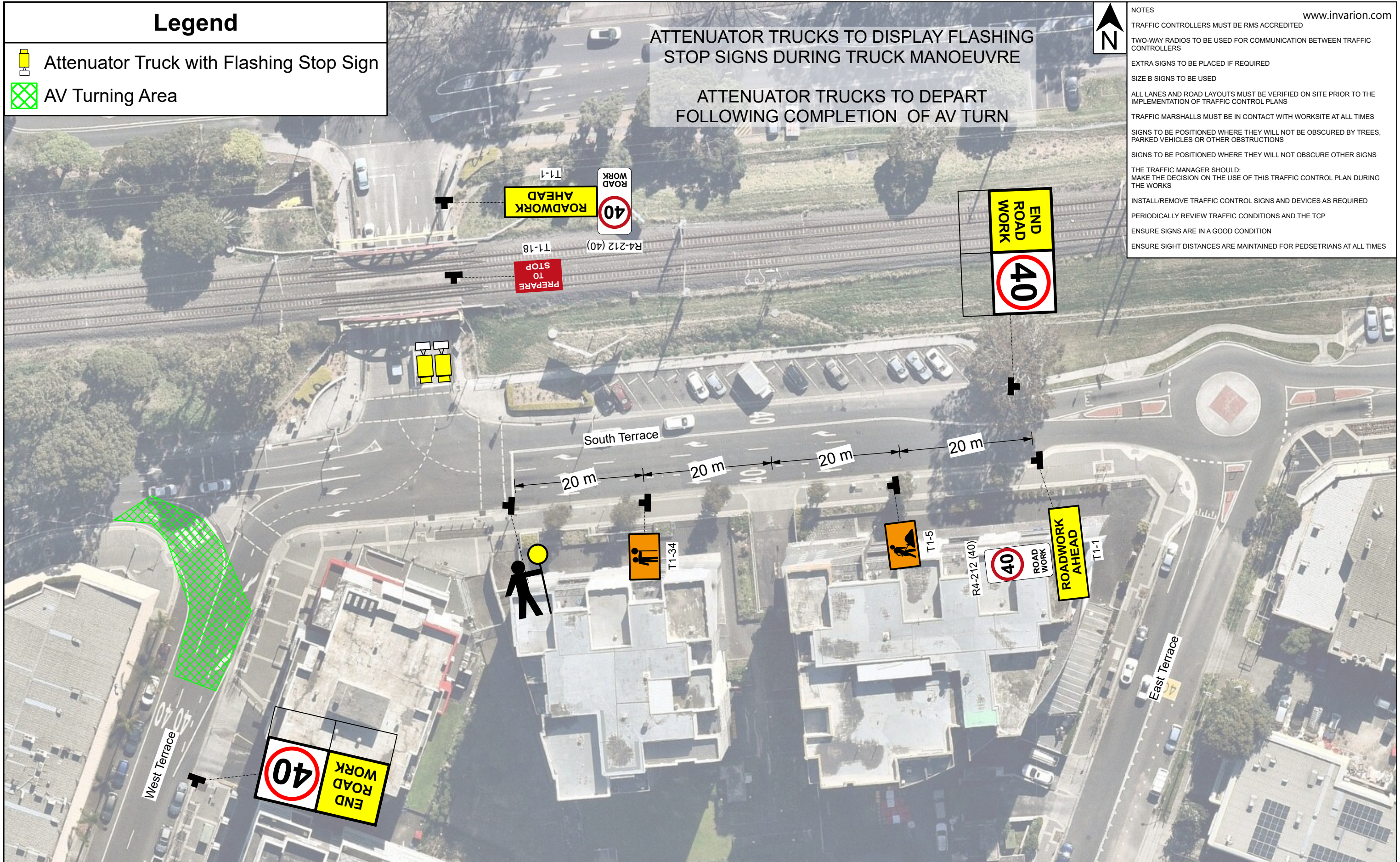
- Attenuator Truck with Flashing Stop Sign
- AV Turning Area




- NOTES
- TRAFFIC CONTROLLERS MUST BE RMS ACCREDITED
- TWO-WAY RADIOS TO BE USED FOR COMMUNICATION BETWEEN TRAFFIC CONTROLLERS
- EXTRA SIGNS TO BE PLACED IF REQUIRED
- SIZE B SIGNS TO BE USED
- ALL LANES AND ROAD LAYOUTS MUST BE VERIFIED ON SITE PRIOR TO THE IMPLEMENTATION OF TRAFFIC CONTROL PLANS
- TRAFFIC MARSHALLS MUST BE IN CONTACT WITH WORKSITE AT ALL TIMES
- SIGNS TO BE POSITIONED WHERE THEY WILL NOT BE OBSCURED BY TREES, PARKED VEHICLES OR OTHER OBSTRUCTIONS
- SIGNS TO BE POSITIONED WHERE THEY WILL NOT OBSCURE OTHER SIGNS
- THE TRAFFIC MANAGER SHOULD:  
MAKE THE DECISION ON THE USE OF THIS TRAFFIC CONTROL PLAN DURING THE WORKS
- INSTALL/REMOVE TRAFFIC CONTROL SIGNS AND DEVICES AS REQUIRED
- PERIODICALLY REVIEW TRAFFIC CONDITIONS AND THE TCP
- ENSURE SIGNS ARE IN A GOOD CONDITION
- ENSURE SIGHT DISTANCES ARE MAINTAINED FOR PEDSETRIANS AT ALL TIMES

ATTENUATOR TRUCKS TO DISPLAY FLASHING STOP SIGNS DURING TRUCK MANOEUVRE

ATTENUATOR TRUCKS TO DEPART FOLLOWING COMPLETION OF AV TURN





**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

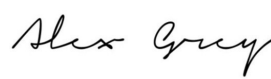
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)

**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS		Drawn	Date
Issue	Revisions/Descriptions		
001	INITIAL TCP	M.H	27/09/21
002	ADD NORTHERN APPROACH TRAFFIC CONTROL	M.H	02/11/21

APPROVED

ALEX GREY  
PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN  
CARD NO. 0051873071  
EXPIRY 30/11/2021

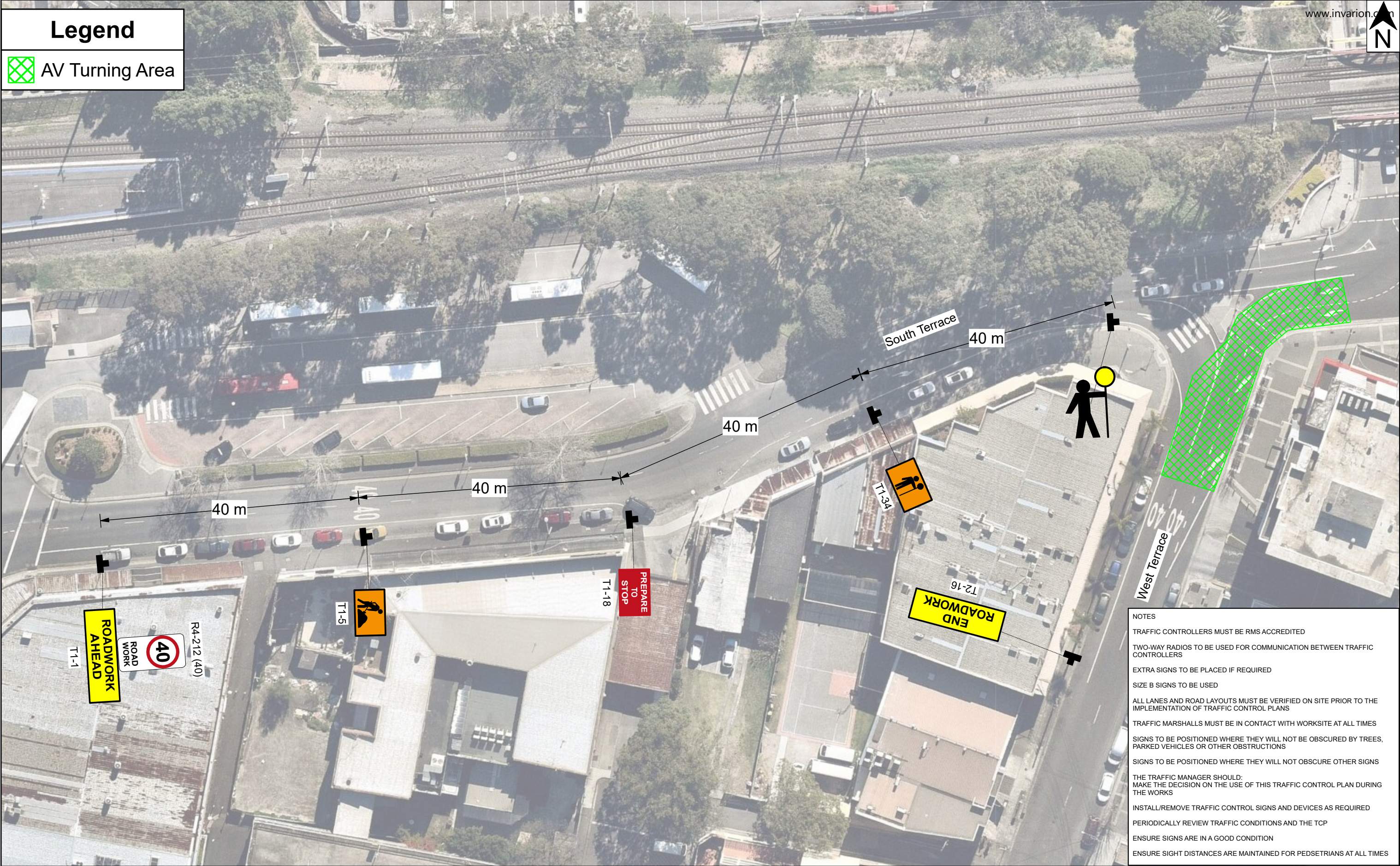


Project	Design	Drawn	Checked
BANKSTOWN STATION CTMP	M.H	M.H	A.G

FOR CONSTRUCTION		Date
		02/11/2021

Project	Sheet Number	Issue
SOUTH TERRACE / WEST TERRACE TC EASTERN SIDE	6	002





Legend

AV Turning Area

- NOTES
- TRAFFIC CONTROLLERS MUST BE RMS ACCREDITED

TWO-WAY RADIOS TO BE USED FOR COMMUNICATION BETWEEN TRAFFIC CONTROLLERS

EXTRA SIGNS TO BE PLACED IF REQUIRED

SIZE B SIGNS TO BE USED

ALL LANES AND ROAD LAYOUTS MUST BE VERIFIED ON SITE PRIOR TO THE IMPLEMENTATION OF TRAFFIC CONTROL PLANS

TRAFFIC MARSHALLS MUST BE IN CONTACT WITH WORKSITE AT ALL TIMES

SIGNS TO BE POSITIONED WHERE THEY WILL NOT BE OBSCURED BY TREES, PARKED VEHICLES OR OTHER OBSTRUCTIONS

SIGNS TO BE POSITIONED WHERE THEY WILL NOT OBSCURE OTHER SIGNS

THE TRAFFIC MANAGER SHOULD:  
MAKE THE DECISION ON THE USE OF THIS TRAFFIC CONTROL PLAN DURING THE WORKS

INSTALL/REMOVE TRAFFIC CONTROL SIGNS AND DEVICES AS REQUIRED

PERIODICALLY REVIEW TRAFFIC CONDITIONS AND THE TCP

ENSURE SIGNS ARE IN A GOOD CONDITION

ENSURE SIGHT DISTANCES ARE MAINTAINED FOR PEDSETRIANS AT ALL TIMES

Gold Coast

Suite 26, 58 Riverwalk Avenue, Robina QLD 4226

P: (07) 5562-5377

W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

Brisbane

Level 2, 428 Upper Edward Street, Spring Hill 4000

P: (07) 3831-4442

E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)

Sydney

Studio 203, 3 Gladstone Street, Newtown NSW 2042

P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL TCP	M.H	27/09/21

APPROVED

ALEX GREY

PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN


CARD NO. 0051873071

EXPIRY 30/11/2021

Project	BANKSTOWN STATION CTMP		
Title	SOUTH TERRACE / WEST TERRACE TC WESTERN SIDE		
	Design	Drawn	Checked
M.H		M.H	A.G
FOR CONSTRUCTION		Date 27/09/2021	
Project Number P3519	Sheet Number 7	Issue 001	







**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)

**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL TCP	M.H	27/09/21

APPROVED

ALEX GREY  
PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN  
CARD NO. 0051873071  
EXPIRY 30/11/2021

*Alex Grey*

Project	BANKSTOWN STATION CTMP		
Title	RAYMOND STREET / WEST TERRACE TC		
Design	M.H	Drawn	M.H
FOR CONSTRUCTION		Checked	A.G
Project Number	P3519	Sheet Number	8
Issue	001	Date	27/09/2021

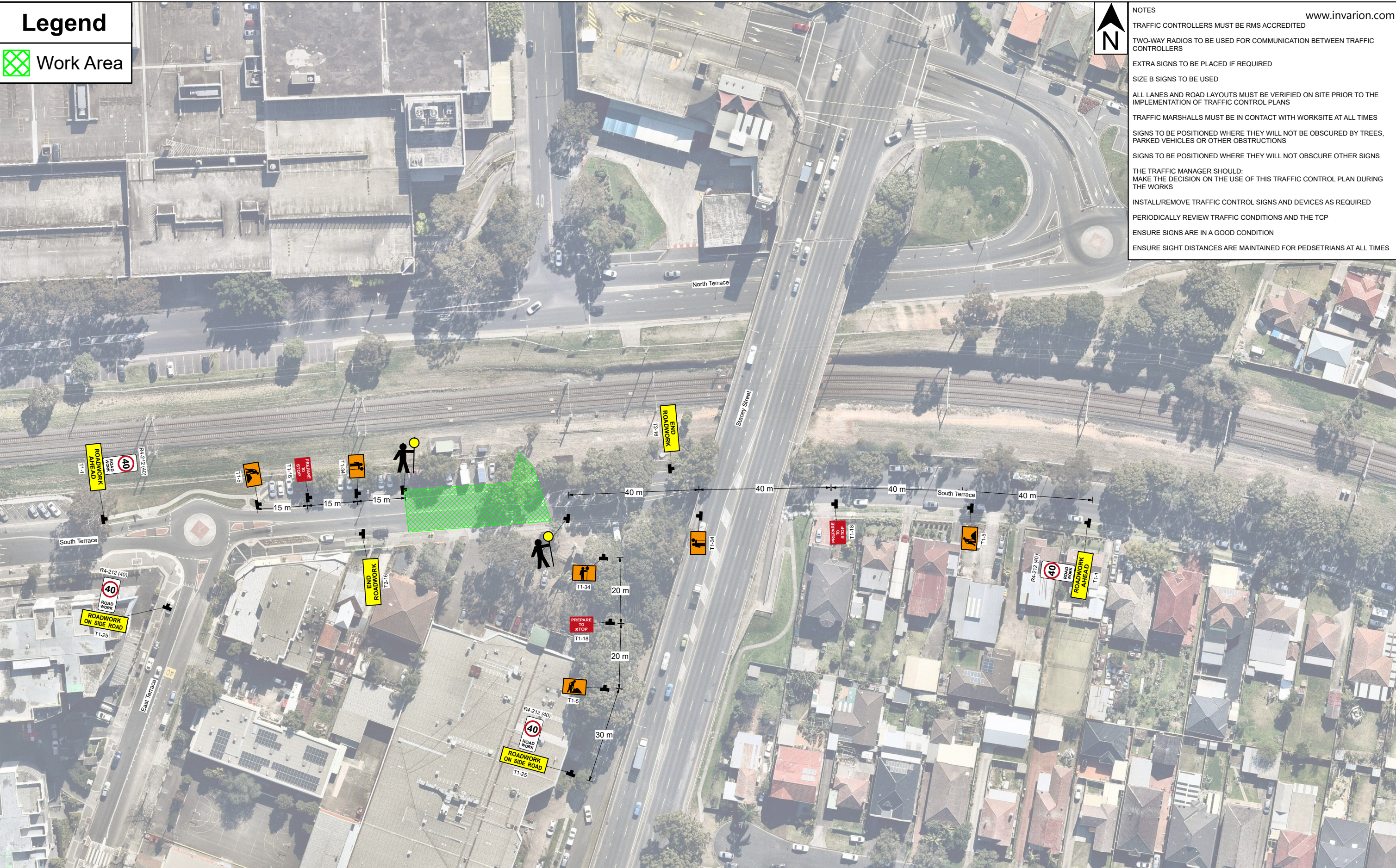


Legend

 Work Area



- NOTES
- TRAFFIC CONTROLLERS MUST BE RMS ACCREDITED
- TWO-WAY RADIOS TO BE USED FOR COMMUNICATION BETWEEN TRAFFIC CONTROLLERS
- EXTRA SIGNS TO BE PLACED IF REQUIRED
- SIZE B SIGNS TO BE USED
- ALL LANES AND ROAD LAYOUTS MUST BE VERIFIED ON SITE PRIOR TO THE IMPLEMENTATION OF TRAFFIC CONTROL PLANS
- TRAFFIC MARSHALLS MUST BE IN CONTACT WITH WORKSITE AT ALL TIMES
- SIGNS TO BE POSITIONED WHERE THEY WILL NOT BE OBTSCURED BY TREES, PARKED VEHICLES OR OTHER OBSTRUCTIONS
- SIGNS TO BE POSITIONED WHERE THEY WILL NOT OBTSCURE OTHER SIGNS
- THE TRAFFIC MANAGER SHOULD:  
MAKE THE DECISION ON THE USE OF THIS TRAFFIC CONTROL PLAN DURING THE WORKS
- INSTALL/REMOVE TRAFFIC CONTROL SIGNS AND DEVICES AS REQUIRED
- PERIODICALLY REVIEW TRAFFIC CONDITIONS AND THE TCP
- ENSURE SIGNS ARE IN A GOOD CONDITION
- ENSURE SIGHT DISTANCES ARE MAINTAINED FOR PEDSETRIANS AT ALL TIMES



**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL TCP	M.H	17/09/21

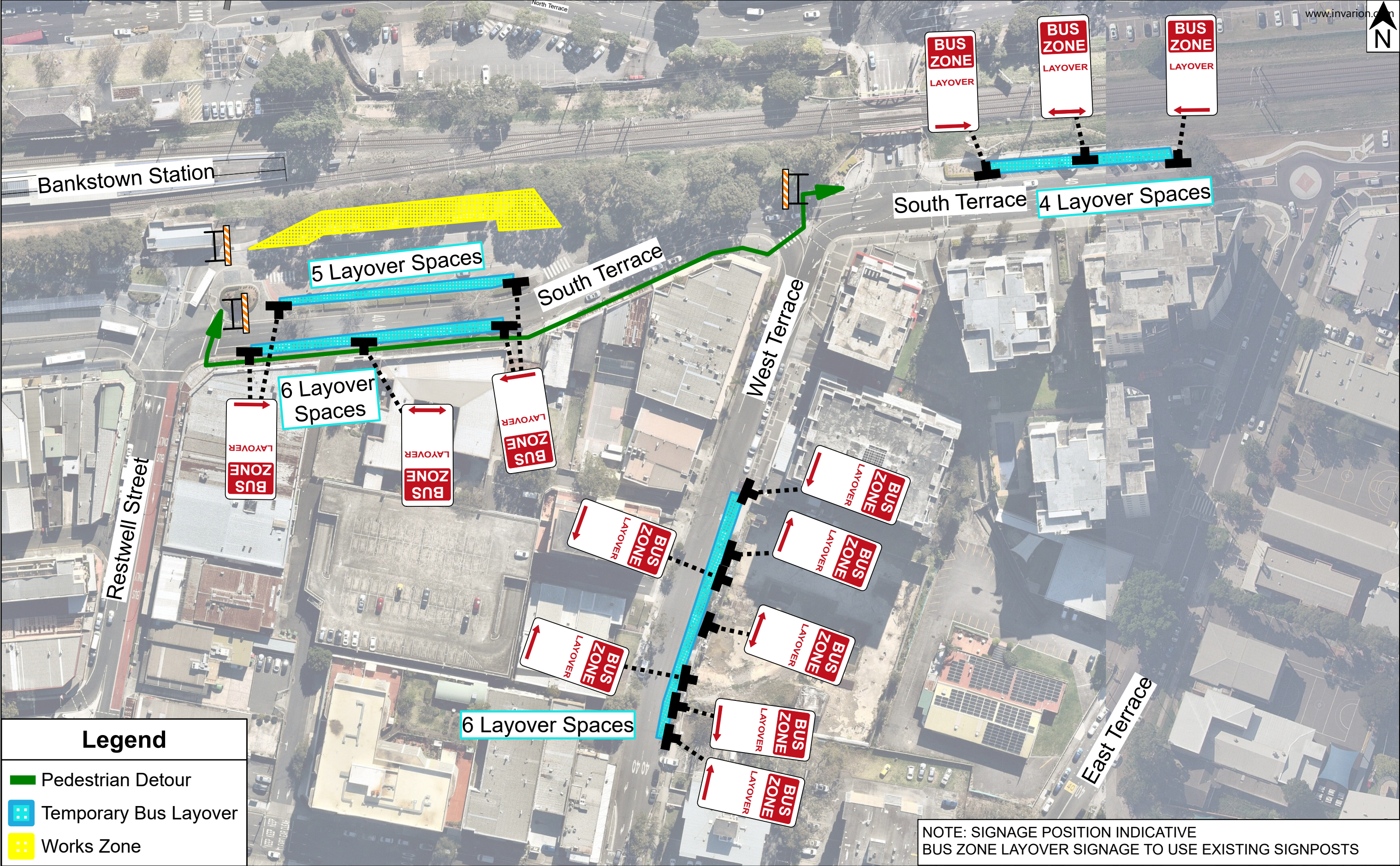
APPROVED

ALEX GREY  
PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN  
CARD NO. 0051873071  
EXPIRY 30/11/2021

*Alex Grey*


Project	BANKSTOWN STATION CTMP		
Title	Design	Drawn	Checked
	M.H	M.H	A.G
TERRACE STREET GATE EXIT	FOR CONSTRUCTION		
	Project Number	Sheet Number	Issue
	P3519	9	001





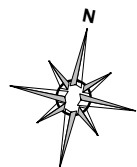
### Legend

- Pedestrian Detour
- Temporary Bus Layover
- Works Zone

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				Project BANKSTOWN STATION CTMP			Design M.H	Drawn M.H	Checked A.G
					Title TEMPORARY BU LAYOVER AREAS AND PEDESTRIAN DETOUR			<div>FOR CONSTRUCTION</div>		
					Project Number P3519			Sheet Number 10	Date 29/10/2021	
								Issue 003		

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL PLAN	M.H	28/10/21
002	REMOVE TC SIGNS	M.H	29/10/21
003	ADD BUS LAYOVER SIGNS, REMOVE ONE LAYOVER AREA	M.H	29/10/21





North Terrace

South Terrace

Restwell St

South Terrace

West Terrace

LEGEND		RESOURCES	
	SITE ACCESS GATE		X 3
	EXISTING FENCE AREA		X 1
	WATER FILLED BARRIERS		
	CONES		
	WORK AREA		

USE OTHER FOOTPATH	PEDESTRIANS WATCH YOUR STEP
FOOTPATH CLOSED	PEDESTRIANS

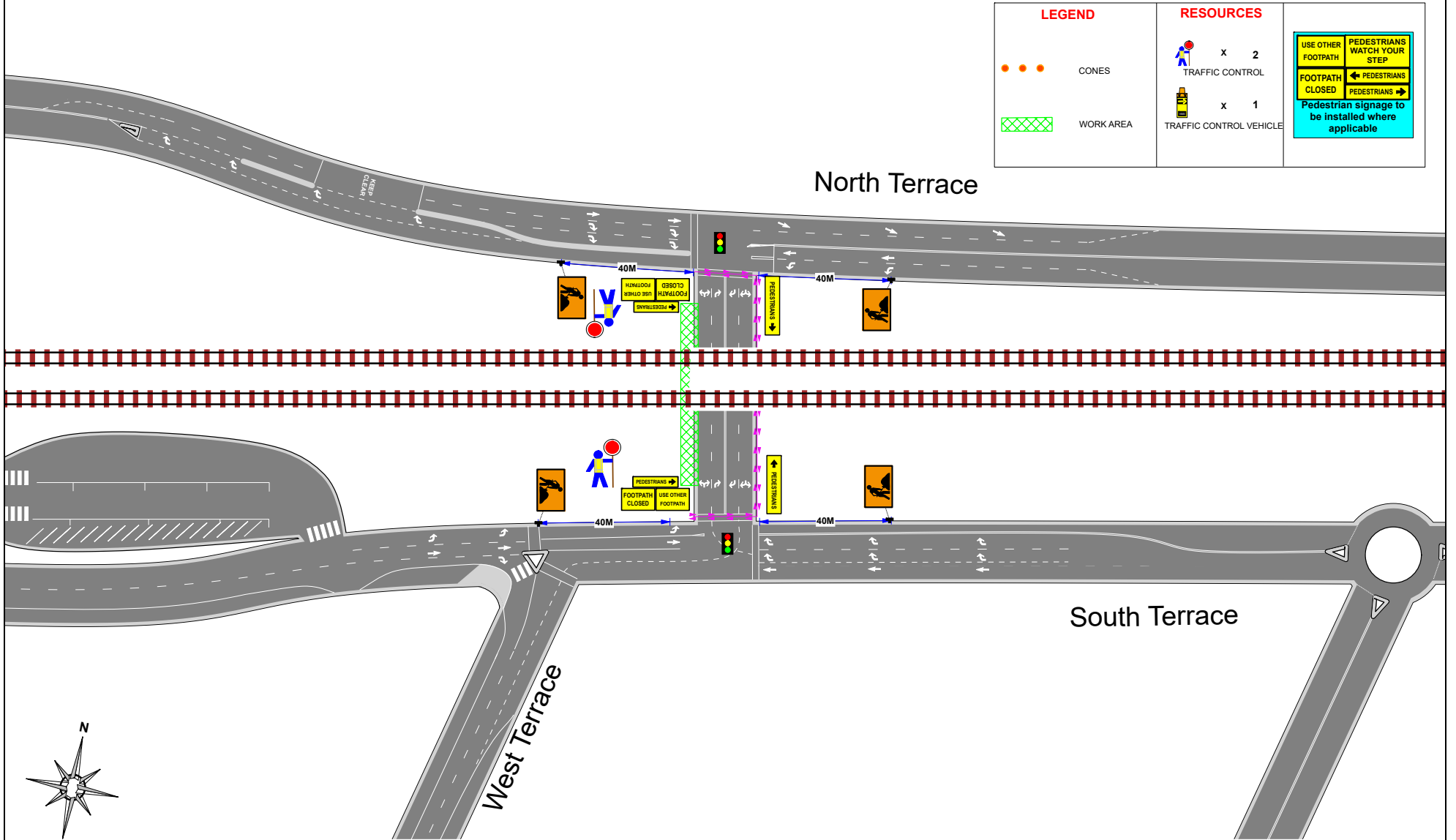
Pedestrian signage to be installed where applicable

REV	REVISION DESCRIPTION	TGS PLAN #	SOUTH TERRACE-003	CLIENT:	JOHN HOLLAND LANDS ORIGIN	DESIGNED BY	S. KOLIMI	APPROVED BY		IMPLEMENTED BY		
00	SUPPLIED TO CLIENT	ROAD NAME	SOUTH TERRACE	JHLORJV		SIGNATURE	<i>K. Sandberg</i>	SIGNATURE		SIGNATURE		
01		SUBURB	BANKSTOWN	ROL REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	DATE	12.10.2021	DATE		DATE		
02		WORK LOCATION	MULTIPLE LANES - LANE & SHOULDER	ROAD SPEED(S)	40 KM/HR	CERTIFICATE #	TCT0065537	CERTIFICATE #		CERTIFICATE #		



Web: [www.dtraffic.com.au](http://www.dtraffic.com.au)  
 Email: [sydney@dd-group.com.au](mailto:sydney@dd-group.com.au)  
 Phone: 1300 597 622





REV	REVISION DESCRIPTION	TGS PLAN #	SOUTH TERRACE-005	CLIENT:	DESIGNED BY	S. KOLIMI	APPROVED BY	IMPLEMENTED BY		
00	SUPPLIED TO CLIENT	ROAD NAME	SOUTH TERRACE	JHLORJV	SIGNATURE	<i>K. Sandberg</i>	SIGNATURE	SIGNATURE		
01		SUBURB	BANKSTOWN	ROL REQUIRED	DATE	12.10.2021	DATE	DATE		
02		WORK LOCATION	MULTIPLE LANES - PEDESTRIAN CLOSURE	ROAD SPEED(S)	CERTIFICATE #	TCT0065537	CERTIFICATE #	CERTIFICATE #		



Web: www.dtraffic.com.au  
Email: sydney@d-d-group.com.au  
Phone: 1300 597 622



**LEGEND**

TEMPORARY SIGNAGE  
CONFORMING TO  
AS1742.3 & TCAWS V.6



AUTHORISED TRAFFIC  
CONTROLLER.



WORK AREA



SHADOW VEHICLE



PEDESTRIAN PATH



CONES

# JOHN HOLLAND

SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



North Ter

Traffic Controller's Stop / Slow  
-Delineate your position  
in advance with 4 traffic  
cones along the kerb @ 4M  
-Ensure all traffic comes to a  
complete stop before proceeding  
through the work zone.  
-Nights - Stand under  
a street light / daymaker  
-Maintain an escape route  
at all times  
- Reassess your position  
continuously for new risks



North Ter

South Ter

South Ter

Bus Depo

South Ter

West Ter

East Ter

SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



Approved by: Aisling O'Donnell

*Aisling O'Donnell*

PWZTMP No: 0052051227  
Expiry Date: 22nd June 2022

email: a.odonnell@ferrycarrig.com.au

Drawn by: Caoimhe Scullion  
Traffic Coordinator

*C. Scullion*

PWZTMP No: TCT0012122  
Issue Date: 2nd October 2019

Client: John Holland  
Project ID: FC254 - Bankstown Station  
Location: Bankstown  
Est Duration: 2-3 Shifts  
Working Hours: Nightshift  
ROL Req'd  
Traffic Volumes: TBC  
Plan Number: 220150  
Date Drawn: 14th December 2021  
Plan Expiry: 30th December 2022

Revision 1:  
Signed:  
Revision 2:  
Signed:  
Revision 3:  
Signed:

This site specific TGS is based on TNSW TCAWS Ver 6.0 (2020) & must be installed & packed up by qualified traffic controllers with current Traffic Controller & Implement Traffic Control Plans accreditation. Modifications to this plans must be approved by a person holding the PWZTMP qualification, and must be supported by a TMP or risk assessment. TCAWS 7.20.4. The TCCP person may vary the positioning of signs and devices provided the requirements of Section 7.10.3 TCAWS, regarding Tolerance on Positioning, are met. Traffic controller's to identify and make note of escape routes prior to commencement of works. Local constraints may not allow sign and devices to be placed exactly in accordance with the TGS judgement, therefore it is permissible for a TCC to position signs 10% less and up to 25% greater than the TGS indicated distance. Signs spacing measurements may extend across some intersections, therefore warning signs may need to be placed in the side streets. Signs are to be Class 1 retro-reflective, positioned adjacent to the footpath or where vehicle parking occurs place signs in the parking lane or elevated on posts. They must be positioned so that they are in clear view of passing motorists. The TGS is approved for use by Ferrycarrig Construction Traffic Control ONLY. The drafter takes no responsibility for unauthorised and unapproved implementation of this TGS.

**NOT TO SCALE**  
TGS BEST VIEWED  
WHEN PRINTED IN  
A3





**LEGEND**

TEMPORARY SIGNAGE  
CONFORMING TO  
AS1742.3 & TCAWS V.6



AUTHORISED TRAFFIC  
CONTROLLER.



WORK AREA



SHADOW VEHICLE



PEDESTRIAN PATH



CONES

# JOHN HOLLAND

SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



North Ter

Traffic Controller's Stop / Slow  
-Delineate your position  
in advance with 4 traffic  
cones along the kerb @ 4M  
-Ensure all traffic comes to a  
complete stop before proceeding  
through the work zone.  
-Nights - Stand under  
a street light / daymaker  
use a nightwand  
-Maintain an escape route  
at all times  
- Reassess your position  
continuously for new risks



North Ter

SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



Bus Depo

South Ter

40m  
Taper

10m  
Buffer

South Ter

SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



South Ter

Lights to be turned  
on flashing amber

SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



East Ter

SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



Approved by: Aisling O'Donnell

*Aisling O'Donnell*

PWZTMP No: 0052051227

Expiry Date: 22nd June 2022

email: a.odonnell@ferrycarrig.com.au



Drawn by: Caoimhe Scullion  
Traffic Coordinator

*C. Scullion*

PWZTMP No: TCT0012122

Issue Date: 2nd October 2019

Client: John Holland  
Project ID: FC254 - Bankstown Station  
Location: Bankstown  
Est Duration: 2-3 Shifts  
Working Hours: Nightshift  
ROL Req'd  
Traffic Volumes: TBC  
Plan Number: 220151  
Date Drawn: 14th December 2021  
Plan Expiry: 30th December 2022

Revision 1:

Signed:

Revision 2:

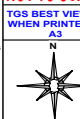
Signed:

Revision 3:

Signed:

This site specific TGS is based on TNSW TCAWS Ver 6.0 (2020) & must be installed & packed up by qualified traffic controllers with current Traffic Controller & Implement Traffic Control Plans accreditation.  
Modifications to this plans must be approved by a person holding the PWZTMP qualification, and must be supported by a TMP or risk assessment. TCAWS 7.20.4  
The TFCP person may vary the positioning of signs and devices provided the requirements of Section 7.10.3 TCAWS, regarding Tolerance on Positioning, are met.  
Traffic controller's to identify and make note of escape routes prior to commencement of works. Local constraints may not allow sign and devices to be placed exactly in accordance with the TGS judgement, therefore it is permissible for a TFC to position signs 10% less and up to 25% greater than the TGS indicated distance.  
Signs spacing measurements may extend across some intersections, therefore warning signs may need to be placed in the side streets.  
Signs are to be Class 1 retro-reflective, positioned adjacent to the footpath or where vehicle parking occurs place signs in the parking lane or elevated on posts. They must be positioned so that they are in clear view of passing motorists.  
The TGS is approved for use by Ferrycarrig Construction Traffic Control ONLY.  
The drafter takes no responsibility for unauthorised and unapproved implementation of this TGS.

**NOT TO SCALE**  
TGS BEST VIEWED  
WHEN PRINTED IN  
A3





**LEGEND**

TEMPORARY SIGNAGE  
CONFORMING TO  
AS1742.3 & TCAWS V.6



AUTHORISED TRAFFIC  
CONTROLLER.



WORK AREA



SHADOW VEHICLE

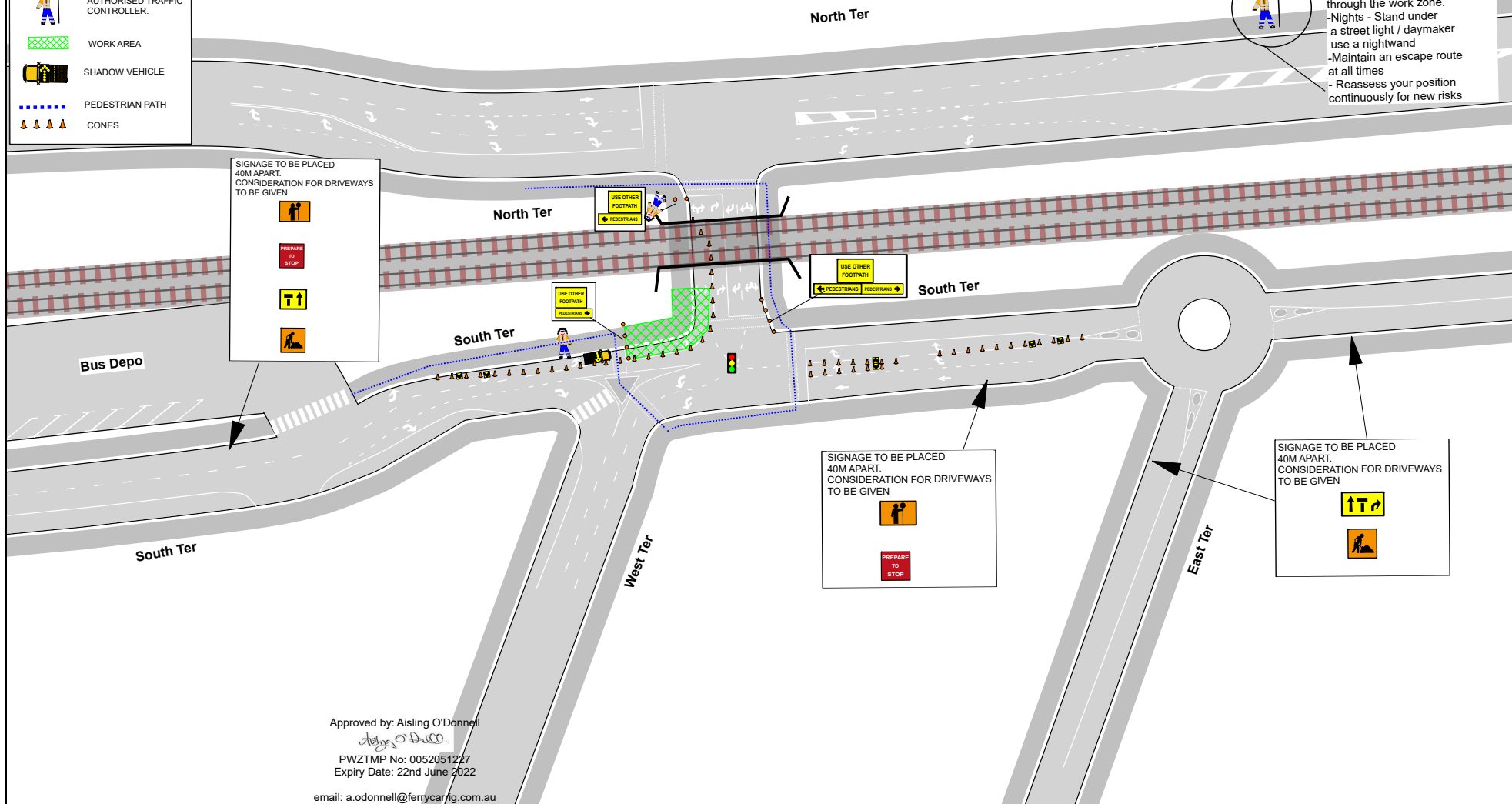


PEDESTRIAN PATH



CONES

# JOHN HOLLAND



Drawn by: Caoimhe Scullion  
Traffic Coordinator

PWZTMP No: TCT0012122  
Issue Date: 2nd October 2019

Client: John Holland  
Project ID: FC254 - Bankstown Station  
Location: Bankstown  
Est Duration: 2-3 Shifts  
Working Hours: Nightshift  
ROL Req'd  
Traffic Volumes: TBC  
Plan Number: 220152  
Date Drawn: 14th December 2021  
Plan Expiry: 30th December 2022

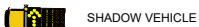
Revision 1:  
Signed:  
Revision 2:  
Signed:  
Revision 3:  
Signed:

This site specific TGS is based on TNSW TCAWS Ver 6.0 (2020) & must be installed & packed up by qualified traffic controllers with current Traffic Controller & Implement Traffic Control Plans accreditation.  
Modifications to this plans must be approved by a person holding the PWZTMP qualification, and must be supported by a TMP or risk assessment. TCAWS 7.20.4.  
The ITC person may vary the positioning of signs and devices provided the requirements of Section 7.10.3 TCAWS, regarding Tolerance on Positioning, are met.  
Traffic controller's to identify and make note of escape routes prior to commencement of works  
Local constraints may not allow signs and devices to be placed exactly in accordance with the TGS judgement, therefore it is permissible for a ITC to position signs 10% less and up to 25% greater than the TGS indicated distance.  
Signs spacing measurements may extend across some intersections, therefore warning signs may need to be placed in the side streets.  
Signs are to be Class 1 retro-reflective, positioned adjacent to the footpath or where vehicle parking occurs place signs in the parking lane or elevated on posts. They must be positioned so that they are in clear view of passing motorists.  
The TGS is approved for use by FerryCarrig Construction Traffic Control ONLY.  
The drafter takes no responsibility for unauthorised and unapproved implementation of this TGS.

**NOT TO SCALE**  
TGS BEST VIEWED  
WHEN PRINTED IN  
A3





**LEGEND**

# JOHN HOLLAND

**Swept path**

Overall values of Long rigid bus

Length: 14.50 m  
Max width: 2.50 m  
Lock to lock: 4 s

Steering angle: 46.37 °  
Turn radius (curb to curb): 12.5 m  
Turn radius (wall to wall): 14.38 m

SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



Approved by: Aisling O'Donnell

*Aisling O'Donnell*

PWZTMP No: 0052051227

Expiry Date: 22nd June 2022

email: a.odonnell@ferrycarrig.com.au

Full width of the lane  
not to be taken to assist  
with bus swept path.

Parking to be taken in  
these locations to allow  
for swept path of buses

**Note:**  
Traffic controllers to monitor buses turning  
into the Bus depo and if required, move traffic  
cones to assist with turning paths.

**Traffic Controller's Stop / Slow**  
-Delineate your position  
in advance with 4 traffic  
cones along the kerb @ 4M  
-Ensure all traffic comes to a  
complete stop before proceeding  
through the work zone.  
-Nights - Stand under  
a street light / daymaker  
use a nightwand  
-Maintain an escape route  
at all times  
- Reassess your position  
continuously for new risks



Drawn by: Caoimhe Scullion  
Traffic Coordinator

*C. Scullion*  
PWZTMP No: TCT0012122  
Issue Date: 2nd October 2019

Client: John Holland  
Project ID: FC254 - Bankstown Station  
Location: Bankstown  
Est Duration: 2-3 Shifts  
Working Hours: Nightshift  
ROL Req'd  
Traffic Volumes: TBC  
Plan Number: 220153  
Date Drawn: 14th December 2021  
Plan Expiry: 30th December 2022

Revision 1:  
Signed:  
Revision 2:  
Signed:  
Revision 3:  
Signed:

This site specific TGS is based on TNSW TCAWS Ver 6.0 (2020) & must be installed & packed up by qualified traffic controllers with current Traffic Controller & Implement Traffic Control Plans accreditation.  
Modifications to this plans must be approved by a person holding the PWZTMP qualification, and must be supported by a TMP or risk assessment. TCAWS 7.20.4.  
The TCTP person may vary the positioning of signs and devices provided the requirements of Section 7.10.3 TCAWS, regarding Tolerance on Positioning, are met.  
Traffic controller's to identify and make note of escape routes prior to commencement of works. Local constraints may not allow sign and devices to be placed exactly in accordance with the TGS judgement, therefore it is permissible for a TCT to position signs 10% less and up to 25% greater than the TGS indicated distance.  
Signs spacing measurements may extend across some intersections, therefore warning signs may need to be placed in the side streets.  
Signs are to be Class 1 retro-reflective, positioned adjacent to the footpath or where vehicle parking occurs place signs in the parking lane or elevated on posts. They must be positioned so that they are in clear view of passing motorists.  
The TGS is approved for use by Ferrycarrig Construction Traffic Control ONLY.  
The drafter takes no responsibility for unauthorised and unapproved implementation of this TGS.

**NOT TO SCALE**  
TGS BEST VIEWED  
WHEN PRINTED IN  
A3





**LEGEND**

TEMPORARY SIGNAGE  
CONFORMING TO  
AS1742.3 & TCAWS V.6



AUTHORISED TRAFFIC  
CONTROLLER.



WORK AREA



SHADOW VEHICLE



PEDESTRIAN PATH



CONES

# JOHN HOLLAND

**Swept path**

Overall values of Long rigid bus

Length: 14.50 m      Steering angle: 46.37 °  
Max width: 2.50 m      Turn radius (curb to curb): 12.5 m  
Lock to lock: 4 s      Turn radius (wall to wall): 14.38 m

SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



SIGNAGE TO BE PLACED  
40M APART.  
CONSIDERATION FOR DRIVEWAYS  
TO BE GIVEN



Approved by: Aisling O'Donnell

*Aisling O'Donnell*

PWZTMP No: 0052051227

Expiry Date: 22nd June 2022

email: a.odonnell@ferrycarrig.com.au

Full width of the lane  
not to be taken to assist  
with bus swept path.

Parking to be taken in  
these locations to allow  
for swept path of buses

**Note:**  
Traffic controllers to monitor buses turning  
into the Bus depo and if required, move traffic  
cones to assist with turning paths.

North Ter

North Ter

South Ter

South Ter

South Ter

West Ter

Restwell St

Traffic Controller's Stop  
-Delineate your position  
in advance with 4 traffic  
cones along the kerb  
-Ensure all traffic comes  
complete stop before  
through the work zone  
-Nights - Stand under  
a street light / dayma  
use a nightwand  
-Maintain an escape r  
at all times  
- Reassess your posit  
continuously for new



Drawn by: Caoimhe Scullion  
Traffic Coordinator

*C. Scullion*

PWZTMP No: TCT0012122  
Issue Date: 2nd October 2019

Client: John Holland  
Project ID: FC254 - Bankstown Station  
Location: Bankstown  
Est Duration: 2-3 Shifts  
Working Hours: Nightshift  
ROL Req'd  
Traffic Volumes: TBC  
Plan Number: 220154  
Date Drawn: 14th December 2021  
Plan Expiry: 30th December 2022

Revision 1:  
Signed:  
Revision 2:  
Signed:  
Revision 3:  
Signed:

This site specific TGS is based on TNSW TCAWS Ver 6.0 (2020) & must be installed & packed up by qualified traffic controllers with current Traffic Controller & Implement Traffic Control Plans accreditation.  
Modifications to this plans must be approved by a person holding the PWZTMP qualification, and must be supported by a TMP or risk assessment. TCAWS 7.20.4.  
The TCG person may vary the positioning of signs and devices provided the requirements of Section 7.10.3 TCAWS, regarding Tolerance on Positioning, are met.  
Traffic controller's to identify and make note of escape routes prior to commencement of works  
Local constraints may not allow sign and devices to be placed exactly in accordance with the TGS judgement, therefore it is permissible for a TCG to position signs 10% less and up to 25% greater than the TGS indicated distance.  
Signs spacing measurements may extend across some intersections, therefore warning signs may need to be placed in the side streets.  
Signs are to be Class 1 retro-reflective, positioned adjacent to the footpath or where vehicle parking occurs place signs in the parking lane or elevated on posts. They must be positioned so that they are in clear view of passing motorists.  
The TGS is approved for use by Ferrycarrig Construction Traffic Control ONLY.  
The drafter takes no responsibility for unauthorised and unapproved implementation of this TGS.

**NOT TO SCALE**  
TGS BEST VIEWED  
WHEN PRINTED IN  
A3





LEGEND

- TEMPORARY SIGNAGE CONFORMING TO AS1742.3 & TCAWS V.6
- AUTHORISED TRAFFIC CONTROLLER.
- WORK AREA
- SHADOW VEHICLE
- PEDESTRIAN PATH
- CONES

SIGNAGE TO BE PLACED 40M APART. CONSIDERATION FOR DRIVEWAYS TO BE GIVEN



SIGNAGE TO BE PLACED 40M APART. CONSIDERATION FOR DRIVEWAYS TO BE GIVEN



SIGNAGE TO BE PLACED 40M APART. CONSIDERATION FOR DRIVEWAYS TO BE GIVEN



SIGNAGE TO BE PLACED 40M APART. CONSIDERATION FOR DRIVEWAYS TO BE GIVEN



JOHN HOLLAND

Traffic Controller's Stop / Slow  
-Delineate your position in advance with 4 traffic cones along the kerb @ 4M  
-Ensure all traffic comes to a complete stop before proceeding through the work zone.  
-Nights - Stand under a street light / daymaker use a nightwand  
-Maintain an escape route at all times  
- Reassess your position continuously for new risks

Approved by: Aisling O'Donnell

*Aisling O'Donnell*

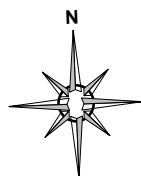
PWZTMP No: 0052051227





Expiry Date: 22nd June 2022

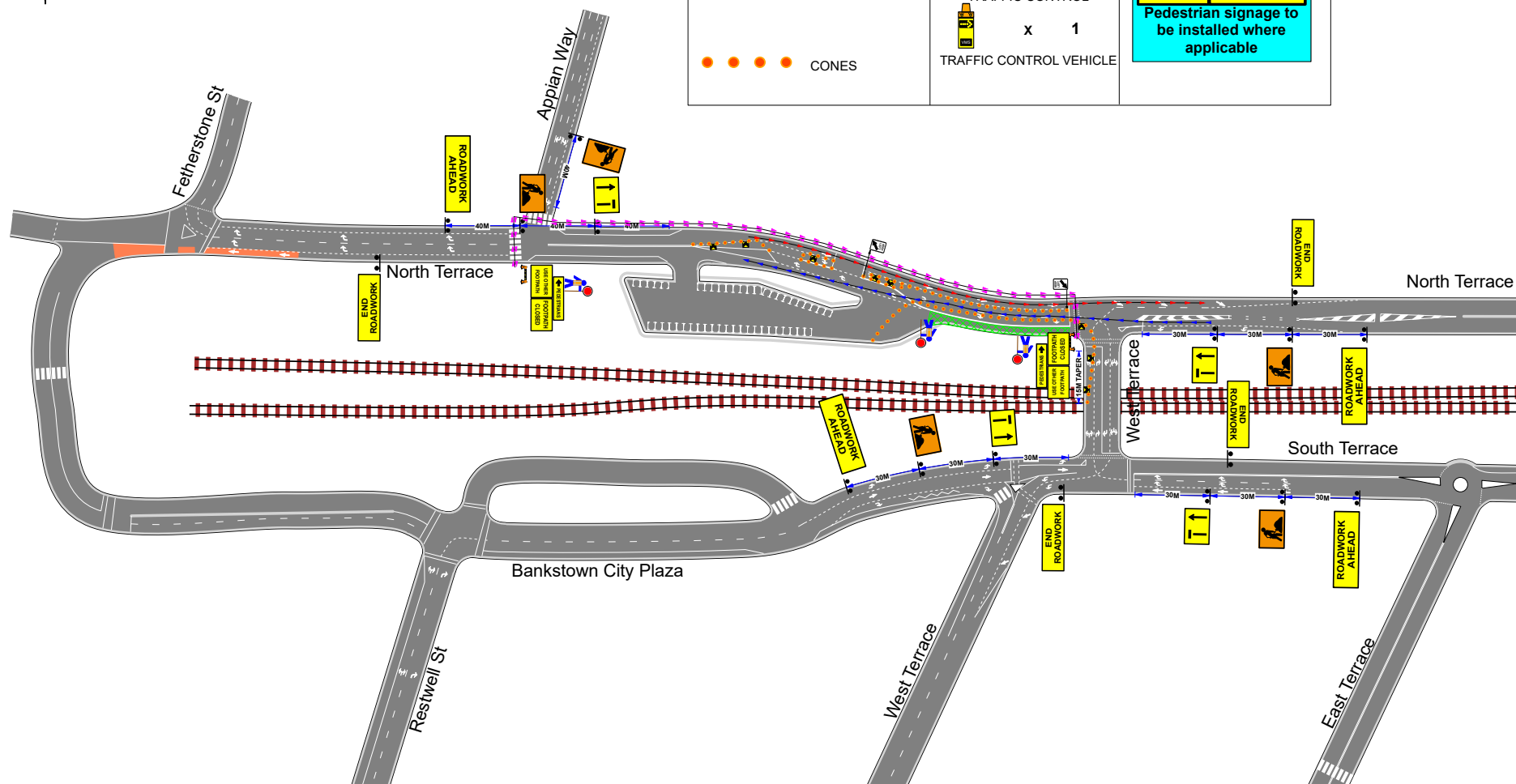
email: a.odonnell@ferrycarrig.com.au





	Drawn by: Caoimhe Scullion Traffic Coordinator <i>C. Scullion</i> PWZTMP No: TCT0012122 Issue Date: 2nd October 2019	Client:	John Holland	Revision 1:		<p>This site specific TGS is based on TNSW TCAWS Ver 6.0 (2020) &amp; must be installed &amp; packed up by qualified traffic controllers with current Traffic Controller &amp; Implement Traffic Control Plans accreditation.</p> <p>Modifications to this plans must be approved by a person holding the PWZTMP qualification, and must be supported by a TMP or risk assessment. TCAWS 7.20.4.</p> <p>The TCTP person may vary the positioning of signs and devices provided the requirements of Section 7.10.3 TCAWS, regarding Tolerance on Positioning, are met.</p> <p>Traffic controllers to identify and make note of escape routes prior to commencement of works</p> <p>Local constraints may not allow sign and devices to be placed exactly in accordance with the TGS judgement, therefore it is permissible for a TCT to position signs 10% less and up to 25% greater than the TGS indicated distance.</p> <p>Signs spacing measurements may extend across some intersections, therefore warning signs may need to be placed in the side streets.</p> <p>Signs are to be Class 1 retro-reflective, positioned adjacent to the footpath or where vehicle parking occurs place signs in the parking lane or elevated on posts. They must be positioned so that they are in clear view of passing motorists.</p> <p>The TGS is approved for use by Ferrycarrig Construction Traffic Control ONLY.</p> <p>The drafter takes no responsibility for unauthorised and unapproved implementation of this TGS.</p>
		Project ID	FC254 - Bankstown Station	Signed:		
		Location:	Bankstown	Revision 2:		
		Est Duration:	2-3 Shifts	Signed:		
		Working Hours:	Nightshift	Revision 3:		
		ROL Req'd		Signed:		
		Traffic Volumes:	TBC			
		Plan Number:	220157			
		Date Drawn:	13th January 2022			
		Plan Expiry:	30th December 2022			



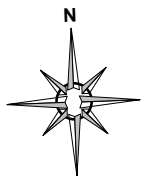


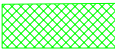



LEGEND	RESOURCES					
 WORK AREA	 x 3 TRAFFIC CONTROL	<table border="1"> <tr> <td>USE OTHER FOOTPATH</td> <td>PEDESTRIANS WATCH YOUR STEP</td> </tr> <tr> <td>FOOTPATH CLOSED</td> <td>PEDESTRIANS ← PEDESTRIANS →</td> </tr> </table> <p>Pedestrian signage to be installed where applicable</p>	USE OTHER FOOTPATH	PEDESTRIANS WATCH YOUR STEP	FOOTPATH CLOSED	PEDESTRIANS ← PEDESTRIANS →
USE OTHER FOOTPATH	PEDESTRIANS WATCH YOUR STEP					
FOOTPATH CLOSED	PEDESTRIANS ← PEDESTRIANS →					
 CONES	 x 1 TRAFFIC CONTROL VEHICLE					

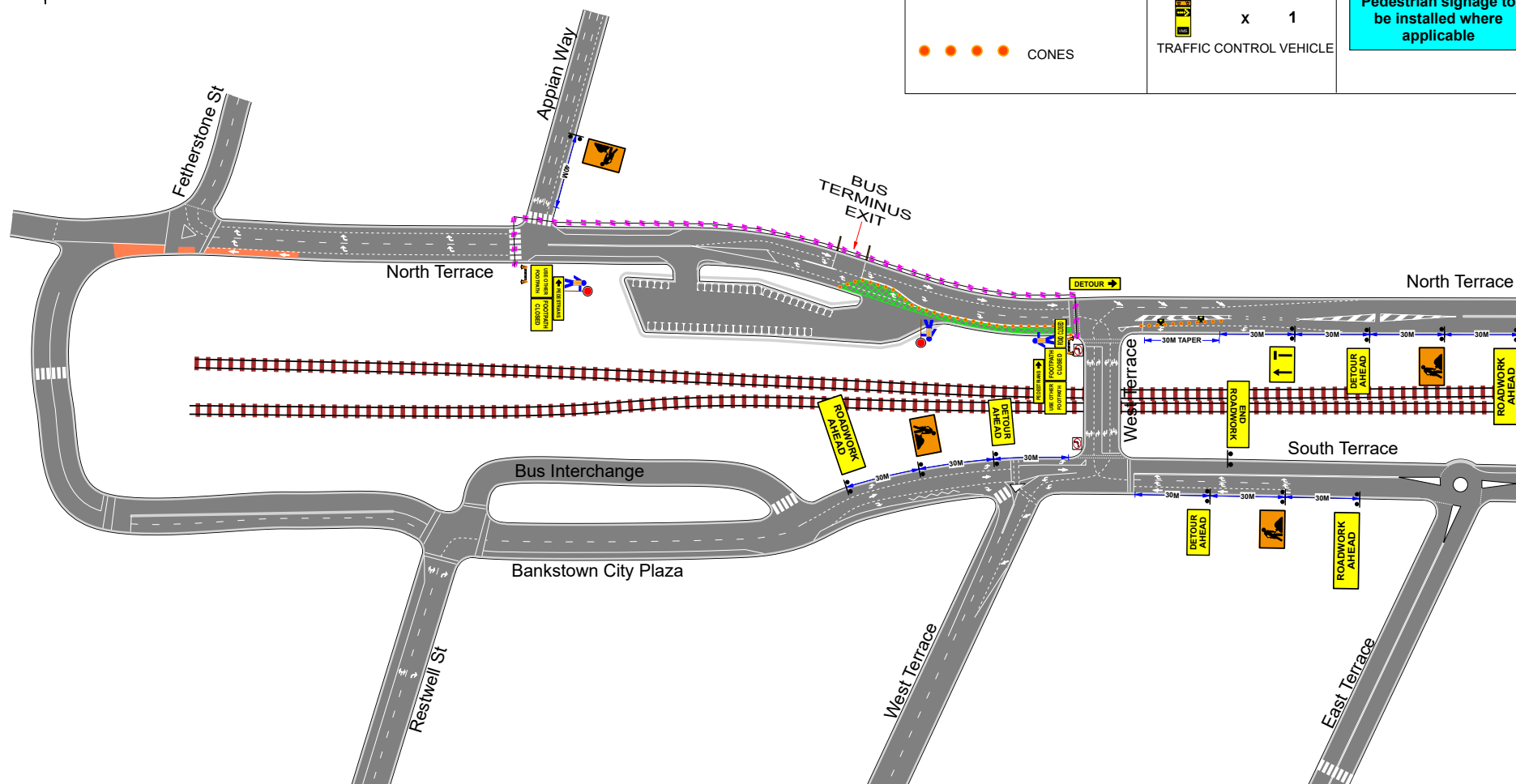






REV	REVISION DESCRIPTION	TGS PLAN #	NORTH TERRACE-001	CLIENT:		DESIGNED BY	S. KOLIMI	APPROVED BY	B. MACINNIS	IMPLEMENTED BY		
00	SUPPLIED TO CLIENT	ROAD NAME	NORTH TERRACE	JHLORJV		SIGNATURE		SIGNATURE		SIGNATURE		
01		SUBURB	BANKSTOWN	ROL REQUIRED	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	DATE	26.08.2022	DATE	26.08.2022	DATE		
02		WORK LOCATION	MULTIPLE LANES - LATERAL SHIFT	ROAD SPEED(S)	40 KM/HR	CERTIFICATE #	TCT0065537	CERTIFICATE #	TCT0008510	CERTIFICATE #		





LEGEND	RESOURCES							
 WORK AREA	 X 3 TRAFFIC CONTROL	<table border="1"> <tr> <td>USE OTHER FOOTPATH</td> <td>PEDESTRIANS WATCH YOUR STEP</td> </tr> <tr> <td>FOOTPATH CLOSED</td> <td>PEDESTRIANS ←</td> </tr> <tr> <td></td> <td>PEDESTRIANS →</td> </tr> </table> Pedestrian signage to be installed where applicable	USE OTHER FOOTPATH	PEDESTRIANS WATCH YOUR STEP	FOOTPATH CLOSED	PEDESTRIANS ←		PEDESTRIANS →
USE OTHER FOOTPATH	PEDESTRIANS WATCH YOUR STEP							
FOOTPATH CLOSED	PEDESTRIANS ←							
	PEDESTRIANS →							
 CONES	 X 1 TRAFFIC CONTROL VEHICLE							

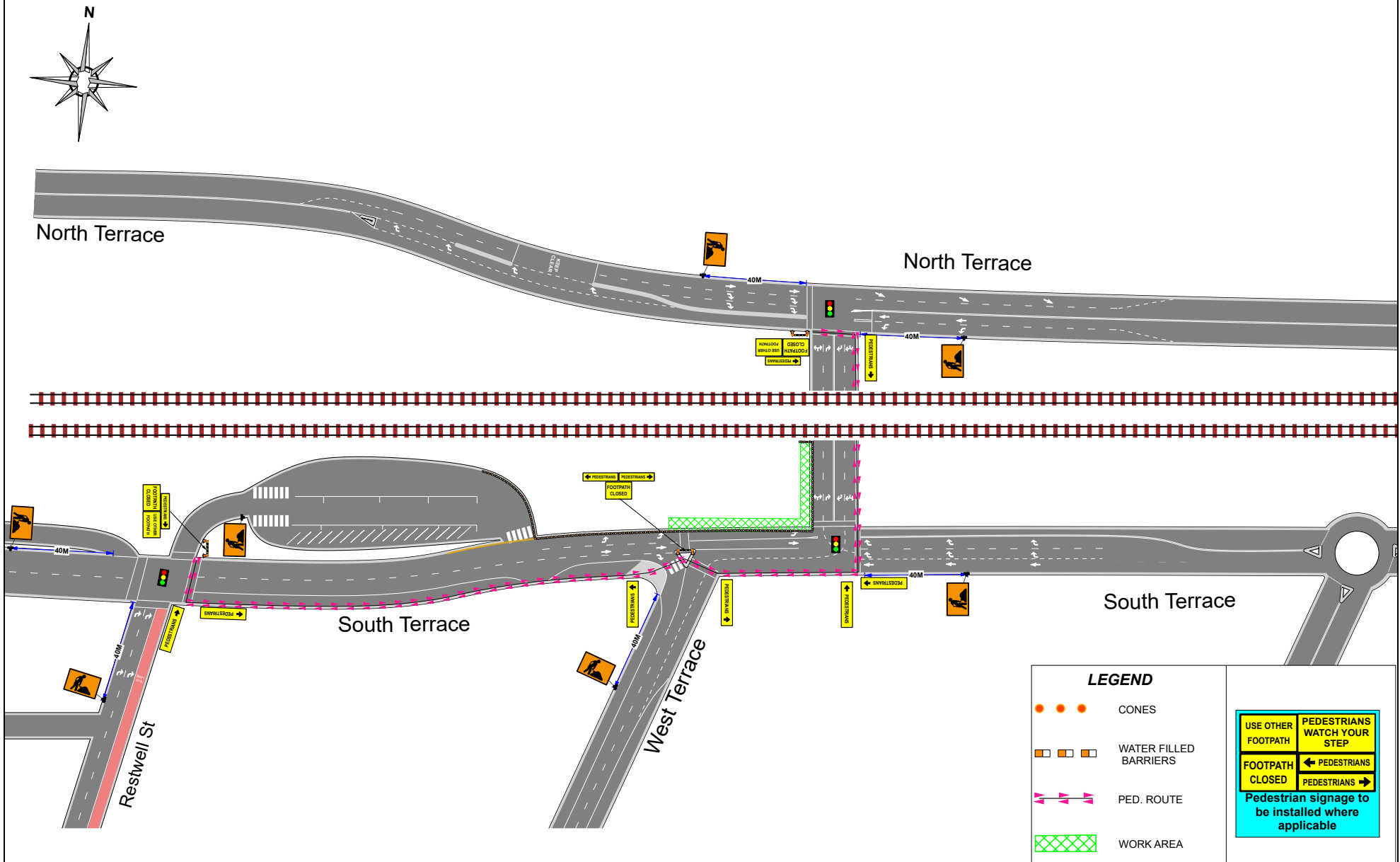


REV	REVISION DESCRIPTION	TGS PLAN #	NORTH TERRACE-002	CLIENT:		DESIGNED BY	S. KOLIMI	APPROVED BY	B. MACINNIS	IMPLEMENTED BY		
00	SUPPLIED TO CLIENT	ROAD NAME	NORTH TERRACE	JHLORJV		SIGNATURE		SIGNATURE		SIGNATURE		
01		SUBURB	BANKSTOWN	ROL REQUIRED	Y <input type="checkbox"/> N <input type="checkbox"/>	DATE	07.09.2022	DATE	08.09.2022	DATE		
02		WORK LOCATION	MULTIPLE LANES - LATERAL SHIFT	ROAD SPEED(S)	40 KM/HR	CERTIFICATE #	TCT0065537	CERTIFICATE #	TCT0008510	CERTIFICATE #		Web: www.dtraffic.com.au Email: sydney@dtg-group.com.au Phone: 1300 597 622



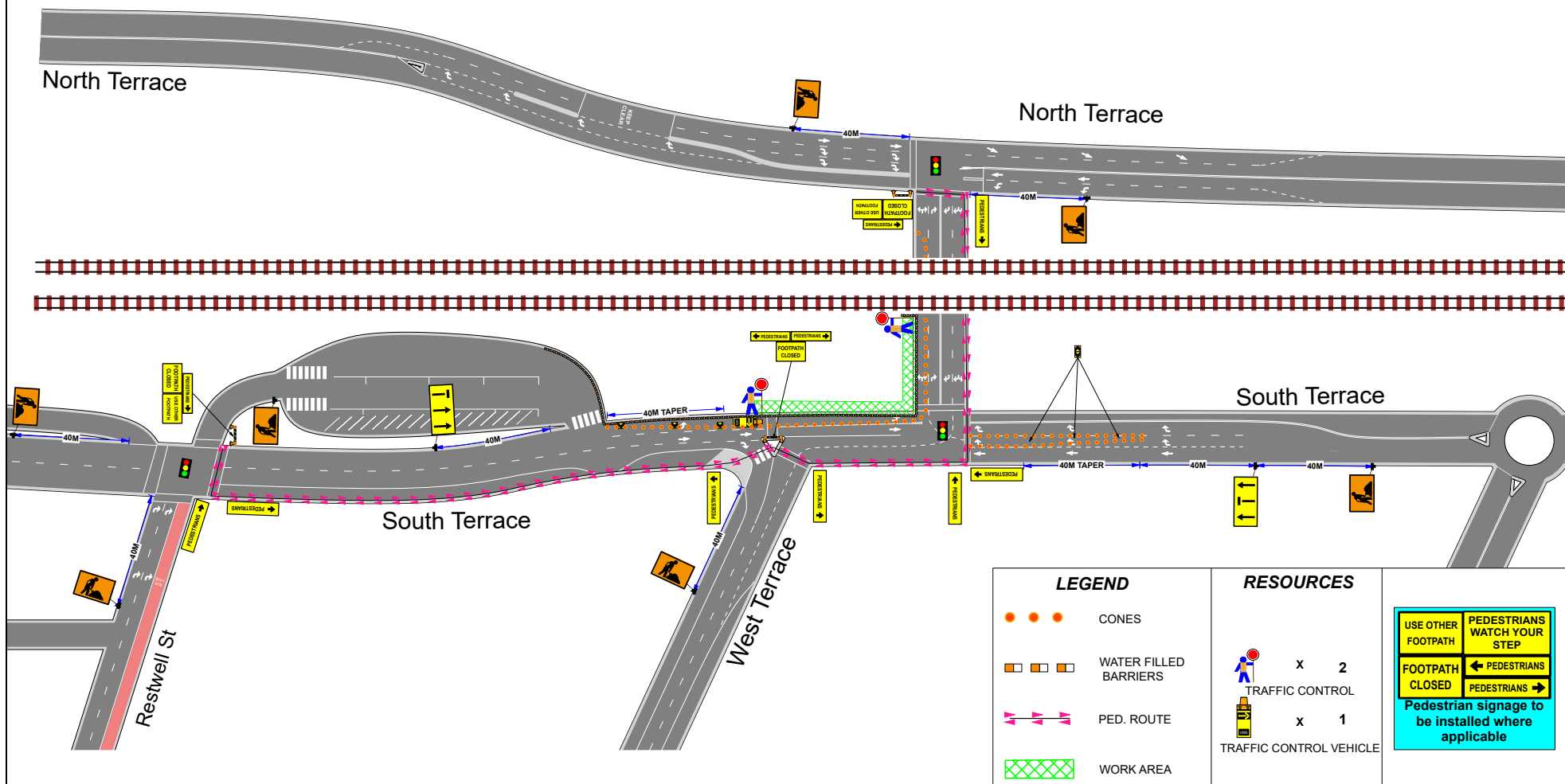
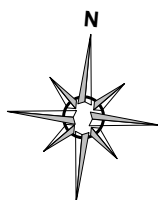






REV	REVISION DESCRIPTION	TGS PLAN #	SOUTH TERRACE-001	CLIENT:	<div>JOHN HOLLAND LANDSCAPE</div>	DESIGNED BY	S. KOLIMI	APPROVED BY	B.Macinnis	IMPLEMENTED BY		<div>Traffic Management</div>
00	SUPPLIED TO CLIENT	ROAD NAME	SOUTH TERRACE	JHLORJV		SIGNATURE		SIGNATURE		SIGNATURE		
01		SUBURB	BANKSTOWN	ROL REQUIRED	Y <input checked="" type="checkbox"/> X <input type="checkbox"/> N <input type="checkbox"/>	DATE	21.07.2022	DATE	27.07.2022	DATE		
02		WORK LOCATION	MULTIPLE LANES - PEDESTRIAN CLOSURE	ROAD SPEED(S)	40 KM/HR	CERTIFICATE #	TCT0065537	CERTIFICATE #	TCT0008510	CERTIFICATE #		<div>Web: <a href="http://www.dtraffic.com.au">www.dtraffic.com.au</a> Email: <a href="mailto:sydney@dd-group.com.au">sydney@dd-group.com.au</a> Phone: 1300 597 622</div>





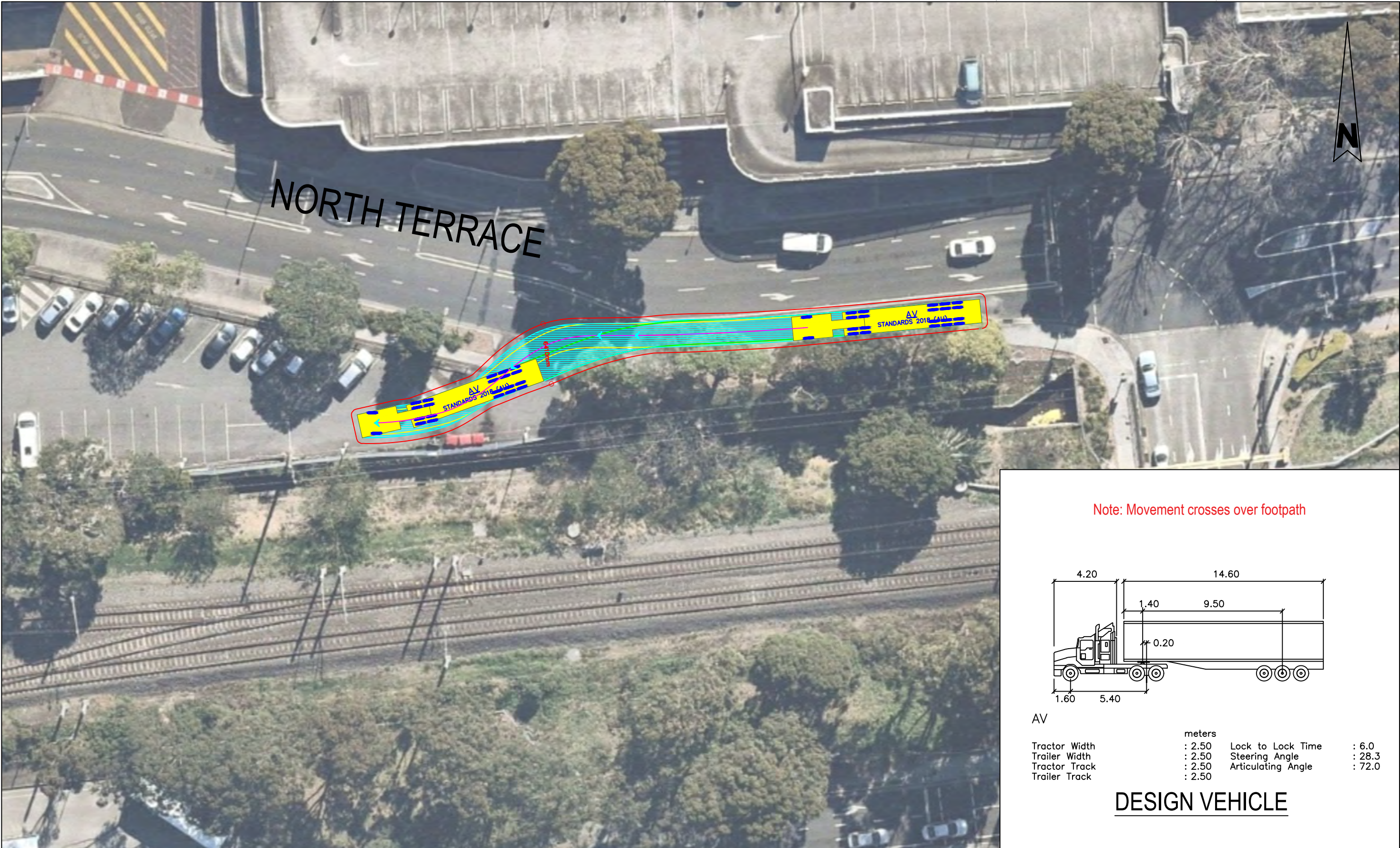
REV	REVISION DESCRIPTION	TGS PLAN #	SOUTH TERRACE-002	CLIENT:	DESIGNED BY	S. KOLIMI	APPROVED BY	B. Macinnis	IMPLEMENTED BY	
00	SUPPLIED TO CLIENT	ROAD NAME	SOUTH TERRACE	JHLORJV	SIGNATURE	<i>K. Sandberg</i>	SIGNATURE	<i>B. Macinnis</i>	SIGNATURE	
01		SUBURB	BANKSTOWN	ROL REQUIRED	DATE	21.07.2022	DATE	27.07.2022	DATE	
02		WORK LOCATION	MULTIPLE LANES - LANE CLOSURE	ROAD SPEED(S)	CERTIFICATE #	TCT0065537	CERTIFICATE #	TCT0008510	CERTIFICATE #	



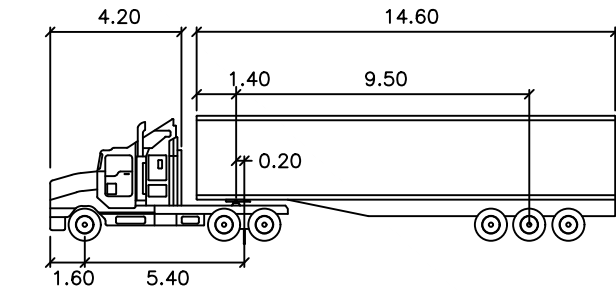


## Appendix 2 – Swept Paths






Note: Movement crosses over footpath

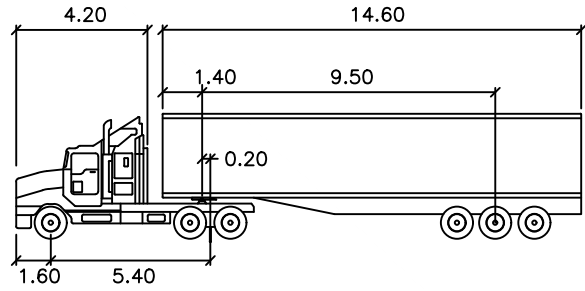
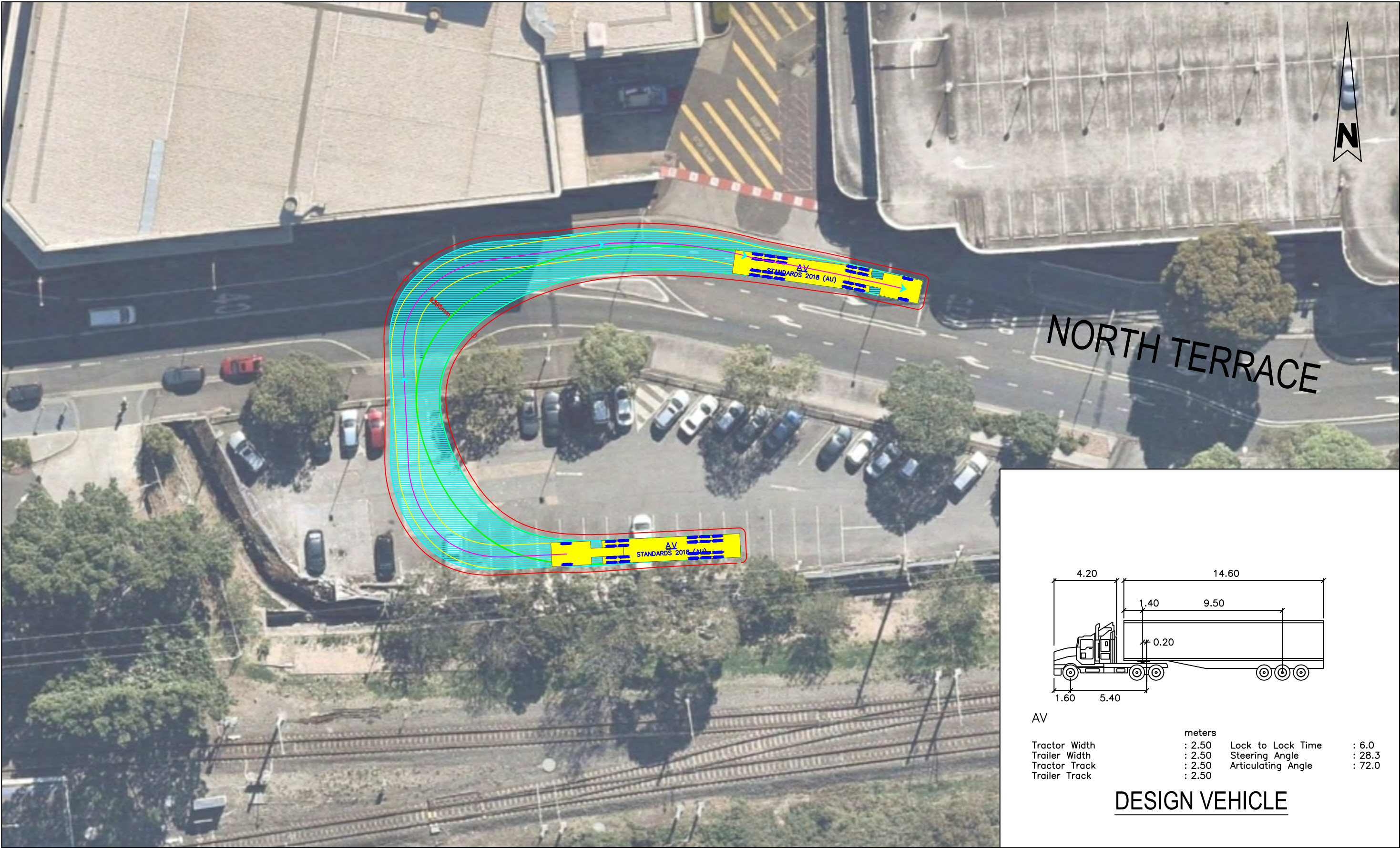


AV			
	Tractor Width	4.20	
	Trailer Width	14.60	
	Tractor Track	1.60	
	Trailer Track	5.40	
	Tractor Height	1.40	
	Trailer Height	9.50	
		0.20	

DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				<b>REVISIONS</b> Revisions/Descriptions		Drawn	Date	Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN			Design M.H	Drawn M.H	Checked A.G
					Issue				Title ENTRY MOVEMENT			FOR INFORMATION ONLY		
					001	INITIAL SWEEP PATH	M.H	02.09.2021				Date 28.09.2021		
					002	UPDATED SWEEP PATH	M.H	23.09.2021				Project Number P3519		
					003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021				Sheet Number 1		
												Issue 003		






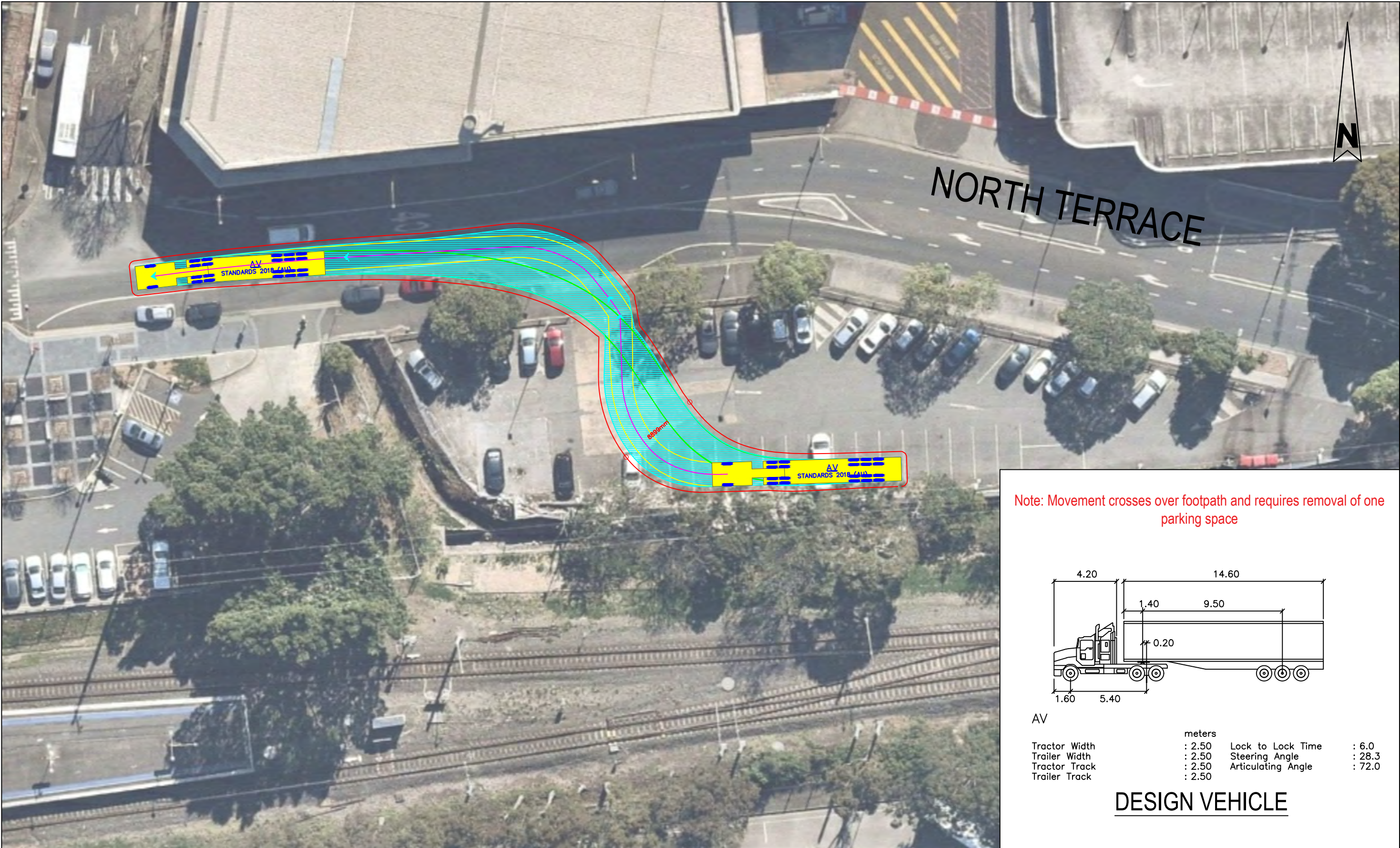
AV


<

DESIGN VEHICLE

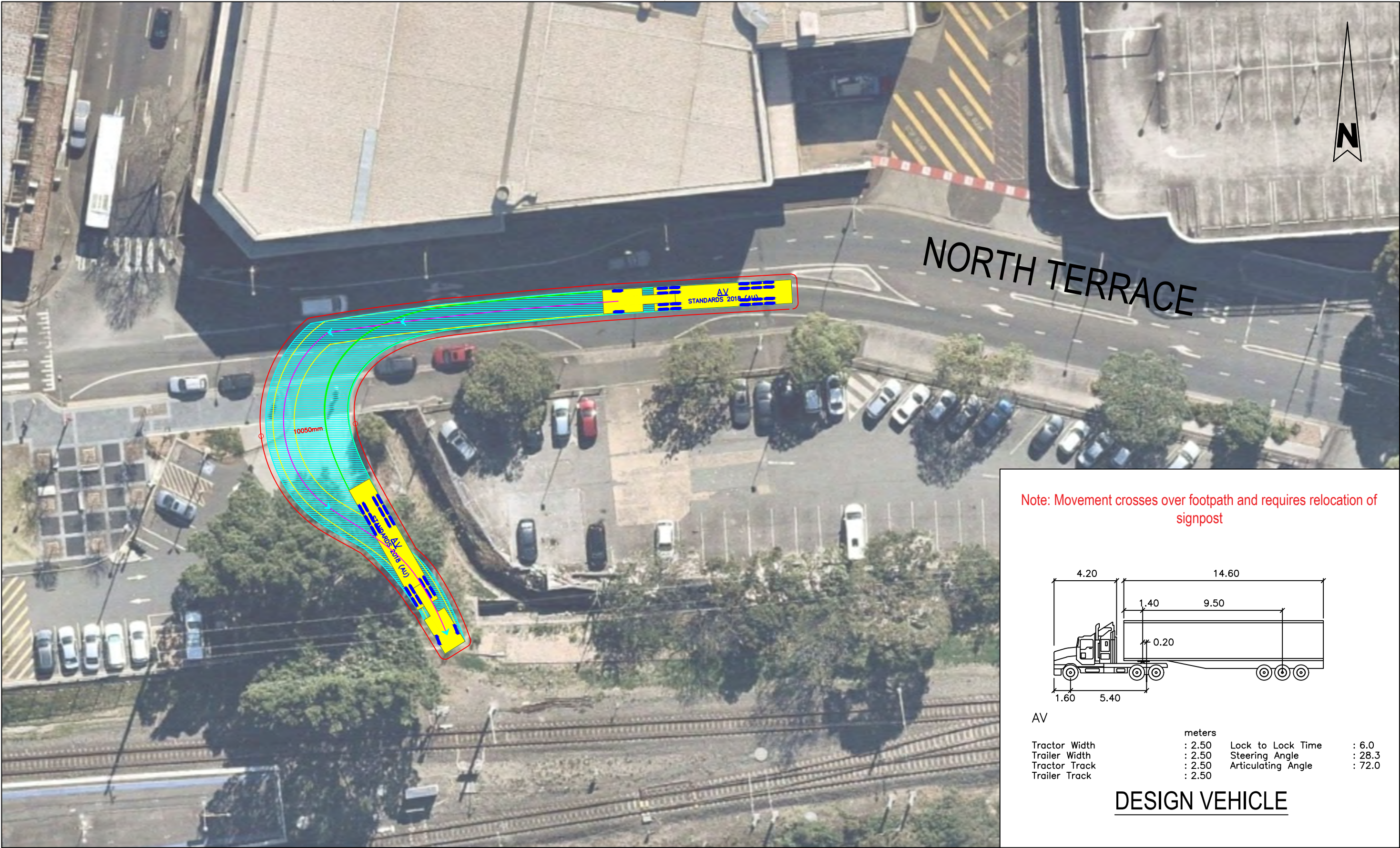
 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.G
	001	INITIAL SWEPT PATH	M.H	02.09.2021		FOR INFORMATION ONLY		
	002	UPDATED SWEPT PATH	M.H	23.09.2021				
	003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021	Title EXIT MOVEMENT - RIGHT	Date	28.09.2021	
						Project Number	Sheet Number	Issue
						P3519	2	003



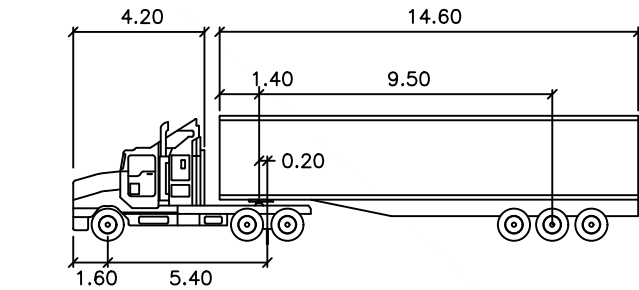


 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.G
	001	INITIAL SWEPT PATH	M.H	02.09.2021		FOR INFORMATION ONLY		
	002	UPDATED SWEPT PATH	M.H	23.09.2021				
	003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021	Title EXIT MOVEMENT - LEFT	Date 28.09.2021		
						Project Number	Sheet Number	Issue
						P3519	3	003






Note: Movement crosses over footpath and requires relocation of signpost



AV			
	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

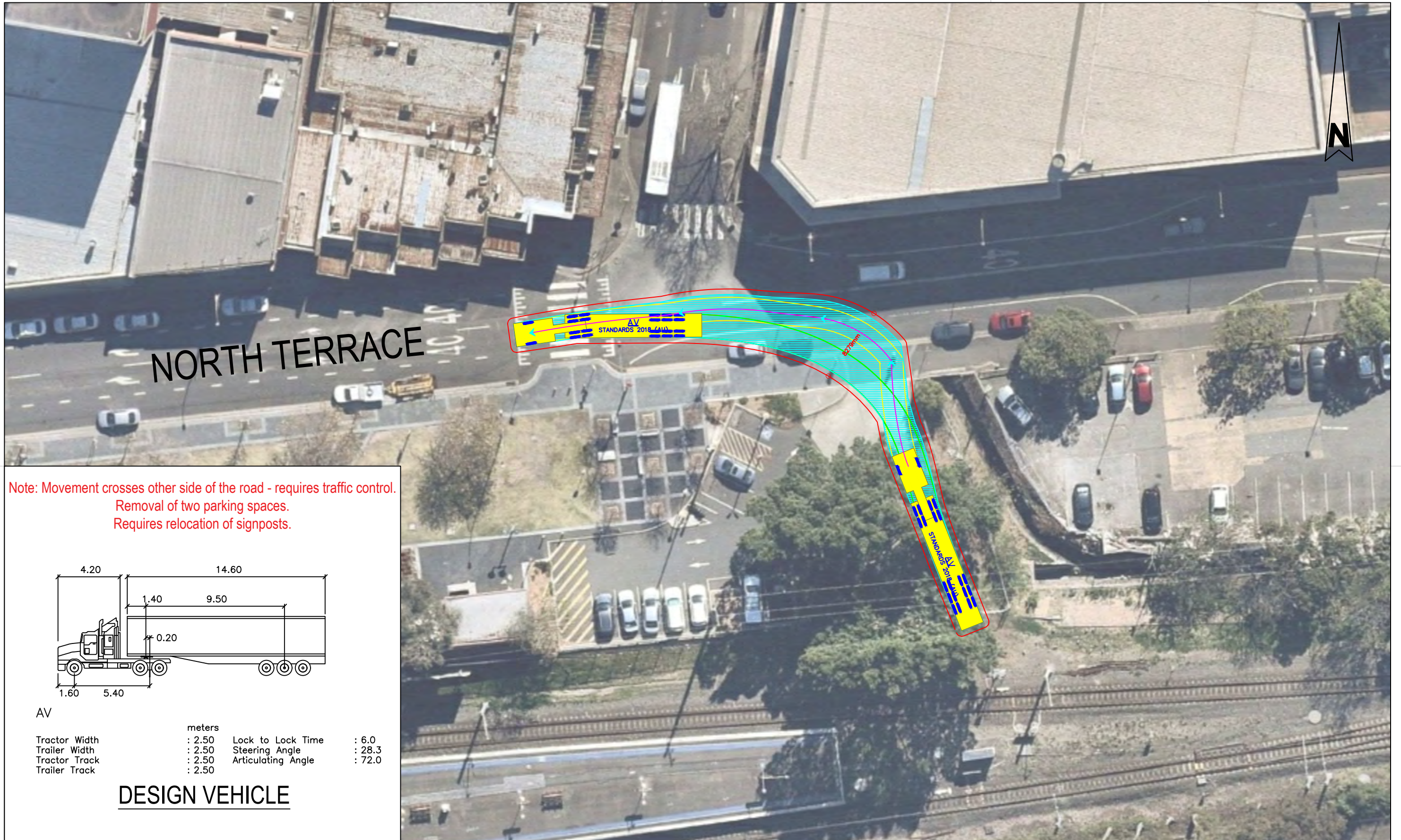
DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
		Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.G
		001	INITIAL SWEPT PATH	M.H	02.09.2021		FOR INFORMATION ONLY		
		002	UPDATED SWEPT PATH	M.H	23.09.2021				
		003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021	Title 20m AV Gate 1 Right Turn Entry from North Terrace	Project Number	Sheet Number	Date
							P3519	4	28.09.2021
									Issue
								003	

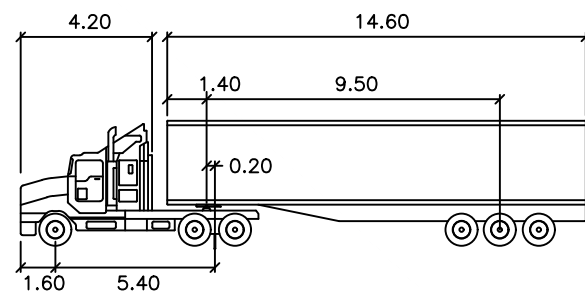








Note: Movement crosses other side of the road - requires traffic control.  
Removal of two parking spaces.  
Requires relocation of signposts.



AV

	meters	
Tractor Width	: 2.50	Lock to Lock Time : 6.0
Trailer Width	: 2.50	Steering Angle : 28.3
Tractor Track	: 2.50	Articulating Angle : 72.0
Trailer Track	: 2.50	

## DESIGN VEHICLE



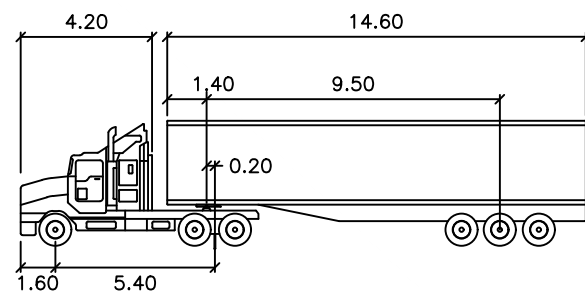
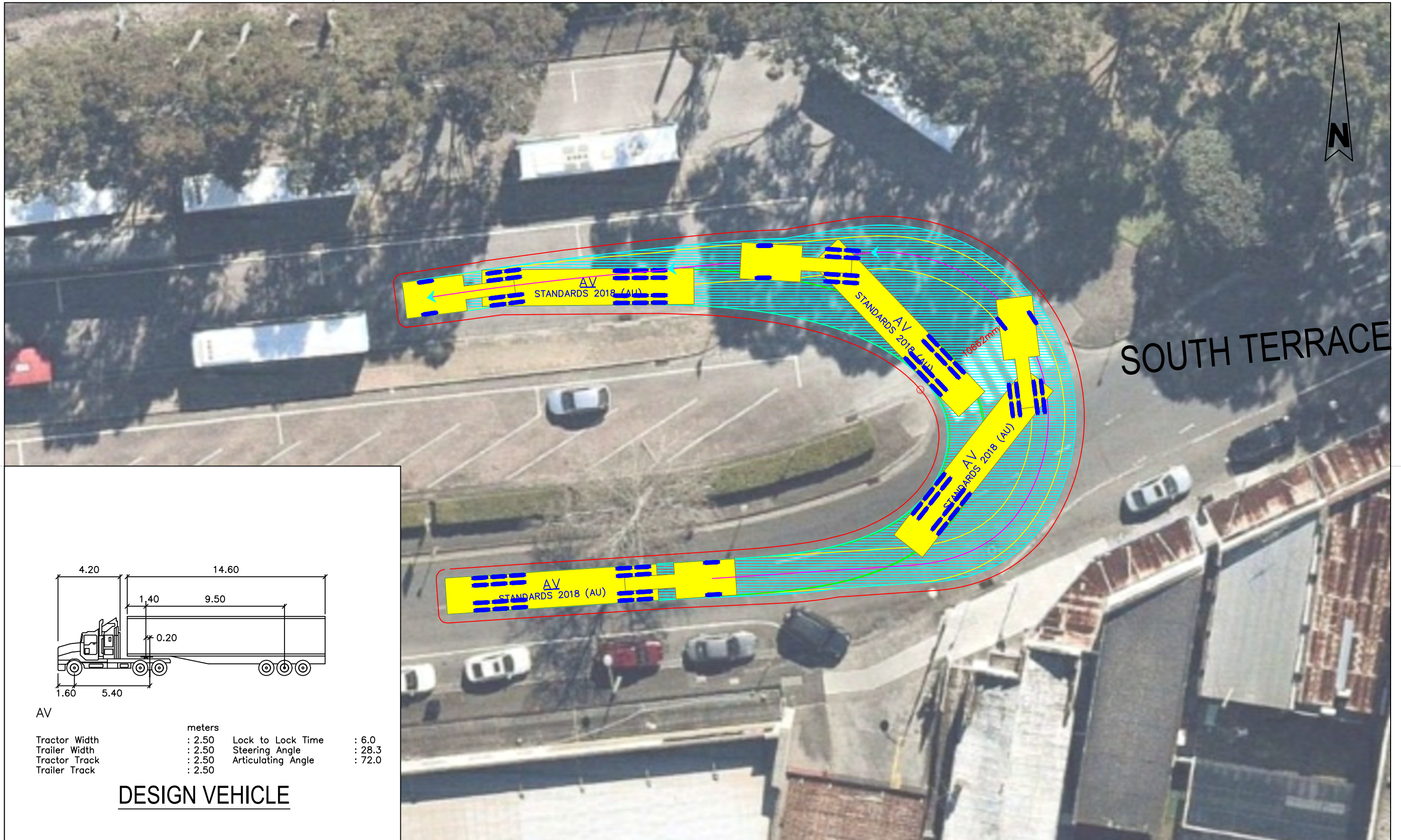
**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEPT PATH	M.H	02.09.2021
002	UPDATED SWEPT PATH	M.H	23.09.2021
003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021


Project	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN
Title	20m AV Gate 1 Left Turn Exit to North Terrace

Design	M.H	Drawn	M.H	Checked	A.G
FOR INFORMATION ONLY					Date
					28.09.2021
Project Number	P3519	Sheet Number	6	Issue	003





AV			
	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

DESIGN VEHICLE



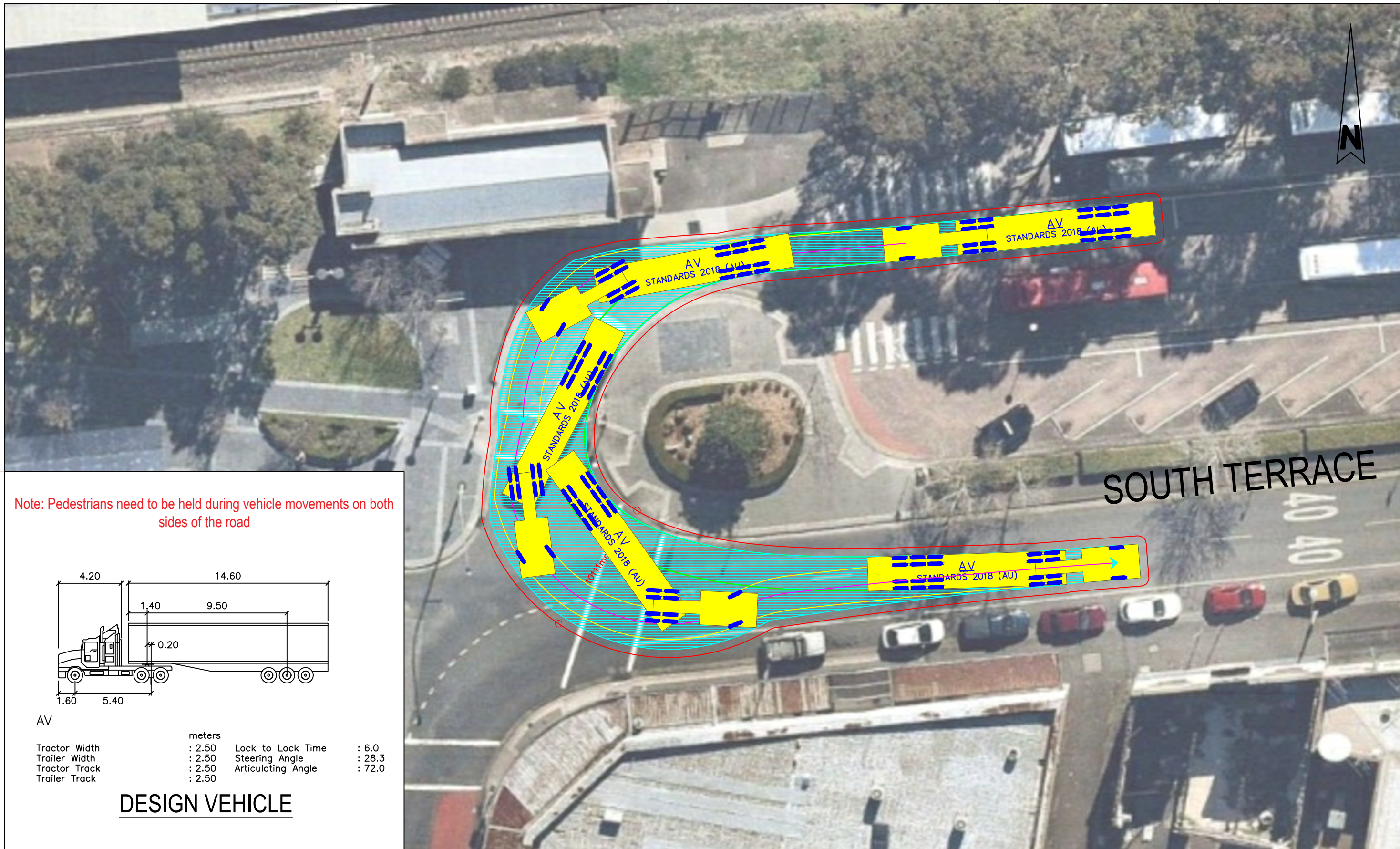
**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021

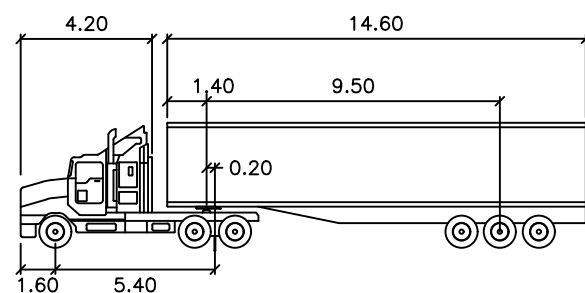
Project	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		
Title	20m AV - Left Turn Entry to Satellite Compound		

Design	M.H	Drawn	M.H	Checked	A.G
				Date	28.09.2021
FOR INFORMATION ONLY					
Project Number	P3519	Sheet Number	7	Issue	003





Note: Pedestrians need to be held during vehicle movements on both sides of the road



AV

	meters	
Tractor Width	: 2.50	Lock to Lock Time : 6.0
Tractor Track	: 2.50	Steering Angle : 28.3
Tractor Wheelbase	: 2.50	Articulating Angle : 72.0
Trailer Width	: 2.50	
Trailer Track	: 2.50	

## DESIGN VEHICLE



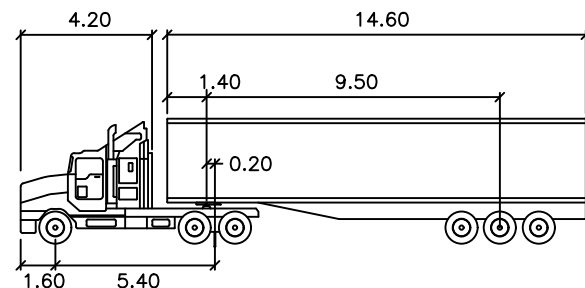
**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021

Project	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		
Title	8.8m MRV Concrete Truck - Left Turn Exit from Satellite Compound		

Design	M.H	Drawn	M.H	Checked	A.G
FOR INFORMATION ONLY					
Project Number	P3519	Sheet Number	8	Date	28.09.2021
				Issue	003





AV

	Tractor Width	Trailer Width	Tractor Track	Trailer Track	Lock to Lock Time	Steering Angle	Articulating Angle
units	meters	meters	meters	meters	seconds	degrees	degrees
values	: 2.50	: 2.50	: 2.50	: 2.50	: 6.0	: 28.3	: 72.0

## DESIGN VEHICLE

SOUTH TERRACE



**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEPT PATH	M.H	02.09.2021
002	UPDATED SWEPT PATH	M.H	23.09.2021
003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021

Project	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		
Title	20m AV Gate 2 Left Turn Entry from South Terrace		

Design	M.H	Drawn	M.H	Checked	A.G
FOR INFORMATION ONLY					Date
Project Number					28.09.2021
Sheet Number					Issue
P3519					003

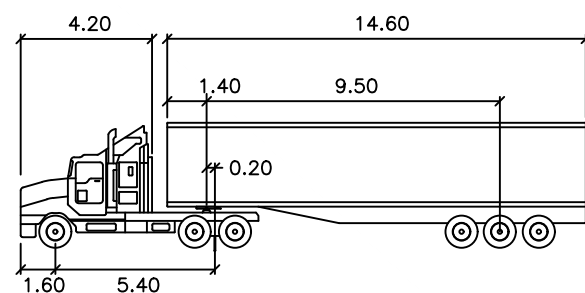








Note: Movement requires substantial gate widening



AV

	Tractor Width	Trailer Width	Tractor Track	Trailer Track	Lock to Lock Time	Steering Angle	Articulating Angle
AV	4.20	14.60	1.40	9.50	0.20	1.60	5.40

## DESIGN VEHICLE



**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

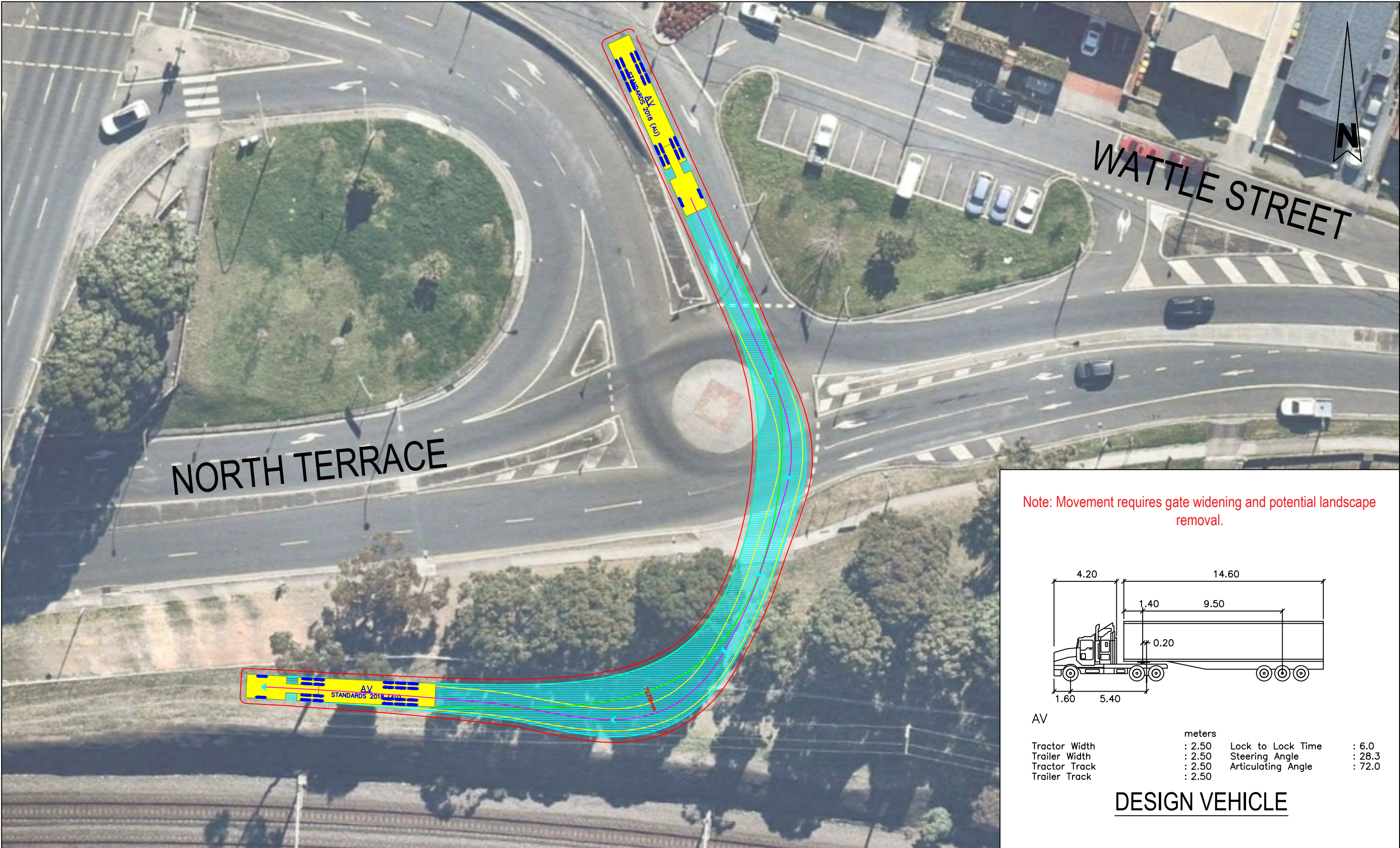
REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021

Project	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN
Title	20m AV Gate 3 Right Turn Exit to South Terrace

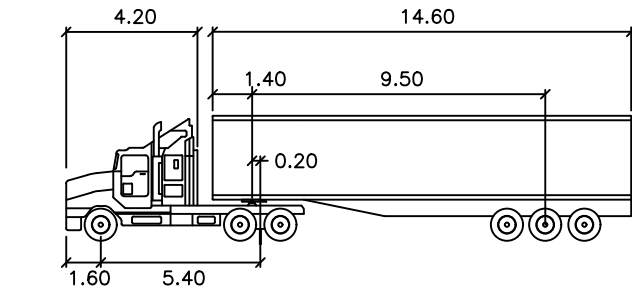
Design	M.H
Drawn	M.H
Checked	A.G
Date	28.09.2021
Project Number	P3519
Sheet Number	11
Issue	003

FOR INFORMATION ONLY		
----------------------	--	--






Note: Movement requires gate widening and potential landscape removal.



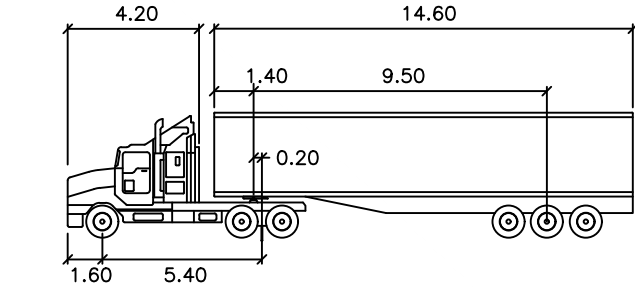
AV			
	Tractor Width	Tractor Track	Trailer Track
	Tractor Width	Tractor Track	Trailer Track
	Tractor Width	Tractor Track	Trailer Track
	Tractor Width	Tractor Track	Trailer Track

DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
		Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.G
		001	INITIAL SWEPT PATH	M.H	02.09.2021		FOR INFORMATION ONLY		
		002	UPDATED SWEPT PATH	M.H	23.09.2021				
		003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021	Title 20m Av Gate 4 Right Turn Entry through Roundabout from Wattle Street	Project Number	Sheet Number	Issue
							P3519	12	003

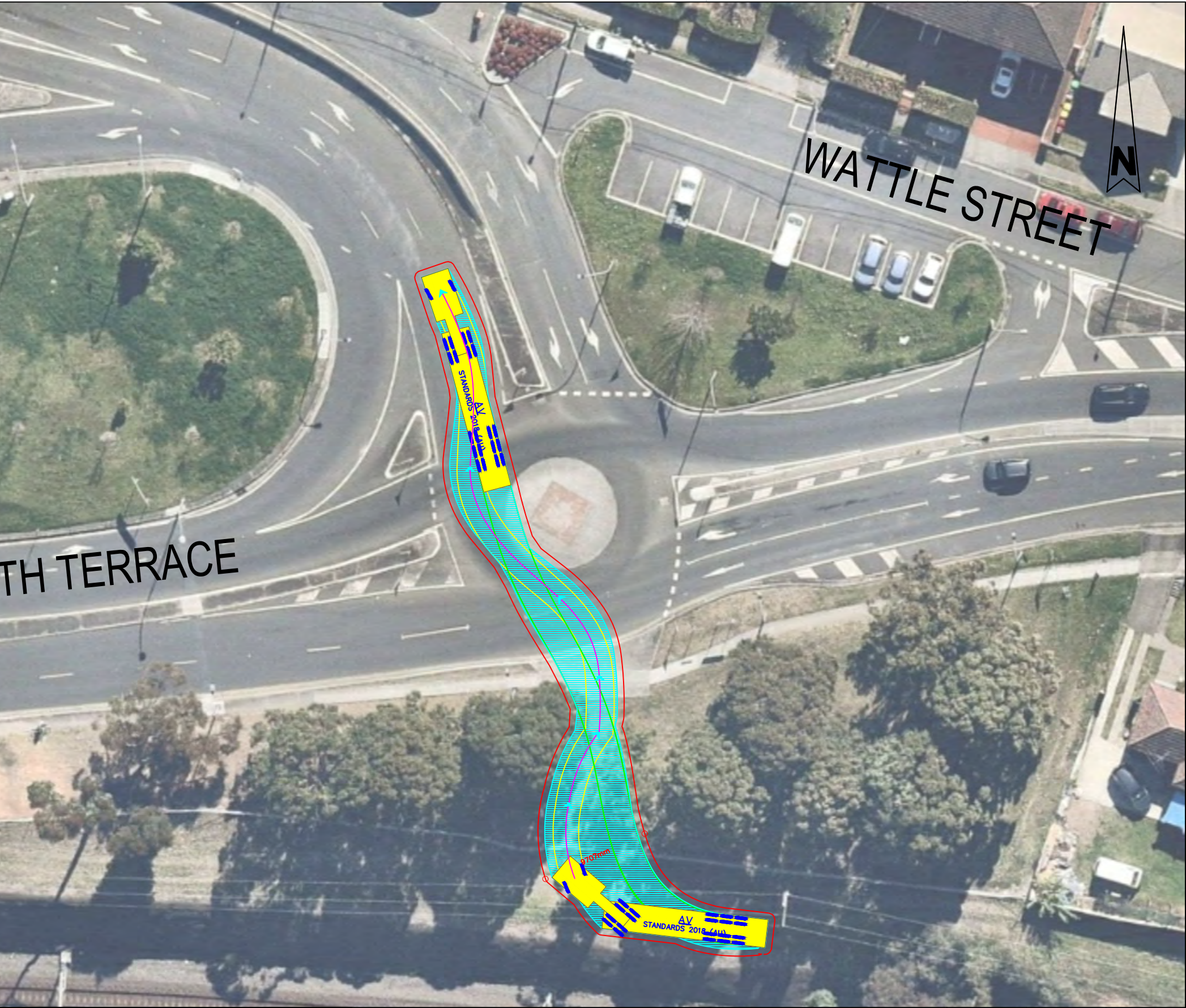


Note: Movement requires gate widening and potential landscape removal..



AV	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

DESIGN VEHICLE



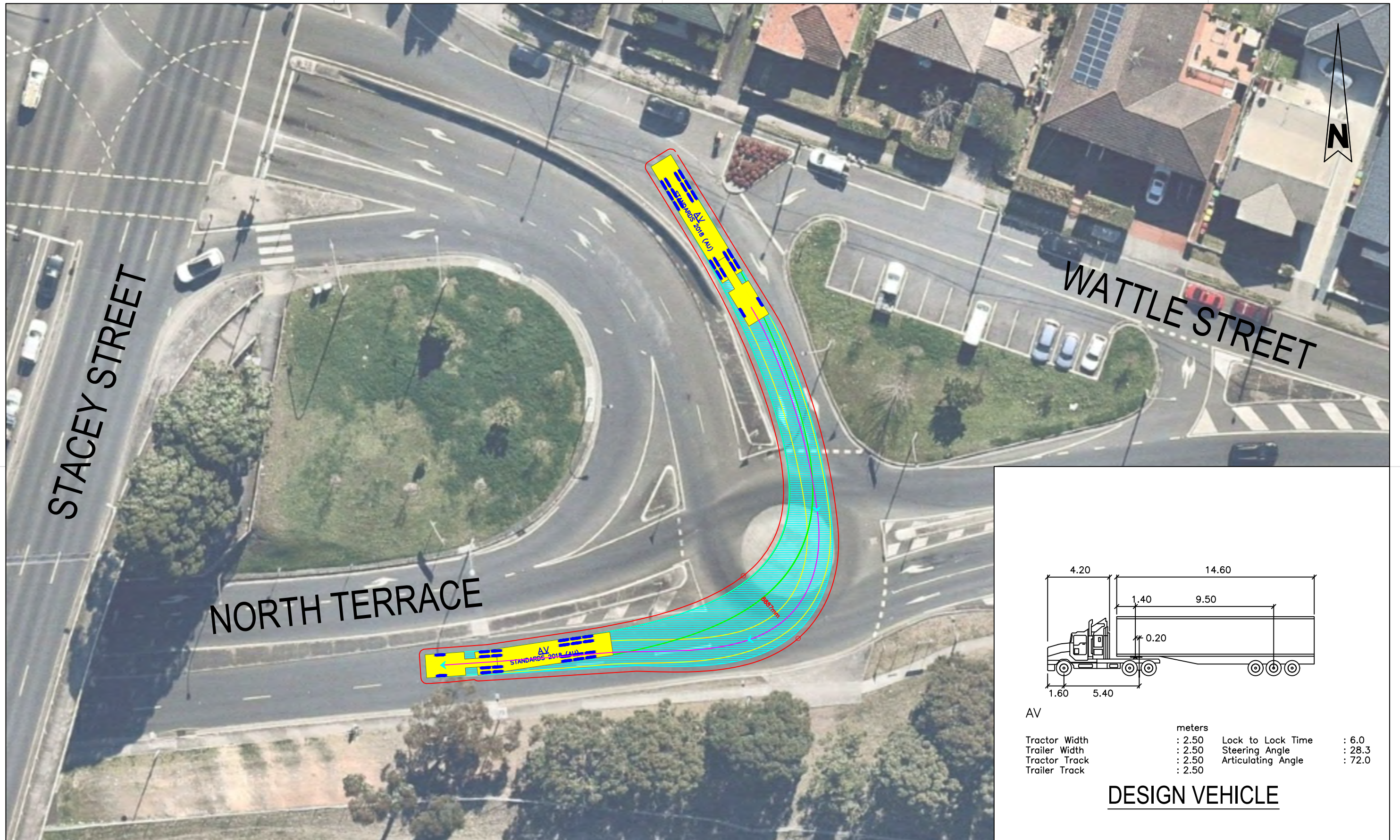
**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202


REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021


Project	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN
Title	20m AV Gate 4 Roundabout Through Exit to Wattle Street

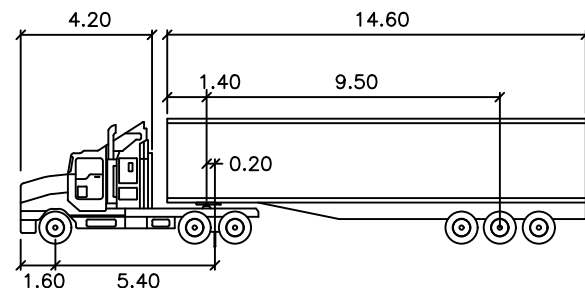
Design	M.H	Drawn	M.H	Checked	A.G
FOR INFORMATION ONLY					Date
					28.09.2021
Project Number	P3519	Sheet Number	13	Issue	003





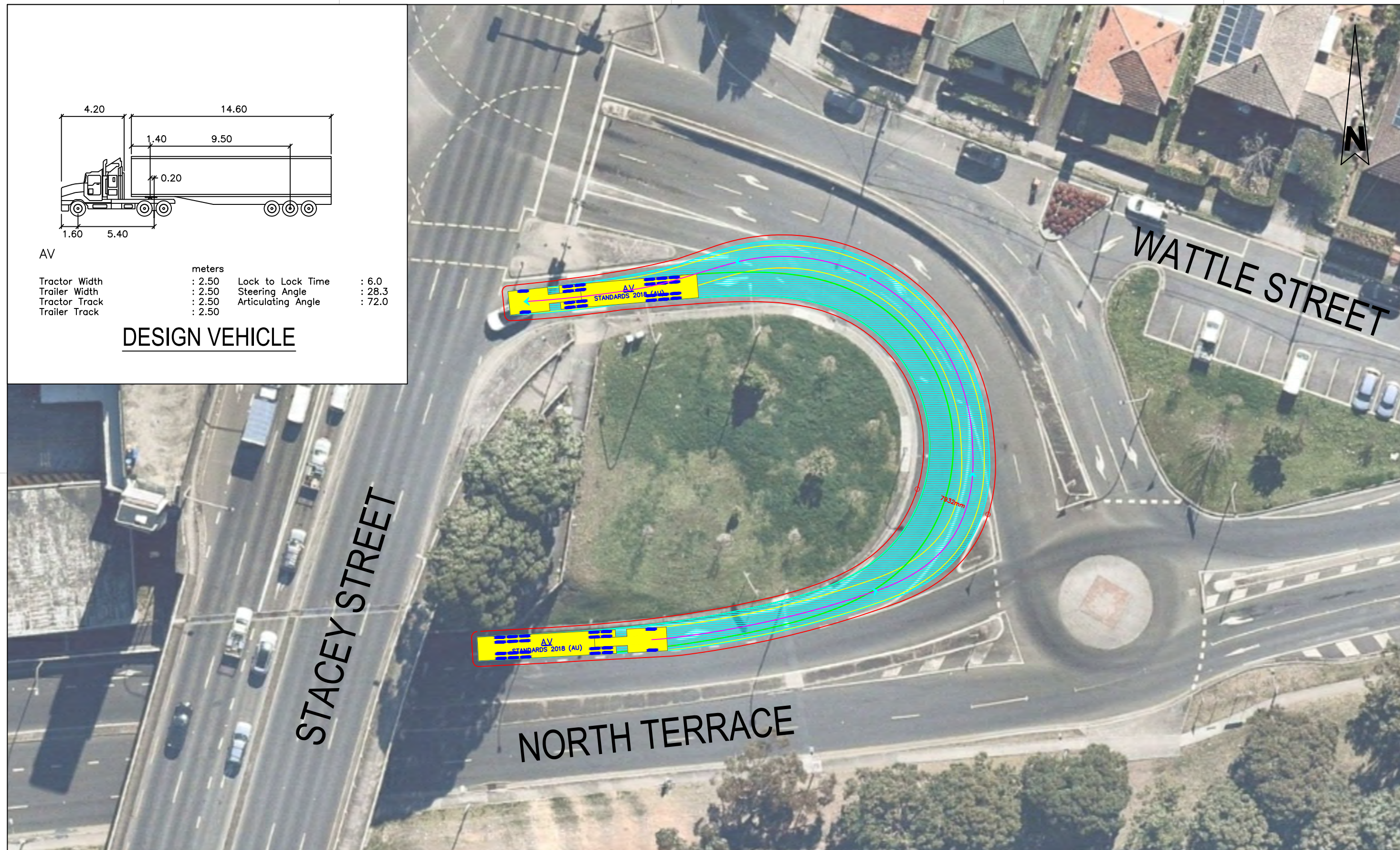
 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.G
	001	INITIAL SWEEP PATH	M.H	02.09.2021		FOR INFORMATION ONLY		
	002	UPDATED SWEEP PATH	M.H	23.09.2021				
	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021	Title 20m AV Turns in Corners - Right Turn Entry Haulage Route (Wattle Street Roundabout)	Project Number	Sheet Number	Issue
						P3519	14	003





AV		
Tractor Width	: 2.50	Lock to Lock Time : 6.0
Trailer Width	: 2.50	Steering Angle : 28.3
Tractor Track	: 2.50	Articulating Angle : 72.0
Trailer Track	: 2.50	

## DESIGN VEHICLE



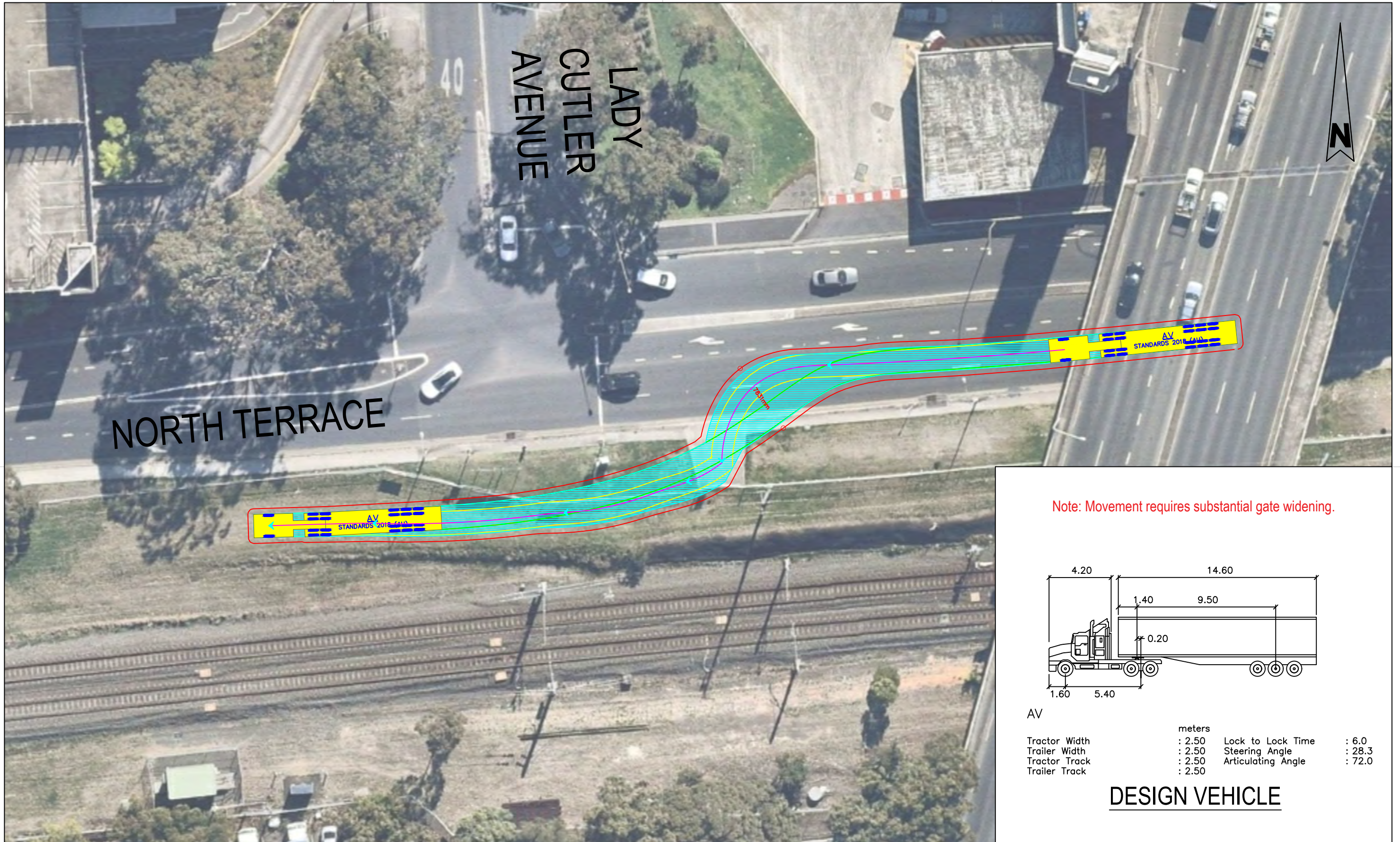
**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021

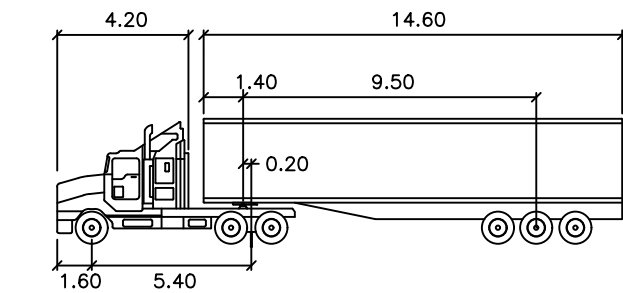
Project	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		
Title	20m AV Turns in Corners - Left Turn Exit Haulage Route to Stacey Street (Wattle Street Roundabout)		

Design	M.H	Drawn	M.H	Checked	A.G
FOR INFORMATION ONLY					
Project Number	P3519	Sheet Number	15	Date	28.09.2021
				Issue	003






Note: Movement requires substantial gate widening.

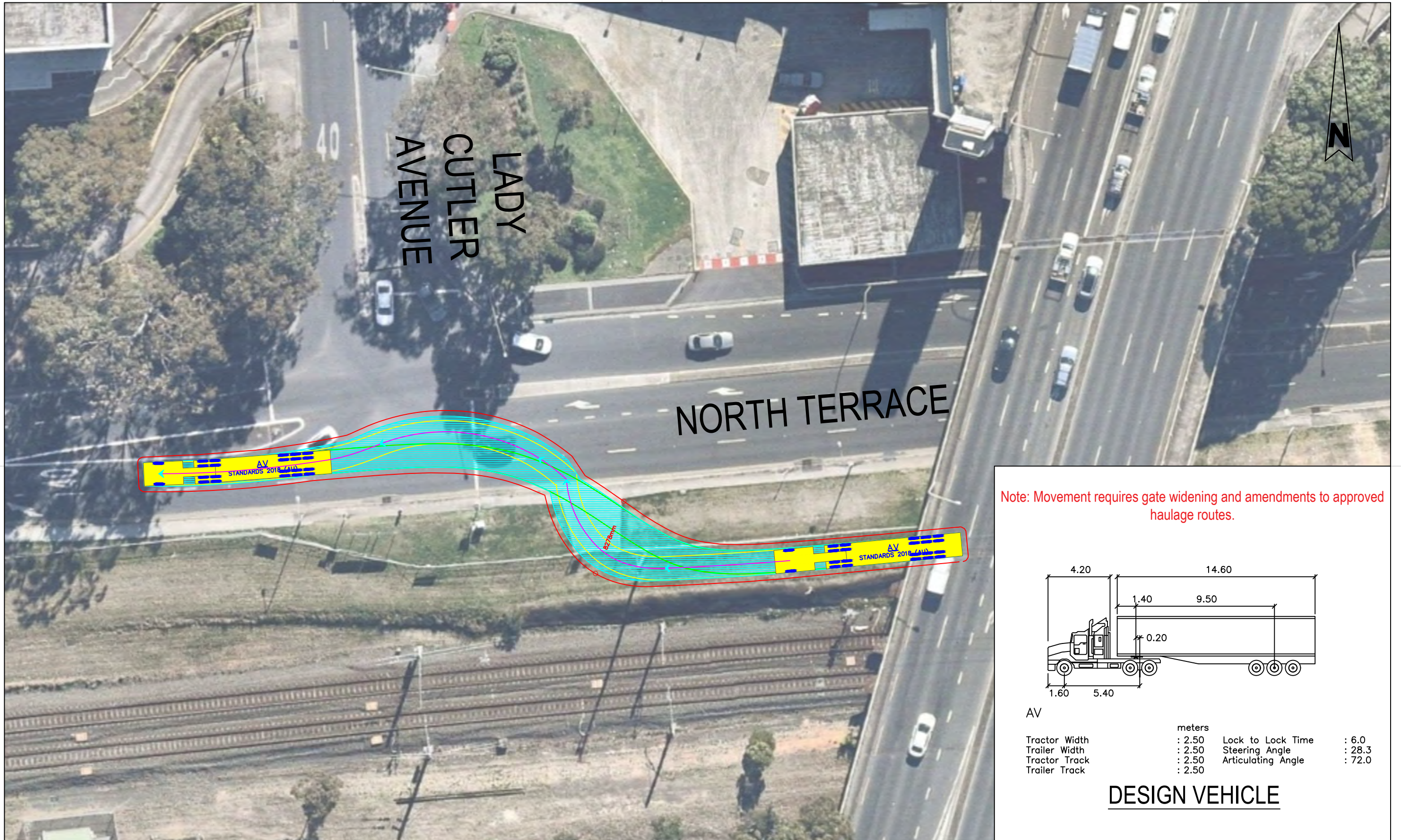


AV			
	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

DESIGN VEHICLE

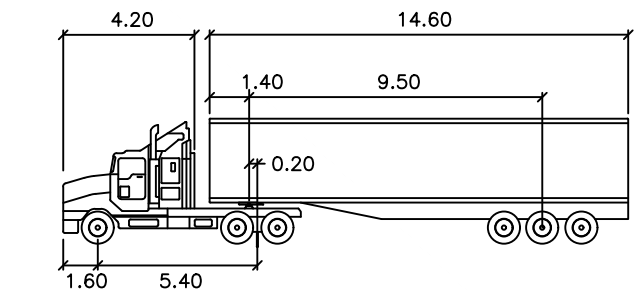
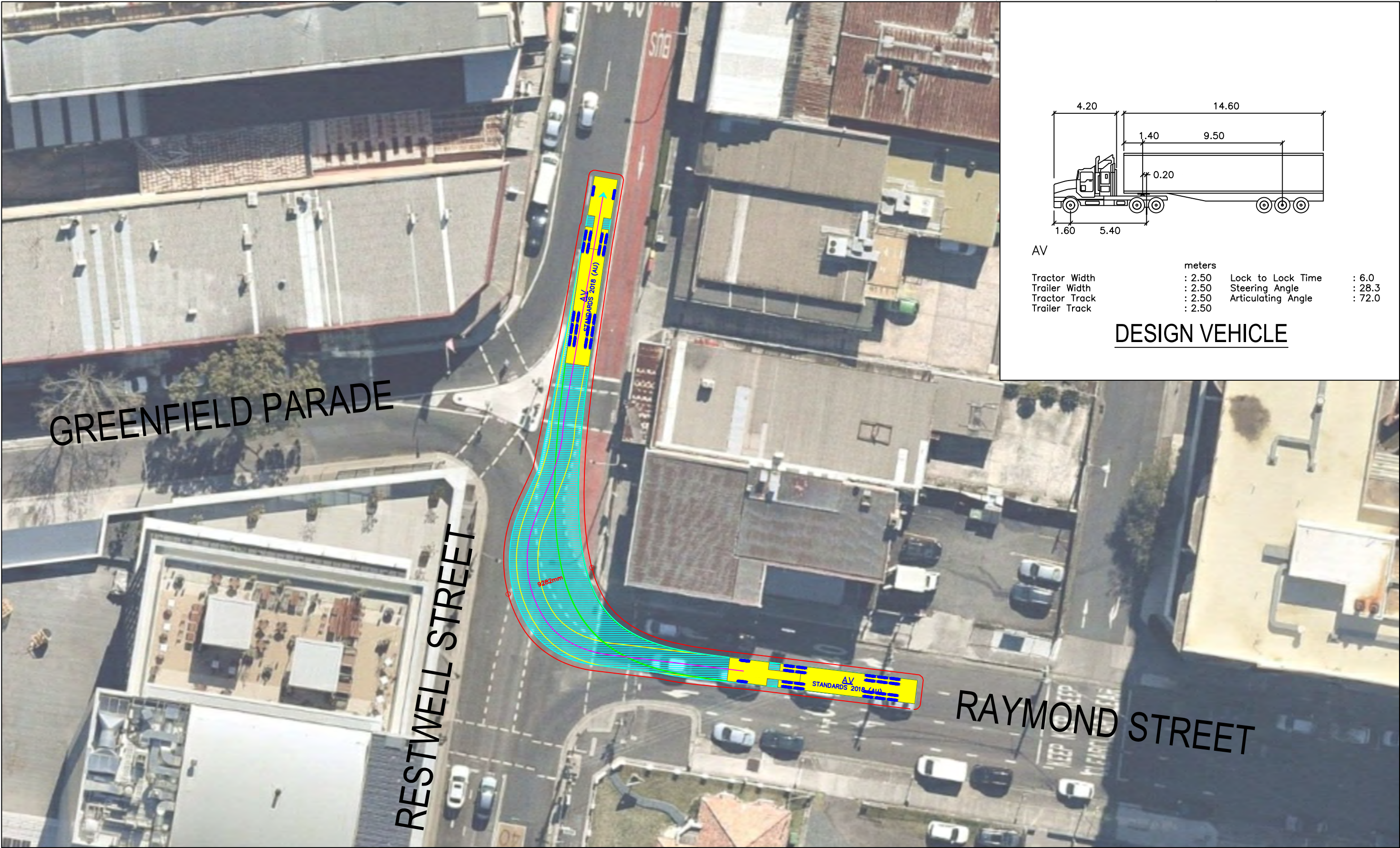
 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<b>REVISIONS</b>				Project		Design	Drawn	Checked						
	Revisions/Descriptions				BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		M.H	M.H	A.G						
	Issue				Drawn	Date	<div>FOR INFORMATION ONLY</div>								
	001	INITIAL SWEPT PATH			M.H	02.09.2021				Date	28.09.2021				
	002	UPDATED SWEPT PATH			M.H	23.09.2021	Project Number			Sheet Number			Issue		
	003	UPDATED SWEPT PATH POST RSA AND REVIEW			M.H	28.09.2021									
							P3519			16			003		






	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	<b>REVISIONS</b> Revisions/Descriptions				Drawn	Date	Project <b>BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN</b>	Design <b>M.H</b>	Drawn <b>M.H</b>	Checked <b>A.G</b>
	001	INITIAL SWEPT PATH	M.H	02.09.2021	Title  20m AV Gate 5 Right Turn Exit to North Terrace	<div>FOR INFORMATION ONLY</div>	Date <b>28.09.2021</b>				
	002	UPDATED SWEPT PATH	M.H	23.09.2021			Project Number <b>P3519</b>		Sheet Number <b>17</b>	Issue <b>003</b>	
	003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021							





AV			
	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

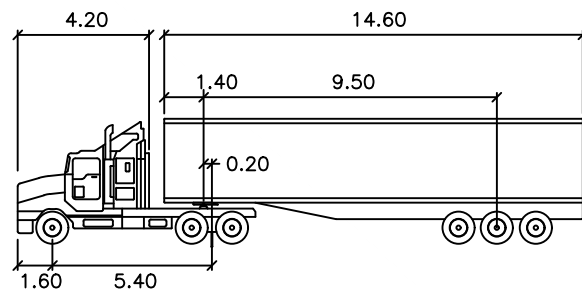
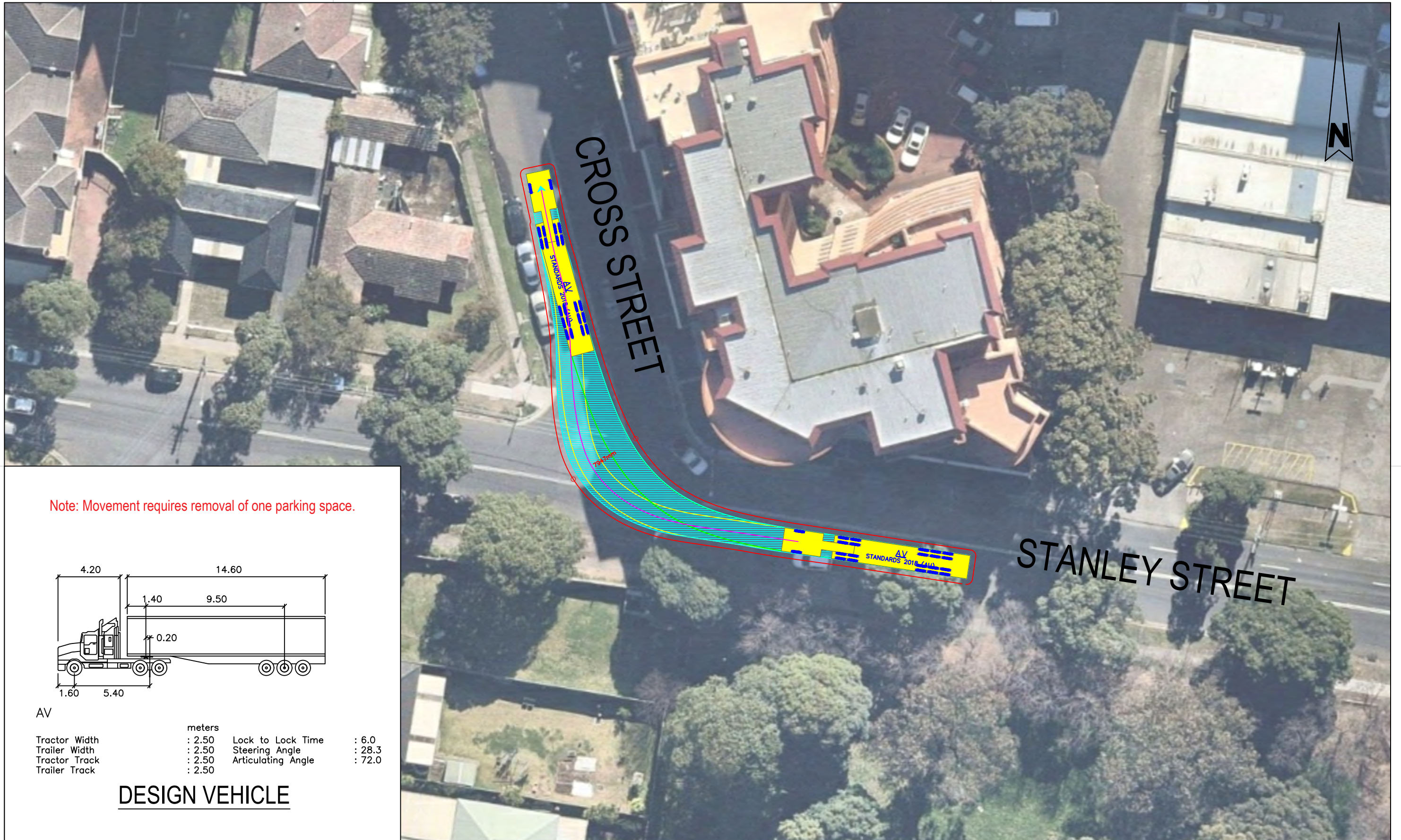
DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project	Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	M.H	M.H	A.G
	001	INITIAL SWEPT PATH	M.H	02.09.2021		FOR INFORMATION ONLY		
	002	UPDATED SWEPT PATH	M.H	23.09.2021				
	003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021	Title 20m AV Turns in Corners - Right Turn Entry Haulage Route (Restwell Street)	Date	28.09.2021	
						Project Number	Sheet Number	Issue
						P3519	18	003









AV			
	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

## DESIGN VEHICLE



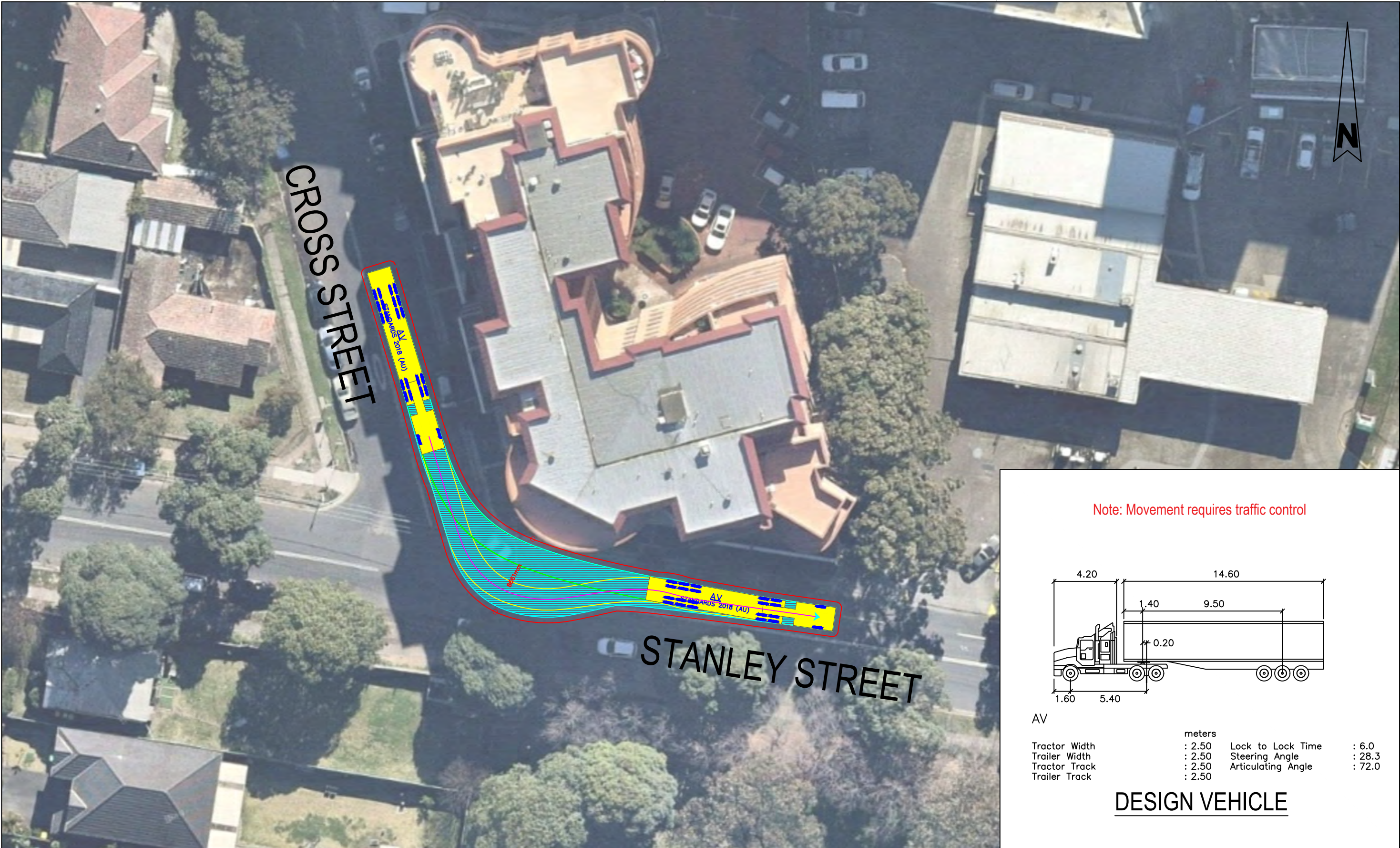
**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS		Drawn	Date
Issue	Revisions/Descriptions		
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021

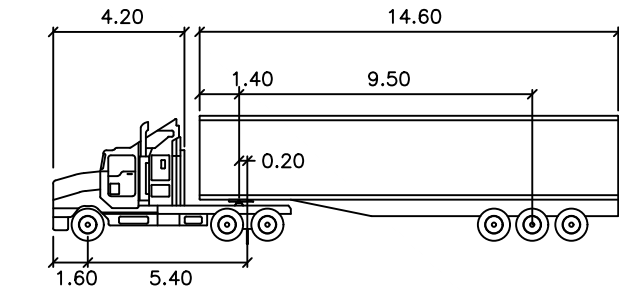

Project	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN
Title	20m AV Turns in Corners - Right Turn Entry Haulage Route (Stanley Street)

Design	M.H	Drawn	M.H	Checked	A.G
FOR INFORMATION ONLY				Date	28.09.2021
Project Number	P3519	Sheet Number	20	Issue	003






Note: Movement requires traffic control



AV			
	Tractor Width	Tractor Track	Trailer Track
	Trailer Width	Tractor Track	Trailer Track
	Tractor Track	Trailer Track	Trailer Track
	Trailer Track	Trailer Track	Trailer Track

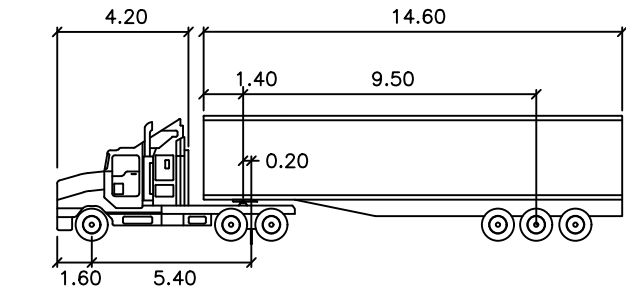
DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<b>REVISIONS</b>				Project	Design	Drawn	Checked
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	Issue	Revisions/Descriptions	Drawn	Date	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	M.H	M.H	A.G
		001	INITIAL SWEEP PATH	M.H	02.09.2021				
		002	UPDATED SWEEP PATH	M.H	23.09.2021				
		003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021				
						Title 20m AV Turns in Corners - Left Turn Exit Haulage Route (Stanley Street)	FOR INFORMATION ONLY	Date 28.09.2021	
				Project Number	Sheet Number	Issue			
				P3519	21	003			






Note: Movement crosses refuge.  
Requires removal of one parking space

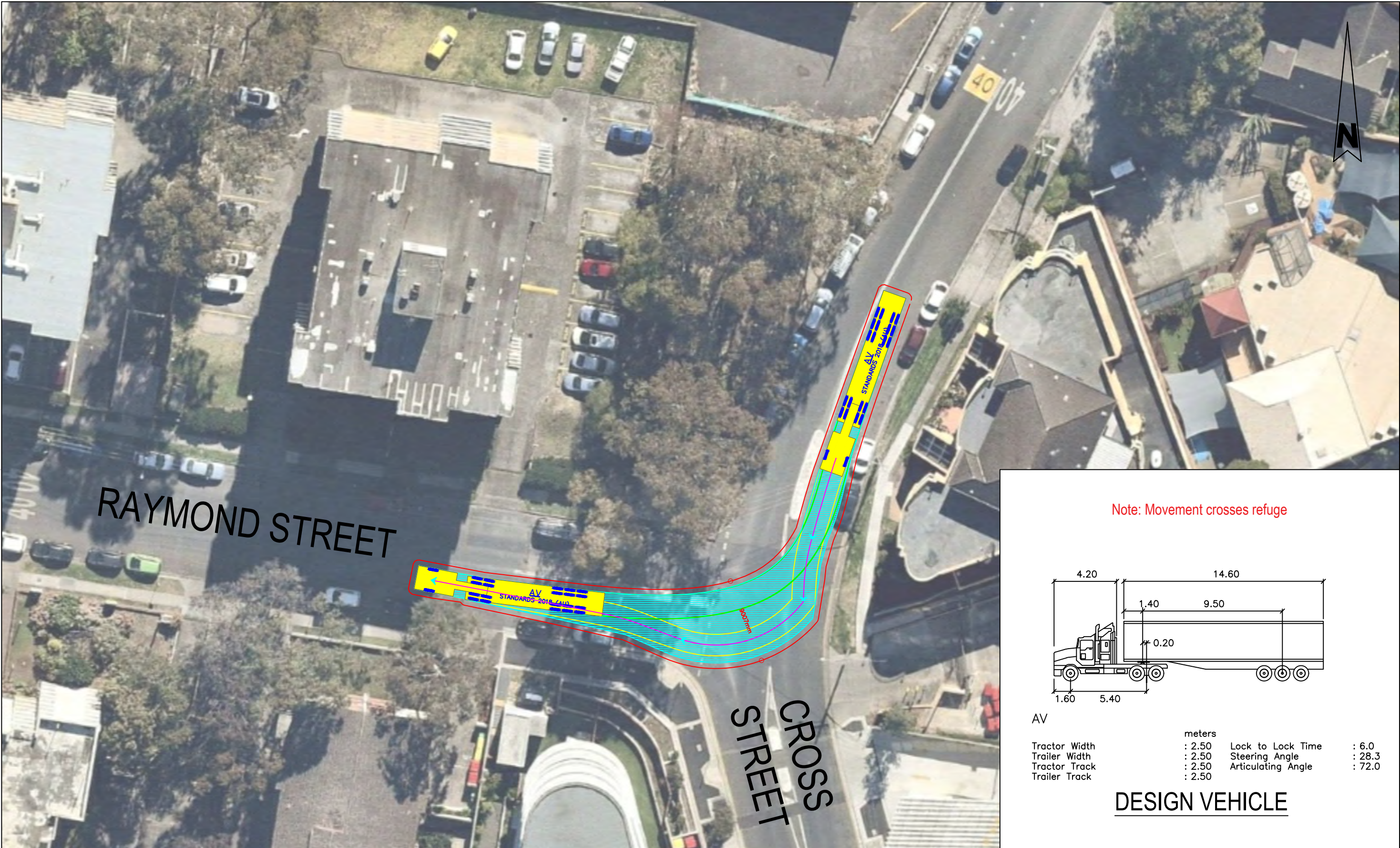


AV			
	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

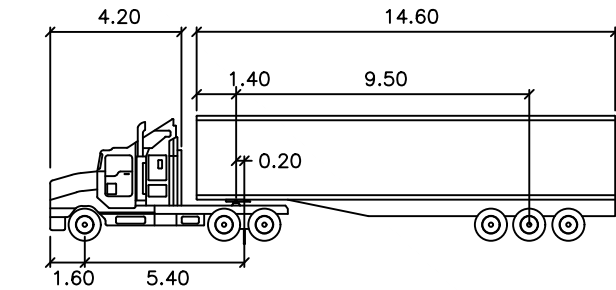
DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<table><tr><th colspan="2">REVISIONS</th><th rowspan="2">Drawn</th><th rowspan="2">Date</th></tr><tr><th>Issue</th><th>Revisions/Descriptions</th></tr><tr><td>001</td><td>INITIAL SWEEP PATH</td><td>M.H</td><td>02.09.2021</td></tr><tr><td>002</td><td>UPDATED SWEEP PATH</td><td>M.H</td><td>23.09.2021</td></tr><tr><td>003</td><td>UPDATED SWEEP PATH POST RSA AND REVIEW</td><td>M.H</td><td>28.09.2021</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>				REVISIONS		Drawn	Date	Issue	Revisions/Descriptions	001	INITIAL SWEEP PATH	M.H	02.09.2021	002	UPDATED SWEEP PATH	M.H	23.09.2021	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021																					Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		Design M.H	Drawn M.H	Checked A.G
	REVISIONS		Drawn	Date																																											
	Issue	Revisions/Descriptions																																													
	001	INITIAL SWEEP PATH	M.H	02.09.2021																																											
	002	UPDATED SWEEP PATH	M.H	23.09.2021																																											
	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021																																											
				Title 20m AV Turns in Corners - Left Turn Entry Haulage Route from South (East Terrace / Raymond Street)		<div>FOR INFORMATION ONLY</div>		Date 28.09.2021																																							
						Project Number P3519	Sheet Number 22	Issue 003																																							






Note: Movement crosses refuge

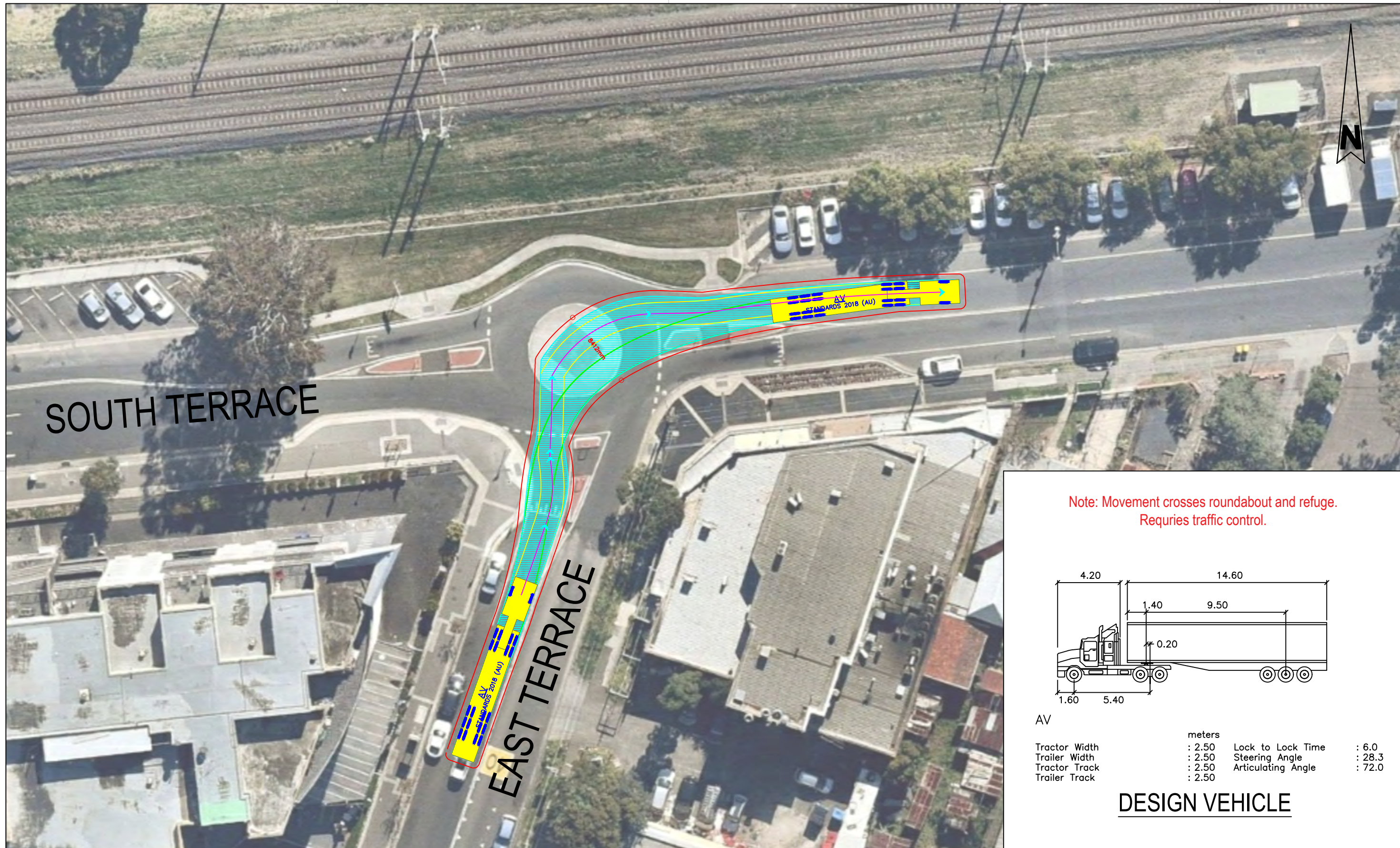


AV			
	Tractor Width	4.20	
	Trailer Width	14.60	
	Tractor Track	1.60	
	Trailer Track	5.40	

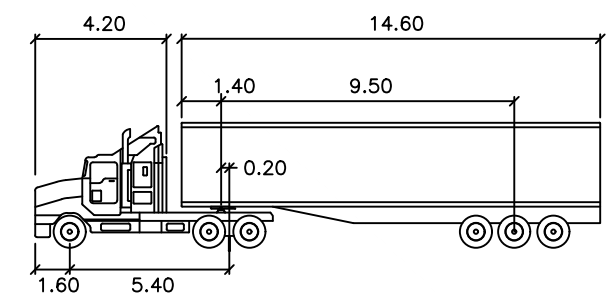
DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<table><tr><th colspan="2">REVISIONS</th><th rowspan="2">Drawn</th><th rowspan="2">Date</th></tr><tr><th>Issue</th><th>Revisions/Descriptions</th></tr><tr><td>001</td><td>INITIAL SWEEP PATH</td><td>M.H</td><td>02.09.2021</td></tr><tr><td>002</td><td>UPDATED SWEEP PATH</td><td>M.H</td><td>23.09.2021</td></tr><tr><td>003</td><td>UPDATED SWEEP PATH POST RSA AND REVIEW</td><td>M.H</td><td>28.09.2021</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>				REVISIONS		Drawn	Date	Issue	Revisions/Descriptions	001	INITIAL SWEEP PATH	M.H	02.09.2021	002	UPDATED SWEEP PATH	M.H	23.09.2021	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021																					Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		Design M.H	Drawn M.H	Checked A.G
	REVISIONS		Drawn	Date																																											
	Issue	Revisions/Descriptions																																													
	001	INITIAL SWEEP PATH	M.H	02.09.2021																																											
	002	UPDATED SWEEP PATH	M.H	23.09.2021																																											
	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021																																											
		Title 20m AV Turns in Corners - Right Turn Entry Haulage Route from North (East Terrace / Raymond Street)		FOR INFORMATION ONLY		Date 28.09.2021																																									
				Project Number P3519	Sheet Number 23	Issue 003																																									






Note: Movement crosses roundabout and refuge.  
Requires traffic control.

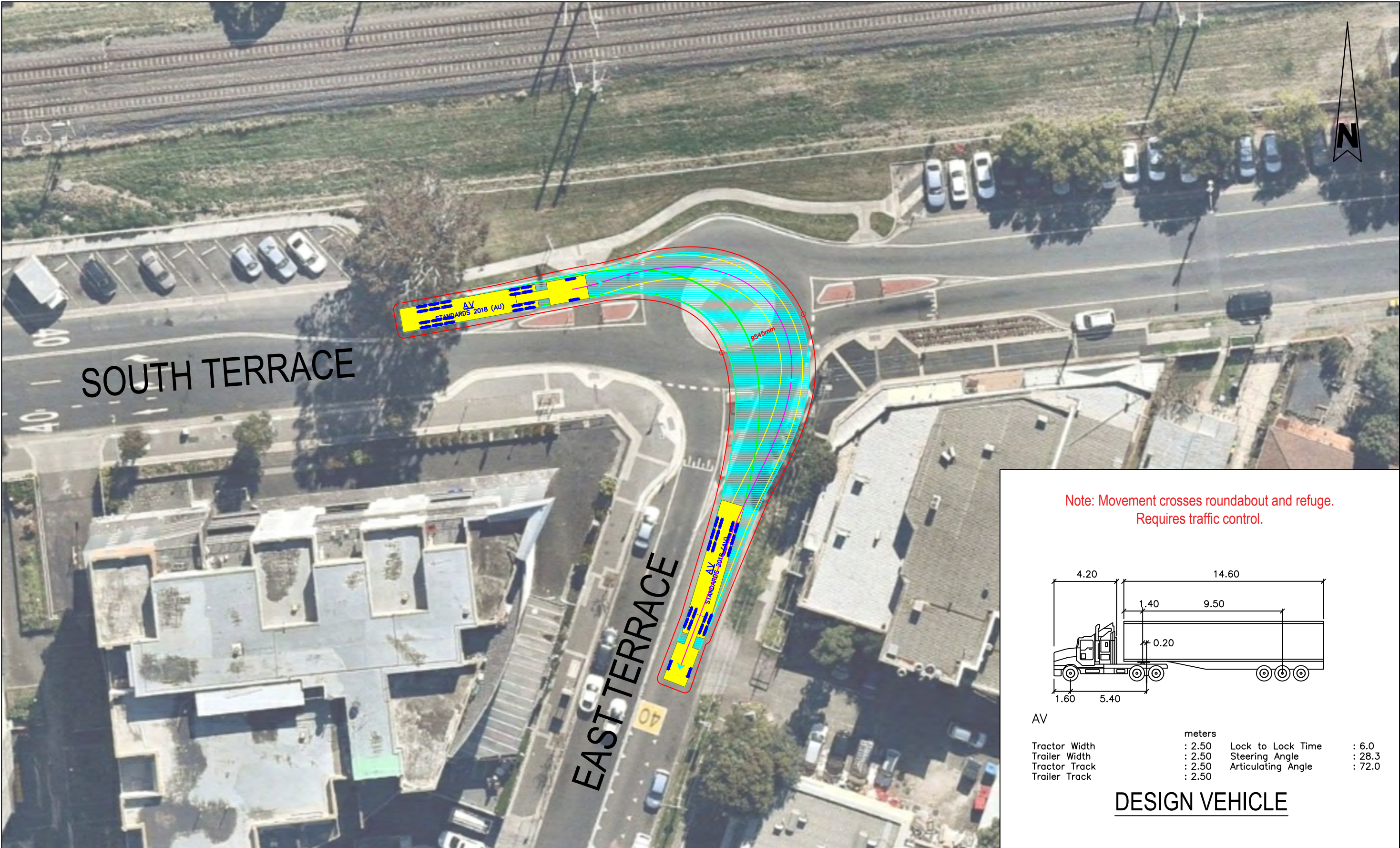


AV	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

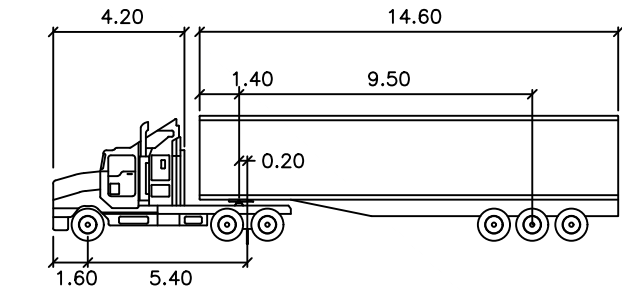
## DESIGN VEHICLE

 <b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	<b>REVISIONS</b>				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.G
	001	INITIAL SWEEP PATH	M.H	02.09.2021		<b>FOR INFORMATION ONLY</b>		
	002	UPDATED SWEEP PATH	M.H	23.09.2021				
	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021	Title 20m AV Turns in Corners - Right Turn Entry Haulage Route to South Terrace (East Terrace / Raymond Street)	Project Number	Sheet Number	Issue
						P3519	24	003






Note: Movement crosses roundabout and refuge.  
Requires traffic control.



AV			
	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.G
	001	INITIAL SWEEP PATH	M.H	02.09.2021		FOR INFORMATION ONLY		
	002	UPDATED SWEEP PATH	M.H	23.09.2021				
	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021	Title 20m AV Turns in Corners - Right Turn Exit Haulage Route from South Terrace (East Terrace / Raymond Street)	Project Number	Sheet Number	Issue
						P3519	25	003

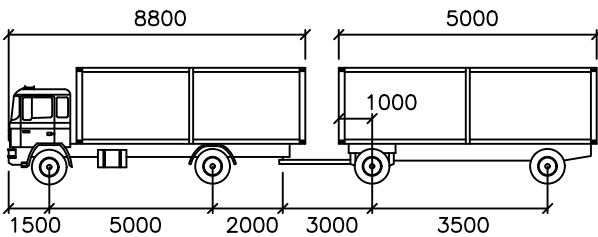
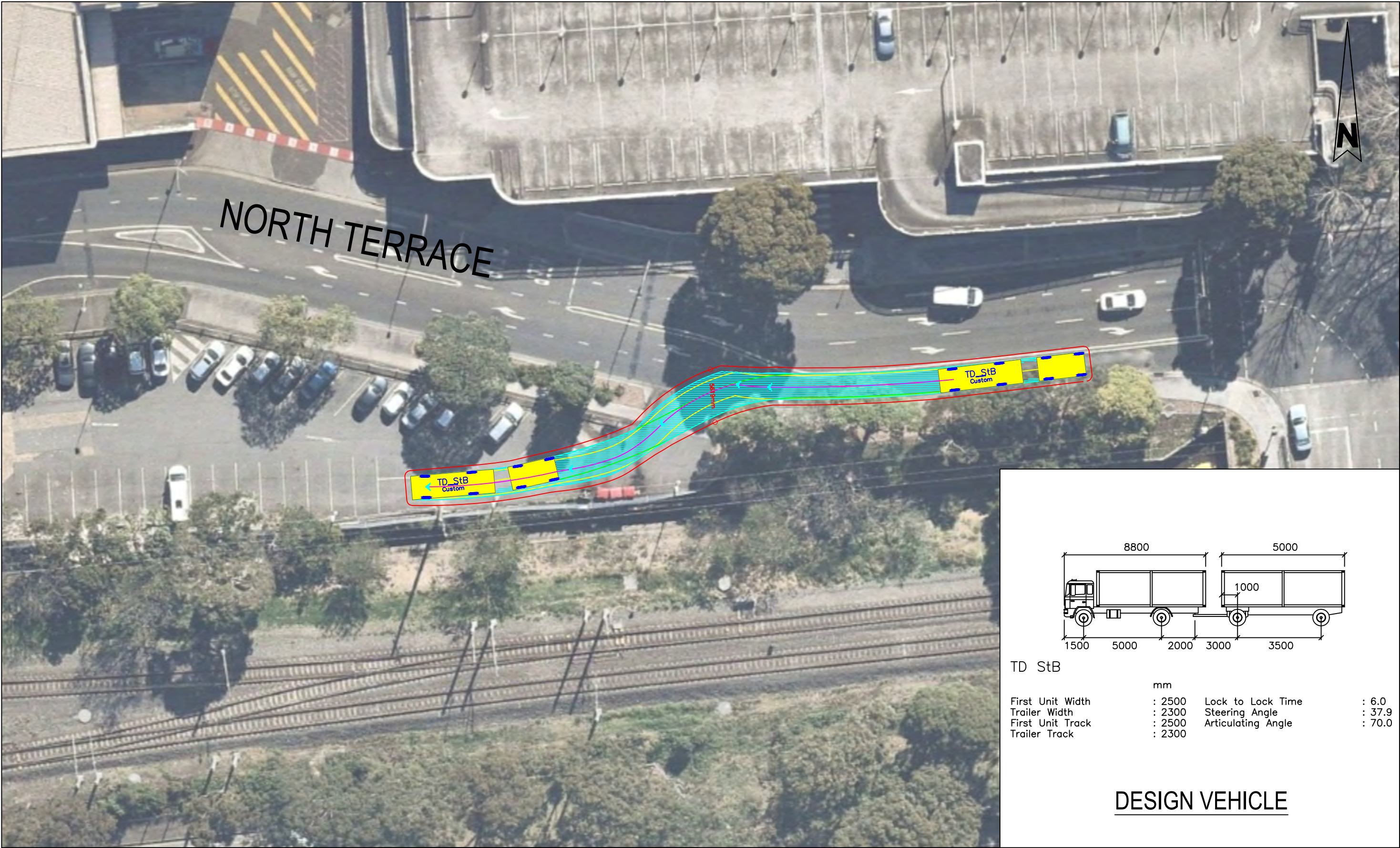











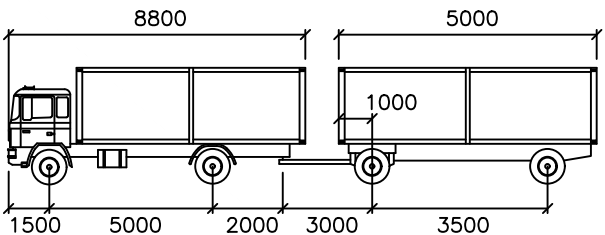


TD StB	mm		
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

DESIGN VEHICLE


	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<b>Revisions/Descriptions</b>	<b>Drawn</b>	<b>Date</b>	<b>Project</b> BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	<b>Design</b>	<b>Drawn</b>	<b>Checked</b>	
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au	001	INITIAL SWEEP PATH	M.H		02.09.2021	M.H	M.H	A.G
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	002	UPDATED SWEEP PATH	M.H		23.09.2021	<div>FOR INFORMATION ONLY</div>		
		003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H		28.09.2021			
							<b>Project Number</b>	<b>Sheet Number</b>	<b>Issue</b>
							P3519	28	003





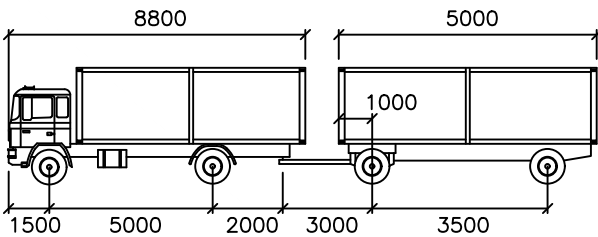
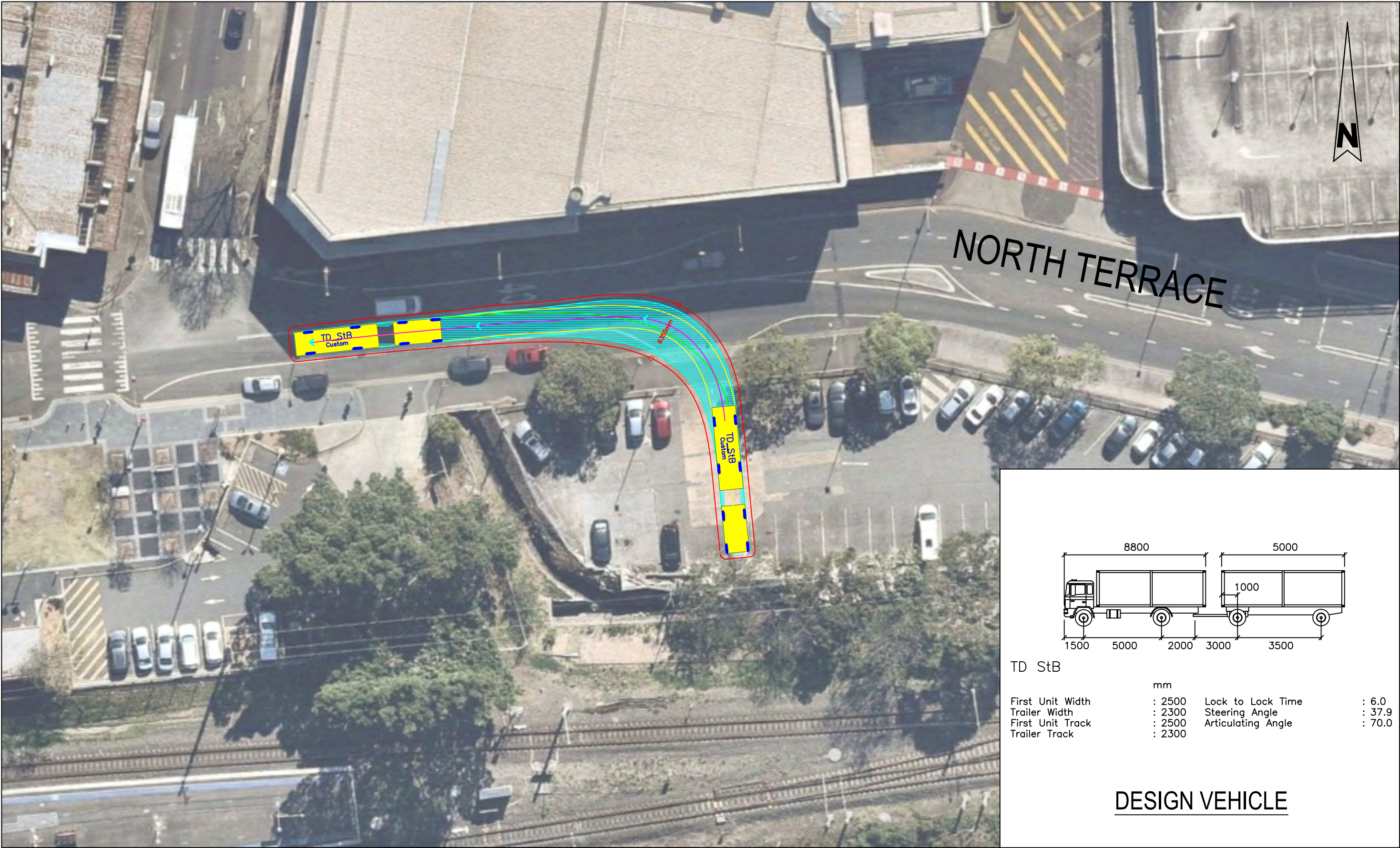
TD StB			
mm			
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		Design M.H	Drawn M.H	Checked A.G
					Title 15.5m T&D Main Compound - Right Turn Exit		FOR INFORMATION ONLY		
							Project Number P3519	Sheet Number 29	Date 28.09.2021
								Issue 003	


REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021





TD StB			
mm			
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.G
	001	INITIAL SWEPT PATH	M.H	02.09.2021		FOR INFORMATION ONLY		
	002	UPDATED SWEPT PATH	M.H	23.09.2021				
	003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021	Title 15.5m T&D Main Compound - Left Turn Exit	Project Number	Sheet Number	Date
						P3519	30	28.09.2021
								Issue
								003

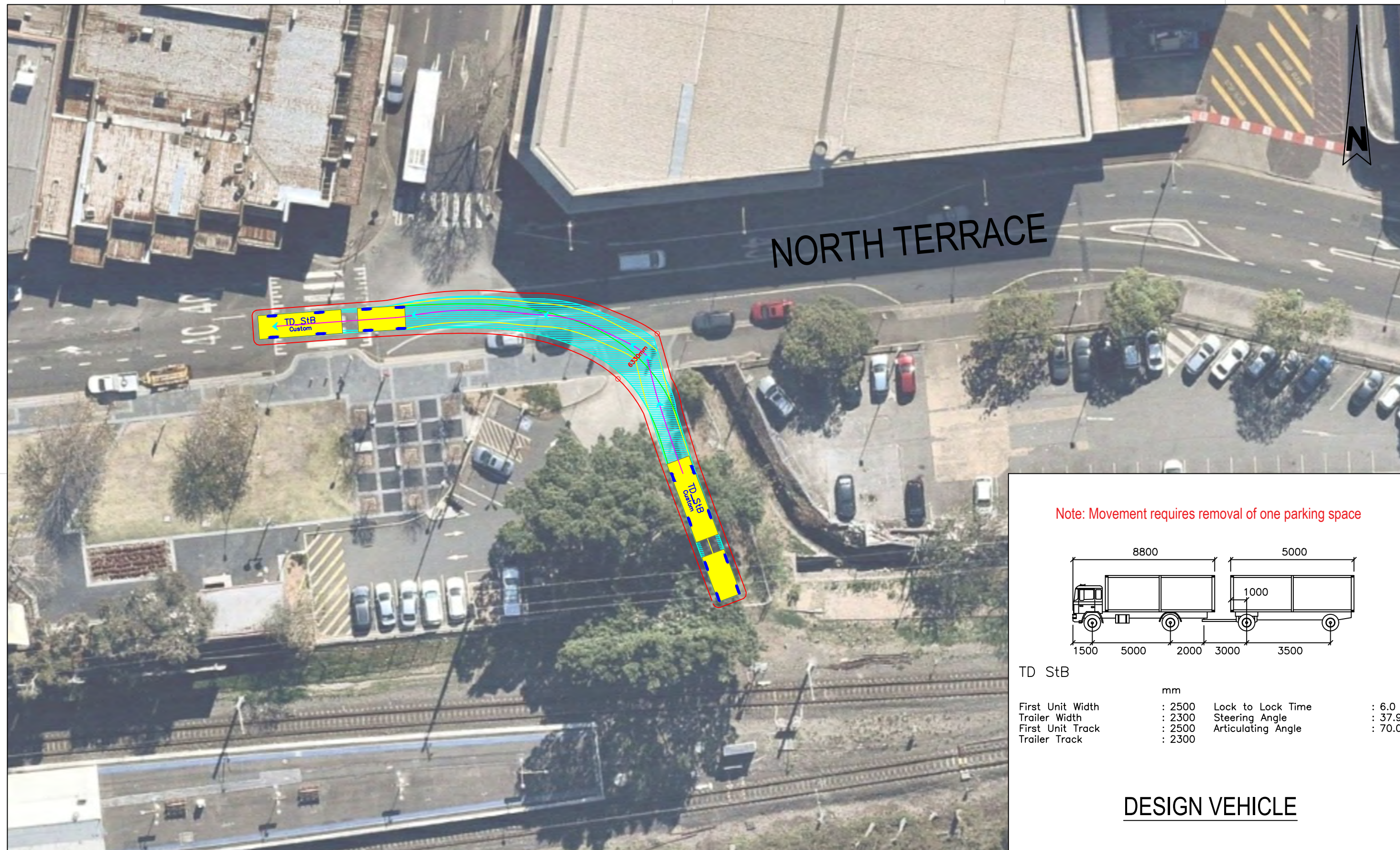












**Gold Coast**  
Suite 28, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

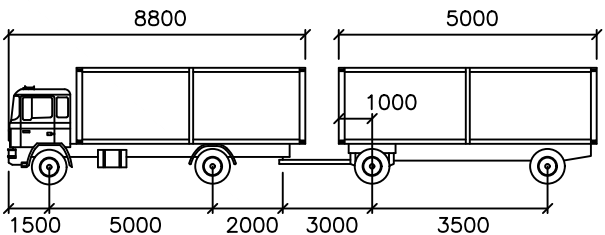
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)

**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

Project	Design	Drawn	Checked
BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	M.H	M.H	A.G
	FOR INFORMATION ONLY		Date
Title	Project Number	Sheet Number	Issue
15.5m T&D Gate 1 Access - Left Turn Exit	P3519	33	003



SOUTH TERRACE



TD StB			
mm			
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

DESIGN VEHICLE

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021

Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design M.H	Drawn M.H	Checked A.G
	FOR INFORMATION ONLY		
Title 15.5m T&D Gate 2 Access - Left Turn Entry	Project Number P3519	Sheet Number 34	Date 28.09.2021 Issue 003

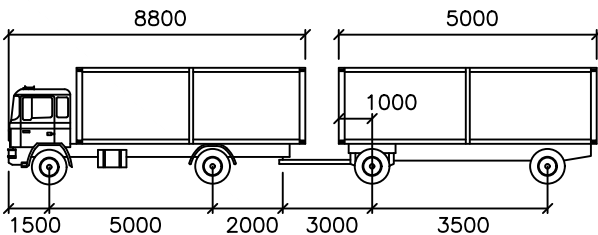
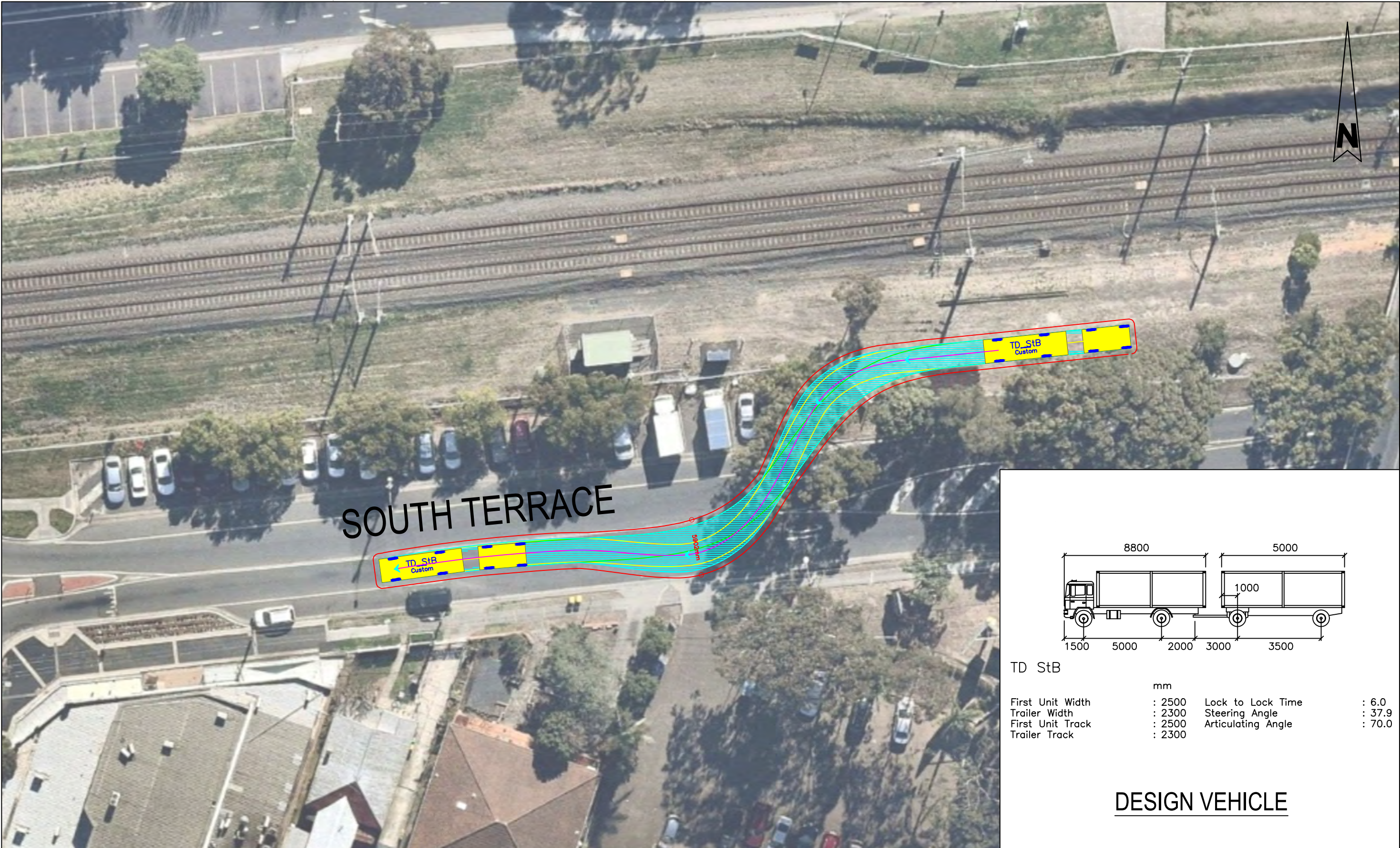


**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)


**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202



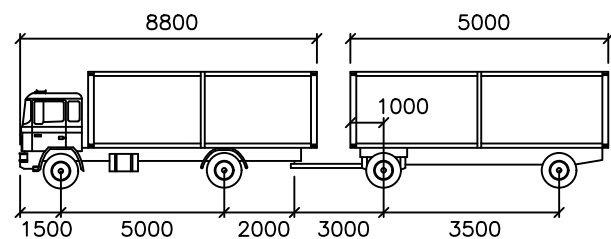


TD StB	mm		
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				<b>REVISIONS</b> Revisions/Descriptions		Drawn	Date	Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN			Design M.H	Drawn M.H	Checked A.G
					Issue				Title 15.5m T&D Gate 2 Access - Right Turn Exit			FOR INFORMATION ONLY		
					001	INITIAL SWEPT PATH	M.H	02.09.2021				Date 28.09.2021		
					002	UPDATED SWEPT PATH	M.H	23.09.2021				Project Number P3519		
					003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021				Sheet Number 35		
												Issue 003		





TD StB

mm

First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

## DESIGN VEHICLE



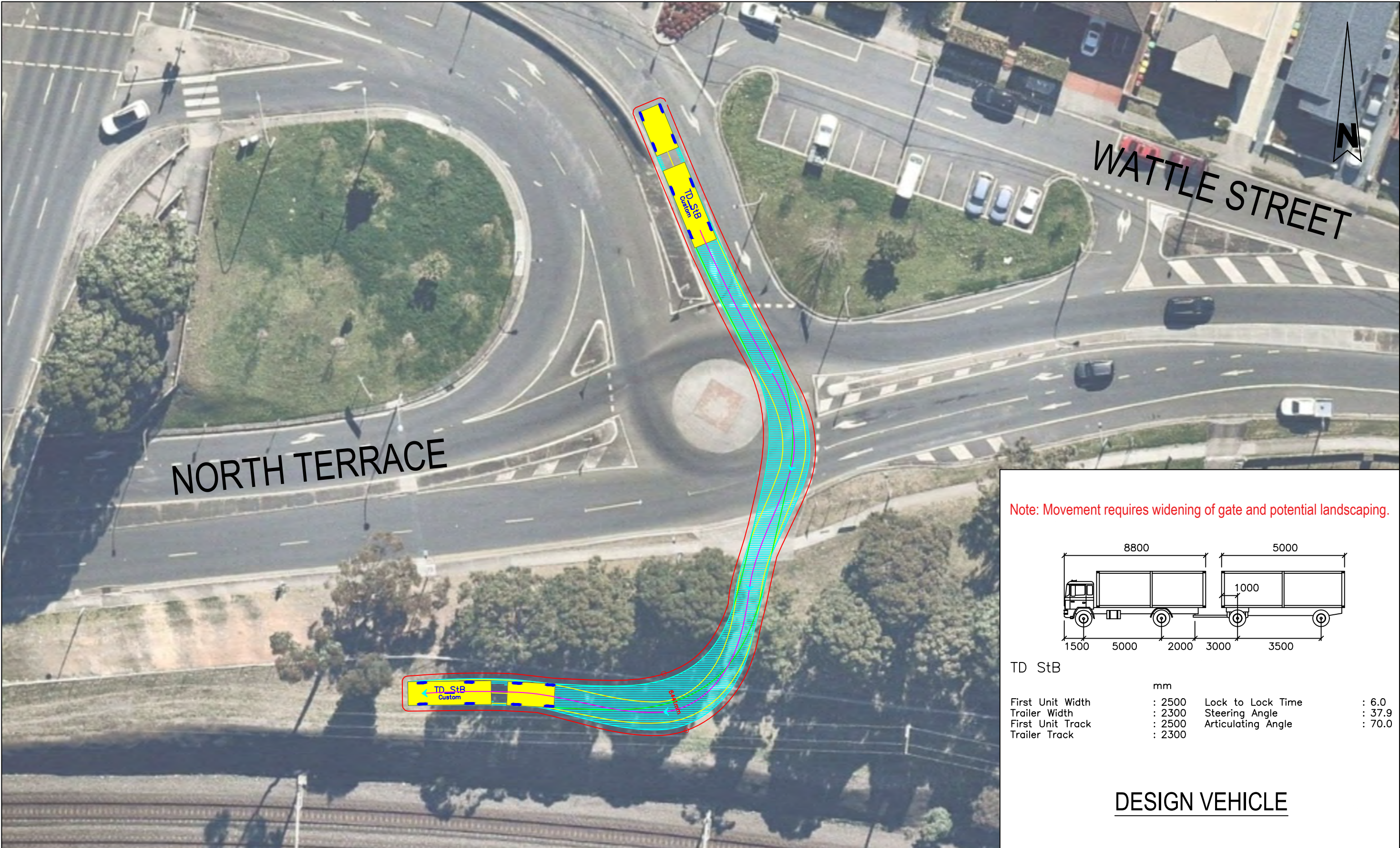
**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021

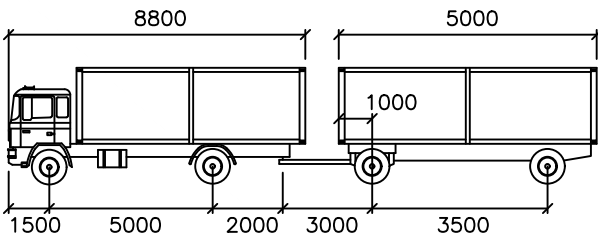

Project	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN
Title	15.5m T&D Gate 3 Access - Right Turn Exit

Design	M.H	Drawn	M.H	Checked	A.G
FOR INFORMATION ONLY				Date	28.09.2021
Project Number	P3519	Sheet Number	36	Issue	003






Note: Movement requires widening of gate and potential landscaping.

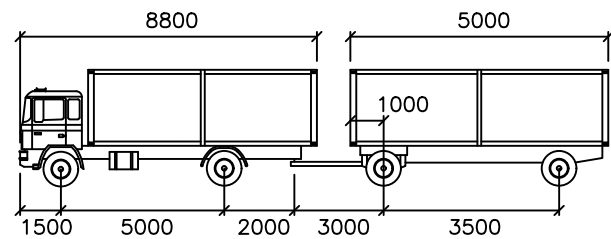
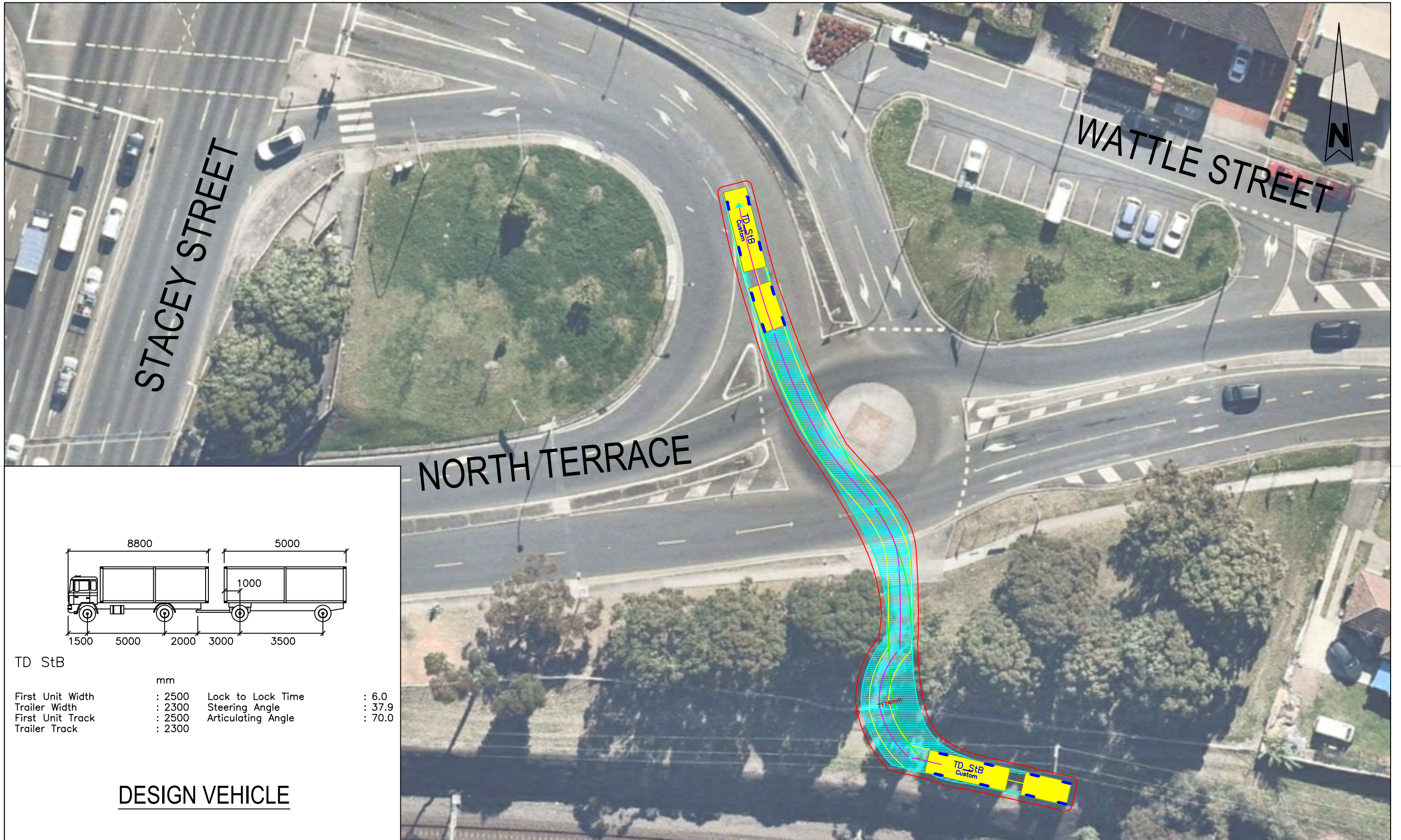


TD StB			
	mm		
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<table><tr><th>Issue</th><th>Revisions/Descriptions</th><th>Drawn</th><th>Date</th></tr><tr><td>001</td><td>INITIAL SWEPT PATH</td><td>M.H</td><td>02.09.2021</td></tr><tr><td>002</td><td>UPDATED SWEPT PATH</td><td>M.H</td><td>23.09.2021</td></tr><tr><td>003</td><td>UPDATED SWEPT PATH POST RSA AND REVIEW</td><td>M.H</td><td>28.09.2021</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>	Issue	Revisions/Descriptions	Drawn	Date	001	INITIAL SWEPT PATH	M.H	02.09.2021	002	UPDATED SWEPT PATH	M.H	23.09.2021	003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021																									<table><tr><td rowspan="3">Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN</td><td>Design M.H</td><td>Drawn M.H</td><td>Checked A.G</td></tr><tr><td colspan="3">FOR INFORMATION ONLY</td></tr><tr><td>Date 28.09.2021</td></tr></table>	Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design M.H	Drawn M.H	Checked A.G	FOR INFORMATION ONLY			Date 28.09.2021
	Issue	Revisions/Descriptions	Drawn	Date																																															
	001	INITIAL SWEPT PATH	M.H	02.09.2021																																															
	002	UPDATED SWEPT PATH	M.H	23.09.2021																																															
	003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021																																															
Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design M.H	Drawn M.H	Checked A.G																																																
	FOR INFORMATION ONLY																																																		
	Date 28.09.2021																																																		
<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au				<table><tr><td rowspan="2">Title 15.5m T&amp;D Gate 4 Access - Right Lane Through Entry</td><td>Project Number P3519</td><td>Sheet Number 37</td><td>Issue 003</td></tr></table>	Title 15.5m T&D Gate 4 Access - Right Lane Through Entry	Project Number P3519	Sheet Number 37	Issue 003																																											
Title 15.5m T&D Gate 4 Access - Right Lane Through Entry	Project Number P3519	Sheet Number 37	Issue 003																																																
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202																																																		





TD StB

mm

First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

## DESIGN VEHICLE



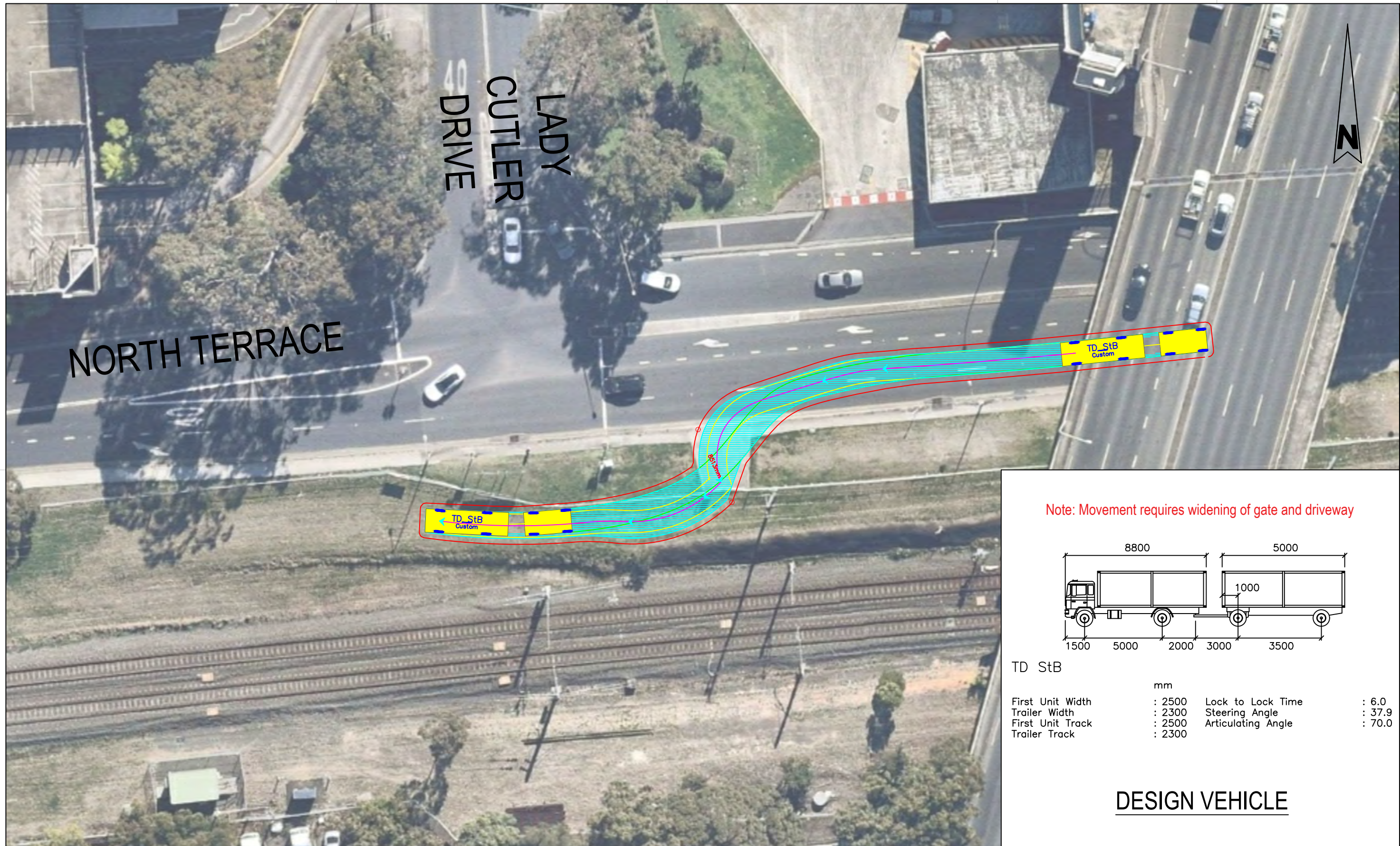
**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021

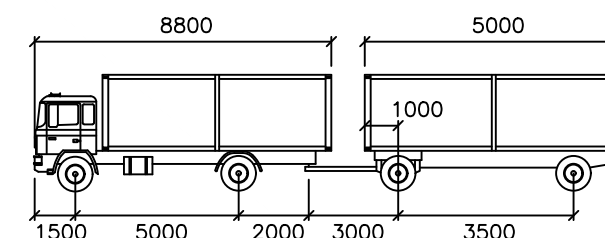
Project	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		
Title	15.5m T&D Gate 4 Access - Left Turn Through Exit to Wattle Street		

Design	M.H	Drawn	M.H	Checked	A.G
FOR INFORMATION ONLY					Date
					28.09.2021
Project Number	P3519	Sheet Number	38	Issue	003






Note: Movement requires widening of gate and driveway



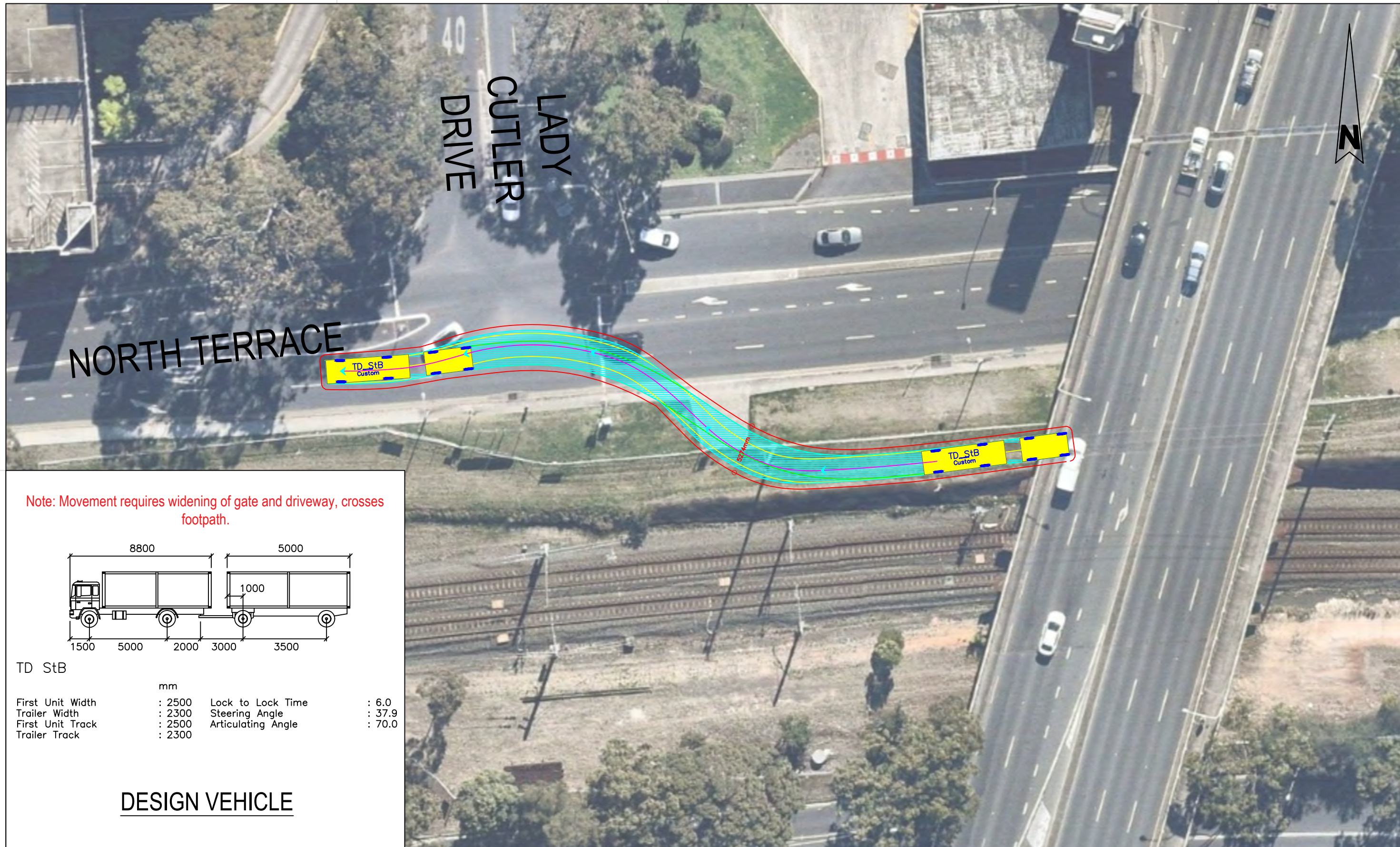
TD StB

mm			
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

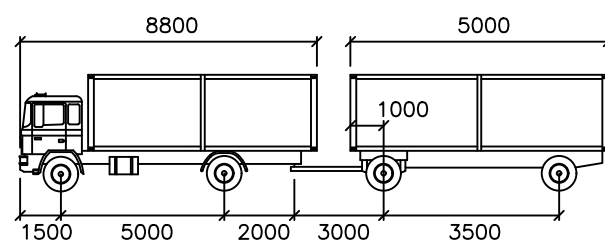
## DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design M.H	Drawn M.H	Checked A.G
		Issue	Revisions/Descriptions	Drawn	Date				
		001	INITIAL SWEPT PATH	M.H	02.09.2021				
		002	UPDATED SWEPT PATH	M.H	23.09.2021				
		003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021	Title 15.5m T&D Gate 5 Access - Left Entry from North Terrace	FOR INFORMATION ONLY	Project Number P3519	Date 28.09.2021
						Sheet Number 39	Issue 003		






Note: Movement requires widening of gate and driveway, crosses footpath.



TD StB			
	mm		
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

## DESIGN VEHICLE



**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)

**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

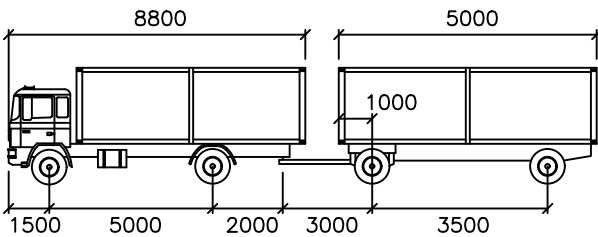
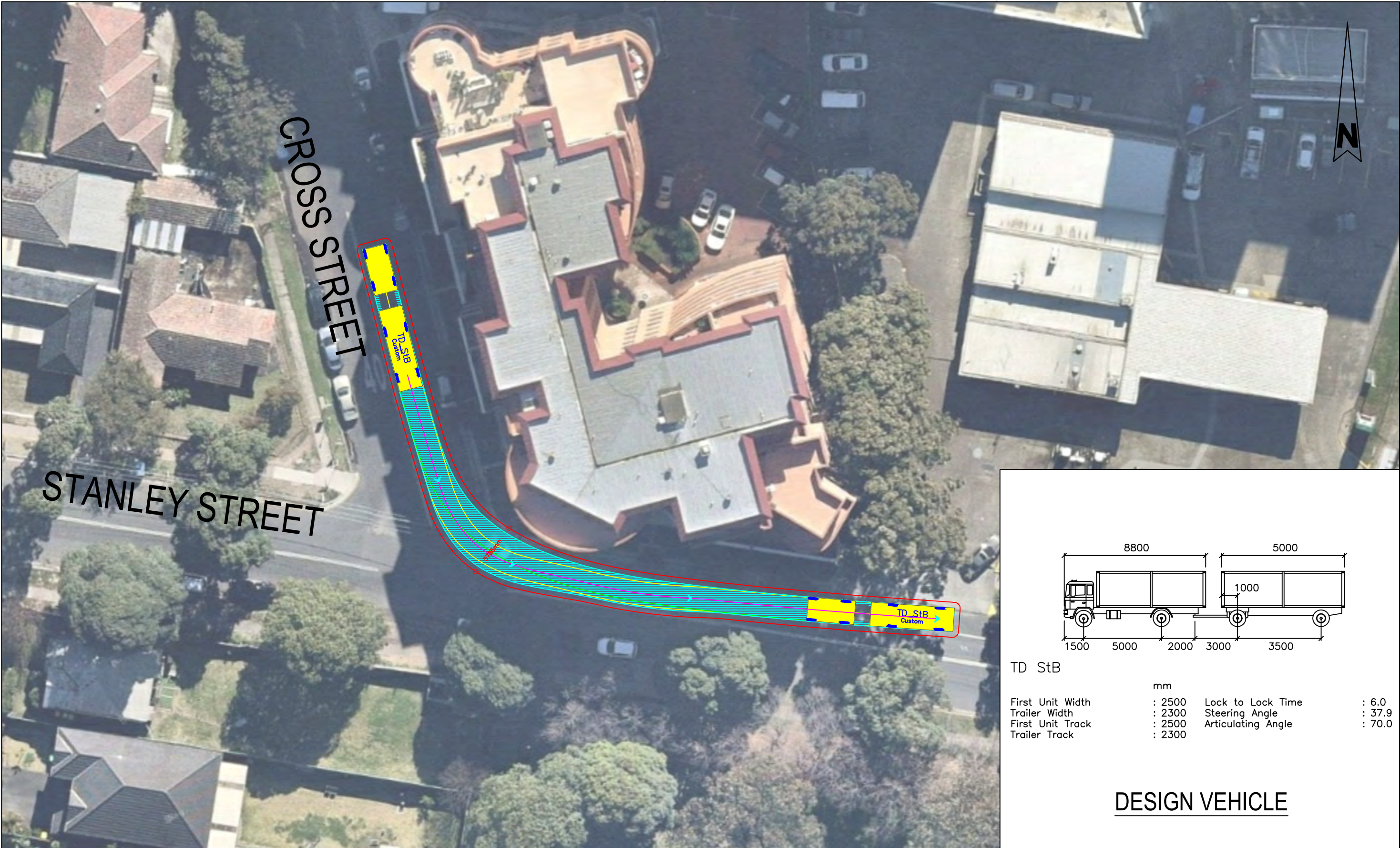
REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021

Project		Design	Drawn	Checked
BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		M.H	M.H	A.G
Title		FOR INFORMATION ONLY		
15.5m T&D Gate 5 Access - Left Turn Exit to North Terrace (Westbound)		Project Number	Sheet Number	Issue
		P3519	40	003








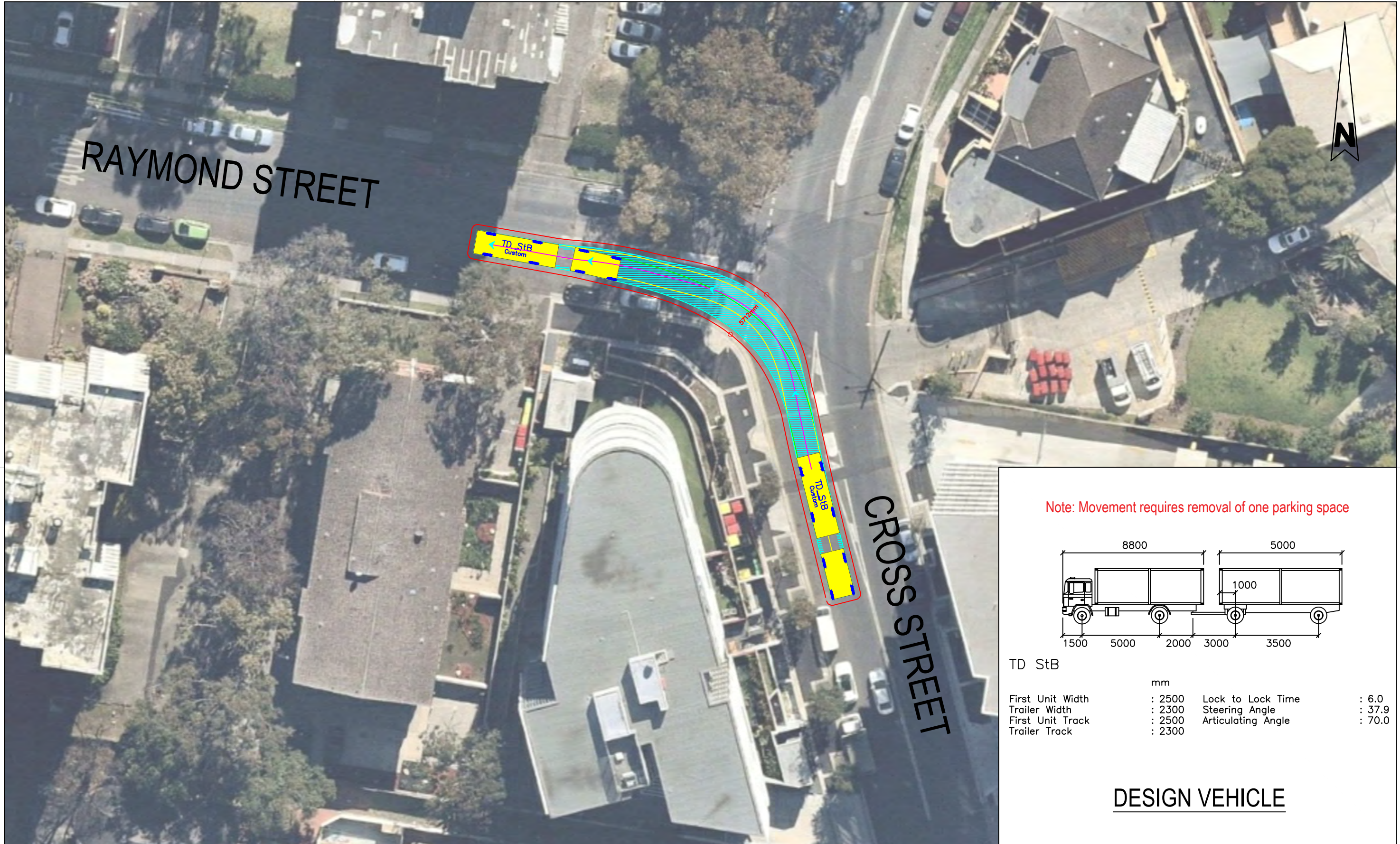


TD StB			
mm			
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

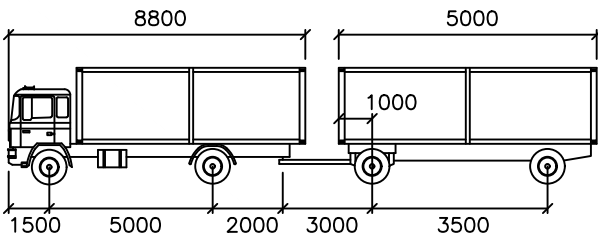
DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<b>REVISIONS</b>				Project		Design	Drawn	Checked
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	Issue	Revisions/Descriptions	Drawn	Date	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	M.H	M.H	A.G	
		001	INITIAL SWEPT PATH	M.H	02.09.2021					
		002	UPDATED SWEPT PATH	M.H	23.09.2021					
		003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021					
						Title 15.5m T&D Turns in Corners (Stanley Street) - Left Turn Exit Haulage Route from Cross Street	<b>FOR INFORMATION ONLY</b>		Date	
							Project Number	Sheet Number	Issue	
							P3519	42	003	






Note: Movement requires removal of one parking space

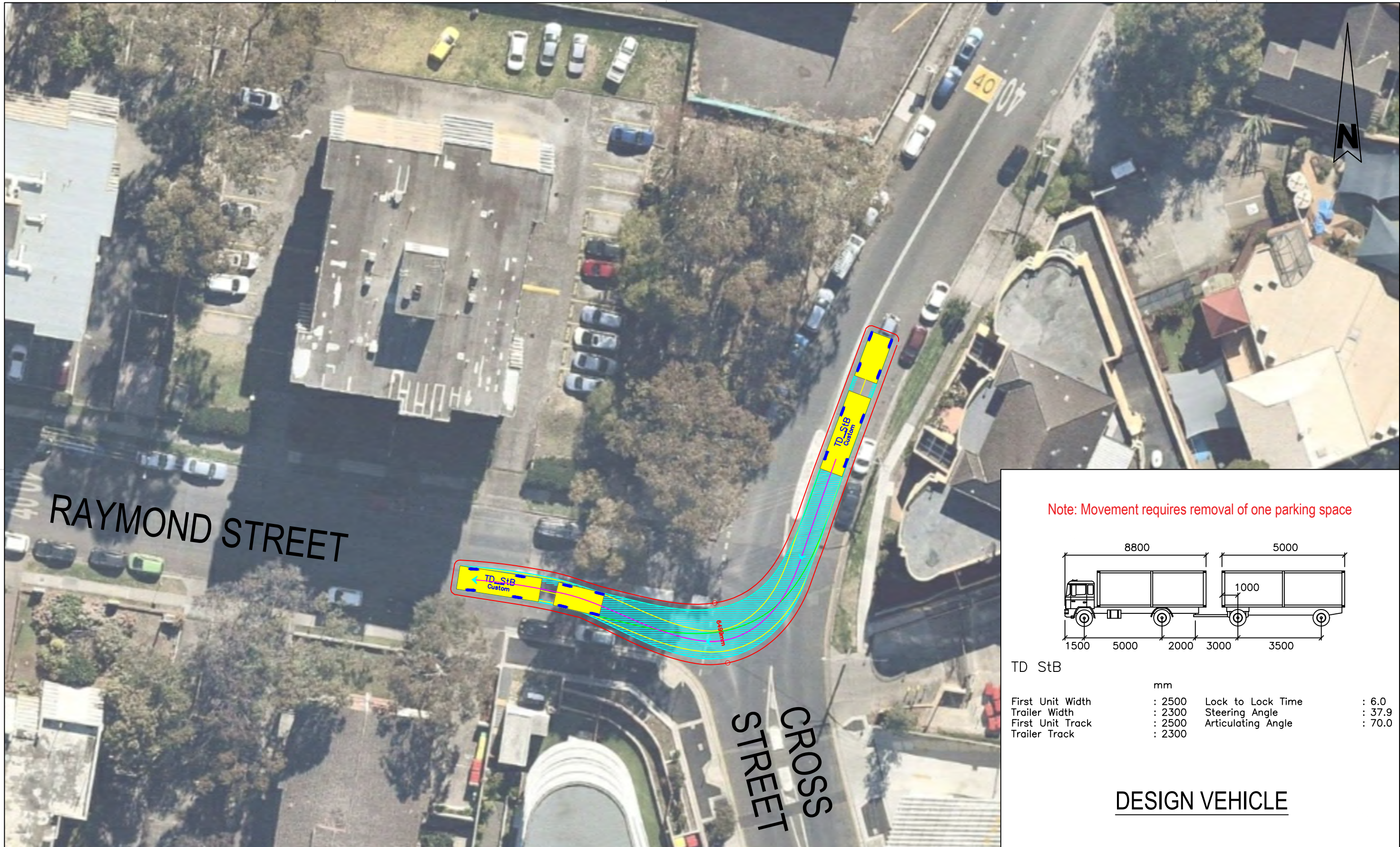


TD StB		mm	
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

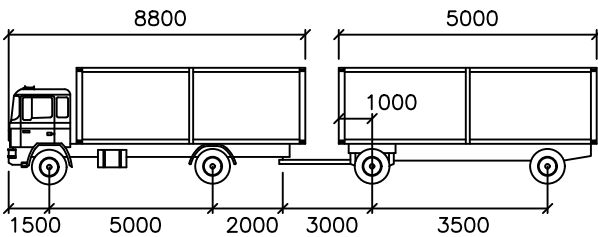
DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<b>REVISIONS</b>				Project	Design	Drawn	Checked
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au	Issue	Revisions/Descriptions	Drawn	Date	<b>BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN</b>	M.H	M.H	A.G
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	001	INITIAL SWEEP PATH	M.H	02.09.2021		<div>FOR INFORMATION ONLY</div>	Date	
		002	UPDATED SWEEP PATH	M.H	23.09.2021			28.09.2021	
		003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021	Project Number			
						P3519			
						Sheet Number	43		
						Issue	003		






Note: Movement requires removal of one parking space

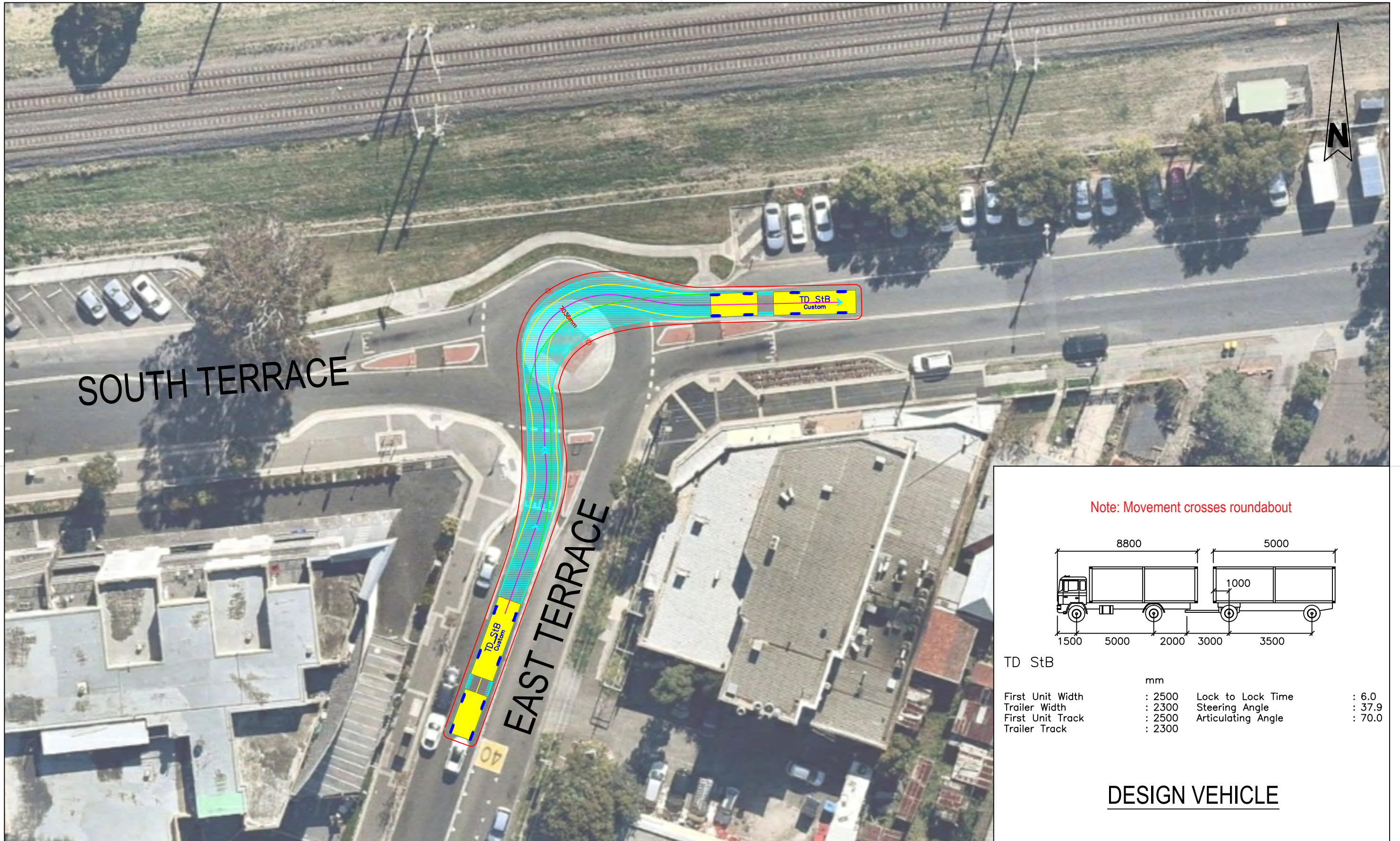


TD StB			
	mm		
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

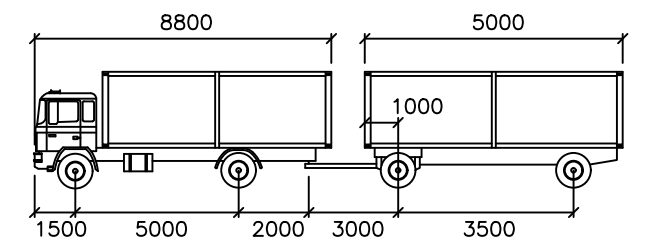
DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au				<table><tr><th colspan="2">REVISIONS</th><th rowspan="2">Issue</th><th rowspan="2">Revisions/Descriptions</th><th rowspan="2">Drawn</th><th rowspan="2">Date</th></tr><tr><th colspan="6"></th></tr><tr><td>001</td><td>INITIAL SWEEP PATH</td><td></td><td></td><td>M.H</td><td>02.09.2021</td></tr><tr><td>002</td><td>UPDATED SWEEP PATH</td><td></td><td></td><td>M.H</td><td>23.09.2021</td></tr><tr><td>003</td><td>UPDATED SWEEP PATH POST RSA AND REVIEW</td><td></td><td></td><td>M.H</td><td>28.09.2021</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>		REVISIONS		Issue	Revisions/Descriptions	Drawn	Date							001	INITIAL SWEEP PATH			M.H	02.09.2021	002	UPDATED SWEEP PATH			M.H	23.09.2021	003	UPDATED SWEEP PATH POST RSA AND REVIEW			M.H	28.09.2021																															<table><tr><td colspan="2">Project</td></tr><tr><td colspan="2">BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN</td></tr><tr><td colspan="2">Title</td></tr><tr><td colspan="2">15.5m T&amp;D Turns in Corners - Right Turn Entry Haulage Route to Raymond Street</td></tr></table>		Project		BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		Title		15.5m T&D Turns in Corners - Right Turn Entry Haulage Route to Raymond Street		<table><tr><td>Design</td><td>Drawn</td><td>Checked</td></tr><tr><td>M.H</td><td>M.H</td><td>A.G</td></tr></table>		Design	Drawn	Checked	M.H	M.H	A.G	<table><tr><td colspan="2">FOR INFORMATION ONLY</td><td>Date</td></tr><tr><td colspan="2"></td><td>28.09.2021</td></tr></table>		FOR INFORMATION ONLY		Date			28.09.2021
	REVISIONS		Issue	Revisions/Descriptions			Drawn	Date																																																																																				
	001	INITIAL SWEEP PATH					M.H	02.09.2021																																																																																				
	002	UPDATED SWEEP PATH					M.H	23.09.2021																																																																																				
	003	UPDATED SWEEP PATH POST RSA AND REVIEW					M.H	28.09.2021																																																																																				
Project																																																																																												
BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN																																																																																												
Title																																																																																												
15.5m T&D Turns in Corners - Right Turn Entry Haulage Route to Raymond Street																																																																																												
Design	Drawn	Checked																																																																																										
M.H	M.H	A.G																																																																																										
FOR INFORMATION ONLY		Date																																																																																										
		28.09.2021																																																																																										
<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au																																																																																												
<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202																																																																																												





Note: Movement crosses roundabout



TD StB

	mm		
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

## DESIGN VEHICLE



**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

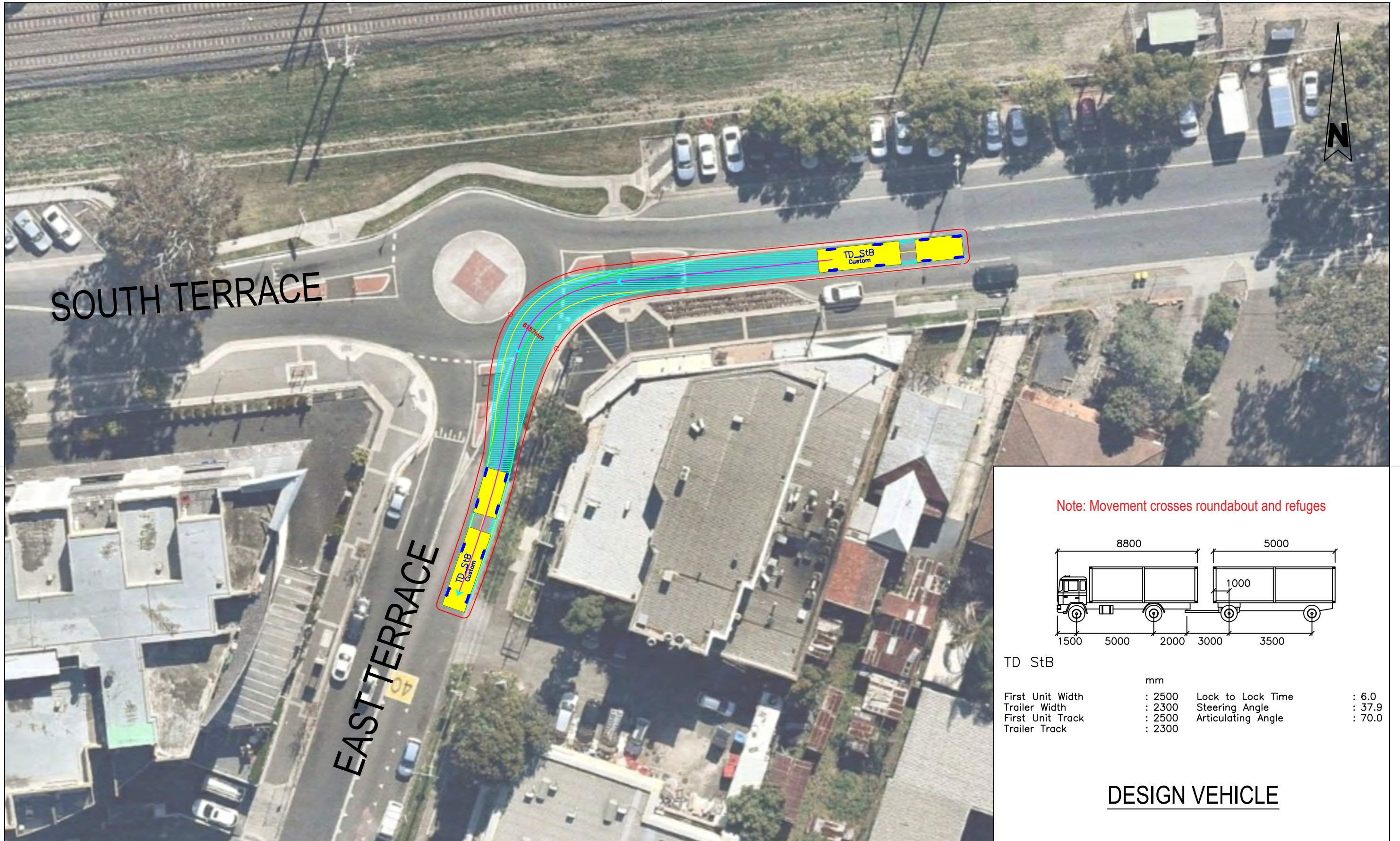
REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021

Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design M.H	Drawn M.H	Checked A.G
	FOR INFORMATION ONLY		
	Date 28.09.2021		
Title 15.5m T&D - Right Turn Entry Haulage Route to South terrace via East Terrace/South Terrace Roundabout	Project Number P3519	Sheet Number 45	Issue 003

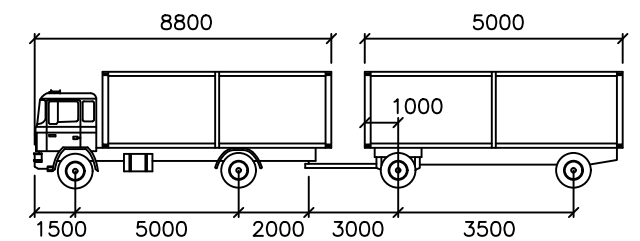








Note: Movement crosses roundabout and refuges



TD StB

mm			
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

## DESIGN VEHICLE

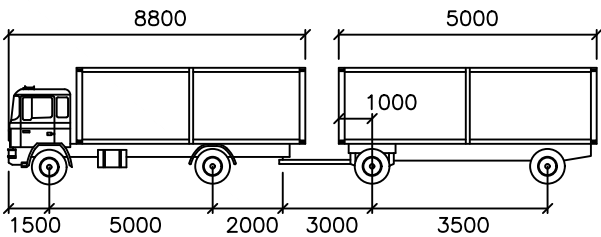
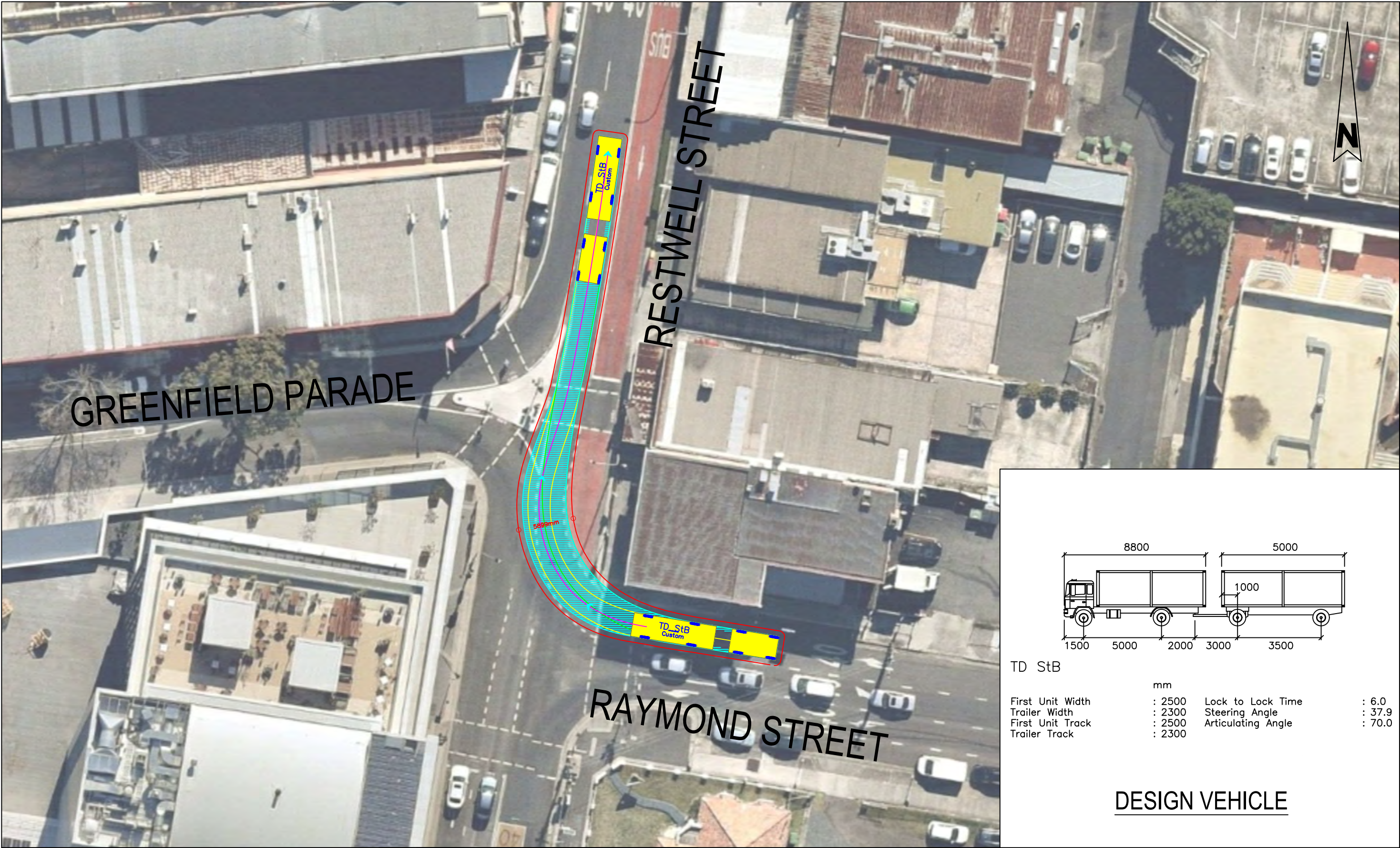


**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021


Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design M.H	Drawn M.H	Checked A.G
	FOR INFORMATION ONLY		
Title 15.5m T&D - Left Turn Exit Haulage Route to East terrace via East Terrace/South Terrace Roundabout	Project Number P3519	Sheet Number 47	Date 28.09.2021
			Issue 003



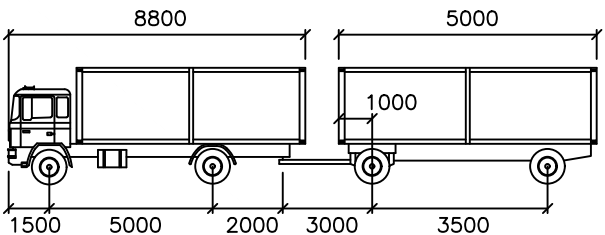
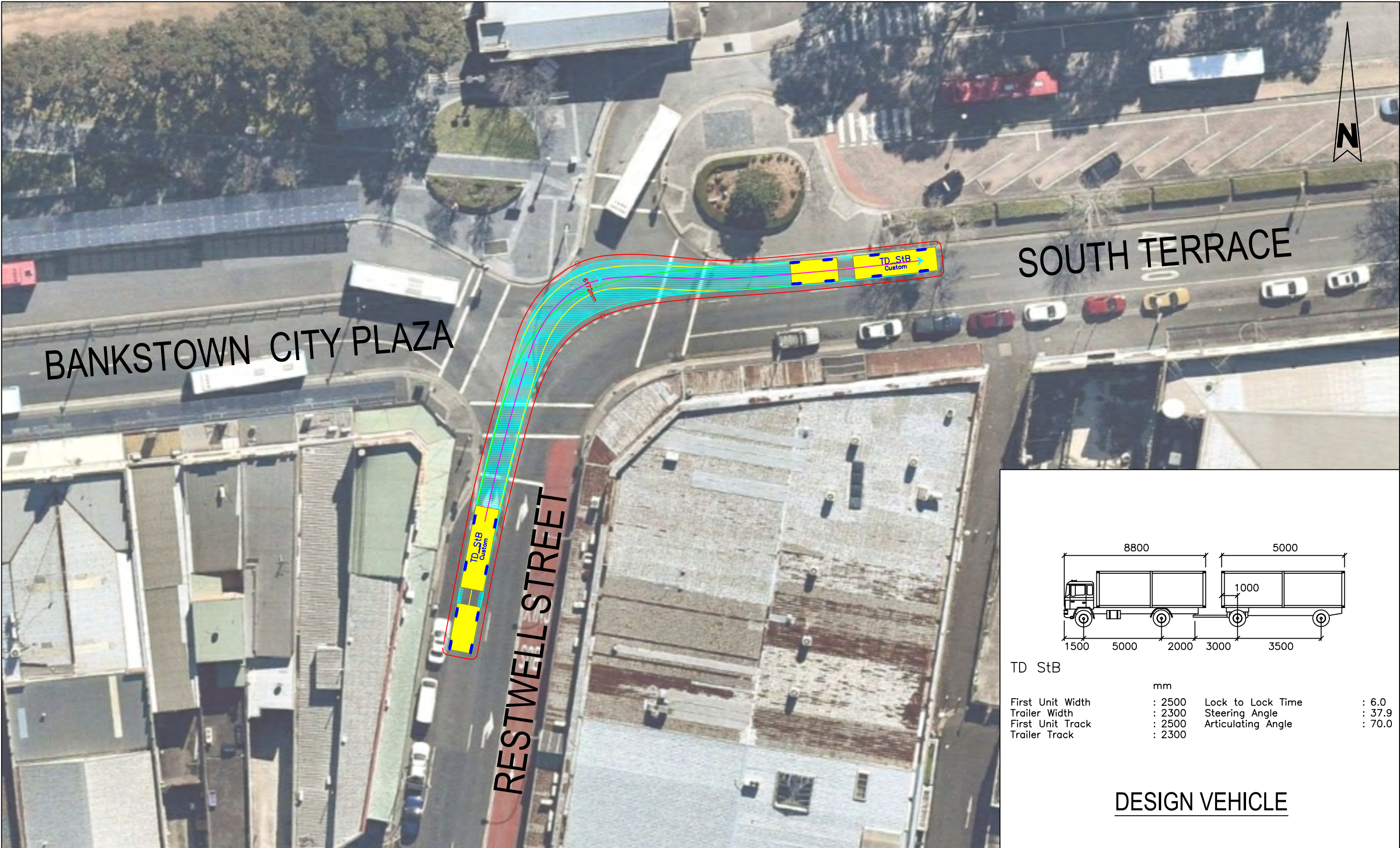


TD StB			
	mm		
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

DESIGN VEHICLE


 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked	
	Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.G	
	001	INITIAL SWEPT PATH	M.H	02.09.2021		FOR INFORMATION ONLY			
	002	UPDATED SWEPT PATH	M.H	23.09.2021					
	003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021		Title 15.5m T&D - Right Turn Entry Haulage Route to Restwell Street	Date		28.09.2021
							Project Number	Sheet Number	Issue
							P3519	48	003





TD StB			
	mm		
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

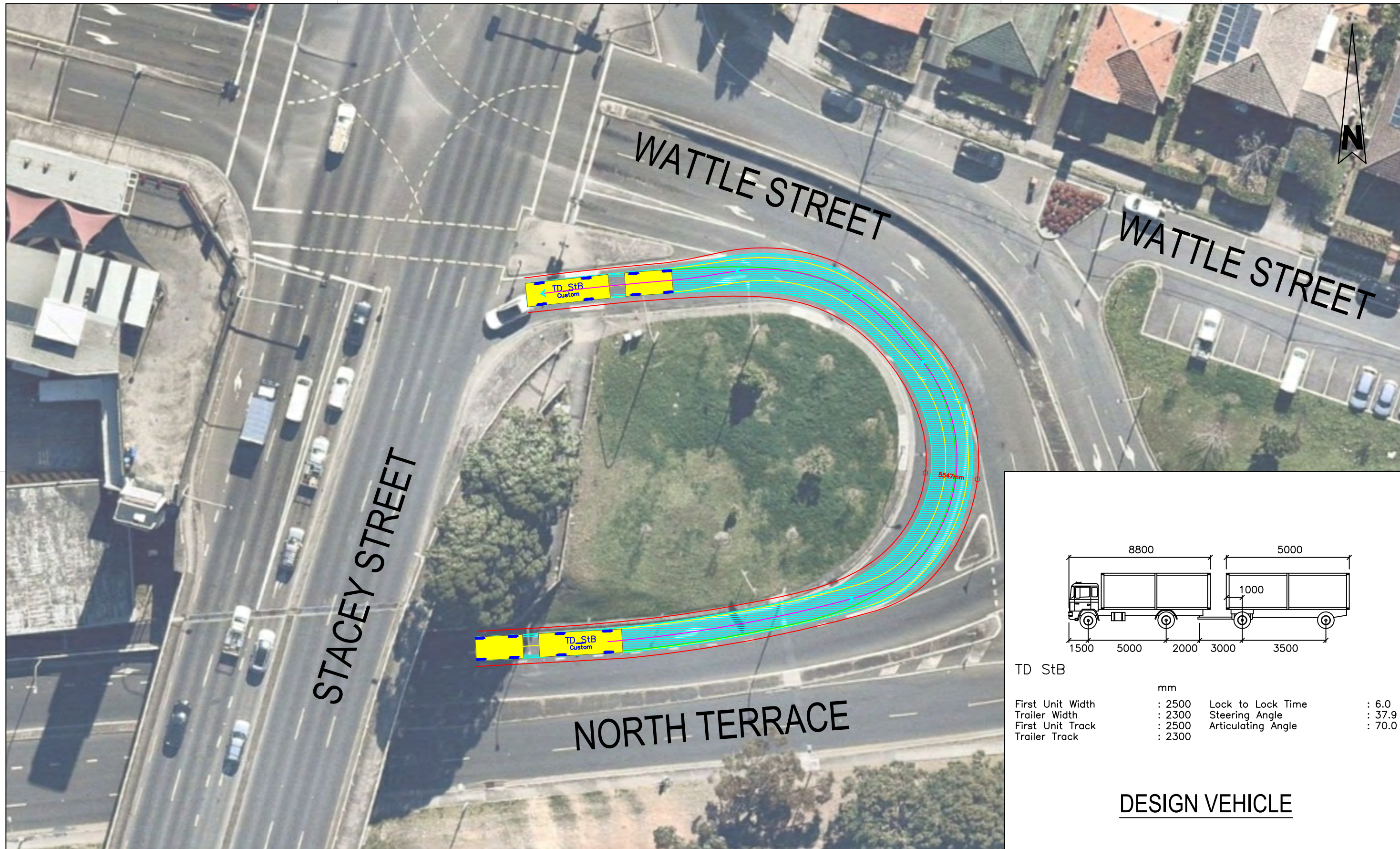
DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.G
	001	INITIAL SWEEP PATH	M.H	02.09.2021		FOR INFORMATION ONLY		
	002	UPDATED SWEEP PATH	M.H	23.09.2021				
	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021	Title 15.5m T&D - Right Turn Entry Haulage Route to South Terrace from Restwell Street	Project Number	Sheet Number	Issue
						P3519	49	003









8800

5000

1500

5000

2000

3000

3500


1000

TD StB

mm

First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

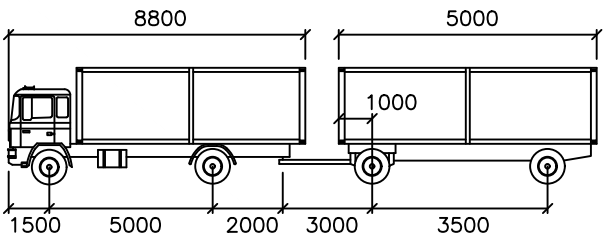
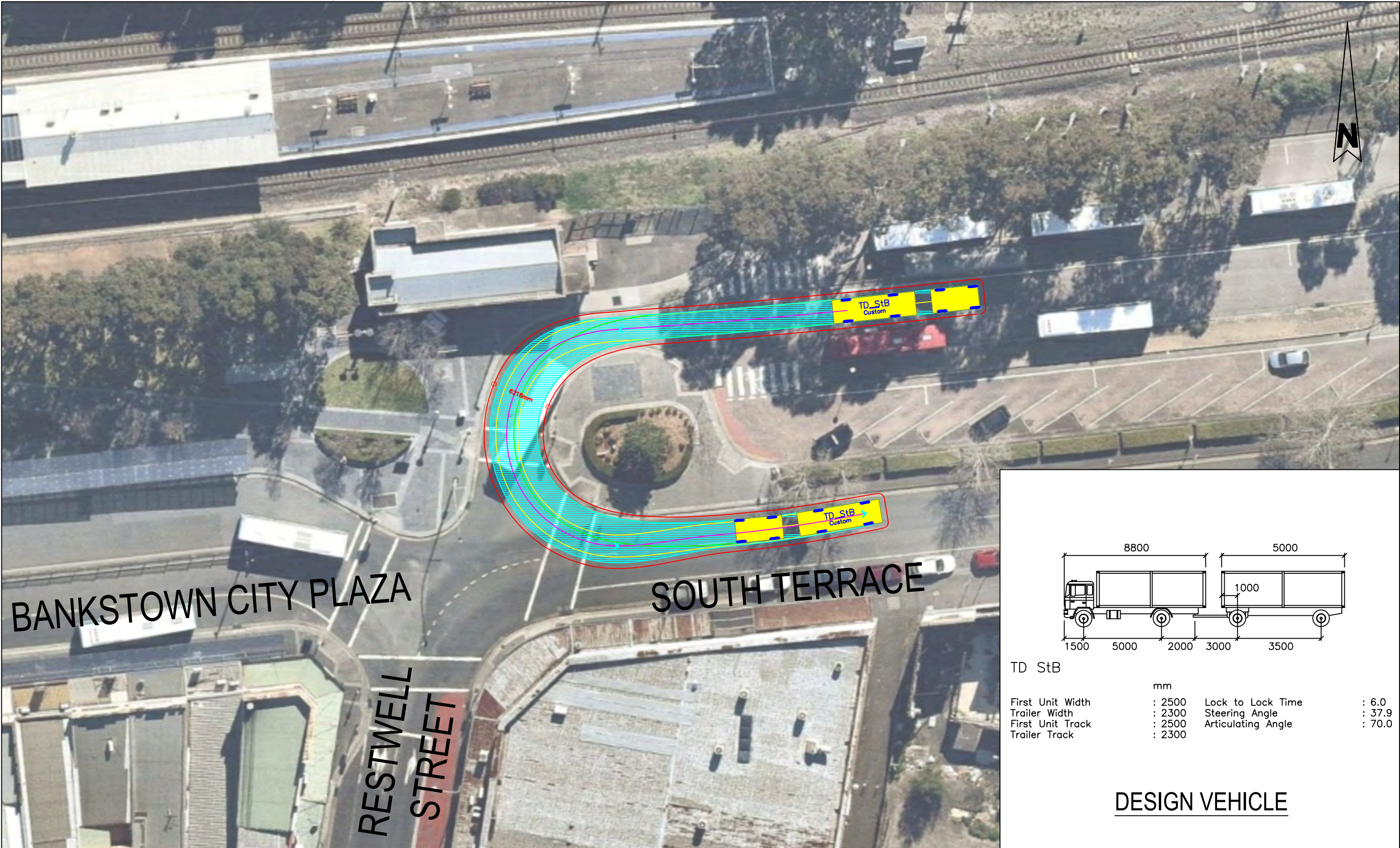
DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				<table><tr><th colspan="3">REVISIONS</th><th rowspan="2">Drawn</th><th rowspan="2">Date</th></tr><tr><th>Issue</th><th colspan="2">Revisions/Descriptions</th></tr><tr><td>001</td><td colspan="2">INITIAL SWEEP PATH</td><td>M.H</td><td>02.09.2021</td></tr><tr><td>002</td><td colspan="2">UPDATED SWEEP PATH</td><td>M.H</td><td>23.09.2021</td></tr><tr><td>003</td><td colspan="2">UPDATED SWEEP PATH POST RSA AND REVIEW</td><td>M.H</td><td>28.09.2021</td></tr><tr><td> </td><td colspan="2"> </td><td> </td><td> </td></tr><tr><td> </td><td colspan="2"> </td><td> </td><td> </td></tr><tr><td> </td><td colspan="2"> </td><td> </td><td> </td></tr><tr><td> </td><td colspan="2"> </td><td> </td><td> </td></tr><tr><td> </td><td colspan="2"> </td><td> </td><td> </td></tr></table>				REVISIONS			Drawn	Date	Issue	Revisions/Descriptions		001	INITIAL SWEEP PATH		M.H	02.09.2021	002	UPDATED SWEEP PATH		M.H	23.09.2021	003	UPDATED SWEEP PATH POST RSA AND REVIEW		M.H	28.09.2021																										<table><tr><td colspan="2">Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN</td></tr><tr><td colspan="2">Title 15.5m T&amp;D - Left Turn Exit Haulage Route to Stacey Street from North Terrace</td></tr></table>		Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		Title 15.5m T&D - Left Turn Exit Haulage Route to Stacey Street from North Terrace		<table><tr><td>Design M.H</td><td>Drawn M.H</td><td>Checked A.G</td></tr><tr><td colspan="2">FOR INFORMATION ONLY</td><td>Date 28.09.2021</td></tr><tr><td>Project Number P3519</td><td>Sheet Number 51</td><td>Issue 003</td></tr></table>		Design M.H	Drawn M.H	Checked A.G	FOR INFORMATION ONLY		Date 28.09.2021	Project Number P3519	Sheet Number 51	Issue 003
	REVISIONS			Drawn	Date																																																																				
	Issue	Revisions/Descriptions																																																																							
	001	INITIAL SWEEP PATH		M.H	02.09.2021																																																																				
	002	UPDATED SWEEP PATH		M.H	23.09.2021																																																																				
	003	UPDATED SWEEP PATH POST RSA AND REVIEW		M.H	28.09.2021																																																																				
Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN																																																																									
Title 15.5m T&D - Left Turn Exit Haulage Route to Stacey Street from North Terrace																																																																									
Design M.H	Drawn M.H	Checked A.G																																																																							
FOR INFORMATION ONLY		Date 28.09.2021																																																																							
Project Number P3519	Sheet Number 51	Issue 003																																																																							










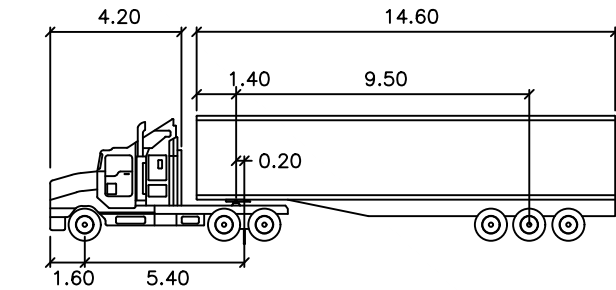
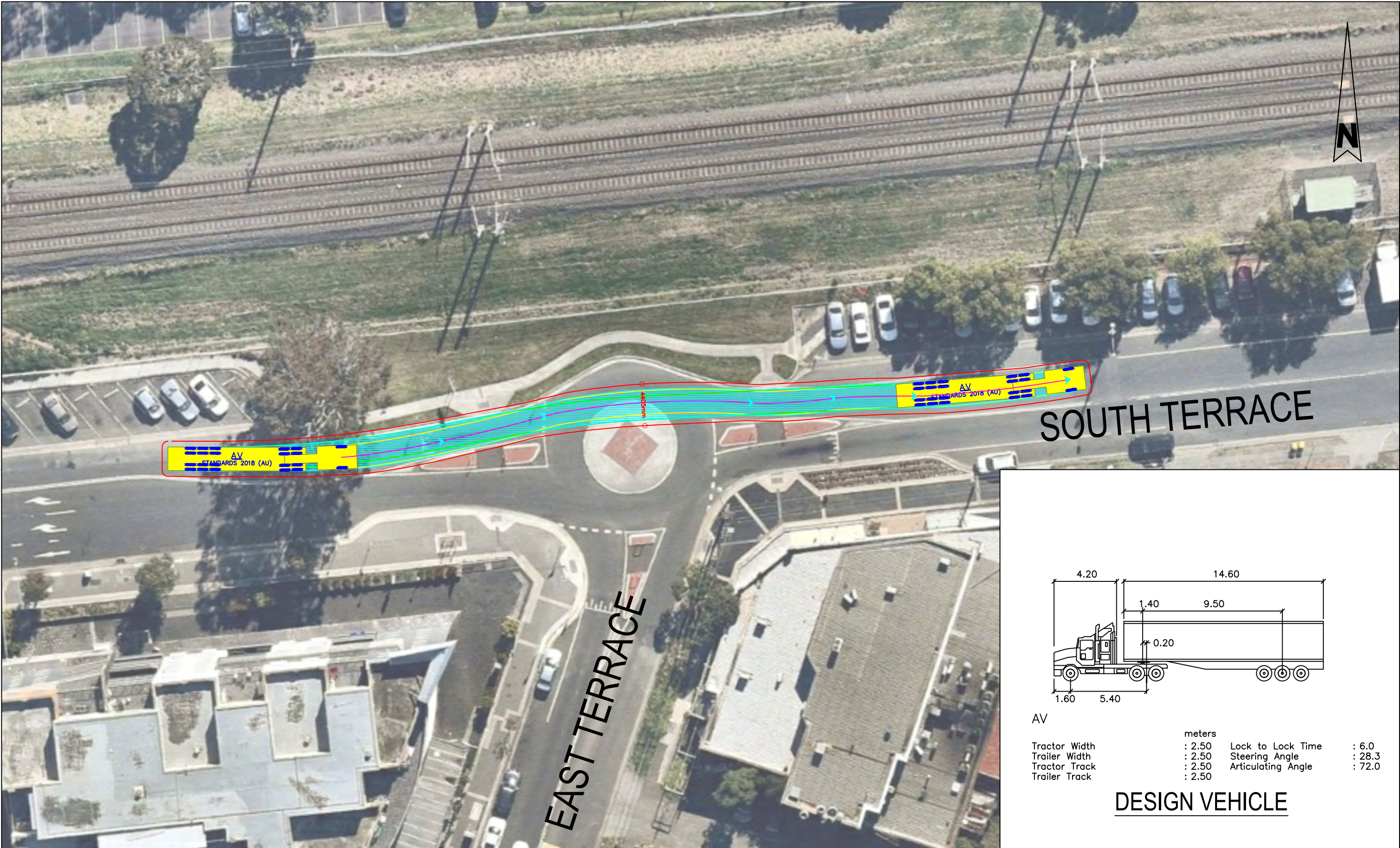
TD StB			
mm			
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN			Design M.H	Drawn M.H	Checked A.G
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au				Title 15.5m T&D Satellite Compound - Left Turn Exit Haulage Route			Date 28.09.2021		
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202							FOR INFORMATION ONLY		
								Project Number P3519	Sheet Number 53	Issue 003


REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL SWEEP PATH	M.H	02.09.2021
002	UPDATED SWEEP PATH	M.H	23.09.2021
003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021



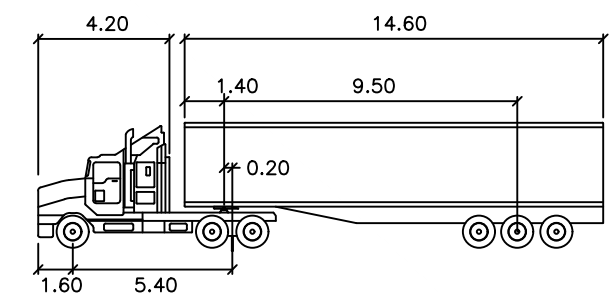
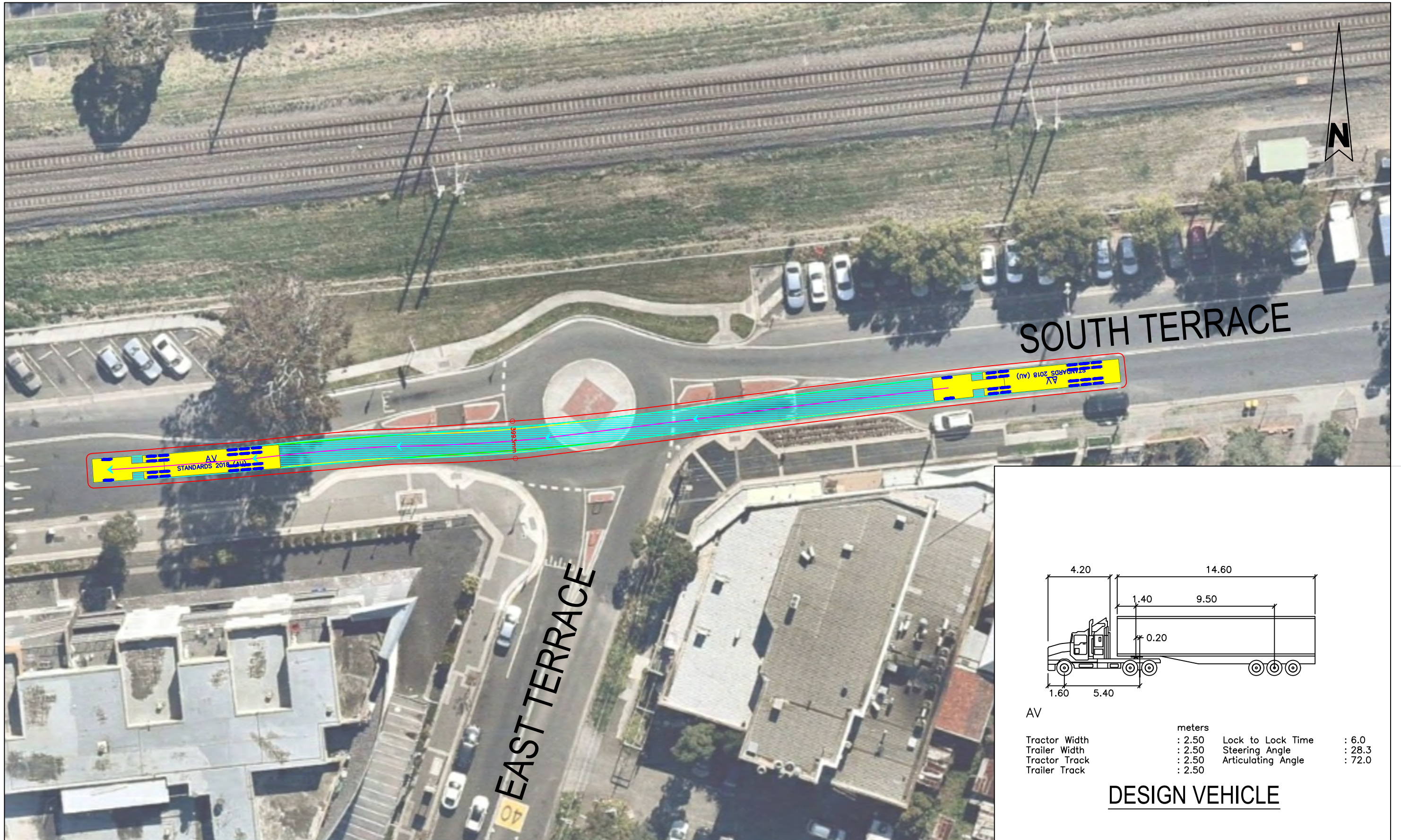


AV			
	Tractor Width	4.20	
	Tractor Track	1.60	
	Tractor Wheelbase	5.40	
	Trailer Width	14.60	
	Trailer Track	9.50	
	Trailer Wheelbase	1.40	
	Trailer Overhang	0.20	

DESIGN VEHICLE


 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project		Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		M.H	M.H	A.F
	001	INITIAL SWEPT PATH	M.H	02.09.2021			<div>FOR INFORMATION ONLY</div>		
	002	UPDATED SWEPT PATH	M.H	23.09.2021					
	003	UPDATED SWEPT PATH POST RSA AND REVIEW	M.H	28.09.2021					
							<div>FOR INFORMATION ONLY</div>		
							<div>FOR INFORMATION ONLY</div>		
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
						<div>FOR INFORMATION ONLY</div>			
	</								



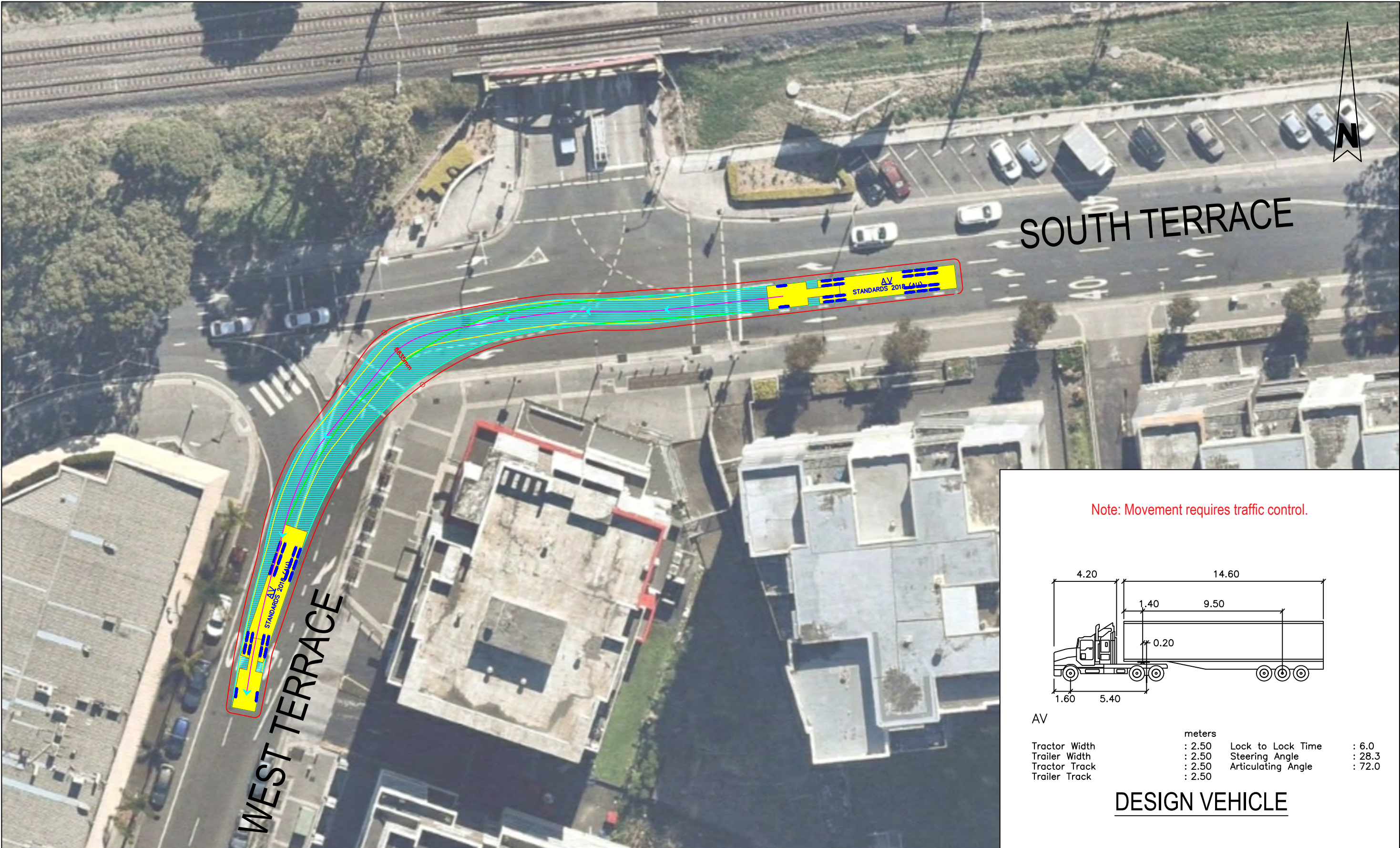


AV		meters	
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

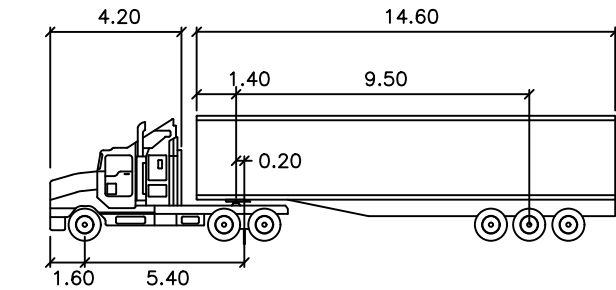
## DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	REVISIONS				Project		Design	Drawn	Checked	
		Issue	Revisions/Descriptions	Drawn	Date	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		M.H	M.H	A.F	
		001	INITIAL SWEEP PATH	M.H	02.09.2021			FOR INFORMATION ONLY		Date	28.09.2021
		002	UPDATED SWEEP PATH	M.H	23.09.2021					Project Number	Sheet Number
		003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021	Title		P3519	55	003	
						20m AV (Through Movement) - South Terrace Westbound Through Roundabout					






Note: Movement requires traffic control.



AV			
	Tractor Width	4.20	
	Trailer Width	14.60	
	Tractor Track	1.60	
	Trailer Track	5.40	
	Tractor Height	1.40	
	Trailer Height	0.20	
	Tractor Length	4.20	
	Trailer Length	14.60	
	Tractor Width	4.20	
	Trailer Width	14.60	
	Tractor Track	1.60	
	Trailer Track	5.40	
	Tractor Height	1.40	
	Trailer Height	0.20	
	Tractor Length	4.20	
	Trailer Length	14.60	

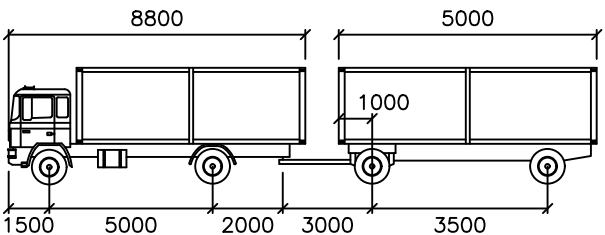
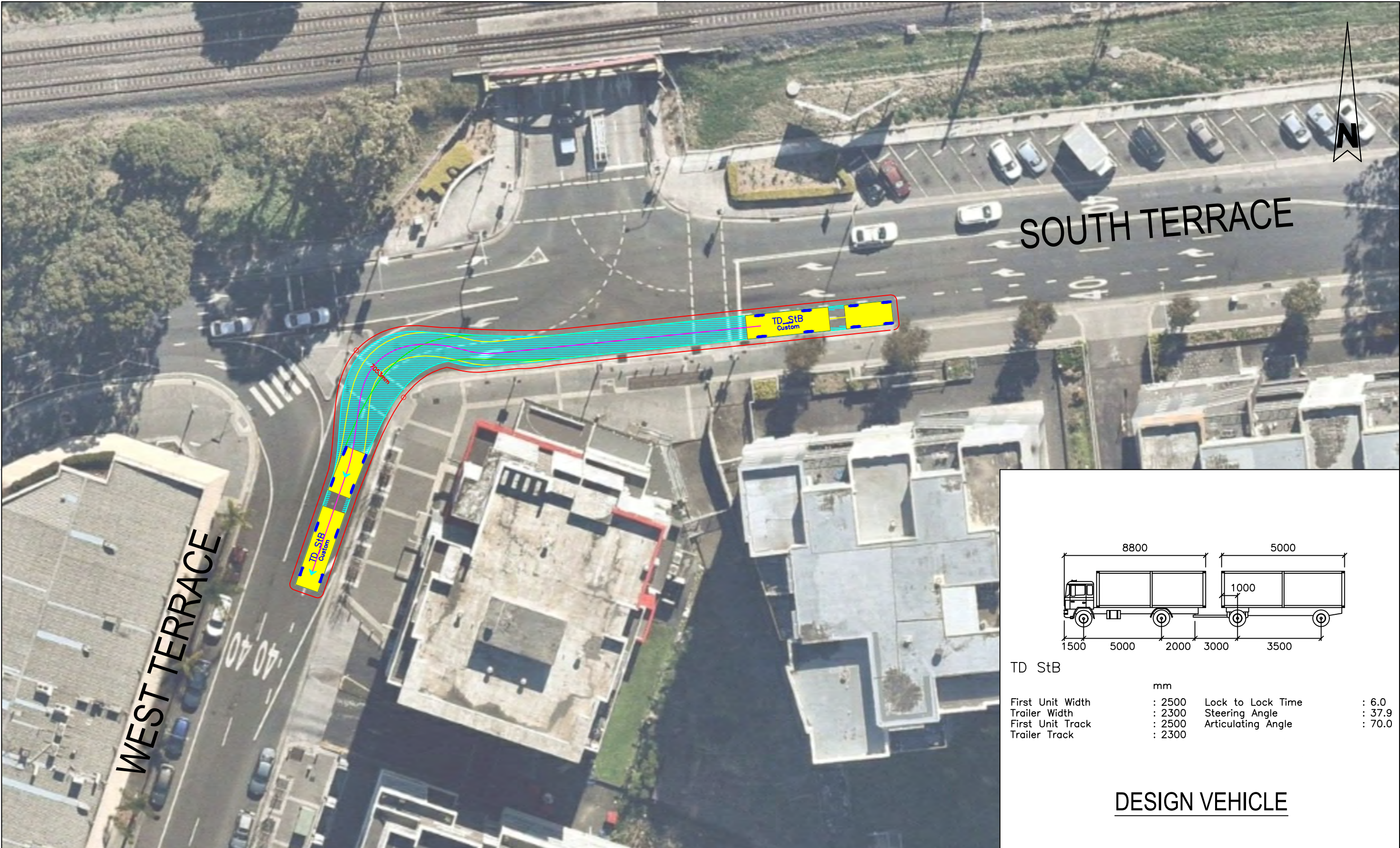
DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date		M.H	M.H	A.F
	001	INITIAL SWEEP PATH	M.H	02.09.2021		FOR INFORMATION ONLY		
	002	UPDATED SWEEP PATH	M.H	23.09.2021				
	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021	Title 20m AV (Left Turn Movement) South Terrace / West Terrace - South Terrace Left Turn to West Terrace	Project Number	Sheet Number	Issue
						P3519	56	003










TD StB			
mm			
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<b>REVISIONS</b>				Project		Design	Drawn	Checked	
	Revisions/Descriptions				Drawn	Date	BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	M.H	M.H	A.F
	Issue									
	001	INITIAL SWEEP PATH		M.H	02.09.2021					
		002	UPDATED SWEEP PATH		M.H	23.09.2021				
		003	UPDATED SWEEP PATH POST RSA AND REVIEW		M.H	28.09.2021				

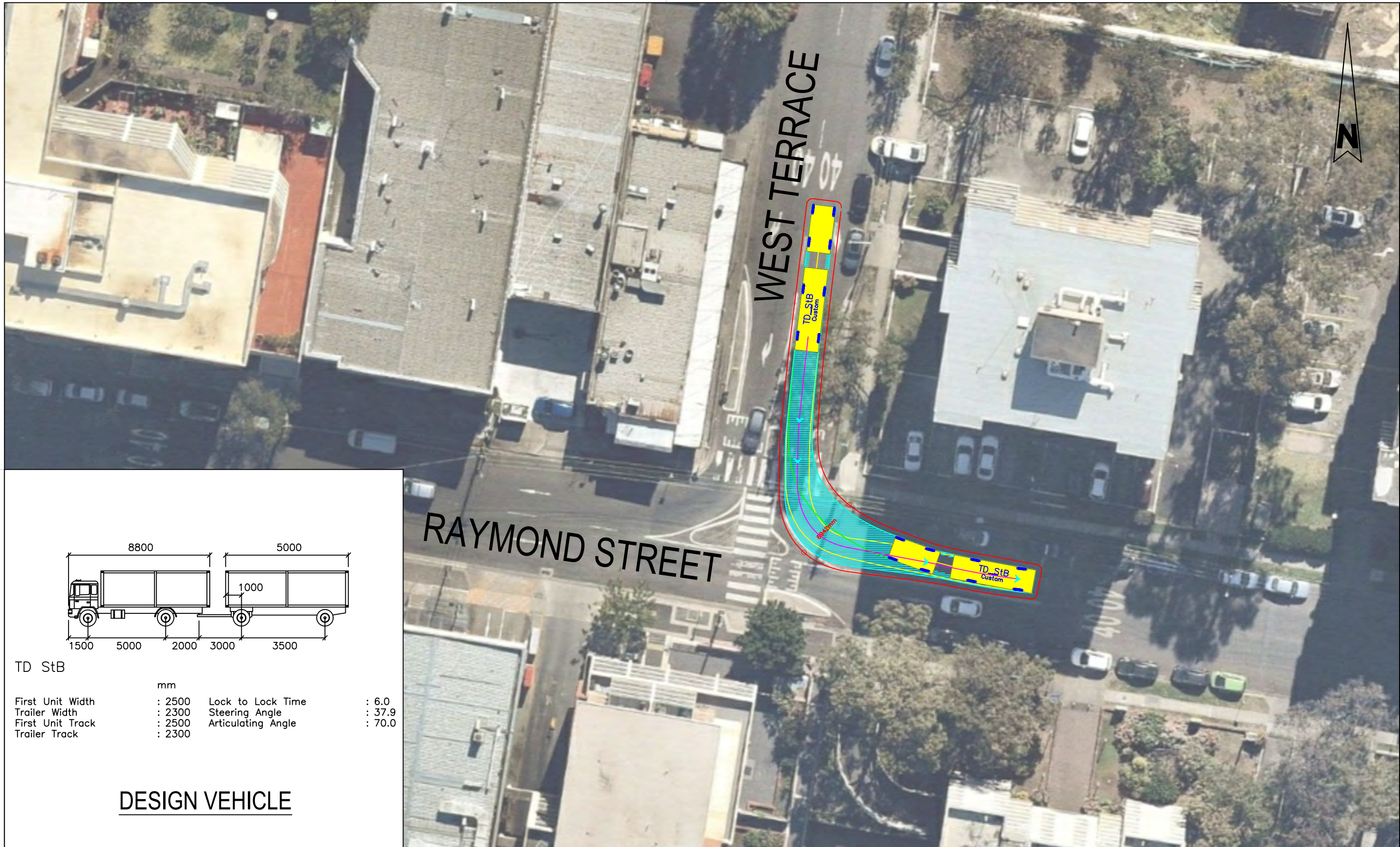











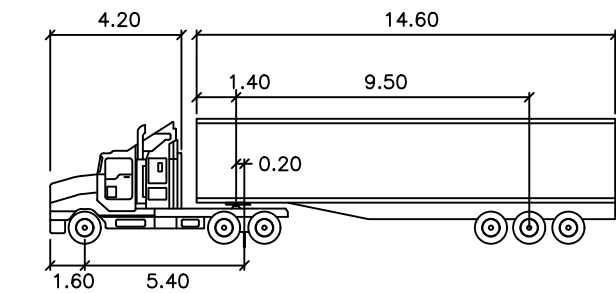


First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

DESIGN VEHICLE


	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	REVISIONS		Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN	Design	Drawn	Checked
		Issue	Revisions/Descriptions		M.H	M.H	A.F
		001	INITIAL SWEEP PATH				
		002	UPDATED SWEEP PATH				
		003	UPDATED SWEEP PATH POST RSA AND REVIEW	Title 15.5m T&D (Left Turn Movement) - West Terrace left turn into Raymond Street	FOR INFORMATION ONLY		Date 28.09.2021
					Project Number	Sheet Number	Issue
					P3519	59	003



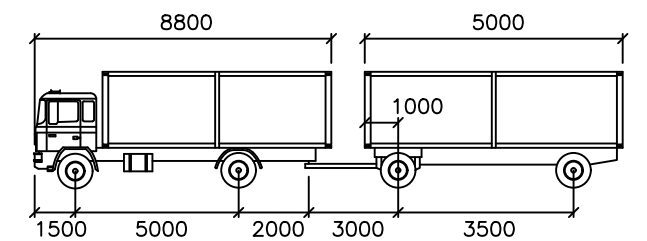
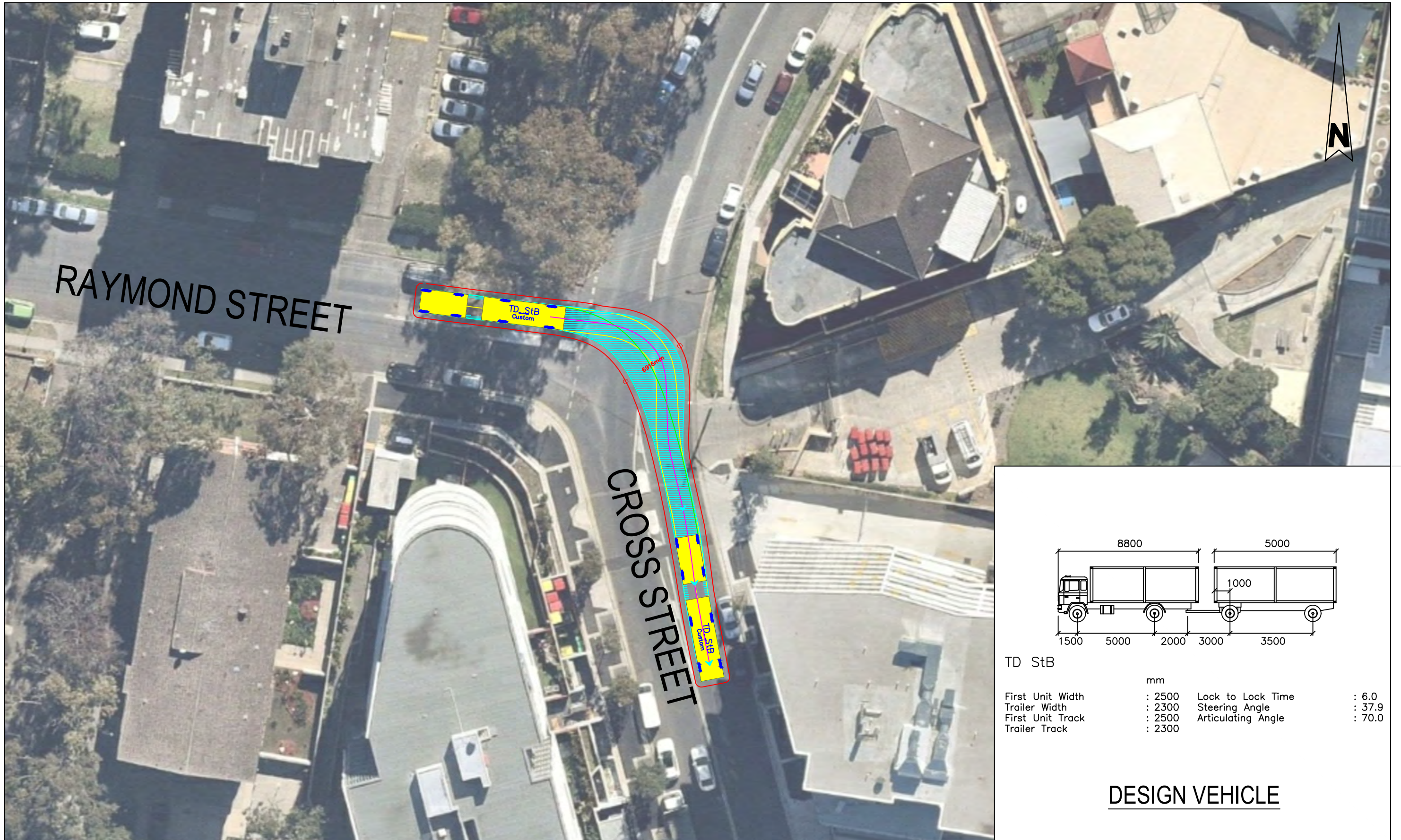


AV			
	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<table><tr><th colspan="2">REVISIONS</th><th rowspan="2">Drawn</th><th rowspan="2">Date</th></tr><tr><th>Issue</th><th>Revisions/Descriptions</th></tr><tr><td>001</td><td>INITIAL SWEEP PATH</td><td>M.H</td><td>02.09.2021</td></tr><tr><td>002</td><td>UPDATED SWEEP PATH</td><td>M.H</td><td>23.09.2021</td></tr><tr><td>003</td><td>UPDATED SWEEP PATH POST RSA AND REVIEW</td><td>M.H</td><td>28.09.2021</td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>				REVISIONS		Drawn	Date	Issue	Revisions/Descriptions	001	INITIAL SWEEP PATH	M.H	02.09.2021	002	UPDATED SWEEP PATH	M.H	23.09.2021	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021																					Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN		Design M.H	Drawn M.H	Checked A.F
	REVISIONS		Drawn	Date																																											
	Issue	Revisions/Descriptions																																													
	001	INITIAL SWEEP PATH	M.H	02.09.2021																																											
	002	UPDATED SWEEP PATH	M.H	23.09.2021																																											
	003	UPDATED SWEEP PATH POST RSA AND REVIEW	M.H	28.09.2021																																											
						<div>FOR INFORMATION ONLY</div>		Date 28.09.2021																																							
					Title 20m AV (Right Turn Movement) - Raymond Street right turn to Cross Street	Project Number P3519	Sheet Number 60	Issue 003																																							






TD StB

	mm		
First Unit Width	: 2500	Lock to Lock Time	: 6.0
Trailer Width	: 2300	Steering Angle	: 37.9
First Unit Track	: 2500	Articulating Angle	: 70.0
Trailer Track	: 2300		

## DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				<b>REVISIONS</b>				Project BANKSTOWN STATION CONSTRUCTION TRAFFIC MANAGEMENT PLAN				Design M.H	Drawn M.H	Checked A.F
	Issue				Revisions/Descriptions				Title 15.5m T&D (Right Turn Movement) - Raymond Street right turn to Cross Street				<div>FOR INFORMATION ONLY</div>		
	001				INITIAL SWEEP PATH				Date 28.09.2021						
	002				UPDATED SWEEP PATH				Project Number P3519				Sheet Number 61	Issue 003	
	003				UPDATED SWEEP PATH POST RSA AND REVIEW										



## Appendix 3 – Road Safety Audit

No.	Description of Road Safety Issue	Risk Rating	Response	Action by	Close-Out Date
1.	For the construction vehicle exit from Gate 2 onto South Terrace westbound, a driver would need to look back over their left shoulder to sight approaching westbound vehicles along South Terrace, which is undesirable. Moreover, an exiting vehicle needs to cross a double-barrier centre-line, which is sub-standard.	High	Crossing over a centre-line is permitted when entering a roadway. A TGS will be prepared to assist heavy vehicles exiting the site .		
2.	For the pedestrian detour along South Terrace (crossing from the northern to the southern side and back), there is an absence of any pedestrian detour information at the changes of direction (on the southern side of the crossing areas) and an absence of any pedestrian detour reassurance signage along the southern side of South Terrace.	Low-Medium	Additional advisory signage to show pedestrian detour route from proposed pedestrian route closure has been provided on the TGS.		
3.	The issue of sun-glare during certain periods of the year at sunrise and sunset may be applicable to east-west alignments along the surrounding road network, eg. along South Terrace and North Terrace. Consequently, the temporary traffic conditions including signage and traffic control devices may be difficult to sight due to sun glare.	Low-Medium	Noted. Traffic Controllers are responsible for ensuring that signs are placed in a position where sun glare will be mitigated.		
4.	The use of delineation cones (proposed for the South Terrace eastbound lane closure near the satellite compound) is generally undesirable because the cones can fall over and/or be struck by passing vehicles into the travel paths of the adjacent lanes, which create a hazard on the road.	Low	The short-term nature of the works makes cones a viable option. Workers are to regularly inspect the cones to ensure they have not been displaced or knocked over.		



No.	Description of Road Safety Issue	Risk Rating	Response	Action by	Close-Out Date
5.	There are a number of swept turning paths where longer vehicles cross contra-flow traffic lanes or need to turn from adjacent lanes, eg. AV left-turn from South Terrace eastbound into the satellite compound area, AV left-turn from West Terrace southbound into Raymond Street eastbound. It is understood that these swept path conflicts will be tested and approved prior to implementation and if necessary, specific TCPs will be developed to manage the vehicle path conflicts. Similarly, for vehicles that may need to reverse into or out of site access points.	Medium	Heavy vehicle movements will not cross the opposite side of the road unless under traffic control.  Heavy vehicles are permitted to straddle multiple lanes to complete turning movements under NSW Road Rules.  Vehicles reversing out of site will be avoided unless a last resort, and will be completed under traffic control.		
6.	It is assumed that there will be appropriate night delineation along the subject road network including (where necessary) reflectors on safety barriers and RRPMS along lane lines, edge-lines, centrelines, etc.		Cones, water-filled barriers, and other traffic control measures will have reflective components to ensure visibility at night.		
7.	The gate access numbers in <i>Figure 16 (page 20 of CTMP)</i> do not match the gate numbers in the swept path assessment diagrams, eg. <i>Sheets 39 and 40</i> of the swept path assessment show Gate 5 instead of Gate 2 (as per <i>Figure 16</i> ), <i>Sheets 37 and 38</i> show Gate 4 instead of Gate 3, <i>Sheet 36</i> shows Gate 3 instead of Gate 4 and <i>Sheets 34 and 35</i> show Gate 2 instead of Gate 5.		Gate access numbers figures have been updated.		
8.	<i>Sheet 40</i> of the swept path assessment (left-turn exit from Gate 5 to North Terrace westbound) does not show any swept path diagrams.		Swept path movement sheet of left-turn exit from Gate 5 to North Terrace westbound has been included.		
9.	<i>Sheet 28</i> of the swept path assessment (left-turn entry into the main compound off North Terrace westbound) appears to be the same as <i>Sheet 27</i> .		Swept path movement sheet of left-turn exit from Gate 1 to North Terrace westbound has been included.		





## **Sydenham Station and Junction – Bankstown CTMP**

---

### **CTMP Road Safety Audit Report**

September 2021





**Samsa Consulting Pty Ltd**  
**Transport Planning & Traffic Engineering**

ABN: 50 097 299 717  
46 Riverside Drive, Sandringham, NSW 2219, AUSTRALIA  
Phone: (+61) 414 971 956  
E-mail: [alansamsa@gmail.com](mailto:alansamsa@gmail.com)  
Skype: alan\_samsa  
Web: [www.samsaconsulting.com](http://www.samsaconsulting.com)

**© Samsa Consulting Pty Ltd**

*This document is and shall remain the property of Samsa Consulting Pty Ltd. The document may only be used for the purposes for which it was commissioned and in accordance with the Terms of Engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.*



# Contents

## EXECUTIVE SUMMARY

<b>1. Introduction .....</b>	<b>1</b>
1.1 Background .....	1
1.2 Report Structure .....	3
<b>2. Audit Details .....</b>	<b>4</b>
2.1 Audit Methodology.....	4
2.2 Audit Administration.....	4
2.3 References & Documentation Audited.....	4
<b>3. Identified Safety Issues .....</b>	<b>6</b>
<b>4. Formal Audit Statement.....</b>	<b>14</b>



## EXECUTIVE SUMMARY

This report details an independently undertaken road safety audit for the Bankstown works CTMP of the Sydenham Station and Junction project.

While a number of minor risk road safety issues were identified, the principal concerns of the audit team relate to the following issues:

- For the construction vehicle exit from Gate 2 onto South Terrace westbound, a driver would need to look back over their left shoulder to sight approaching westbound vehicles along South Terrace as well as crossing a double-barrier centre-line, which is undesirable and sub-standard.
- For construction vehicles exiting the main compound onto North Terrace it is non-standard and inappropriate that the approaching North Terrace westbound traffic would need to give priority to exiting construction traffic.
- During the Stage 2 sewer works, there is only a single, left-turn travel lane into West Terrace southbound, which would appear to restrict the swept turning path of any longer vehicles, including construction vehicles.
- For eastbound travel along South Terrace during the Stage 2 sewer works, through and left-turn movements will approach the West Terrace signalised intersection in the left lane, which has left-turn arrow pavement markings and a painted delineation island within the intersection area.



# 1. Introduction

## 1.1 Background

---

The Bankstown works portion of the Sydenham Station and Junction project consist of the following components:

- Main site compound off the southern side of North Terrace (opposite Bankstown Centro shopping centre) within an existing car park area.
- Satellite site compound off the northern side of South Terrace, at the eastern end of a bus interchange area.
- Utility connection (water and sewerage connections) along the northern side of South Terrace including footpath occupation.

As part of the works design process, *Bitzios Consulting* (Bitzios) are preparing the traffic guidance schemes (TGSs) and undertaking swept path analysis for the construction traffic management plan (CTMP) and subject works.

The Bankstown works will include the following construction tasks:

- Set-up of site compounds.
- Site establishment of works.
- Delivery and storage of materials.
- Ongoing site management.

The following traffic management objectives apply to the construction of the project:

- Minimise disruption to traffic operation, road users, public transport users, bus operators, pedestrians, cyclists, and access to adjoining properties.
- Maximise the safety of the workers, by isolating work areas from traffic flows, applying low exposure work methods, education and the installation of appropriate traffic control measures.
- Limit obstructions and restrictions, and when required, provide alternatives to maintain access for local community, transport operators, over-size load movements and commercial developments.

The CTMP aims to manage and mitigate the impacts of construction traffic and road works and sets out the responsibilities and strategies involved in ensuring a safe environment is maintained for drivers, pedestrians, cyclists, and workers.

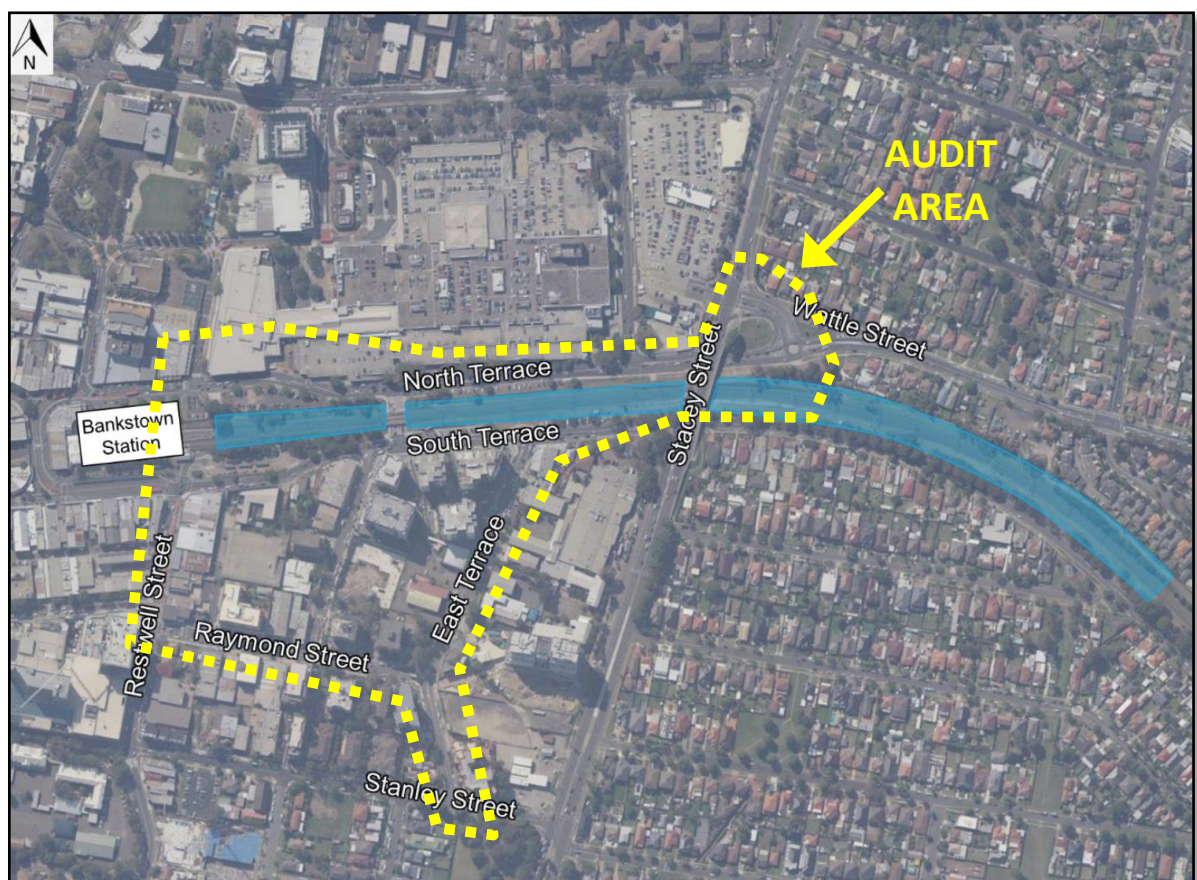
The CTMP will be in use for approximately 10 months in total with the proposed timeline shown following.



Works	Description	Duration	Start Date	End Date
<b>Overall</b>		<b>10 months</b>	<b>Early October 2021</b>	<b>Mid July 2022</b>
<b>Main Compound</b>	Occupying existing car park between North Terrace and the rail corridor	10 months	Early October 2021	Mid July 2022
<b>Satellite Compound</b>	Occupying a portion of the bus layover area, south of the rail corridor	7 months	Early December 2021	Mid-June 2022
<b>Gate Access</b>	Utilising existing gates for access into the rail corridor	7 months	Early October 2021	Mid-April 2022
<b>Utility Connection</b>	Utility connections into the new Service buildings for sewage and water connections	7 months	Early December 2021	Mid-June 2022

This road safety audit report details an independently undertaken road safety audit of the CTMP for the Bankstown works portion of Sydenham Station and Junction project. The road safety audit was undertaken by *Samsa Consulting Pty Ltd*, Transport Planning & Traffic Engineering Consultants.

The location of the audit (including the extent of the surrounding road network swept path analysis) is shown in *Figure 1* following.



**Figure 1: Project Audit Extent and Location**



## **1.2 Report Structure**

---

The remainder of this report is presented as follows:

**Chapter 2** describes details of the audit undertaken including the methodology, administration and documentation audited.

**Chapter 3** details the safety issues identified and audit findings.

**Chapter 4** provides a formal audit statement.



## 2. Audit Details

### 2.1 Audit Methodology

A road safety audit is “... a formal examination of a future road or traffic project or an existing road, in which an independent, qualified team reports on the project's crash potential and safety performance” (Austroads 2009).

This audit followed a standard practice in identifying safety related issues of a project CTMP. It involved a desktop assessment of the proposed traffic management and guidance schemes, as well as identification of any background issues on site during day inspections.

The road safety audit focussed on safety issues such as temporary warning signage and linemarking, delineation, speed zoning, temporary pedestrian facilities and bus stops, safety barriers and proximity between travel lanes and work zones, sight distances, appropriateness of TGSs for the predicted traffic volumes, and overall road legibility adjacent and through work zones (amongst other issues).

The scope of the audit is in accordance with the requirements in Austroads’ “Guide to Road Safety, Part 6 / Part 6A” and is structured around a standard checklist provided in the Part 6A manual as well as RTA’s “Accident Reduction Guide – Part 2: Road Safety Audits”.

The site inspections were undertaken on Friday 24 September 2021. An audit exit meeting was held at the completion of the road safety audit report.

### 2.2 Audit Administration

Bitzios Consulting Project Manager: Matthew Hearne

Road Safety Auditors: Carolyn Samsa (*RMS Accredited Level 3 Lead Road Safety Auditor*)  
(Auditor ID: RSA-02-0585)

Alan Samsa (*RMS Accredited Level 3 Lead Road Safety Auditor*)  
(Auditor ID: RSA-02-0056)

### 2.3 References & Documentation Audited

- Austroads “Guide to Road Design Part 3: Geometric Design (Edition 3.3)”, April 2020
- Austroads “Guide to Road Design Part 4: Intersections and Crossings – General”, 2017
- Austroads “Guide to Road Design Part 4A: Unsignalised and Signalised Intersections”, October 2017
- Austroads “Guide to Road Safety, Part 6: Managing Road Safety Audits”, February 2019
- Austroads “Guide to Road Safety, Part 6A: Implementing Road Safety Audits”, February 2019
- Bitzios Consulting “Bankstown Station CTMP: Main Compound AV Access”, 17/09/2021
- Bitzios Consulting “Bankstown Station CTMP: WE16 Lane Closure and Pedestrian Detour”, 17/09/2021
- Bitzios Consulting “Bankstown Station CTMP: Pedestrian Detour”, 17/09/2021
- Bitzios Consulting “Bankstown Station CTMP: Sewer Works – Stage 1”, 27/09/2021



- Bitzios Consulting “*Bankstown Station CTMP: Sewer Works – Stage 2*”, 27/09/2021
- Bitzios Consulting “*Bankstown Station CTMP: Raymond Street / West Terrace TC*”, 27/09/2021
- JHLOR JV “*Sydenham Station and Junction: Bankstown CTMP (Construction Traffic Management Plan)*, (Document no. SMCSWSSJ-JHL-WBK-TF-PLN-005768)”, 23/09/2021
- RTA “*Accident Reduction Guide – Part 2: Road Safety Audits*”, 2005
- RTA “*Road Safety Audit Technical Direction TD2003/RS03, Version 2*”, August 2005
- RTA “*Delineation Guidelines: Parts 1 to 19 & Appendices A & B*”, assorted dates
- RTA “*Guidelines for Road Safety Audit Practices – Part 1: Road Safety Audit*”, July 2011
- Standards Australia “*AS 1742.1 – 2003: Manual of uniform traffic control devices, Part 1: General introduction and index of signs*”, 2003
- Standards Australia “*AS 1742.3 – 2009: Manual of uniform traffic control devices, Part 3: Traffic control for works on roads*”, 2009
- Transport for NSW “*Traffic Control at Work Sites, Technical Manual – Issue 6.0*”, 14 September 2020



### 3. Identified Safety Issues

The audit of the CTMP focussed on providing an independent identification of potential safety hazards, regardless of current practices, standards and operations, to allow Bitzios to identify remedial measures as part of its CTMP design preparation.

In categorising and prioritising identified safety issues, a risk assessment process was adopted. Risk assessment is the overall process of risk identification, analysis and evaluation. Preliminary risk ratings for each identified issue are assessed based on subjective professional judgement by the Road Safety Audit team with guidance from Section 4.8 C of Austroads "Guide to Road Safety, Part 6A: Implementing Road Safety Audits". The Austroads' document provides an indication of the level of risk and what response may be appropriate. The identified road safety issue is first categorised based on its likely frequency of occurrence and severity ('likelihood' and 'consequence' of crash potential) – refer to Figures 3.1 and 3.2 below (extracted from the Austroads' document).

Crash frequency	Description
Frequent (F)	Once or more per week
Probable (P)	Once or more per year but less than once per week
Occasional (O)	Once every five to ten years
Improbable (I)	Less than once every ten years

**Figure 3.1: Likely Frequency of Issue**

Severity	Description	Examples
Catastrophic (C)	Likely multiple deaths	<ul style="list-style-type: none"> <li>High-speed, multi-vehicle crash on a freeway</li> <li>Car runs into crowded bus stop</li> <li>Bus and petrol tanker collide</li> <li>Collapse of a bridge or tunnel</li> </ul>
Serious (S)	Likely death or serious injury	<ul style="list-style-type: none"> <li>High or medium-speed vehicle / vehicle collision</li> <li>High or medium-speed collision with a fixed roadside object</li> <li>Pedestrian struck at high speed</li> <li>Cyclist is hit by a car</li> </ul>
Minor (M)	Likely minor injury	<ul style="list-style-type: none"> <li>Some low-speed vehicle collisions</li> <li>Cyclist falls from bicycle at low speed</li> <li>Left-turn rear-end crash in a slip lane</li> </ul>
Limited (L)	Likely trivial injury or property damage only	<ul style="list-style-type: none"> <li>Some low speed collisions</li> <li>Pedestrian walks into object (no head injury)</li> <li>Car reverses into post</li> </ul>

**Figure 3.2: Likely Severity of Issue**

An appropriate risk rating is then selected from the risk categories in the risk matrix with a preferred treatment approach for each risk rating (refer to Figures 3.3 and 3.4 below, both extracted from Austroads).



	Frequent (F)	Probable (P)	Occasional (O)	Improbable (I)
Catastrophic (C)	Intolerable (I)	Intolerable (I)	Intolerable (I)	High (H)
Serious (S)	Intolerable (I)	Intolerable (I)	High (H)	Medium (M)
Minor (M)	Intolerable (I)	High (H)	Medium (M)	Low (L)
Limited (L)	High (H)	Medium (M)	Low (L)	Low (L)

**Figure 3.3: Risk Matrix**

Risk	Suggested treatment approach
Intolerable (I)	Must be corrected
High (H)	Should be corrected or the risk significantly reduced, even if the treatment cost is high
Medium (M)	Should be corrected or the risk significantly reduced, if the treatment cost is moderate, but not high
Low (L)	Should be corrected or the risk reduced, if the treatment cost is low

**Figure 3.4: Treatment Approach**

This report may provide recommendations about possible remedial measures in response to identified deficiencies. Any remedial actions recommended are based on current standards and practices. However, it should be noted that it is ultimately the responsibility of Bitzios to determine how to respond to each identified safety deficiency.

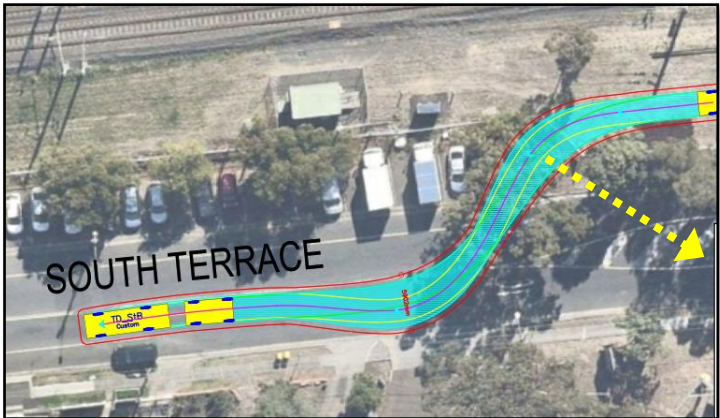
The audit of the project CTMP identified a number of potential road safety issues. The safety audit process requires that the safety issues identified during an audit be acknowledged by the Audit Team and accordingly responded to by Bitzios. The issues are characterised according to their risk, and detailed in *Table 3.1* following.

It should be noted that not all road safety issues identified may necessarily be within the scope of the project CTMP area. This is because while the scope of the audit is generally within the project area described earlier, to complete a full audit of the project, the approaches and transitions to the project area were also audited to identify potential safety issues that may affect road safety within the project area. Therefore, some safety issues that are outside the project area may be the responsibility of the relevant controlling road authority.

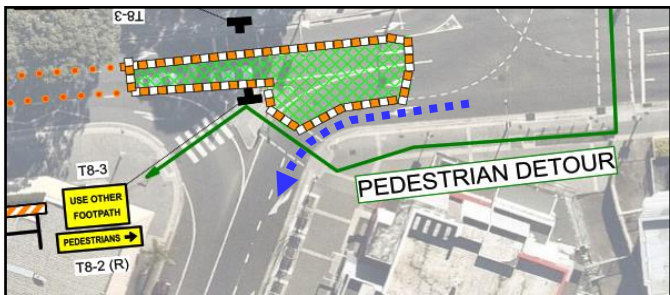
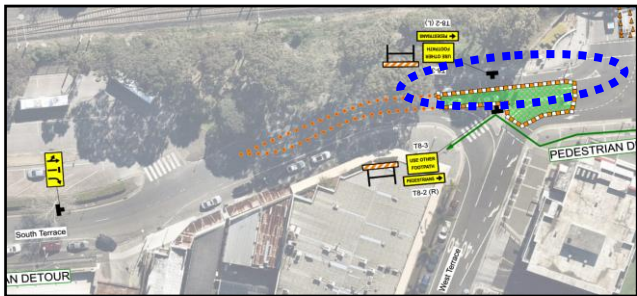
Also note that while this audit focussed on identifying road safety issues related to the project CTMP and not the background existing conditions, some existing road conditions may have been recorded where they were deemed notable.



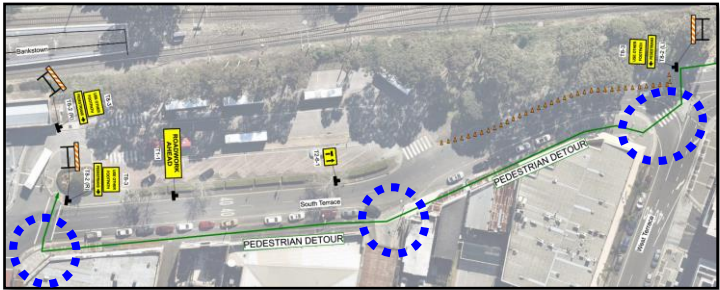
**Table 3.1: Identified Safety Issues**

			For completion by Bitzios		
No.	Description of Road Safety Issue	Risk Rating	Response	Action by	Close-Out Date
1.	<p>For the construction vehicle exit from Gate 2 onto South Terrace westbound, a driver would need to look back over their left shoulder to sight approaching westbound vehicles along South Terrace, which is undesirable. Moreover, an exiting vehicle needs to cross a double-barrier centre-line, which is sub-standard.</p> 	Medium			
2.	<p>For construction vehicles exiting the main compound onto North Terrace it is non-standard and inappropriate that the approaching North Terrace westbound traffic would need to give priority to exiting construction traffic, as discussed in <i>Section 2.1.1 (page 9)</i> of the CTMP.</p>	Medium			

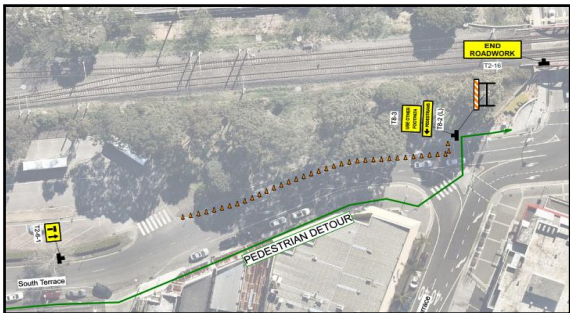



			For completion by Bitzios		
No.	Description of Road Safety Issue	Risk Rating	Response	Action by	Close-Out Date
3.	<p>During the Stage 2 sewer works, there is only a single, left-turn travel lane into West Terrace southbound, which would appear to restrict the swept turning path of any longer vehicles, including construction vehicles.</p> 	Medium			
4.	<p>For eastbound travel along South Terrace during the Stage 2 sewer works, through and left-turn movements will approach the West Terrace signalised intersection in the left lane, which has left-turn arrow pavement markings and a painted delineation island within the intersection area.</p> 	Medium			



			For completion by Bitzios		
No.	Description of Road Safety Issue	Risk Rating	Response	Action by	Close-Out Date
5.	For all site access gates off North Terrace and South Terrace, there is no warning or advisory signage to warn general traffic of construction traffic turning and to advise approaching construction traffic of site access points.	Low - Medium			
6.	The issue of sun-glare during certain periods of the year at sunrise and sunset may be applicable to east-west alignments along the surrounding road network, eg. along South Terrace and North Terrace. Consequently, the temporary traffic conditions including signage and traffic control devices may be difficult to sight due to sun glare.	Low - Medium			
7.	For the pedestrian detour along South Terrace (crossing from the northern to the southern side and back), there is an absence of any pedestrian detour information at the changes of direction (on the southern side of the crossing areas) and an absence of any pedestrian detour reassurance signage along the southern side of South Terrace. 	Low - Medium			



			For completion by Bitzios		
No.	Description of Road Safety Issue	Risk Rating	Response	Action by	Close-Out Date
8.	<p>The use of delineation cones (proposed for the South Terrace eastbound lane closure near the satellite compound) is generally undesirable because the cones can fall over and/or be struck by passing vehicles into the travel paths of the adjacent lanes, which create a hazard on the road.</p> 	Low - Medium			
9.	<p>For westbound travel along Raymond Street, when exiting the roadworks (TCP) area at West Terrace, there is an absence of 'End Roadworks' advisory or speed reinstatement signage.</p> 	Low			



			For completion by Bitzios		
No.	Description of Road Safety Issue	Risk Rating	Response	Action by	Close-Out Date
10.	There are a number of swept turning paths where longer vehicles cross contra-flow traffic lanes or need to turn from adjacent lanes, eg. AV left-turn from South Terrace eastbound into the satellite compound area, AV left-turn from West Terrace southbound into Raymond Street eastbound. It is understood that these swept path conflicts will be tested and approved prior to implementation and if necessary, specific TCPs will be developed to manage the vehicle path conflicts.  Similarly, for construction vehicles that may need to reverse into or out of site access points, it is understood that specific TCPs will be developed and approved prior to implementation.	Note only			
11.	It is assumed that there will be appropriate night delineation along the subject road network including (where necessary) reflectors on safety barriers and RRPMS along lane lines, edge-lines, centrelines, etc.	Note only			
12.	The gate access numbers in <i>Figure 16 (page 20 of CTMP)</i> do not match the gate numbers in the swept path assessment diagrams, eg. <i>Sheets 39 and 40</i> of the swept path assessment show Gate 5 instead of Gate 2 (as per <i>Figure 16</i> ), <i>Sheets 37 and 38</i> show Gate 4 instead of Gate 3, <i>Sheet 36</i> shows Gate 3 instead of Gate 4 and <i>Sheets 34 and 35</i> show Gate 2 instead of Gate 5.	Note only			
13.	<i>Sheet 40</i> of the swept path assessment (left-turn exit from Gate 5 to North Terrace westbound) does not show any swept path diagrams.	Note only			



			<i>For completion by Bitzios</i>		
<b>No.</b>	<b>Description of Road Safety Issue</b>	<b>Risk Rating</b>	<b>Response</b>	<b>Action by</b>	<b>Close-Out Date</b>
14.	Sheet 28 of the swept path assessment (left-turn entry into the main compound off North Terrace westbound) appears to be the same as Sheet 27.	Note only			
15.	Only TGSs for the main compound, satellite compound and South Terrace sewer works were provided as well as a TCP for the Raymond Street traffic control – no TGSs were provided for the other gate locations.	Note only			
16.	No pedestrian movement plans (PMPs) were provided as per Section 4.2.1 (page 21) of the CTMP.	Note only			



## 4. Formal Audit Statement

This road safety audit has been undertaken by *Samsa Consulting Pty Ltd*, using the references and documentation detailed previously and site inspections of the subject project area during daylight conditions.

While the road safety audit may provide recommendations about possible remedial measures in response to identified road safety issues, it is ultimately the responsibility of Bitzios to determine how best to respond to each identified safety issue.

The audit has been undertaken for the sole purpose of identifying any safety-deficient features and road safety risks of the subject project CTMP. Every effort was made to ensure that all relevant safety issues were considered and the findings are the opinion and judgement of the audit team.



27 September 2021

CAROLYN SAMSA

*RMS Accredited Road Safety Auditor: Level 3 Lead Auditor  
(Auditor ID: RSA-02-0585)*



27 September 2021

ALAN SAMSA

*RMS Accredited Road Safety Auditor: Level 3 Lead Auditor  
(Auditor ID: RSA-02-0056)*







Appendix 4 – Comments Register



CONTRACT NO.	DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
SW8	SMCSWSW8-JHL-WBK-TF-PLN-000091	SWM3 - Construction Traffic Management Plan (CTMP)	A.01	RVW	01	27/08/2024	SCO	JCOLES	REVA	1.4.4, 4.2.2.2	NA	At time of submission the arrangements proposed for Punchbowl are not approved for implementation.	Observation		Y
									REVA	1.4.4, 4.2.2.2	NA		Observation		Y
					01.01	13/09/2024	JHL	ACONSTANTI				Noted. Further consultation will be provided once designs have been confirmed.	Observation		Y
													Observation		Y
					02	27/08/2024	SCO	JCOLES	REVA	1.4	NA	Lane closures proposed across all locations are subject to ROL and Council approval. It should be expected that the majority of these lane closure will be permitted out of hours only.	Observation		Y
									REVA	1.4	NA		Observation		Y
					02.01	13/09/2024	JHL	ACONSTANTI				Noted.	Observation		Y
													Observation		Y
					03	27/08/2024	SCO	JCOLES	REVA	1.4	NA	Some of the works discussed in section 1.4 have significant clashes with proposals by the Sydney Metro CIRA contractor. These conflicts will need to be managed internally between the JV, CIRA and Metro.	Observation		Y
									REVA	1.4	NA		Observation		Y
					03.01	13/09/2024	JHL	ACONSTANTI				Noted. Coordination meeting are being held between SM/JHLOR/Martinius.	Observation		Y
													Observation		Y
					04	27/08/2024	SCO	JCOLES	REVA	1.4.7	NA	With the proposed long term closure of Lillian Ln, changes should be made to the signalised intersection's personality to improve the operational efficiency of the intersection.	Observation		Y
									REVA	1.4.7	NA		Observation		Y
					04.01	13/09/2024	JHL	ACONSTANTI				Noted. The designers will confirm the interim arrangement provide a TCS plan for review.	Observation		Y
													Observation		Y
					05	3/09/2024	TFN	LWILBY	SMCSWSW8-JHL-WBK-TF-PLN-000091	3.1.1 requirements	Access NA	Noting the use of traffic controllers to control pedestrians where necessary. Please also consider the use of Be Truck Aware footpath decals at all driveway access and egress points where heavy vehicles will cross the footpath to enter and exit site. These are used across all Sydney Metro sites to increase pedestrian awareness and serve as an important reminder to look out before entering the roadway. Suggest including in the CTMP a map of where these will be implemented. Thanks.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	3.1.1 requirements	Access NA		Observation		Y
					05.01	13/09/2024	JHL	ACONSTANTI				Noted. We will explore the installation of these decals in highly impacted access/egress points.	Observation		Y
													Observation		Y
					05.01.01	18/09/2024	TFN	LWILBY				Noted, thank you. Comment closed.	Observation		Y
													Observation		Y
					06	3/09/2024	TFN	LWILBY	SMCSWSW8-JHL-WBK-TF-PLN-000091	9. Road safety audit	NA	The RSA was carried out roughly three years ago - can you please confirm that when it was carried out it included all works and TGS included within this CTMP? If not can you please ensure that the additional works are also reviewed through the road safety audit process. Thanks.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	9. Road safety audit	NA		Observation		Y
					06.01	13/09/2024	JHL	ACONSTANTI				Noted. New locations where an updated RSA is required will be provided progressively based on start dates (eg. Breust Place, Punchbowl traffic setups, etc)	Observation		Y
													Observation		Y
					06.01.01	18/09/2024	TFN	LWILBY				Noted, thank you. Comment closed.	Observation		Y
													Observation		Y
					07	4/09/2024	SCO	DNGO	SMCSWSW8-JHL-WBK-TF-PLN-000091	1.4.6	NA	Duration of short term lane closures? Are these nightly closures?	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	1.4.6	NA		Observation		Y
					07.01	13/09/2024	JHL	ACONSTANTI				Noted. Short-term closures will consist of day/nightshift occupation, depending on Council/RMS approval times (eg. Mon-Fri 10am to 3pm, Sun-Thu 9pm-3am, etc).	Observation		Y
													Observation		Y



CONTRACT NO.	DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
					08	4/09/2024	SCO	DNGO	SMCSWSW8-JHL-WBK-TF-PLN-000091	1.4.7	NA	Will the Full closure of footpath on north-western corner of Lillian Lane / Beamish Street intersection and Staged closure of the northern leg of the Beamish Street / Lillian Lane intersection occur concurrently? Due to the heavy foot traffic along Beamish Street, this may not be supported. TGS to be reviewed when supplied.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	1.4.7	NA		Observation		Y
					08.01	13/09/2024	JHL	ACONSTANTI				Noted. The current plan is to divert pedestrians around the worksite using the NB kerbside lane (concrete barriers to be placed parallel to live traffic) to maintain the pedestrian path on the western side of Beamish St. TGS plan will be presented for review and comment in the upcoming TCG meetings.	Observation		Y
													Observation		Y
					09	4/09/2024	SCO	DNGO	SMCSWSW8-JHL-WBK-TF-PLN-000091	1.4.8	NA	Ensure buses are consulted in the stakeholder engagement for the partial closures at Broughton St.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	1.4.8	NA		Observation		Y
					09.01	13/09/2024	JHL	ACONSTANTI				Noted. Traffic/Pedestrian staging TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders. This is noted in Section 1.4.8 (Pg.14). If the works can't be coordinated during the dayshift, it will be planned outside normal bussing operations.	Observation		Y
													Observation		Y
					10	4/09/2024	SCO	DNGO	SMCSWSW8-JHL-WBK-TF-PLN-000091	General	NA	Provide a duration for all full/partial closures at stations. Section 1.4.1 provides an overview, but further detail is required. For example, the scope of works at Campsie requires multiple footpath closures. Will all these works require 4 months as per table 1?	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	General	NA		Observation		Y
					10.01	13/09/2024	JHL	ACONSTANTI				Noted. The durations included in Table 1 are based on initial traffic staging of works. Once the designs are finalised, TGS staging plans will be presented with approximate durations in the TCG meetings for comment by the relevant stakeholders. In relation to Beamish St, Campsie the duration (4 months) takes into consideration the various number of traffic/pedestrian staging we believe are required required to construct the works whilst maintaining both NB and SB directions of traffic and pedestrian paths. This may change depending on the approvals received by the relevant stakeholders.	Observation		Y
													Observation		Y
					11	4/09/2024	SCO	DNGO	SMCSWSW8-JHL-WBK-TF-PLN-000091	3.2.1	NA	Ensure haulage manoeuvres are spaced to avoid significant queuing or delays to traffic.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	3.2.1	NA		Observation		Y
					11.01	13/09/2024	JHL	ACONSTANTI				Noted. This will be communicated to haulage contractors.	Observation		Y
													Observation		Y
					12	4/09/2024	SCO	DNGO	SMCSWSW8-JHL-WBK-TF-PLN-000091	4.2.1	NA	Provide Pedestrian Movement plans, with detour signage as required, for all stations, include all footpath widths in area around any public domain or footpath closures. Additionally, ensure any TCs required for pedestrian management are clearly marked on the plans. These plans will be especially critical for heavily used footpaths such as Punchbowl Station to Punchbowl Boys' High School and along Beamish St in Campsie.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	4.2.1	NA		Observation		Y
					12.01	12/09/2024	JHL	ACONSTANTI				Noted. This will be provided and presented in the TCG meetings for comment and approval by the relevant stakeholders.	Observation		Y
													Observation		Y
					13	4/09/2024	SCO	JCOLES	SMCSWSW8-JHL-WBK-TF-PLN-000091	4.2.2.4	NA	If directing more pedestrians to use Anzac Mall due to Lillian Lane closure, please ensure there is adequate lighting in on the detour route to increase pedestrian safety.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	4.2.2.4	NA		Observation		Y



CONTRACT NO.	DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
					13.01	12/09/2024	JHL	ACONSTANTI				Noted. Anzac Mall is an existing pedestrian thoroughfare which has existing lighting. We will review prior to the Lillian Ln closure and provide additional lighting if required.	Observation		Y
													Observation		Y
					14	4/09/2024	SCO	JCOLES	SMCSWSW8-JHL-WBK-TF-PLN-000091	4.2.2.6	NA	what footpath width is maintained on the partially closed footpath?	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	4.2.2.6	NA		Observation		Y
					14.01	12/09/2024	JHL	ACONSTANTI				As a general rule, we will maintain a minimum 1.5m width for all pedestrian paths. If a reduction/closure is required we will seek approval by the relevant stakeholders.	Observation		Y
													Observation		Y
					15	4/09/2024	SCO	JCOLES	SMCSWSW8-JHL-WBK-TF-PLN-000091	4.5.8	NA	Consider changing a general parking spot close to the space being removed to disabled parking to maintain amenity in the area for those who require this facility.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	4.5.8	NA		Observation		Y
					15.01	12/09/2024	JHL	ACONSTANTI				Noted. This has been considered and proposed to IWC and they have agreed to not replace the disabled parking due to the close proximity of Schwebel St.	Observation		Y
													Observation		Y
					16	4/09/2024	SCO	JCOLES	SMCSWSW8-JHL-WBK-TF-PLN-000091	4.6.2	NA	The lane way is not a suitable detour for buses. Has this road closure, bus stop closures and detour been discussed with Transport Integration?	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	4.6.2	NA		Observation		Y
					16.01	12/09/2024	JHL	ACONSTANTI				Noted. We have identified in section 4.6.2 that Quine Lane is not suitable for bus detours and will request in due course to change the bus route during the construction. If possible, we will limit the road closure to weekends or stage the construction to maintain traffic through Breust Place. Once the designs have been finalised we can confirm this and stage these works accordingly. To be presented in the TCG meeting for comment and approval by the relevant stakeholders.	Observation		Y
													Observation		Y
					17	4/09/2024	SCO	JCOLES	SMCSWSW8-JHL-WBK-TF-PLN-000091	Appendix 2	NA	For vehicle movements that require pedestrians to be held, this should be outside peak times to ensure we are minimising disruption. There must be always traffic controllers onsite to assist with movements crossing footpaths. Where signs and other road furniture is required to be removed to facilitate swept path movements approved to remove these would need to be approved by the asset owner, and relocated if possible.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Appendix 2	NA		Observation		Y
					17.01	12/09/2024	JHL	ACONSTANTI				Noted. Pedestrians will be managed at access gates. These are the main interface points between vehicles and pedestrians. Where pedestrian paths are adjacent worksites, a physical barrier (barriers/hoarding) will be in place to provide appropriate delineation. Refer to Section 3.1.1 & 3.1.2.	Observation		Y
													Observation		Y
					18	10/09/2024	IWC	MHUY	Stage 3 CTMP	CTMP	N/A	Figure 11 and 22 – No Traffic impact. Ensure pedestrian access around closed areas in Bedford Crescent. Ensure that alternate pedestrian detour posted as enter into carpark area and ensure detour and alternate route for pedestrians and cyclist made clear to public at least two week prior to closure. Figure 12 – No Traffic Impact. Ensure detour and alternate route for pedestrians and cyclist made clear to public at least two week prior to closure.	Potential Non-Compliance		Y
									Stage 3 CTMP	CTMP	N/A		Potential Non-Compliance		Y
					18.01	12/09/2024	JHL	ACONSTANTI				Noted. Community Notifications are sent out monthly and available on the Sydney Metro website. Alternate pedestrian routes will be in place during footpath closures.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y



CONTRACT NO.	DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
					18.01.01	18/09/2024	IWC	MHUY	Stage 3 CTMP	CTMP	N/A	TGSs are to be consulted with Council for all detours and alternate routes for pedestrian and cyclist. In addition to the monthly community notifications and Sydney Metro website, all impacted residents and businesses in the area are to be notified at least two weeks prior to closure.	Potential Non-Compliance		Y
									Stage 3 CTMP	CTMP	N/A		Potential Non-Compliance		Y
					19	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	N/A	Section 1.4.4	I have raised concerns before about the closure of the underpass between Breust Place particularly during non-school holidays. It is important that there is a safe alternative for school students to cross Punchbowl Road.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	N/A	Section 1.4.4		Potential Non-Compliance		Y
					19.01	12/09/2024	JHL	ACONSTANTI				Noted. Whilst the underpass is closed during construction works, the pedestrians will be detoured via Punchbowl Rd footpath and utilise the signalised crossing to access replacement bussing located on The Boulevard. Refer to Section 4.2.2.2. Pedestrian staging TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					20	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.6	N/A	The additional land required off The Boulevard would engulf the footpath completely, plus the marquee and bus stop. This is not a viable solution. The proposed area must be substantially reduced.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.6	N/A		Potential Non-Compliance		Y
					20.01	12/09/2024	JHL	ACONSTANTI				Noted. Figure 6 shows the additional land required to cover our scope. This does not mean that we plan take occupation of the entire footprint in one stage. These works will be staged and pedestrian detour TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders. Refer to Section 4.2.2.3.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					21	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.7	N/A	The additional land required includes the signalised pedestrian crossing on Beamish St. This is a critical crossing point from the closed train station to a TTB bus stop on South Parade and is not supported	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.7	N/A		Potential Non-Compliance		Y
					21.01	12/09/2024	JHL	ACONSTANTI				Noted. We do not plan to close both Beamish St signalised crossings simultaneously. There will always be one crossing point to access the South Parade TTP bus stops. This is deemed a minor pedestrian detour and TGS plans will be presented to the relevant stakeholders for approval. Refer to Section 1.4.7.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					22	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.7	N/A	The footpath outside the station entrance is required to be open at all times.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.7	N/A		Potential Non-Compliance		Y
					22.01	12/09/2024	JHL	ACONSTANTI				Noted. We will maintain a pedestrian path throughout the duration of construction unless deemed unsafe or restricted by the work area. Traffic/Pedestrian staging/detour TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders. Refer to Section 1.4.7	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					23	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.9	N/A	Footpath works should be available at all times. If not feasible, pedestrian management and/or safe detour signage (for a short timeframe)	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.9	N/A		Potential Non-Compliance		Y
					23.01	12/09/2024	JHL	ACONSTANTI				Noted. We only plan to partially close the footpath during construction. Where a full footpath closure is required, we will implement minor detours. This will be presented and approved by relevant stakeholders. Refer to Section 4.2.2.6 Pedestrian Impacts.	Potential Non-Compliance		Y



CONTRACT NO.	DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
													Potential Non-Compliance		Y
					24	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.10	N/A	A meeting in August 2024, Sydney Metro Construction Contractors presented a full closure of Wardell Road Bridge in front of the station entrance. Construction teams will need to coordinate with CJP to find the best resolution to completing the construction without minimal impact to the community.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.10	N/A		Potential Non-Compliance		Y
					24.01	12/09/2024	JHL	ACONSTANTI				Noted. This is not related to JHLOR scope. We plan to undertake partial closures to undertake the new footpath works south of the existing Station entry. Traffic/Pedestrian staging TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders. This will include the temporary relocation of the special services bus stop located on Wardell Rd. This is noted in Section 1.4.10 (Pg.15).	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					25	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.14.11	N/A	The closure of the footpath between Victoria Road/Myrtle Street and Riverdale Avenue is part of the advertised Active Transport route for Southwest Link project (12-month conversion of the Bankstown Line). This footpath must be open by 29 September 2024 (at the latest) as this is part of the alternative transport options being advertised.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.14.11	N/A		Potential Non-Compliance		Y
					25.01	12/09/2024	JHL	ACONSTANTI				Noted. This will need to be discussed directly with Sydney Metro. The footpath is currently closed with a pedestrian detour in place (from previous Sydney Metro Contractors). There are no plans for this footpath to be constructed and reopened by the 29/9/24.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					25.01.01	17/09/2024	TFN	AWALSH				Any footpath works will need to be completed prior to 30 September so that it is open for the start of SWL. This is advertised as an active transport route. If further work is required beyond 30 Sept, JHLOR to work with CJP for a suitable solution.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					26	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 2.2.2	N/A	Any construction/site shed use of the Bankstown Bus Interchange will need worked through with CJP. The bus interchange is a critical part of delivering SWL.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 2.2.2	N/A		Potential Non-Compliance		Y
					26.01	12/09/2024	JHL	ACONSTANTI				Noted. Any changes to the proposed arrangement which has already been consulted will be represented and approved by the relevant stakeholders.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					27	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 3.1.2	N/A	Hoarding should be installed as per agreed at previous meetings. If hoarding extends beyond the agreed areas, it will impact the positioning of bus shelters and pedestrian movements.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 3.1.2	N/A		Potential Non-Compliance		Y
					27.01	12/09/2024	JHL	ACONSTANTI				Noted. Any changes to the proposed arrangement which has already been consulted will be represented and approved by the relevant stakeholders.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					28	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.1	N/A	Pedestrian detour around Bankstown Interchange will need to be managed closely with CJP. The interchange is vital to SWL bus operations.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.1	N/A		Potential Non-Compliance		Y
					28.01	12/09/2024	JHL	ACONSTANTI				Noted. Any changes to the existing arrangement will be consulted and approved by the relevant stakeholders.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y



CONTRACT NO.	DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
					29	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.2	N/A	A safe pedestrian management solution is required so that the school students have safe access to walk around Punchbowl without being tempted to run across Punchbowl Road due to the underpass being closed for long period during busy school times.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.2	N/A		Potential Non-Compliance		Y
					29.01	12/09/2024	JHL	ACONSTANTI				Noted. Whilst the underpass is closed during construction works, the pedestrians will be detoured via Punchbowl Rd footpath and utilise the signalised crossing to access replacement bussing located on The Boulevard. Refer to Section 4.2.2.2. Pedestrian staging TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					30	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.3	N/A	The 'partially closed' pedestrian path is at the exact location of the TTP bus stop and is not approved unless conducted during the times when buses are not operating, possibly 3 hours during weeknights - a suitable solution is required prior to any approvals to close the footpath.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.3	N/A		Potential Non-Compliance		Y
					30.01	12/09/2024	JHL	ACONSTANTI				Noted. Pedestrian staging TGS plans are being developed to assist with the new footpath works and will be presented in the TCG meetings for comment and approval by the relevant stakeholders. This is noted in Section 1.4.6 (Pg.11).If required, a proposed temporary relocation of the bus stop will also be presented for approval.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					31	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.4	N/A	Partially closed footpath not to occur when the TTP buses are operating, as this corner of Beamish St and North Parade is the direct path from the station to one of the TTP bus stops.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.4	N/A		Potential Non-Compliance		Y
					31.01	12/09/2024	JHL	ACONSTANTI				Noted. "Partially closed footpath" on Beamish St means that we will maintain a pedestrian path throughout the duration of construction unless deemed unsafe or restricted by the work area. Traffic/Pedestrian staging/detour TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders. Refer to Section 1.4.7.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					32	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.5	N/A	Broughton Street Partially Closed Footpaths to not occur at the same time, otherwise pedestrians would have no choice but to walk on the road along with traffic.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.5	N/A		Potential Non-Compliance		Y
					32.01	12/09/2024	JHL	ACONSTANTI				Noted. The footpaths will undergo partial closures. Pedestrian access is expected to be always maintained on Broughton St with minor detours in place. Refer to Section 4.2.2.5.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					33	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.6	N/A	Partially Closed footpath to be agreed with CJP to make sure that pedestrian movements are maintained safely without excessive detours.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.6	N/A		Potential Non-Compliance		Y
					33.01	12/09/2024	JHL	ACONSTANTI				Noted. Only minor detours planned during the works. Refer to Section 4.2.2.6. Pedestrian staging TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					34	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.8	N/A	The closed footpath cannot occur during the 12-month conversation period, it is an advertised Active Transport route that is required to be delivered by Sydney Metro prior to SWL commencement (30 Sept 2024)	Potential Non-Compliance		Y



CONTRACT NO.	DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.2.2.8	N/A		Potential Non-Compliance		Y
					34.01	12/09/2024	JHL	ACONSTANTI				Noted. This will need to be discussed directly with Sydney Metro. The footpath currently closed with a pedestrian detour in place (from previous Sydney Metro Contractors). There is no plans for this footpath to be constructed by the 30/9/24.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					34.02	17/09/2024	TFN	AWALSH				As discussed with Wissum (Sydney Metro), this path is required to be open by 30 September. If work is required to be done post 30 September, CJP will work with JHLOR to achieve suitable outcome	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					35	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.5.8	N/A	TTP will place a temporary toilet in the vicinity of the Station St for the first 4-6 weeks of busing operations. Sydney Metro Construction and CJP to work together to facilitate both site facilities and the toilet.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.5.8	N/A		Potential Non-Compliance		Y
					35.01	12/09/2024	JHL	ACONSTANTI				Noted. Please provide a mark-up of the proposed location to determine any clashes. JHLOR has already consulted with Inner West Council and they have provided an approved permit to install site facilities at the bottom of Station St as shown in Figure 36 (Pg.38).	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					36	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.6.2	N/A	Agreed pedestrian detour routes to be provided particularly if Breust Place pedestrian access to Puchbowl Road and underpass is blocked.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 4.6.2	N/A		Potential Non-Compliance		Y
					36.01	12/09/2024	JHL	ACONSTANTI				Noted. Whilst the underpass is closed during construction works, the pedestrians will be detoured via Punchbowl Rd footpath and utilise the signalised crossing to access replacement bussing located on The Boulevard. Refer to Section 4.2.2.2. Pedestrian staging TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					37	10/09/2024	TFN	AWALSH	SMCSWSW8-JHL-WBK-TF-PLN-000091	SMCSWSW8-JHL-WBK-TF-PLN-000091	N/A	Please note that the approx. 150 Traffic Management Plans have not be reviewed by the Southwest Link Project team (TTP team).	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	SMCSWSW8-JHL-WBK-TF-PLN-000091	N/A		Potential Non-Compliance		Y
					37.01	12/09/2024	JHL	ACONSTANTI				Noted. All traffic arrangements are presented in the TCG meetings and approved by the relevant stakeholders prior to implementation. Bussing representative also attend these meetings.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					38	10/09/2024	SMD	AAMIN	SMCSWSW8-JHL-WBK-TF-PLN-000091	Page 8 – Figure 2	N/A	All night routes stop in this location – where will the temporary stop be located during works?	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Page 8 – Figure 2	N/A		Potential Non-Compliance		Y
					38.01	12/09/2024	JHL	ACONSTANTI				Figure 8 refer to the Bankstown South Terrace Bus Layover. The site compound layout (marked in RED) has already been approved and established by the previous contract (Bankstown Early Works - BEW). Refer to the BEW CTMP. The additional area (marked in GREEN) has also been presented in the TCG and approved by the relevant stakeholders. It has been agreed that the footpath is to remain accessible during the Possession/Shutdown for pedestrians to be able to access the Northern median. Refer to section 1.4.3.1 (Pg.7).	Potential Non-Compliance		Y
													Potential Non-Compliance		Y



CONTRACT NO.	DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
					39	10/09/2024	SMD	AAMIN	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.4 – Site Plan at Punchbowl	N/A	Breust PI – route S14 operates along this roadway (2 trips each direction a day) . Quine Lane does not appear suitable to be traversed, will need to see swept paths and dish pan gutter review for 12.5m standard size vehicles. Additional temporary bus stops will be required to cater for the two bus stops that service Breust PI How long is this piece of work?	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.4 – Site Plan at Punchbowl	N/A		Potential Non-Compliance		Y
					39.01	12/09/2024	JHL	ACONSTANTI				Refer to Section 4.6.2 (Pg.39) which addresses the bussing impacts at Punchbowl. The duration of works will depend on whether a full closure of Breust Place is approved or whether we need to stage construction to maintain both direction of traffic. Footpath/Road designs are being finalised which will assist with developing the TGS plans in order to present in the TCG meetings for comment by the relevant stakeholders. This is noted in Section 1.4.4 (Pg.9).	Potential Non-Compliance	Y	
													Potential Non-Compliance		Y
					40	10/09/2024	SMD	AAMIN	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.6 Site Plan at Lakemba	N/A	All night routes stop in this location – where will the temporary stop be located during works?	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.6 Site Plan at Lakemba	N/A		Potential Non-Compliance		Y
					40.01	12/09/2024	JHL	ACONSTANTI				Noted. Pedestrian staging TGS plans are being developed to assist with the new footpath works and will be presented in the TCG meetings for comment and approval by the relevant stakeholders. This is noted in Section 1.4.6 (Pg.11 of the CTMP).If required, a proposed temporary relocation of the bus stop will also be presented for approval.	Potential Non-Compliance	Y	
													Potential Non-Compliance		Y
					41	10/09/2024	SMD	AAMIN	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.8 Site Plan at Canterbury	N/A	Broughton St, so long as per previous works, any loss of kerbside meterage is offset to cater for bussing operations.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.8 Site Plan at Canterbury	N/A		Potential Non-Compliance		Y
					41.01	12/09/2024	JHL	ACONSTANTI				Noted. Traffic/Pedestrian staging TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders. This is noted in Section 1.4.8 (Pg.14 of the CTMP). If the works can't be coordinated during the dayshift, it will be planned outside normal bussing operations.	Potential Non-Compliance	Y	
													Potential Non-Compliance		Y
					42	10/09/2024	SMD	AAMIN	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.10 Site Plan at Dulwich Hill	N/A	Broughton St, so long as per previous works, any loss of kerbside meterage is offset to cater for bussing operations.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.10 Site Plan at Dulwich Hill	N/A		Potential Non-Compliance		Y
					42.01	12/09/2024	JHL	ACONSTANTI				This is a double up of Comment 41.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					43	10/09/2024	SMD	AAMIN	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.10 Site Plan at Dulwich Hill	N/A	Would like to see pedestrian management plan Bus stop is serviced by school specials, planned light rail possession and emergency bussing , will need to have a meeting to discuss possible options	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 1.4.10 Site Plan at Dulwich Hill	N/A		Potential Non-Compliance		Y
					43.01	12/09/2024	JHL	ACONSTANTI				Noted. Traffic/Pedestrian staging TGS plans are being developed and will be presented in the TCG meetings for comment and approval by the relevant stakeholders. This will include the temporary relocation of the bus stop. This is noted in Section 1.4.10 (Pg.15 of the CTMP).	Potential Non-Compliance	Y	
													Potential Non-Compliance		Y
					44	10/09/2024	SMD	AAMIN	SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 3.1.2 Hoarding and Site Boundaries	N/A	As a general comment, any hoarding to be recessed a minimum 600mm (800mm preferred) from kerb face. Any waterfilled/ concrete barriers and gawking screens will need to be no higher than height of bus mirrors, want to avoid fixed object collisions (unless recessed in accordance with previous statement – 600mm recessed from kerb face)	Potential Non-Compliance		Y



CONTRACT NO.	DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
									SMCSWSW8-JHL-WBK-TF-PLN-000091	Section 3.1.2 Hoarding and Site Boundaries	N/A		Potential Non-Compliance		Y
					44.01	11/09/2024	JHL	ACONSTANTI				Noted. In most locations the barriers/hoarding will be set back from the kerb but in some instances where minimum pedestrian paths need to be maintained or where scopes extend out to the kerb, they are required to be placed on top of the kerb to maximise the work area. Where required swept paths will be completed to confirm whether there are any clashes with having the barrier on top of the kerb.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					45	10/09/2024	SMD	AAMIN	SMCSWSW8-JHL-WBK-TF-PLN-000091	N/A	N/A	As a general comment, it would be better if works can be scheduled to occur off peak, in particularly at nights between 21:00 -05:00.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	N/A	N/A		Observation		Y
					45.01	11/09/2024	JHL	ACONSTANTI				Noted. Depending on the scale of the traffic arrangement and consultation with relevant parties, nightshifts will be considered where required. No changes to the CTMP required.	Observation		Y
													Observation		Y
					46	10/09/2024	SMD	AAMIN	SMCSWSW8-JHL-WBK-TF-PLN-000091	N/A	N/A	Adobe, appears to blank out after page 30.	Observation		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	N/A	N/A		Observation		Y
					46.01	11/09/2024	JHL	ACONSTANTI				Please try another program. No issues from our end viewing the document.	Observation		Y
													Observation		Y
					47	12/09/2024	CBC	IKHAN	SMCSWSW8-JHL-WBK-TF-PLN-000091	271	SMCSWSW8-JHL-WBK-TF-PLN-000091	A dilapidation report covering all local roads and associated traffic facilities along the haulage route must be submitted. This report should address potential damage to road structures and to be forwarded to the Assets Team. Occupation of existing car park or land requires a special agreement with the Council to be referred to Council's properties management.	Potential Non-Compliance		Y
									SMCSWSW8-JHL-WBK-TF-PLN-000091	271	SMCSWSW8-JHL-WBK-TF-PLN-000091		Potential Non-Compliance		Y
					47.01	13/09/2024	JHL	ACONSTANTI				Noted. No changes to the existing approved haulage routes which have already been consulted and included in the SWMC/BEW CTMPs. The dilapidation reports have been previously provided to the relevant Council, noting there are new areas surrounding Stations which we will be undertaking dilapidation reports and provided these to Council progressively based on construction start dates.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					47.02	13/09/2024	JHL	ACONSTANTI				Noted. JHLOR will consult with Council through the current process when occupying areas such as carparks, parking, etc.	Potential Non-Compliance		Y
													Potential Non-Compliance		Y
					48	17/09/2024	SMD	AAMIN	N/A	N/A	N/A	No Comments	Observation		Y
									N/A	N/A	N/A		Observation		Y
					49	19/09/2024	SCO	JCOLES	SMCSWSW8-JHL-WBK-TF-PLN-000001	NA	NA	In accordance with Schedule C1 Appendix A.9 Section 2.1 ( c ) and 2.2 ( c ) of the Principal's General Specifications G10 – Traffic and Transport Management and Minister's Condition of Approval E82 for the Sydney Metro City & South West, Transport for NSW – Operations Planning approve the SWM3 – Construction Management Plan (SMCSWSW8-JHL-WBK-TF-PLN-000001) for the Sydney Metro City & South West project subject to the following requirements: Addressing any issues raised by Council, STA, Taxi Council, residents/businesses or Emergency Services in the CTMP approval process; Addressing the requirements arising as an outcome of the Local Traffic Committee meeting; Obtaining Road Occupancy Licenses (ROLs) from the Transport Management Centre as required; Promptly addressing any CJP and/or TMC and/or TINSW issue that eventuates during the works Works adjacent to stations and bus stops, not including measures to close access to stations during the shutdown, are subject to further consultation at the TCG and TTLG forums.	Observation		Y



CONTRACT NO.	DOCUMENT NO.	TITLE	VER	STATUS	NO.	DATE	COMPANY	RAISED BY	REVIEW DOC. NO.*	DOCUMENT REF*	DEED REF*	COMMENTS / RESPONSE	COMMENT CATEGORY*	LINKED ITEM NO	CLOSED OUT
									SMCSWSW8-JHL-WBK-TF-PLN-000001	NA	NA		Observation		Y



## Appendix 5 – SWM3 Additional TGS Plans

The following Traffic Guidance Schemes (TGSs) are provided. These will be updated with the Traffic Control Supplier if necessary, as the works progress and resubmitted if changed, for approval.

Table 36 – Traffic Guidance Schemes

TCP Title	Location	Description of Control
<b>TRUCK ADVANCE WARNING - NORTH SIDE</b>	North Terrace - Main Compound	TGS for main compound extension required for BAC Works. Includes new gate access.
<b>TRUCK ADVANCE WARNING - SOUTH SIDE</b>	South Terrace - Main Compound	TGS for main compound extension required for BAC Works. Includes footpath closure and new gate access.
<b>TEMPORARY BUS LAYOVER AREAS AND PEDESTIRAN DETOUR</b>	South Terrace - Main Compound	TGS for Partial Bus Layover Closure, Pedestrian Footpath Closure and Signage Plan for Temporary Bus Layovers on South Terrace and West Terrace
<b>STAGE 1</b>	South Terrace - Bus Layover	TGS for Stage 1 of footpath works near the bus layover
<b>STAGE 2</b>	South Terrace - Bus Layover	TGS for Stage 2 of footpath works near the bus layover
<b>STAGE 3</b>	South Terrace - Bus Layover	TGS for Stage 3 of footpath works near the bus layover
<b>STAGE 4</b>	South Terrace - Bus Layover	TGS for Stage 4 of footpath works near the bus layover



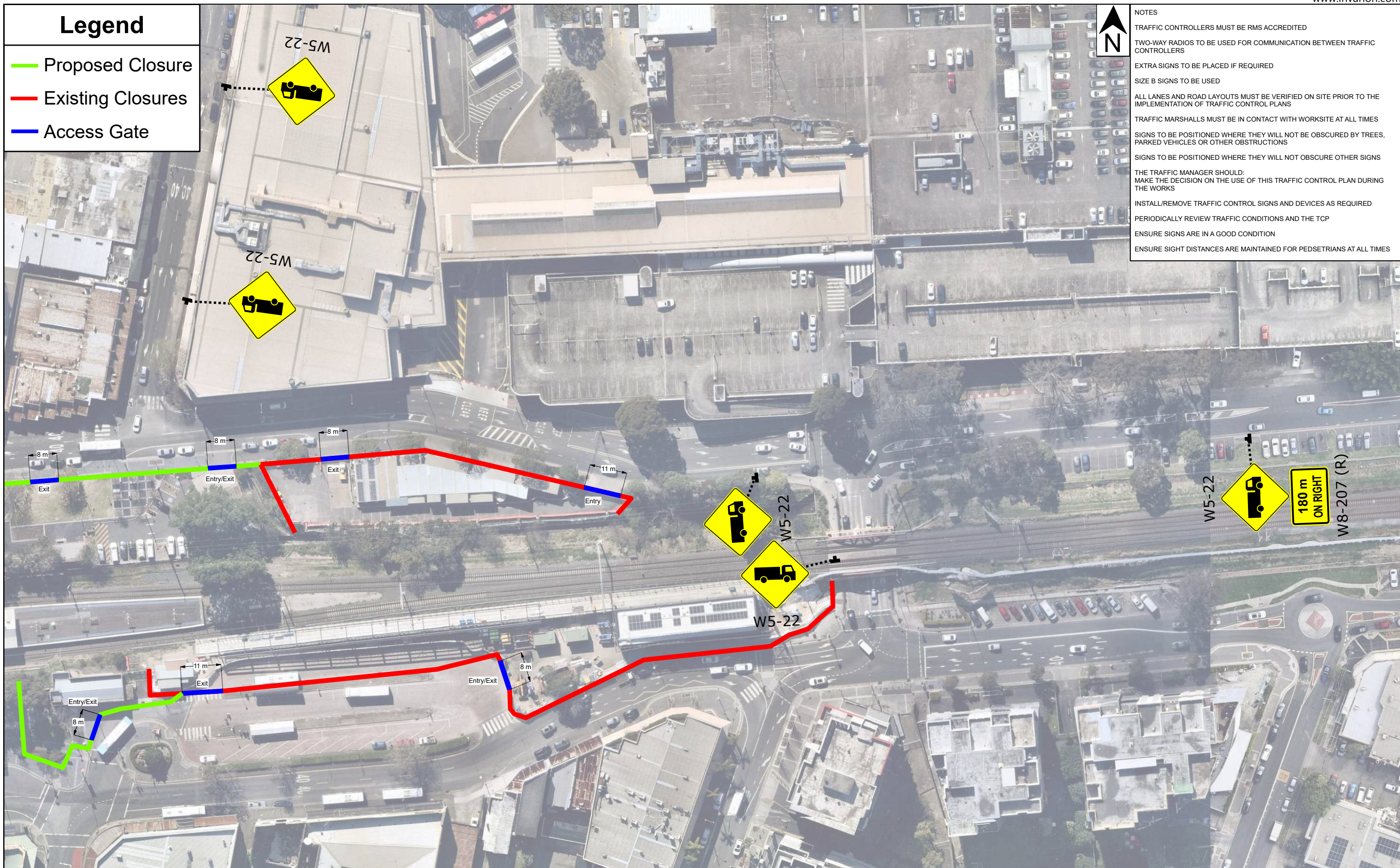
## Legend


- Proposed Closure
- Existing Closures
- Access Gate



### NOTES

- TRAFFIC CONTROLLERS MUST BE RMS ACCREDITED
- TWO-WAY RADIOS TO BE USED FOR COMMUNICATION BETWEEN TRAFFIC CONTROLLERS
- EXTRA SIGNS TO BE PLACED IF REQUIRED
- SIZE B SIGNS TO BE USED
- ALL LANES AND ROAD LAYOUTS MUST BE VERIFIED ON SITE PRIOR TO THE IMPLEMENTATION OF TRAFFIC CONTROL PLANS
- TRAFFIC MARSHALLS MUST BE IN CONTACT WITH WORKSITE AT ALL TIMES
- SIGNS TO BE POSITIONED WHERE THEY WILL NOT BE OBSCURED BY TREES, PARKED VEHICLES OR OTHER OBSTRUCTIONS
- SIGNS TO BE POSITIONED WHERE THEY WILL NOT OBSCURE OTHER SIGNS
- THE TRAFFIC MANAGER SHOULD:  
MAKE THE DECISION ON THE USE OF THIS TRAFFIC CONTROL PLAN DURING THE WORKS
- INSTALL/REMOVE TRAFFIC CONTROL SIGNS AND DEVICES AS REQUIRED
- PERIODICALLY REVIEW TRAFFIC CONDITIONS AND THE TCP
- ENSURE SIGNS ARE IN A GOOD CONDITION
- ENSURE SIGHT DISTANCES ARE MAINTAINED FOR PEDSETRIANS AT ALL TIMES



	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<table><tr><th colspan="2">REVISIONS</th><th rowspan="2">Drawn</th><th rowspan="2">Date</th></tr><tr><th>Issue</th><th>Revisions/Descriptions</th></tr><tr><td>001</td><td>INITIAL TGS</td><td>M.H</td><td>06/10/22</td></tr><tr><td>002</td><td>UPDATED TGS</td><td>M.H</td><td>08/11/22</td></tr><tr><td>003</td><td>ADD TRUCK TURNING TGS</td><td>M.H</td><td>11/11/22</td></tr><tr><td>004</td><td>SPLIT NORTH AND SOUTH TGS</td><td>M.H</td><td>16/11/22</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>	REVISIONS		Drawn	Date	Issue	Revisions/Descriptions	001	INITIAL TGS	M.H	06/10/22	002	UPDATED TGS	M.H	08/11/22	003	ADD TRUCK TURNING TGS	M.H	11/11/22	004	SPLIT NORTH AND SOUTH TGS	M.H	16/11/22																	<div>APPROVED</div> <div>ALEX GREY PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN CARD NO. 0051873071 EXPIRY 30/11/2021</div> <div>Alex Grey</div>	<table><tr><td>Project</td><td>Design</td><td>Drawn</td><td>Checked</td></tr><tr><td rowspan="2">BANKSTOWN STATION BAC EARLY WORKS</td><td>M.H</td><td>M.H</td><td>A.G</td></tr><tr><td colspan="2">FOR INFORMATION ONLY</td><td>Date</td></tr><tr><td rowspan="2">TRUCK ADVANCE WARNING NORTH SIDE</td><td>Project Number</td><td>Sheet Number</td><td>Issue</td></tr><tr><td>P3519</td><td>7</td><td>004</td></tr></table>	Project	Design	Drawn	Checked	BANKSTOWN STATION BAC EARLY WORKS	M.H	M.H	A.G	FOR INFORMATION ONLY		Date	TRUCK ADVANCE WARNING NORTH SIDE	Project Number	Sheet Number	Issue	P3519	7	004																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	REVISIONS		Drawn	Date																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	Issue	Revisions/Descriptions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	001	INITIAL TGS	M.H	06/10/22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	002	UPDATED TGS	M.H	08/11/22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	003	ADD TRUCK TURNING TGS	M.H	11/11/22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	004	SPLIT NORTH AND SOUTH TGS	M.H	16/11/22																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
Project	Design	Drawn	Checked																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
BANKSTOWN STATION BAC EARLY WORKS	M.H	M.H	A.G																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	FOR INFORMATION ONLY		Date																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
TRUCK ADVANCE WARNING NORTH SIDE	Project Number	Sheet Number	Issue																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
	P3519	7	004																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</



Legend

Proposed Closure

Existing Closures

Access Gate

N

NOTES

TRAFFIC CONTROLLERS MUST BE RMS ACCREDITED

TWO-WAY RADIOS TO BE USED FOR COMMUNICATION BETWEEN TRAFFIC CONTROLLERS

EXTRA SIGNS TO BE PLACED IF REQUIRED

SIZE B SIGNS TO BE USED

ALL LANES AND ROAD LAYOUTS MUST BE VERIFIED ON SITE PRIOR TO THE IMPLEMENTATION OF TRAFFIC CONTROL PLANS

TRAFFIC MARSHALLS MUST BE IN CONTACT WITH WORKSITE AT ALL TIMES

SIGNS TO BE POSITIONED WHERE THEY WILL NOT BE OBTAINED BY TREES, PARKED VEHICLES OR OTHER OBSTRUCTIONS

SIGNS TO BE POSITIONED WHERE THEY WILL NOT OBTAIN OTHER SIGNS

THE TRAFFIC MANAGER SHOULD:  
MAKE THE DECISION ON THE USE OF THIS TRAFFIC CONTROL PLAN DURING THE WORKS

INSTALL/REMOVE TRAFFIC CONTROL SIGNS AND DEVICES AS REQUIRED

PERIODICALLY REVIEW TRAFFIC CONDITIONS AND THE TCP

ENSURE SIGNS ARE IN A GOOD CONDITION

ENSURE SIGHT DISTANCES ARE MAINTAINED FOR PEDESTRIANS AT ALL TIMES



BITZIOS

consulting

Gold Coast

Suite 26, 58 Riverwalk Avenue, Robina QLD 4226

P: (07) 5562-5377

W: www.bitziosconsulting.com.au

Brisbane

Level 2, 428 Upper Edward Street, Spring Hill 4000

P: (07) 3831-4442

E: admin@bitziosconsulting.com.au

Sydney

Studio 203, 3 Gladstone Street, Newtown NSW 2042

P: (02) 9557 6202

REVISIONS

Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL TGS	M.H	06/10/22
002	UPDATED TGS	M.H	08/11/22
003	ADD TRUCK TURNING TGS	M.H	11/11/22
004	SPLIT NORTH AND SOUTH TGS	M.H	16/11/22

APPROVED

ALEX GREY

PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN

CARD NO. 0051873071

EXPIRY 30/11/2021

Alex Grey

Project

BANKSTOWN STATION BAC EARLY WORKS

Title

TRUCK ADVANCE WARNING - SOUTH SIDE

Design

M.H

Drawn

M.H

Checked

A.G

Date

16/11/2022

Project Number

P3519

Sheet Number

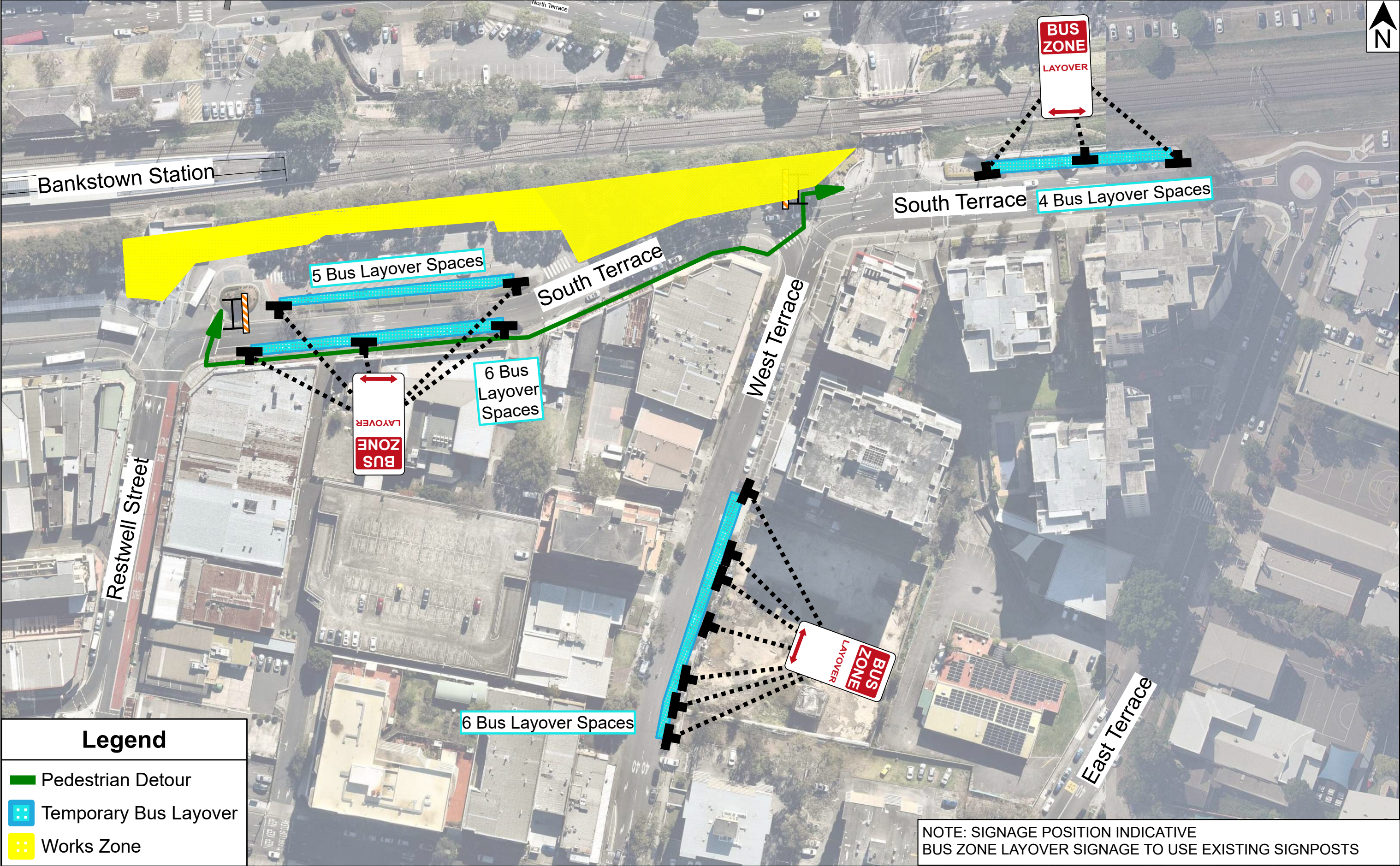
6

Issue

004

FOR INFORMATION ONLY






Legend

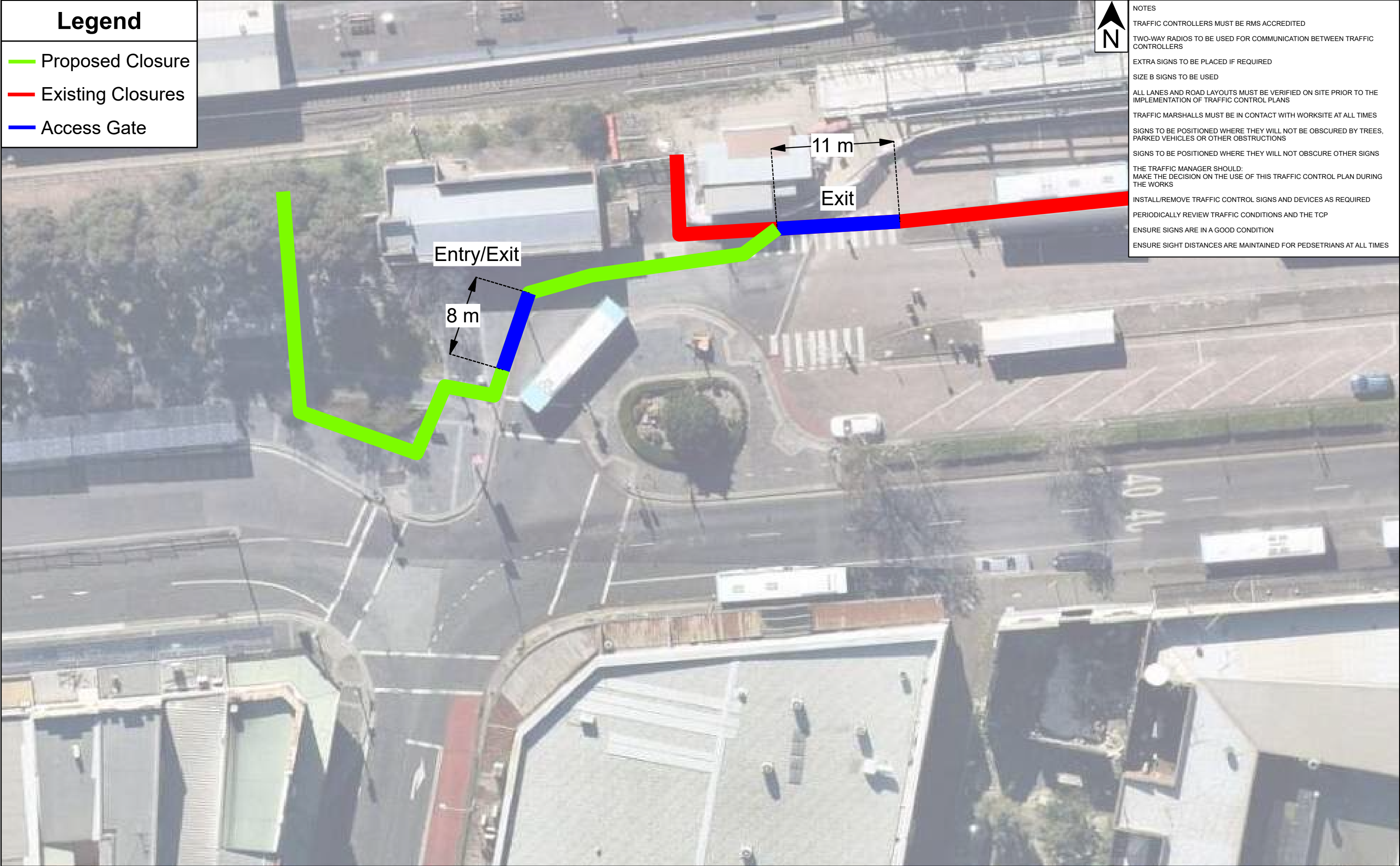
Pedestrian Detour


Temporary Bus Layover

Works Zone

	<p><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a></p> <p><b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a></p> <p><b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</p>	REVISIONS				Project			Design		
		Issue	Revisions/Descriptions	Drawn	Date	BANKSTOWN STATION CTMP			M.H	M.H	Checked
		001	INITIAL PLAN	M.H	28/10/21	TEMPORARY BU LAYOVER AREAS AND PEDESTRIAN DETOUR			FOR CONSTRUCTION		
		002	REMOVE TC SIGNS	M.H	29/10/21						
		003	ADD BUS LAYOVER SIGNS, REMOVE ONE LAYOVER AREA	M.H	29/10/21				Date		
		004	MINOR TEXT CHANGES	M.H	29/10/21				08/11/2021		
		005	MINOR SIGNAGE CHANGES	M.H	03/11/21	Project Number			Issue		
		006	12 MONTH REVIEW - UPDATE SITE EXTENTS	M.H	08/11/22						
						P3519			Sheet Number		
						1			006		





 <div><b>Gold Coast</b> Suite 26, 58 Riverbank Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<table><tr><th colspan="4">REVISIONS</th></tr><tr><th>Issue</th><th>Revisions/Descriptions</th><th>Drawn</th><th>Date</th></tr><tr><td>001</td><td>INITIAL TGS</td><td>M.H</td><td>06/10/22</td></tr><tr><td>002</td><td>UPDATED TGS</td><td>M.H</td><td>08/11/22</td></tr><tr><td>003</td><td>ADD TRUCK TURNING TGS</td><td>M.H</td><td>11/11/22</td></tr><tr><td>004</td><td>SPLIT NORTH AND SOUTH TGS</td><td>M.H</td><td>16/11/22</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>				REVISIONS				Issue	Revisions/Descriptions	Drawn	Date	001	INITIAL TGS	M.H	06/10/22	002	UPDATED TGS	M.H	08/11/22	003	ADD TRUCK TURNING TGS	M.H	11/11/22	004	SPLIT NORTH AND SOUTH TGS	M.H	16/11/22																	<div>APPROVED</div> <div>ALEX GREY PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN CARD NO. 0051873071 EXPIRY 30/11/2021</div> <div><i>Alex Grey</i></div>		<table><tr><td>Project</td><td>Design</td><td>Drawn</td><td>Checked</td></tr><tr><td rowspan="3">BANKSTOWN STATION BAC EARLY WORKS</td><td>M.H</td><td>M.H</td><td>A.G</td></tr><tr><td colspan="2">FOR INFORMATION ONLY</td><td>Date</td></tr><tr><td colspan="2">Project Number P3519</td><td>Sheet Number 1</td></tr><tr><td>Title</td><td colspan="2">Issue</td><td></td></tr><tr><td>Stage 1</td><td colspan="2"></td><td>004</td></tr></table>	Project	Design	Drawn	Checked	BANKSTOWN STATION BAC EARLY WORKS	M.H	M.H	A.G	FOR INFORMATION ONLY		Date	Project Number P3519		Sheet Number 1	Title	Issue			Stage 1			004
	REVISIONS																																																																				
	Issue	Revisions/Descriptions	Drawn	Date																																																																	
	001	INITIAL TGS	M.H	06/10/22																																																																	
	002	UPDATED TGS	M.H	08/11/22																																																																	
	003	ADD TRUCK TURNING TGS	M.H	11/11/22																																																																	
	004	SPLIT NORTH AND SOUTH TGS	M.H	16/11/22																																																																	
Project	Design	Drawn	Checked																																																																		
BANKSTOWN STATION BAC EARLY WORKS	M.H	M.H	A.G																																																																		
	FOR INFORMATION ONLY		Date																																																																		
	Project Number P3519		Sheet Number 1																																																																		
Title	Issue																																																																				
Stage 1			004																																																																		

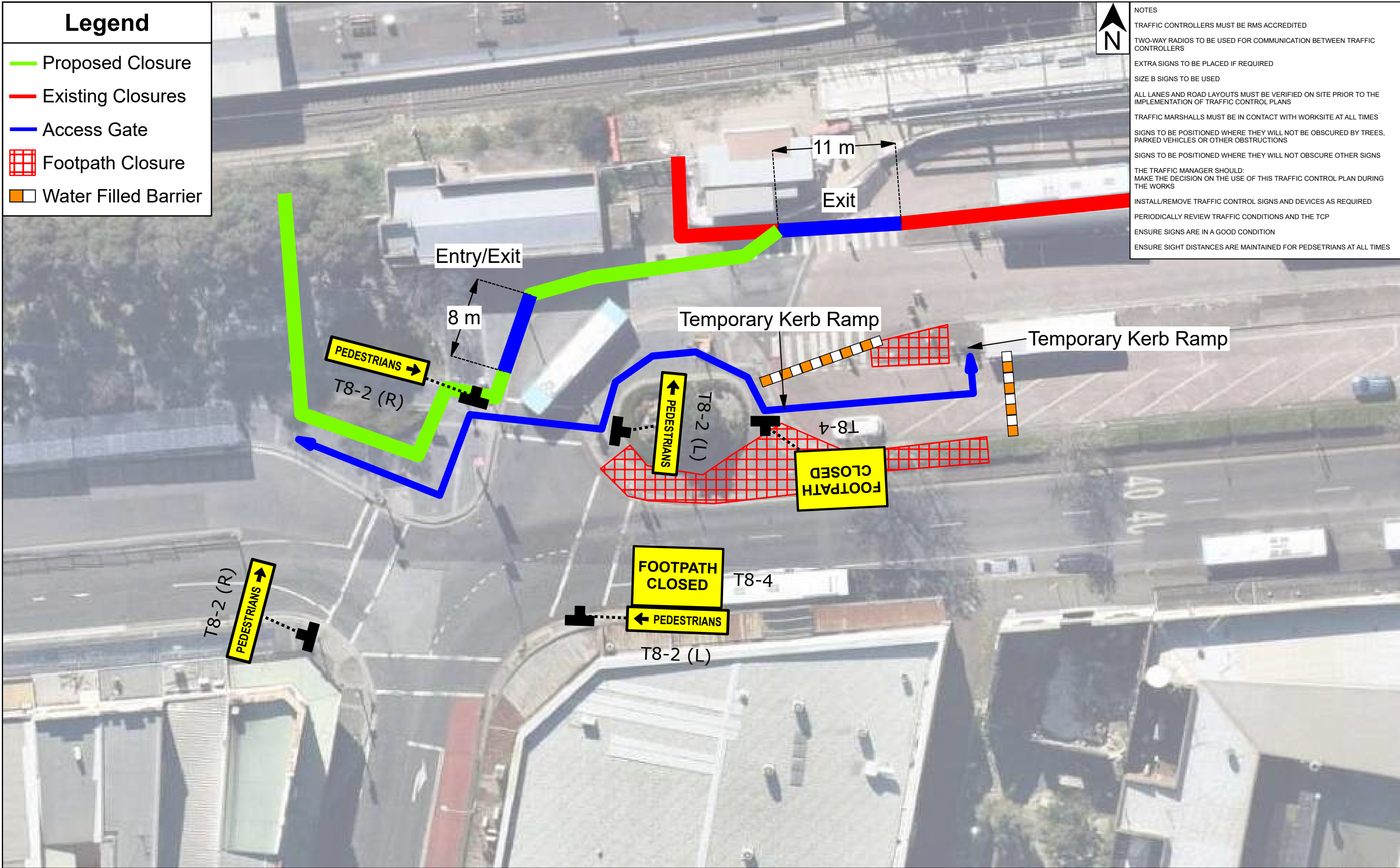



Legend

- Proposed Closure
- Existing Closures
- Access Gate
- Footpath Closure
- Water Filled Barrier



- NOTES
- TRAFFIC CONTROLLERS MUST BE RMS ACCREDITED
  - TWO-WAY RADIOS TO BE USED FOR COMMUNICATION BETWEEN TRAFFIC CONTROLLERS
  - EXTRA SIGNS TO BE PLACED IF REQUIRED
  - SIZE B SIGNS TO BE USED
  - ALL LANES AND ROAD LAYOUTS MUST BE VERIFIED ON SITE PRIOR TO THE IMPLEMENTATION OF TRAFFIC CONTROL PLANS
  - TRAFFIC MARSHALLS MUST BE IN CONTACT WITH WORKSITE AT ALL TIMES
  - SIGNS TO BE POSITIONED WHERE THEY WILL NOT BE OBSCURED BY TREES, PARKED VEHICLES OR OTHER OBSTRUCTIONS
  - SIGNS TO BE POSITIONED WHERE THEY WILL NOT OBSCURE OTHER SIGNS
  - THE TRAFFIC MANAGER SHOULD:  
MAKE THE DECISION ON THE USE OF THIS TRAFFIC CONTROL PLAN DURING THE WORKS
  - INSTALL/REMOVE TRAFFIC CONTROL SIGNS AND DEVICES AS REQUIRED
  - PERIODICALLY REVIEW TRAFFIC CONDITIONS AND THE TCP
  - ENSURE SIGNS ARE IN A GOOD CONDITION
  - ENSURE SIGHT DISTANCES ARE MAINTAINED FOR PEDESTRIANS AT ALL TIMES





**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)

**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)

**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	INITIAL TGS	M.H	06/10/22
002	UPDATED TGS	M.H	08/11/22
003	ADD TRUCK TURNING TGS	M.H	11/11/22
004	SPLIT NORTH AND SOUTH TGS	M.H	16/11/22

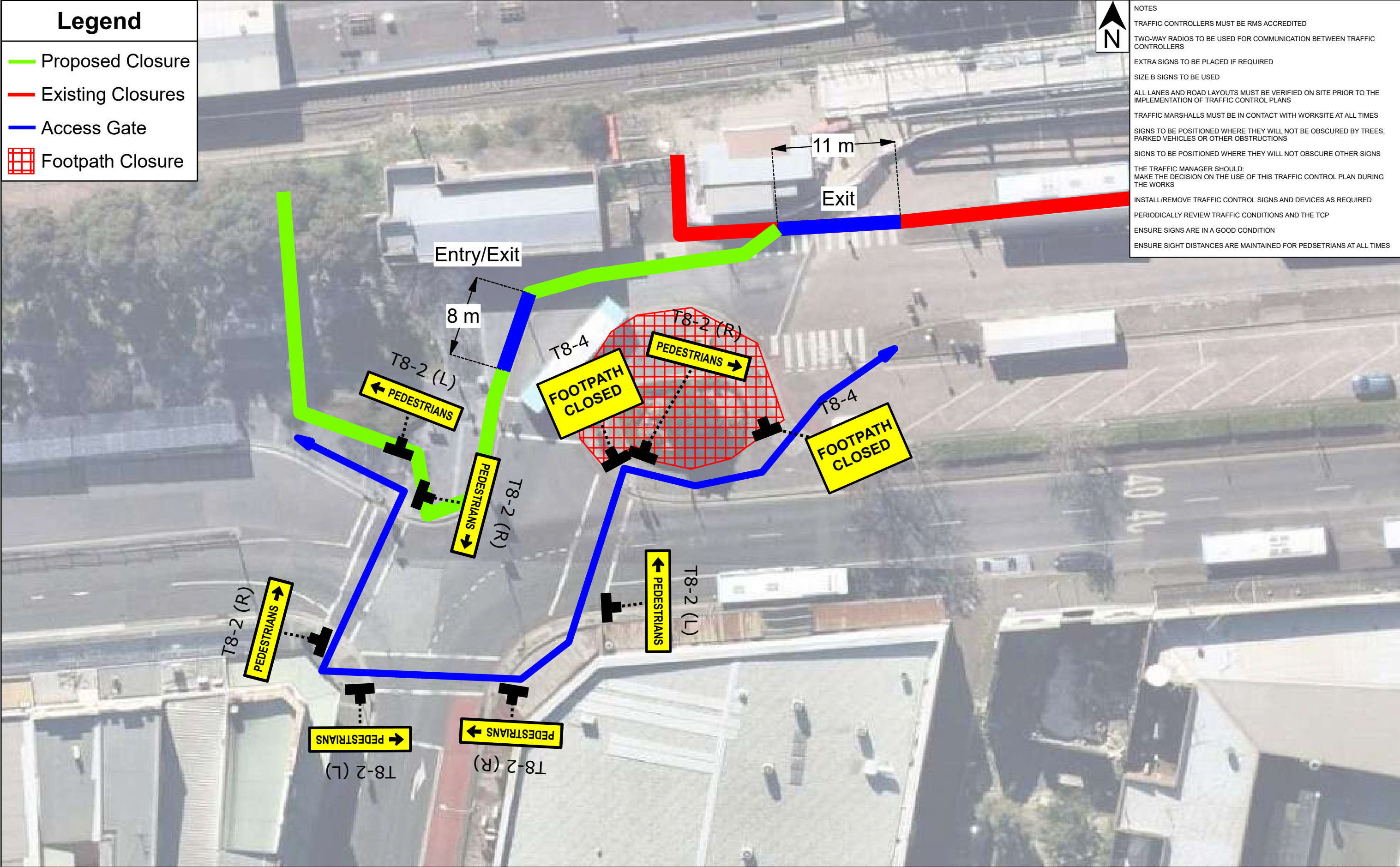
APPROVED

ALEX GREY  
PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN  
CARD NO. 0051873071  
EXPIRY 30/11/2021

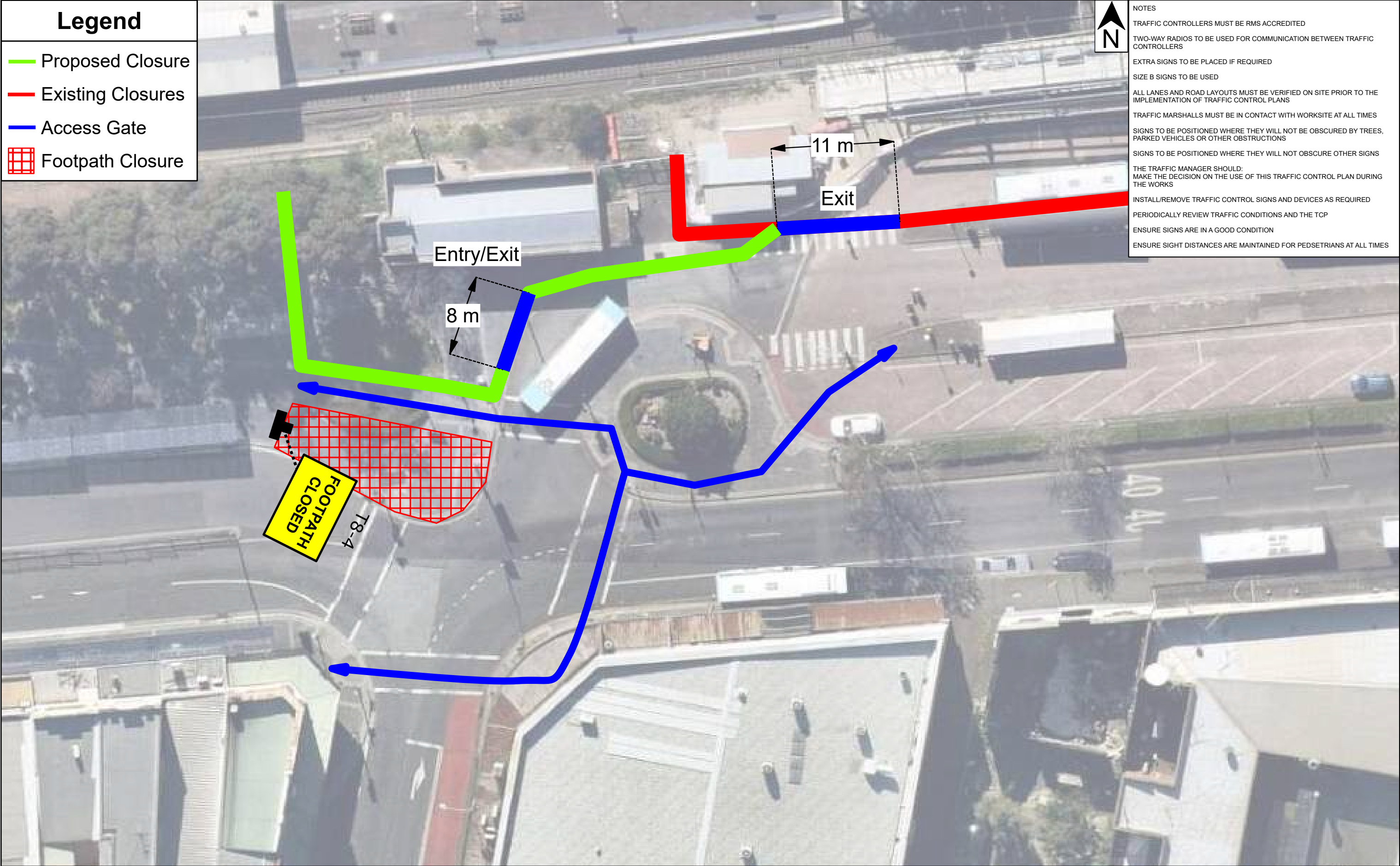
*Alex Grey*

Project	Design	Drawn	Checked
BANKSTOWN STATION BAC EARLY WORKS	M.H	M.H	A.G
Title	FOR INFORMATION ONLY		
Stage 2	Project Number	Sheet Number	Issue
	P3519	2	004











## Appendix 6 – SWM3 Additional Swept Paths

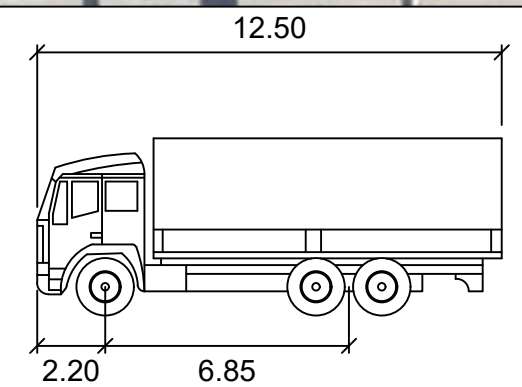
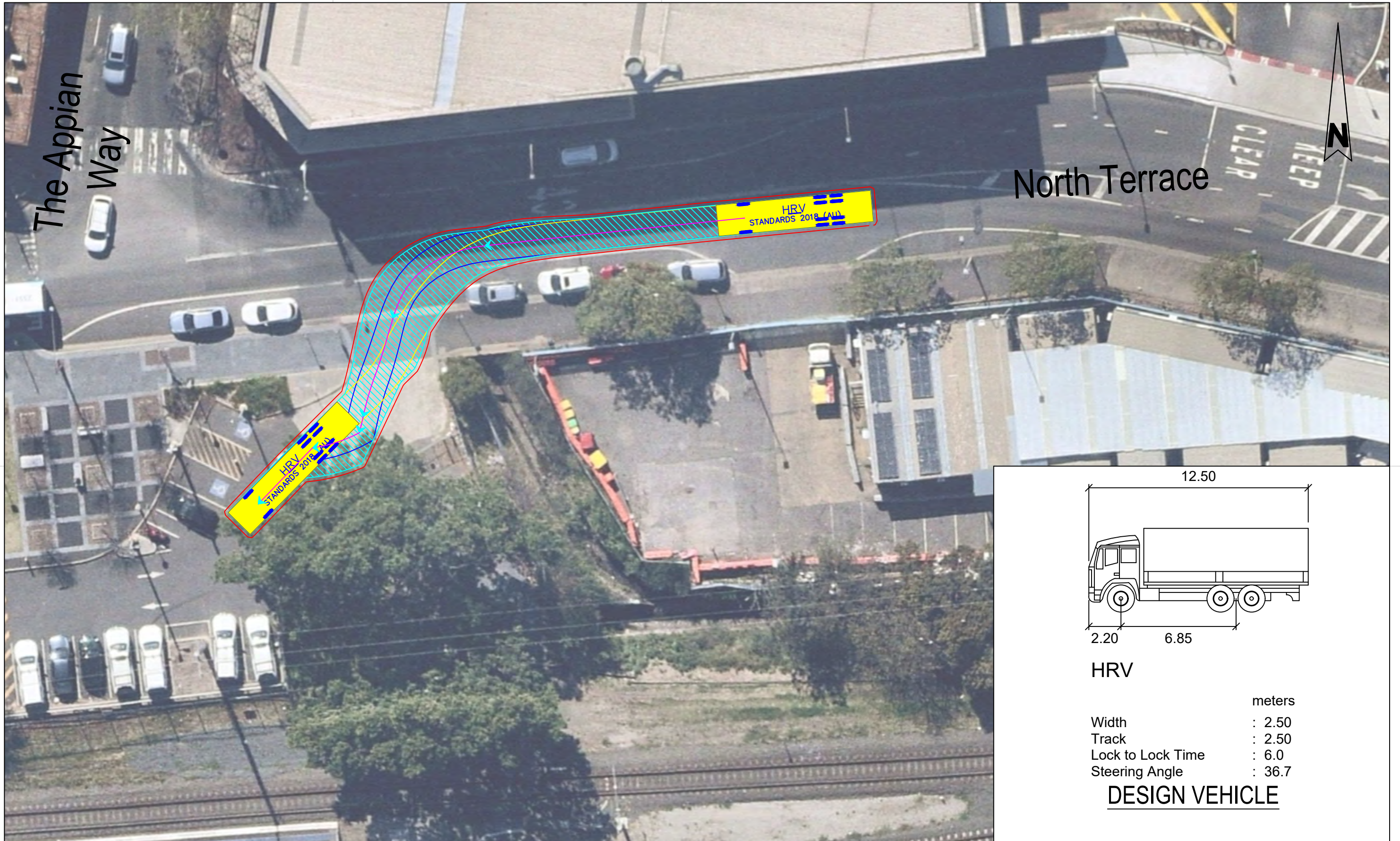












HRV

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

DESIGN VEHICLE

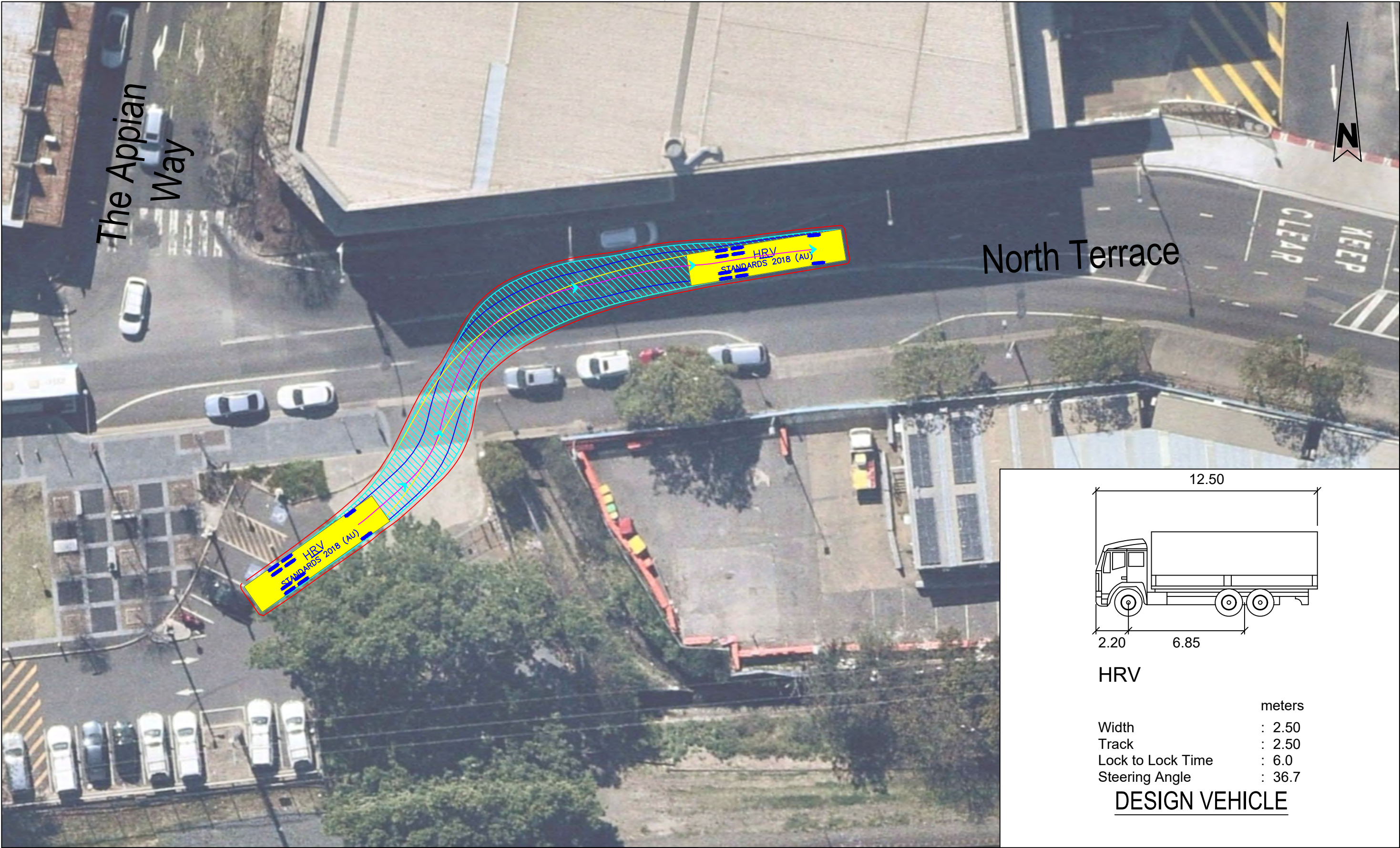



**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022

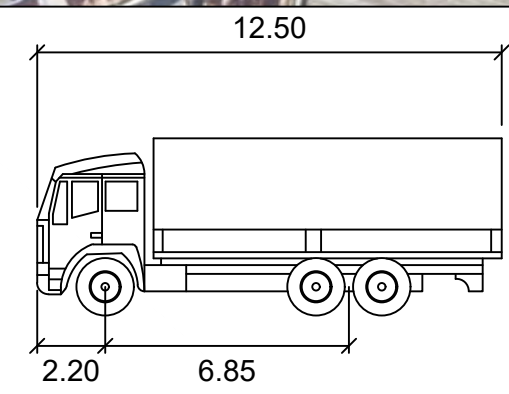
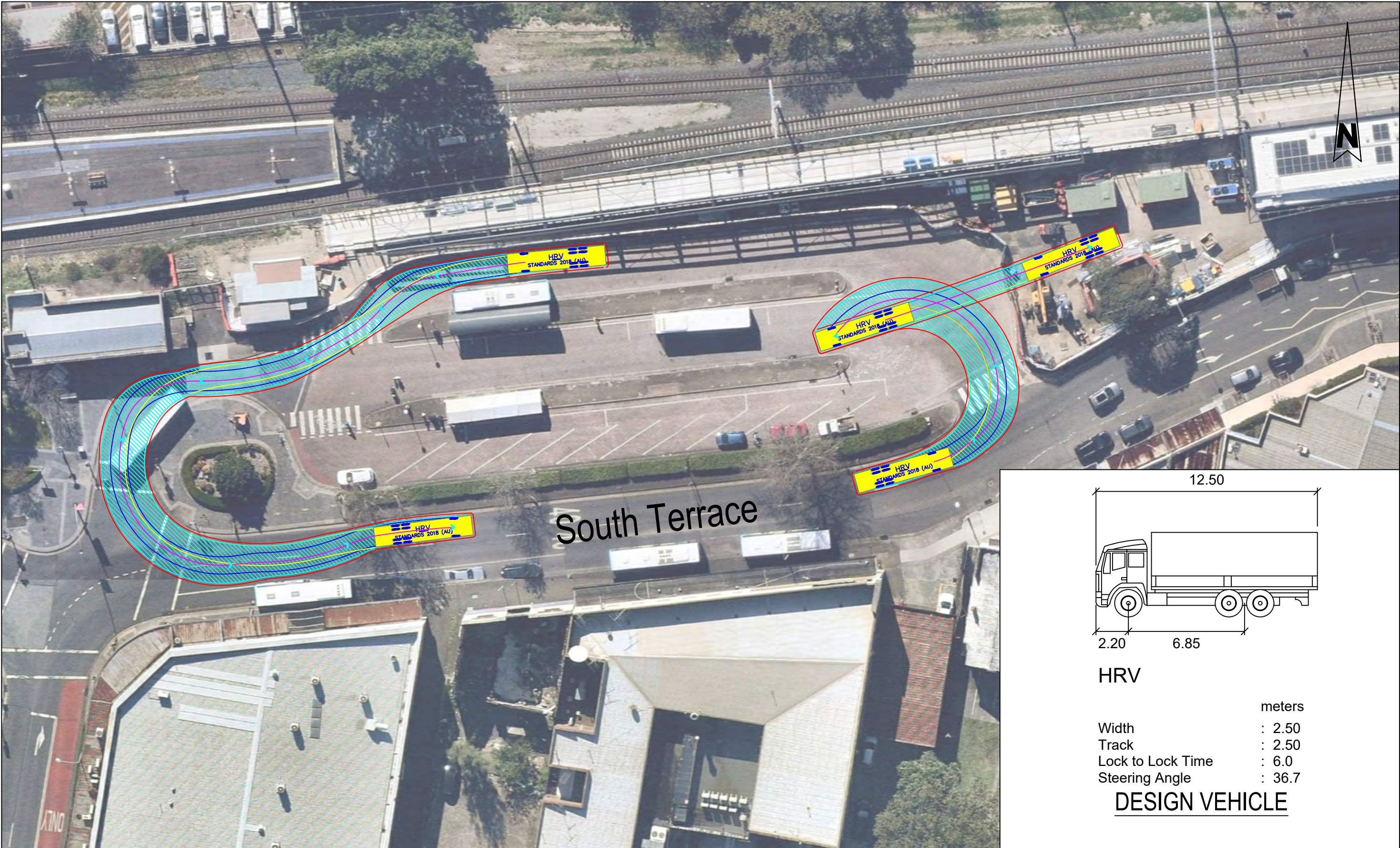
Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked M.H
	FOR INFORMATION ONLY		
Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV North Terrace LT Entry 2	Project Number P3519	Sheet Number 3	Date 04.10.2022
			Issue 001





	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au				<table><tr><th colspan="4">REVISIONS</th></tr><tr><th>Issue</th><th>Revisions/Descriptions</th><th>Drawn</th><th>Date</th></tr><tr><td>001</td><td>V036 BAC Early Works CTMP Swept Path Analysis</td><td>A.S</td><td>04.10.2022</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>				REVISIONS				Issue	Revisions/Descriptions	Drawn	Date	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022																													Project  JHLORJV Sydenham Station and Junction				Design  A.S		Drawn  A.S		Checked  M.H	
	REVISIONS																																																									
	Issue	Revisions/Descriptions	Drawn	Date																																																						
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022																																																						
				Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV North Terrace RT Exit 2				<div>FOR INFORMATION ONLY</div>				Date  04.10.2022																																														
								Project Number  P3519		Sheet Number  4		Issue  001																																														






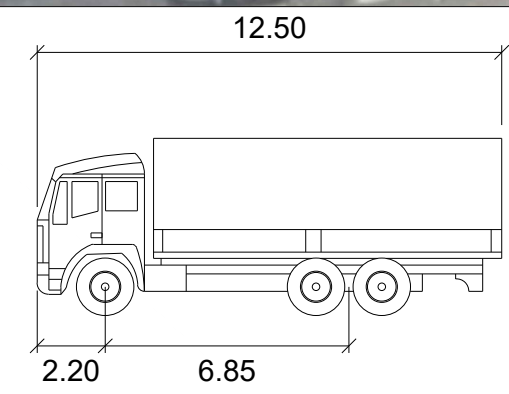
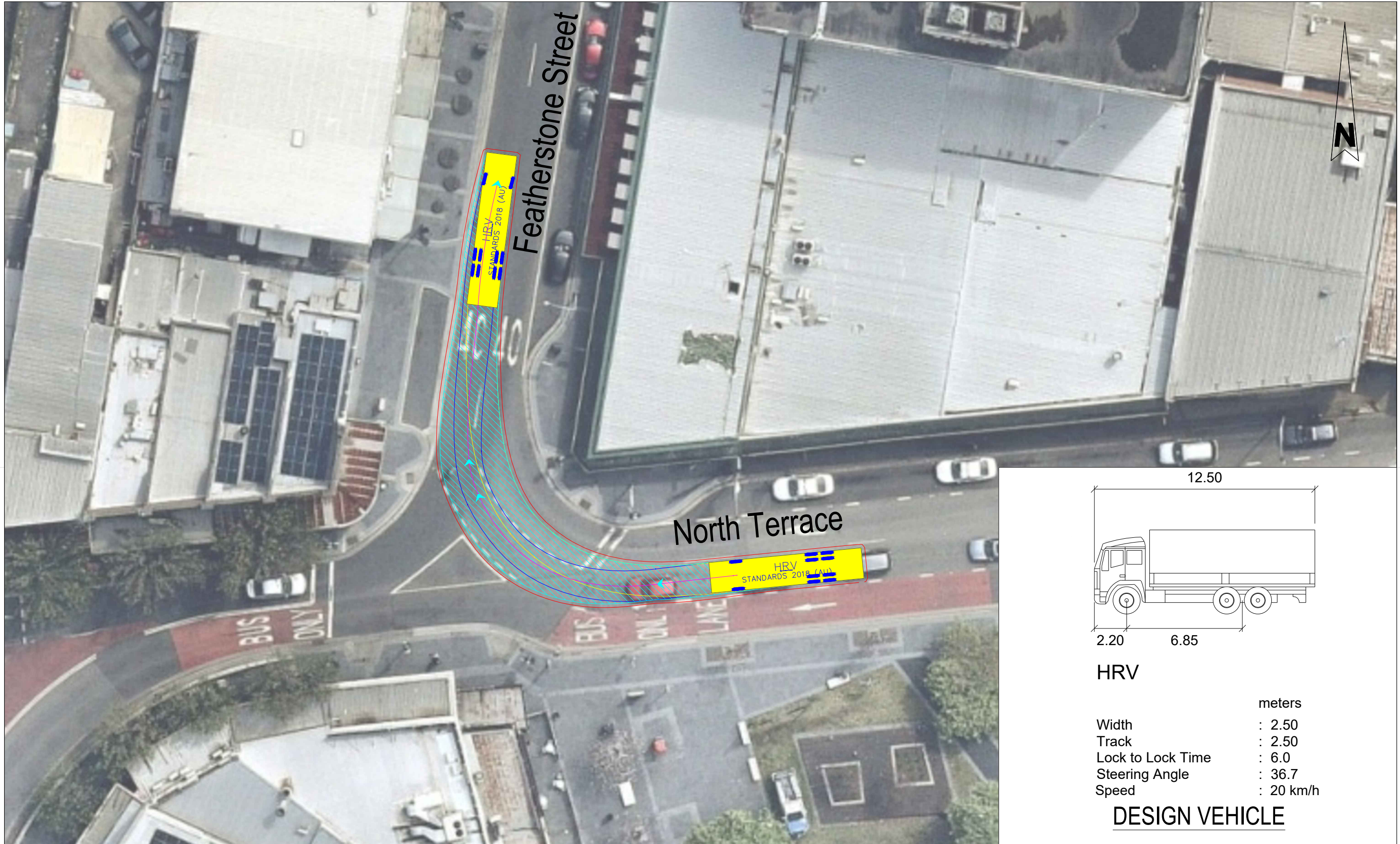
HRV

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<b>REVISIONS</b> Revisions/Descriptions		Drawn	Date	Project  JHLORJV Sydenham Station and Junction	Design  A.S	Drawn  A.S	Checked  M.H
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022		Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV South Terrace LT Entry 1 & Exit 1	<div>FOR INFORMATION ONLY</div>	
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202					Project Number  P3519		Sheet Number  5	Issue  001






**HRV**

Width : 2.50 meters  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7  
Speed : 20 km/h

**DESIGN VEHICLE**



Gold Coast

Suite 26, 58 Riverwalk Avenue, Robina QLD 4226

P: (07) 5562-5377

W: www.bitziosconsulting.com.au

Brisbane

Level 2, 428 Upper Edward Street, Spring Hill 4000

P: (07) 3831-4442

E: admin@bitziosconsulting.com.au

Sydney

Studio 203, 3 Gladstone Street, Newtown NSW 2042

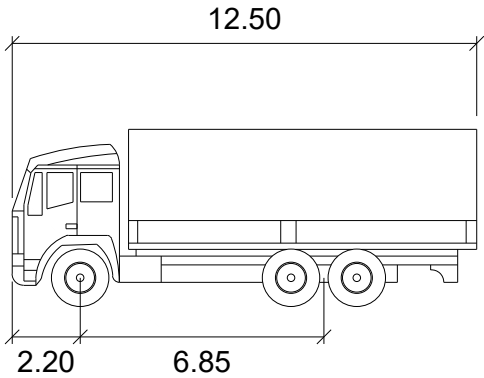
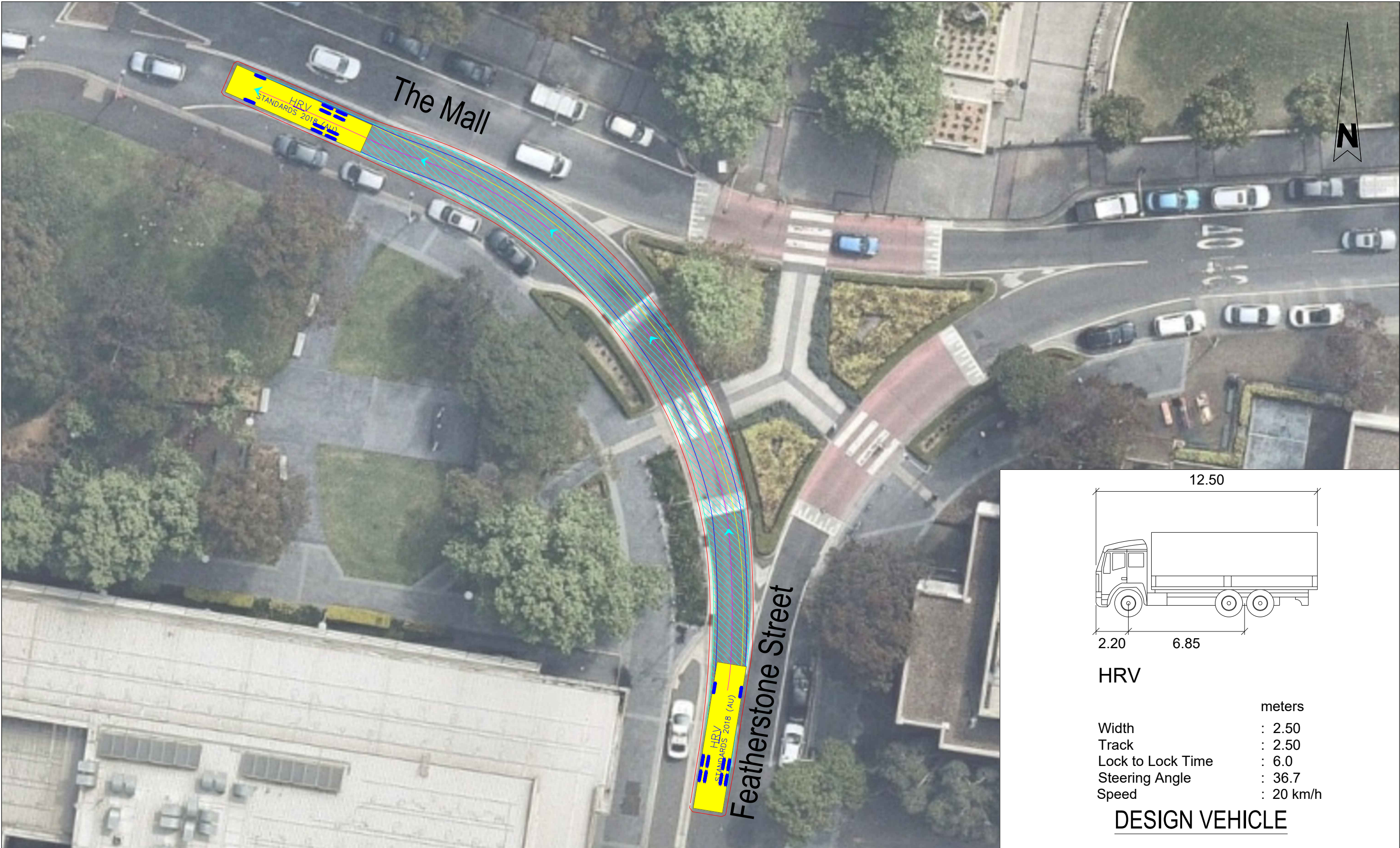
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022
002	Add Site Extents	M.H	06.10.2022
003	Additional Swept Paths	A.S	04.11.2022
004	Additional Swept Paths for North Terrace Haulage Route	A.S	11.11.2022

Project	JHLORJV Sydenham Station and Junction		
	Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV North Terrace RT to Featherstone Street		
	Project Number	Sheet Number	Issue
	P3519	1	004

Design	A.S	Drawn	A.S	Checked	M.H
FOR INFORMATION ONLY				Date	11.11.2022






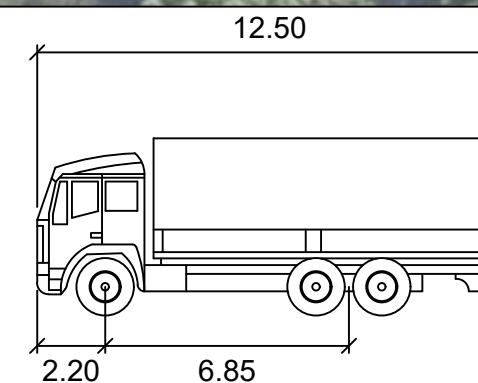
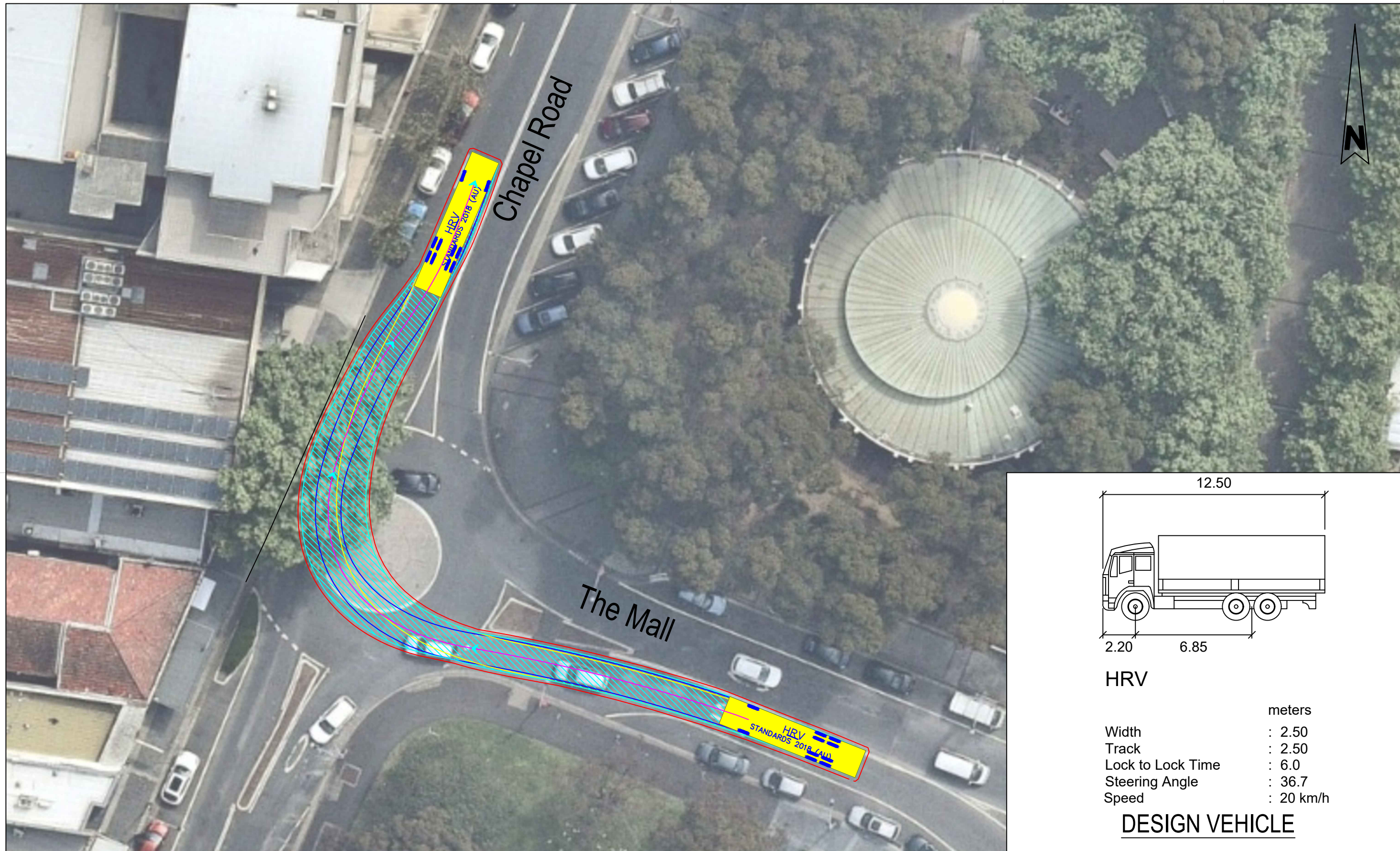
**HRV**

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7  
Speed : 20 km/h

**DESIGN VEHICLE**

	<b>Gold Coast</b> Suite 26, 58 Riverbank Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<b>REVISIONS</b>				Project  JHLORJV Sydenham Station and Junction	Design	Drawn	Checked
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	Issue	Revisions/Descriptions	Drawn	Date		A.S	A.S	M.H
		001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022		<div>FOR INFORMATION ONLY</div>		
		002	Add Site Extents	M.H	06.10.2022				
		003	Additional Swept Paths	A.S	04.11.2022				
	004	Additional Swept Paths for North Terrace Haulage Route	A.S	11.11.2022	Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV Featherstone Street LT to The Mall	Date	11.11.2022		
						Project Number	Sheet Number	Issue	
						P3519	2	004	






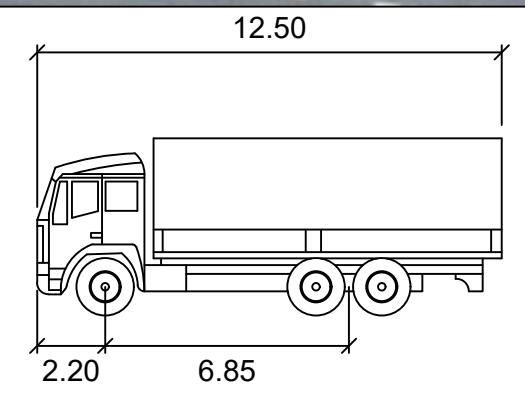
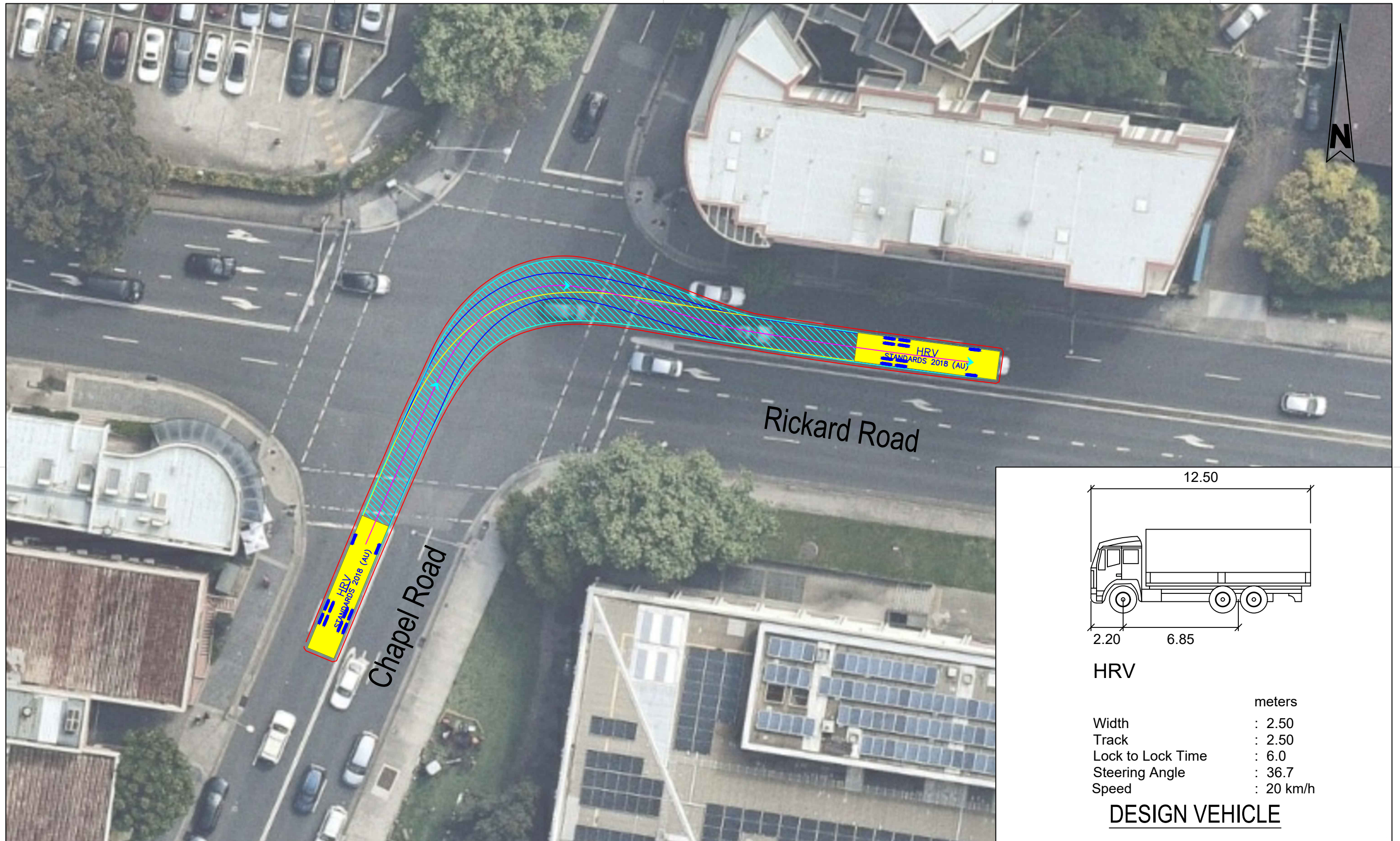
**HRV**

	HRV	metres
Width	:	2.50
Track	:	2.50
Lock to Lock Time	:	6.0
Steering Angle	:	36.7
Speed	:	20 km/h

**DESIGN VEHICLE**

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a>	<table><tr><th>Issue</th><th>Revisions/Descriptions</th><th>Drawn</th><th>Date</th></tr><tr><td>001</td><td>V036 BAC Early Works CTMP Swept Path Analysis</td><td>A.S</td><td>04.10.2022</td></tr><tr><td>002</td><td>Add Site Extents</td><td>M.H</td><td>06.10.2022</td></tr><tr><td>003</td><td>Additional Swept Paths</td><td>A.S</td><td>04.11.2022</td></tr><tr><td>004</td><td>Additional Swept Paths for North Terrace Haulage Route</td><td>A.S</td><td>11.11.2022</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>				Issue	Revisions/Descriptions	Drawn	Date	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022	002	Add Site Extents	M.H	06.10.2022	003	Additional Swept Paths	A.S	04.11.2022	004	Additional Swept Paths for North Terrace Haulage Route	A.S	11.11.2022																					Project JHLORJV Sydenham Station and Junction		Design A.S	Drawn A.S	Checked M.H
	Issue	Revisions/Descriptions	Drawn	Date																																														
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022																																														
	002	Add Site Extents	M.H	06.10.2022																																														
	003	Additional Swept Paths	A.S	04.11.2022																																														
	004	Additional Swept Paths for North Terrace Haulage Route	A.S	11.11.2022																																														
<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a>					<div>FOR INFORMATION ONLY</div>		Date 11.11.2022																																											
<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202							Issue 004																																											
	Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV The Mall RT to Chapel Road				Project Number P3519	Sheet Number 3	Issue 004																																											






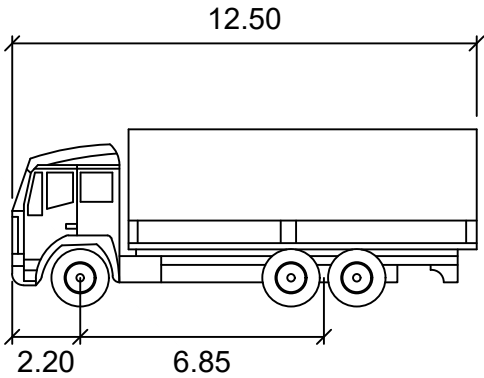
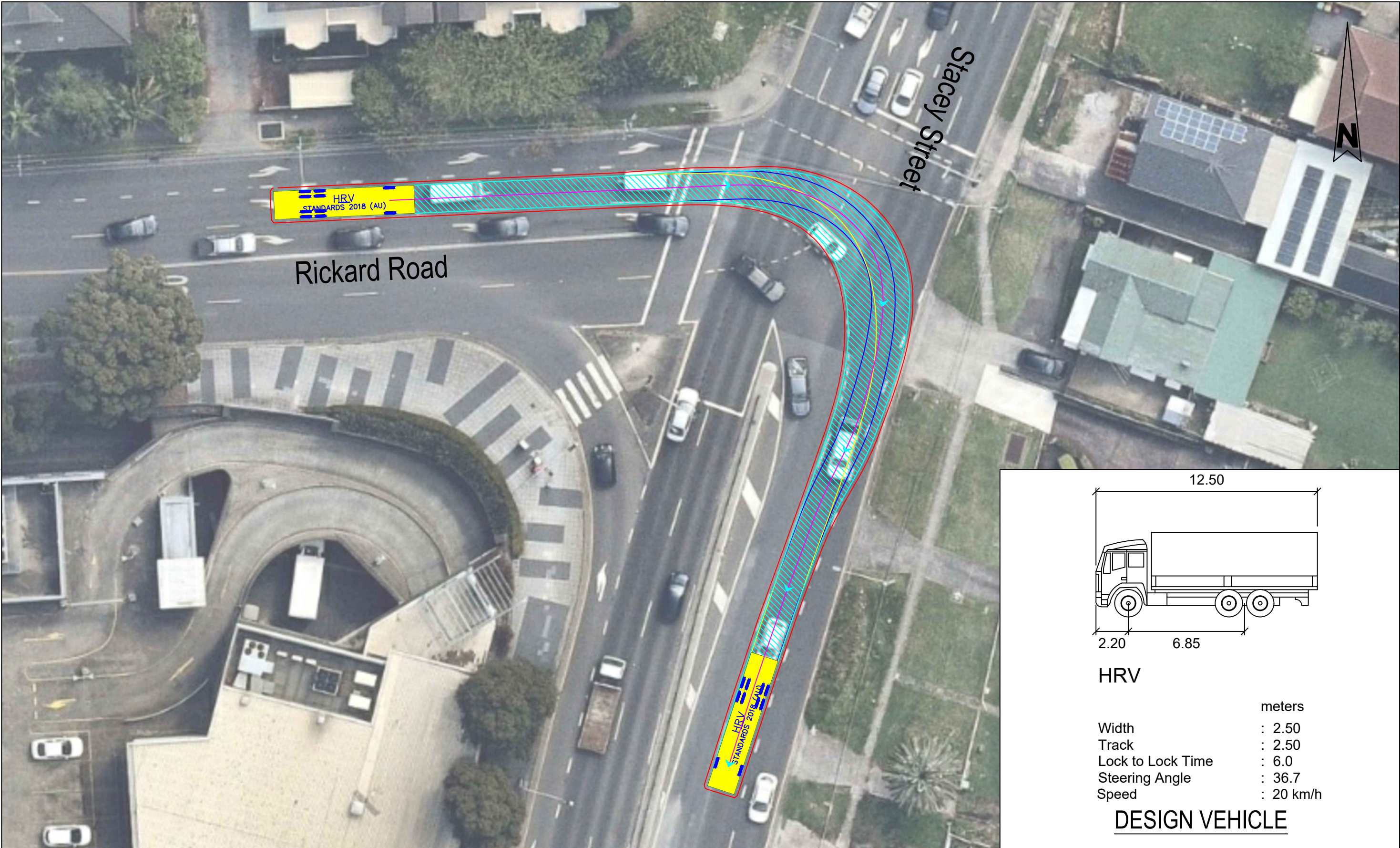
**HRV**

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7  
Speed : 20 km/h

**DESIGN VEHICLE**

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<b>REVISIONS</b>				Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked M.H
	Issue	Revisions/Descriptions	Drawn	Date		<b>FOR INFORMATION ONLY</b>		
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022				
	002	Add Site Extents	M.H	06.10.2022				
	003	Additional Swept Paths	A.S	04.11.2022	Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV Chapel Road RT to Rickard Road	Project Number P3519	Sheet Number 4	Date 11.11.2022
	004	Additional Swept Paths for North Terrace Haulage Route	A.S	11.11.2022		Issue 004		






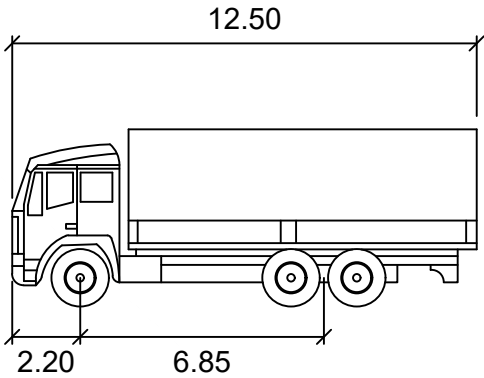
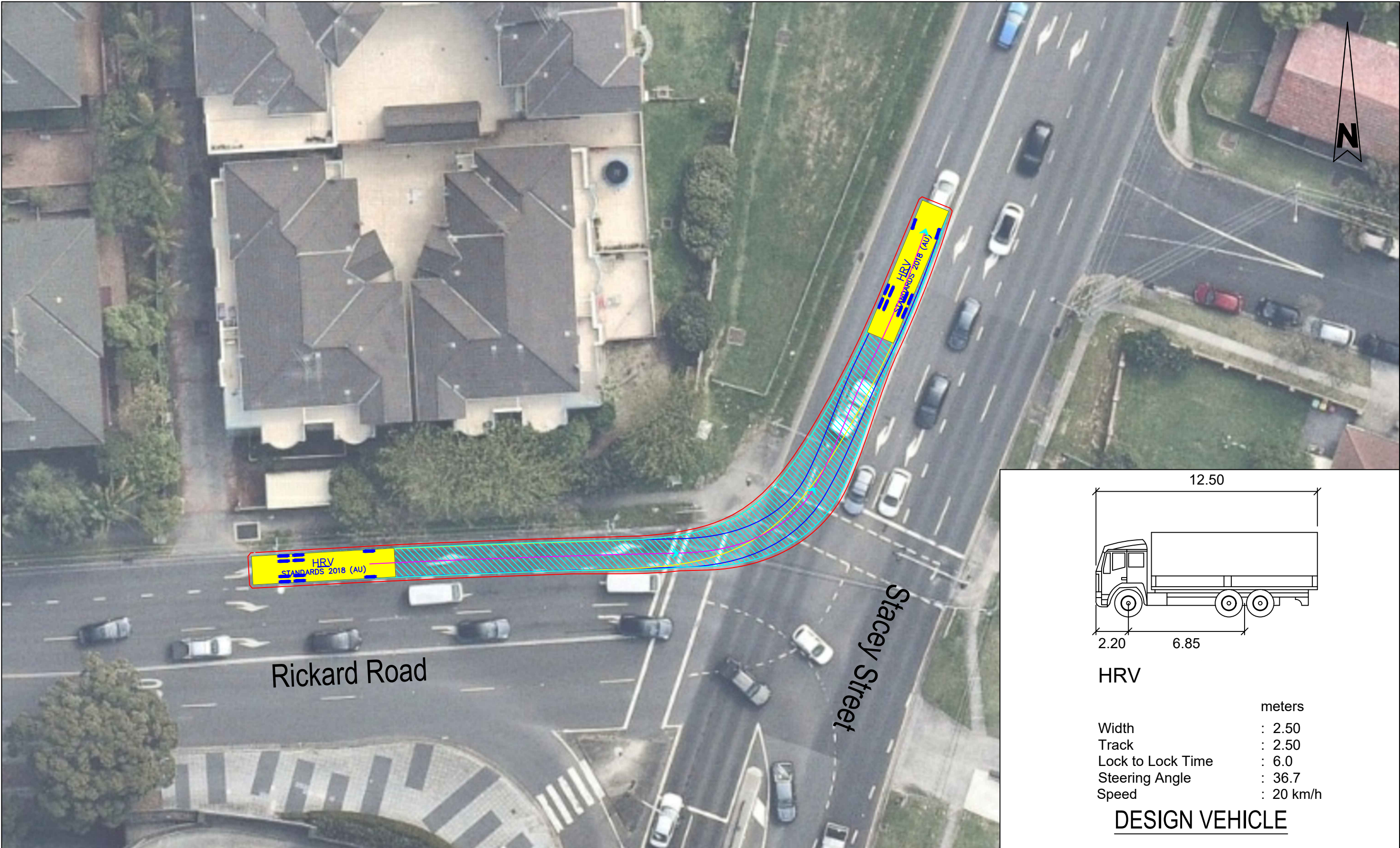
**HRV**

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7  
Speed : 20 km/h

**DESIGN VEHICLE**

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<b>REVISIONS</b>				Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked M.H
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au	Issue	Revisions/Descriptions	Drawn	Date		<div>FOR INFORMATION ONLY</div>		
		001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022				
		002	Add Site Extents	M.H	06.10.2022				
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	003	Additional Swept Paths	A.S	04.11.2022	Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV Rickard Road RT to Stacey Street	Date 11.11.2022		
		004	Additional Swept Paths for North Terrace Haulage Route	A.S	11.11.2022				
							Project Number P3519	Sheet Number 5	Issue 004






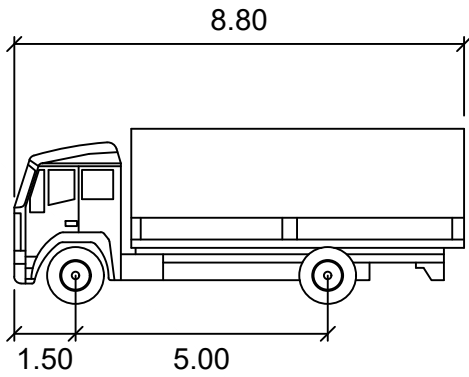
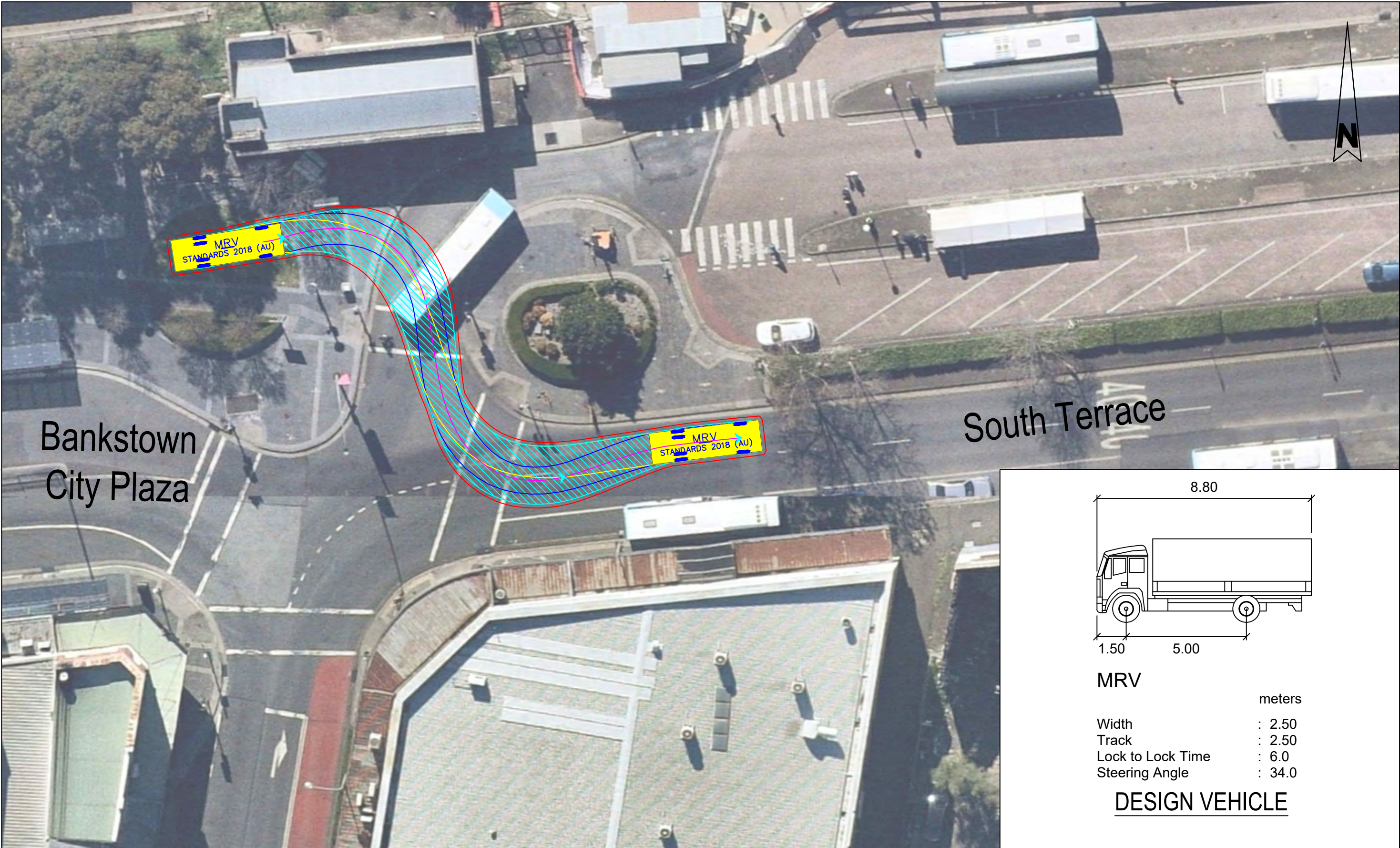
HRV

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7  
Speed : 20 km/h

DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<b>REVISIONS</b>				Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked M.H
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au	Issue	Revisions/Descriptions	Drawn	Date		<div>FOR INFORMATION ONLY</div>		
		001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022				
		002	Add Site Extents	M.H	06.10.2022				
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	003	Additional Swept Paths	A.S	04.11.2022	Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV Rickard Road LT to Stacey Street	<div>Project Number P3519</div> <div>Sheet Number 6</div> <div>Issue 004</div>		
		004	Additional Swept Paths for North Terrace Haulage Route	A.S	11.11.2022				






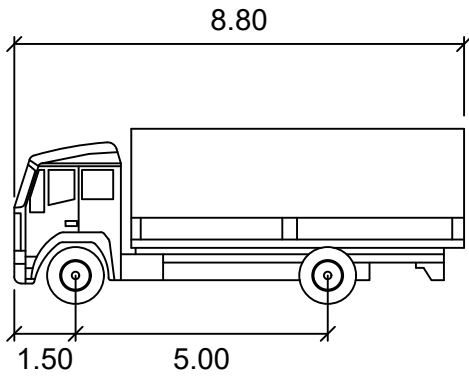
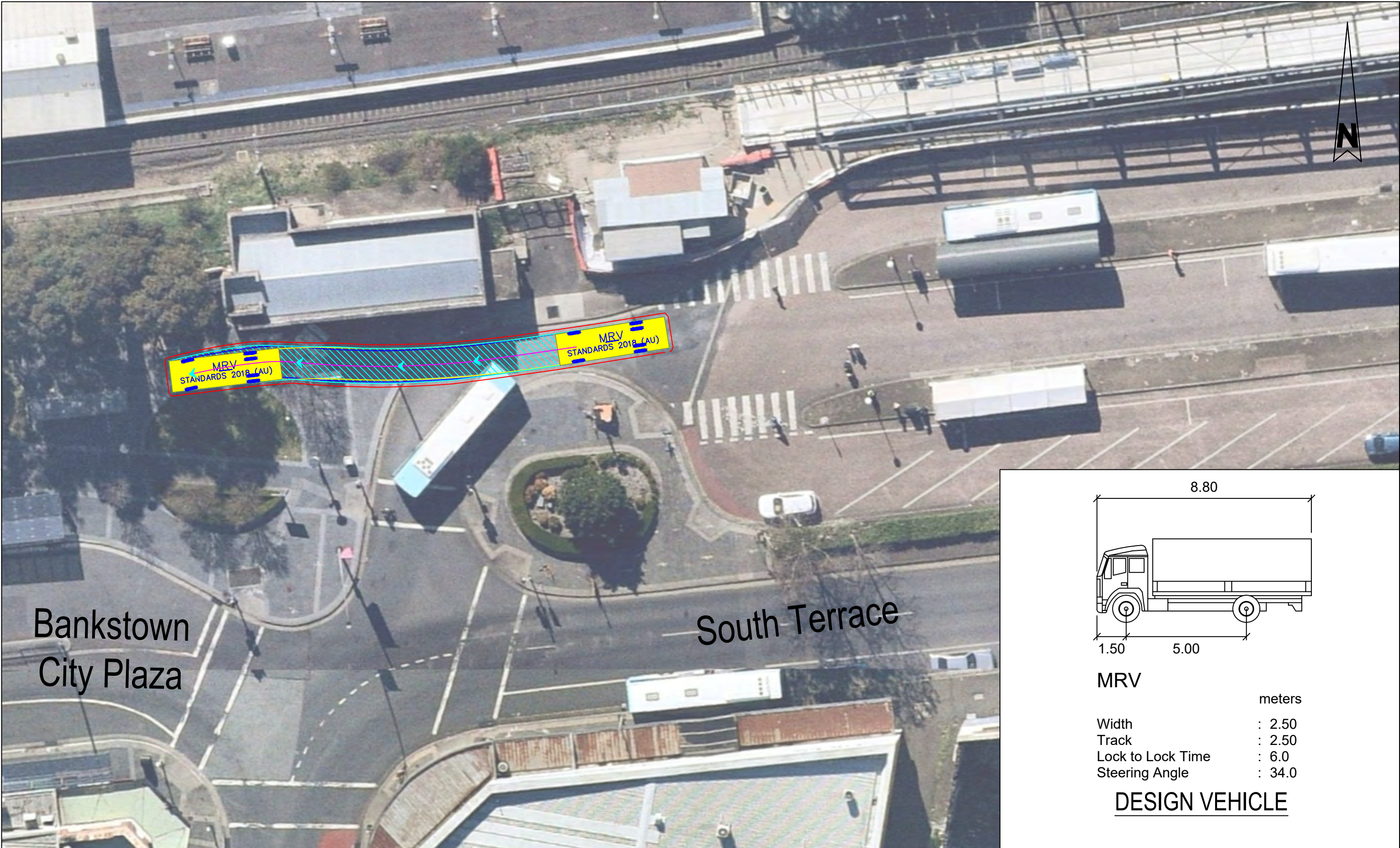
**MRV** meters

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 34.0

**DESIGN VEHICLE**

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au				Project JHLORJV Sydenham Station and Junction		Design A.S	Drawn A.S	Checked M.H
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au				Title V036 BAC Early Works Swept Path Analysis: 8.8m MRV South Terrace RT Exit 2		FOR INFORMATION ONLY		
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202						Project Number P3519	Sheet Number 6	Date 04.10.2022
							Issue 001		






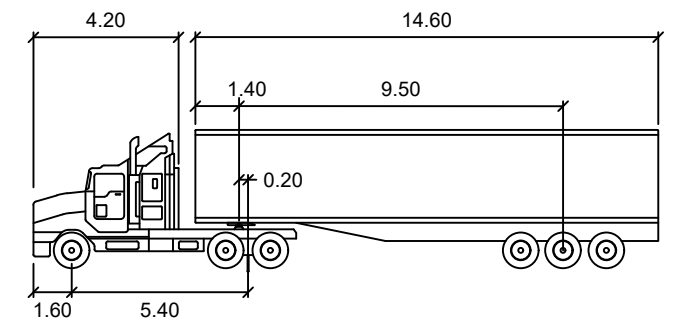
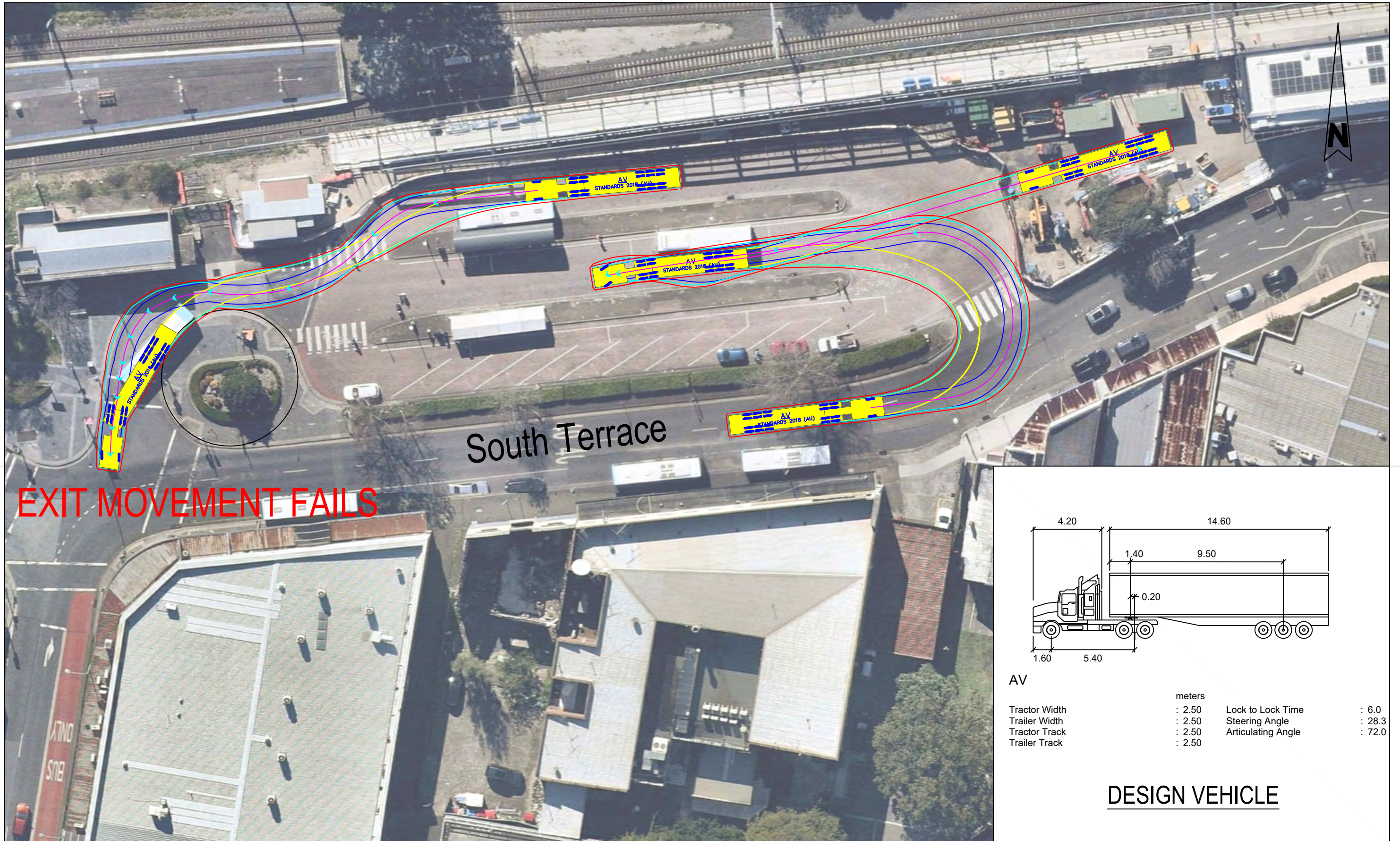
**MRV** meters

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 34.0

**DESIGN VEHICLE**

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				<b>REVISIONS</b> Revisions/Descriptions Drawn Date			Project JHLORJV Sydenham Station and Junction			Design A.S	Drawn A.S	Checked M.H
					001 V036 BAC Early Works CTMP Swept Path Analysis A.S 04.10.2022			Title V036 BAC Early Works Swept Path Analysis: 8.8m MRV South Terrace Through Entry 2			<b>FOR INFORMATION ONLY</b> Date 04.10.2022		
											Project Number P3519	Sheet Number 7	Issue 001





AV

	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

## DESIGN VEHICLE

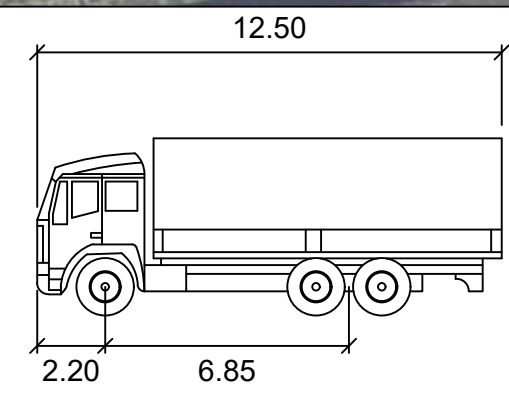
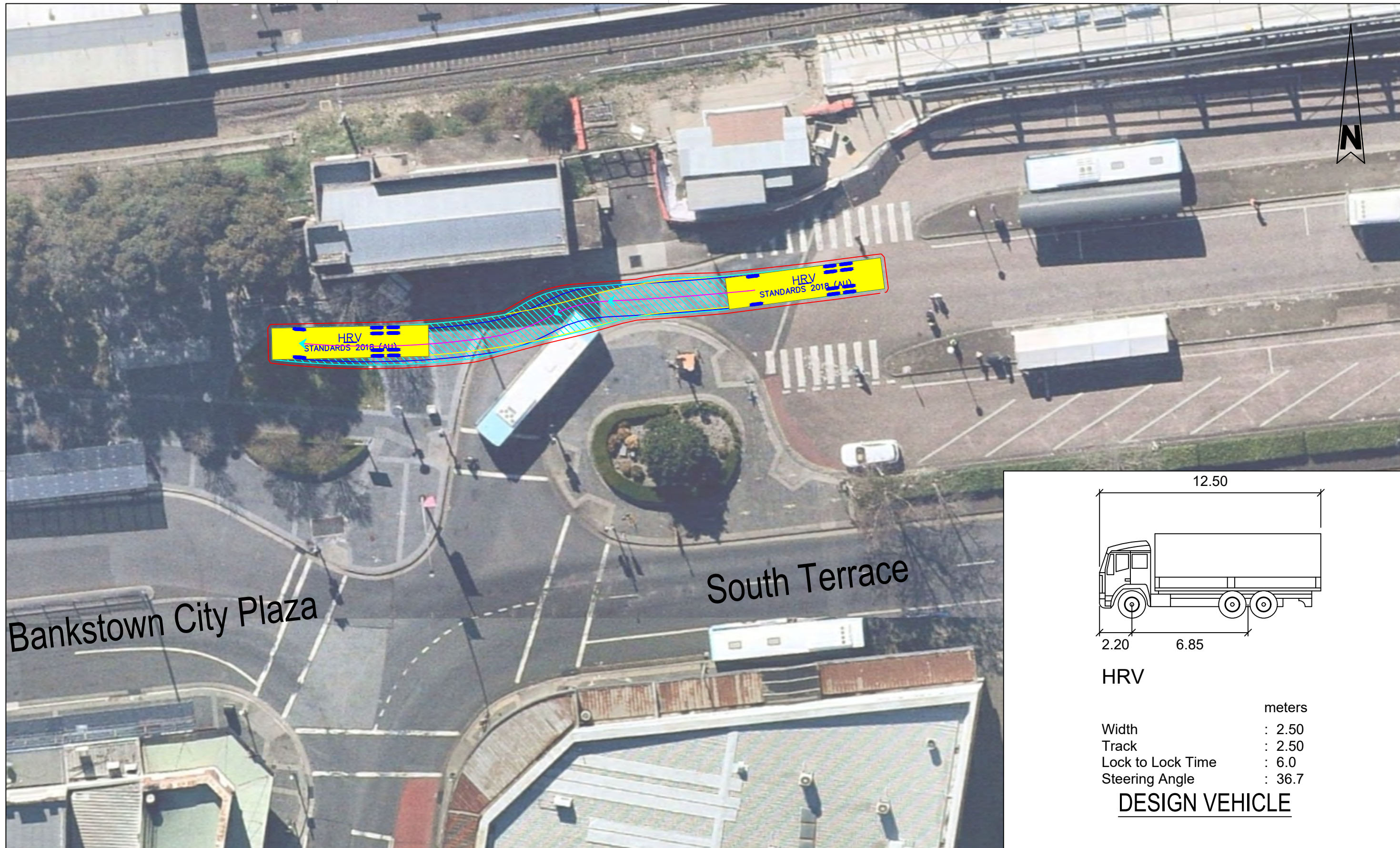


**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: www.bitziosconsulting.com.au  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: admin@bitziosconsulting.com.au  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022

Project	JHLORJV Sydenham Station and Junction	Design	A.S	Drawn	A.S	Checked	M.H
Title		FOR INFORMATION ONLY			Date		04.10.2022
		Project Number	P3519	Sheet Number	8	Issue	001






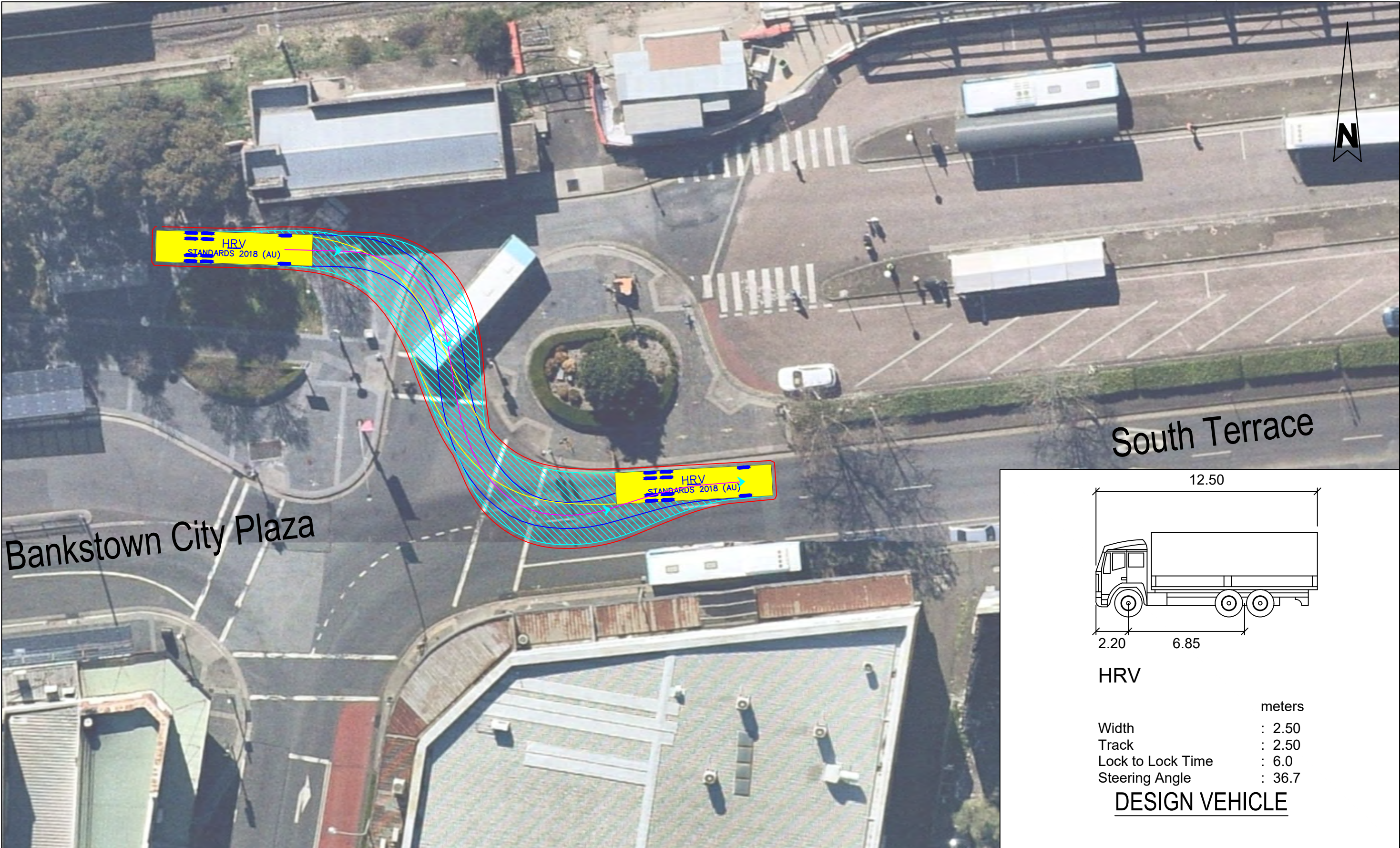
HRV

Width : 2.50 meters  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

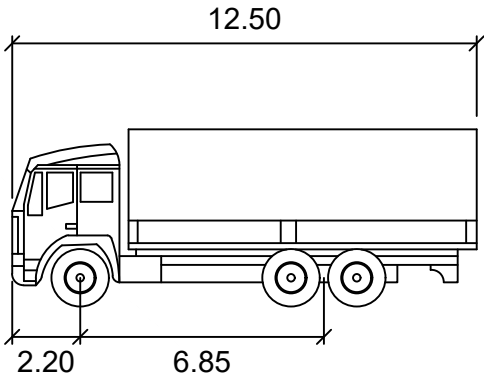
	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				<b>REVISIONS</b> Revisions/Descriptions		Drawn	Date	Project	Design	Drawn	Checked
	001 V036 BAC Early Works CTMP Swept Path Analysis						A.S	04.10.2022	JHLORJV Sydenham Station and Junction	A.S	A.S	M.H
									Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV South Terrace Through Entry 2	<b>FOR INFORMATION ONLY</b>		
										Project Number	Sheet Number	Date
									P3519	9	04.10.2022	Issue
									001			






South Terrace

Bankstown City Plaza

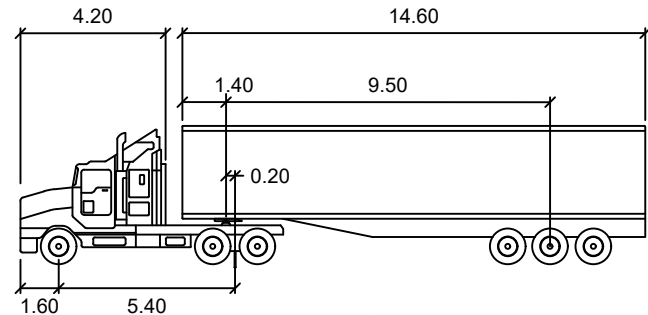
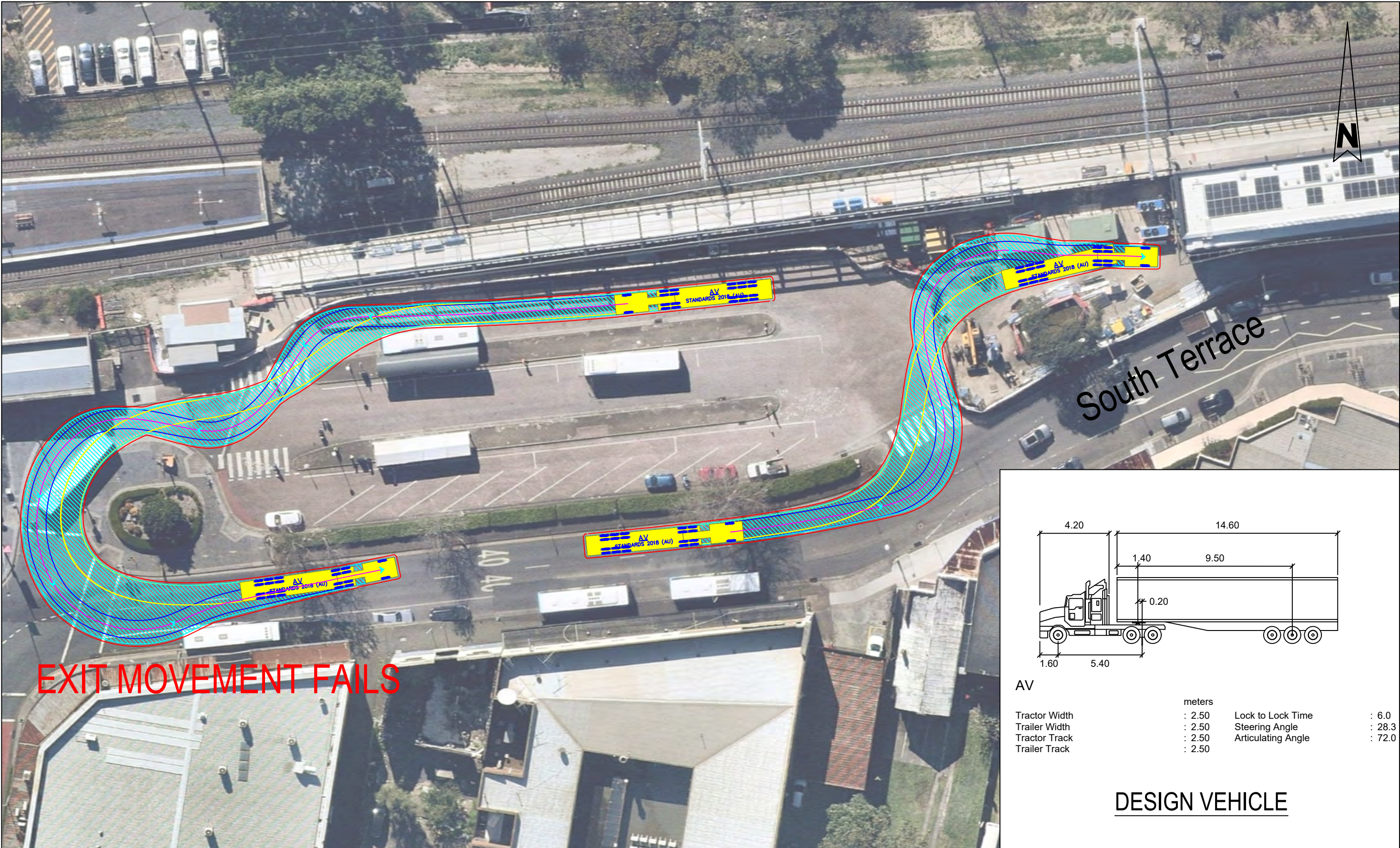


HRV  
Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

DESIGN VEHICLE


 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<table><tr><th colspan="4">REVISIONS</th></tr><tr><th>Issue</th><th>Revisions/Descriptions</th><th>Drawn</th><th>Date</th></tr><tr><td>001</td><td>V036 BAC Early Works CTMP Swept Path Analysis</td><td>A.S</td><td>04.10.2022</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>				REVISIONS				Issue	Revisions/Descriptions	Drawn	Date	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022																													Project JHLORJV Sydenham Station and Junction		Design A.S	Drawn A.S	Checked M.H
	REVISIONS																																																
	Issue	Revisions/Descriptions	Drawn	Date																																													
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022																																													
Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV South Terrace RT Exit 2		FOR INFORMATION ONLY		Date 04.10.2022																																													
				Project Number P3519	Sheet Number 10	Issue 001																																											



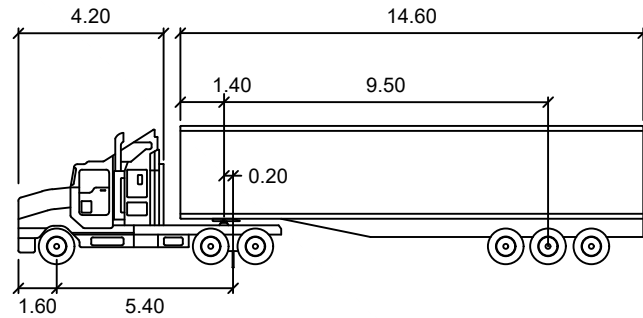
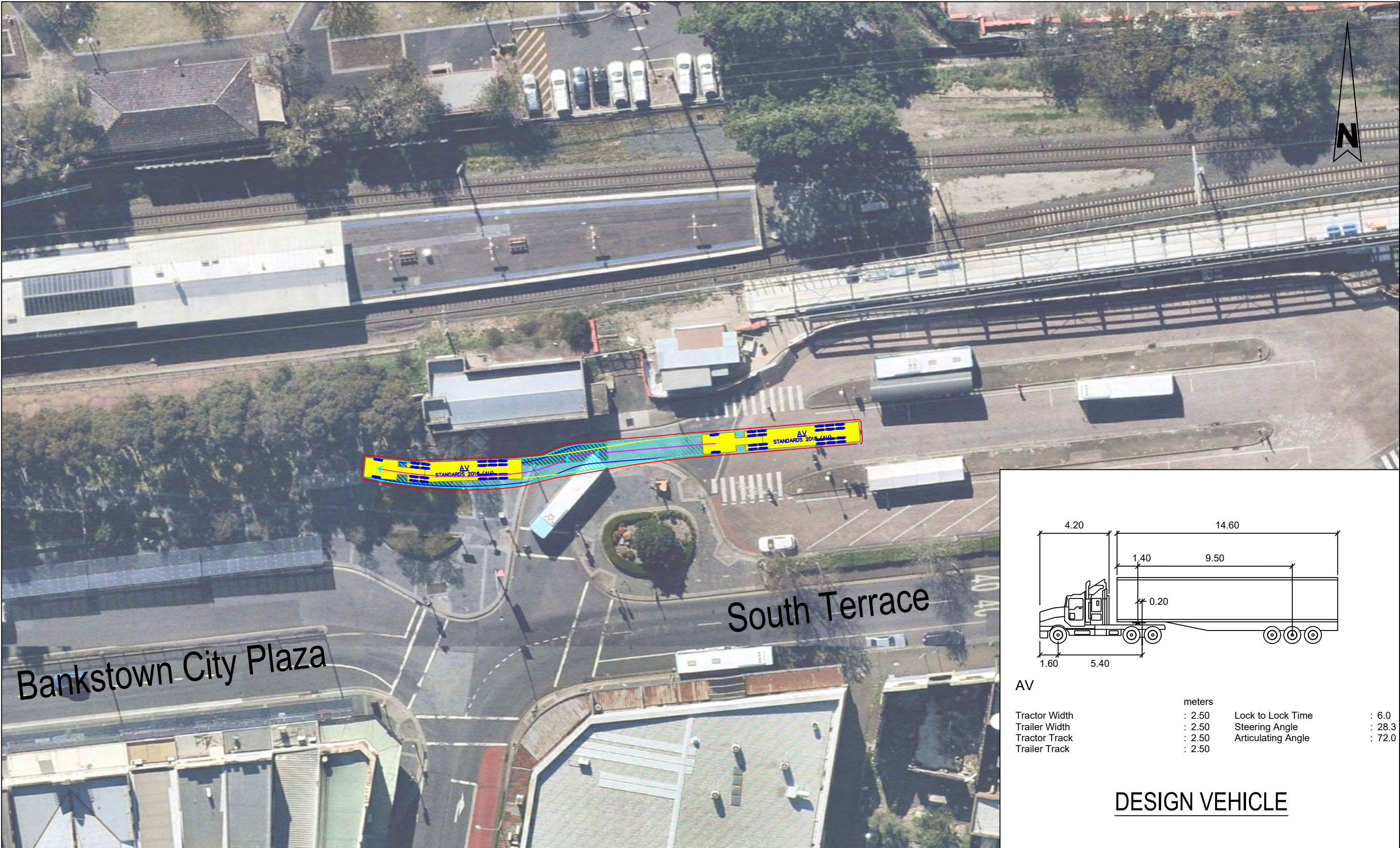


AV			
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

DESIGN VEHICLE

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au				<b>ReVISIONS</b>				Project				Design	Drawn	Checked			
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au				Issue				Revisions/Descriptions				A.S				A.S	M.H
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				001				V036 BAC Early Works CTMP Swept Path Analysis				A.S					






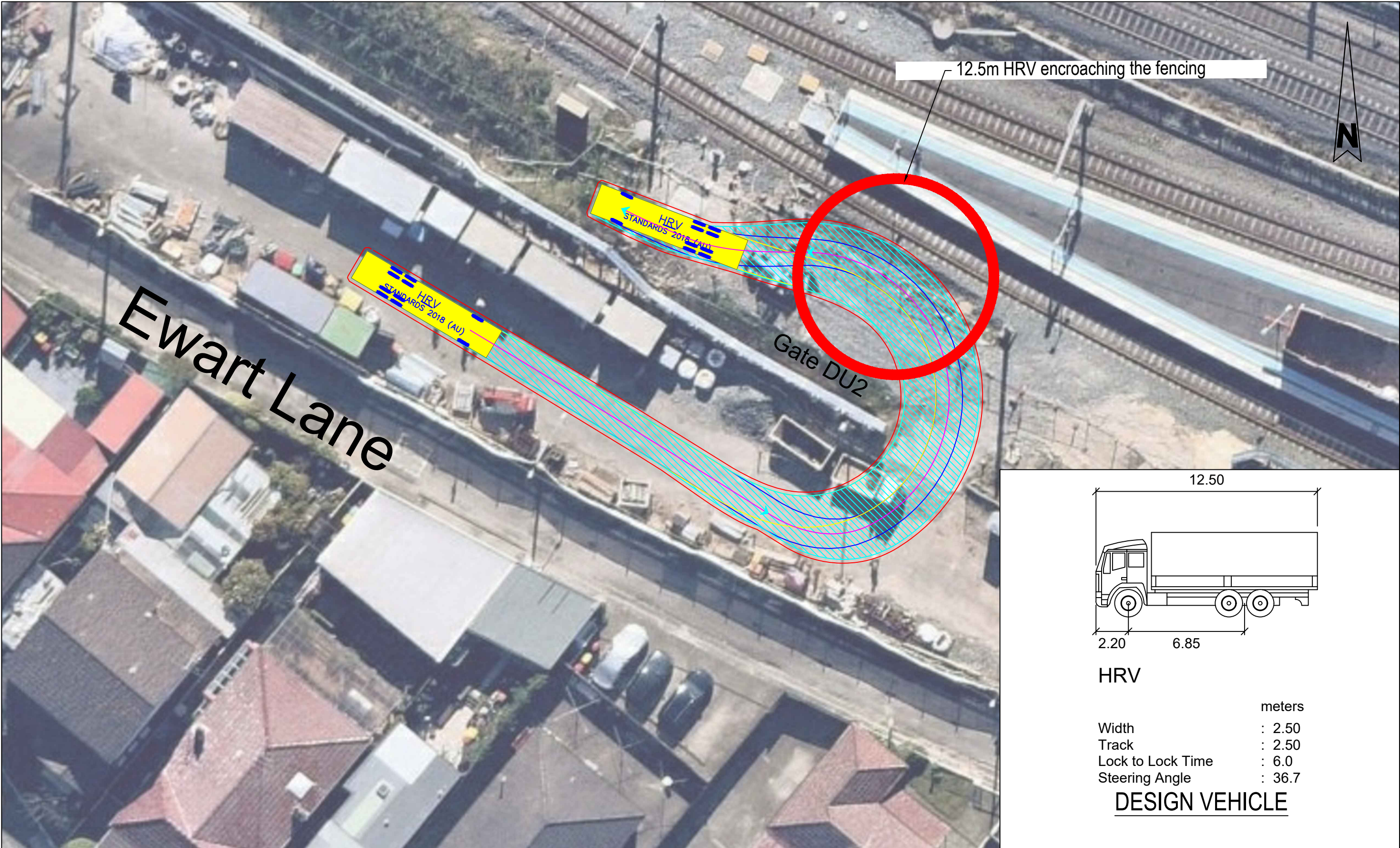
AV


	meters		
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

DESIGN VEHICLE

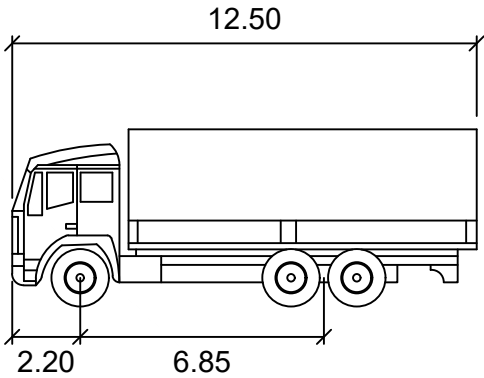
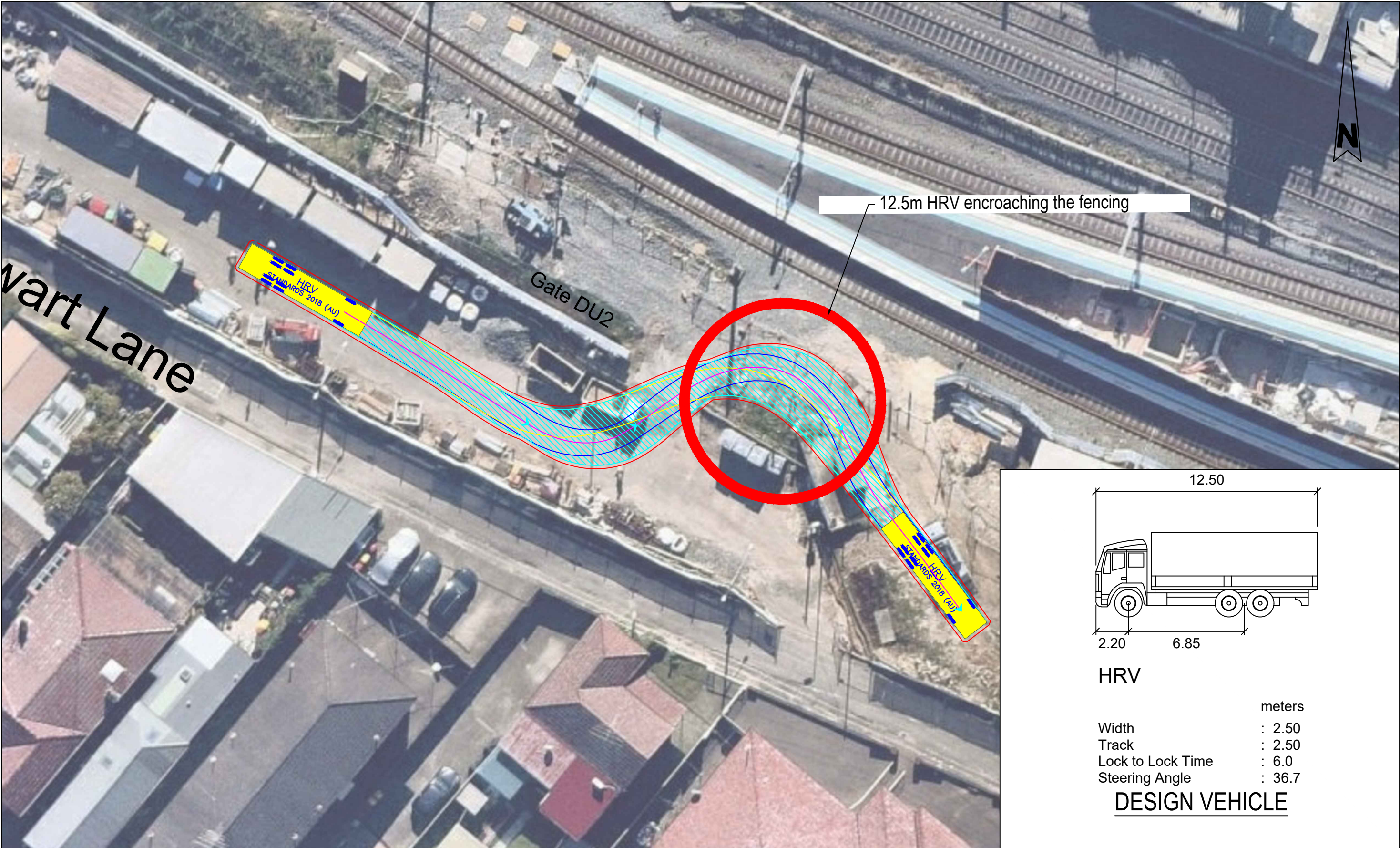
	<b>Gold Coast</b> Suite 26, 58 Riverbank Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<b>REVISIONS</b>				Project	Design	Drawn	Checked
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au	Issue	Revisions/Descriptions	Drawn	Date	JHLORJV Sydenham Station and Junction	A.S	A.S	M.H
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022		<b>FOR INFORMATION ONLY</b>		Date
						Title V036 BAC Early Works Swept Path Analysis: 20m AV South Terrace Through Entry 2	Project Number	Sheet Number	Issue
							P3519	12	001





 <div><b>Gold Coast</b> Suite 26, 58 Riverbank Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<div>REVISIONS</div> <table><thead><tr><th>Issue</th><th>Revisions/Descriptions</th><th>Drawn</th><th>Date</th></tr></thead><tbody><tr><td>001</td><td>V036 BAC Early Works CTMP Swept Path Analysis</td><td>A.S</td><td>04.10.2022</td></tr><tr><td>002</td><td>Add Site Extents</td><td>M.H</td><td>06.10.2022</td></tr><tr><td>003</td><td>Additional Swept Paths</td><td>A.S</td><td>04.11.2022</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>				Issue	Revisions/Descriptions	Drawn	Date	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022	002	Add Site Extents	M.H	06.10.2022	003	Additional Swept Paths	A.S	04.11.2022																									Project  JHLORJV Sydenham Station and Junction		Design  A.S	Drawn  A.S	Checked  A.G
	Issue	Revisions/Descriptions	Drawn	Date																																													
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022																																													
	002	Add Site Extents	M.H	06.10.2022																																													
	003	Additional Swept Paths	A.S	04.11.2022																																													
Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate DU2 Ewart Lane, Dulwich Hill		<div>FOR INFORMATION ONLY</div>		Date  04.11.2022																																													
Project Number  P3519		Sheet Number  1		Issue  003																																													






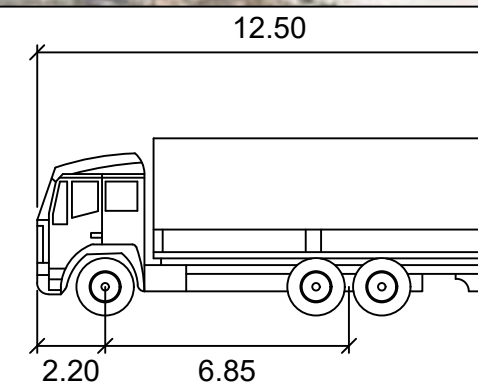
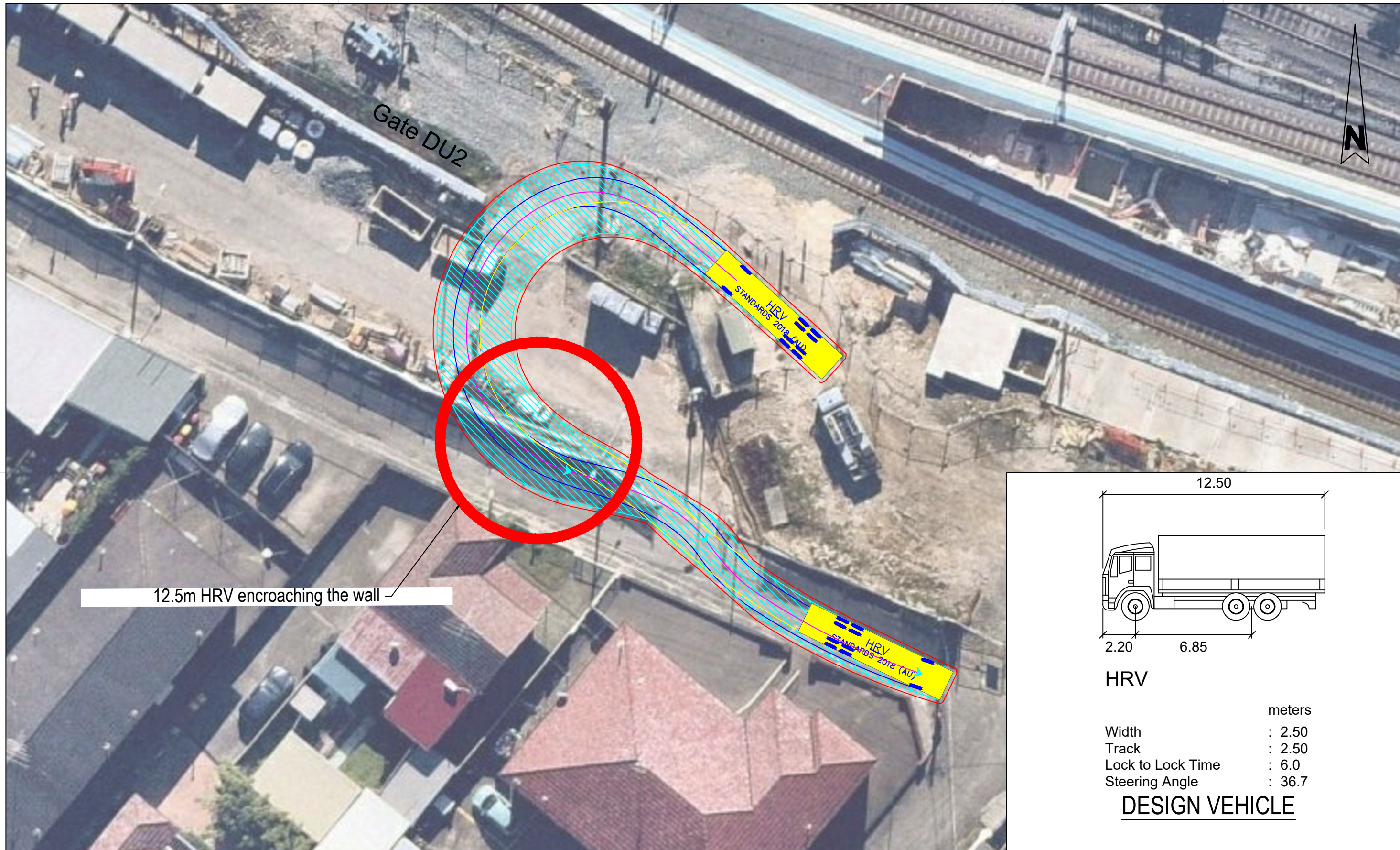
HRV

Width : 2.50 meters  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<b>REVISIONS</b>				Project		Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date	JHLORJV Sydenham Station and Junction		A.S	A.S	A.G
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022			<div>FOR INFORMATION ONLY</div>		
	002	Add Site Extents	M.H	06.10.2022					
	003	Additional Swept Paths	A.S	04.11.2022			Date	04.11.2022	






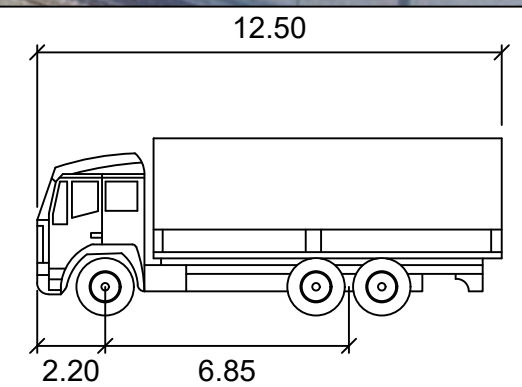
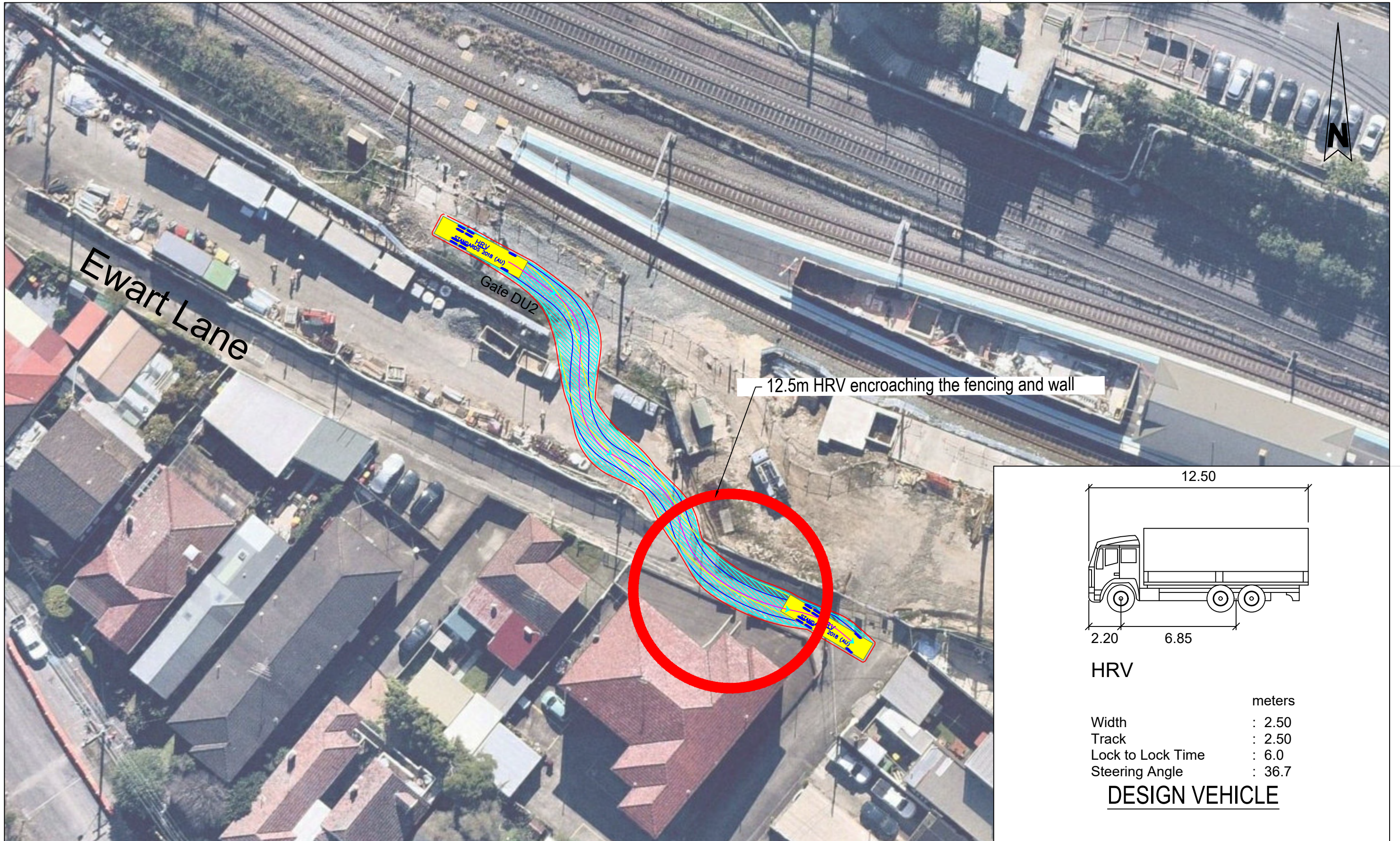
### HRV

	HRV	units
Width	2.50	meters
Track	2.50	meters
Lock to Lock Time	6.0	seconds
Steering Angle	36.7	degrees

### DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project	Design	Drawn	Checked	
	Issue	Revisions/Descriptions	Drawn	Date	JHLORJV Sydenham Station and Junction	A.S	A.S	A.G	
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022		FOR INFORMATION ONLY			Date
	002	Add Site Extents	M.H	06.10.2022		04.11.2022			
	003	Additional Swept Paths	A.S	04.11.2022		Project Number	Sheet Number	Issue	
						P3519	3	003	





HRV

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

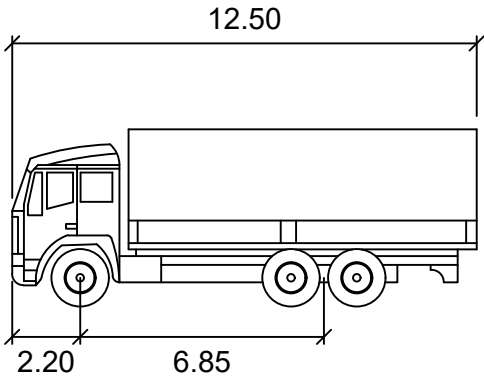
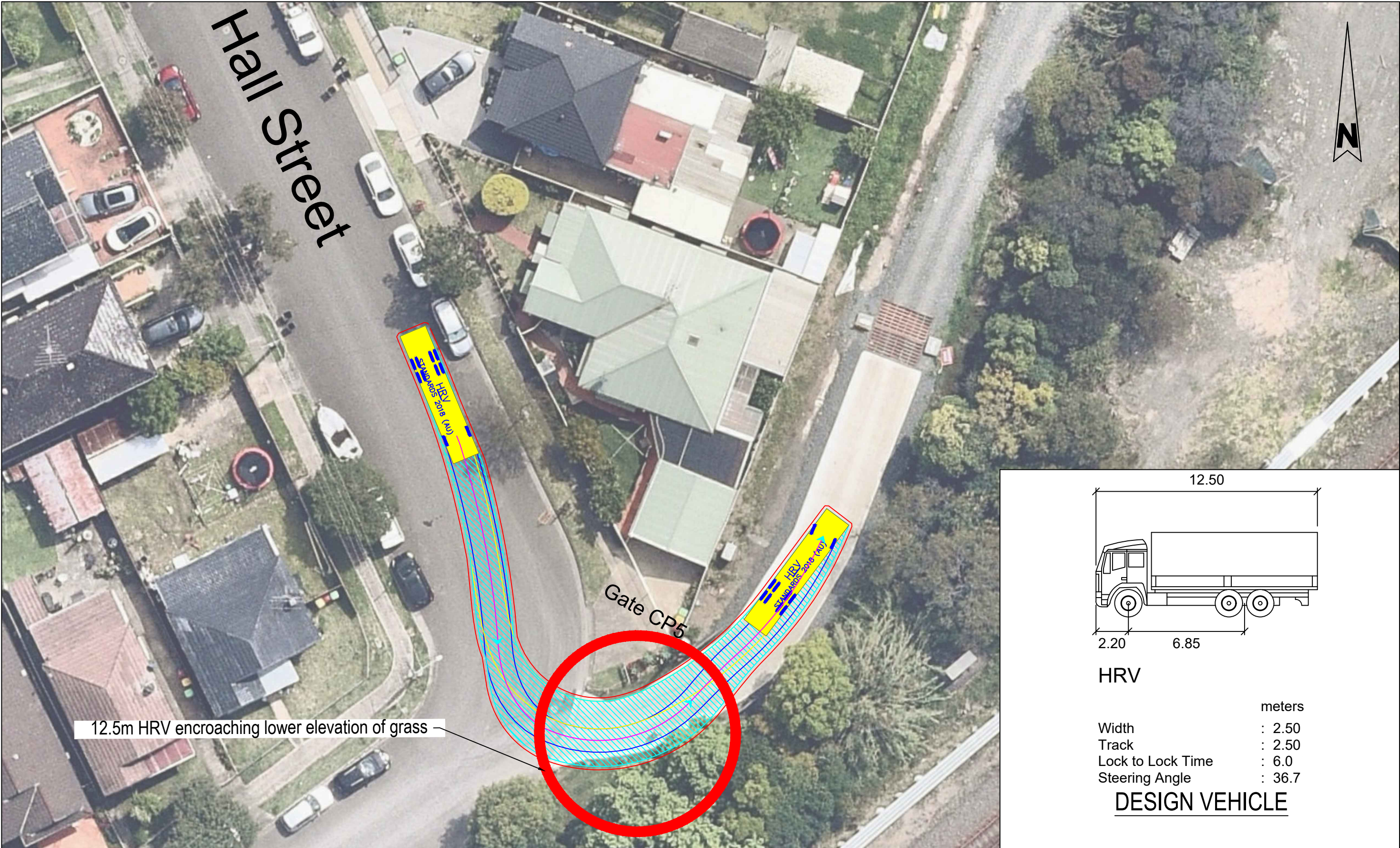


**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: www.bitziosconsulting.com.au  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: admin@bitziosconsulting.com.au  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022
002	Add Site Extents	M.H	06.10.2022
003	Additional Swept Paths	A.S	04.11.2022

Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked A.G
	FOR INFORMATION ONLY		
Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate DU2 Ewart Lane, Dulwich Hill	Project Number P3519	Sheet Number 4	Date 04.11.2022
			Issue 003






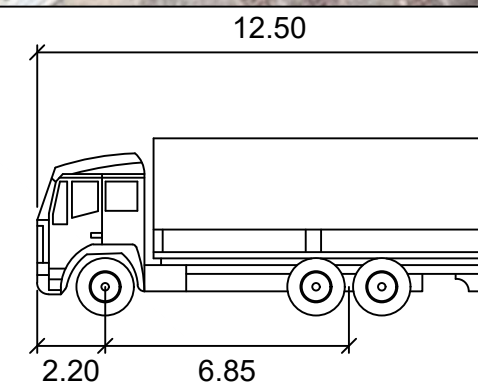
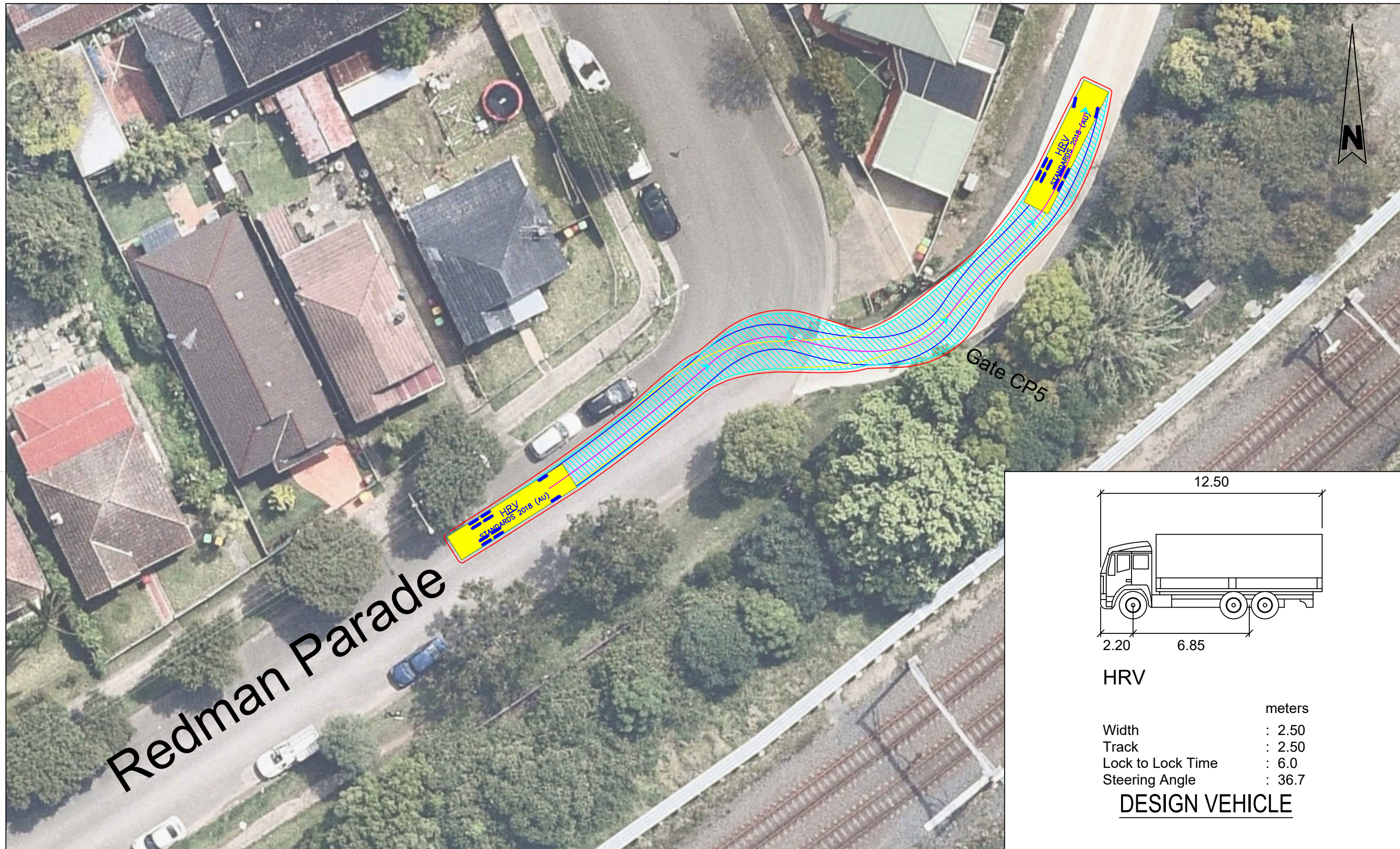
HRV

Width : 2.50 meters  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

DESIGN VEHICLE

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked A.G
	Issue	Revisions/Descriptions	Drawn	Date		FOR INFORMATION ONLY		
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022				
	002	Add Site Extents	M.H	06.10.2022				
	003	Additional Swept Paths	A.S	04.11.2022	Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate CP5 Hall Street, Belmore	Project Number P3519	Sheet Number 13	Date 04.11.2022
								Issue
								003






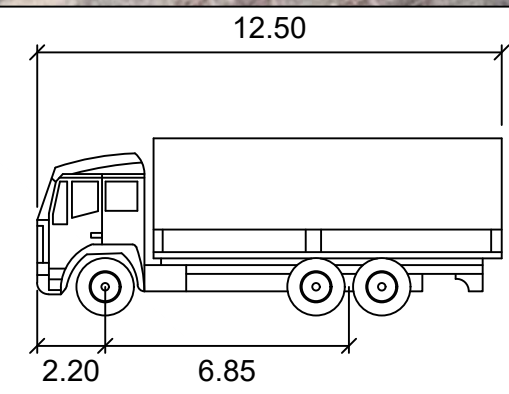
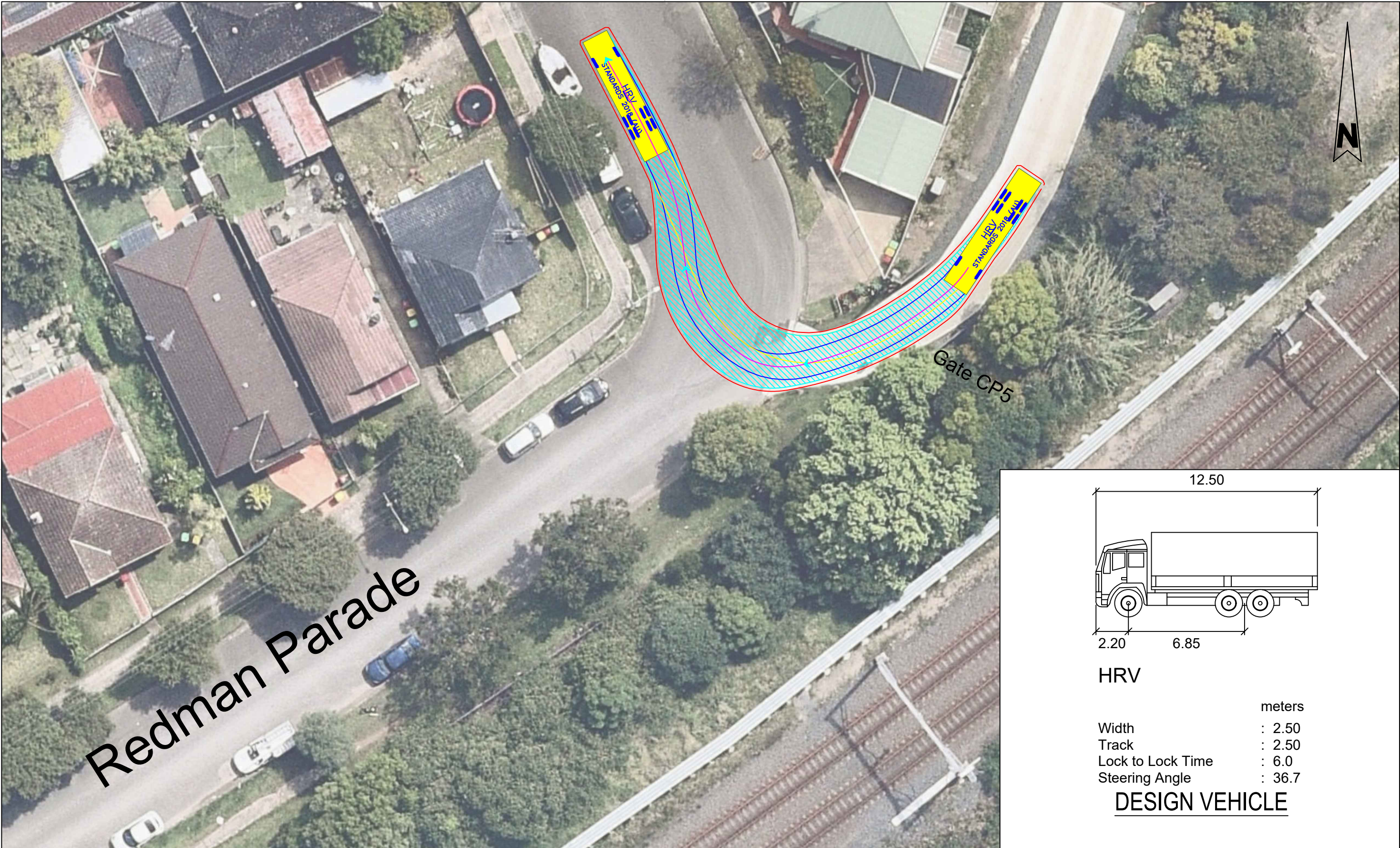
HRV

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au			Project			Design	Drawn	Checked
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au			JHLORJV Sydenham Station and Junction			A.S	A.S	A.G
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202			Title			FOR INFORMATION ONLY		
				V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate CP5 Hall Street, Belmore			Project Number	Sheet Number	Date
							P3519	14	04.11.2022
							Issue		
							003		






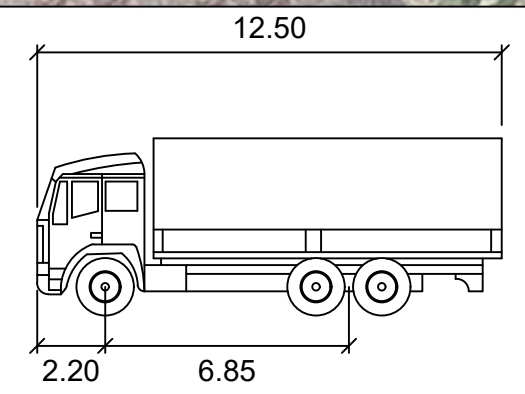
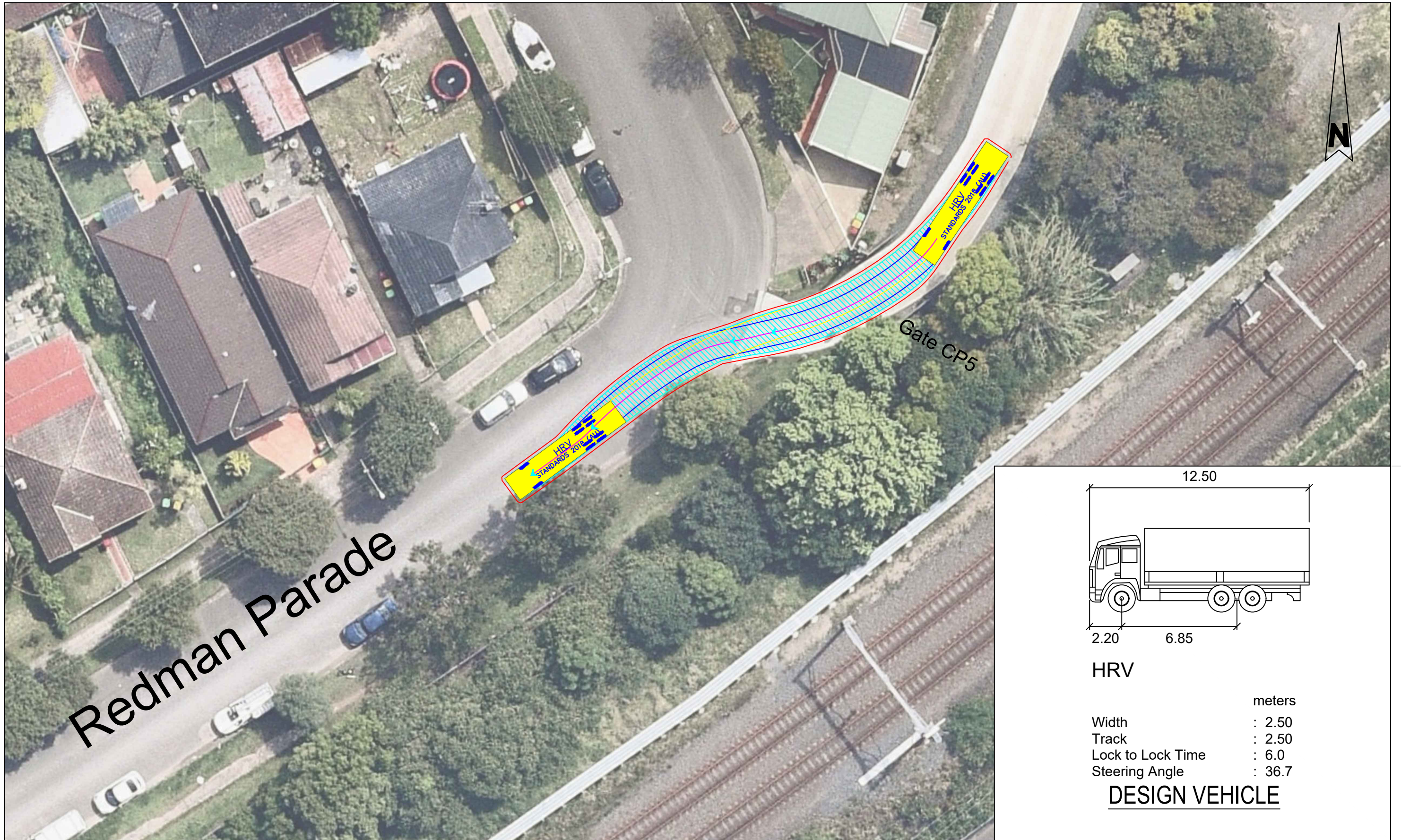
HRV

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<table><tr><th colspan="4">REVISIONS</th></tr><tr><th>Issue</th><th>Revisions/Descriptions</th><th>Drawn</th><th>Date</th></tr><tr><td>001</td><td>V036 BAC Early Works CTMP Swept Path Analysis</td><td>A.S</td><td>04.10.2022</td></tr><tr><td>002</td><td>Add Site Extents</td><td>M.H</td><td>06.10.2022</td></tr><tr><td>003</td><td>Additional Swept Paths</td><td>A.S</td><td>04.11.2022</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>				REVISIONS				Issue	Revisions/Descriptions	Drawn	Date	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022	002	Add Site Extents	M.H	06.10.2022	003	Additional Swept Paths	A.S	04.11.2022																					Project  JHLORJV Sydenham Station and Junction		Design  A.S	Drawn  A.S	Checked  A.G
	REVISIONS																																																
	Issue	Revisions/Descriptions	Drawn	Date																																													
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022																																													
	002	Add Site Extents	M.H	06.10.2022																																													
	003	Additional Swept Paths	A.S	04.11.2022																																													
Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate CP5 Hall Street, Belmore		<div>FOR INFORMATION ONLY</div>		Date  04.11.2022																																													
		Project Number  P3519	Sheet Number  15	Issue  003																																													






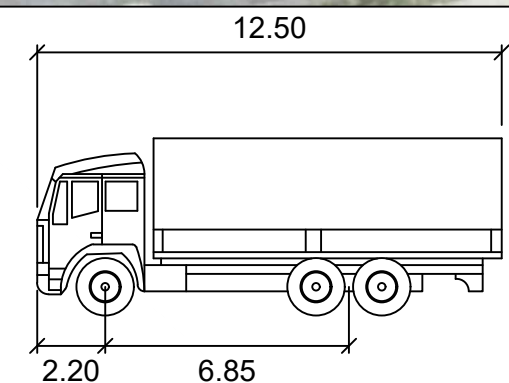
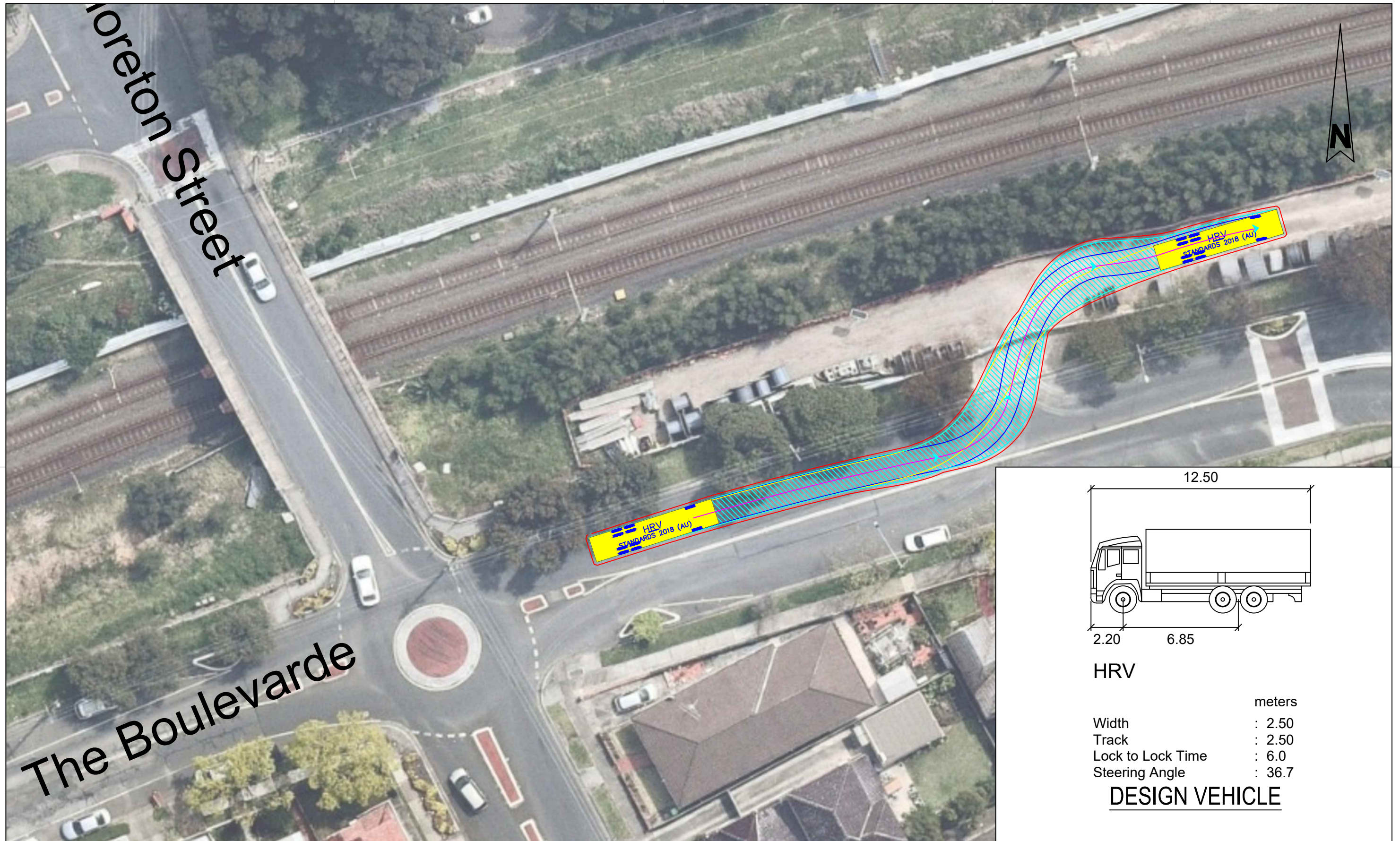
HRV

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked A.G
	Issue	Revisions/Descriptions	Drawn	Date		FOR INFORMATION ONLY		
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022				
	002	Add Site Extents	M.H	06.10.2022				
	003	Additional Swept Paths	A.S	04.11.2022	Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate CP5 Hall Street, Belmore	Project Number P3519	Sheet Number 16	Date 04.11.2022
								Issue
								003






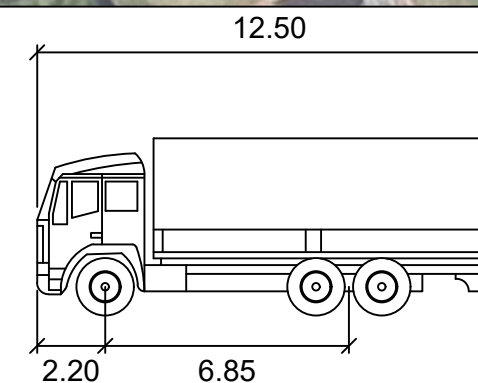
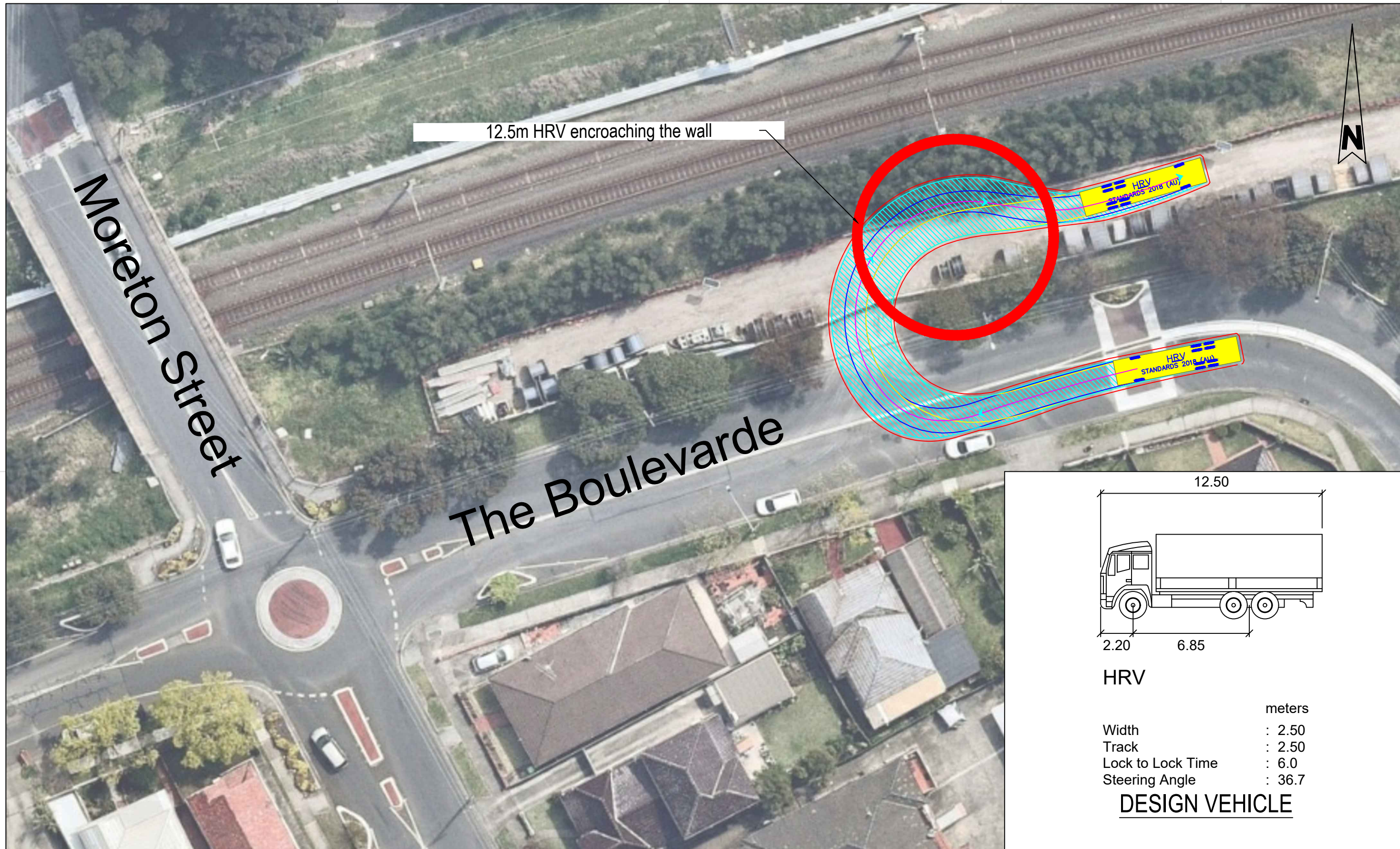
HRV

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	<b>REVISIONS</b>				Project  JHLORJV Sydenham Station and Junction	Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate BE5 The Boulevard, Belmore	Design  A.S	Drawn  A.S	Checked  A.G		
	Issue	Revisions/Descriptions		Drawn	Date						<div>FOR INFORMATION ONLY</div>	Date  04.11.2022
	001	V036 BAC Early Works CTMP Swept Path Analysis		A.S	04.10.2022							
	002	Add Site Extents		M.H	06.10.2022							
	003	Additional Swept Paths		A.S	04.11.2022							





HRV

Width : 12.50  
Track : 6.85  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

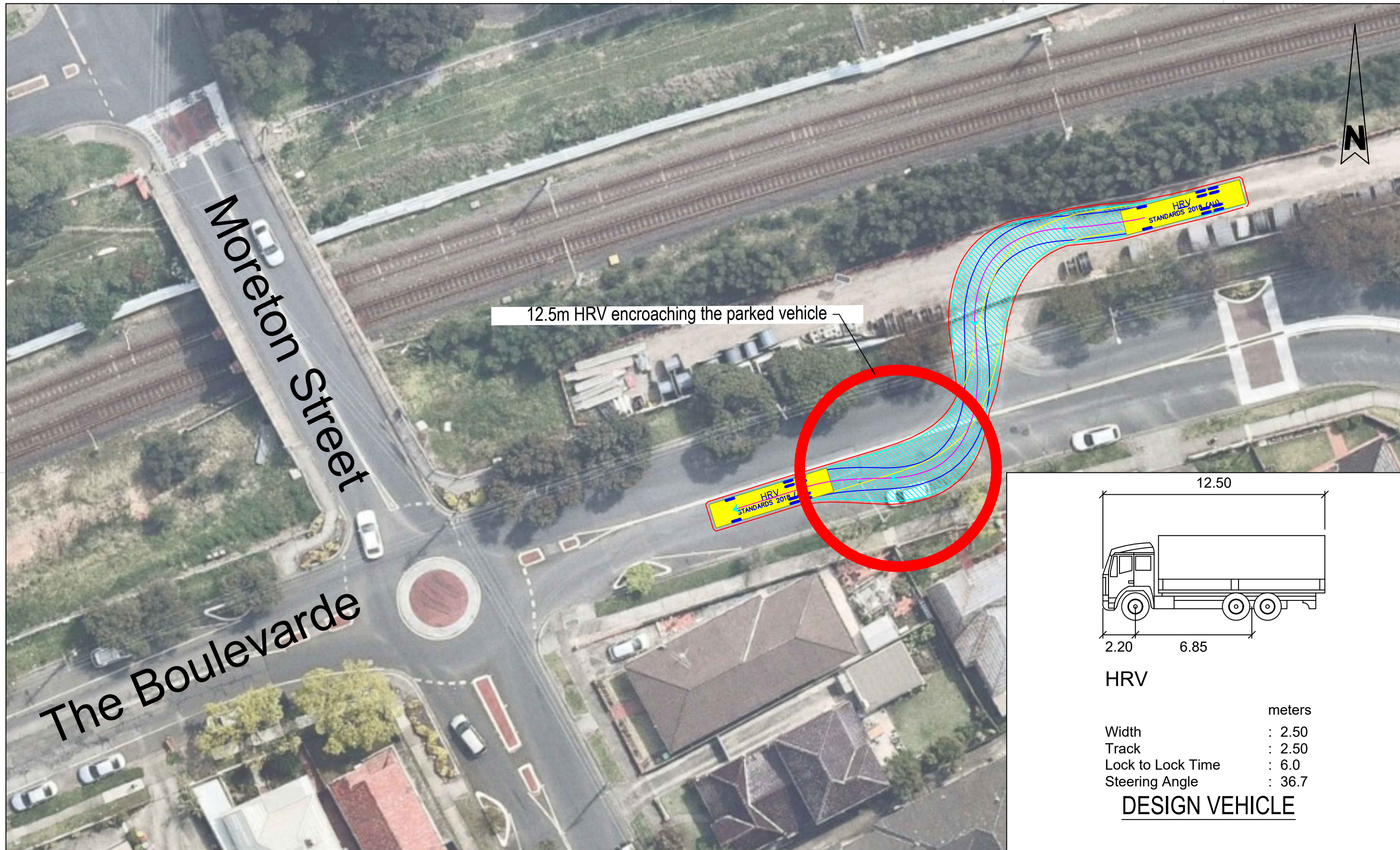



**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: www.bitziosconsulting.com.au  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: admin@bitziosconsulting.com.au  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022
002	Add Site Extents	M.H	06.10.2022
003	Additional Swept Paths	A.S	04.11.2022

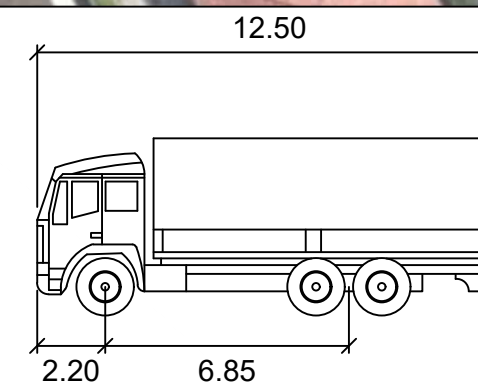
Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked A.G
	FOR INFORMATION ONLY		
	Project Number P3519	Sheet Number 23	Date 04.11.2022
Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate BE5 The Boulevard, Belmore			
			Issue 003





	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				<table><thead><tr><th>Issue</th><th>Revisions/Descriptions</th><th>Drawn</th><th>Date</th></tr></thead><tbody><tr><td>001</td><td>V036 BAC Early Works CTMP Swept Path Analysis</td><td>A.S</td><td>04.10.2022</td></tr><tr><td>002</td><td>Add Site Extents</td><td>M.H</td><td>06.10.2022</td></tr><tr><td>003</td><td>Additional Swept Paths</td><td>A.S</td><td>04.11.2022</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>				Issue	Revisions/Descriptions	Drawn	Date	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022	002	Add Site Extents	M.H	06.10.2022	003	Additional Swept Paths	A.S	04.11.2022																									Project JHLORJV Sydenham Station and Junction		Design A.S	Drawn A.S	Checked A.G
	Issue	Revisions/Descriptions	Drawn	Date																																																	
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022																																																	
	002	Add Site Extents	M.H	06.10.2022																																																	
	003	Additional Swept Paths	A.S	04.11.2022																																																	
Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate BE5 The Boulevard, Belmore		FOR INFORMATION ONLY		Date 04.11.2022																																																	
P3519		25		003																																																	






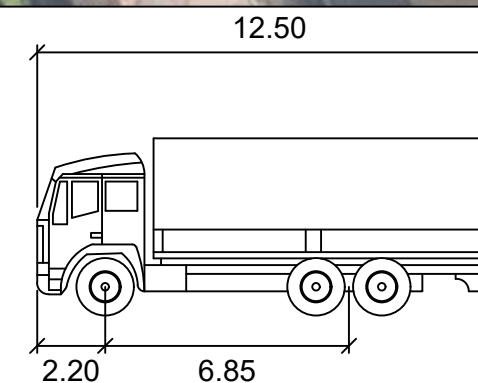
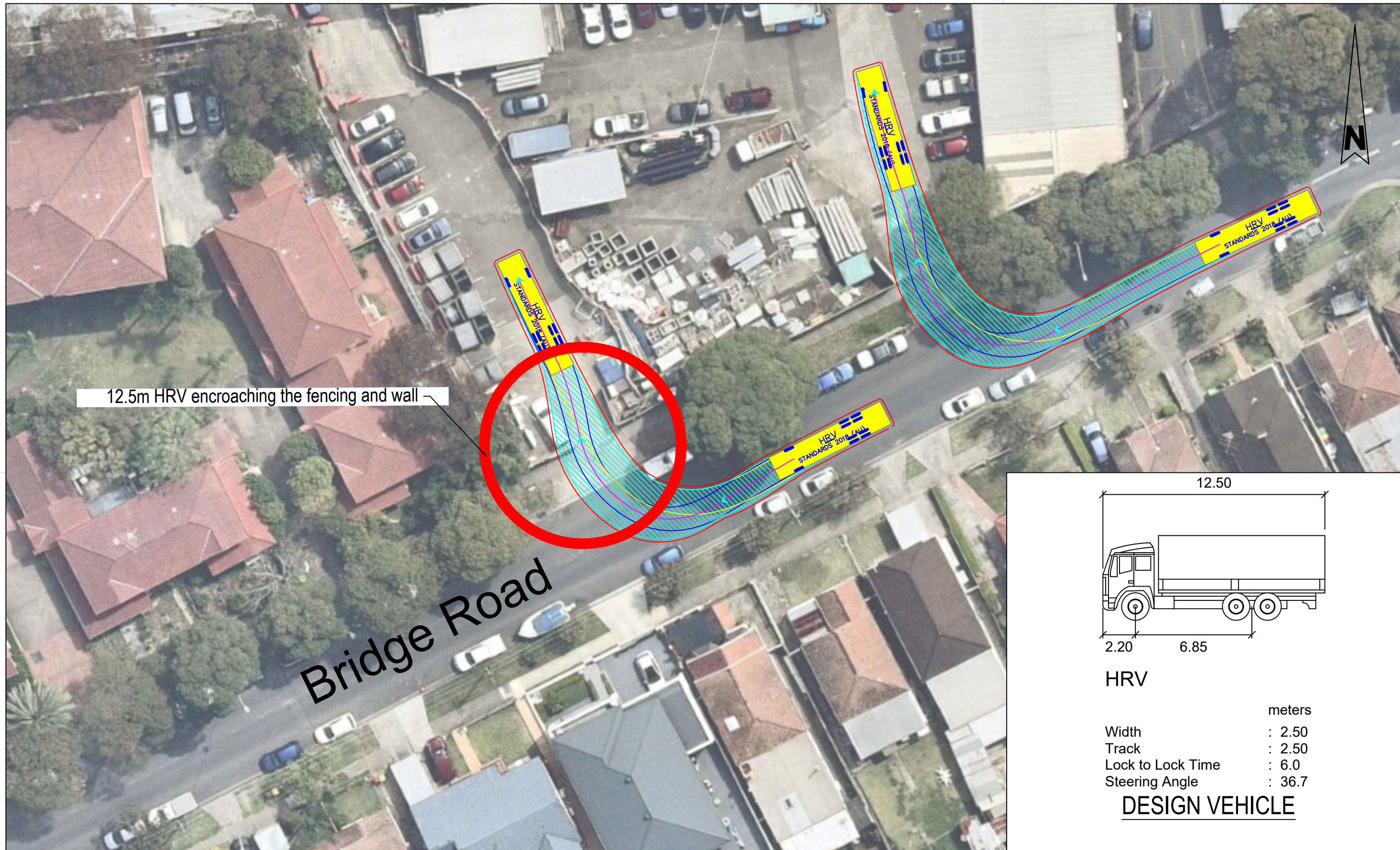
**HRV**

Width : 12.50  
Track : 2.20  
Lock to Lock Time : 6.85  
Steering Angle : 36.7

**DESIGN VEHICLE**

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	REVISIONS				Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked A.G		
		Issue	Revisions/Descriptions	Drawn	Date		FOR INFORMATION ONLY				
		001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022						
		002	Add Site Extents	M.H	06.10.2022						
				003	Additional Swept Paths	A.S	04.11.2022	Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate BE5 The Boulevard, Belmore	Project Number P3519	Sheet Number 22	Date 04.11.2022
										Issue 003	






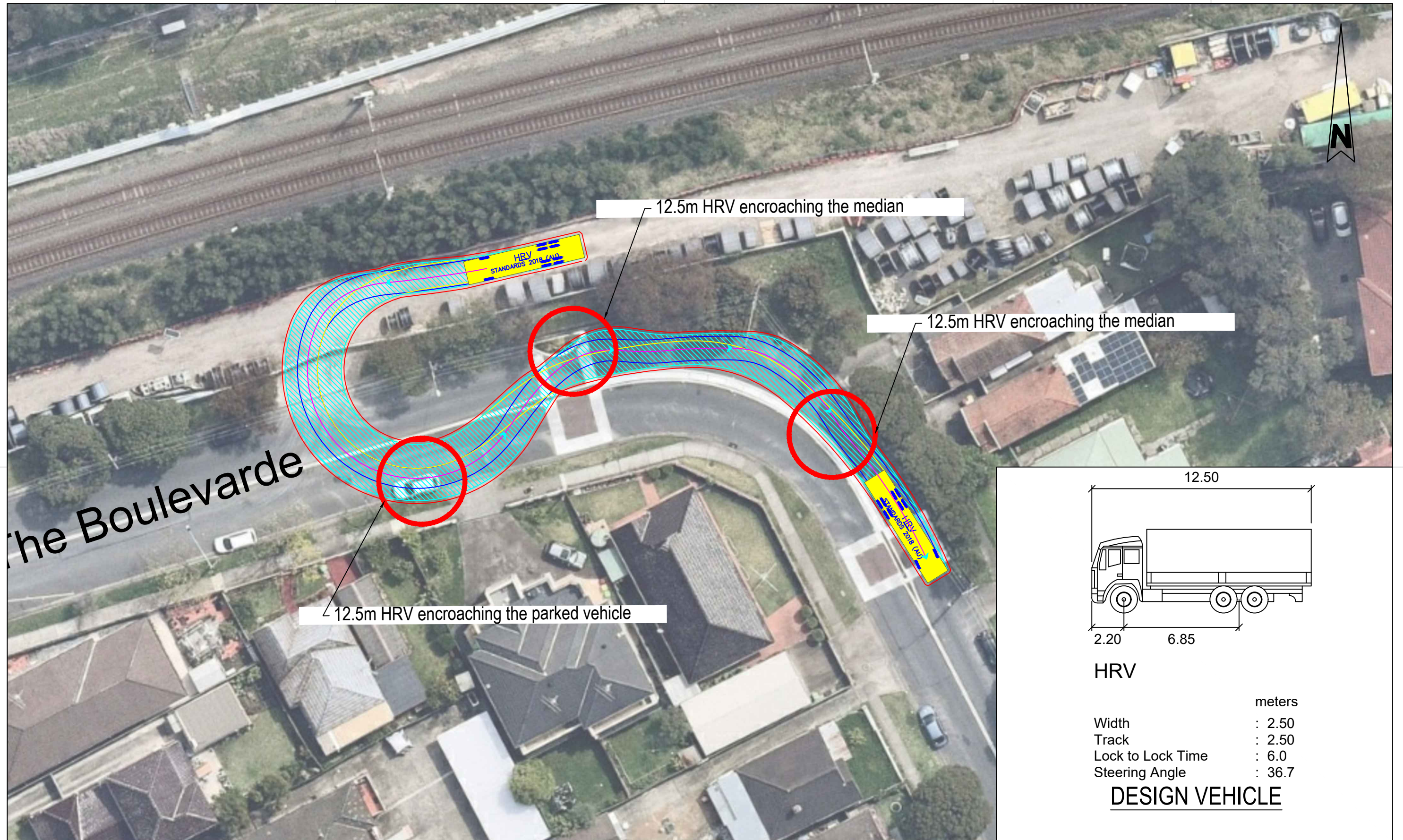
HRV


Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

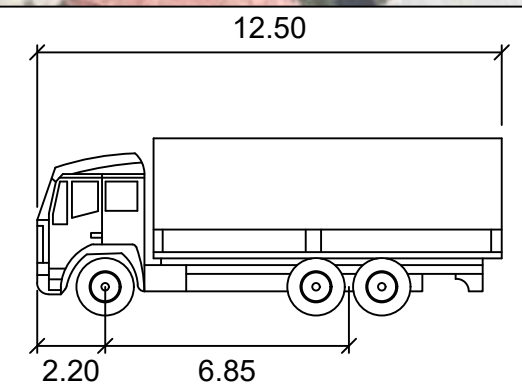
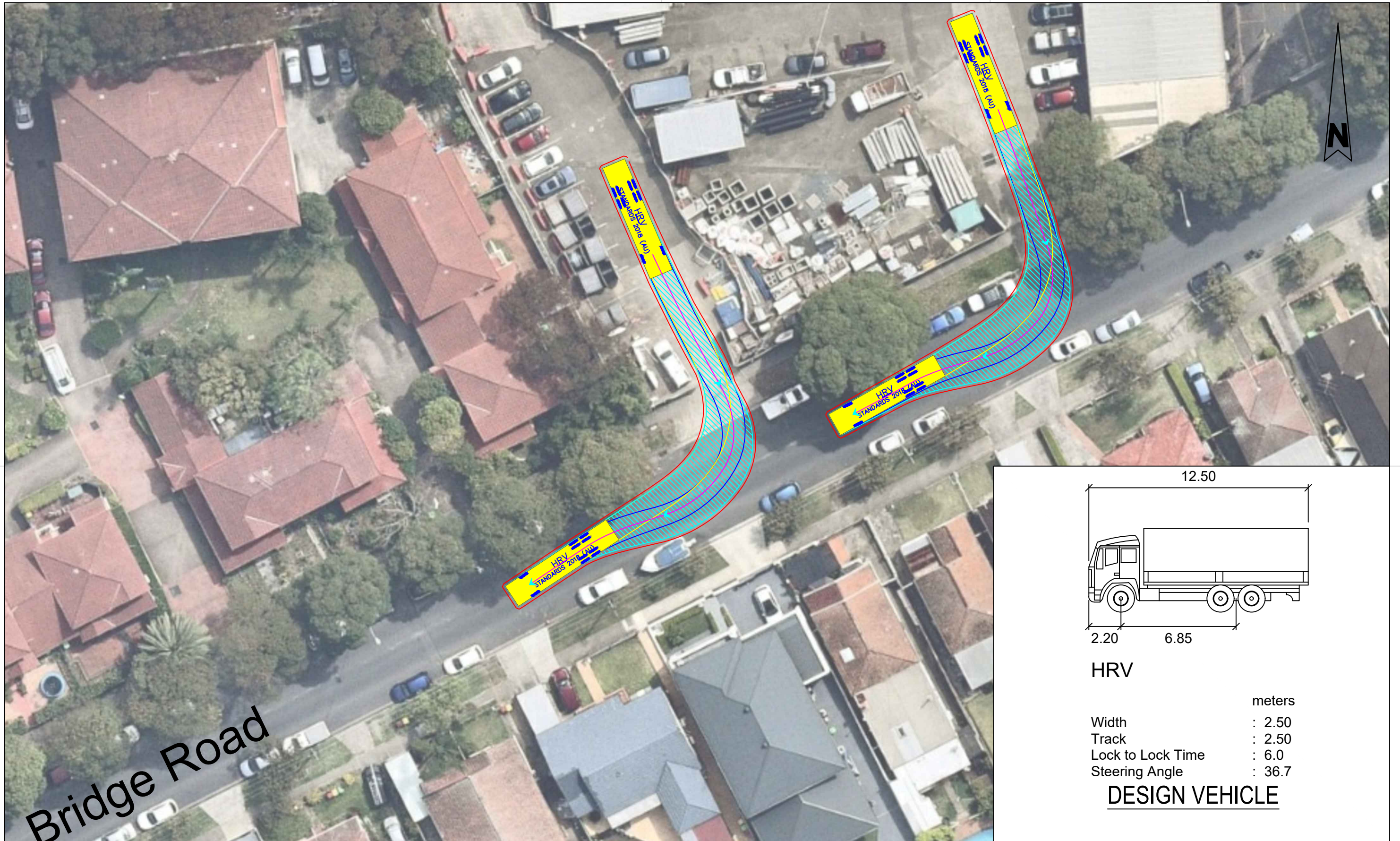
	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202	<b>REVISIONS</b> Revisions/Descriptions			Drawn	Date	Project  JHLORJV Sydenham Station and Junction	Design  A.S	Drawn  A.S	Checked  A.G	
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022	Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate BE5 The Boulevard, Belmore	<div>FOR INFORMATION ONLY</div>					Date  04.11.2022
	002	Add Site Extents	M.H	06.10.2022							
	003	Additional Swept Paths	A.S	04.11.2022							
							Project Number  P3519	Sheet Number  24	Issue  003		





 <div>Gold Coast Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au Brisbane Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au Sydney Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project		Design	Drawn	Checked
	Revisions/Descriptions				JHLORJV Sydenham Station and Junction		A.S	A.S	A.G
	Issue		Drawn	Date			FOR INFORMATION ONLY	Date	
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022				04.11.2022	
	002	Add Site Extents	M.H	06.10.2022					
	003	Additional Swept Paths	A.S	04.11.2022			Project Number	Sheet Number	Issue
							P3519	27	003
						</			





HRV

Width : 12.50  
Track : 6.85  
Lock to Lock Time : 2.20  
Steering Angle : 36.7

DESIGN VEHICLE

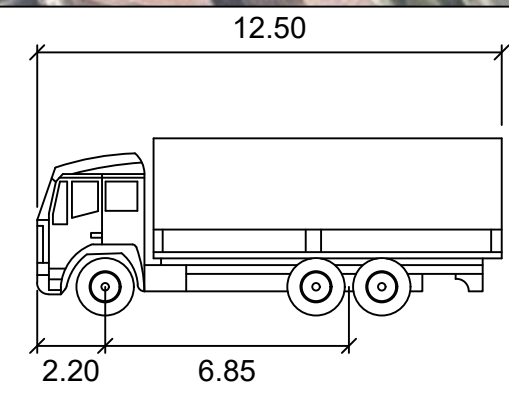
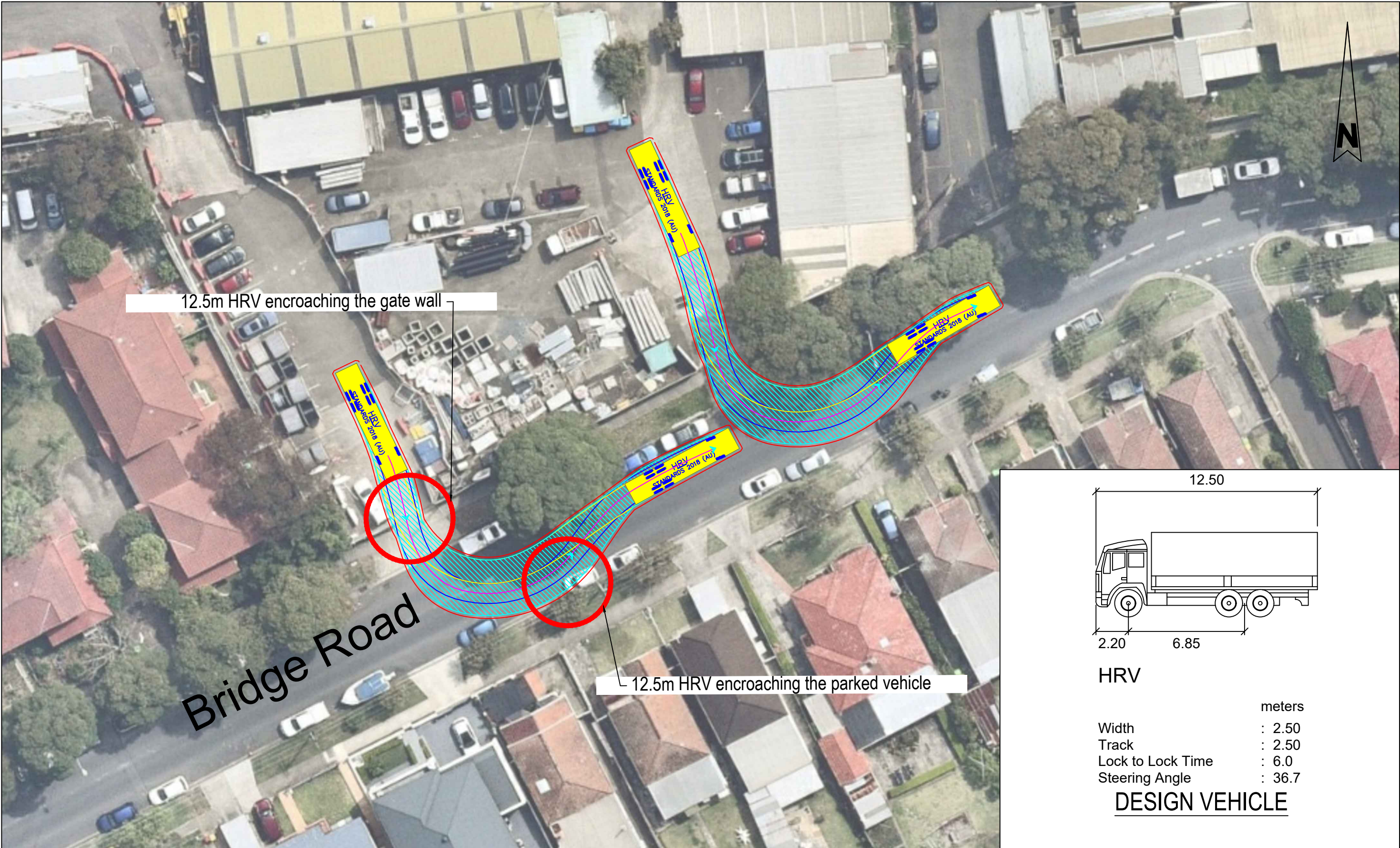


**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022
002	Add Site Extents	M.H	06.10.2022
003	Additional Swept Paths	A.S	04.11.2022

Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked A.G
	FOR INFORMATION ONLY		
	Project Number P3519	Sheet Number 26	Date 04.11.2022
Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate BE5 The Boulevard, Belmore	Issue 003		






HRV

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project  JHLORJV Sydenham Station and Junction	Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate BE5 The Boulevard, Belmore	Design	Drawn	Checked
	Issue	Revisions/Descriptions	Drawn	Date			A.S	A.S	A.G
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022			FOR INFORMATION ONLY	Date 04.11.2022	
	002	Add Site Extents	M.H	06.10.2022					
	003	Additional Swept Paths	A.S	04.11.2022					
							Project Number	Sheet Number	Issue
							P3519	28	003

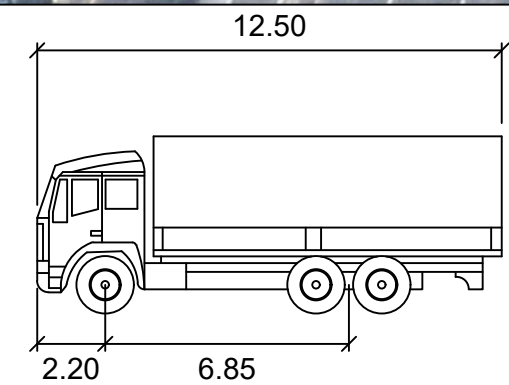


North Terrace

Stacey Street

HRV  
STANDARDS 2018 (AU)

South Terrace



HRV

Width : 2.50  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

DESIGN VEHICLE

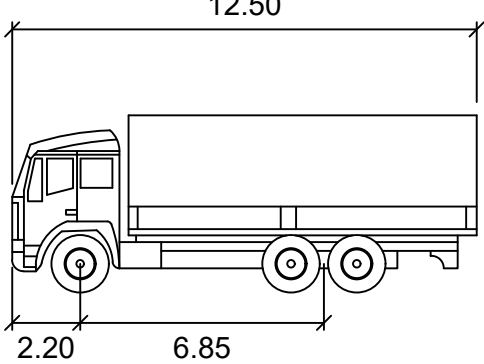
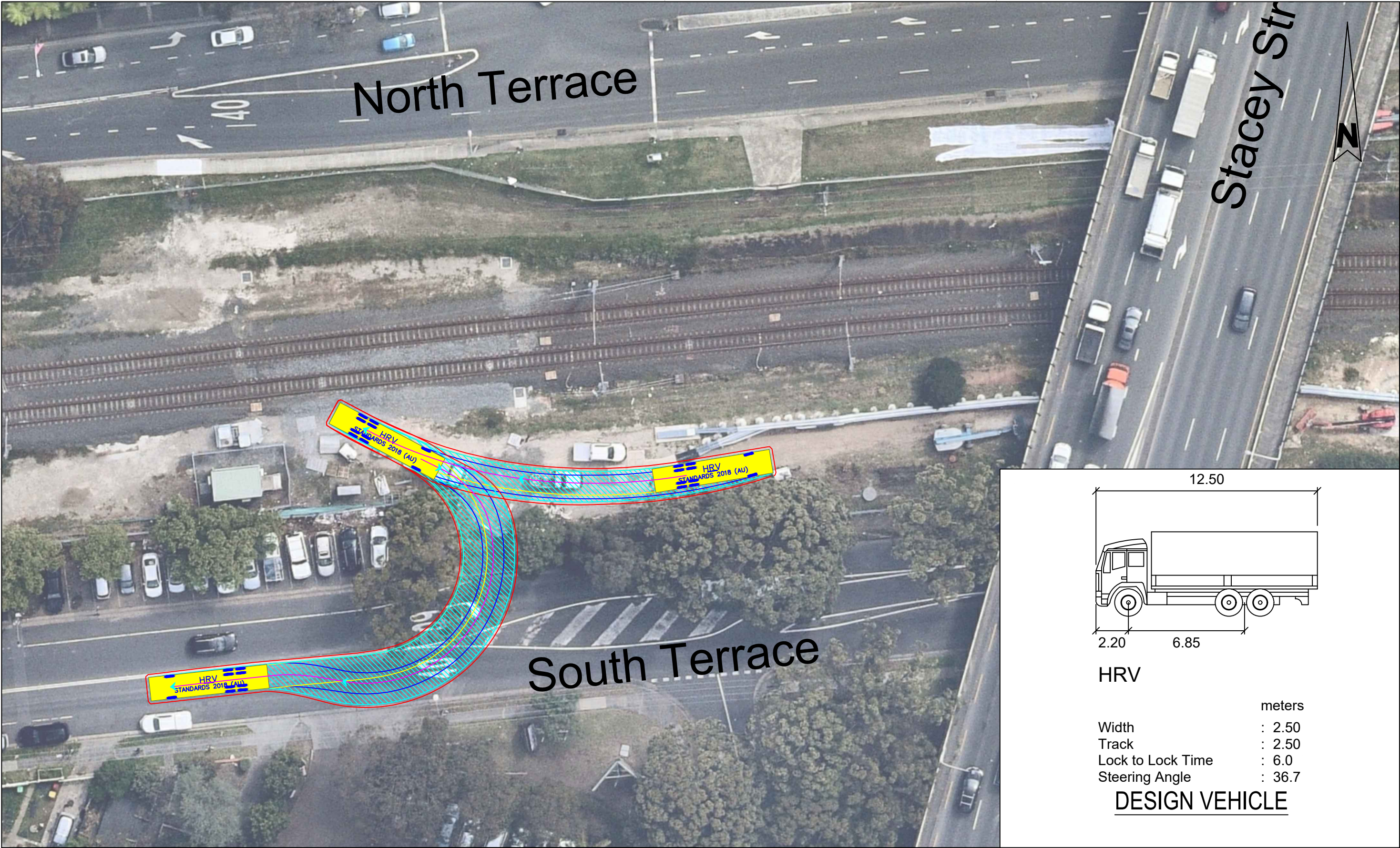


**Gold Coast**  
Suite 26, 58 Riverwalk Avenue, Robina QLD 4226  
P: (07) 5562-5377  
W: [www.bitziosconsulting.com.au](http://www.bitziosconsulting.com.au)  
**Brisbane**  
Level 2, 428 Upper Edward Street, Spring Hill 4000  
P: (07) 3831-4442  
E: [admin@bitziosconsulting.com.au](mailto:admin@bitziosconsulting.com.au)  
**Sydney**  
Studio 203, 3 Gladstone Street, Newtown NSW 2042  
P: (02) 9557 6202

REVISIONS			
Issue	Revisions/Descriptions	Drawn	Date
001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022
002	Add Site Extents	M.H	06.10.2022
003	Additional Swept Paths	A.S	04.11.2022

Project JHLORJV Sydenham Station and Junction	Design A.S	Drawn A.S	Checked A.G
	FOR INFORMATION ONLY		
Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate PB15 South Terrace, Bankstown	Project Number P3519	Sheet Number 37	Date 04.11.2022
			Issue 003






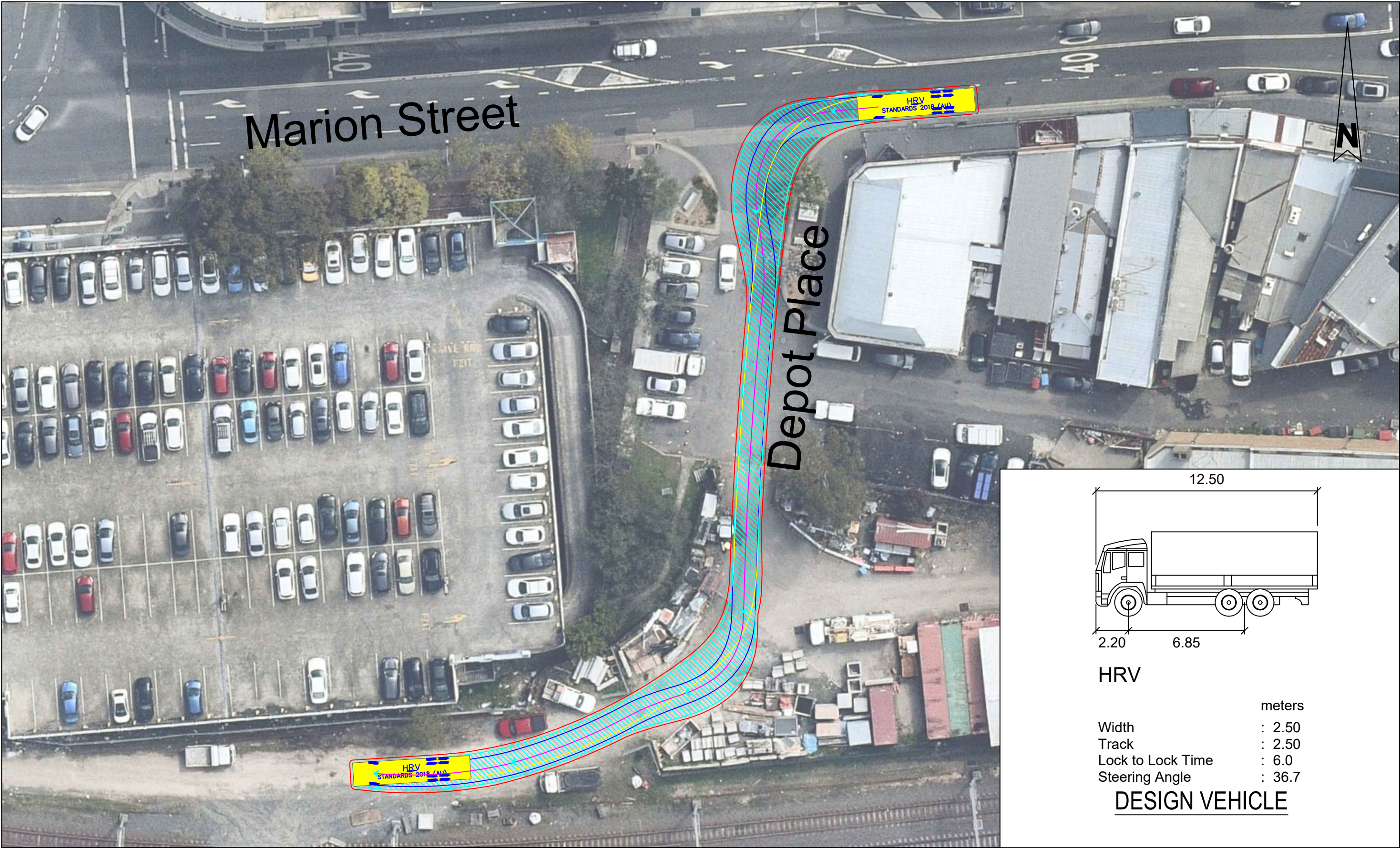
HRV


Width : 12.50 meters  
Track : 2.20 meters  
Lock to Lock Time : 6.0 seconds  
Steering Angle : 36.7 degrees

**DESIGN VEHICLE**

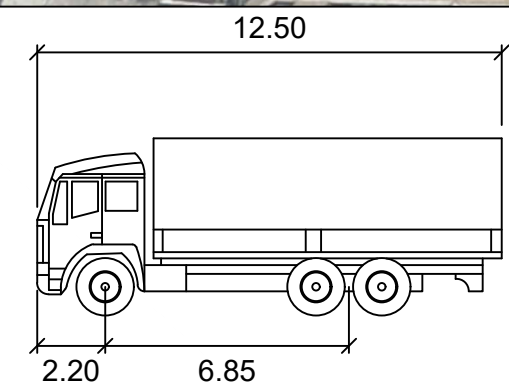
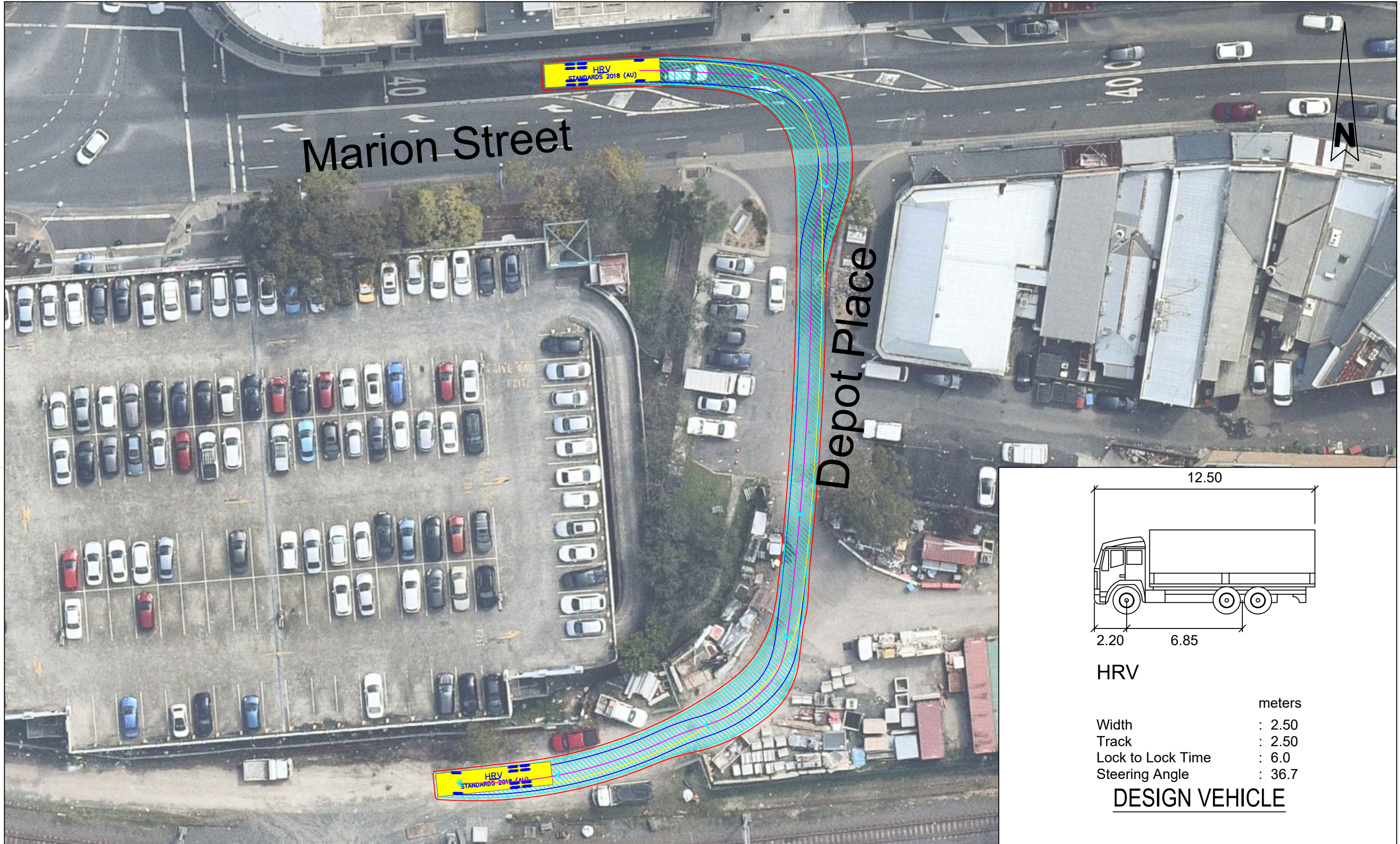
	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au				<b>ReVISIONS</b>				Project  JHLORJV Sydenham Station and Junction		Design	Drawn	Checked
	<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au				Issue	Revisions/Descriptions	Drawn	Date			A.S	A.S	A.G
	<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202				001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022	Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate PB15 South Terrace, Bankstown		FOR INFORMATION ONLY		Date
					002	Add Site Extents	M.H	06.10.2022					04.11.2022
					003	Additional Swept Paths	A.S	04.11.2022			Project Number	Sheet Number	Issue
											P3519	38	003





 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: <a href="http://www.bitziosconsulting.com.au">www.bitziosconsulting.com.au</a> <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: <a href="mailto:admin@bitziosconsulting.com.au">admin@bitziosconsulting.com.au</a> <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	<table><tr><th colspan="4">REVISIONS</th></tr><tr><th>Issue</th><th>Revisions/Descriptions</th><th>Drawn</th><th>Date</th></tr><tr><td>001</td><td>V036 BAC Early Works CTMP Swept Path Analysis</td><td>A.S</td><td>04.10.2022</td></tr><tr><td>002</td><td>Add Site Extents</td><td>M.H</td><td>06.10.2022</td></tr><tr><td>003</td><td>Additional Swept Paths</td><td>A.S</td><td>04.11.2022</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>				REVISIONS				Issue	Revisions/Descriptions	Drawn	Date	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022	002	Add Site Extents	M.H	06.10.2022	003	Additional Swept Paths	A.S	04.11.2022																					Project  JHLORJV Sydenham Station and Junction		Design  A.S	Drawn  A.S	Checked  A.G
	REVISIONS																																																
	Issue	Revisions/Descriptions	Drawn	Date																																													
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022																																													
	002	Add Site Extents	M.H	06.10.2022																																													
	003	Additional Swept Paths	A.S	04.11.2022																																													
				<table><tr><td colspan="2" rowspan="2">FOR INFORMATION ONLY</td><td>Date  04.11.2022</td></tr><tr><td> </td></tr></table>		FOR INFORMATION ONLY		Date  04.11.2022																																									
FOR INFORMATION ONLY		Date  04.11.2022																																															
		Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate BA2 Depot Place, Bankstown		Project Number  P3519	Sheet Number  41	Issue  003																																											






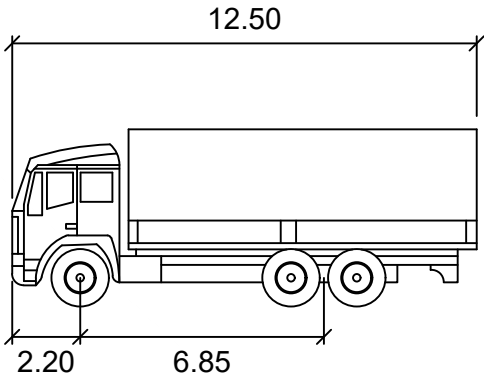
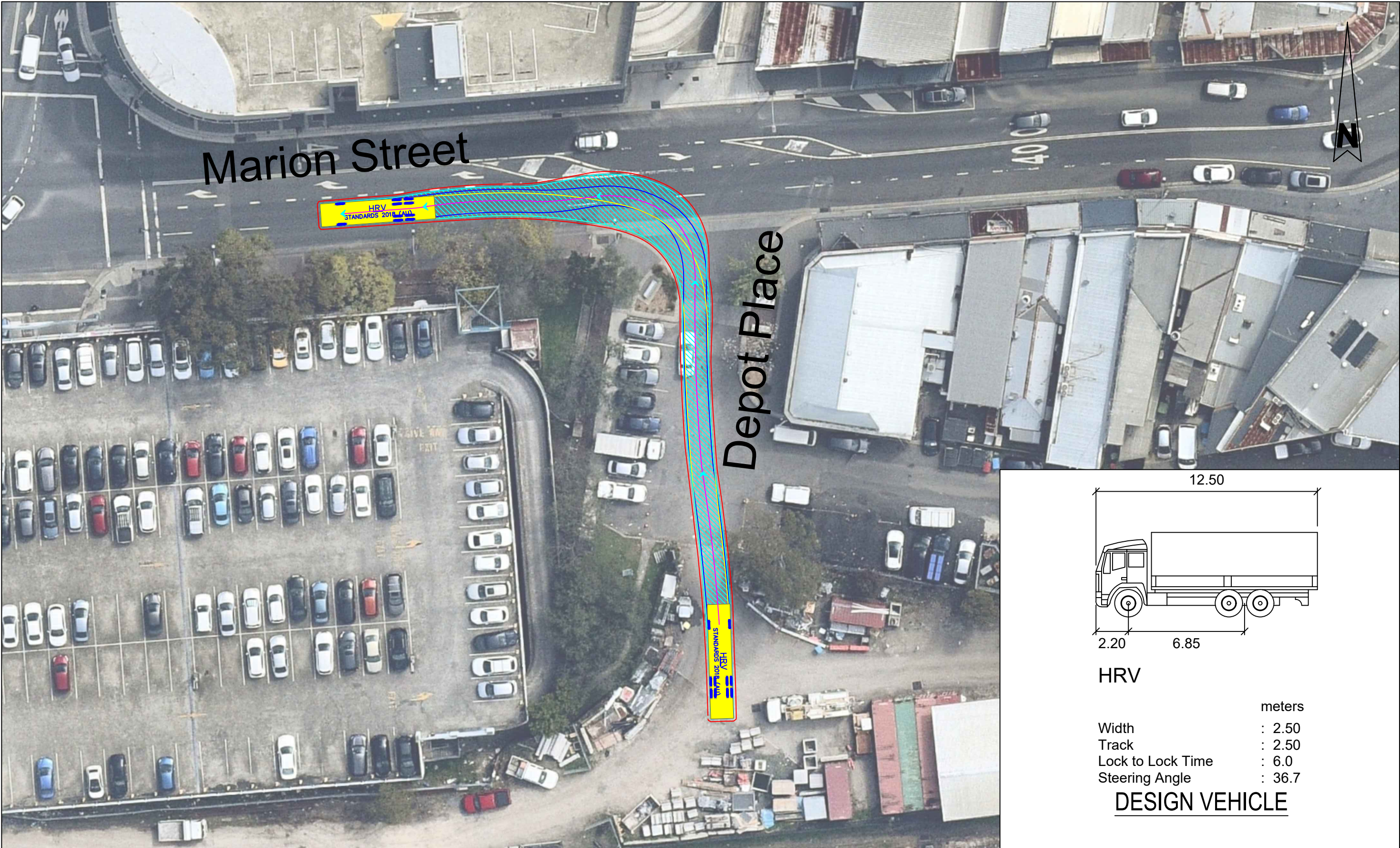
HRV

Width : 2.50 meters  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

 <div><b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au <b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au <b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202</div>	REVISIONS				Project  JHLORJV Sydenham Station and Junction	Design  A.S	Drawn  A.S	Checked  A.G
	Issue	Revisions/Descriptions	Drawn	Date		FOR INFORMATION ONLY		Date 04.11.2022
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022	Title  V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate BA2 Depot Place, Bankstown	Project Number  P3519	Sheet Number  42	Issue  003
	002	Add Site Extents	M.H	06.10.2022				
	003	Additional Swept Paths	A.S	04.11.2022				






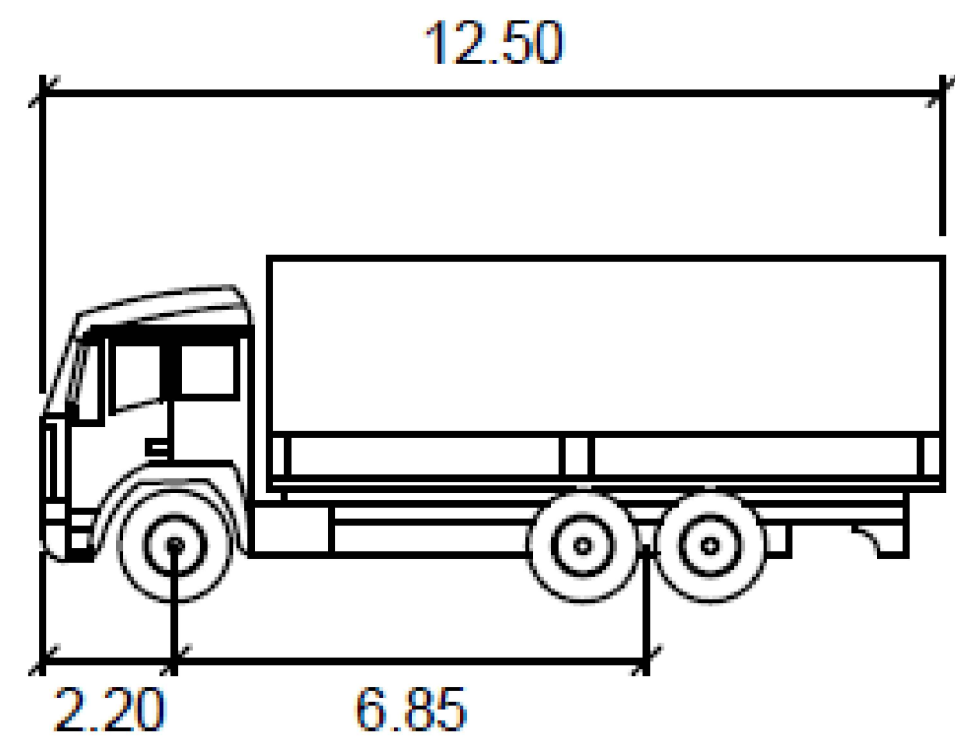
HRV

Width : 2.50 meters  
Track : 2.50  
Lock to Lock Time : 6.0  
Steering Angle : 36.7

**DESIGN VEHICLE**

	<b>Gold Coast</b> Suite 26, 58 Riverwalk Avenue, Robina QLD 4226 P: (07) 5562-5377 W: www.bitziosconsulting.com.au	<table><tr><th colspan="4">REVISIONS</th></tr><tr><th>Issue</th><th>Revisions/Descriptions</th><th>Drawn</th><th>Date</th></tr><tr><td>001</td><td>V036 BAC Early Works CTMP Swept Path Analysis</td><td>A.S</td><td>04.10.2022</td></tr><tr><td>002</td><td>Add Site Extents</td><td>M.H</td><td>06.10.2022</td></tr><tr><td>003</td><td>Additional Swept Paths</td><td>A.S</td><td>04.11.2022</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>				REVISIONS				Issue	Revisions/Descriptions	Drawn	Date	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022	002	Add Site Extents	M.H	06.10.2022	003	Additional Swept Paths	A.S	04.11.2022																					Project JHLORJV Sydenham Station and Junction		Design A.S	Drawn A.S	Checked A.G
	REVISIONS																																																	
	Issue	Revisions/Descriptions	Drawn	Date																																														
	001	V036 BAC Early Works CTMP Swept Path Analysis	A.S	04.10.2022																																														
	002	Add Site Extents	M.H	06.10.2022																																														
	003	Additional Swept Paths	A.S	04.11.2022																																														
<b>Brisbane</b> Level 2, 428 Upper Edward Street, Spring Hill 4000 P: (07) 3831-4442 E: admin@bitziosconsulting.com.au					<div>FOR INFORMATION ONLY</div>		Date 04.11.2022																																											
<b>Sydney</b> Studio 203, 3 Gladstone Street, Newtown NSW 2042 P: (02) 9557 6202							Project Number P3519	Sheet Number 43	Issue 003																																									
					Title V036 BAC Early Works Swept Path Analysis: 12.5m HRV - Gate BA2 Depot Place, Bankstown																																													





HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.7

Security: [Security Classification]

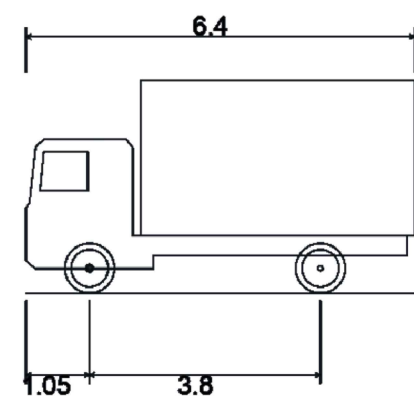
FOR INFORMATION ONLY

WORK IN PROGRESS			CLIENT			SYDNEY METRO Sydney Metro CSW SWM3 Stations Swept Path Analysis Dulwich Hill Articulated Vehicle- Out to Ewart Lane		
No.	Amendment Description	Name Design by	Name Verified by	XX (dd/mm/yy) Approved Initial/Date		SERVICE PROVIDERS	DRAWN Drawn by	dd/mm/yy
						DESIGNED Design by	dd/mm/yy	
						DRG CHECK Drawing checker	dd/mm/yy	
						DESIGN CHECK Design checker	dd/mm/yy	









SRV - Small Rigid Vehicle  
Overall Length 6.400m  
Overall Width 2.330m  
Overall Body Height 3.500m  
Min Body Ground Clearance 0.398m  
Track Width 2.330m  
Lock-to-lock time 4.00s  
Curb to Curb Turning Radius 7.100m

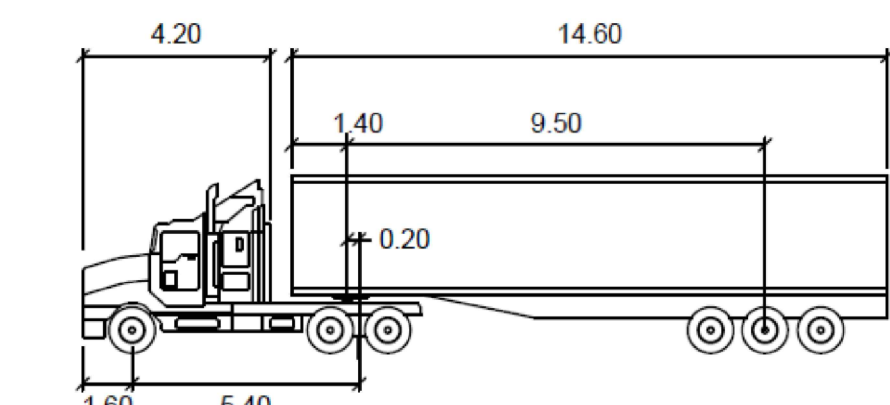
Security: [Security Classification]

FOR INFORMATION ONLY

WORK IN PROGRESS				CLIENT				SYDNEY METRO Sydney Metro CSW SWM3 Stations Swept Path Analysis Dulwich Hill Articulated Vehicle- Out to Ewart Lane			
No.	Amendment Description	Name Design by	Name Verified by	XX Initial/Date	SERVICE PROVIDERS				Drawn by	dd/mm/yyyy	Drawn
					DESIGNED				Design by	dd/mm/yyyy	Designed
					DRG CHECK				Drawing checker	dd/mm/yyyy	DRG CHECK
					DESIGN CHECK				Design checker	dd/mm/yyyy	DESIGN CHECK
tbDesignCompName					DOCUMENT No: NA				SHEET: NA OF NA		
					STATUS: NA				EDMS NO: NA		
									REV		
									VER		



100mm AT FULL SIZE



AV	meters	
Tractor Width	2.50	Lock to Lock Time
Trailer Width	2.50	Steering Angle
Tractor Track	2.50	Articulating Angle
Trailer Track	2.50	

Security: [Security Classification]

FOR INFORMATION ONLY

WORK IN PROGRESS			
No.	Amendment Description	Name	XX (dd/mm/yy)
		Design by	Approved Initial/Date
		Verified by	Initial/Date

CLIENT

SERVICE PROVIDERS

DRAWN	Drawn by	dd/mm/yy
DESIGNED	Design by	dd/mm/yy
DRG CHECK	Drawing checker	dd/mm/yy
DESIGN CHECK	Design checker	dd/mm/yy

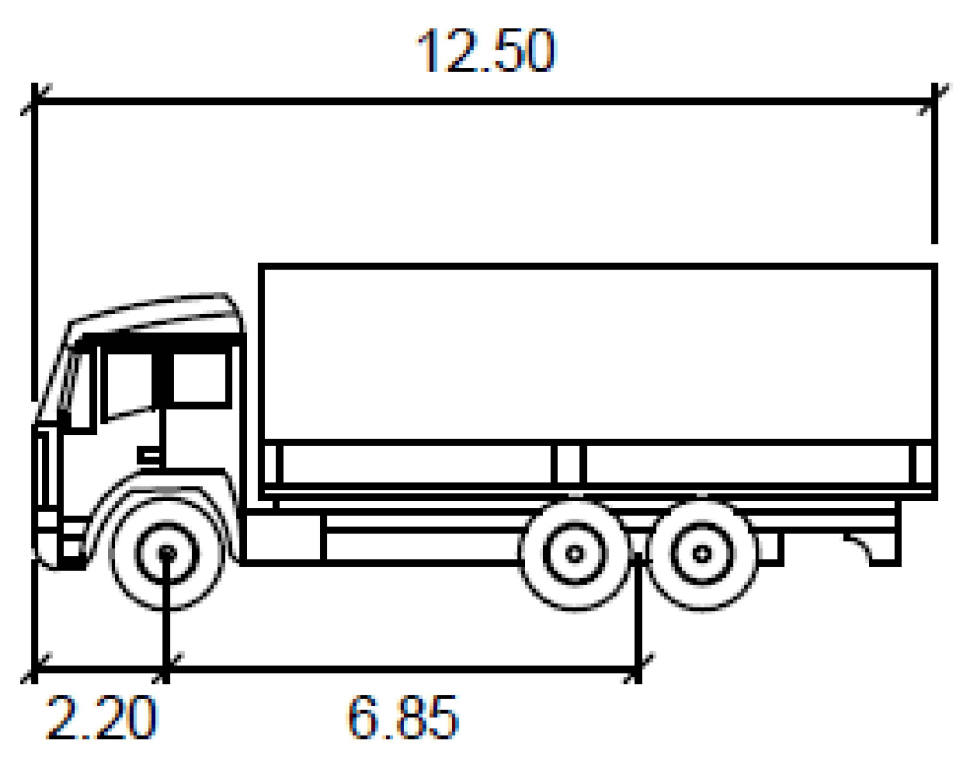
tbDesignCompName

SYDNEY METRO

Sydney Metro CSW SWM3 Stations  
Swept Path Analysis  
Campsie Station  
Articulated Vehicle- Out to Beamish Street

DOCUMENT No:	NA	SHEET: NA	OF NA	©
STATUS: NA		EDMS NO:	NA	
REV		VER		





HRV

meters

Width : 2.50

Track : 2.50

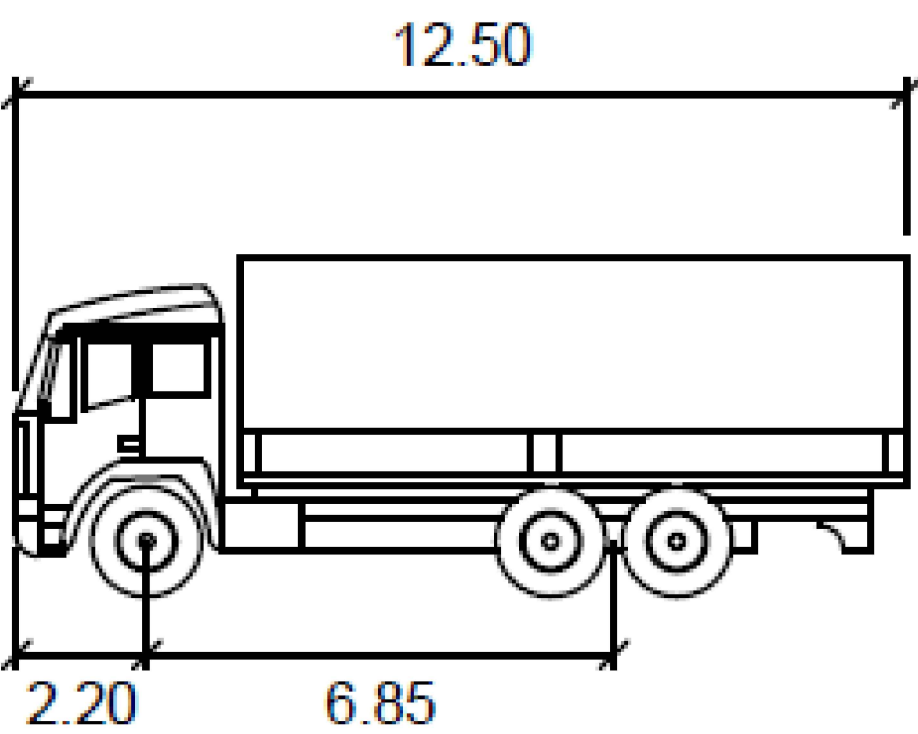
Lock to Lock Time : 6.0

Steering Angle : 36.7

FOR INFORMATION ONLY

<div>WORK IN PROGRESS</div>																														CLIENT																				SYDNEY METRO Sydney Metro CSW SWM3 Stations Swept Path Analysis Hurlstone Park Articulated Vehicle- Out to Dunstroon Street																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
No.										Amendment Description										Name Design by										Name Verified										XX (dd/mm/yyyy) Approved Initial/Date																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							





HRV

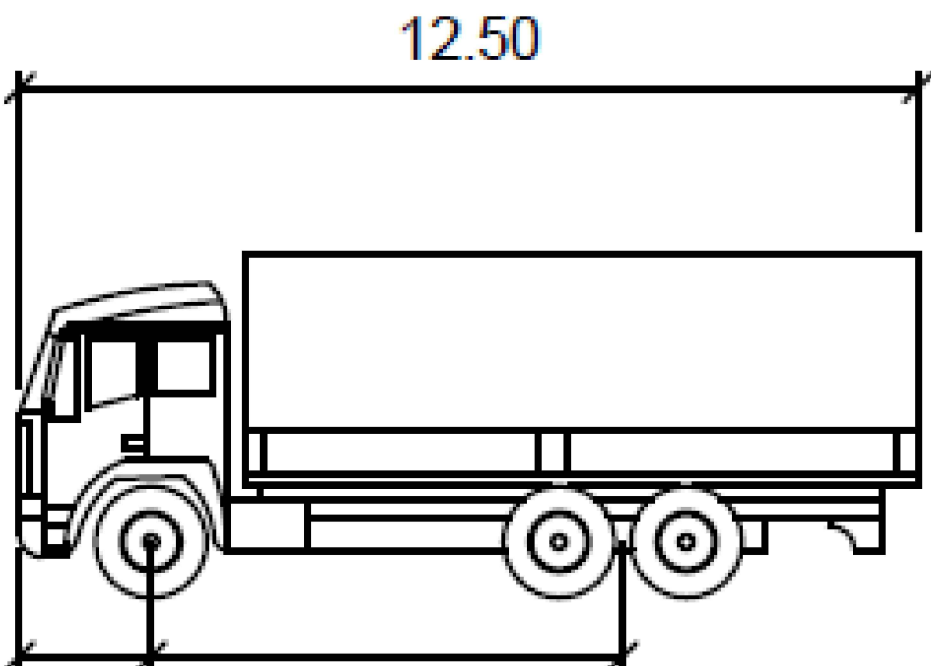
	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.7

Security: [Security Classification]

FOR INFORMATION ONLY

<div>WORK IN PROGRESS</div>																CLIENT						SYDNEY METRO Sydney Metro CSW SWM3 Stations Swept Path Analysis Marrickville Station Articulated Vehicle- Out to Illawarra Road																															
No.	Amendment Description								Name Design by	Name Verified by	XX Approved Initial/Date							SERVICE PROVIDERS			DRAWN Drawn by			DESIGNED Design by			DRG CHECK Drawing checker			DESIGN CHECK Design checker			tbDesignCompName			DOCUMENT No: NA			SHEET: NA OF NA			STATUS:NA			EDMS NO: NA			REV			VER		
14.00																																																					





HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.7

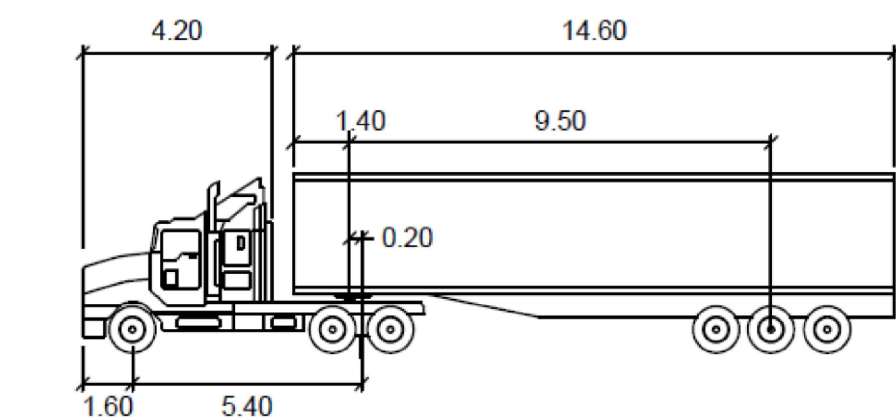
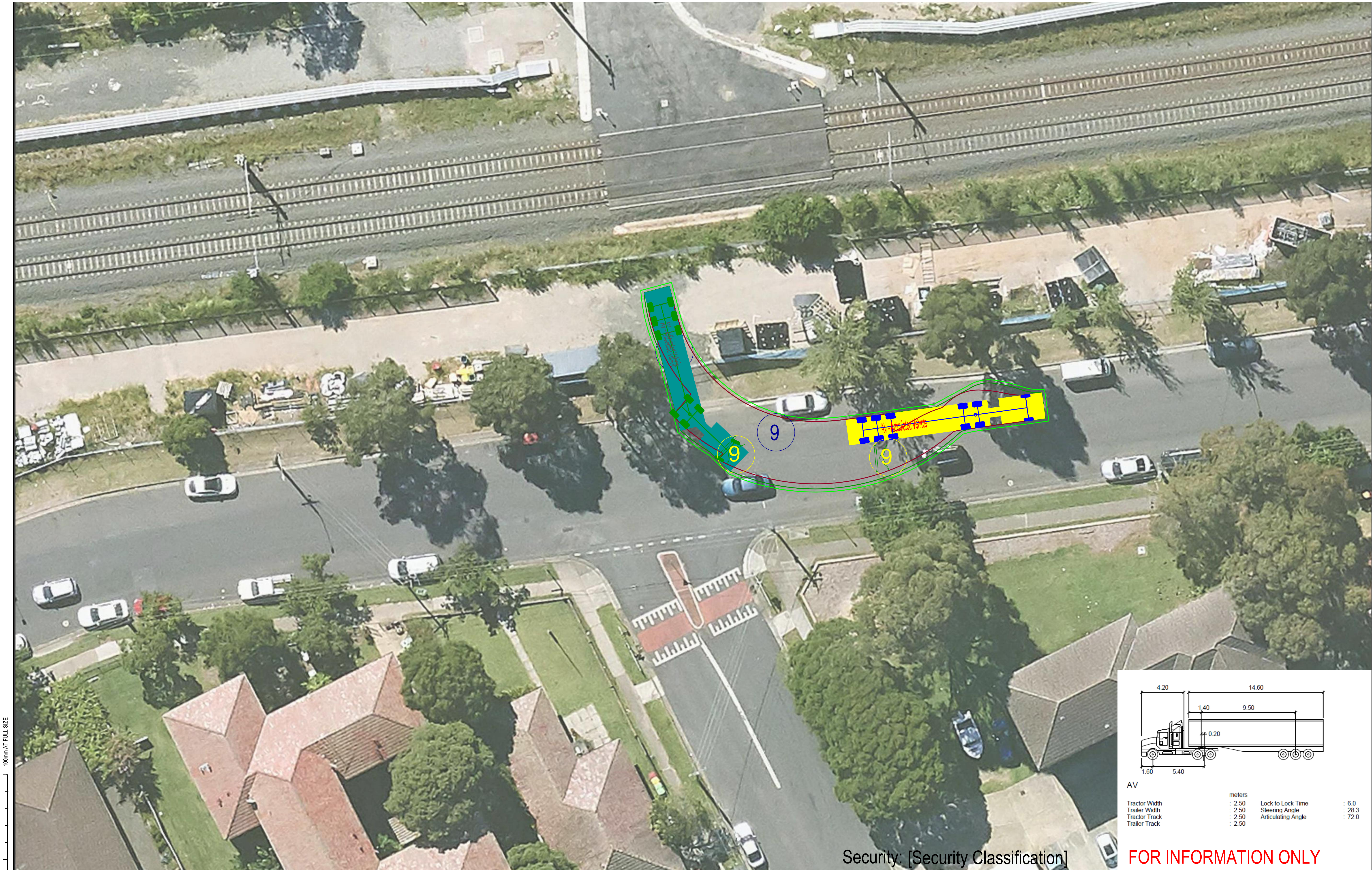
Security: [Security Classification]

FOR INFORMATION ONLY

<div>WORK IN PROGRESS</div>																				CLIENT										SYDNEY METRO Sydney Metro CSW SWM3 Stations Swept Path Analysis Dulwich Hill Articulated Vehicle- Out to Ewart Lane									
SERVICE PROVIDERS										DRAWN <u>Drawn by</u> _____ <u>dd/mm/yyyy</u>																				DOCUMENT No:     NA     SHEET: NA OF NA     (C)									
DESIGNED <u>Design by</u> _____ <u>dd/mm/yyyy</u>																				EDMS NO:     NA										REV     VER									
DRG CHECK <u>Drawing checker</u> _____ <u>dd/mm/yyyy</u>																																							
DESIGN CHECK <u>Design checker</u> _____ <u>dd/mm/yyyy</u>																																							
tbDesignCompName																																							
DATE																																							



100mm AT FULL SIZE



AV			
	meters		
Tractor Width	2.50	Lock to Lock Time	6.0
Trailer Width	2.50	Steering Angle	28.3
Tractor Track	2.50	Articulating Angle	72.0
Trailer Track	2.50		

Security: [Security Classification]

FOR INFORMATION ONLY

<div>WORK IN PROGRESS</div>		CLIENT		SYDNEY METRO Sydney Metro CSW SWM3 Stations Swept Path Analysis Punchowl- The Boulevard Articulated Vehicle- Reverse in with Traffic Control	
No.	Amendment Description	Name Design by	Name Verified by	XX dd/mm/yy Approved Initial/Date	DOCUMENT No: NA
No.					SHEET: NA OF NA
No.					EDMS NO: NA
No.					REV
No.					VER



