AGENDA Local Traffic Committee





Thursday 16 May 2024 Council Chambers | Wingecarribee Shire Council Civic Centre 68 Elizabeth Street, Moss Vale at 10:00 am

1 OPENING	G OF THE MEETING	4
2 ACKNOW	VLEDGEMENT OF COUNTRY	4
3 APOLOG	BIES	4
4 ADOPTIO	ON OF MINUTES OF PREVIOUS MEETING	4
5 DECLAR	ATIONS OF INTEREST	4
6 AGENDA	REPORTS	6
6.1	Police Report On Recent Road Crashes In The Shire	6
6.2	Proposed Changes To Parking Arrangements On Argyle Street, Berrima	7
6.3	Intersection Of Ellsmore Road And Blue Gum Road Bundanoon - Give Way	
	Restriction.	12
6.4	Range Road Glenquarry - Road Reconstruction Including Signs And Line	
	Marking	15
6.5	Market Place, Berrima - Line Marking For 45° Angle Parking Spaces	22
6.6	2024 Bowral Classic	27
6.7	Proposed Pedestrian Crossing - Lackey Road, Moss Vale	29
6.8	Railway Avenue, Wingello - Removal Of Pedestrian Refuge	35
6.9	Access Road Arrangements For 6 Lot Subdivision At 267 Bundanoon Road	
	Exeter	40
6.10	Traffic Arrangements For Proposed Development On Sally Corner Road,	
	Sutton Forest	65
7 DATE OF	NEXT MEETING	86
8 MEETING	G CLOSURE	86

Our Mission, Our Vision, Our Values

OUR MISSION

To create and nurture a vibrant and diverse community growing and working in harmony with our urban, agricultural and natural environments

Leadership: 'An innovative and effective organisation with strong leadership' People: 'A vibrant and diverse community living harmoniously, supported by innovative services and effective communication with Council' **OUR VISION** Places: 'Places that are safe. maintained, accessible, sympathetic to the built and natural environment, that supports the needs of the community' **Environment**: 'A community that values and protects the natural environment enhancing its health and diversity' **Economy**: 'A strong local economy that encourages and provides employment, business opportunities and tourism' **OUR VALUES** Communication and teamwork Service quality

1 OPENING OF THE MEETING

The Senior Traffic Engineer will open the meeting.

2 ACKNOWLEDGEMENT OF COUNTRY

"Wingecarribee Shire Council acknowledges the Gundungurra and Tharawal people as the traditional custodians of this land we now call the Wingecarribee Shire. I pay my respect to Elders both past, present and emerging. I would also like to extend that respect to all Aboriginal and Torres Strait Islanders present here today."

3 APOLOGIES

Nil at time of print.

4 ADOPTION OF MINUTES OF PREVIOUS MEETING

That the minutes of the Traffic Committee meeting held on 21 March 2024, recommendation numbers TC 2024/11 to TC 2024/21 inclusive, copies of which were forwarded to Committee members, have been received and noted.

5 DECLARATIONS OF INTEREST

The provisions of Chapter 14 of the Local Government Act 1993 regulate the way in which nominated staff of Council conduct themselves to ensure that there is no conflict between their private interests and their public trust.

The Act prescribes that where a member of Council (or a Committee of Council) has a direct or indirect financial (pecuniary) interest in a matter to be considered at a meeting of the Council (or Committee), that interest and the reasons for declaring such interest must be disclosed as soon as practicable after the start of the meeting.

As members are aware, the provisions of the Local Government Act restrict any member who has declared a pecuniary interest in any matter from participating in the discussions or voting on that matter and further require that the member vacate the Chamber.

Council's Code of Conduct provides that if members have a non-pecuniary conflict of interest, the nature of the conflict must be disclosed. The Code also provides for a number of ways in which a member may manage non pecuniary conflicts of interest.

Where necessary any Councillor, Committee Member and nominated staff of Council should disclose any interest and the reason for declaring such interest in the matters under consideration at this meeting.



6 AGENDA REPORTS

6.1 Police Report on recent road crashes in the Shire

Report Author: Traffic Engineer

Authoriser: Karin Targa

PURPOSE

Reporting on recent road crashes in the Shire recorded by Police.

RECOMMENDATION

<u>THAT</u> the information be received and noted.

REPORT

BACKGROUND

At its meeting on 28 April 2010, Council adopted the recommendation of the Traffic Committee as follows:

<u>THAT</u> the Police report to each Traffic Committee meeting any fatal and serious injury crashes and locations where a pattern of crashes is developing <u>AND THAT</u> these crashes also be reported to Council staff to permit a timely investigation of the road environment.

CONCLUSION

That the information be received and noted.

ATTACHMENTS

Nil

6.2 Proposed Changes to Parking Arrangements on Argyle Street, Berrima

Report Author: Traffic Engineer

Authoriser: Karin Targa

PURPOSE

To amend the parking restrictions on Argyle Street, Berrima, adjacent to the Berrima Gaol.

RECOMMENDATION

<u>THAT</u> the 70m No Parking zone on the west side of Argyle Street, Berrima, adjacent to the Berrima Gaol be amended to include:

- Removal of the existing Bus Zone at the southern end of Argyle Street
- The installation of a 32m Bus Zone south of the Berrima Gaol driveway
- The creation of 58m of unrestricted parking south of the proposed Bus Zone
- Removal of the existing 22m Loading Zone located opposite the driveway to Berrima Gaol

REPORT

There is currently a 70m No Parking zone on Argyle Street, Berrima, between the Bus Zone to the south and 4m north of the Berrima Gaol access driveway.

Berrima Gaol is no longer in operation with the gaol being permanently closed in 2020.

This report proposes to remove the Bus Zone at the southern end of Argyle Street and create a 32m Bus Zone south of the driveway to Berrima Gaol. The terrain at the existing Bus Zone is uneven and unsafe for people to step on when entering and exiting the bus.

The 70m of No Parking will be removed. Removal of the No Parking Zone will allow for 58m of unrestricted parking.

The 22m Loading Zone on the east side of Argyle Street would be removed. The Loading Zone was created in 2017 to allow for deliveries when the gaol was in operation. The width of Argyle Street through a portion of the loading zone is narrow. Vehicles parked on both sides of Argyle Street would not allow enough width for a vehicle to pass.



EXISTING PARKING LAYOUT ARGYLE STREET, BERRIMA

Image 1 – Existing parking layout on Argyle Street



PROPOSED PARKING LAYOUT ARGYLE STREET, BERRIMA

Image 2 – Proposed parking layout on Argyle Street



Image 3 – Existing Loading Zone

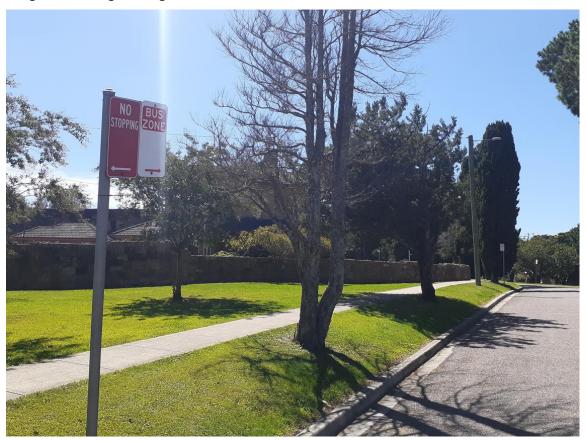


Image 4 – Existing Bus Zone



Image 5 – Existing No Parking Zone

CONCLUSION

The proposed parking changes to Argyle Street Berrima will allow for up to 58m of extra space for vehicles to park. This can provide approximately 10 - 11 new parking spaces.

The proposed Bus Zone will provide a safer terrain for people to use when entering and exiting the bus.

The Loading Zone is not required due to Berrima Gaol no longer being in operation.

The proposed parking arrangements are recommended for approval.

ATTACHMENTS

Nil

6.3 Intersection of Ellsmore Road and Blue Gum Road Bundanoon - Give way restriction.

Report Author: Traffic Engineer

Authoriser: Karin Targa

PURPOSE

To advise and have the Committee's approval for recently installed Give Way sign and line marking at Blue Gum Road with the intersection of Ellsmore Road, Bundanoon.

RECOMMENDATION

THAT the Council approves:

- 1. The installation of a Give way sign, 9m TB Line and TB1 Line,
- 2. Existing unbroken dividing single central barrier line (9m) in Blue Gum Road be replaced with 10m unbroken double dividing barrier (BB) lines in Blue Gum Road.
- 3. A 30m TB1 line be installed to delineate the priority vehicles movement on Ellsmore Road
- 4. 15m Double Barrier lines at either end of the TB1 Curve delineation line on Ellsmore Road

REPORT

BACKGROUND

A recent search confirmed that there is not enough information of the installation of existing signs and lines in the intersection of Blue Gum Road and Ellsmore Road in Council's records. The existing Give Way sign and line marking installation was completed in early of March 2023, in the subject intersection. It was not included in Traffic Committee agenda items previously.

REPORT

The intersection of Ellsmore Road and Blue Gum Road has been inspected. In this location there is a right-angled bend at Ellsmore Road, and Blue Gum Road forming a three-legged T-type intersection. Blue Gum Road is a No Through local road with a very low volume of traffic. The major traffic flow on Ellsmore Road has the priority in this intersection. The existing Give Way sign and line marking in Blue Gum Road are justified in present traffic condition.

Currently a TB line (9m), and an unbroken central barrier line (9m) are in place. The unbroken dividing single central barrier line (9m) in Blue Gum Road will be replaced with a 10m unbroken double dividing barrier (BB) line in Blue Gum Road in combination with Give Way sign.

The double barrier lines are to be place at the centre of the road. The road width for three legs of the intersection is 6m.

A dashed line to delineate the priority turn is proposed to be installed on Ellsmore Road with double barrier lines at either end of the turn line.

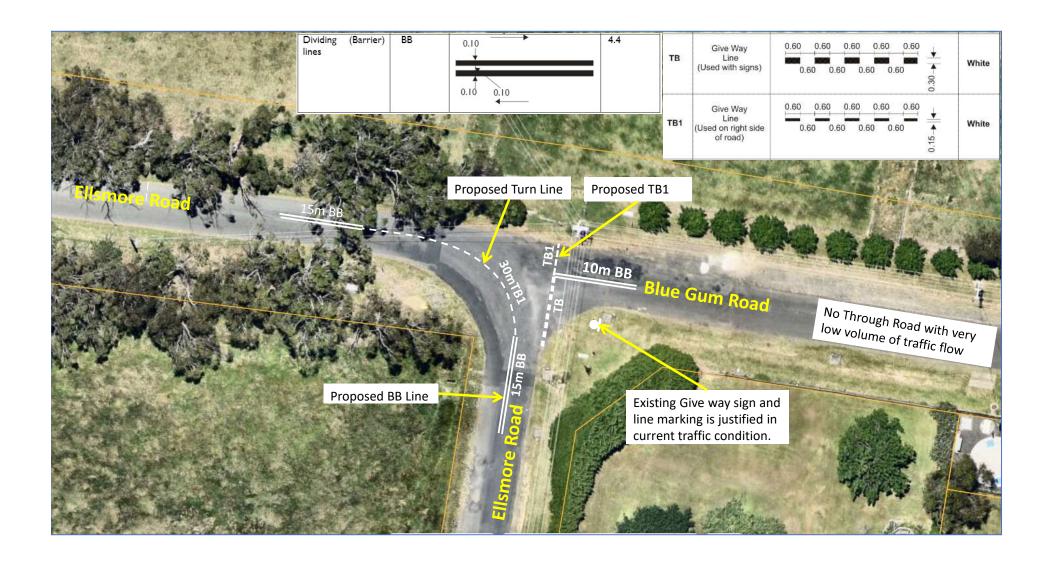
CONCLUSION

The traffic flow of Blue Gum Road needs to be controlled by installing a Give Way restriction in it. The location of new Give Way sign will have minimum impact on adjoining residents.

It is recommended that Council approves the recent installation of a Give Way sign and associated line marking, in Blue Gum Road at the intersection of Ellsmore Road Bundanoon.

ATTACHMENTS

1. Blue Gum Ellsmore Road Give Way Sign and Line Marking [6.3.1 - 1 page]



6.4 Range Road Glenquarry - Road reconstruction including signs and line marking.

Report Author: Traffic Engineer

Authoriser: Karin Targa

PURPOSE

To have the Committee's approval for the proposed road reconstruction with Signage and Line marking in the section of Range Road from George Emery Lane to Tourist Road, Glenquarry.

RECOMMENDATION

THAT Council approves proposed review and upgrading:

- Installation of new signs R4 1(B) on both direction at CH 1920 in Range Road, Glenquarry (Ref. Sheet 74 of 74).
- Installation of new BB line marking with RRPMs from:
 - a) CH465 CH550 at 12m centres (Ref. Sheet 72 of 74)
 - b) CH850 CH925 at 12m centres (Ref. Sheet 72 of 74)
 - c) CH1065 CH1130 at 12m centres (Ref. Sheet 73 of 74)
 - d) CH1235 CH1290 at 12m centres (Ref. Sheet 73 of 74)
 - e) CH1540 CH1605 at 12m centres (Ref. Sheet 74 of 74)
 - f) CH1740 CH1890 at 12m centres (Ref. Sheet 74 of 74)

REPORT

BACKGROUND

Range Road is a two-lane sealed road with a speed limit of 60 km/hr. It has a traffic count of 607 average annual daily traffic and a heavy vehicle percentage of 10.28%.

Sections of the road pavement have been found to be in very poor condition including poor drainage, failed asphalt surface and narrow road width.

This road section requires new pavement for approximately 2 km between George Emery Lane to Tourist Road. The works include the installation of new stormwater drainage and subsoil drainage, fence relocation, service relocations, dish gutter construction, vegetation removal, shoulder widening, signs, line marking and associated works.

REPORT

Range Road is a local road located 5 km southeast of Bowral and Glenquarry. Range Road has recently had improvement works undertaken.

The works will include:

- Subsoil drainage installation.
- Stormwater pit and pipe installations
- Concrete dish gutter construction
- Fence and service relocations.
- Road pavement reconstruction including signs and line marking.
- Vegetation removal

A set of plans for the road reconstruction has been prepared by Council's Project Delivery team. The Project Delivery team have requested Traffic Committee to endorse proposed signage & line marking as part of the road improvements.

The proposed road works will have a post construction pavement width of 7m. The line marking is proposed for the bends to improve road safety by helping prevent vehicles cutting the corner, and to better delineate the bends.

Range Road currently does not have any line marking. The centreline marking proposed in this report will be new.

Design Plans showing the road improvements, including signage and line marking are attached.

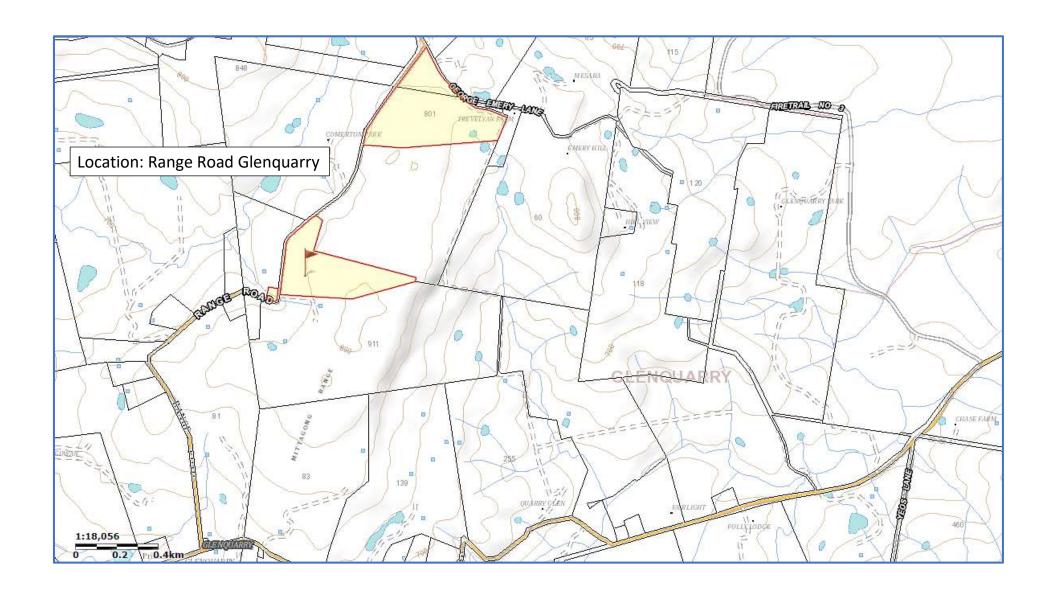
CONCLUSION

It is recommended that:

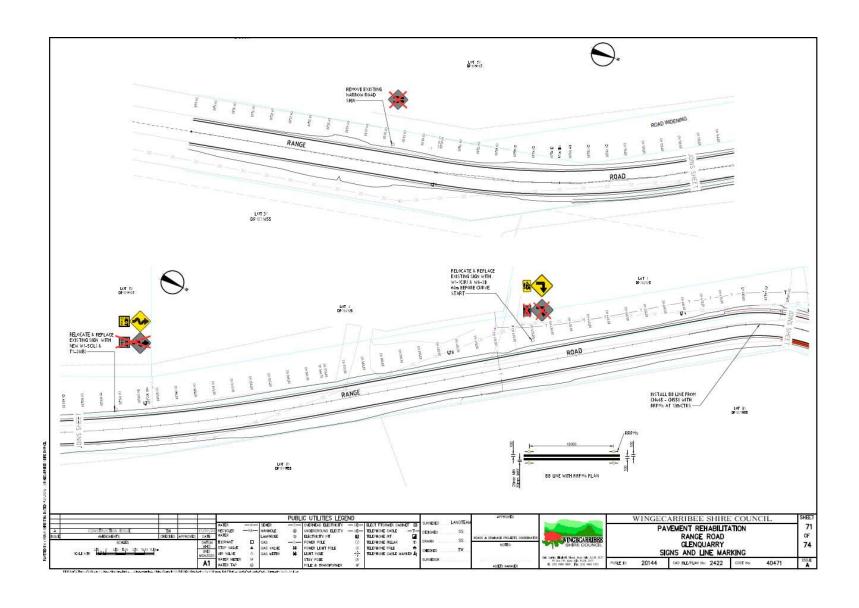
- Installation of new signs R4 1(B) on both direction at CH 1920 in Range Road, Glenquarry (Ref. Sheet 74 of 74).
- Installation of BB line with RRPMs from:
- a) CH465 CH550 at 12m centres (Ref. Sheet 72 of 74)
- b) CH850 CH925 at 12m centres (Ref. Sheet 72 of 74)
- c) CH1065 CH1130 at 12m centres (Ref. Sheet 73 of 74)
- d) CH1235 CH1290 at 12m centres (Ref. Sheet 73 of 74)
- e) CH1540 CH1605 at 12m centres (Ref. Sheet 74 of 74)
- f) CH1740 CH1890 at 12m centres (Ref. Sheet 74 of 74)

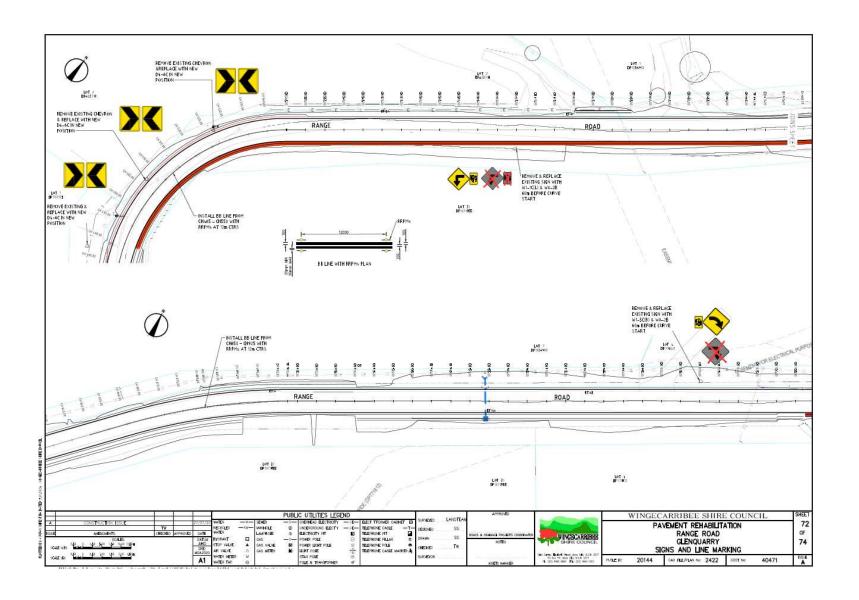
ATTACHMENTS

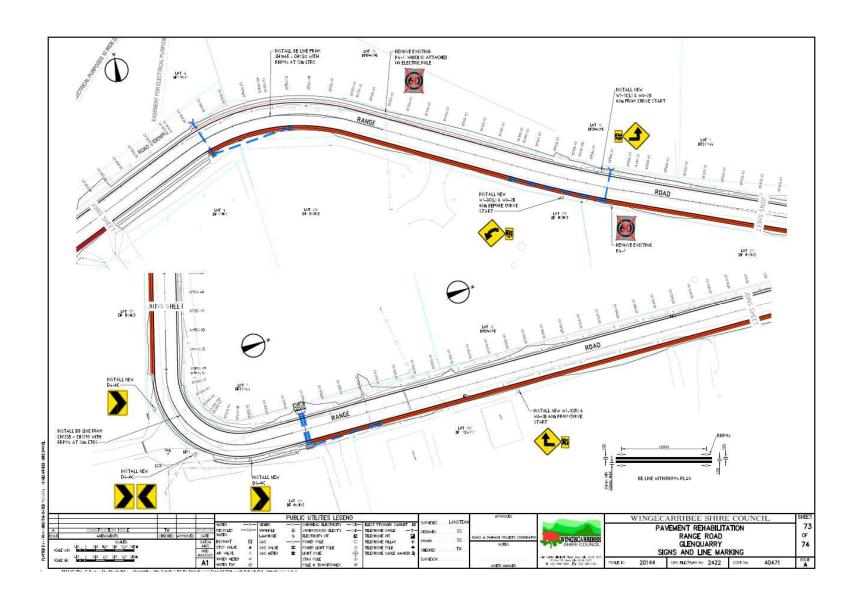
1. Range Road Glenquarry - Road reconstruction including signs and line marking. [**6.4.1** - 5 pages]

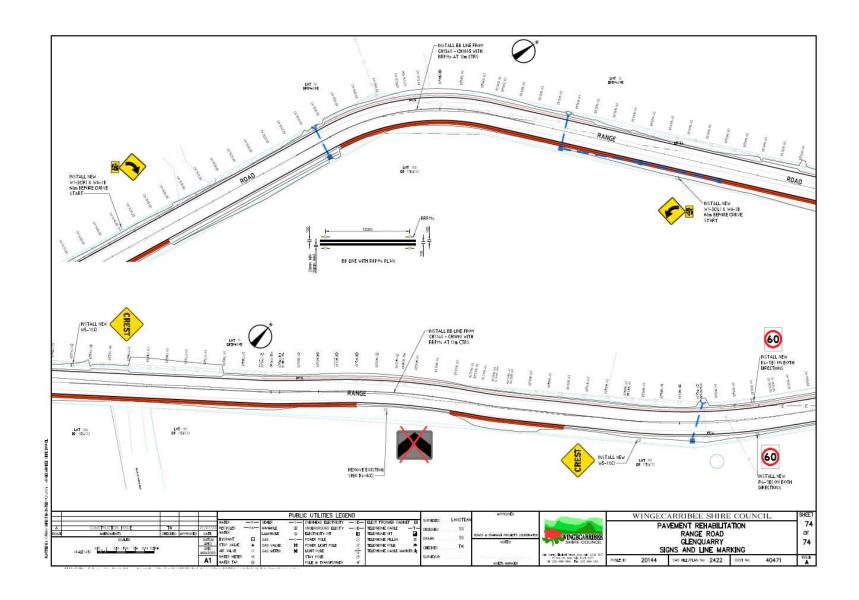


6.4.1 Range Road Glenquarry - Road reconstruction including signs and line marking.









6.5 Market Place, Berrima - Line marking for 45° angle parking spaces.

Report Author: Traffic Engineer

Authoriser: Karin Targa

PURPOSE

To advise and have Traffic Committee's approval for the recent painting for new line marking of existing unmarked 45° angle rear to the kerb parking spaces as FIGURE 2.2 LAYOUTS FOR ANGLE PARKING SPACES defined in AS/NZS 2890.1 :2004, on the northern kerb side of Market Place, Berrima.

RECOMMENDATION

THAT the line marking for existing unmarked 45° angle rear to the kerb parking spaces as FIGURE 2.2 LAYOUTS FOR ANGLE PARKING SPACES defined in AS/NZS 2890.1 :2004, on the northern kerb side of Market Place, Berrima is recommended for approval.

REPORT

BACKGROUND

Council received a request from the community to line mark the existing unmarked 45° angle rear to the kerb parking spaces on the northern kerb side of the Market Place, Berrima.

The existing 45° parking area has signage to indicate the parking restriction but no line marking is present.

REPORT

The parking area on Market Place, Berrima, is sign posted to specify 45° Angle Parking, Rear to Kerb, Vehicles Under 6m Only. The pavement width of this section of Market Place is 13m which includes the angle parking area.

A layout plan for the 45° angle line marking is attached.

The purpose of the line marking is to provide a better delineated 45° parking zone to create more efficient and orderly parking, and better compliance with the designated angle parking.

The line marking will provide positive benefits in that it will increase parking capacity with more efficient parking as vehicles are guided to park in manner that reduces the spacing between vehicles.

Vehicles often do not adhere to the sign posted 45° angle parking. Vehicles tend to park closer 90° or angle park in the wrong direction. This haphazard parking can be a safety issue as vehicles back into spaces with no guidance of the correct parking arrangement.

The proposed angle parking line marking complies with Australian Standards



Image 1 – Existing 45° angle parking zone with no line marking



Image 2 – This image captures vehicles not adhering to existing non line marked 45° parking area on Market Place

Angle parking line marking already exists on the Old Hume Highway in Berrima. The line marking outlined in this report is like the existing line marking on Old Hume Highway through the CBD of Berrima.



Image 2 - Existing 45° angle line marking on Old Hume Highway Berrima

CONCLUSION

The line marking will better define the intended angle parking arrangement and lead to more efficient and orderly parking on Market Place.

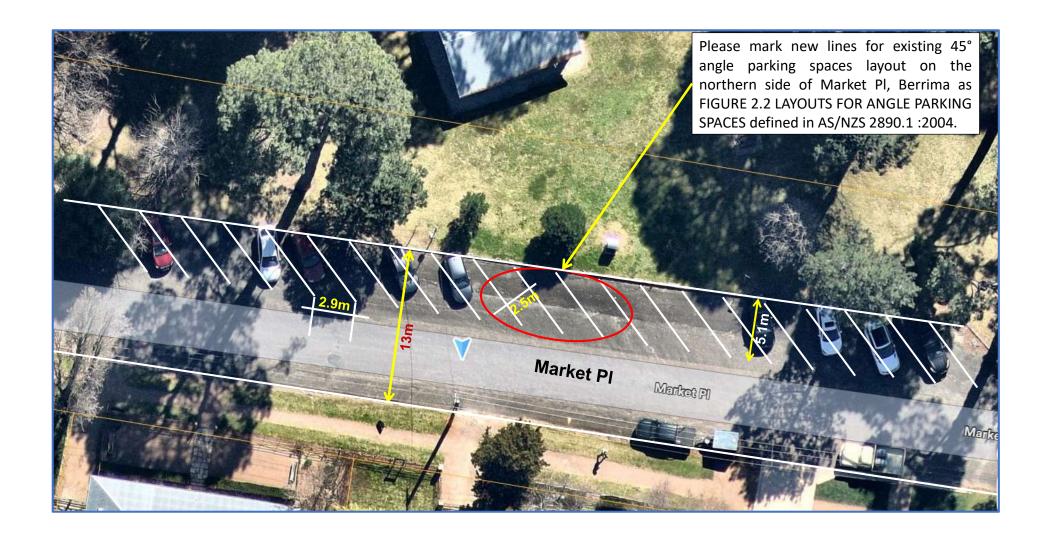
The line marking will support the existing 45° angle rear to the kerb parking spaces on the northern kerb side of Market Place, creating more efficient parking.

The 45° angle parking line marking on Market Place, Berrima is recommended for approval.

ATTACHMENTS

1. Market Place, Berrima - Line marking for 45° angle parking spaces [6.5.1 - 2 pages]





6.6 2024 Bowral Classic

Report Author: Traffic Engineer

Authoriser: Karin Targa

PURPOSE

Reporting on the traffic management arrangements for the 2024 Bowral Classic event.

RECOMMENDATION

<u>THAT</u> there is no objection to the traffic arrangements proposed for the 2024 Bowral Classic events on Saturday 19 October and Sunday 20 October subject to approval by the NSW Police and completion of the approval process for Class 2 Race Events as per the NSW Guidelines for Bicycle Road Races and the Guide to Traffic and Transport Management for Special Events including the approval of specified speed reductions and granting of Road Occupancy Licenses (ROL) by TfNSW.

REPORT

The seventh instalment of the Bowral Classic will take place on Saturday 19 October and Sunday 20 October 2024.

The Bowral Classic is a road cycling event that takes place on roads throughout the Wingecarribee Shire. The event includes three courses, the 150km Maxi Classic, the 120km Challenge Classic, and the 85km Rouleurs Classic. The ride starts at Bong Bong St, Bowral, between 6.30am and 8am.

The event village will be located at Loseby, Bowral. The first riders will return to Loseby Park from 10:00am. The last riders are expected to cross the finish line around 3:30pm.

Riders from all over Australia have registered for the event. Many will be staying in the Southern Highlands over the weekend bringing economic benefits to the local region.

An 'elite self-nominated group' of a (maximum) 75 riders will participate in the 150km Maxi Classic course, this group of riders is referred to as Highlanders.

When registering riders will be asked to provide their current Cycling Australia Race License. This is to ensure they are experienced at riding in teams or bunches.

Even though this event is not a race, this first group will be riding in an envelope with vehicles front and back for safety.

The vehicles in this group will be -

- 1 x Police vehicle (front)
- 1 x Mechanic
- 1 x Medical Vehicle (both rear). 3.3 Rouleurs Classic 85KM

Participants will be riding on open roads with traffic. Riders must obey all traffic rules and regulations, especially Police instructions. Event vehicles from the organisation will limit the speed of the riders at some points during the ride. In this case, the riders are forbidden to overtake the organisation vehicles. Any rider who violates this rule, will be disqualified from the event, resulting in a DNF.

Please see attached Traffic Management Plan and Traffic Guidance Scheme for traffic management details.

CONCLUSION

The Bowral Classic is a major event impacting upon an extensive part of the Shire but also promoting the area nationally and bringing in many thousands of visitors. The event organisers work closely with Council, NSW Police and Transport for NSW to minimise disruption and to follow the "Guidelines for Bicycle Road Races" and the "Guide to Traffic and Transport Management for Special Events".

The traffic management arrangements for 2024 Bowral Classic are recommended for approval.

ATTACHMENTS

Attachments under separate cover

- 1. Bowral Classic Traffic Management Plan 2024 [6.6.1 119 pages]
- 2. Bowral Classic 2024 Event Management Plan [6.6.2 19 pages]

6.7 Proposed Pedestrian Crossing - Lackey Road, Moss Vale

Report Author: Traffic Engineer

Authoriser: Karin Targa

PURPOSE

To review the proposal for the installation of a pedestrian crossing on Lackey Road, Moss Vale.

RECOMMENDATION

<u>THAT</u> the proposed pedestrian crossing with associated kerb blisters, signage and line marking on Lackey Road, Moss Vale be recommended for approval.

<u>THAT</u> the proposed No Stopping Zones on the approaches to the pedestrian crossing be recommended for approval.

REPORT

BACKGROUND

Transport for NSW plan to upgrade access to Moss Vale Railway Station. The upgrade will include a new accessible lift, paths and ramps to be installed at the location of the current pedestrian bridge which accesses Lackey Road.

A pedestrian crossing is proposed to be installed adjacent to the new lift to provide safer access for pedestrians when crossing Lackey Road.

REPORT

Transport for NSW proposes to improve access to Moss Vale Railway Station by upgrading the existing pedestrian bridge which connects with Lackey Road.

The upgrade works include a pedestrian lift, accessible ramps and the installation of a pedestrian crossing.

The pedestrian crossing will cross Lackey Road, allowing safer access from the existing footpath on the west side of the road to the proposed footpath and ramps on the east side of the road.

Lackey Road is a collector road with an Annual Average Daily Traffic volume of 3724 vehicles with 11.4% heavy vehicles.

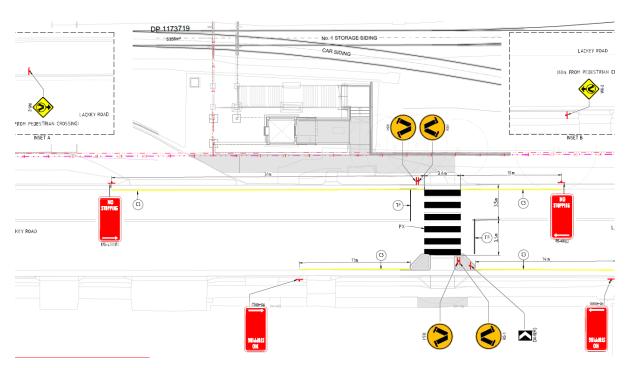


Image 1 – Proposed pedestrian crossing with signage and line marking



Image 2 – Aerial photograph showing existing site with proposed pedestrian crossing



Image 3 – Street view of the existing site showing pedestrian bridge

The No Stopping Zones will be 31m on the southbound approach and 10m on the southbound departure of the crossing. The No Stopping Zones will be 14m on the northbound approach and 11m on the northbound departure of the crossing.

CONCLUSION

The upgrades to Moss Vale Railway Station will provide greater accessibility to the community. The proposed pedestrian crossing will allow for safer crossing of Lackey Road to access the new pedestrian ramps and lift.

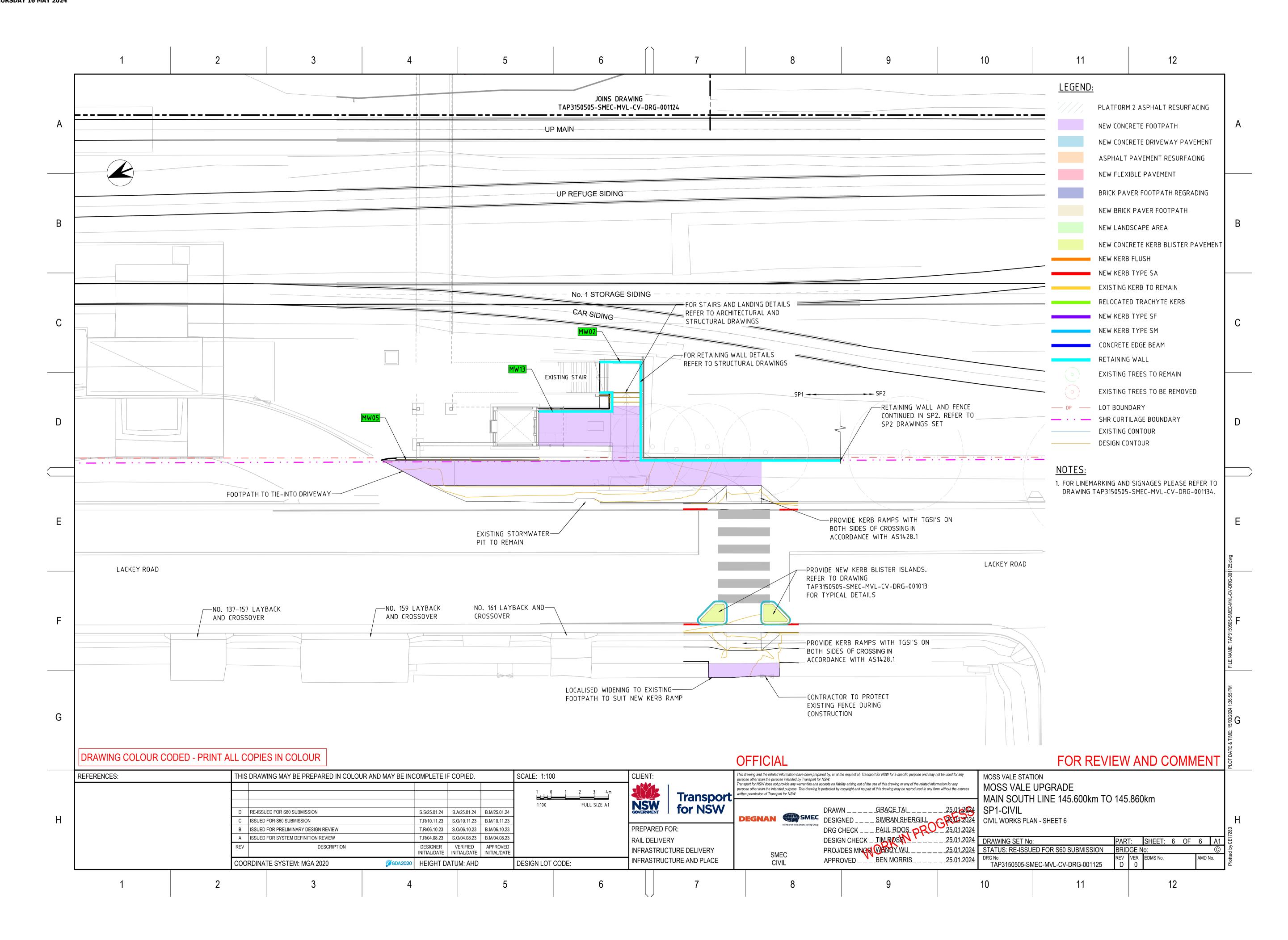
The proposed pedestrian crossing on Lackey Road, Moss Vale is recommended for approval.

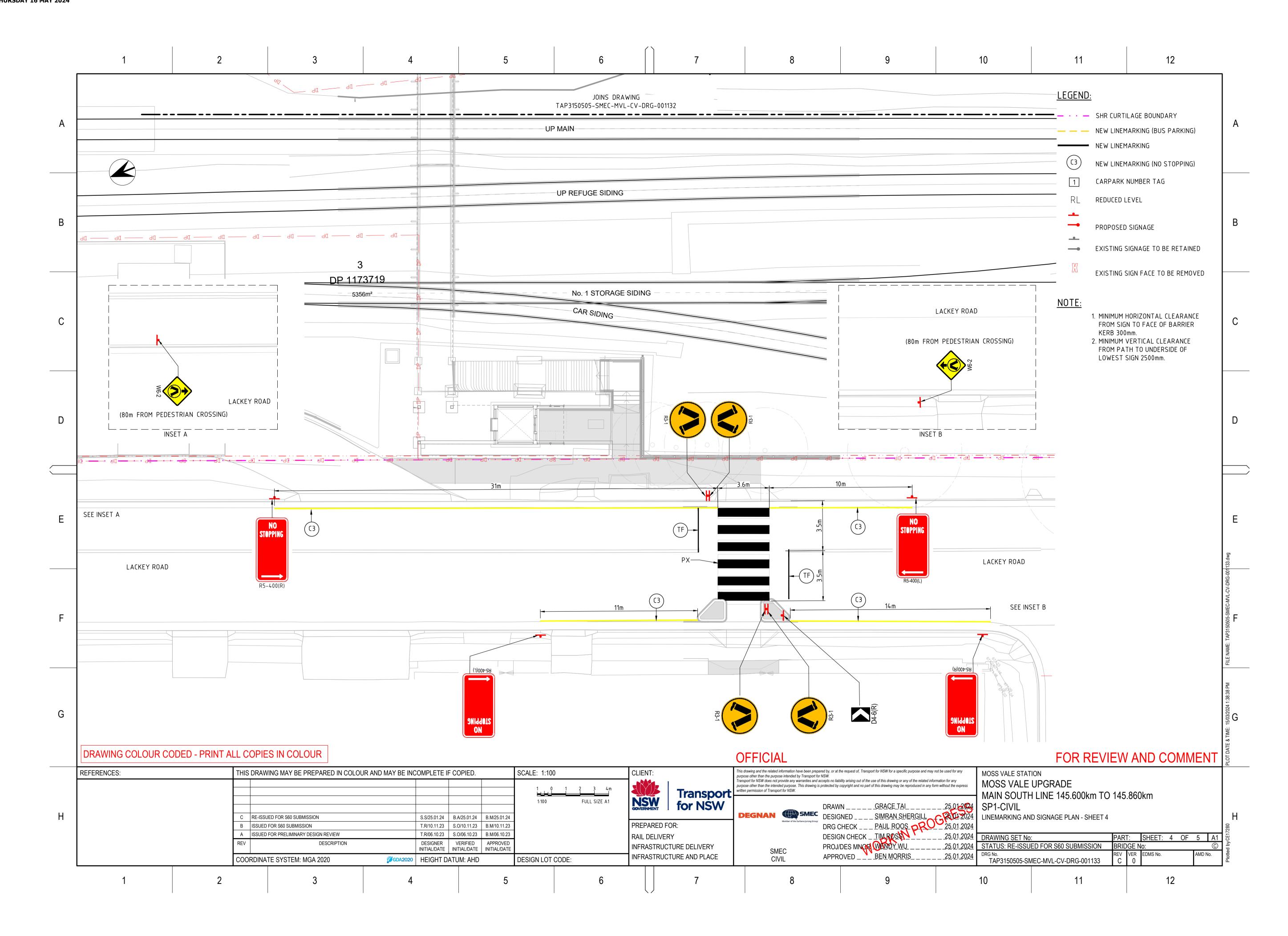
ATTACHMENTS

1. Moss Vale - Lackey Rd Pedestrian Crossing - Rev 0 - 010524 [6.7.1 - 3 pages]

SIGNAGE AND LINEMARKING	<u> </u>		SAFETY IN DESIG	<u>iN</u>											
 NON-FRANGIBLE SIGNS SHALL EI BY SAFETY BARRIER. 	THER BE PLACED OUTSI	DE THE CLEAR ZONE OR PROTECTED	1. REFER TO THE PRO	JECT HAZARD LOG FOR D	ETAILS OF SAFETY IN D	ESIGN ISSUES.									
 LOCATION OF PROPOSED SIGNS MAY BE ADJUSTED LONGITUDINALLY ON SITE TO SUIT SIGHT LINES SUBJECT TO APPROVAL BY THE DESIGN REPRESENTATIVE. ALL SIGNAGE TO BE CLEAR OF VEGETATION AND OBSTRUCTIONS. 				2. THE CONTRACTOR IS TO COMPLETE THEIR OWN RISK ASSESSMENT OF ALL WORK PROCEDURES PRIOR TO COMMENCING WORK.											
			3. THE CONTRACTOR RISK ASSESSMENT IS TO INCLUDE ALL RISKS AND SHALL NOT BE LIMITED TO THOSE LISTED ABOVE.												
4. SIGNAGE AND LINEMARKING TO B			PROJECT SPECIFI												
RELEVANT TFNSW GUIDES & STA TFNSW SPECIFICATIONS:	NDARDS,AUSTRALIAN S	STANDARDS AND THE FOLLOWING		T SPECIFICATIONS ARE A	PPLICARLE TO THE WOR	KS LINDER THIS PACKA	\GF								
- TfNSW D&C R110 - COLOURED SU	DEACE COATINGS FOD R	IIS I ANES AND CYCLEWAYS	TfNSW SPECIFICATIONS		THE WOR	NO ONDER THIS I MERK	vac.								
- TfNSW D&C R131 - GUIDEPOSTS		US LANES AND CICLEWATS	TS 01456.2 CONSTRUCT	ION SURVEYS											
 TfNSW D&C R141 - PAVEMENT MA TfNSW D&C R142 - RETROREFLECT 	TIVE RAISED PAVEMEN	T MARKERS	TS 03255.2 KERBS AND TS 03260.2 TRENCH DR.												
TfNSW D&C R143 - SIGN POSTINGTfNSW D&C R145 - PAVEMENT M			TS 02158.2 EARTHWOR TS 03264.1 CONCRETE (KS FOR GENERAL USE), MORT	TAR AND GROUT										
TfNSW D&C 3357 - THERMOPLASTfNSW D&C 3359 - PROFILE THEF				ITUMINOUS SURFACING (WITUMINOUS SURFACING (W											
TfNSW D&C 3360 - TWO PART CC TfNSW D&C 3400 - MANUFACTUR	OLD APPLIED ROAD MAR	KING MATERIAL	TS 03283.2 HEAVY DUT	Y DENSE GRADED ASPHA	ALT	BIT OF IEIT,									
- TfNSW D&C B220 - PROTECTIVE	TREATMENT OF BRIDGE	STEEL WORK	TS 03315.2 GRANULAR	DENSE GRADED ASPHAL PAVEMENT BASE AND SU											
- TfNSW D&C B240 - SUPPLY OF E	OLIS, NUIS, SCREWS A	AND WASHERS	TS 03318.2 AGGREGATE TS 03316.2 SELECTED N	ES FOR ASPHALT 1ATERIAL FOR FORMATION	N LAYERS										
5. REFER TO TFNSW D&C 3400 – MA SECTION 10 FOR SIGN FACE COLOU		ERY OF ROAD SIGNS AND AS1743	TS 03331.2 BITUMEN AL	DHESION AGENT (FOR BITU	JMEN)										
		A SIGN, THE SIGN SHOULD BE TURNED HE NORMAL TO THE HEADLIGHT BEAM	TfNSW DRAWINGS: R0300 KERB AND CHANI	NEL SERIES											
/ LINE OF SIGHT 200M IN ADVANC SHOULD BE TILTED BACK 5° TO T	E OF THE SIGN. THE VE HE LINE OF SIGHT ON LE	RTICAL AXIS OF OVERHEAD SIGNS VEL AND DOWNHILL GRADES. ON	R0400 EARTHWORKS SE												
UPHILL GRADES TILT BACK AT 5° PROBLEMS OCCUR OVER THE RAN		BUT ENSURE THAT NO REFLECTION ANCES.	AMB	TIIVODUC											
7. LATERAL OFFSET DIMENSION FOR SAFETY BARRIER SYSTEM HAS E		LOCATED BEHIND GUARDRAIL CCEPTANCE DOCUMENT FOR SAFETY	T HR CI 12110 ST EAR T HR CI 12111 SP	IHWUKKS											
BARRIER PRODUCT.			TS 04951.2:1.0 TS 04955.1:1.0												
B. CHEVRON AND DIAGONAL LAYOU WITH THE RMS DELINEATION GUID	•	E AND SPACING TO BE IN ACCORDANCE	TS 04951.1:2.0 TS 04992												
9. RETROREFLECTIVE RAISED PAVE EDGE, BARRIER LINES UNLESS NO		S) SHALL BE PLACED ON ALL LANE, NG OF RAISED MARKERS SHALL BE IN													
ACCORDANCE WITH RMS DELINEA	TION GUIDE AND TFNSW	D&C SPECIFICATION R142.													
 CONNECTION OF SIGN FACES AND WITH MANUFACTURERS REQUIRED 															
CONCRETE NOTES															
	ATION FOR PRAINACE CA	COLICTURES TO BE DALING													
 CONCRETE EXPOSURE CLASSIFICA MINIMUM 28 DAY COMPRESSIVE S 															
3. ALL CONCRETE WORK SHALL BE I															
4. PRECAST CONCRETE MEMBER SHA															
MAX WATER/CEMENT RATIO SHA BE 390kg/m3/ UNO.	LL BE 0.46. AND MIN TO	TAL CEMENTITIOUS CONTENT SHALL													
6. EDGES SHALL BE CHAMFERED 20: SPECIFIED OTHERWISE.	<20 AND RE-ENTRANT A	NGLES FILLETED 20x20 UNLESS													
7. NO FINES CONCRETE, 15MPa.															
DRAWING COLOUR CODED -	PRINT ALL COPIE	S IN COLOUR						OFFICIAL							ID COMMEN
:FERENCES:	THIS DRAW	ING MAY BE PREPARED IN COLOUR AND	MAY BE INCOMPLETE IF COPIED.	SCALE: NTS	<u> </u>	CLIENT:		This drawing and the related information have bee purpose other than the purpose intended by Trans		f, Transport for NSW for a specific purpose	e and may not be used for any	MOSS VALE ST		VEVIEVV AIV	ID COMMINICI
							ansport	purpose other than the purpose intended by Trans Transport for NSW does not provide any warrantie purpose other than the intended purpose. This dra written permission of Transport for NSW.	es and accepts no liability arising ou			MOSS VAL	E UPGRADE	km TO 145 0001	m
	D RE-ISSU	ED FOR S60 SUBMISSION	S.S/25.01.24 B.A/25.01.24	B.M/25.01.24			r NSW	######################################	DRAWN	GRACE TAI SIMRAN SHERGI	25.01-2024		TH LINE 145.600	KIII I∪ 145.86Uk	lf1
		FOR S60 SUBMISSION FOR PRELIMINARY DESIGN REVIEW		B.M/10.11.23		PREPARED FOR:		Member of the Surbana Juros	DESIGNED DRG CHECK	SIMRAN SHERGI PAUL ROOS 👩	ILL 25.01.202 4	GENERAL NOT	ES - SHEET 2		
	A ISSUED REV	FOR SYSTEM DEFINITION REVIEW DESCRIPTION	T.R/04.08.23 S.O/04.08.23 DESIGNER VERIFIED VERIFIED INITIAL (CATE)	APPROVED		RAIL DELIVERY INFRASTRUCTURE D)FI IVERY		DESIGN CHE	CK_TIMROSS	<u>25.01.2024</u>	DRAWING SET	No: SUED FOR S60 SUBMIS	PART: S	HEET: 2 OF 2
	COORDINA	TE SYSTEM: MGA 2020	INITIAL/DATE INITIAL/DAT GDA2020 HEIGHT DATUM: AH		CODE:	INFRASTRUCTURE A		SMEC CIVIL		BEN MORRIS		DRG No.	6-SMEC-MVL-CV-DRG-00	REV VER E	

6.7.1 Moss Vale - Lackey Rd Pedestrian Crossing - Rev 0 - 010524





6.8 Railway Avenue, Wingello - Removal of Pedestrian Refuge

Report Author: Traffic Engineer

Authoriser: Karin Targa

PURPOSE

To not support a pedestrian refuge from previously approved road work design plan in relation to Casburn Park, Wingello upgrade works

RECOMMENDATION

<u>THAT</u> the pedestrian refuge shown in the design plans produced by Complete, design plan No. 3393, in relation the Casburn Park upgrade, <u>not</u> be recommended for construction.

REPORT

BACKGROUND

At the 24 August 2023 Local Traffic Committee meeting a civil works design plan in relation to upgrade works to Casburn Park was recommended for approval.

The civil works included sealing the verge, kerb and gutter, footpaths and a pedestrian refuge.

REPORT

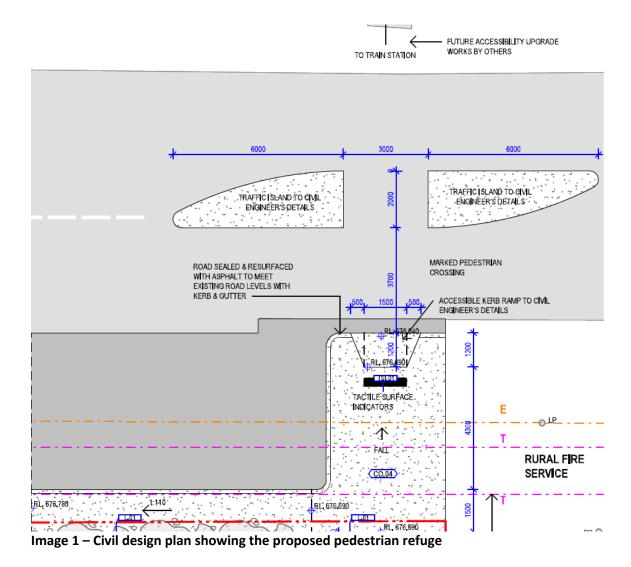
The design plans for the civil works in relation to Casburn Park upgrade work was recommended for approval by Traffic Committee at the 24 August 2023 meeting.

The civil design plans included a pedestrian refuge. Dimensions of the refuge and west bound lane were shown to be adequate.

Construction of the civil works began in February 2024. It was noticed that the overall final road width was 8m. A 2m refuge would leave only 3m for each travel lane. The civil works included a concrete dish drain at the interface between the road and the parking area. The 3m lane width on the west bound lane is further reduced in width due to the edge of the dish drain.

The 3m width of the lanes will force vehicles to the edge of the lanes where they will drive on the dish gutter on the west bound lane, and on the broken edges of the road on the east bound lane or be forced to drive close to the refuge and waiting pedestrians.

The Annual Average Daily Traffic volume for Railway Parade is 839 vehicles with 10% heavy vehicles.



This report proposes to not include the pedestrian refuge due to the insufficient road width.

A footpath and kerb ramp are provided at the desired crossing point to the train station. There is over 500m of sight distance when looking to the east. There is approximately 180m of sight distance when looking to the west which includes a stop sign that will slow traffic. The speed limit on the portion of Railway Parade is 50km/h.



Image 2 – Aerial photo with subject location shown with the red dot



Image 3 – Pre-construction image of the subject location (looking east)



Image 4 - Civil works during construction showing the dish drain (looking east)

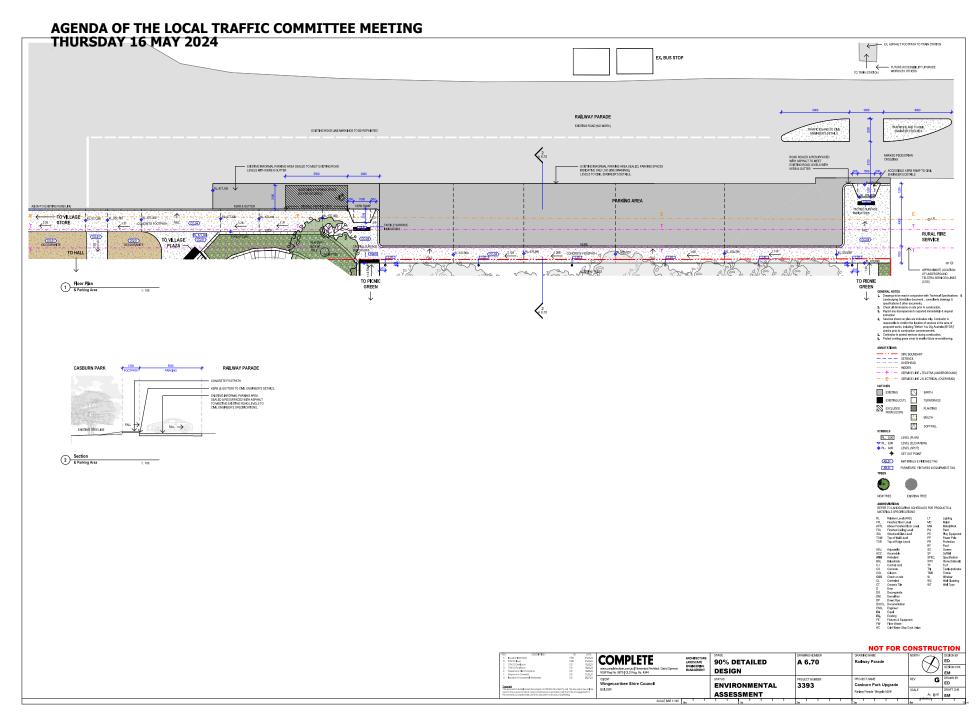
CONCLUSION

The road width on Railway Parade, Wingello, is not enough to install a pedestrian refuge and still have sufficient road width, particularly for heavy vehicles.

It is not recommended that the pedestrian refuge as shown in the civil design plans for the Casburn Park upgrade be constructed.

ATTACHMENTS

1. Casburn Park Upgrade - Parking and Pedestrian Facilities [6.8.1 - 1 page]



6.9 Access Road Arrangements for 6 Lot Subdivision at 267 Bundanoon Road Exeter

Report Author: Traffic Engineer

Authoriser: Karin Targa

PURPOSE

To assess the proposed access road arrangements for a 6 lot subdivision at 267 Bundanoon Road, Exeter

RECOMMENDATION

<u>THAT</u> the median island, signage and line marking arrangements as shown in design plan drawing No. 22071-D01-V8 designed by CJP Consulting Engineers for the access to the proposed subdivision be recommended for approval.

THAT further information be requested for the proposed turning area on Ringwood Lane, Exeter

REPORT

Council received a development application for a 6 lot subdivision at 267 Bundanoon Road, Exeter (DA No. 22/0890).

The subdivision requires an access road which is proposed to be a 7m radius cul-de-sac accessing from Bundanoon Road. The cul-de-sac will be located approximately 70m east of Ringwood Road.

Due to limited sight distance the entrance is proposed to not allow right turns into the access road. Signage and a median island will be in place to notify drivers of the No Right Turn and restrict the right turn movement.

A 7m radius turning area is proposed to be constructed on Ringwood Lane to cater for the inability to turn right into the subdivision entry road. Ringwood Lane is located 170m west of the proposed access road to the subdivision.

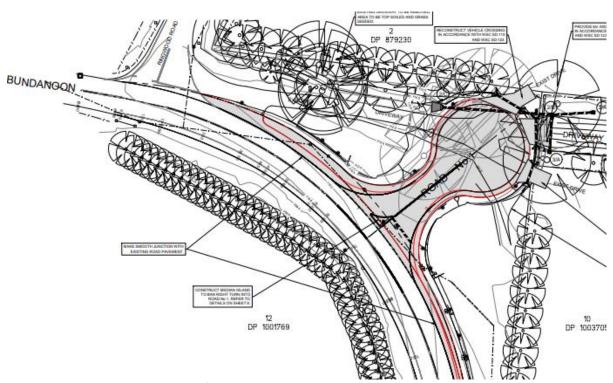


Image 1 – Proposed access road from Bundanoon Road

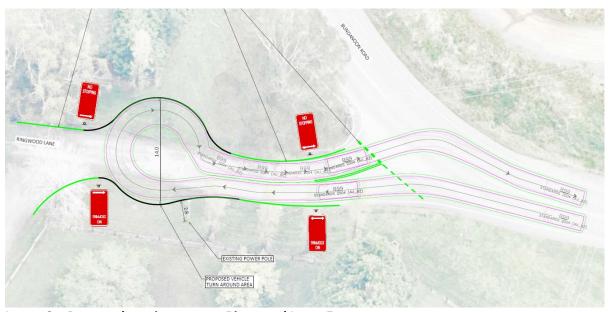


Image 2 – Proposed turning area on Ringwood Lane, Exeter



Image 3 – Aerial image of the subject area with location of proposed access road at the red dot

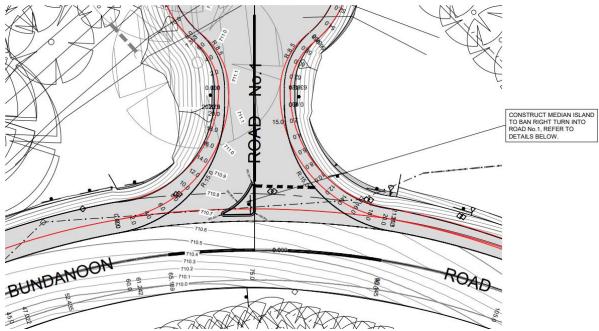


Image 4 – Proposed median island to prevent right turn movements into the subdivision

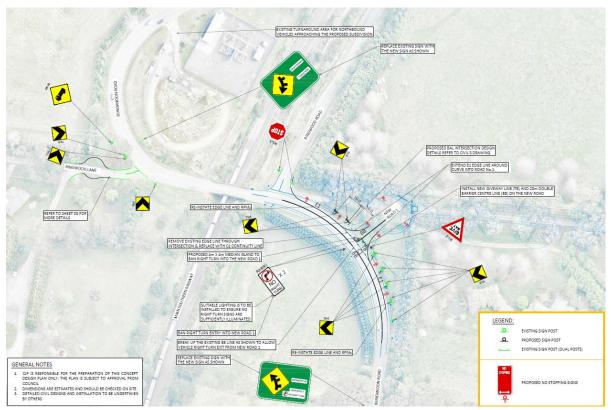


Image 5 - Signage and line marking plan

Complete signage and line marking plan, swept turning paths and road safety audit are attached with this report.

Council engaged the services of an expert traffic engineer to review the design plans. Sight distances were checked, and measures taken to address sight distance deficiencies

The signage proposed includes Give Way, Curve Alignment Makers, No Right Turn, No Stopping and advanced warning of the road layout. Double barrier lines, continuity lines and edge lines are proposed. The arrangement of the signage and line marking are attached.

CONCLUSION

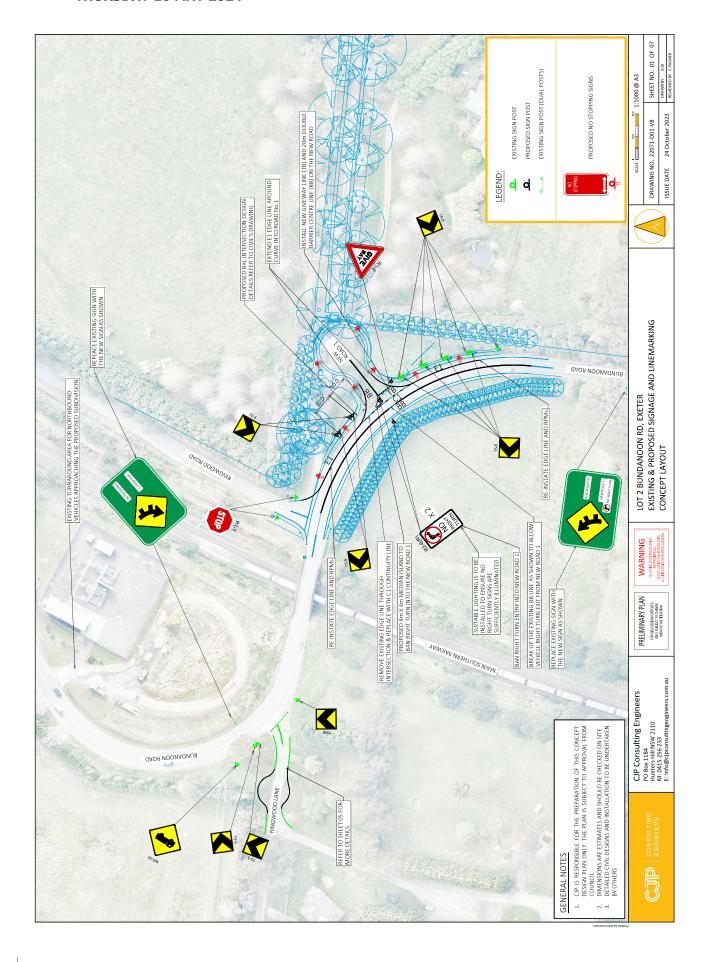
Signage and line marking, sight distances, and road dimensions have been assessed to be appropriate.

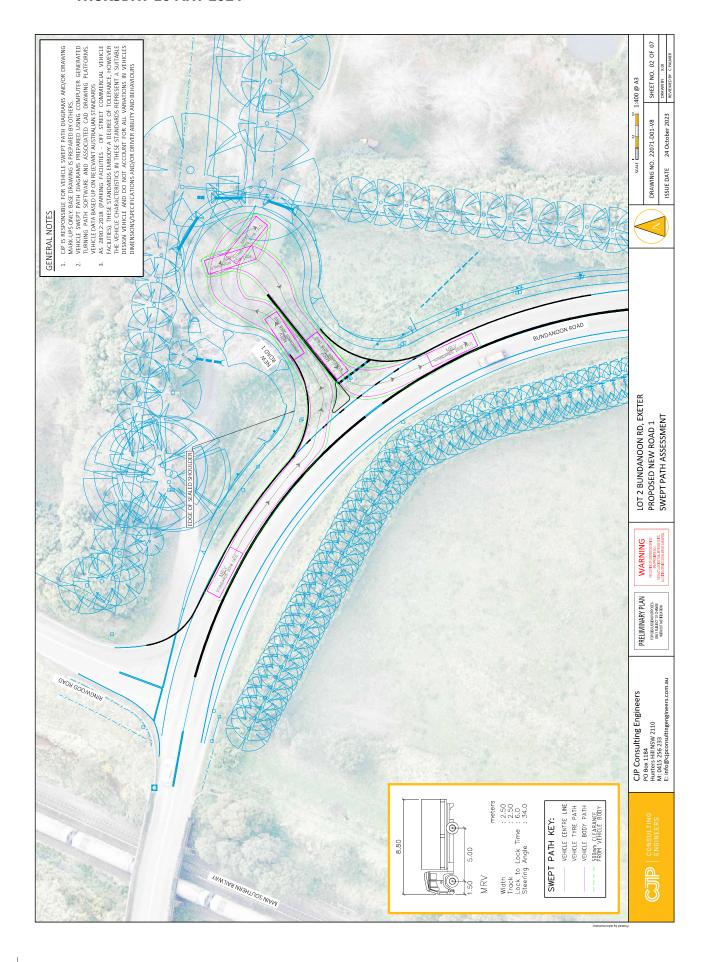
The proposed access road for the 6 lot subdivision at 267 Bundanoon Road is the be recommended for approval.

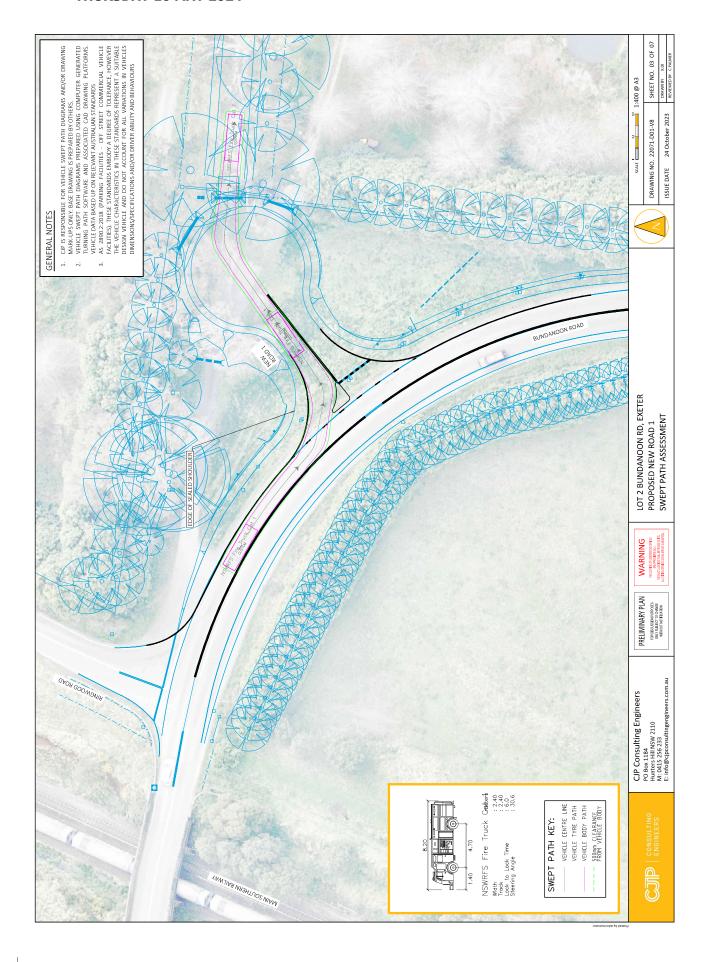
The plans provided for the proposed turning area on Ringwood Lane does not have enough information at this stage to be recommended for approval. More information on signage, line marking, right of way of vehicles, and engineering specifications, such as retaining walls, batters, road material and drainage will need to be provided.

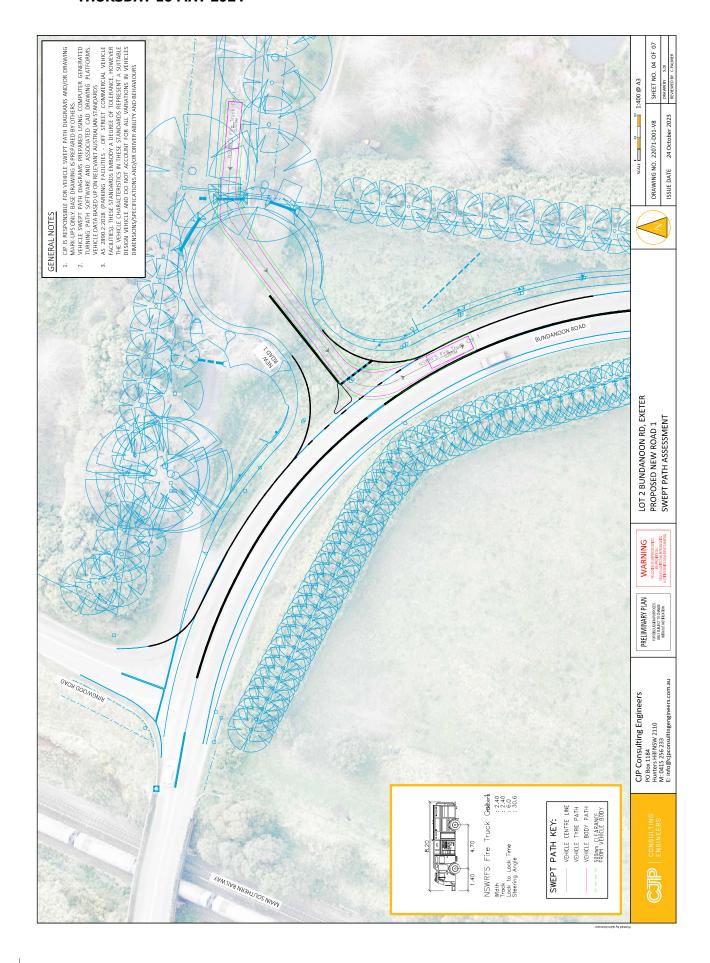
ATTACHMENTS

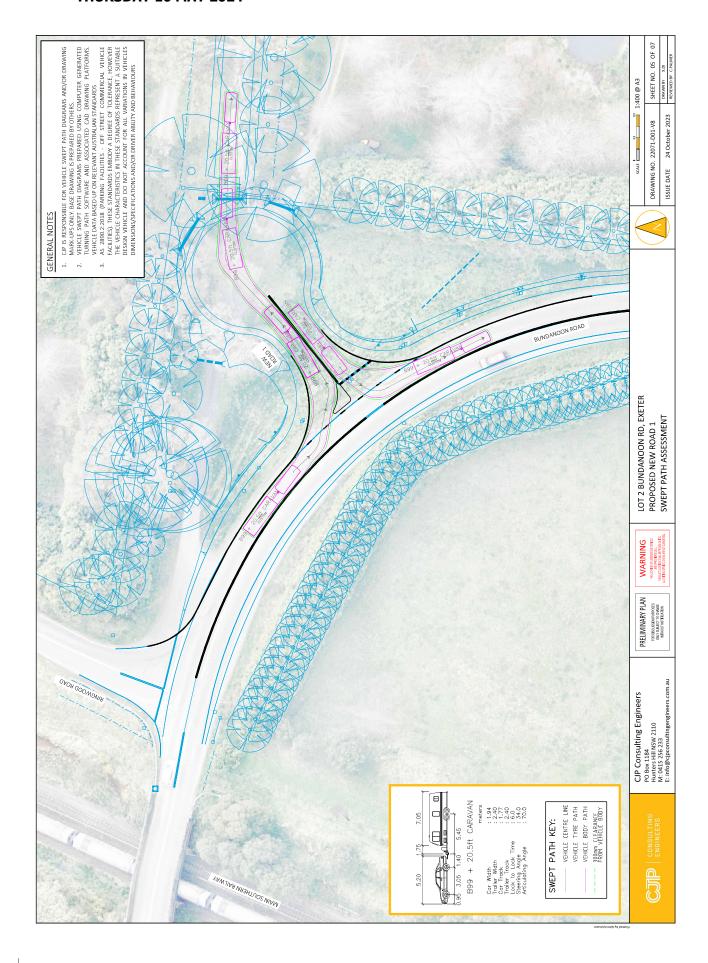
- 1. 267 Bundanoon Road Signage, Line Marking and Swept Paths [6.9.1 7 pages]
- 2. 267 Bundanoon Road Road Safety Audit [6.9.2 13 pages]

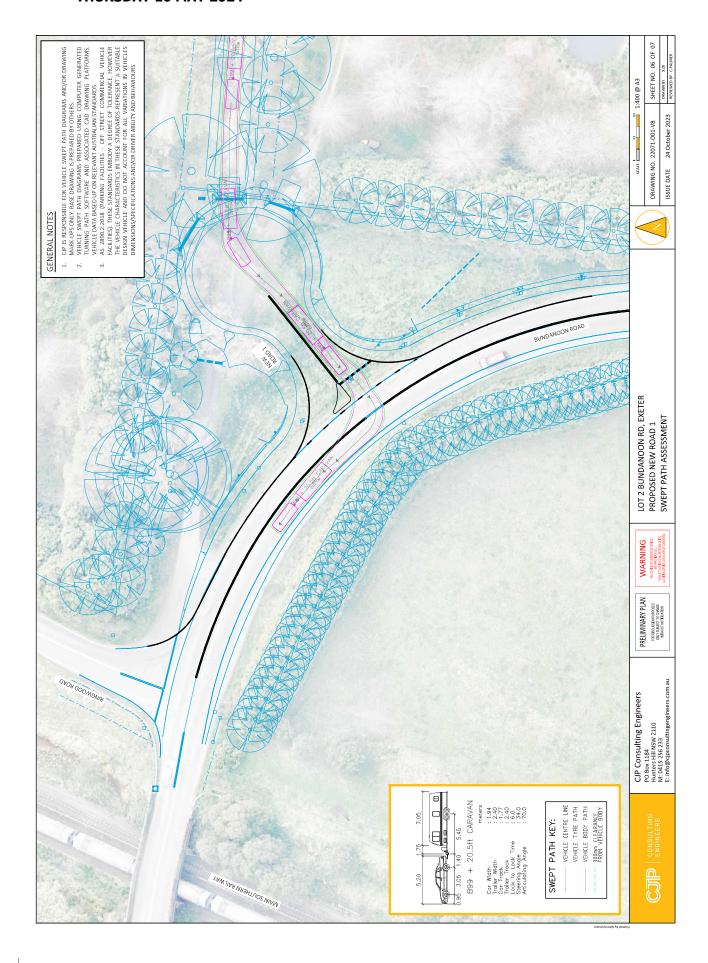


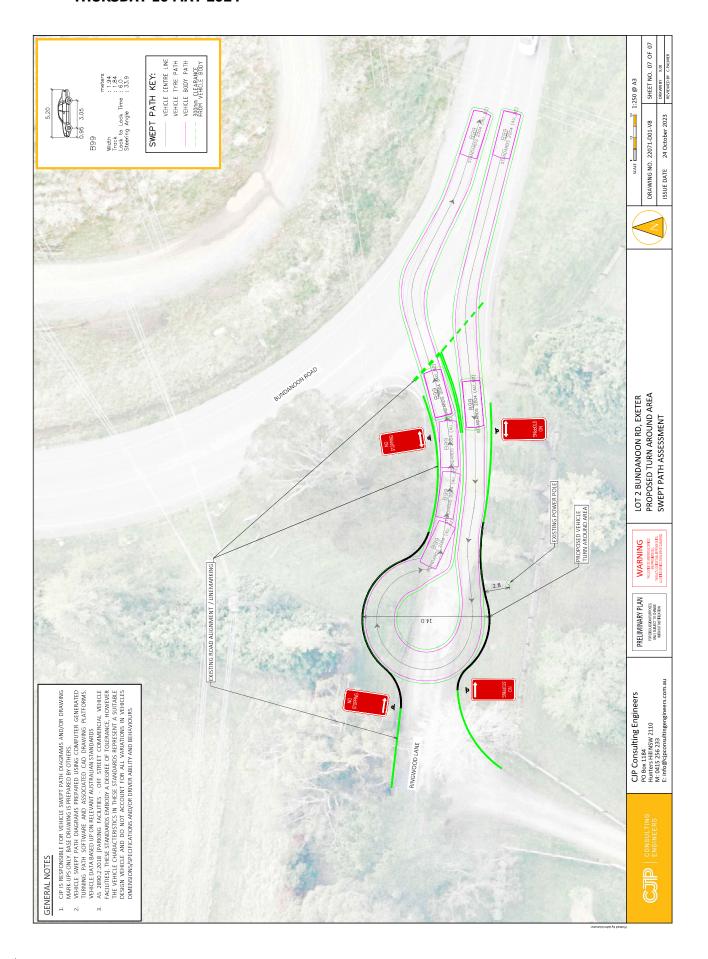












Proposed Access Works - Lot 2, DP1275829

Road Safety Audit

Detailed Design Stage

1st November 2023

JN23040_Report01 Rev03 - CDS 267 Bundanoon Detailed

On Behalf of

Civil Development Solutions



Ph: 0405 345 124 admin@amwc-rsa.com www.amwc-rsa.com ABN: 13 619 698 985

NSW RSA Register Details

Final Signoff Date	05/05/2023
Title of Audit	Proposed Access Works - Lot 2, DP1275829
Location of Audit	Exeter
TfNSW Project?	No
Project Description (Max 300 char)	The aim of this project is to construct a new access to Lot 2, DP 1275829 from Bundanoon Road in Exeter
Purpose of Audit (Max 300 char)	The aim of this Road Safety Audit (RSA) is to assess the detailed design plans in the context of the existing conditions, and the interface between existing and proposed works
State of Audit	NSW
Stage of Audit	Detailed Design Stage
Client Company	Civil Development Solutions
Client Contact	Richard Anderson
Client Phone	02 4862 1277
Client Email	richard@cdsolutions.com.au
Audit Team Lead	Aaron Walton

Road Safety Audit Proposed Access Works - Lot 2, DP1275829

Table of Contents

NSW	/ RSA Register Details	2
1	Project Description	4
2	Study Area	4
3	Auditable Data	4
4	Previous Audits	4
5	Audit Stage	5
6	Exclusions	5
7	Audit Team	5
8	Audit Program	5
9	Audit Risk Assessment Technique	6
10	Audit Findings	7
11	Formal Statement	13

1 Project Description

The aim of this project is to construct a new access to Lot 2, DP 1275829 from Bundanoon Road in Exeter. Proposed works include pavement shoulder widening, construction of a new access road and terminating cul-de-sac, existing access reconstruction, signage, line marking and drainage.

The aim of this Road Safety Audit (RSA) is to assess the detailed design plans in the context of the existing conditions, and the interface between existing and proposed works.

2 Study Area

The general audit location is shown below.



Source - snazzymaps.com

3 Auditable Data

The following data was referenced during the audit:

- > Proposed Access Works Lot 2, DP1275829 'Mittabah' Bundanoon Rd Exeter
 - (Rev A 11/10/2021)
- > Lot 2 Bundanoon Road, Exeter Existing & Proposed Signage and Linemarking Concept Layout
 - (Rev V1 10/04/2023)

4 Previous Audits

The audit team has previously undertaken an Existing Stage Road Safety Audit for this project. Findings raised in previous audits have not been raised again in this audit.

JN23040_Report01 Rev03 - CDS 267 Bundanoon Detailed

Road Safety Audit Proposed Access Works - Lot 2, DP1275829

5 Audit Stage

A Detailed Stage Audit was carried out on the 16th of April 2023 including a desktop assessment of the auditable data. A site visit of proposed works was carried out during an Existing Stage Audit on the 25th of October 2022 during day and night conditions. At the time of the site visit the weather conditions were clear and the traffic conditions were light.

The audit was generally undertaken in accordance with 'TfNSW Guidelines for Road Safety Audit Practices (2011)' and 'Austroads: Guide to Road Safety Part 6 (2022)'.

6 Exclusions

At the time of the audit there were no exclusions presented to the audit team.

7 Audit Team

The audit team and client details are shown below.

Table 7-1 Audit Team & Client Details

Role	Name	
Client (Sponsor)	Civil Development Solutions	
Client Contact	Richard Anderson	
Client Email	richard@cdsolutions.com.au	
Lead Auditor	Aaron Walton	RSA-02-0501 - Level 3 Auditor
Lead Auditor Email	admin@amwc-rsa.com	
Team member	Tracey Norberg	RSA-02-0964 - Level 3 Auditor

8 Audit Program

The audit program details are shown below.

Table 8-1 Audit Program

Activity	Date	Attendees
Opening Meeting	28/08/2022	Aaron Walton, Richard Anderson
Site Inspection	25/10/2022	Aaron Walton, Tracey Norberg
Detailed Design Audit	16/04/2023	Aaron Walton, Tracey Norberg
Draft Report Internal Review	17/04/2023	RSA Report (Rev00)
Draft Report External Responses	18/04/2023	RSA Report (Rev01)
Completion Meeting	03/05/2023	Aaron Walton, Richard Anderson
Final Report	05/05/2023	RSA Report (Rev02)
Final Report - Updated Responses	01/11/2023	RSA Report (Rev03)

JN23040_Report01 Rev03 - CDS 267 Bundanoon Detailed

Road Safety Audit Proposed Access Works - Lot 2, DP1275829

9 Audit Risk Assessment Technique

For each of the safety issues identified, the level of risk has been determined. The tables below are extracted from Austroads: Guide to Road Safety Part 6 (2022) and have been used in the assessment of risk for this audit.

Table 9-1 Incident Likelihood

Likelihood Description	
Almost Certain Once per quarter	
Likely Once per quarter to once per year	
Possible	Once per year to once every three years
Unlikely Once every three years to once every seven years	
Rare	Less than once every seven years

Table 9-2 Incident Severity

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

Table 9-3 Incident Priority for Mitigation

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

Table 9-4 Resulting Level of Risk Matrix

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

Safe System crash outcome threshold

10 Audit Findings

Table 1	Table 10-1 Audit Findings			
	Safety Hazard Finding	Risk Assessment	ent	Project Manager Response
d 01	There is a right turn restriction for northbound vehicles on Bundanoon Road entering New Road 01. On site the audit team could not located a safe turn around point past the right turn restriction. There is a risk that a northbound motorist may attempt unsafe movements such as U-turns at intersection points, property accesses or in locations of narrow road shoulder or restricted sight distance to turn around and enter New Road 01 resulting in rear end or side impact collisions.	Likelihood - Possible Severity - Serious Priority - High	ible	The analysis and design of the proposed intersection resulted in a proposal for no right turn into the site from Bundanoon Road. This was as a result of limited SISD distance from the south limitations of providing a BAR on the existing road. Due to the very limited amount of traffic movements that is expected to occur for this movement it was considered reasonable and safer to ban the right turn movement. It is our opinion there is opportunity for the provision of a turning head arrangement a short distance along Ringwood Lane to allow for vehicles to turnaround and this risk can be significantly downgraded. This turnaround location is only 190m to the west of the proposed intersection location and has good sight distance in both directions. The proposed turnaround area on Ringwood Lane is setback approximately 30m from the Bundanoon Road intersection, thereby achieving a storage capacity of 4 cars. This is unlikely to ever reach full storage capacity, such that the turnaround area should be clear at all times.

JN23040_Report01 Rev03 - CDS 267 Bundanoon Detailed

No Right Turn New Road 01

Item

The proposed signage plan has been modified to indicate curved roads rather than straight roads.

Moderate Medium

There are advanced intersection signs proposed on the northern and southern approaches of Bundanoon Road.

Intersection Signs On Approaches

Safety Hazard Finding

Item

The signs indicate intersection points on a straight alignment however the alignment is curved.

Severity -Priority -

There is a risk that a motorist may not anticipate the intersection points to be on the curve resulting in rear end collisions with a turning vehicle.

Risk Assessment Likelihood - Unlikely

Project Manager Response

	No.
Oliv Millery	
The state of the s	
1 1 1 1 1 1 1	SOLICIONIST AND THE SOLICION SOLICIONI SOLICION SOLICION SOLICION SOLICION SOLICION SOLICION SOLICIONI
TO SECURITY OF THE SECURITY OF	S S S S S S S S S S S S S S S S S S S

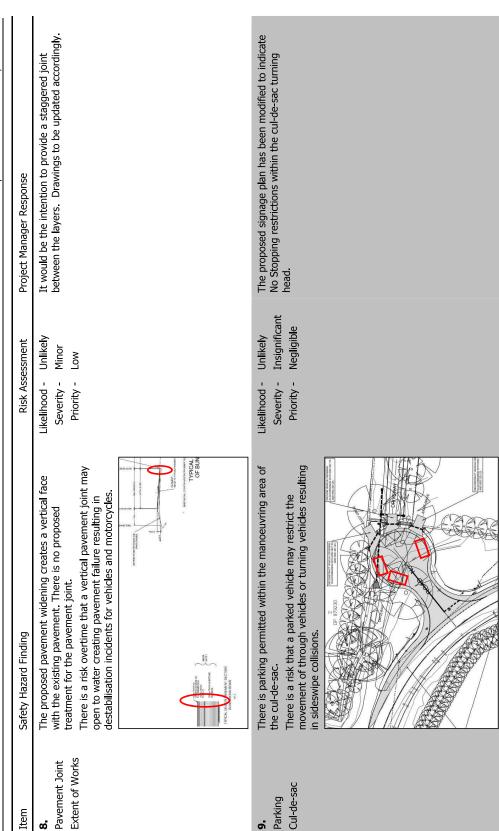
JN23040_Report01 Rev03 - CDS 267 Bundanoon Detailed

Proposed Access Works - Lot 2, DP12/5829	Risk Assessment Project Manager Response	Likely Intention is for the existing access to be removed. Plans Severity - Moderate to be updated to reflect this. Priority - High	Likelihood - Unlikely This is unlikely (as noted) — the high point is only 19m from the cl of the road and the road is crowned. Limited flow path over existing Bundanoon Road however analysis can be undertaken to confirm.
	Safety Hazard Finding	There is no data provided for retention or removal of the existing access. There is a risk that motorists may attempt to use the existing access point, particularly with the right turn restriction for northbound motorists. Risks associated with the existing access point have been raised in the existing stage audit report including angle of intersection, conflict points, sight obstructions and overhanging branches.	There is no proposed contour data provided to the audit team. It is unclear to the audit team of proposed pavement flow paths. There is a risk that the length of a flow path from the crest of New Road 01 down to and across Bundanoon Road may create a deep flow of water resulting in aquaplaning incidents.
	Item	4. Existing Access Existing Access	Sontours New Road 01

JN23040_Report01 Rev03 - CDS 267 Bundanoon Detailed

JN23040_Report01 Rev03 - CDS 267 Bundanoon Detailed

Road Safety Audit Proposed Access Works - Lot 2, DP1275829



JN23040_Report01 Rev03 - CDS 267 Bundanoon Detailed

Road Safety Audit Proposed Access Works - Lot 2, DP1275829

11 Formal Statement

We, the undersigned, declare that we have reviewed the site and data listed in this report and identified the safety and operational deficiencies above.

It should be noted that while every effort has been made to identify potential safety hazards, no guarantee could be made that every deficiency has been identified.

A project sponsor is under no obligation to accept the findings outlined in this audit report. This report simply provides the opportunity to review potential safety issues highlighted by the auditors.

This audit will be recorded on the NSW Register of Road Safety Auditors and the project sponsor should expect email notification from the register to confirm the audit has been carried out.

We recommend that points of concern be investigated, and necessary corrective actions undertaken.

Aaron Walton

Level 3 Road Safety Auditor Team Leader **Tracey Norberg**

T. Norley

Level 3 Road Safety Auditor Team Member

6.10 Traffic Arrangements for Proposed Development on Sally Corner Road, Sutton Forest

Report Author: Traffic Engineer

Authoriser: Karin Targa

PURPOSE

To assess the traffic arrangements for a proposed food outlet development on Sally's Corner Road, Sutton Forest.

RECOMMENDATION

<u>THAT</u> the civil design plans and associated traffic arrangements designed by Richmond and Ross Consulting Engineers (Plan No. 230139) and SLR Consulting (Plan No. 610.31088) be recommended for approval on the condition that the speed limit is reduced from 90km/h to 60km/h.

REPORT

There is a proposed development to build two food outlets on Sally Corner Road, opposite the current Heatherbrae Pies business.

There are two driveways proposed. The eastern most driveway is currently in the 90km/h zone, and the western most driveway is in a 60km/h zone.

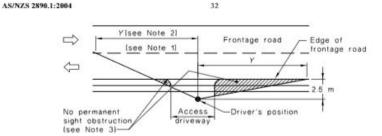
The developer has applied to TfNSW to extend the 60km/h zone approximately 250m to the east. This request is currently being reviewed.

The eastern driveway proposes to restrict the right turn into the car park and allow the right turn out of the car park.

The sight distance for vehicles exiting the eastern driveway, looking east is 130m. The minimum sight distance stated in Australian Standards for an access driveway at 90km/h is 130m.



Image 1 - Aerial image showing traffic facility arrangement and turning paths



Frontage road speed	Distance (Y) along frontage road m			
(Note 4)		eways other stic (Note 5)	Domestic property access (Note 6)	
300000	Desirable 5 s gap	Minimum SSD		
40	55	35	30	
50	69	45	40	
60	83	65	55	
70	97	85	70	
80	111	105	95	
90	125	130		
100	139	160	Use values from 2 nd and 3 rd columns	
110	153	190		

NOTES:

- 1 Centre-line or centre of road (undivided road), or right hand edge of right hand through lane (divided road).
- 2 A check to the left is not required at a divided road where the median is wide enough to shelter a vehicle leaving the driveway.
- 3 Parking on this side of the frontage road may need to be restricted on either side of the driveway so that the sight distance required by the above table to an approaching vehicle is not obstructed.
- 4 This is the posted or general speed limit unless the 85th percentile speed is more than 5 km/h above the limit in which case the tabulated speed nearest the 85th percentile shall be adopted.
- 5 The values in the table apply only to left turn and right turn manocuvres into two-way roads up to four lanes wide and one-way streets regardless of width, either for a 5 s gap, desirable at lower frontage road speeds, or minimum stopping sight distance based on 2 s reaction time.
 - Crossing manoeuvres (e.g. from an access opposite the steam of a T-junction) over four lanes or more, and turning manoeuvres into a six lane two-way road would require longer gaps unless there was a median wide enough to store a vehicle and allow a two stage manoeuvre.
- 6 These distances are based on stopping sight distances with reaction time of 1.5 s for traffic approaching along the frontage road and are applicable to a frontage road speed of up to 80 km/h only. Wherever practicable sight distance provided at domestic property accesses should meet the values given in the second or third columns of the Table.
- 7 When checking sight distance the driver's eye height and the height of the object (approaching vehicle) are to be taken as 1.15 m above the road surface.

FIGURE 3.2 SIGHT DISTANCE REQUIREMENTS AT ACCESS DRIVEWAYS

The safe intersection sight distance of a car stopping to turn right into the eastern driveway is 214m allowing for 2 seconds of reaction time. The site does not allow for the required site distance therefore the right turn in proposed to be restricted. A median island and No Right Turn are proposed to restrict the right turn. Vehicle volumes accessing the site from the east are expected to be low. Vehicles assessing from the east will use the western driveway to turn right into the development.

Table 3.2:	Safe intersection sight distance (SISD) and corresponding minimum crest vertical curve size for
	sealed roads (S < L)

Design speed	Based on safe intersection sight distance for cars ⁽¹⁾ $h_1 = 1.1$; $h_2 = 1.25$, $d = 0.36^{(2)}$; Observation time = 3 sec						
(km/h)	$R_T = 1.5 \text{sec}^{(3)}$		R _T = 2.0 sec		R _T = 2.5 sec		
	SISD (m)	K	SISD (m)	K	SISD (m)	K	
40	67	4.9	73	6	-	-	
50	90	8.6	97	10	-	1.70	
60	114	14	123	16	-	_	
70	141	22	151	25	-	-	
80	170	31	181	35	-	-	
90	201	43	214	49	226	55	
100	234	59	248	66	262	74	
110	-	-	285	87	300	97	
120	-	-	324	112	341	124	
130	-	-	365	143	383	157	

- 1 If the average grade over the braking length is not zero, calculate the safe intersection sight distance (SISD) values using the correction factors in Table 3.4 (or use Equation 2) by applying the average grade over the braking length.
- 2 A coefficient of deceleration of greater than 0.36 is not provided in this table. The provision of SISD requires more conservative values than for other sight distance models (e.g. the stopping sight distance model allows values up to 0.46 in constrained situations). This is because there is a much higher likelihood of colliding with hazards at intersections (that is, other vehicles). Comparatively, there is a relatively low risk of hitting a small object on the road (the stopping sight distance model).
- 3 A 1.5 sec reaction time is only to be used in constrained situations where drivers will be alert. Typical situations are given in Table 4.2 of AGRD Part 3. The general minimum reaction time is 2 sec.

Notes:

K is the length of vertical curve for a 1% change in grade.

To determine SISD for trucks around horizontal curves, use Equation 2 with an observation time of 2.5 sec.

Main Roads Western Australia have adopted a desirable minimum reaction time of 2.5 sec and an absolute minimum reaction time of 2.0 sec. A reaction time of 1.5 sec is not to be used in Western Australia.

Combinations of design speed and reaction times not shown in this table are generally not used.

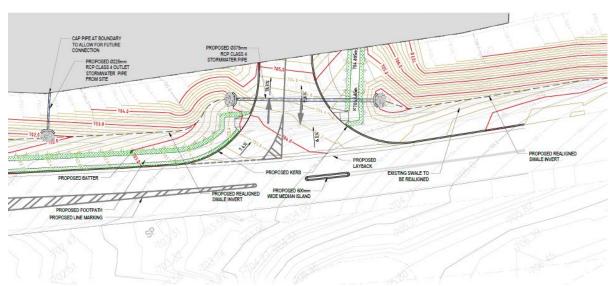


Image 2 - Traffic facility arrangement for eastern driveway

The western driveway proposes a short right turn lane with associated line marking and a pedestrian refuge. The right turn allows right turning cars to move off the through travel lane which

allows for better traffic flow and removes the possibility of a rear end accident. The turning arrangement into the development is like the right turn arrangement for the adjacent McDonalds and Heatherbrae Pies.

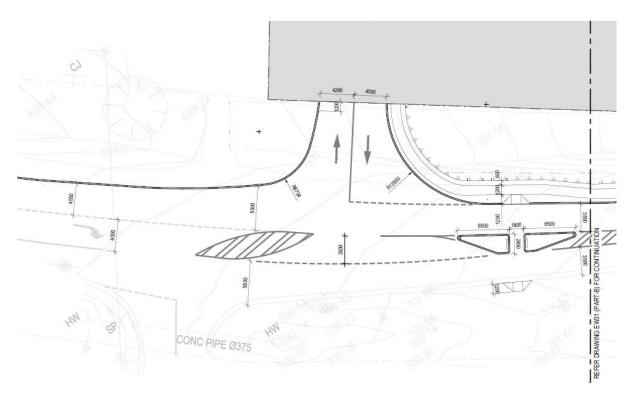


Image 3 – Right turn arrangements for eastern driveway and pedestrian refuge

The signage and line marking arrangements are attached.

CONCLUSION

The proposed traffic arrangement for the development on Sally's Corner Road meets Australian Standards for driveway sight distances. Appropriate measures have been put in place to address the safe intersection sight distance for right turning vehicles into the eastern driveway.

Appropriate lane widths are provided. The right turn arrangement into the western driveway allows for vehicles to move from the travel lane and is similar to the turning arrangement for the adjacent food outlets.

A pedestrian footpath is provided and pedestrian refuge.

The proposed development on Sally's corner road is recommended for approval subject to the speed limit being reduced from 90km/h to 60km/h

ATTACHMENTS

1. Sally's Corner Road Proposed Development Civil Plans [6.10.1 - 16 pages]

SALLYS CORNER ROAD

SUTTON FOREST, NSW 2579

EXTERNAL CIVIL WORKS DRAWINGS					
DWG. NO.	AMDT.	DRAWING TITLE			
EW00	Н	COVER PAGE & DRAWING LIST			
SK-01		PROPOSED RIGHT AND LEFT TURN ARRANGEMENTS (CARS) & SIGHT DISTANCE			
SK-02A		PROPOSED RIGHT AND LEFT TURN ARRANGEMENTS (TRUCKS)			
EW01	F	OVERALL SITE PLAN			
EW10	G	EXISTING & DEMOLITION SITE PLAN PART-A			
EW11	E	EXISTING & DEMOLITION SITE PLAN PART-B			
EW20	G	PROPOSED SITE PLAN PART-A			
EW21	F	PROPOSED SITE PLAN PART-B			
EW30	E	DIMENSION & SETOUT PLAN PART-A			
EW31	E	DIMENSION & SETOUT PLAN PART-B			
EW40	G	LINE MARK AND SIGNAGE PLAN PART-A			
EW41	G	LINE MARKING AND SIGNAGE PLAN PART-B			
EW50	F	PAVEMENT PLAN PART-A			
EW51	Е	PAVEMENT PLAN PART-B			
EW52	С	PAVEMENT DETAILS (SHEET 1 OF 2)			
EW53	D	PAVEMENT DETAILS (SHEET 2 OF 2)			

REV No.	COMMENTS DATE	INIT.		PROJECT:	Dichmond Docs		
В	TENDER ISSUE 13.02.24	DJ		SALLYS CORNER ROAD	Richmond+Ross PTY LIMITED	COVER PAGE &	
С	FOR APPROVAL 12.04.24	DJ		OUTTON FORFOT NOW 0570	CONSULTING ENGINEERS AND PROJECT LEADERS ABN 34 001 485 436	DDAMING LICT	
D	FOR APPROVAL 16.04.24	DJ		SUTTON FOREST NSW 2579	ABN 34 001 485 436	DRAWING LIST	
Е	FOR APPROVAL 17.04.24	DJ				DATE MANY 0000	DDO N
F	FOR APPROVAL 17.04.24	DJ		CLIENT:	38 WILLOUGHBY ROAD,	DATE: MAY 2023	
G	FOR APPROVAL 24.04.24	DJ	S138 APPROVAL		CROWS NEST, NSW 2065	SCALE: N.T.S.	JEW00
Н	FOR S138 APPROVAL 30.04.24	DJ	01007111107712		TEL: (02) 9490 9600	100.11	
J	FOR S138 APPROVAL 01.05.24	DJ			FAX: (02) 9438 1224	JOB No. 230139	REV J





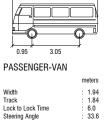
LEVEL 16, 175 EAGLE ST BRISBANE QUEENSLAND 4000 AUSTRALIA T: 61 7 3858 4800

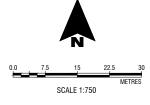
The content contained within this document may be based on third party data.

SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

Project No:	610.31088
Date:	02/05/2024
Drawn by:	Charlie Seventekin
Certified by:	Charlie Seventekin
Sheet Size:	А3
Projection:	GDA2020

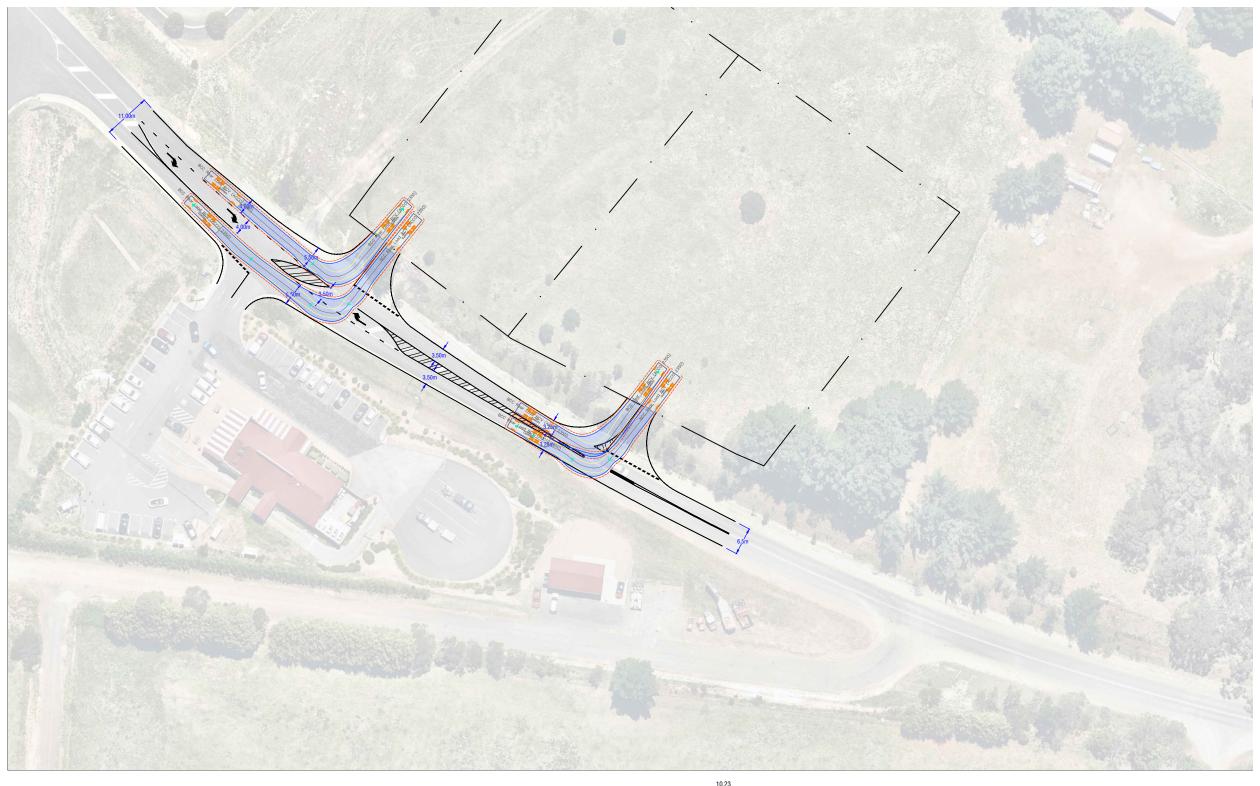








Proposed Right and Left Turn
Arrangements (Cars) & Sight Distance FIGURE SK-01





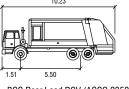
LEVEL 16, 175 EAGLE ST BRISBANE QUEENSLAND 4000 AUSTRALIA T: 61 7 3858 4800 www.sirconsulting.com

The content contained within this document may be based on third party data.

SLR Consulting Australia Pty Ltd does not guarantee the accuracy of any such information.

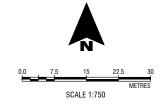
Project No:	610.31088
Date:	02/05/2024
Drawn by:	Charlie Seventekin
Certified by:	Charlie Seventekin
Sheet Size:	A3
Projection:	GDA2020





BCC Rear Load RCV (ACCO 2350)

	meters		
Width	: 2.50		
Track	: 2.50		
Lock to Lock Time	: 6.0		
Steering Angle	: 40.3		

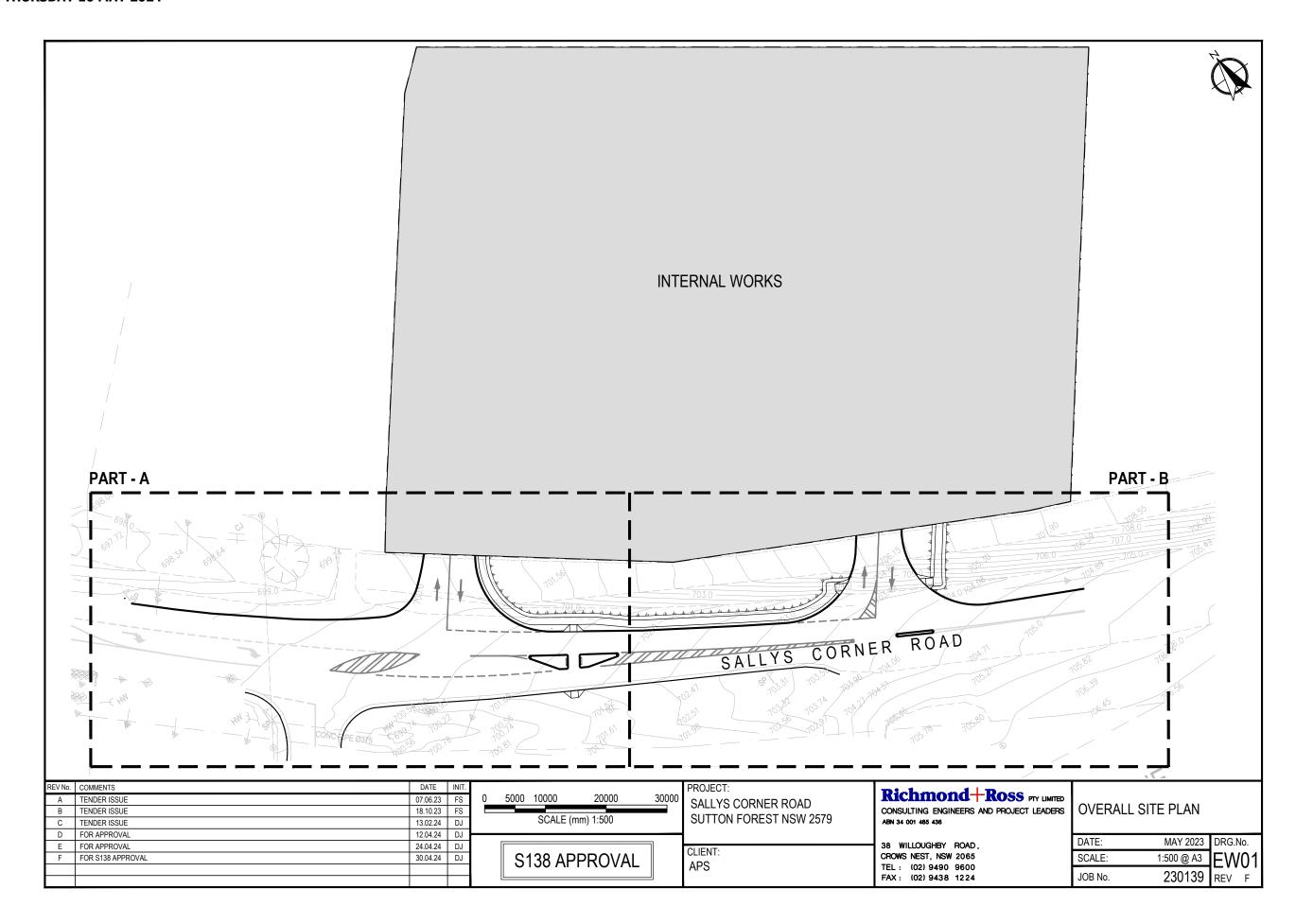


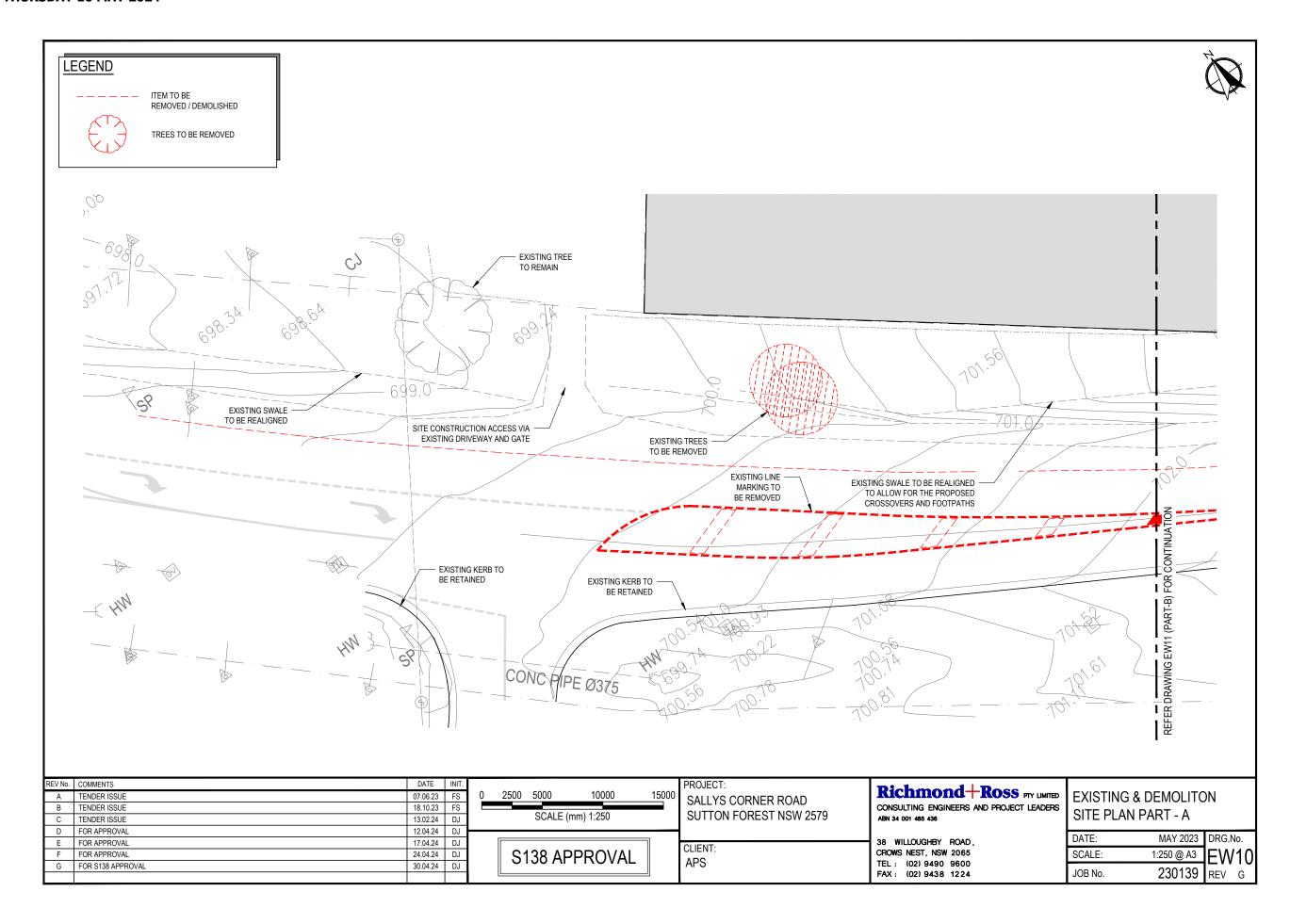
Australian Property Syndicates Pty Ltd

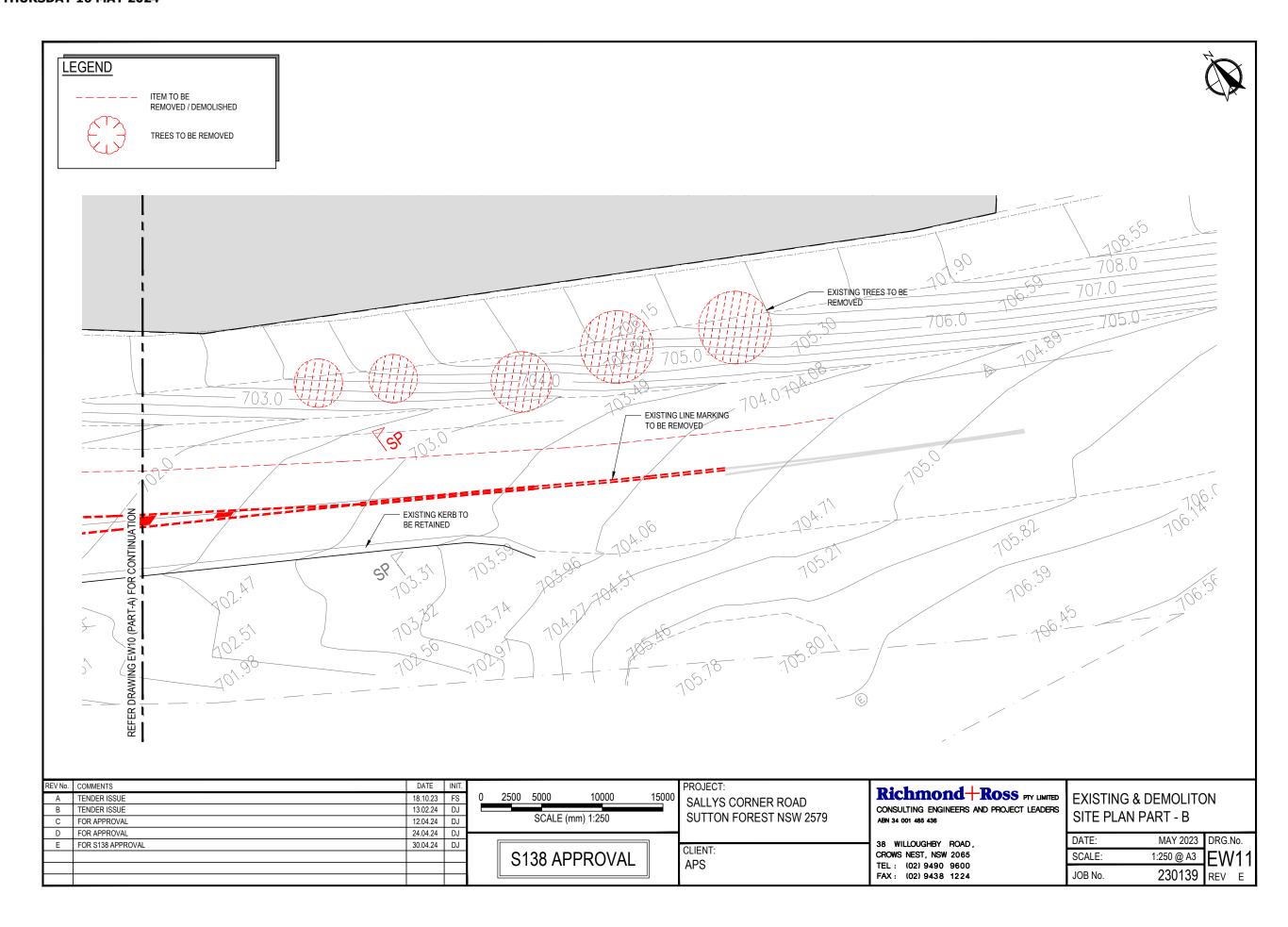
S138 Application

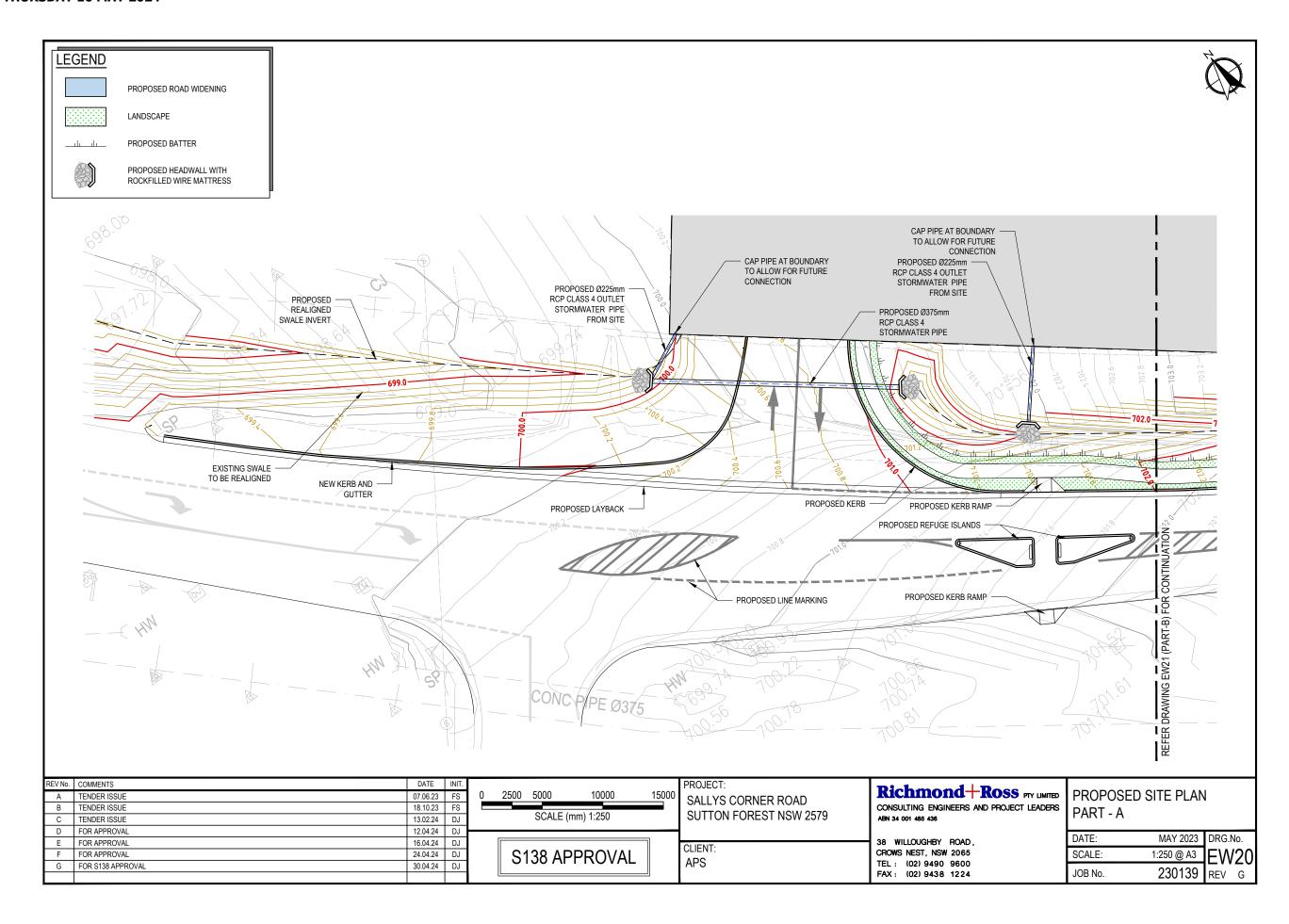
Proposed Right and Left Turn Arrangements (Trucks)

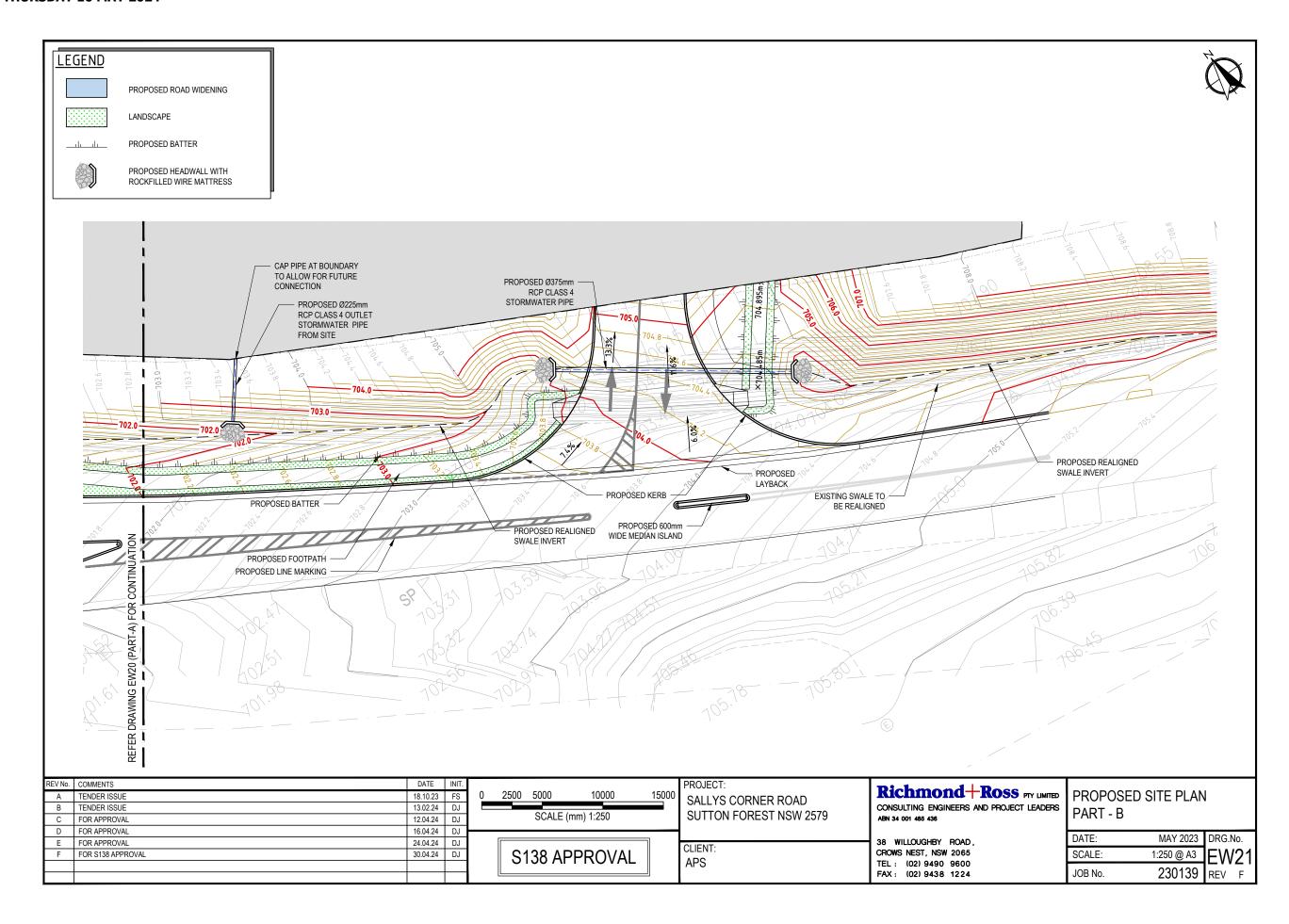
FIGURE SK-02A

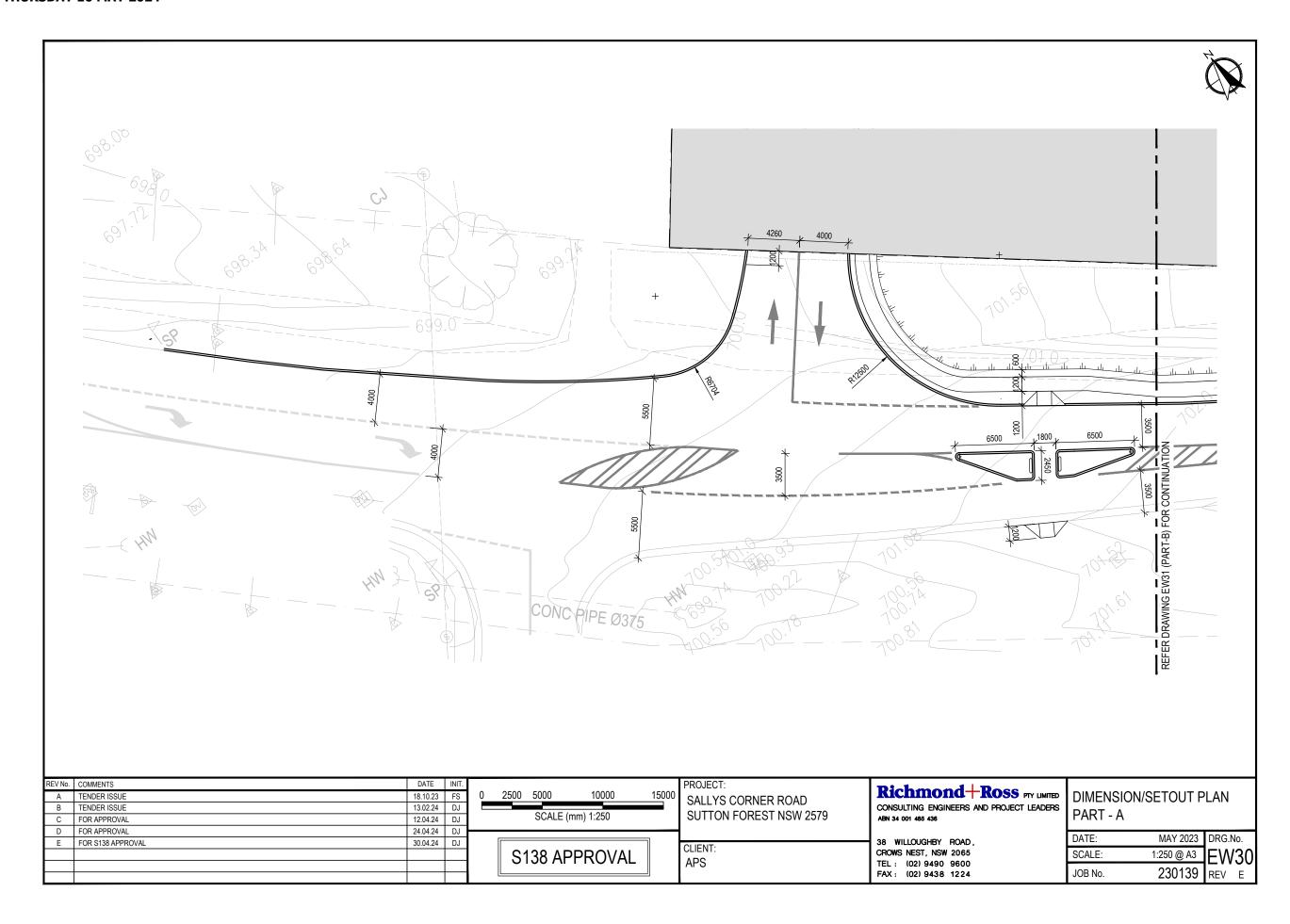


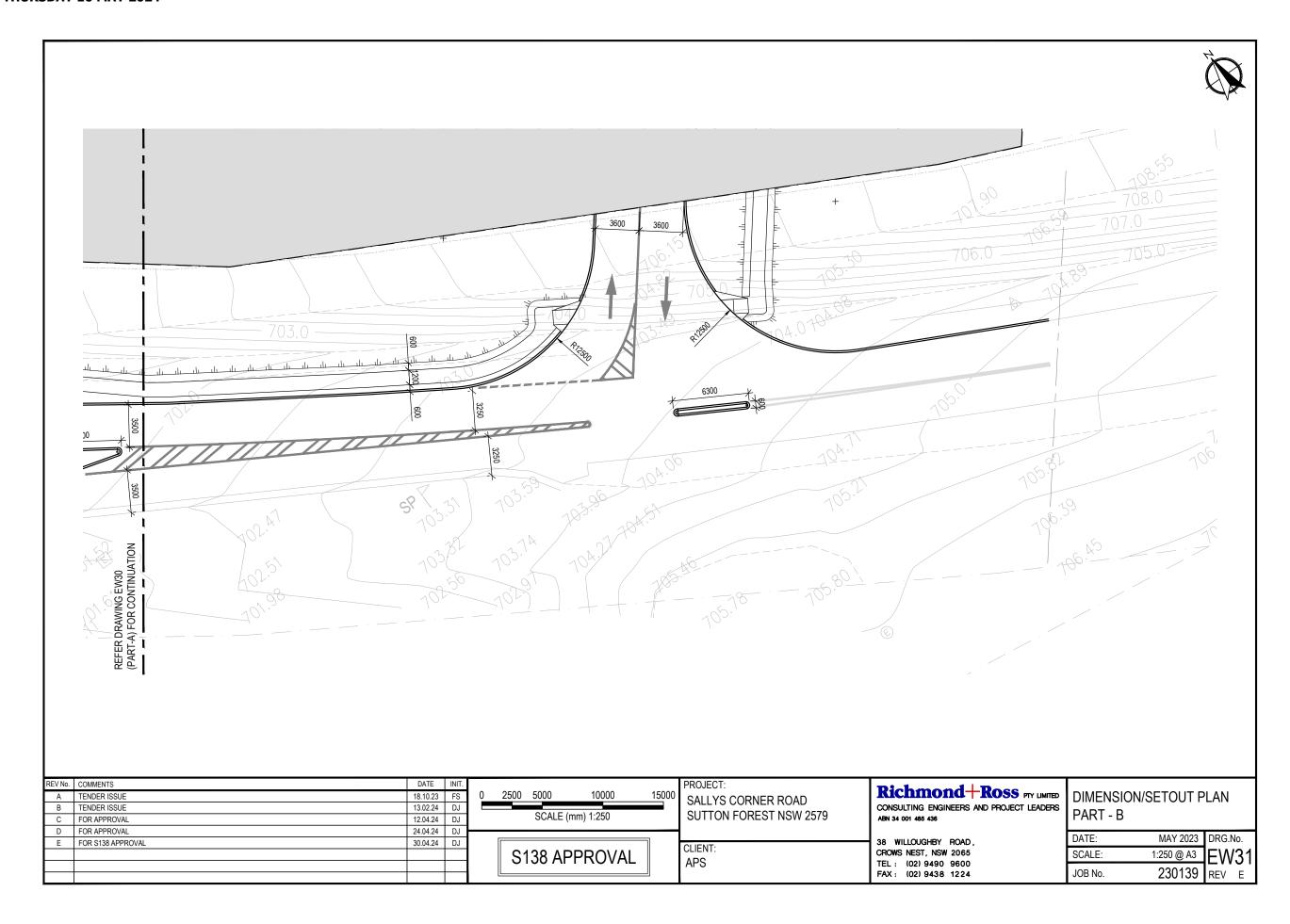


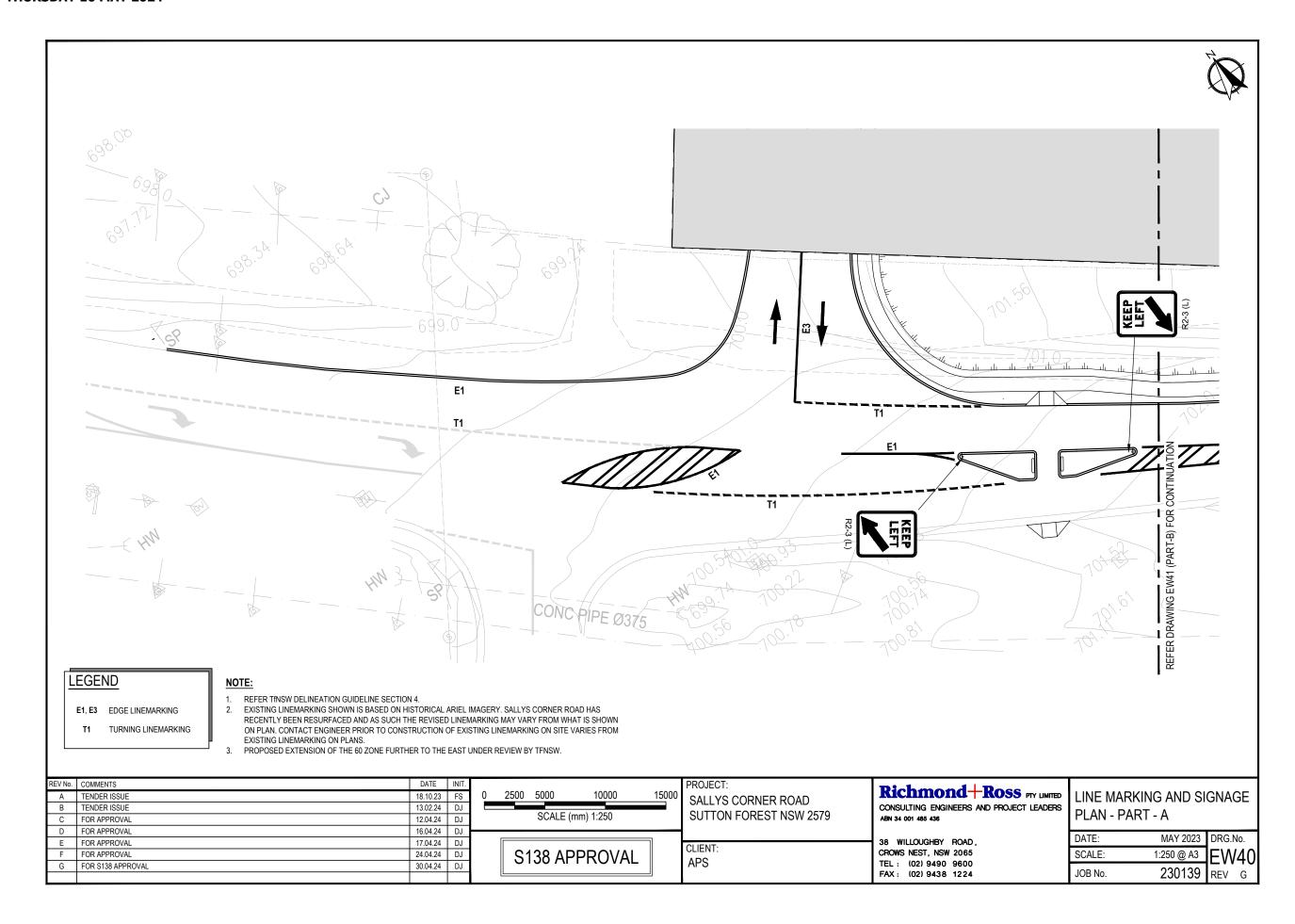


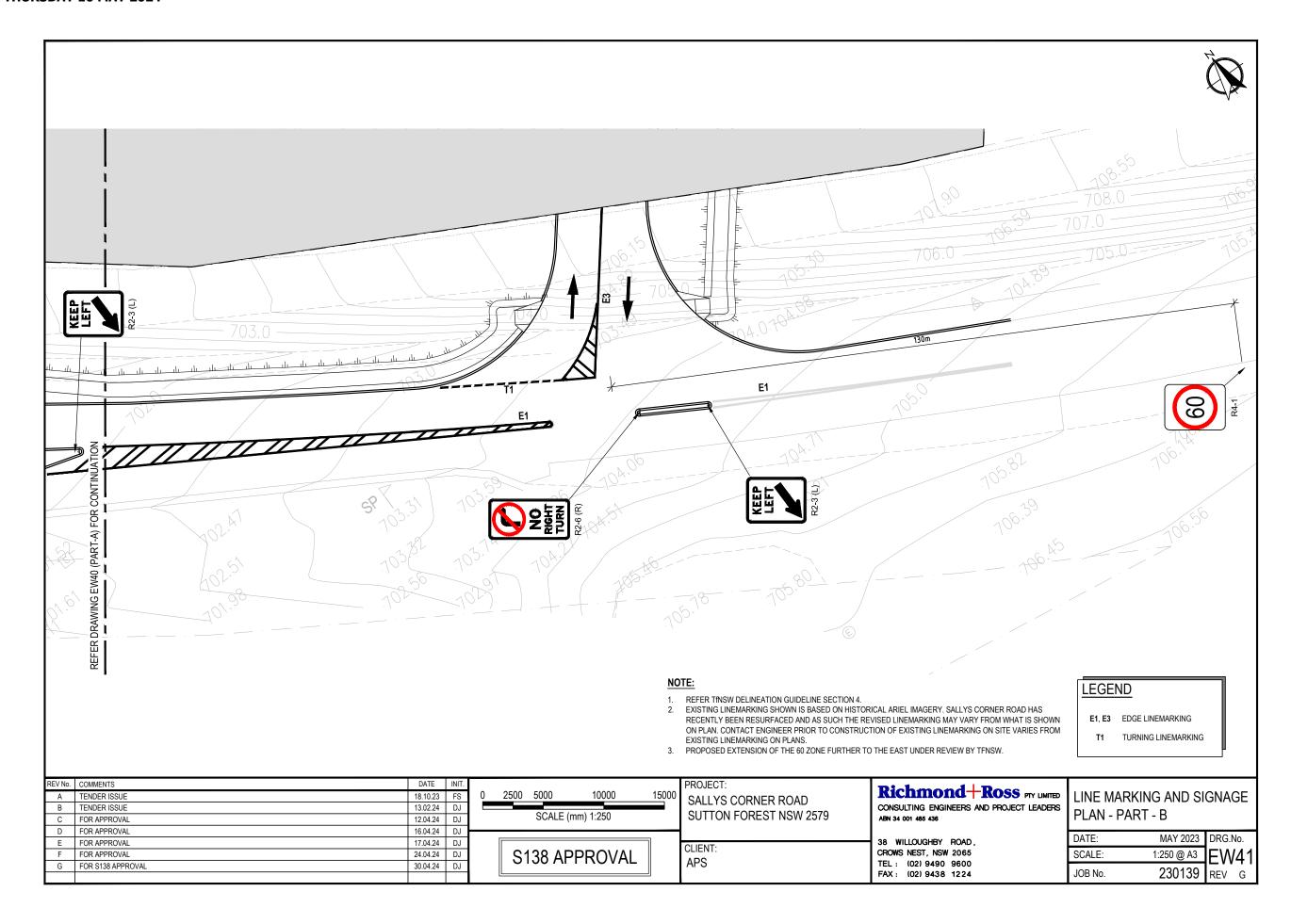


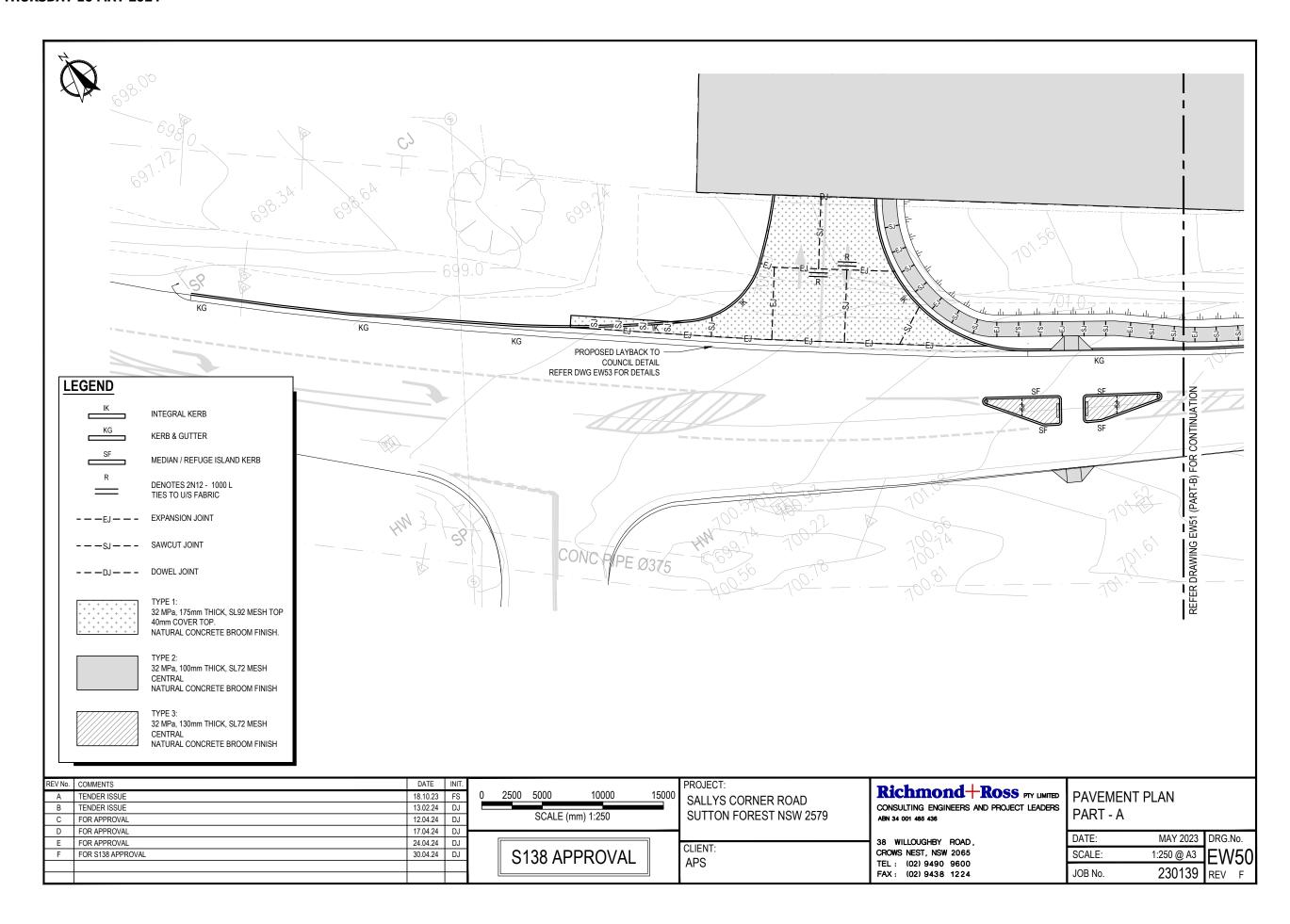


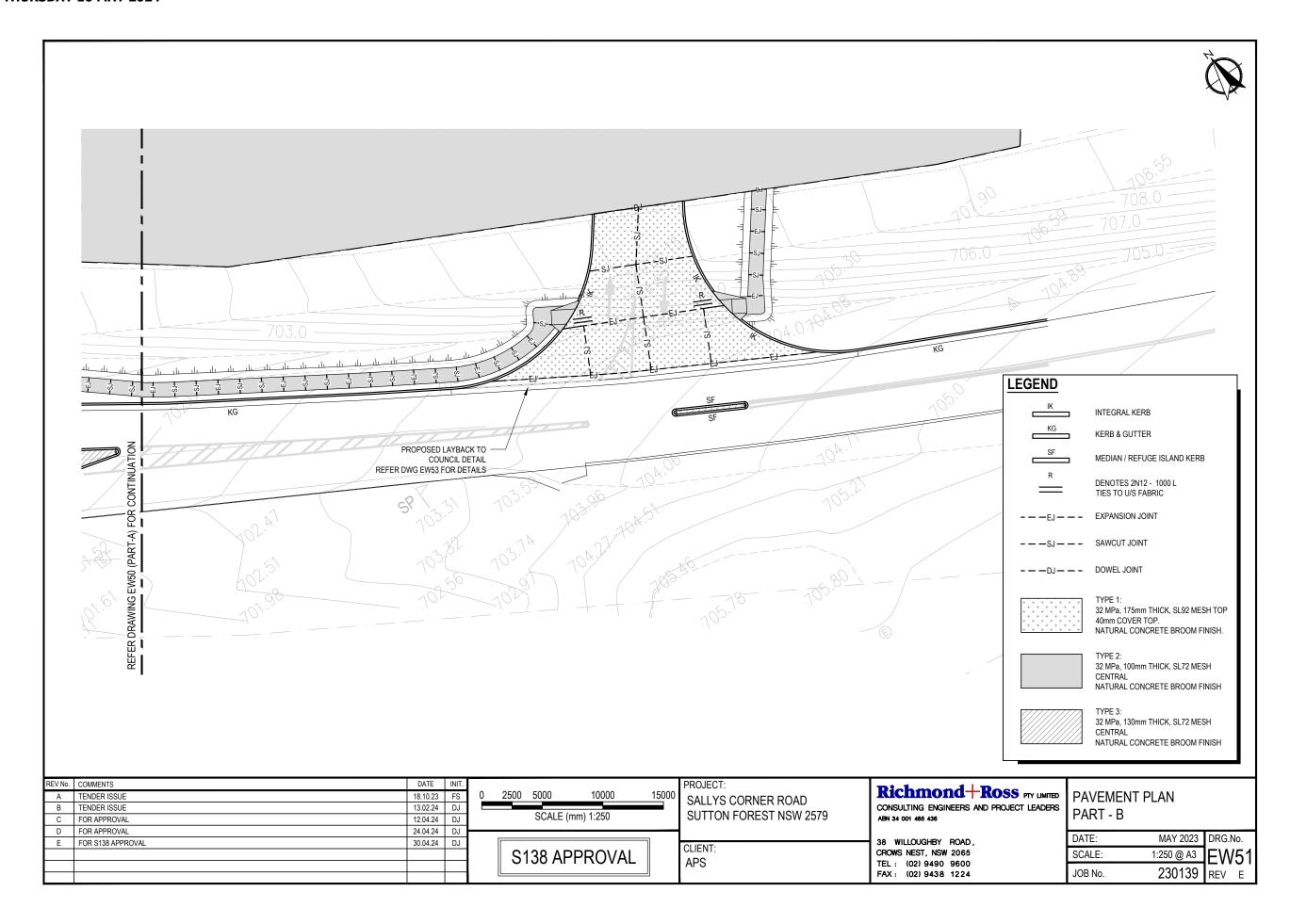












PAVEMENT NOTES

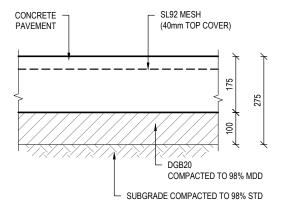
- 1. PAVEMENT MATERIALS SHALL BE IN ACCORDANCE WITH TINSW SPEC 3051 : BASE COURSE DGB20
- FILL MATERIALS WHICH ARE PRONE TO ACCELERATED WEATHERING WILL NOT BE ACCEPTED EG.
 SOME MUDSTONES, CLAYSTONES, SILTSTONES, SHALES AND OTHER ROCKS. ENDORSEMENT OF
 THE SUITABILITY OF THE PROPOSED FILLING MATERIAL IS TO BE MADE BY A GEOTECHNICAL
 ENGINEER PRIOR TO APPROVAL. FILL MATERIALS USED TO SUPPORT PAYEMENTS SHALL BE
 COMPACTED TO 95% STANDARD MAXIMUM DRY DENSITY UPTO 0.5M BELOW SUBGRADE LEVEL.
- BASE COURSE SHALL BE COMPACTED TO 98% MODIFIED MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN 2% OF STANDARD OPTIMUM. MINIMUM SOAKED CBR 80% UNO.
- 4. SUB BASE COURSE SHALL BE COMPACTED TO 95% MODIFIED MAXIMUM DRY DENSITY, MINIMUM SOAKED CBR 45% UNO.
- 5. SUBGRADE SHALL BE APPROVED NATURAL SUBGRADE OR IMPORTED FILL. PROOF ROLL AND COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY UNO.

CONCRETE PAVEMENT NOTES

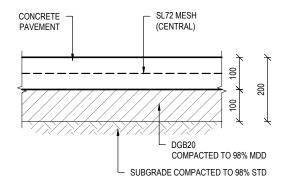
- CONCRET
- 1.1. ALL EXTERNAL CONCRETE SLABS TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 32MPA @ 28 DAYS (U.N.O.)
- 1.2. ALL PEDESTRIAN TRAFFIC PAVEMENTS TO BE A MINIMUM OF 28MPa @ 28 DAYS
- 2. PROVIDE A HEAVY DUTY MEMBRANE UNDER ALL BUILDING SLABS AND TANK FARM PAVEMENTS.
- 3. ALL REINFORCEMENT SHALL BE SUPPORTED ON BAR CHAIRS AND DISCS 50mm MIN COVER TO LIGS, CROSS BARS AND ALL REINFORCEMENT EXPOSED TO AIR OR AGAINST GROUND.
- 4. NO WATER SHALL BE PERMITTED TO BE ADDED TO PREMIXED CONCRETE ON SITE.
- EACH TRUCK SHALL BE CHECKED FOR SLUMP USING A STANDARD CONE. SPECIFIED SLUMP TO BE 85MM ± 15MM. CONCRETE OUTSIDE THIS RANGE SHALL BE REJECTED.
- 6. ALL CONCRETE SHALL BE COMPACTED USING A VIBRATOR OR TRAVELLING SCREED.
- 7. MINIMUM TRAFFICABLE CURE TIME FOR CONCRETE SLAB AS FOLLOWS:
- 7.1. 32MPA, 4MPA FLEXURAL = 7 DAYS UNLESS ACCELERATED WITH TINSW COMPLIANT MIX IN WHICH CASE MAY TRAFFICKED 12 HOURS AFTER CURING
- 7.2. 60MPA = 4 DAYS (NOT SUITABLE FOR USE WITH ACCELERANTS)
- 8. ALL SAWN JOINTS SHALL BE CUT USING A 'SOFT CUT' 4 HOURS AFTER POUR.
- PROVIDE AT LEAST 48 HOURS NOTICE TO THE ENGINEER FOR INSPECTION OF REINFORCEMENT, PRIOR TO POUR.
- 10. MAINTAIN COVER TO ALL REINFORCEMENT IN ACCORDANCE WITH THE "REINFORCEMENT DETAIL".
- 11. USE ONLY GALVANISED DOWEL BARS (MIN 250 GRADE).
- 12. SEAL ALL JOINTS (U.N.O.) IN ACCORDANCE WITH RELEVANT JOINT SEAL DETAIL
- 13. THE EVAPORATION RATE SHALL BE MONITORED BY THE CONTRACTOR DURING CONCRETING OPERATIONS UNTIL SUCH TIME AS CURING COMMENCES. IF CONTROL MEASURES ARE NOT SUCCESSFUL OR ARE IMPRACTICAL, NO CONCRETE SHALL BE POURED.
- 14. WHERE WEATHER CONDITIONS ON SITE INDICATE AN EVAPORATION RATE FROM THE CONCRETE SURFACE IS LIKELY TO EXCEED 0.50 KG/M³/H, THE USE OF EVAPORATION RETARDANT MIST SPRAYS ON THE CONCRETE SLAB EXPOSED SURFACE ARE MANDATORY. SPRAYS MUST BE MIXED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND APPLIED WITHIN 10 MINUTES OF CONCRETE PLACEMENT AND INITIAL LEVELLING. SPRAYS ARE THEN APPLIED AGAIN FOLLOWING ANY SUBSEQUENT FLOATING OPERATION ON THE CONCRETE SURFACE.

PAVEMENT DESIGN CBR

PAVEMENTS DESIGNED USING AN ASSUMED CBR OF 4.5% PAVEMENT PROFILES SUBJECT TO REVIEW ON COMPLETION OF GEOTECH INVESTIGATION



TYPE 1: HEAVY DUTY
CONCRETE PAVEMENT
SCALE 1:10



TYPE 2: CONCRETE PAVEMENT FOR PEDESTRIAN ACCESS

REV No.	COMMENTS	DATE	INIT.	
Α	TENDER ISSUE	18.10.23	FS	0
В	FOR APPROVAL	15.04.24	JK	
С	FOR \$138 APPROVAL	30.04.24	JK	

0 100 200 400 600 SALL SUT

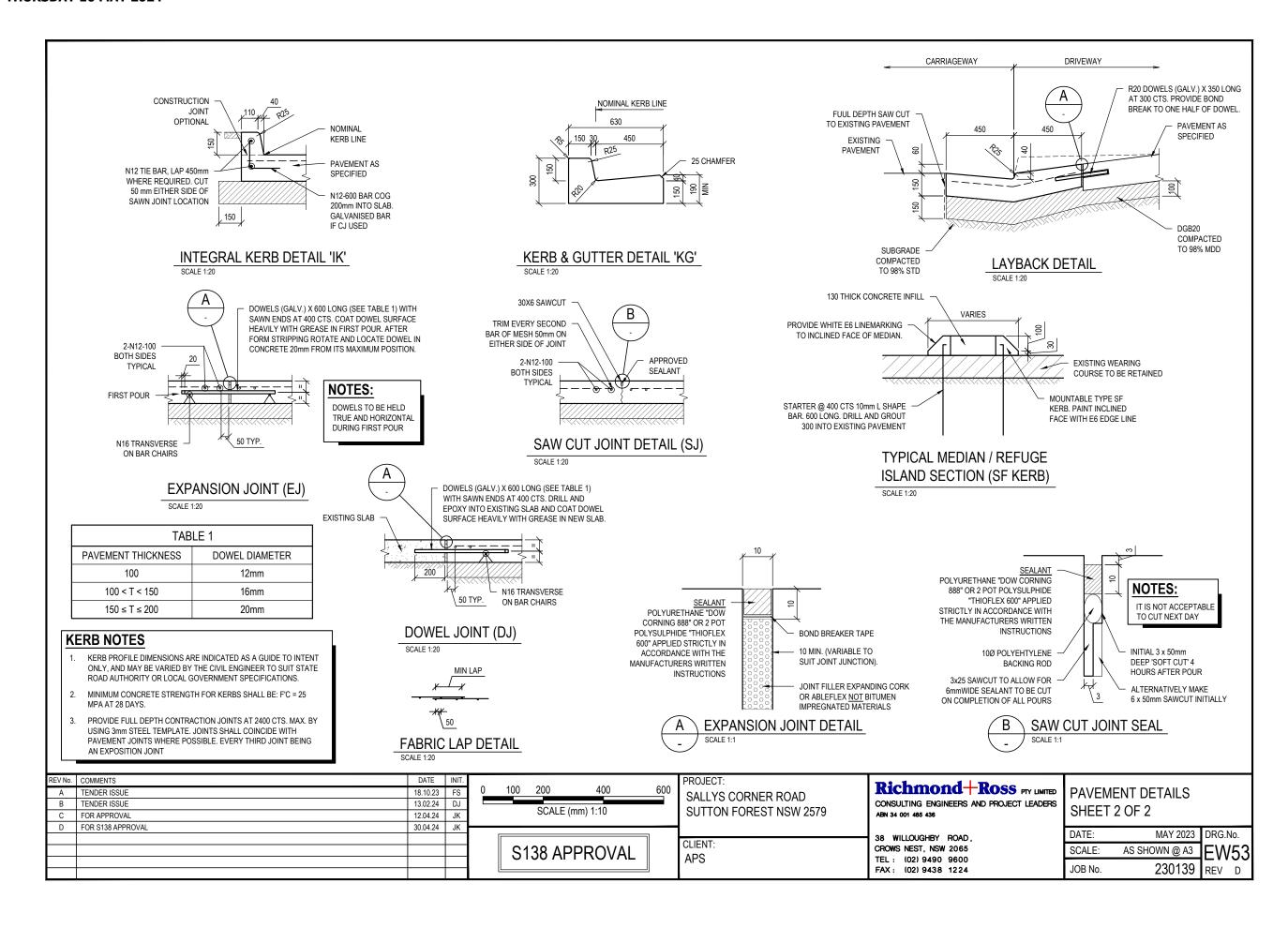
PROJECT:
SALLYS CORNER ROAD
SUTTON FOREST NSW 2579

CLIENT:

Richmond+Ross PTY LIMITED CONSULTING ENGINEERS AND PROJECT LEADERS ABN 34 001 485 436

38 WILLOUGHBY ROAD, CROWS NEST, NSW 2065 TEL: (02) 9490 9600 FAX: (02) 9438 1224 PAVEMENT DETAILS SHEET 1 OF 2

DATE:	MAY 2023	DRG.No.
SCALE:	1:10 @ A3	EW52
JOB No.	230139	REV C



7 DATE OF NEXT MEETING

The next meeting will be held on Thursday 18th July 2024 in the Council Chambers, Civic Centre, Elizabeth Street, Moss Vale commencing at 10am.

8 MEETING CLOSURE