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Northern Rivers Flood Recovery – Richmond River High Campus Redevelopment

Transport and
Accessibility Impact
Assessment

Rev 05



Quality Assurance

Project Details

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Glossary

Term	Description
Background growth	The amount of additional traffic that is expected from natural growth in population or employment size and any planned developments.
Catchment	A defined area based on criteria that can be used to understand how far people are willing to travel.
Depersonalised data	Refers to student-related information that has been processed to remove or obscure personally identifiable details, ensuring that individual students cannot be directly identified.
Development timing	The sequence and timing of activities and tasks required to complete the project.
Development control plan (DCP)	A document that provides detailed planning and design guidelines to support the planning controls in the Local Environmental Plan developed by a council.
Geographical scope	Geographical scope refers to the area or extent covered by the assessment, documents or data.
Hands-up travel survey	A classroom survey where teachers list transport options, and students raise their hands to indicate their travel mode for that day. The total responses are counted to determine the school's mode share, with all classes surveyed on the same day.
Kiss and drop zone	This refers to a designated area that allows for parents to stop whilst in their vehicle to pick up or drop off their child to school without obstructing traffic flow.
Kit of parts	Kit of parts is a Modern Method of Construction (MMC) approach that involves manufacturing building components off-site and assembling them on-site. This practice is adopted by NSW Department of Education.
Modern Methods of Construction (MMC)	Modern Methods of Construction is an umbrella term for a collection of construction methods that are different from traditional onsite construction and includes practices such as prefabrication, off-site manufacturing, modular or volumetric dwellings, 3D printing, robotics, artificial intelligence (AI) and Design for Manufacture and Assembly (DfMA).
Mode share	Mode share refers to the percentage share of students or teachers walking, cycling, catching public transport or being driven to and from school.
Notional Catchment	The notional catchment represents the maximum theoretical area that can be covered using a straight-line distance.
Operational Impact	Refers to the impact of the proposed development post-construction on the first day of opening.
Principal's questionnaire	A series of questions were provided to staff by the council which recorded how they travelled to school on a daily basis.
Road user movement (RUM)	A code that corresponds to a specific action or behaviour of a road user in a crash.
School catchment	The designated area around a school that determines student eligibility for enrolment based on residential address.

Term	Description
Shared path	A type of paved off-road facility that is intended to be shared and used by pedestrians and cyclists.
Site	This refers to the location of the development activities.
School Student Travel Scheme (SSTS)	The SSTS is a program that gives school students free or subsidised travel between home and school on NSW public transport including trains, buses, ferries and light rail. The exclusion zone refers to the area where people live that is deemed ineligible to receive free or subsidised travel.
T&I SEPP	Refer to the State Environmental Planning Policy (Transport and Infrastructure), 2021.
Traffic management	This refers to traffic signs and road markings which control or direct the operation and behaviour of people and vehicles. For example, this includes measures like speed limits, street parking restrictions and pedestrian crossings.
Travel Access Guide (TAG)	A document that provides key information to parents and students about school entry points, location of key surrounding transport infrastructure, kiss and drop locations and bike parking.

Executive Summary

Purpose and Scope

The NSW Department of Education (DoE) is seeking planning approval for the rebuild of Richmond River High Campus (RRHC) at 163 and 170 Alexandra Parade, North Lismore. The existing school was significantly impacted by the 2022 floods, and the proposed new campus will provide a flood-resilient education facility in an area less vulnerable to flood risk.

This Transport and Accessibility Impact Assessment (TAIA) has been prepared to support a Review of Environmental Factors (REF) for the rebuild of Richmond River High Campus (the activity) (RRHC). The REF has been prepared to support an approval for the RRHC development under Section 68 of the NSW Reconstruction Authority Act 2022 (RA Act).

The purpose of this report is to assess the potential traffic and transport implications of the activity to inform planning approval.

Traffic and Transport Impacts

Site access

The existing road network and hierarchy surrounding the site includes:

- Dunoon Road – A regional road providing north–south connectivity and future bus access.
- Alexandra Parade – A local road along the site's southern boundary.
- Terania Street – A regional road that connects North Lismore to the broader Lismore town centre.

The proposed site access arrangements for the activity include:

- A new priority-controlled T-intersection on Dunoon Road to serve as the primary site access, enabling safe and efficient vehicle movements.
- Key Council and TfNSW stakeholders were consulted on the access strategy during the May 2025 TWG meeting. Consensus was reached on the proposed arrangements, with no further comments received.

Transport considerations

- Active Transport: A 2.5-metre shared path is proposed along the Dunoon Road site frontage by Lismore City Council. The activity includes directly connecting to this shared path at the proposed access point via the provision of a crossing which integrates into a dedicated internal bicycle path. This internal link extends into the school grounds, together with end-of-trip facilities for students and staff.
- Public Transport: The Department of Education will work with Transport for NSW (TfNSW) to realign school bus services to support the new site.
- Private Transport: The campus is forecast to generate approximately 1,035 vehicle trips across the AM and PM peak periods. These trips can be accommodated by the surrounding road network.

- The proposed car park layout is capable of complying with the relevant Australian Standards (AS2890); however, the following items will need to be resolved during detailed design and demonstrated prior to issuing of the Crown Certificate:
 - Verification that aisle widths meet AS2890 requirements.

Impact on the Transport Network

Traffic analysis confirms that the proposed activity will not result in detrimental impacts to the operation of the local or regional road network. The proposed intersection at Dunoon Road is appropriate for the forecast traffic volumes and will provide safe access to the site.

This assessment has been prepared under the REF pathway, where referral to Transport for NSW is discretionary under Schedule 3 of the Transport and Infrastructure SEPP 2021. Ongoing consultation has been undertaken with TfNSW and Lismore City Council through the Transport Working Group (TWG) meetings.

Mitigation Measures

To support the detailed design, approvals, and operational transition to the new site, the following mitigation measures are recommended:

- A road safety audit should be undertaken for the proposed Dunoon Road intersection during detailed design.
- Enact the School Travel Plan to manage demand and encourage sustainable transport behaviours as the school prepares to transition into operations.
- Update the existing Transport Access Guide (TAG) (refer to School Transport Plan) to reflect final bus service details and confirm access arrangements once construction and planning are complete.
- If required, Section 138 application should be submitted to Lismore City Council and Transport for NSW to obtain consent for any works within the road reserve, including the proposed new intersection at Dunoon Road.
- A request should be submitted to Transport for NSW to implement a 40 km/h school zone on Dunoon Road, consistent with NSW school zone policy and subject to TfNSW assessment and approval.
- A Construction Traffic Impact Assessment (CTIA) and Construction Traffic Management Plan (CTMP) should be prepared during detailed design to assess and manage construction-phase traffic impacts on the surrounding network.
- Verification that the car park layout complies to AS2890 requirements.

Conclusion

- The proposed activity is supported by an appropriate access strategy and surrounding transport infrastructure that can accommodate forecast travel demand.
- The activity will not result in adverse traffic impacts.
- The mitigation measures outlined above will support safe design, regulatory compliance, and a smooth transition to the new campus.

1 Introduction

1.1 Purpose of this Report

This Transport and Accessibility Impact Assessment (TAIA) has been prepared by Crossley Transport Planning on behalf of the NSW Department of Education (DoE) to support a Review of Environmental Factors (REF) for the proposed rebuild of Richmond River High Campus (RRHC) at 163 and 170 Alexandra Parade, North Lismore.

The proposed activity involves construction of a new high school campus to replace the original RRHC, which was significantly damaged during the 2022 floods. The activity is being assessed under the Reconstruction Authority Act 2022 and will be delivered through the NSW Reconstruction Authority.

This report identifies the potential traffic and transport impacts associated with the activity and considers the suitability of access arrangements, expected traffic generation, and infrastructure needs.

1.2 Regulatory Context

The activity is being assessed under the Reconstruction Authority Act 2022, which allows the NSW Reconstruction Authority to determine development proposals for recovery and resilience purposes in flood-affected communities.

As a result, the development is not subject to the standard development application pathway under the Environmental Planning and Assessment Act 1979 (EP&A Act). Instead, the assessment is governed by the REF process outlined in the Environmental Planning and Assessment Regulation 2021, as modified by the Reconstruction Authority Act.

Although the proposal is identified as traffic-generating development under Schedule 3 of the State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP), referral to Transport for NSW (TfNSW) is discretionary in this instance.

Notwithstanding this, ongoing consultation has occurred with TfNSW and Lismore City Council through the Transport Working Group (TWG) process.

1.3 Methodology

To inform the assessment, the following tasks were undertaken:

- A site inspection was conducted on 22 February 2024 to observe existing traffic patterns, pedestrian and cyclist movements, and public transport accessibility.
- A Principal interview was conducted on 23 February 2024 to gain insight into how staff currently travel to school.
- A student hands-up travel survey was conducted on 7 June 2024, capturing current mode share at the temporary RRHC site in East Lismore.
- A crash analysis was carried out using the most recent five-year crash data (1 January 2019 – 31 December 2023), sourced from the Transport for NSW Crash Data Portal.
- Traffic count surveys were conducted on 29 August 2024 during the morning peak period (7:30am to 9:30am) and the afternoon peak period (2:00pm to 4:00pm) at the intersection of Terania Street/Tweed Street, North Lismore. Automatic tube counts

were conducted along Dunoon Road, approximately 250m South of Sexton Road over a 7-day period from 29 August 2024 to 4 September 2024.

1.4 Consultation and stakeholder engagement

The development of this TAIA included consultation with Lismore City Council, the NSW Reconstruction Authority, Transport for NSW via the Transport Working Group (TWG). The TWG met on the following dates:

- Monday 23 September 2024
- Monday 14 October 2024
- Monday 25 November 2024
- Thursday 8 May 2025

Findings and requirements discussed at these meetings have been integrated into the TAIA.

1.5 Scope of the Transport Assessment

This TAIA has been prepared in accordance with the Transport for NSW Guide to Transport Impact Assessments (TS-00085 v1.1) and considers the following matters:

- Access arrangements, including a new priority-controlled T-intersection on Dunoon Road.
- Traffic generation and distribution associated with school operations.
- Road network capacity and operational performance.
- Active and public transport connections and infrastructure.
- Parking, service vehicle access, and kiss-and-drop requirements.
- School zone, signage, and road safety considerations.
- Recommendations to inform detailed design and operational planning.

This report focuses on the operational phase of the school. Construction-related traffic impacts will be addressed during the detailed design phase, including a Construction Traffic Impact Assessment (CTIA) and Construction Traffic Management Plan (CTMP).

1.6 Policy Context

A review of relevant local and state government policies was undertaken to ensure alignment with broader transport and planning strategies. The following documents were reviewed in relation to traffic and transport:

- Inspire Lismore 2023 – Local Strategic Planning Statement (LSPS)
- Lismore Growth and Alignment Strategy 2022
- Lismore Walking, Cycling and Micromobility Strategy 2024-2034
- Lismore City Council Development Control Plan

The policy review identified planned works in the vicinity of the proposed Richmond River High School Campus.

2 Existing conditions

2.1 Site overview

The site is located at Dunoon Road, North Lismore, also known as 163 and 170 Alexandra Parade, North Lismore. The site comprises of three separate lots, located to the north of Alexandra Parade, with Dunoon Road running parallel to the eastern boundary of the site.

The site is legally described as:

- Lot 1 DP 539012
- Lot 2 DP 539012
- Lot 1 DP 376007

The site area is approximately 33.53 hectares. The proposed activity will be undertaken mainly within the southeastern portion of the site. The site is outlined in Figure 1.

Dunoon Road forms the eastern boundary of the site and provides north-south regional connectivity, linking into the wider Lismore network. The site is currently undeveloped and does not have direct vehicle access from Dunoon Road or Alexandra Parade.



Figure 1 Site location

The site is currently zoned RU1 – Primary Production under the Lismore Local Environmental Plan 2012. A Planning Proposal has been submitted to rezone the land to:

- SP2 Educational Establishment
- C2 Environmental Conservation
- C3 Environmental Management

This TAIA has been prepared to assess the development activity proposed at the site and assumes that the land use change will be implemented.

The Department of Education (the department) is the landowner, and proponent pursuant to Section 5.1 of the Environmental Planning and Assessment Act 1979 (the Act). The activity will be determined by the Reconstruction Authority (RA) under the Ministerial powers in Section 68 of the NSW Reconstruction Authority Act 2022 (RA Act). This report focuses on the transport and accessibility implications of the future school development.

2.2 Traffic environment

2.2.1 Road hierarchy

The surrounding road network includes the following key roads as show in Figure 2.

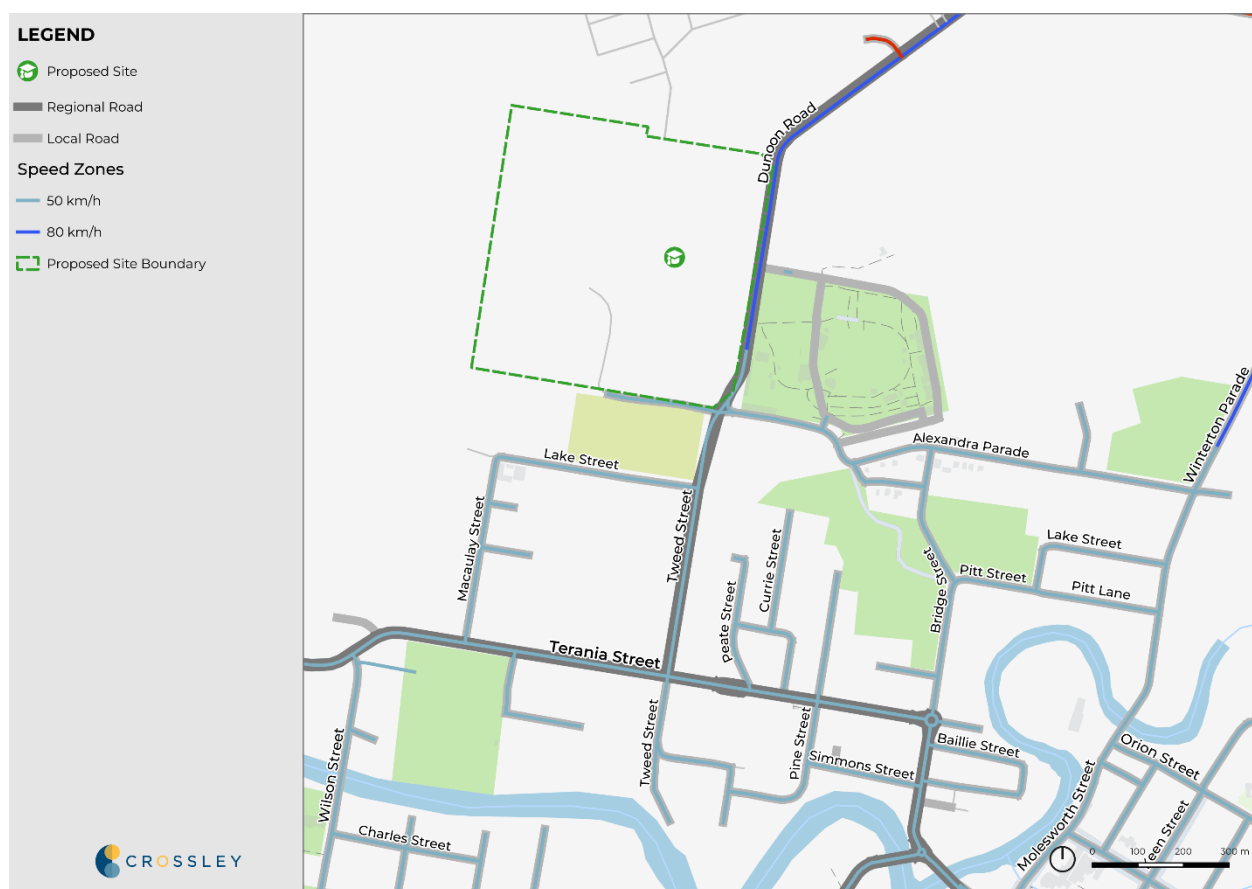


Figure 2 Existing road hierarchy and speed zones

Dunoon Road / Tweed Street

Dunoon Road, which transitions into Tweed Street, is classified as a regional road. According to the National Heavy Vehicle Regulator (NHVR), the section of Dunoon Road that extends along the site's frontage, as well as Tweed Street, is designated as a heavy vehicle route for 23-metre-long B-doubles. It is assumed the pavement width is designed for this function. The pavement width at the narrowest point along Tweed Street is approximately 6 metres. It is an undivided, two-lane sealed road that forms the eastern boundary of the subject site.

The posted speed limit is 50 km/h within the urban fringe of North Lismore. The 80 km/h zone begins approximately 200 metres north of the intersection with Alexandra Parade, reflecting the transition to a more rural environment.

Dunoon Road provides regional north–south connectivity and links to Terania Street, which in turn connects to the Lismore town centre.

- Traffic volumes: 334 vehicles during AM peak hour and 296 vehicles during PM peak hour.
- Proportion of heavy vehicles: 1%

Alexandra Parade

Alexandra Parade is a local road that forms part of the eastern and southern boundary of the site. It operates under a 50 km/h speed limit and is characterised by two distinct legs:

The western leg is a no-through unsealed road, providing access to the sales cattle yard and private dwellings at 163 and 170 Alexandra Parade.

The eastern leg is a sealed, undivided road that provides access to the Lismore Showgrounds and connects to Winton Street and Winterton Parade.

- Traffic volumes: 191 vehicles during AM peak hour and 162 vehicles during PM peak hour.
- Proportion of heavy vehicles: 1%

Terania Street

Terania Street is a regional road that provides east–west connectivity between Dunoon Road and the Lismore town centre. It operates under a 50 km/h speed limit and forms part of the local bus network, connecting residential areas, the CBD, and local facilities.

A historic rail overpass is located just east of its intersection with Dunoon Road / Tweed Road. This bridge imposes a 3.8-metre height restriction, which may limit accessibility for some larger vehicles and B-doubles.

- Traffic volumes: 296 vehicles during AM peak hour and 304 vehicles during PM peak hour.
- Proportion of heavy vehicles: 1%

2.2.2 Parking and loading

There are no existing formal parking facilities at the site, as it is currently undeveloped.

- On-street parking along Alexandra Parade is informal and limited to residential property at 163 and the cattle yard at 205 Lake Street which has a car park and operates from Alexandra Parade.
- The cattle yard is the venue for a variety of livestock sales events. Based on the current Sales Calendar (<https://ianweirandson.com.au/locations/lismore-saleyards/>) up to three events can be planned per week ranging from a full day 9:00am – 5:00pm; or a half day event from 7:30am – 1:30pm.
- During sales events, vehicles access the cattle yard at Alexandra Parade and park on-street and within the dedicated off-street car park (Figure 3) or on Tweed Street (Figure 4).



Figure 3 Parking on Alexandra Parade associated with the cattle yard operations. Google Streetview

- There are no formal parking restrictions in operation along the site frontage at Dunoon Road. However, the lack of kerb and gutter does not prohibit vehicles from stopping on the grass verge adjacent to the travel lanes. A short gravel area in front of the Cattle yard and properties number 125-127 provide space for car parking (Figure 4).

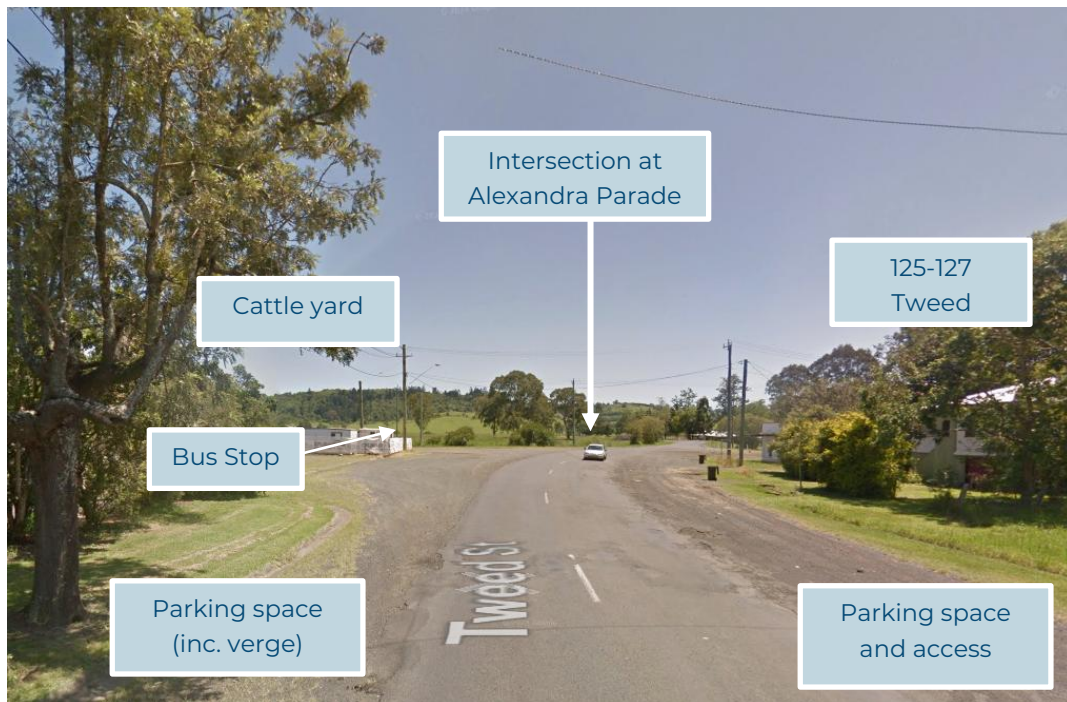


Figure 4 Street parking facilities at Tweed Street / Dunoon Road looking toward Alexandra Parade intersection. Google Street view

2.3 Active Transport

The current pedestrian and cyclist network around the site is limited. There are no dedicated footpaths or bicycle facilities along Dunoon Road or Alexandra Parade.

2.4 Public Transport

The existing public transport network in North Lismore includes four bus stops located within walking distance (approximately 800 metres) of the proposed school site, as shown in Figure 5. These stops do not service public buses.

These stops are serviced by three existing school bus routes:

- S377
- S897
- S898

Each of these services operates one trip in the morning and one in the afternoon, providing connectivity between North Lismore and the Trinity College Interchange, where broader connections across the Lismore region are available.

While these routes currently operate in the vicinity, they are not directly aligned with the future RRHC site. The Department of Education will work with Transport for NSW and local bus operators to review existing services and establish appropriate school bus routing and timetables as part of the transition to the new campus.

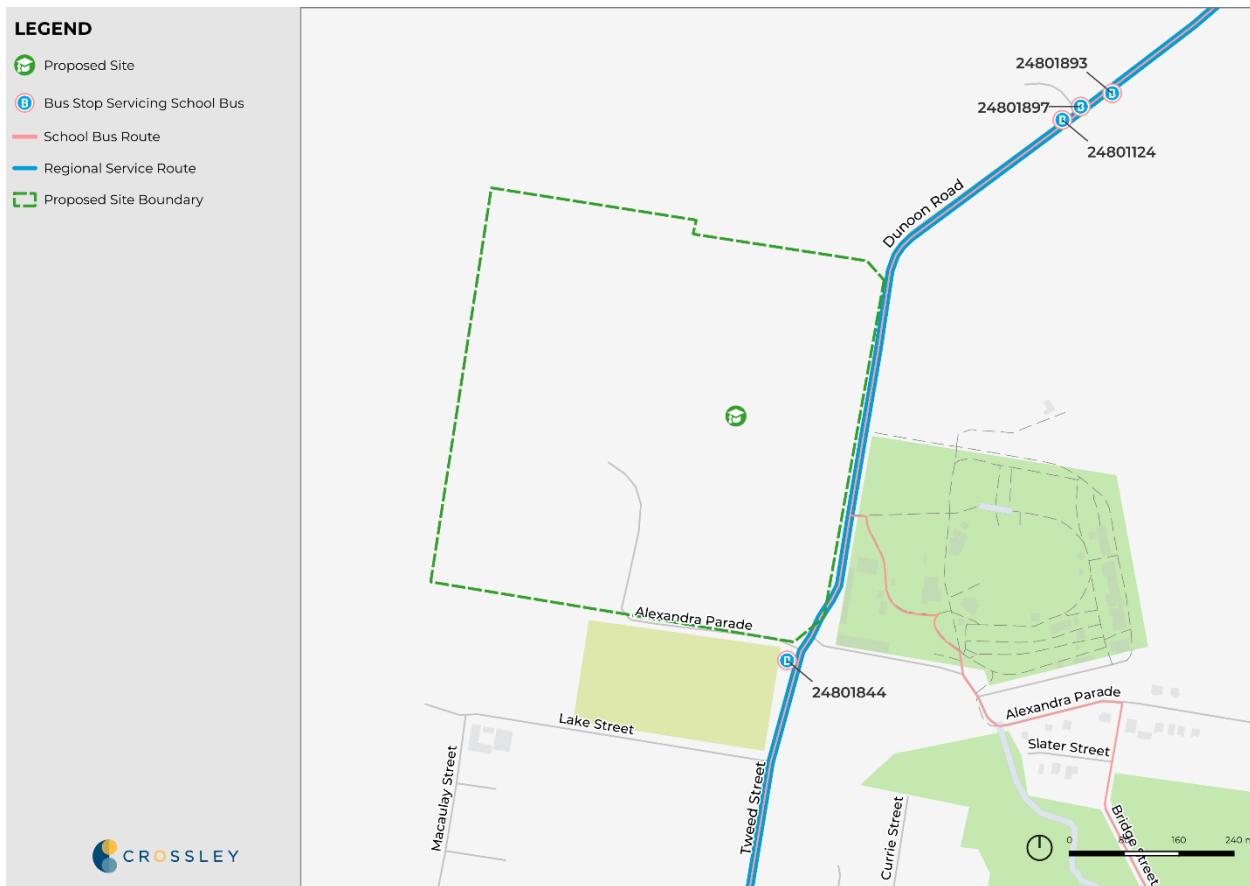


Figure 5 Existing bus stops and bus routes

Table 1 School bus routes servicing North Lismore

Route	Bus stop	Destinations	Frequency During Weekday (AM)	Frequency During Weekday (PM)
S377	ID 24801124	Fire Breathing Dragon Bus - Vistara Primary to Southern Cross University via North Lismore	Once a day in the morning	Once a day in the afternoon
S898	ID 24801844	Lismore Schools to Dunoon and Modanville via Barton Rd Tullera	Once a day in the morning	Once a day in the afternoon
S897	ID 24801893 ID 24801897	Lismore Schools to Dunoon and Dorroughby	Once a day in the morning	-

The Trinity College Interchange is a dedicated interchange for school buses. This interchange forms an extensive school bus network across Lismore as shown in Figure 6. Appendix A details the school bus services operating from Trinity College.

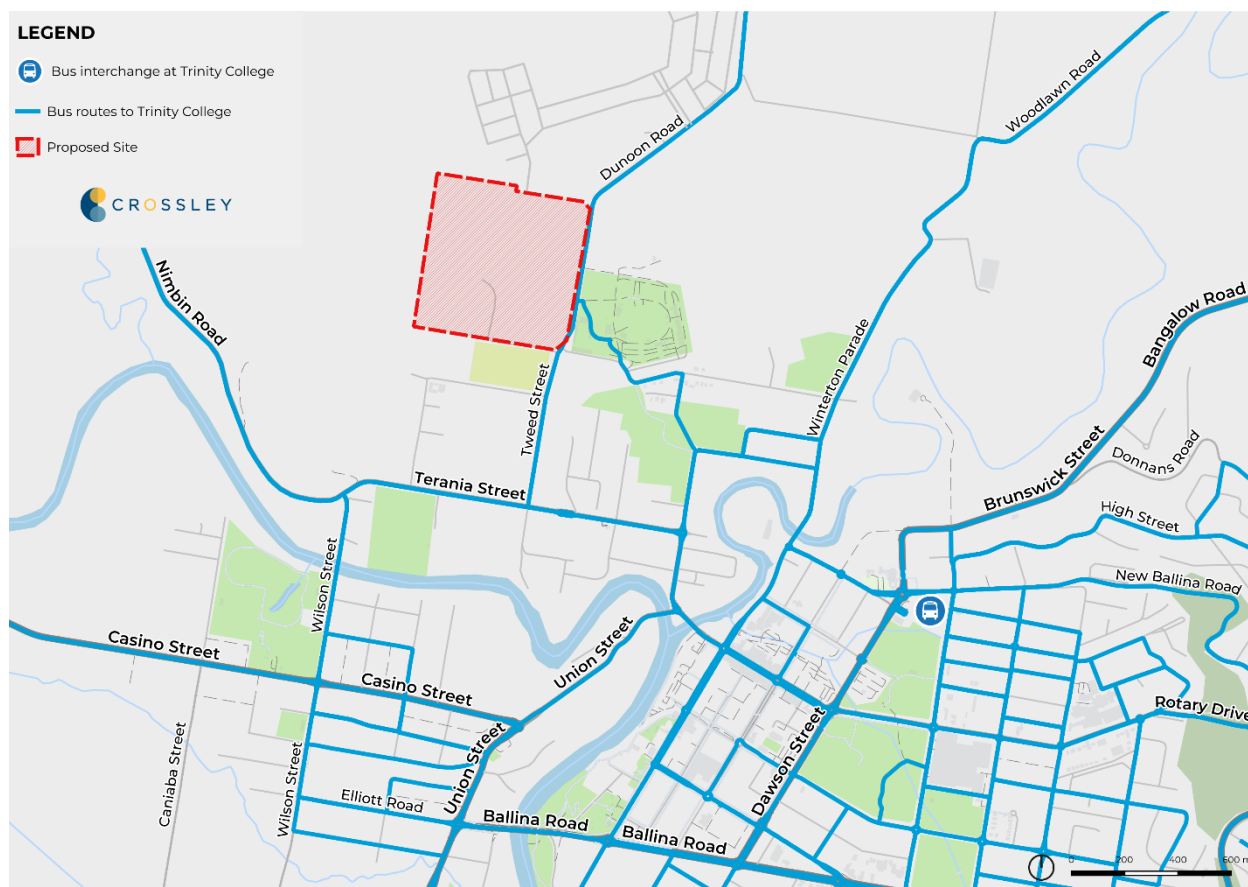


Figure 6 Trinity College school bus interchange and network

2.5 Crash history

Crash data for the five-year period 1 January 2019 to 31 December 2023 was obtained from the Transport for NSW Crash Data Portal. The analysis identified three reported crashes across two locations in the vicinity of the proposed school site on Dunoon Road.

The location and injury type of the crashes are listed in Table 2.

Table 2 Crash location and description

ID	Location	Injury	RUM code	RUM description
1	Dunoon Road adjacent to proposed school	Non-casualty	81	A vehicle collided into a parked car
2	Dunoon Road adjacent to Lismore Showground	Moderate Injury	73	A vehicle collided into utility
3	Dunoon Road at the intersection with Alexandra Parade	Moderate Injury	73	A vehicle collided into a 4-wheel drive

These incidents do not indicate any systemic safety issue in the local area but reinforce the need for safe access design and future monitoring as the school becomes operational.

Figure 7 visualises the location of these crashes on the local network.

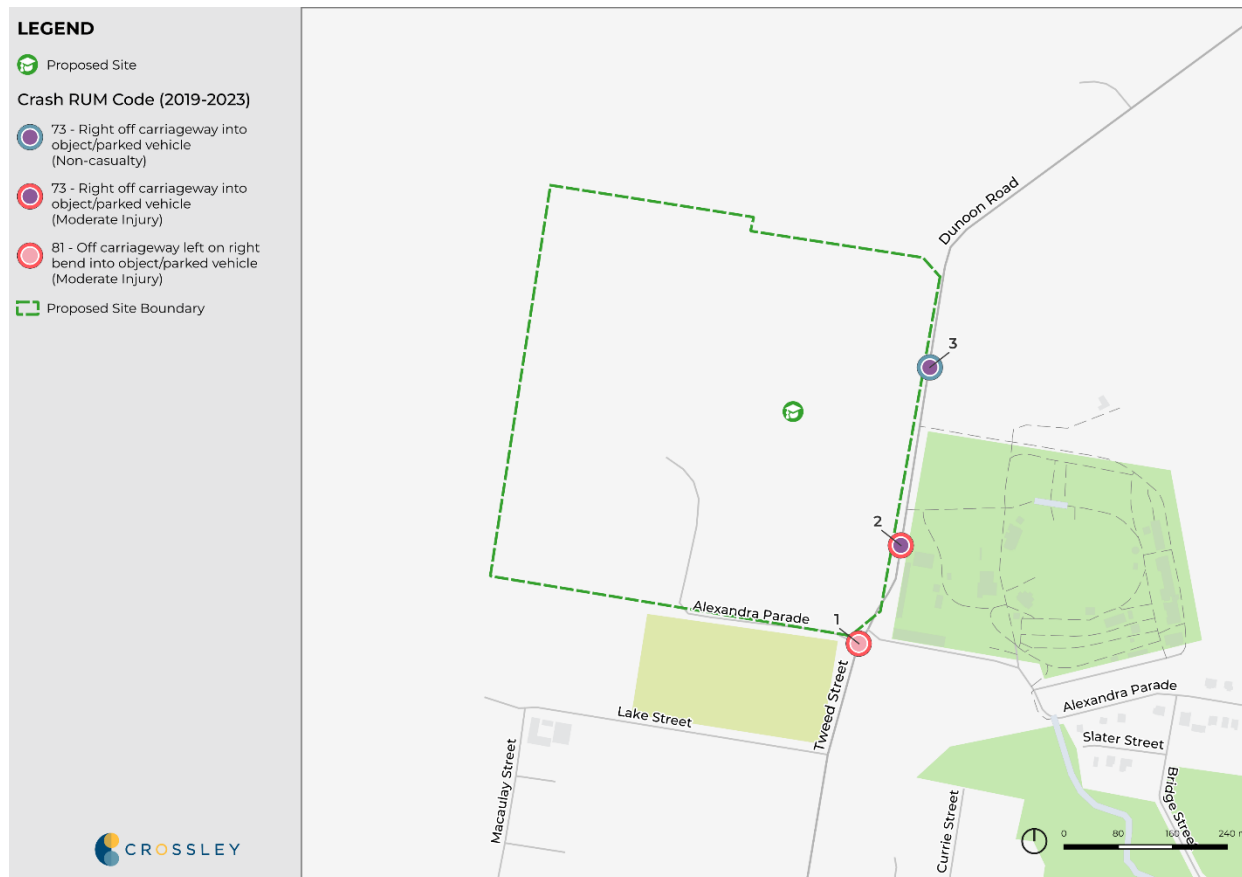


Figure 7 Location of crashes (Source: Transport for NSW, 2019-2023)

2.6 Local Network Operational Performance

To understand the baseline performance of the local road network, traffic surveys were undertaken at key locations surrounding the site as detailed in Table 3.

Table 3 Traffic survey type and dates

Count Location	Survey Type	Day Date	Time of Day	Peak AM and PM Period
Terania Street and Tweed Street	Classified turning count	29 Aug 2024	07:30 – 09:30 14:00 – 16:00	07:45 – 08:45 15:00 – 16:00
Dunoon Road south of Sexton Road	Classified mid-block count	29 Aug 2024	07:30 – 09:30 14:00 – 16:00	08:00 – 09:00 14:00 – 15:00

This data was used to establish baseline traffic volumes, vehicle distribution patterns, and assess the operational performance and available capacity of the local network.

Using these inputs, SIDRA intersection models were developed to test the current operation of key intersections. The modelling results indicate that the existing road network operates within acceptable Levels of Service (LoS A) during the observed peak periods.

Table 4 Existing performance of the local network

Location	AM Peak Hour				PM Peak Hour			Degree of Saturation (v/c)
	Average Delay (sec)	Level of Service (LoS)	95 th % back of queue (m)	Degree of Saturation (v/c)	Average Delay (sec)	Level of Service (LoS)	95 th % back of queue (m)	
Terania Street / Tweed Street	6.5	A	2.8	0.107	5.6	A	2.2	0.087
Alexandra Parade / Dunoon Road	2.3	A	1.0	0.149	3.2	A	2.5	0.113

Detailed modelling outputs, including degree of saturation (DoS), delays, queue lengths, and levels of service, are provided in Appendix B.

2.7 Summary

The existing road network surrounding the proposed school site has been assessed in terms of traffic volumes, operational performance, and road safety.

Traffic data and SIDRA modelling indicate that the local road network operates at Level of Service (LoS) A during both the AM and PM peak periods. This reflects low traffic volumes, short delays, and ample spare capacity across the network.

Crash data over a five-year period identified three reported crashes at or near the site, two of which resulted in moderate injuries. While the number of crashes is low and not indicative of systemic risk, the presence of a classified regional road highlights the importance of safe operating conditions and awareness of heavy vehicle movements.

Overall, the existing conditions indicate that the network is operating efficiently and safely, with no critical capacity or safety constraints at present.

3. Proposed Activity

3.1 Site overview

3.1.1 Site location

The subject site is located at 163 and 170 Alexandra Parade, North Lismore, NSW. It comprises three allotments:

- Lot 1 DP 539012
- Lot 2 DP 539012
- Lot 1 DP 376007

The site occupies approximately 33.53 hectares and is bounded to the east by Dunoon Road, a classified regional road, and to the south by Alexandra Parade. The site is currently undeveloped and was historically used for agricultural purposes.



Figure 8 Breakdown of parcels by allotment

(Source: Sixmaps)

3.1.2 Site description

The site currently contains several rural structures including cattle sheds, a cattle drinking well, and wire fencing. The terrain is mostly cleared, with vegetation primarily along the northern boundary and several individual trees scattered throughout.

The proposed school will be located in the south-western portion of the site to minimise flood exposure and environmental impact, with all access proposed from the eastern boundary along Dunoon Road.

3.2 Land use and planning considerations

As discussed in section 2.1, the proposed site is currently zoned RU1 Primary Production, and a planning proposal has been submitted to rezone the land to SP2 Education Establishment, C2 Environmental Conservation and C3 Environmental Management.

3.2.1 Surrounding land use

The proposed school site is located within a mixed rural–residential context at the edge of North Lismore. Land use zoning under the Lismore Local Environmental Plan 2012 includes a mix of:

- RU1 – Primary Production and R1 – General Residential to the west and north
- RE1 – Public Recreation and RE2 – Private Recreation to the east, across Dunoon Road

The surrounding land uses include:

- Low-density residential dwellings and rural lifestyle properties to the west and south.
- A cattle sales yard located immediately south of the site along Alexandra Parade, which generates regular livestock truck movements.
- The Lismore Showgrounds to the east, situated on the eastern side of Dunoon Road.
- Areas of public open space and environmental conservation to the north and northwest, including land identified as flood-prone.
- North Lismore Plateau development, situated north of the site. This is subject to a planned residential subdivision. This cumulative impact is discussed in Section 4.3.1.

While the residential and open space areas create a generally quiet setting, the presence of the cattle sales yard and associated vehicle movements introduces potential land use interface considerations, particularly in relation to vehicle access and school safety. These factors have been considered in the assessment of access options and site planning.

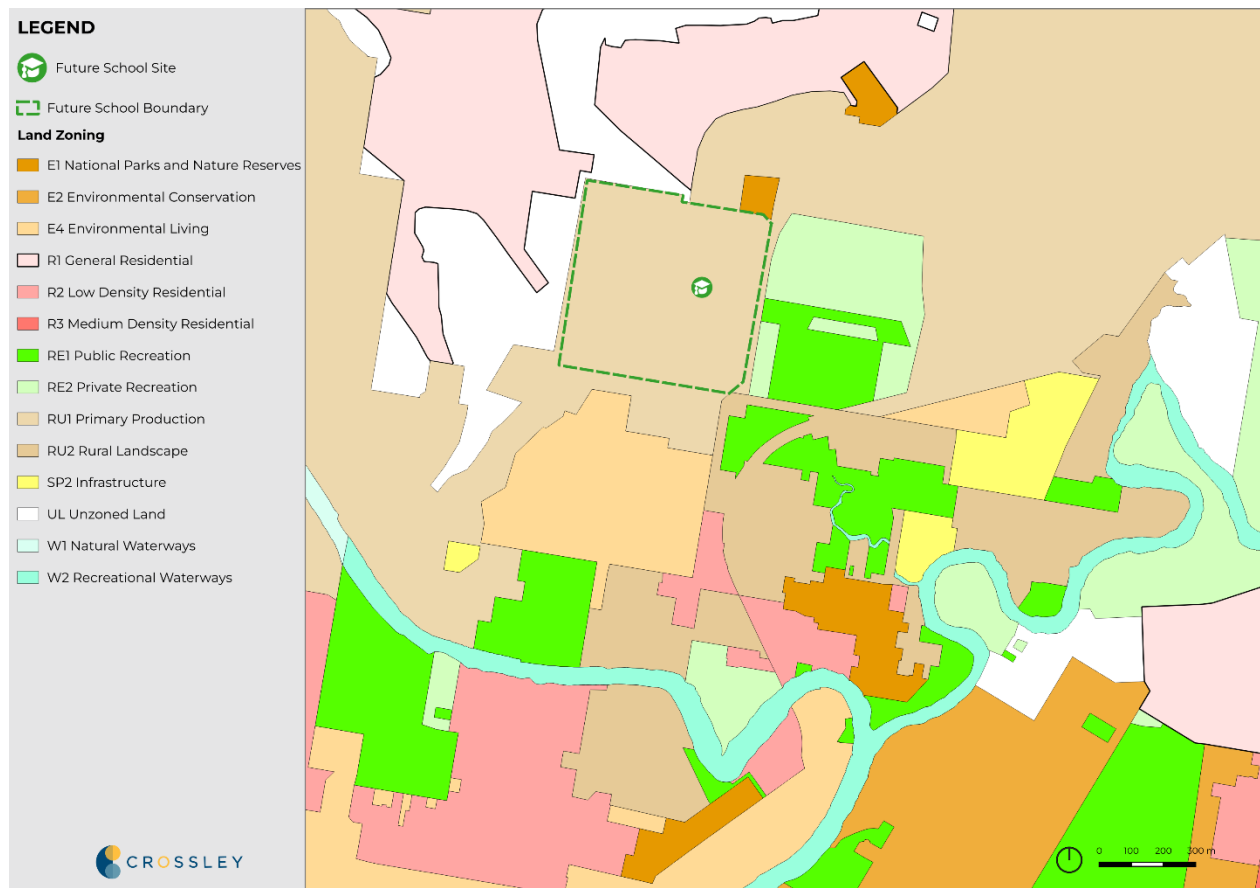


Figure 9 Land zoning around the proposed school site

(Source: CrossleyTP, 2024)

3.2.2 Future corridor protection requirements

A review of land use zoning and Transport for NSW strategic planning documents confirms that no future transport corridors or SP2 (Infrastructure) reservations are identified through or adjacent to the site.

However, it is noted that the NSW Reconstruction Authority is investigating the delivery of a new road along the northern boundary of the site to support the North Lismore Plateau residential subdivision. This road is not intended to provide access to the school. This is further discussed in section 4.3.

3.3 The activity

The proposed activity involves the relocation and rebuild of the Richmond River High Campus from its existing temporary location alongside The Rivers Secondary College Lismore High Campus at East Lismore to the proposed site at 163 and 170 Alexandra Parade, North Lismore.

3.3.1 Components of the activity

The school will be delivered in one stage. A detailed description of the proposal is as follows:

1. Demolition of existing features including existing buildings, cattle drinking well, cattle sheds, and wire fencing, and removal of trees to accommodate school development.
2. Construction of new 3 storey buildings on the southeastern portion of the site for the proposed public secondary school including:
 - a. General and Specialist Learning Spaces, and Workshops.
 - b. Administration, and Staff facilities.
 - c. Library, Hall, and Movement Studio.
 - d. Construction, Hospitality, and Agricultural Learning Facilities.
 - e. Amenity, Plant, Circulation, and Storage areas.
 - f. Outdoor Learning Spaces and play spaces.
3. Landscaping including tree planting.
4. Public domain works comprising:
 - Access road off Dunoon Road, comprising a separate shared bicycle/pedestrian pathway, and internal access roundabout.
 - Kiss and ride drop-off and pick up zones.
 - Bus transport arrangements with a separate bus zone.
5. Outdoor spaces including assembly zones, agricultural spaces, sports fields, games courts, dancing circles, yarning and dancing circles, seating and shade structures.
6. On-site carparking, including accessible spaces and provision for EV charging spaces.

There are no proposed public domain works.

Figure 10 below show the scope of works.

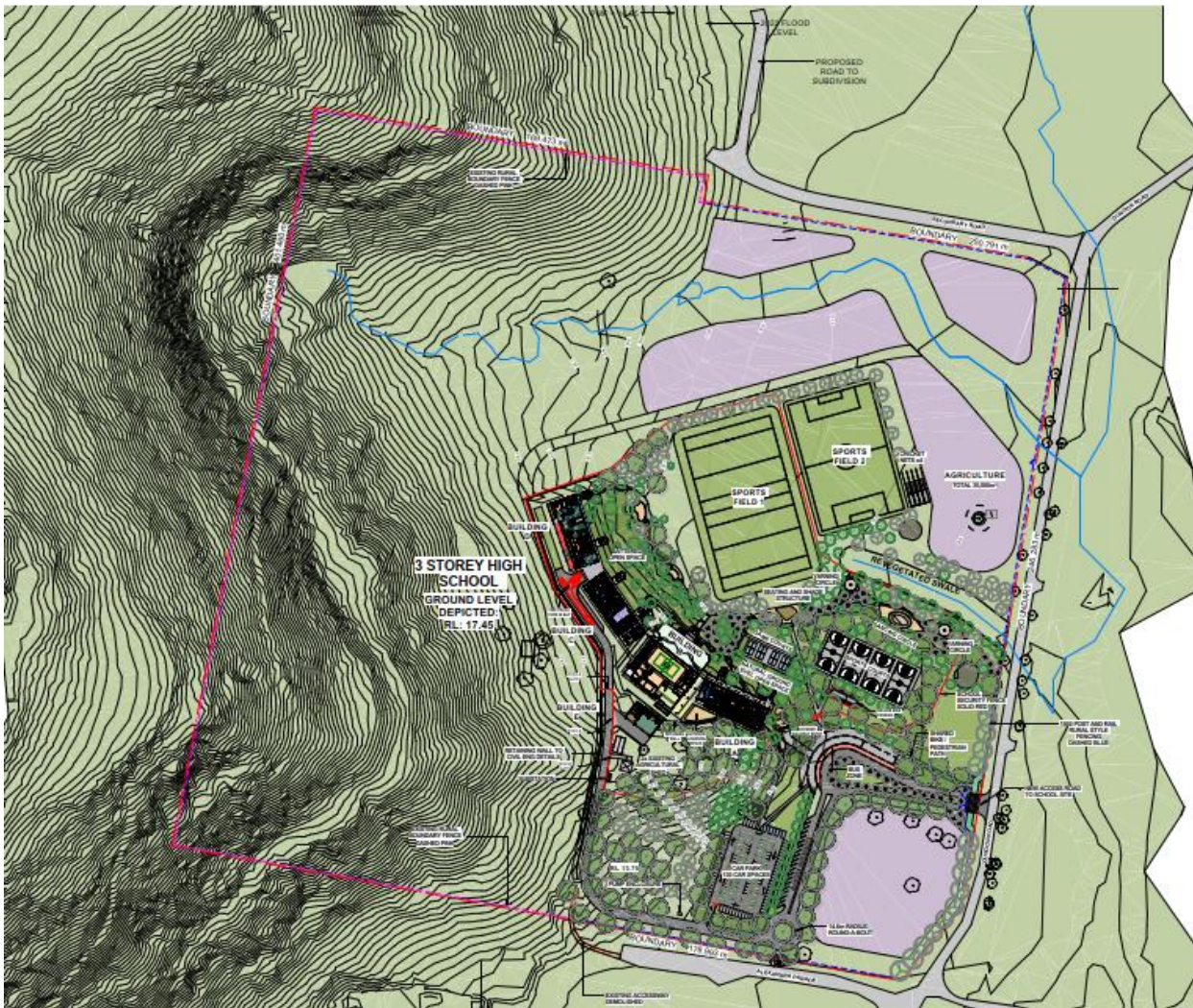


Figure 10 Overall site context plan

(Source: EJE, 2025)

3.3.2 Site access

General access arrangement

Access to the site will be provided via a new priority-controlled T-intersection on Dunoon Road, approximately 150m north of the intersection with Alexandra Parade. The proposed access point is located within an existing 50 km/h speed zone, on a section of Dunoon Road that forms the eastern boundary of the site.

The proposed access strategy includes:

- A single, purpose-built entry point on Dunoon Road to manage all vehicle access to the school.
- Internal traffic separation, including:
 - Staff and visitor parking
 - Designated kiss-and-drop zones
 - Dedicated internal bus bays, located fully within the site to reduce traffic interaction on the public road network.

The proposed intersection also provides an opportunity to integrate Lismore City Council's planned 2.5 m-wide shared path along Dunoon Road into the school's internal circulation. This will link directly to the on-site bike parking facilities, encouraging safe and direct access for students travelling by active modes.

The suitability of implementing a 40 km/h school zone along this section of Dunoon Road will be assessed by Transport for NSW, in accordance with the NSW Speed Zoning Guidelines. Given the land use change and proposed access design, a reduced school speed zone is expected to be feasible and appropriate, subject to TfNSW review and approval.

The design and performance of the intersection and internal network are further assessed in Section 4 of this report.

Key Council and TfNSW stakeholders were consulted on the access arrangement during the TWG meeting dated 8th May 2025. A pre-meeting briefing pack was circulated, outlining the rationale for the proposed access location and design. At the conclusion of the meeting, all comments were satisfactorily addressed, and consensus was reached on the arrangement presented in this report.

Internal bus stop access

The proposed bus stop is located adjacent to the main school entrance and is physically separated from both the kiss-and-drop zone and staff car park to minimise conflict between transport modes.

The bus bay is approximately 84 metres in length and designed to accommodate up to four buses simultaneously. This provides additional capacity compared to the temporary site, where timetables show up to two buses arrive within a 5-minute window.

The proposed layout is considered sufficient to provide resilience in service planning and scheduling, with flexibility to accommodate future increases in bus demand.

3.3.3 Construction and implementation

Construction is expected to occur in a single stage. Construction access is proposed from Dunoon Road, a classified regional road. A Construction Traffic Impact Assessment (CTIA) and Construction Traffic Management Plan (CTMP) will be prepared during the detailed design phase.

All construction activities will occur within standard construction hours, in accordance with relevant environmental and safety regulations.

Coordination with Transport for NSW and Lismore City Council will be required to manage impacts to the transport network. A Section 138 approval under the Roads Act 1993 may be required from Transport for NSW for any works within the Dunoon Road corridor reservation.

3.4 Development timing

The proposed day of opening of Richmond River High School Campus is Term 1 2027. Construction activities are planned to occur in 2026.

4. Operational impacts (with Proposal)

This chapter assesses the potential traffic and transport impacts of the activity. The assessment considers existing travel behaviour, road network conditions, parking availability, public and active transport connectivity, and potential cumulative impacts from planned developments or infrastructure projects.

4.1 Travel forecasts

4.1.1 Forecast modal split

The proposed school will accommodate:

- 660 students (at full enrolment capacity), and
- 66 full-time equivalent (FTE) staff

This represents a long-term investment in education infrastructure that will meet current and future demand for secondary schooling in the North Lismore area.

4.1.2 Trip generation

To forecast transport demand and potential impacts associated with the proposed, standard trip generation rates were applied in accordance with the Transport for NSW Guide to Transport Impact Assessments (2024).

The trip generation estimates apply the following key assumptions:

- Trip generation rates are based on one-way trips per student. To reflect both arrival and departure trips, these rates were doubled to calculate total student vehicle trips.
- The following peak period trip rates were applied:
 - AM peak hour - 0.4 vehicle trips/student, resulting in 528 student vehicle trips
 - PM peak hour - 0.3 vehicle trips/ student resulting in 396 student vehicle trips
- 100% of staff (66) are assumed to drive and park on site.
- 4 school buses are assumed to operate during both peak periods, equating to 8 vehicles trips (accounting for arrivals and departures).

Table 5 Estimated vehicle trips in AM and PM peak

Time period	Student vehicle trips (Car Passenger)	Staff vehicle trips	School bus vehicle trips	Total vehicle trips
AM Peak Hour	528	66	8	602
PM Peak Hour	396	66	8	470

Richmond River High Campus is expected to generate up to 602 vehicle trips during the AM peak period and up to 470 vehicle trips during the PM peak period, based on a conservative assumption that each car passenger travels alone.

These trip estimates inform the intersection analysis and parking assessments in the following sections.

4.1.3 Trip distribution

Trip distribution for Richmond River High Campus (RRHC) has been informed by analysis of current depersonalised student enrolment data, which identifies the residential location of enrolled students. This approach ensures that trip patterns used in this assessment reflect the real travel origins of the anticipated school population, rather than relying solely on assumed catchments.

Based on this analysis, the likely distribution of student and staff trips to the site is expected to follow three dominant corridors:

- North of the site via Dunoon Road, including Goonellabah, Clunes, and other rural localities.
- Southwest via Terania Street, connecting to South Lismore, Casino and other regional areas.
- Southeast via Terania Street, connecting to Lismore town centre, Trinity Interchange, Goonellabah and other regional areas.

All vehicle traffic will enter and exit the site via a new T-intersection on Dunoon Road. No access is proposed via Alexandra Parade, due to its unsealed condition, limited capacity, and proximity to the livestock sales yard, which generates heavy vehicle activity.

The following directional split was applied to assign future trips in the operational assessment:

- 16% to/from the north via Dunoon Road
- 38% to/from the southwest via Terania Street
- 46% to/from the southeast via Terania Street

These percentages were used in the SIDRA intersection modelling to evaluate the operational performance of key intersections and determine whether the local road network has sufficient capacity to accommodate school-generated traffic.

4.2 Performance assessment

4.2.1 Background traffic growth

To model the future operational performance of the local road network, a background traffic growth rate was applied to account for general increases in traffic volume unrelated to the proposed school activity.

Background traffic growth projections for North Lismore were obtained from travel zone data for zone 7821, summarised in Table 5. These projections show:

- A gradual decline in population over the 15-year period between 2016 and 2031.
- A modest increase in employment, reflecting small-scale economic activity in the area.

It is noted that these projections do not account for the planned North Lismore Plateau Urban Release Area, which may contribute to additional population and traffic in the longer term. This development is addressed in Chapter 5 – Cumulative Impact.

To ensure a conservative approach in assessing future traffic performance, a 1% annual background traffic growth rate was applied to traffic count data collected in 2024. This adjustment produces estimated traffic volumes for the 2027 year of opening as detailed in Table 7.

Table 6 Travel zone growth projects for North Lismore (Zone 7821)

Travel zone 7821; North Lismore	2016	2021	2026	2031	Average yearly growth
Population	954	912	886	851	-0.96%
Employment	424.7	449.2	449.5	451.2	+1%

Table 7 Year of opening background traffic

Location	Approach	2024 Existing		2027 Forecast	
		AM	PM	AM	PM
Dunoon Road (Mid-block)	North	265	121	273	125
	South	86	178	88	183
Dunoon Road/School Access Road Intersection	North	265	121	273	125
	South	86	178	88	183
	West	0	0	0	0
Dunoon Road/Alexandra Parade Intersection	North	264	121	272	125
	South	71	89	73	91
	East	37	113	38	116
	West	2	0	2	1
Terania Street/Tweed Street Intersection	North	135	96	139	99
	South	10	5	10	5
	East	66	171	68	176
	West	202	133	208	137

4.2.2 Intersection performance assessment

This section presents the results of the SIDRA Intersection modelling for key intersections impacted by the proposed development, including:

- The proposed T-intersection on Dunoon Road providing access to the new school site
- The existing intersection at Dunoon Road / Alexandra Parade
- The existing intersection at Terania Street and Tweed Street

Table 8 Intersection performance with RRHC

Intersection	AM Peak Hour			PM Peak Hour		
	Average Delay (sec)	Level of Service (LoS)	95 th percentile back of queue (m)	Average Delay (sec)	Level of Service (LoS)	95 th percentile back of queue (m)
Dunoon Road/School Access Road (Sign controlled intersection)	2.7	A	5.1	2.8	A	5.0
Dunoon Road/Alexandra Parade (Sign controlled intersection roundabout)	1.2	A	1.7	1.8	A	3.8
Terania Street/Tweed Street (Sign controlled intersection)	5.1	A	8.6	3.9	A	7.1

The modelling confirms that the existing road network has the capacity to accommodate the additional school-generated traffic from the proposed development, and no mitigation measures are required at these intersections.

4.3 End of Trip Facilities

This section outlines the end-of-trip facilities required under the Lismore City Council Development Control Plan and relevant Australian Standards. It then compares these requirements to the proposed facilities and forecast demand across all transport modes to assess compliance and whether the provision is adequate to support safe access to the site.

4.3.1 Car parking

Parking Requirements

The Lismore DCP specification for motor vehicle parking rates for educational establishments as per *Schedule 1 – Car Parking Requirements for Specific Land Uses* is outlined in Table 9.

Table 9 Carparking spaces required as specified in the Lismore DCP

Type of people	Number of people	Carparking requirements	Carparking spaces required
Staff	66	1 per 2 employees	33
Students	660	1 per 10 students	66
GRAND TOTAL			99

Based on the projected staff and student enrolment numbers for the site, an estimated 99 parking spaces, including one disability parking space, will be required to align with DCP regulations.

The Lismore DCP specifies the following requirement in Chapter 7.7.1 Parking for People with a Disability:

“Regardless of the location of the development, parking for people with disability shall be provided at a rate of no less than 1 space for every 100 spaces provided by a development “

This provision is consistent with the Building Code of Australia (BCA) for accessible bays, which similarly outlines 1 space for every 100 car parking spaces or part thereof.

Green Star requires that at least 5% of parking spaces be designated for electric vehicles and charging infrastructure must be provided.

Compliance and provision

The Overall Site Context Plan by EJE dated 19/06/25 outlines 117 standard car parking spaces, 9 EV parking spaces and 4 disability parking spaces, which complies with Green Star and DCP requirements.

The car park design as depicted in the Overall Site Context Plan by EJE dated 02/04/25 has been reviewed against Australian Standards for Class 1 – employee and commuter parking. A summary of the findings of the assessment are shown in Table 10.

Table 10 Car park design review against Australian Standards, Class 1

Design Aspects	AS2890	Proposed Provision	Notes	Compliant
Parking Space Dimensions (AS2890.1 Section 2.4.1 Figure 2.2)	Class 1 space dimensions to be: 2.4 (w) x 5.4m (l) Or	Proposed car parking spaces are 2.4 (w) x 5.4m (l)	Parking spaces are compliant.	YES
Parking Aisle Width (AS 2890.1 Section 2.4.1 Figure 2.2)	Minimum aisle width for 90° parking is 6.2m.	5.8m	5.8m aisles are only compliant if coupled with 2.5m wide bays as per Appendix B Table B2 of AS 2890.	Aisle widths to comply with AS2890 during design development.
Blind Aisle (AS2890.1 Section 2.4.2)	N/A	N/A	There are no blind aisles proposed for this carpark.	N/A
Gradients within parking modules (AS2890.1 Section 2.4.6)	Maximum Gradients: Measured parallel to the angle of parking—1 in 20 (5%). Accessed by NSW.NET on 18 Jun 2010 (b) (c) Measured in any other direction—1 in 16 (6.25%). Within parking spaces for people with disabilities—see AS/NZS 2890.6 <u>Minimum Gradients</u> For adequate drainage 1 in 100 (1.0%) for outdoor areas and 1 in 200 (0.5%) for covered areas.	1% (TTW Civil Engineering Plan, dated 20/06/25)	YES	
Motorcycle Space Dimensions (AS2890.1 Section 2.4.7)	N/A	N/A	There are no motorcycle spaces proposed for this carpark. There is no requirement under the DCP to provide motorcycle spaces	N/A

Design Aspects	AS2890	Proposed Provision	Notes	Compliant
			for school developments.	
Circulation Roadway & Ramp Width (AS2890.1 Section 2.5.2)	Circulation roadway requires a minimum 5.5m width for two-way roadways.	6.0m	Circulation roadway is compliant.	YES
Circulation Roadway Grades (AS2890.1 Section 2.5.3)	Maximum 1 in 5 (20%) for roadways longer than 20m. Maximum 1 in 4 (25%) for roadways up to 20m long	1% (TTW Civil Engineering Plan, dated 20/06/25)	Circulation roadway grade is compliant.	YES
Access Driveway Width (AS2890.1 Section 3.2.1)	This car park provides a combined driveway. According to Category 2 requirements, the width of the access driveway must be 6.0 to 9.0 metres.	6.0m at the narrowest point of the driveway.	Access driveway widths are compliant.	YES
Access driveway sight distance (AS2890.1 Section 3.2.4)	Minimum Stopping Sight Distance (SSD) for a 40km speed zone is 35m.	35m	There should be no obstructions for 35m from the exit driveway.	YES
Access Driveway Gradients (AS2890.1 Section 3.3)	A) Property line / building alignment - MAX 1 in 20 (5%) between edge of frontage road and property line and for at least the first 6m into the car park D) Across footpath MAX 1 in 40 (2.5%) across lateral distance of 1.0m	1% (TTW Civil Engineering Plan, dated 20/06/25)	Access Driveway Gradient is compliant.	YES
Minimum queueing at entrance (AS2890.1 Section 3.4)	Minimum queueing length of 5 cars / lane for a carpark with tidal traffic such as everyone arriving to work around the same time.	There is sufficient room for approximately 3 cars to queue in the carpark.	While the queue length between the control point and car park entry does not meet the minimum requirement in AS2890.1 Section	YES

Design Aspects	AS2890	Proposed Provision	Notes	Compliant
			3.4, the access is via an internal, privately owned driveway with sufficient length to accommodate vehicle queuing wholly within the site. As such, the functional intent of the standard i.e., to avoid queuing back onto public roads, is achieved. Accordingly, this is considered an acceptable outcome for this context.	
Column Positioning (AS2890.1 Section 5.2)	N/A	N/A	This carpark does not have columns.	N/A
Headroom Clearance (AS2890.1 Section 5.3)	N/A	N/A	This carpark does not have multiple storeys.	N/A
Bicycle Parking Space Dimensions (AS2890.3 Section 2.1)	1000mm min. between bicycle racks	1000mm	Bicycle parking space is compliant.	YES
Bicycle Envelope (AS2890.3 Section 2.1)	500mm (w) x 1800mm (l)	500mm (w) x 1800mm (l)	Bicycle envelope is compliant.	YES
Accessible Space Dimensions (AS2890.6 Section 2.5.1)	2.4 (w) x 5.4m (l)	2.5 (w) x 5.4m (l)	Accessible spaces are compliant.	YES
Shared Zone Dimensions (for accessible bays) (AS2890.6 Section 2.5.1)	2.4 (w) x 5.4m (l)	2.5 (w) x 5.4m (l)	Accessible spaces are compliant provided that one of the parking spaces is a shared space.	YES

Design Aspects	AS2890	Proposed Provision	Notes	Compliant
Headroom Clearance for accessible space (AS2890.6 Section 2.7)	N/A	N/A	This carpark does not have multiple storeys.	N/A

4.3.2 Kiss and drop

A hands-up travel survey was conducted on 7 June 2024, capturing students expected travel mode to the proposed RRHC site in North Lismore. A total of 329 students participated in the survey.

Based on the hands-up travel survey, approximately 69% of students (455 students) are expected to be dropped off and picked up by a caregiver. Assuming one student per vehicle, this equates to 455 vehicles arriving and departing during the AM and PM peak periods.

A technical assessment of kiss-and-drop requirements was undertaken to inform the internal layout and ensure sufficient queuing capacity. This assessment applied the following assumptions:

- Total demand: 455 vehicles in each peak period
- Peak activity window: 30-minute period during the school start and end times
- Arrival distribution: Modelled using a Poisson distribution to reflect typical variability in parent arrival rates
- Average dwell time (including deceleration, unloading, and clearance): 2–5 minutes per vehicle.

Based on this assessment and consistent with demand calculations in the Guide to Traffic Generating Developments (TfNSW), between 20 and 27 kiss-and-drop bays are required to accommodate peak demand without queuing onto the external road network.

The proposed design includes 20 internal kiss-and-drop spaces along the southeastern side of the site, which meets the calculated requirement. The layout has been designed in accordance with the Australian Standards for Off-Street Car Parking (AS2890.1) and allows for continuous movement through a one-way internal loop road.

The proposed internal layout provides capacity for 90 vehicles queueing, ensuring sufficient space for efficient operation and allowing for minor surges in arrival rates to prevent spillback onto Dunoon Road, supporting both safety and traffic flow.

4.3.3 Active transport facilities

The Lismore Development Control Plan (DCP) does not mandate bicycle parking requirements for new schools. However, as part of the School Transport Plan, a target mode share for cycling of 9% has been identified, which equates to an estimated demand for 59 bicycle parking spaces.

Based on data from the preferred travel survey, a minimum of 40 bicycle parking spaces would accommodate anticipated demand.

The proposed Overall Site Context Plan dated 19/06/25 by EJE provides 80 bicycle parking spaces accessed via an internal bicycle link connecting to Dunoon Road and Council's planned shared user path connection. Cyclists access is designed to be physically separate from vehicular access to increase safety. This design meets anticipated cycling demand.

4.3.4 Public transport

The temporary Richmond River High Campus (RRHC) site in East Lismore is currently served by four school bus services. It is assumed that these existing services will be reallocated to the new school site upon opening, subject to confirmation through the bus planning process.

The school currently enrolls approximately 550 students, with a maximum future capacity of 660 students. To support this capacity, if and when it is reached, an additional school bus service may be required to accommodate increased demand. However, the final number of bus services will need to be confirmed during the bus planning stage, which can only be triggered 18 months prior to the school's opening in accordance with Transport for NSW (TfNSW) contractual arrangements and budget planning processes.

As confirmed through discussions with Transport for NSW bus planning representatives at the Transport Working Group (TWG) dated 14/10/24, the project team was guided to provide capacity for a minimum of three school buses to load and unload simultaneously on-site. This requirement has been accommodated within the internal layout, which provide a bus zone extending for 84 metres, which offers capacity for up to four buses.

4.3.5 Service Vehicles

Based on the architectural plans, the loading zone is located in the northwest side of the school. Service vehicles can access this area via the School Access Road.

As specified in 'Lismore DCP Section 7.6.1 General Criteria' it is required that carparking areas have:

"Adequate provision of loading bays and manoeuvring areas within the site boundaries in accordance with AS2890.2"

There is no particular requirement for the number of spaces that need to be provided for delivery vehicles for schools. The architectural plan shows a dedicated loading space within the site. Therefore, this requirement has been satisfied. The service vehicles will access the loading zone through the School Access Road. The loading zone has been designed at this location to separate and minimise conflict between the loading zone and the car park area.

4.3 Cumulative impact

The cumulative impact assessment considers the combined effects of multiple developments on the transport network in North Lismore.

4.3.1 North Lismore Plateau

A residential subdivision is being planned north of the site as part of the North Lismore Plateau Urban Release Area. This subdivision is expected to deliver:

- 714 residential lots.
- 2 commercial lots.
- 8 residual lots.

According to the Barker Ryan Stewart Traffic and Parking Impact Report found in Lismore City Council's website, the subdivision is projected to generate 1,399 vehicle trips during the AM and PM peak hours once fully developed. However, this development is expected to be delivered in stages across eight precincts, with completion occurring after the site is operational.

As the North Lismore Plateau is within the local school catchment, it is expected that a portion of future residents will generate additional school-related trips. The impact of this subdivision on Dunoon Road and the surrounding transport network will be influenced by:

- The timing and staging of subdivision delivery relative to the site's opening.
- The completion of transport infrastructure upgrades, including the Dunoon Road upgrade, Dunoon Road shared path and Secondary Road new road connection.
- Modal share trends, particularly the availability of active and public transport options to reduce reliance on private vehicles.

The land has been rezoned, and subdivision approvals have been granted for Stages 1 and 2. However, any future development applications for the construction of dwellings will need to be submitted separately. The developments potential cumulative impact on the broader road network will need to be considered by the respective developers.

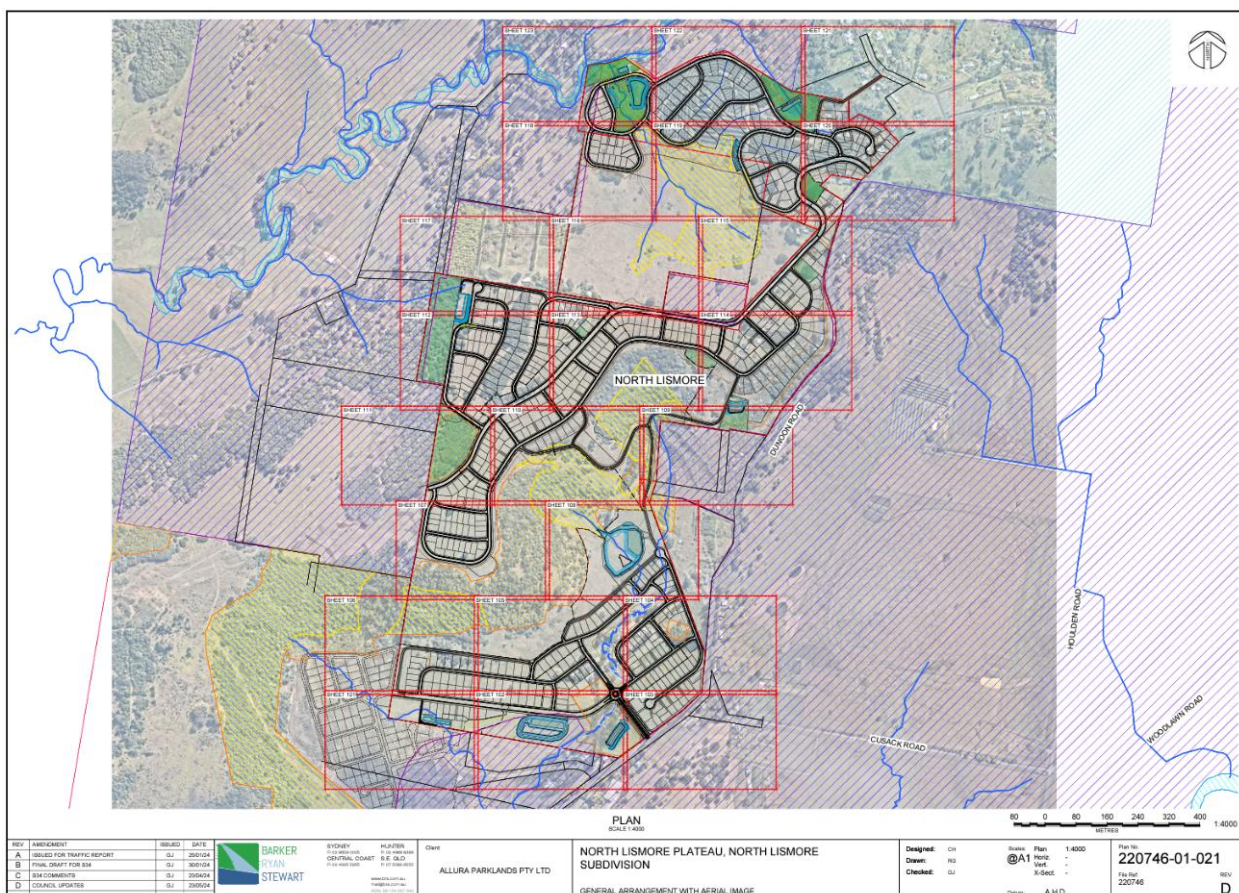


Figure 11 Masterplan for residential subdivision in North Lismore (Source: Barker Ryan Stewart)

5. Preliminary Construction Traffic and Pedestrian Management

5.1 General principles

During construction, effective traffic management is essential to ensure safety, minimise disruptions, and maintain smooth traffic flow. The following basic traffic management principles should be adopted during the construction period.

A. Planning & Coordination

- It is recommended that a detailed CTMP is developed as part of the detailed design stage before starting construction.
- Work should be coordinated between local government, law enforcement and transportation departments to ensure compliance with regulations.

B. Communication

- Inform the public about construction schedules, road closures and alternative routes through various channels.

C. Construction Impact Mitigation

- Disruption to all road users during construction should be kept to a minimum.
- Construction and delivery vehicles entering or leaving the site compound should be restricted to non-peak traffic periods.
- Property, vehicle, pedestrian and cyclist access should be maintained throughout the construction period with suitable alternative access arrangements provided otherwise.
- Implement phased construction to minimise impact on traffic.

D. Temporary Traffic Control Devices and Signs:

- Use clear, consistent and visible signage to guide road users through detours and work zones.
- Delineate any work zones or guide traffic using barriers and cones.
- Traffic control would need to be provided to manage and regulate traffic movements during construction.

E. Monitoring & Adaptation

- Continuously monitor traffic conditions and the effectiveness of traffic management strategies.
- Prepare to make adjustments based on real-time traffic conditions.

F. Incident Management

- Develop and communicate an emergency response plan to handle accidents or unforeseen incidents.
- Ensure there are protocols in place for the rapid clearance of any incidents to minimise disruption.

G. Environmental Considerations

- Implement measures to control noise, dust and other environmental impacts of construction on nearby residents and businesses.

5.2 Proposed working hours

The construction workforce is likely to fluctuate, depending on the stage of construction and associated activities. It is recommended for construction to be undertaken during standard working hours which have been defined by the NSW Environment Protection Authority (EPA) as:

- Monday to Friday - between 7am to 6pm
- Saturday - between 8am to 1pm
- Sunday and public holidays - no work.

6. Mitigation Measure

To ensure potential transport impacts are effectively managed and aligned with stakeholder expectations, a suite of mitigation measures has been identified. These measures focus on operational coordination, minor infrastructure adjustments, and staged planning in collaboration with Council and TfNSW.

Table 11 outlines the mitigation measures to manage and accommodate the traffic demand generated from the activity.

Table 11: Mitigation Measures

Mitigation Number and Name	Stage of implementation	Mitigation Measure	Reason for Mitigation Measure
1. Road Safety Audit	Detailed Design	A road safety audit should be undertaken for the proposed Dunoon Road intersection.	To assess safety associated with a planned new access onto a regional road.
2. Car Park Layout	Detailed Design	Verify the car park layout is compliant to AS 2890	Demonstrate compliance to AS 2890 standards.
3. A Construction Traffic Impact Assessment (CTIA) and Construction Traffic Management Plan (CTMP)	Detailed Design	Prepare a CTIA and CTMP.	To assess and manage construction-phase traffic impacts on the surrounding network.
4. Section 138 application	Pre-construction	Confirm whether a Section 138 application should be submitted to Lismore City Council and Transport for NSW.	To obtain consent for any works within the road reserve, including the proposed new intersection at Dunoon Road
5. School Zone request	Pre-construction	A request should be submitted to Transport for NSW to implement a 40km/h school zone on Dunoon Road.	Mitigate safety issues for students arriving on foot at the entry point on Dunoon Road.
6. Bus Services	Pre-opening	The Department of Education will work with Transport for NSW (TfNSW) and local bus operators to review existing bus services to establish school bus routing and timetables as part of the transition to the new campus. This can only be triggered 18 months prior to the school's opening in accordance with TfNSW contractual arrangements and budget planning processes.	There are currently no bus services operating to the proposed school site. The TfNSW transport team must plan and amend bus service routes to provide access to the site.
7. Transport Access Guide (TAG)	Pre-opening	Update the existing TAG	The TAG needs to reflect final bus service details and confirm access arrangement once

Mitigation Number and Name	Stage of implementation	Mitigation Measure	Reason for Mitigation Measure
			construction and planning are complete.
8. School Transport Plan	During operations	Adopt the School Transport Plan.	To manage travel demand and encourage sustainable transport behaviours.
9. Monitoring	During operation	Monitor safety issues in the local area.	Change in road conditions with the proposed new access arrangement and associated movements in/out of the site.

7. Conclusion and recommendations

7.1 Key Findings

The proposed access strategy, including the new Dunoon Road intersection, supports safe and efficient site access.

- The redevelopment will not result in adverse transport impacts under 2027 traffic forecasts.
- Adequate provisions are made for active transport, parking, kiss-and-drop, and buses.
- Consultation with TfNSW and Lismore City Council has informed the planning.
- Referral under T&I SEPP is discretionary due to the planning pathway under the Reconstruction Authority.

7.2 Recommendations

These guide next steps:

- Implement the mitigation measures outlined in Section 6 to address key transport-related risks during design finalisation, approvals, and the operational transition to the new school site.
- Finalise detailed intersection design and confirm access road geometry.
- Work with Council to confirm the shared path along Dunoon Road.
- Trigger the 18-month planning window for school bus operations with TfNSW.

7.3 Conclusion

- The proposed activity meets the requirements of the Reconstruction Authority Act 2022 and the REF pathway, where referral to TfNSW is discretionary under Schedule 3 of the Transport and Infrastructure SEPP 2021.
- The proposed activity is supported by an appropriate access strategy and surrounding transport infrastructure that can accommodate forecast travel demand.
- Key Council and TfNSW stakeholders were consulted on the access strategy during the 8th May 2025 TWG meeting. Consensus was reached on the proposed arrangements, with no further comments received.

Appendix A – Trinity College School Bus Services

Table 12 Trinity College School Bus Service

Bus number	Bus route description	Bus operator
610	Byron Bay to Lismore via Bangalow	Northern Rivers Buslines
635	Lismore to Mullumbimby	Northern Rivers Buslines
650	Lismore to Nimbin	Northern Rivers Buslines
652	Lismore to Tuntable Creek via Keerrong and The Channon	Quinns Buses
652	Lismore to Tuntable Creek	Quinns Buses
653	Dorroughby & Dunoon to Lismore	Dunoon Bus Service
661	Ballina to Lismore via Wollongbar and Alstonville	Northern Rivers Buslines
662	Lismore to Lennox Head via Wollongbar	Northern Rivers Buslines
N0124	Bangalow to Lismore Schools via Booyong & Richmond Hill	Bulzomi Bros Pty Ltd
N0218	Bangalow to Lismore Schools via Fernleigh, Pearces Creek & Woodlawn	Bulzomi Bros Pty Ltd
N0220	Teven to Kadina via Blue Hills, Summerland & Bexhill Schools	Bulzomi Bros Pty Ltd
N0295	Whian Whian to South Lismore via Lismore Schools	Halls Bus Company Pty Ltd
N0356	Larnook to Blakebrook Public & Lismore Schools via Rock Valley	SB Coaches Pty Ltd
N0357	Cawongla to Lismore Schools	SB Coaches Pty Ltd
N0835	Leycester to Lismore Schools via Leycester Rd	Halls Bus Company Pty Ltd
N0902	Koonorigan to Blakebrook Primary & Lismore Schools via Goolmangar	Balanco Pty Ltd
N1045	-	Williams, Michael
N1169	-	Williams, Michael
N1694	Woodlawn & Numulgi to Lismore Schools via Bexhill	Halls Bus Company Pty Ltd
N2551	Terania Creek to Modanville Public & Lismore Schools	MT & CJ QUINN PTY LTD
N2568	Alstonville to Lismore via Tregeagle Rd	Sodhi Transport Pty Ltd
N2569	Wardell to Lismore Schools via Rous Rd	Sodhi Transport Pty Ltd
N2734	Kyogle to Lismore Schools via Bentley	Sodhi Transport Pty Ltd
N2823	Caniaba Rd to Caniaba Public & Lismore Schools	SB Coaches Pty Ltd
N2891	Broadwater to Lismore Schools & Goonellabah Schools via Wyrallah	MT & CJ QUINN PTY LTD
N2892	Tucki Tucki Rd to Lismore Schools via Riverbank & East Gundurimba	MT & CJ QUINN PTY LTD

Bus number	Bus route description	Bus operator
N2900	Hillyards Rd to Lismore Schools via Bentley	Sodhi Transport Pty Ltd
S231	Lismore Schools to Leycester via Leycester Rd	Halls Bus Company
S232	Lismore Schools to Whian Whian via Dunoon	Halls Bus Company
S233	Lismore Schools to Numulgi and Woodlawn via Bexhill	Halls Bus Company
S264	Goonellabah Schools and Lismore Schools to Broadwater via Wyrallah	Quinns Buses
S265	Lismore Schools to Tucki Tucki via East Gundurimba	Quinns Buses
S347	Whale Bus - Lismore Schools to East Lismore via Coraki	Northern Rivers Buslines
S348	Rosella Bus - Lismore Schools to Lismore Military St via Goonellabah	Northern Rivers Buslines
S349	Kookaburra Bus - Kadina High to Lismore via Lismore Heights	Northern Rivers Buslines
S354	Kangaroo Bus - Goonellabah to East Lismore	Northern Rivers Buslines
S355	Butterfly Bus - Blue Hills Coll to East Lismore via Trinity Catholic Coll and Goonellabah	Northern Rivers Buslines
S356	Swan Bus - Southern Cross University to Lismore via East Lismore	Northern Rivers Buslines
S357	Turkey Bus - East Lismore to Lismore Schools via Lismore and Goonellabah	Northern Rivers Buslines
S358	Dragonfly Bus - Albert Park Public to Lismore via Lismore Schools and Goonellabah	Northern Rivers Buslines
S360	Snail Bus - Wyrallah Road Public to East Lismore via Lismore Schools and Goonellabah	Northern Rivers Buslines
S363	Duck Bus - Lismore High School to Lismore Schools and East Lismore Schools	Northern Rivers Buslines
S365	Rabbit Bus - St John's Coll to Lismore, Goonellabah Schools and East Lismore Schools	Northern Rivers Buslines
S366	Starfish Bus - East Lismore and Lismore Hts Schools to Goonellabah via Richmond Hill	Northern Rivers Buslines
S367	Marlin Bus - Lismore High to Lismore, N Lismore, South Lismore Schools and Lismore	Northern Rivers Buslines
S368	Platypus Bus - Summerland Christian Coll to Lismore, South Lismore Schools and Casino	Northern Rivers Buslines
S369	Seashell (Fan) Bus - Summerland Christian Coll to Bexhill, Eureka, Lismore Schools and E Lismore	Northern Rivers Buslines
S370	Polar Bear Bus - Southern Cross Uni to Lismore, Albert Park Schools & East Lismore	Northern Rivers Buslines
S373	Llama Bus - South Lismore to Southern Cross University via East Lismore	Northern Rivers Buslines
S375	Brown Bear Bus - Summerland Christian Coll to Southern Cross University via Blue Hills Coll	Northern Rivers Buslines

Bus number	Bus route description	Bus operator
S376	Sheep Bus - Evans River Community to Evans Head via Woodburn St	Northern Rivers Buslines
S377	Fire Breathing Dragon Bus - Vistara Primary to Southern Cross University via North Lismore	Northern Rivers Buslines
S378	Skunk Bus - Summerland Christian Coll to Lismore via Blue Hills Coll and East Lismore	Northern Rivers Buslines
S379	Flamingo Bus - Evans Head to Woodburn Schools, Coraki Schools and Lismore	Northern Rivers Buslines
S383	Dolphin Bus - Southern Cross University to Gwynne Rd via Tuncester and East Lismore	Northern Rivers Buslines
S384	Ant Bus - St John's College to Nimbin via Blakebrook Public and East Lismore	Northern Rivers Buslines
S385	Honey Bee Bus - Southern Cross University to Jiggi Rd via Blakebrook Public	Northern Rivers Buslines
S386	Ibis Bus - Southern Cross University to Nimbin via Blakebrook Public	Northern Rivers Buslines
S507	Cat Bus - Goonellabah to East Ballina via Lismore and Lennox Head	Northern Rivers Buslines
S514	Koala Bus - St John's College to Ballina via Lismore	Northern Rivers Buslines
S519	Dog Bus - Lismore Heights Primary to Alstonville via Coolgardie	Northern Rivers Buslines
S520	Cow Bus - St John's to Byron Bay via Lismore Rd	Northern Rivers Buslines
S524	Snake Bus - St John's Coll Woodlawn to Alstonville via McLeans Ridges and Wollongbar	Northern Rivers Buslines
S527	Fox Bus - St John's to Alstonvale via Tuckombil	Northern Rivers Buslines
S528	Lion Bus - Southern Cross Public to Molesworth St	Ballina Buslines
S529	Squirrel Bus - Wollongbar Public to Alstonville High	Ballina Buslines
S563	Lismore Schools to Bangalow via Boat Harbour and Fernleigh	Bulzomi Bros Pty Ltd
S891	Geneva & Kyogle to Lismore Schools	Dunoon Bus Service
S893	Lismore to Alstonville via Tregeagle Rd	Dunoon Bus Service
S894	Lismore Schools to Wardell via Rous Rd	Dunoon Bus Service
S896	Lismore Schools to Hillyards Rd via Bentley	Dunoon Bus Service
S897	Dorroughby & Dunoon to Lismore Schools	Dunoon Bus Service
S898	Lismore Schools to Dunoon and Modanville via Borton Rd Tullera	Dunoon Bus Service
S916	Lismore Schools and Blakebrook Primary to Koonorigan via Goolmangar	Koonorigan Bus Service
S964	Lismore to Repentance Creek via St Johns College	Williams, Michael
S966	Repentance Creek to Lismore via Corndale & Bexhill	Williams Bus Lines
S978	Lismore Schools and Blakebrook Public to Larnook via Rock Valley	Simes Bros. Coaches

Bus number	Bus route description	Bus operator
S979	East Lismore Schools to Cawongla	Simes Bros. Coaches
S980	Caniaba Public and Lismore Schools to Casino and Caniaba via Spring Grove	Simes Bros. Coaches
S982	Goonellabah and Lismore Schools to South Lismore via Caniaba	Simes Bros. Coaches

Appendix B – SIDRA Intersection Modelling Results

MOVEMENT SUMMARY

Site: [04-PM2027] 04 DUN_ACE 3-4PM Future 2027 (DUN Access) (Future Base + School (3-4PM 2027))
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Dunoon Road / Access Road
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	%	[Total HV]	%				[Veh. veh	Dist] m				km/h
South: Dunoon Road_S															
1	L2	All MCs	179	1.8	179	1.8	0.203	3.5	LOS A	0.0	0.0	0.00	0.22	0.00	38.5
2	T1	All MCs	193	6.0	193	6.0	0.203	0.1	LOS A	0.0	0.0	0.00	0.22	0.00	39.4
Approach			372	4.0	372	4.0	0.203	1.7	NA	0.0	0.0	0.00	0.22	0.00	39.1
North: Dunoon Road_N															
8	T1	All MCs	132	85.6	132	85.6	0.144	0.9	LOS A	0.4	5.0	0.24	0.27	0.24	39.5
9	R2	All MCs	34	96.9	34	96.9	0.144	6.8	LOS A	0.4	5.0	0.24	0.27	0.24	38.4
Approach			165	87.9	165	87.9	0.144	2.1	NA	0.4	5.0	0.24	0.27	0.24	39.4
West: Access Road_W															
10	L2	All MCs	44	2.4	44	2.4	0.227	4.0	LOS A	0.7	4.8	0.33	0.58	0.33	37.5
12	R2	All MCs	237	1.3	237	1.3	0.227	4.6	LOS A	0.7	4.8	0.33	0.58	0.33	37.0
Approach			281	1.5	281	1.5	0.227	4.5	LOS A	0.7	4.8	0.33	0.58	0.33	37.1
All Vehicles			818	20.1	818	20.1	0.227	2.8	NA	0.7	5.0	0.16	0.36	0.16	38.6

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akcelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: [01-AM2024] 01 TER_TWE 8-9AM Base 2024 (Base Model 2024)

Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Terania Street / Tweed Street AM Peak - JC
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number of Cycles	Aver. Speed
			[Total HV]		[Total HV]					[Veh.	Dist]		Rate to Depart		
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Tweed Street_S															
1	L2	All MCs	5	40.0	5	40.0	0.007	5.0	LOS A	0.0	0.2	0.15	0.49	0.15	40.9
2	T1	All MCs	1	0.0	1	0.0	0.007	3.8	LOS A	0.0	0.2	0.15	0.49	0.15	43.2
3	R2	All MCs	4	0.0	4	0.0	0.007	5.2	LOS A	0.0	0.2	0.15	0.49	0.15	38.7
Approach			10	20.0	10	20.0	0.007	5.0	LOS A	0.0	0.2	0.15	0.49	0.15	40.5
East: Terania Street_E															
4	L2	All MCs	3	0.0	3	0.0	0.032	6.0	LOS A	0.1	0.8	0.18	0.23	0.18	47.4
5	T1	All MCs	44	2.3	44	2.3	0.032	0.2	LOS A	0.1	0.8	0.18	0.23	0.18	55.1
6	R2	All MCs	19	0.0	19	0.0	0.032	6.0	LOS A	0.1	0.8	0.18	0.23	0.18	52.2
Approach			66	1.5	66	1.5	0.032	2.1	NA	0.1	0.8	0.18	0.23	0.18	53.9
North: Tweed Street_N															
7	L2	All MCs	63	0.0	63	0.0	0.102	5.9	LOS A	0.3	2.6	0.24	0.57	0.24	47.6
8	T1	All MCs	4	0.0	4	0.0	0.102	4.8	LOS A	0.3	2.6	0.24	0.57	0.24	47.9
9	R2	All MCs	68	16.2	68	16.2	0.102	6.5	LOS A	0.3	2.6	0.24	0.57	0.24	49.0
Approach			135	8.1	135	8.1	0.102	6.2	LOS A	0.3	2.6	0.24	0.57	0.24	48.4
West: Terania Street_W															
10	L2	All MCs	51	7.8	51	7.8	0.102	5.6	LOS A	0.1	0.4	0.01	0.16	0.01	54.5
11	T1	All MCs	147	0.0	147	0.0	0.102	0.0	LOS A	0.1	0.4	0.01	0.16	0.01	57.3
12	R2	All MCs	4	75.0	4	75.0	0.102	6.4	LOS A	0.1	0.4	0.01	0.16	0.01	44.0
Approach			202	3.5	202	3.5	0.102	1.6	NA	0.1	0.4	0.01	0.16	0.01	56.1
All Vehicles			413	5.1	413	5.1	0.102	3.2	NA	0.3	2.6	0.12	0.31	0.12	52.4

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY


Site: [01-PM2024] 01 TER_TWE 3-4PM Base 2024 (Base Model 2024)
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Terania Street / Tweed Street PM Peak
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number of Cycles	Aver. Speed
			[Total HV]	[Total HV]	[Total HV]	[Total HV]				[Veh.]	[Dist]		Rate to Depart		km/h
			veh/h	%	veh/h	%	v/c	sec		veh	m				
South: Tweed Street_S															
1	L2	All MCs	4	50.0	4	50.0	0.004	5.4	LOS A	0.0	0.1	0.23	0.48	0.23	40.5
2	T1	All MCs	1	0.0	1	0.0	0.004	3.9	LOS A	0.0	0.1	0.23	0.48	0.23	43.1
3	R2	All MCs	1	0.0	1	0.0	0.004	5.2	LOS A	0.0	0.1	0.23	0.48	0.23	38.5
Approach			6	33.3	6	33.3	0.004	5.1	LOS A	0.0	0.1	0.23	0.48	0.23	40.7
East: Terania Street_E															
4	L2	All MCs	4	0.0	4	0.0	0.082	4.9	LOS A	0.3	1.8	0.14	0.18	0.14	43.2
5	T1	All MCs	120	0.0	120	0.0	0.082	0.1	LOS A	0.3	1.8	0.14	0.18	0.14	47.4
6	R2	All MCs	47	0.0	47	0.0	0.082	4.9	LOS A	0.3	1.8	0.14	0.18	0.14	45.9
Approach			171	0.0	171	0.0	0.082	1.5	NA	0.3	1.8	0.14	0.18	0.14	46.9
North: Tweed Street_N															
7	L2	All MCs	42	2.4	42	2.4	0.076	4.8	LOS A	0.2	1.9	0.21	0.52	0.21	42.6
8	T1	All MCs	1	0.0	1	0.0	0.076	3.9	LOS A	0.2	1.9	0.21	0.52	0.21	42.9
9	R2	All MCs	54	14.8	54	14.8	0.076	5.5	LOS A	0.2	1.9	0.21	0.52	0.21	43.8
Approach			97	9.3	97	9.3	0.076	5.2	LOS A	0.2	1.9	0.21	0.52	0.21	43.3
West: Terania Street_W															
10	L2	All MCs	42	19.0	42	19.0	0.069	4.7	LOS A	0.0	0.3	0.02	0.19	0.02	46.7
11	T1	All MCs	87	1.1	87	1.1	0.069	0.0	LOS A	0.0	0.3	0.02	0.19	0.02	48.1
12	R2	All MCs	4	25.0	4	25.0	0.069	5.0	LOS A	0.0	0.3	0.02	0.19	0.02	43.0
Approach			133	7.5	133	7.5	0.069	1.7	NA	0.0	0.3	0.02	0.19	0.02	47.4
All Vehicles			407	5.2	407	5.2	0.082	2.5	NA	0.3	1.9	0.12	0.27	0.12	45.9

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

 **Site: [03C-AM202] 03C DUN_ALE 8-9AM Base 2024 - Sign controlled (DUN Access) (Base Model 2024)**
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Dunnon Road / Alexandra Parade AM Peak
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]		[Total HV]					[Veh.]	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Tweed Street_S															
1	L2	All MCs	1	0.0	1	0.0	0.041	4.2	LOS A	0.1	0.7	0.16	0.18	0.16	37.4
2	T1	All MCs	60	5.3	60	5.3	0.041	0.2	LOS A	0.1	0.7	0.16	0.18	0.16	39.1
3	R2	All MCs	15	7.1	15	7.1	0.041	4.4	LOS A	0.1	0.7	0.16	0.18	0.16	37.6
Approach			76	5.6	76	5.6	0.041	1.1	NA	0.1	0.7	0.16	0.18	0.16	38.9
East: Alexandra Parade_E															
4	L2	All MCs	8	12.5	8	12.5	0.042	7.6	LOS A	0.1	1.0	0.28	0.92	0.28	33.7
5	T1	All MCs	1	0.0	1	0.0	0.042	7.1	LOS A	0.1	1.0	0.28	0.92	0.28	34.1
6	R2	All MCs	31	17.2	31	17.2	0.042	8.2	LOS A	0.1	1.0	0.28	0.92	0.28	35.9
Approach			40	15.8	40	15.8	0.042	8.1	LOS A	0.1	1.0	0.28	0.92	0.28	35.5
North: Dunoon Road_N															
7	L2	All MCs	144	15.3	144	15.3	0.149	3.5	LOS A	0.0	0.1	0.00	0.24	0.00	38.5
8	T1	All MCs	134	7.9	134	7.9	0.149	0.0	LOS A	0.0	0.1	0.00	0.24	0.00	38.9
9	R2	All MCs	1	0.0	1	0.0	0.149	3.5	LOS A	0.0	0.1	0.00	0.24	0.00	38.2
Approach			279	11.7	279	11.7	0.149	1.8	NA	0.0	0.1	0.00	0.24	0.00	38.7
West: Alexandra Parade_W															
10	L2	All MCs	1	0.0	1	0.0	0.003	6.8	LOS A	0.0	0.1	0.19	0.87	0.19	35.7
11	T1	All MCs	1	0.0	1	0.0	0.003	7.2	LOS A	0.0	0.1	0.19	0.87	0.19	34.3
12	R2	All MCs	1	0.0	1	0.0	0.003	7.0	LOS A	0.0	0.1	0.19	0.87	0.19	32.5
Approach			3	0.0	3	0.0	0.003	7.0	LOS A	0.0	0.1	0.19	0.87	0.19	34.4
All Vehicles			398	10.8	398	10.8	0.149	2.3	NA	0.1	1.0	0.06	0.30	0.06	38.3

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

 **Site: [03C-PM202] 03C DUN_ALE 3-4PM Base 2024 - Sign controlled (DUN Access) (Base Model 2024)**
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Dunnon Road / Alexandra Parade AM Peak
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]		[Total HV]					[Veh.]	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Tweed Street_S															
1	L2	All MCs	1	0.0	1	0.0	0.050	3.7	LOS A	0.0	0.3	0.04	0.05	0.04	38.3
2	T1	All MCs	86	8.5	86	8.5	0.050	0.0	LOS A	0.0	0.3	0.04	0.05	0.04	39.7
3	R2	All MCs	6	16.7	6	16.7	0.050	4.0	LOS A	0.0	0.3	0.04	0.05	0.04	38.3
Approach			94	9.0	94	9.0	0.050	0.3	NA	0.0	0.3	0.04	0.05	0.04	39.6
East: Alexandra Parade_E															
4	L2	All MCs	18	11.8	18	11.8	0.113	7.4	LOS A	0.3	2.5	0.23	0.92	0.23	33.9
5	T1	All MCs	1	0.0	1	0.0	0.113	6.9	LOS A	0.3	2.5	0.23	0.92	0.23	34.2
6	R2	All MCs	101	4.2	101	4.2	0.113	7.3	LOS A	0.3	2.5	0.23	0.92	0.23	36.1
Approach			120	5.3	120	5.3	0.113	7.4	LOS A	0.3	2.5	0.23	0.92	0.23	35.8
North: Dunoon Road_N															
7	L2	All MCs	44	23.8	44	23.8	0.069	3.5	LOS A	0.0	0.1	0.00	0.16	0.00	38.8
8	T1	All MCs	83	8.9	83	8.9	0.069	0.0	LOS A	0.0	0.1	0.00	0.16	0.00	39.3
9	R2	All MCs	1	0.0	1	0.0	0.069	3.5	LOS A	0.0	0.1	0.00	0.16	0.00	38.6
Approach			128	13.9	128	13.9	0.069	1.2	NA	0.0	0.1	0.00	0.16	0.00	39.1
West: Alexandra Parade_W															
10	L2	All MCs	1	0.0	1	0.0	0.003	6.9	LOS A	0.0	0.1	0.20	0.87	0.20	35.8
11	T1	All MCs	1	0.0	1	0.0	0.003	6.9	LOS A	0.0	0.1	0.20	0.87	0.20	34.4
12	R2	All MCs	1	0.0	1	0.0	0.003	6.9	LOS A	0.0	0.1	0.20	0.87	0.20	32.6
Approach			3	0.0	3	0.0	0.003	6.9	LOS A	0.0	0.1	0.20	0.87	0.20	34.5
All Vehicles			345	9.5	345	9.5	0.113	3.2	NA	0.3	2.5	0.10	0.40	0.10	37.9

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: [01-AM202] 01 TER_TWE 8-9AM Future 2027 (Future Base + School (8-9AM 2027))
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Terania Street / Tweed Street AM Peak - JC
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number of Cycles	Aver. Speed
			[Total HV]	[Total HV]											
			veh/h	%	veh/h	%	v/c	sec		[Veh. veh	Dist] m		Rate to Depart		km/h
South: Tweed Street_S															
1	L2	All MCs	5	40.0	5	40.0	0.008	5.1	LOS A	0.0	0.2	0.17	0.49	0.17	40.7
2	T1	All MCs	1	0.0	1	0.0	0.008	4.4	LOS A	0.0	0.2	0.17	0.49	0.17	43.1
3	R2	All MCs	4	0.0	4	0.0	0.008	6.0	LOS A	0.0	0.2	0.17	0.49	0.17	38.5
Approach			10	20.0	10	20.0	0.008	5.4	LOS A	0.0	0.2	0.17	0.49	0.17	40.3
East: Terania Street_E															
4	L2	All MCs	3	0.0	3	0.0	0.123	6.5	LOS A	0.7	4.8	0.42	0.52	0.42	41.7
5	T1	All MCs	45	2.2	45	2.2	0.123	0.9	LOS A	0.7	4.8	0.42	0.52	0.42	49.9
6	R2	All MCs	176	1.7	176	1.7	0.123	6.5	LOS A	0.7	4.8	0.42	0.52	0.42	47.9
Approach			224	1.8	224	1.8	0.123	5.4	NA	0.7	4.8	0.42	0.52	0.42	48.2
North: Tweed Street_N															
7	L2	All MCs	191	1.6	191	1.6	0.290	6.0	LOS A	1.2	8.6	0.34	0.59	0.34	47.0
8	T1	All MCs	4	0.0	4	0.0	0.290	5.6	LOS A	1.2	8.6	0.34	0.59	0.34	47.4
9	R2	All MCs	169	6.5	169	6.5	0.290	7.5	LOS A	1.2	8.6	0.34	0.59	0.34	49.1
Approach			364	3.8	364	3.8	0.290	6.7	LOS A	1.2	8.6	0.34	0.59	0.34	48.1
West: Terania Street_W															
10	L2	All MCs	177	2.3	177	2.3	0.168	5.6	LOS A	0.1	0.4	0.01	0.32	0.01	53.1
11	T1	All MCs	151	0.0	151	0.0	0.168	0.0	LOS A	0.1	0.4	0.01	0.32	0.01	54.6
12	R2	All MCs	4	75.0	4	75.0	0.168	6.4	LOS A	0.1	0.4	0.01	0.32	0.01	42.4
Approach			332	2.1	332	2.1	0.168	3.0	NA	0.1	0.4	0.01	0.32	0.01	53.5
All Vehicles			930	2.9	930	2.9	0.290	5.1	NA	1.2	8.6	0.24	0.48	0.24	49.9

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

 **Site: [03C-AM2027] 03C DUN_ALE 8-9AM Future 2027 - Sign controlled (DUN Access) (Future Base + School (8-9AM 2027))**

Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Dunnon Road / Alexandra Parade AM Peak
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]		[Total HV]					[Veh. veh	Dist] m				km/h
South: Tweed Street_S															
1	L2	All MCs	1	0.0	1	0.0	0.195	5.4	LOS A	0.1	1.0	0.06	0.07	0.06	38.4
2	T1	All MCs	357	1.8	357	1.8	0.195	0.1	LOS A	0.1	1.0	0.06	0.07	0.06	39.8
3	R2	All MCs	15	7.1	15	7.1	0.195	5.6	LOS A	0.1	1.0	0.06	0.07	0.06	38.4
Approach			373	2.0	373	2.0	0.195	0.4	NA	0.1	1.0	0.06	0.07	0.06	39.7
East: Alexandra Parade_E															
4	L2	All MCs	8	12.5	8	12.5	0.076	8.7	LOS A	0.2	1.7	0.52	1.00	0.52	32.0
5	T1	All MCs	1	0.0	1	0.0	0.076	9.2	LOS A	0.2	1.7	0.52	1.00	0.52	32.4
6	R2	All MCs	32	16.7	32	16.7	0.076	12.1	LOS A	0.2	1.7	0.52	1.00	0.52	34.7
Approach			41	15.4	41	15.4	0.076	11.3	LOS A	0.2	1.7	0.52	1.00	0.52	34.3
North: Dunoon Road_N															
7	L2	All MCs	149	15.5	149	15.5	0.270	3.5	LOS A	0.0	0.1	0.00	0.13	0.00	38.9
8	T1	All MCs	375	3.7	375	3.7	0.270	0.0	LOS A	0.0	0.1	0.00	0.13	0.00	39.4
9	R2	All MCs	1	0.0	1	0.0	0.270	3.6	LOS A	0.0	0.1	0.00	0.13	0.00	38.7
Approach			525	7.0	525	7.0	0.270	1.0	NA	0.0	0.1	0.00	0.13	0.00	39.2
West: Alexandra Parade_W															
10	L2	All MCs	1	0.0	1	0.0	0.004	7.8	LOS A	0.0	0.1	0.46	0.84	0.46	35.1
11	T1	All MCs	1	0.0	1	0.0	0.004	9.5	LOS A	0.0	0.1	0.46	0.84	0.46	33.5
12	R2	All MCs	1	0.0	1	0.0	0.004	9.3	LOS A	0.0	0.1	0.46	0.84	0.46	31.5
Approach			3	0.0	3	0.0	0.004	8.9	LOS A	0.0	0.1	0.46	0.84	0.46	33.6
All Vehicles			942	5.4	942	5.4	0.270	1.2	NA	0.2	1.7	0.05	0.15	0.05	39.1

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: [04-AM2027] 04 DUN_ACE 8-9AM Future 2027 (DUN Access) (Future Base + School (8-9AM 2027))
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Dunoon Road / Access Road
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number of Cycles to Depart	Aver. Speed
			[Total HV]		[Total HV]					[Veh.]	[Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Dunoon Road_S															
1	L2	All MCs	296	1.1	296	1.1	0.214	3.5	LOS A	0.0	0.0	0.00	0.35	0.00	38.1
2	T1	All MCs	93	9.1	93	9.1	0.214	0.1	LOS A	0.0	0.0	0.00	0.35	0.00	39.1
Approach			388	3.0	388	3.0	0.214	2.7	NA	0.0	0.0	0.00	0.35	0.00	38.4
North: Dunoon Road_N															
8	T1	All MCs	287	11.7	287	11.7	0.194	0.3	LOS A	0.4	3.1	0.16	0.18	0.16	39.6
9	R2	All MCs	56	1.9	56	1.9	0.194	4.8	LOS A	0.4	3.1	0.16	0.18	0.16	38.9
Approach			343	10.1	343	10.1	0.194	1.0	NA	0.4	3.1	0.16	0.18	0.16	39.5
West: Access Road_W															
10	L2	All MCs	44	2.4	44	2.4	0.236	3.7	LOS A	0.7	5.1	0.32	0.56	0.32	37.5
12	R2	All MCs	237	1.3	237	1.3	0.236	4.9	LOS A	0.7	5.1	0.32	0.56	0.32	37.1
Approach			281	1.5	281	1.5	0.236	4.7	LOS A	0.7	5.1	0.32	0.56	0.32	37.2
All Vehicles			1013	5.0	1013	5.0	0.236	2.7	NA	0.7	5.1	0.14	0.35	0.14	38.5

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

▼ Site: [01-PM202] 01 TER_TWE 3-4PM Future 2027 (Future Base + School (3-4PM 2027))
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

Terania Street / Tweed Street PM Peak
Site Category: (None)
Give-Way (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed
			[Total HV]	[Total HV]						[Veh.]	Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Tweed Street_S															
1	L2	All MCs	4	50.0	4	50.0	0.005	5.4	LOS A	0.0	0.2	0.25	0.48	0.25	40.4
2	T1	All MCs	1	0.0	1	0.0	0.005	4.2	LOS A	0.0	0.2	0.25	0.48	0.25	43.0
3	R2	All MCs	1	0.0	1	0.0	0.005	5.9	LOS A	0.0	0.2	0.25	0.48	0.25	38.4
Approach			6	33.3	6	33.3	0.005	5.3	LOS A	0.0	0.2	0.25	0.48	0.25	40.6
East: Terania Street_E															
4	L2	All MCs	4	0.0	4	0.0	0.135	5.1	LOS A	0.7	4.9	0.30	0.34	0.30	40.7
5	T1	All MCs	124	0.0	124	0.0	0.135	0.4	LOS A	0.7	4.9	0.30	0.34	0.30	45.4
6	R2	All MCs	143	2.1	143	2.1	0.135	5.1	LOS A	0.7	4.9	0.30	0.34	0.30	44.2
Approach			271	1.1	271	1.1	0.135	3.0	NA	0.7	4.9	0.30	0.34	0.30	44.7
North: Tweed Street_N															
7	L2	All MCs	166	0.6	166	0.6	0.247	4.8	LOS A	1.0	7.1	0.26	0.52	0.26	42.5
8	T1	All MCs	1	0.0	1	0.0	0.247	4.4	LOS A	1.0	7.1	0.26	0.52	0.26	42.7
9	R2	All MCs	155	5.2	155	5.2	0.247	6.2	LOS A	1.0	7.1	0.26	0.52	0.26	43.8
Approach			322	2.8	322	2.8	0.247	5.5	LOS A	1.0	7.1	0.26	0.52	0.26	43.2
West: Terania Street_W															
10	L2	All MCs	118	6.8	118	6.8	0.109	4.6	LOS A	0.0	0.3	0.02	0.31	0.02	46.0
11	T1	All MCs	90	1.1	90	1.1	0.109	0.0	LOS A	0.0	0.3	0.02	0.31	0.02	46.7
12	R2	All MCs	4	25.0	4	25.0	0.109	4.9	LOS A	0.0	0.3	0.02	0.31	0.02	41.8
Approach			212	4.7	212	4.7	0.109	2.7	NA	0.0	0.3	0.02	0.31	0.02	46.2
All Vehicles			811	3.0	811	3.0	0.247	3.9	NA	1.0	7.1	0.21	0.41	0.21	44.4

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

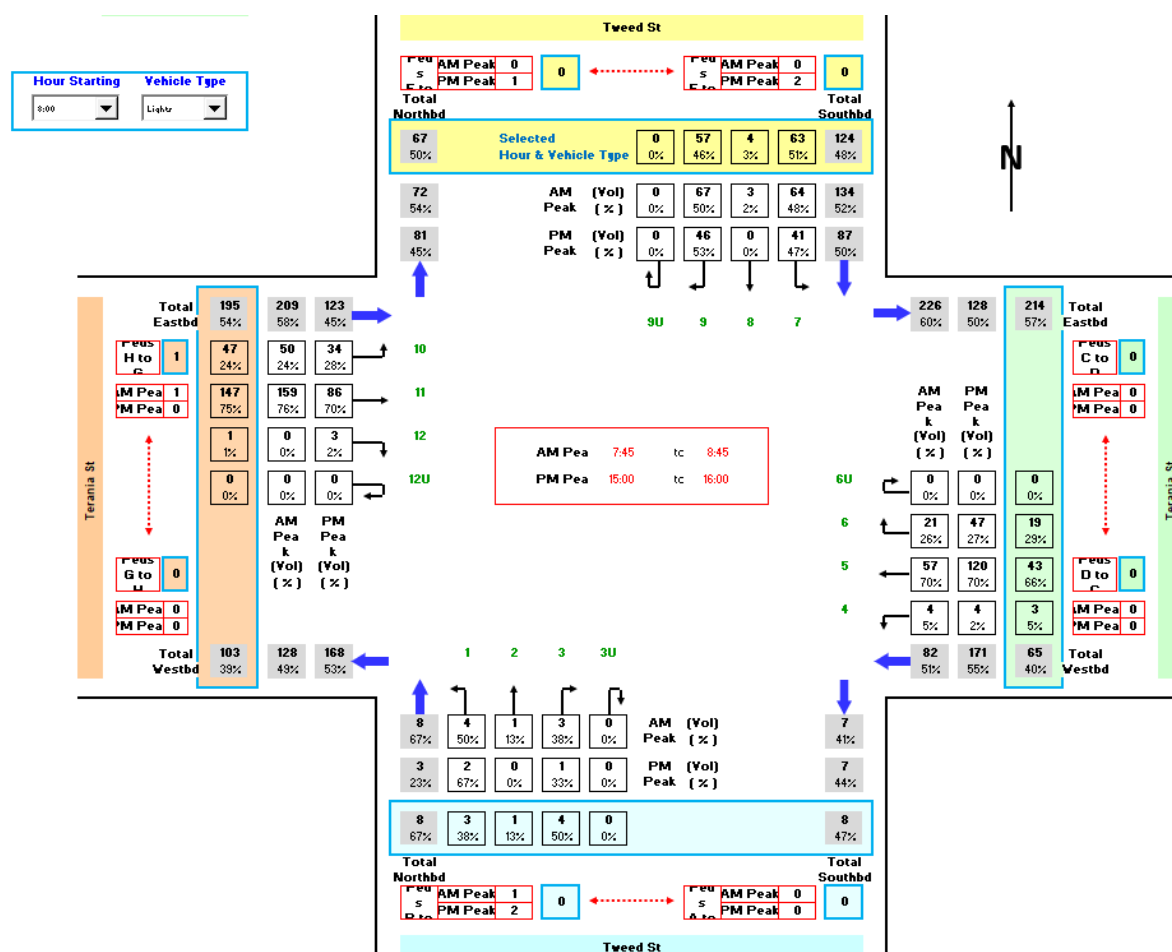
 **Site: [03C-PM2027] 03C DUN_ALE 3-4PM Sign controlled (DUN Access)** (Future Base + School (3-4PM 2027))
Output produced by SIDRA INTERSECTION Version: 10.0.5.217

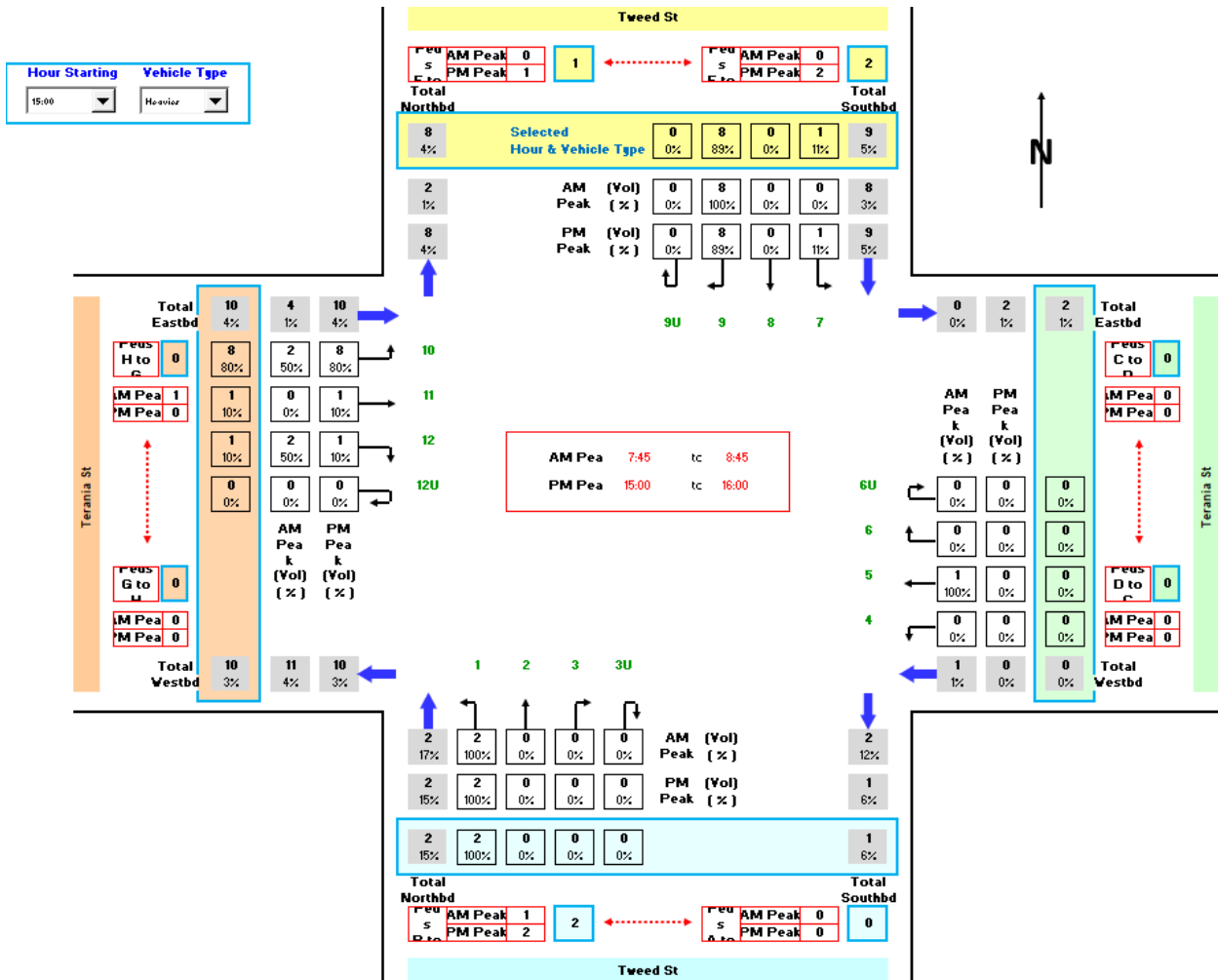
Dunnon Road / Alexandra Parade AM Peak
Site Category: (None)
Stop (Two-Way)
Site Scenario: 1 | Local Volumes

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Qued	Eff. Stop of Cycles	Number of Cycles to Depart	Aver. Speed
			[Total HV]		[Total HV]					[Veh.]	[Dist]				
			veh/h	%	veh/h	%	v/c	sec		veh	m				km/h
South: Tweed Street_S															
1	L2	All MCs	1	0.0	1	0.0	0.144	4.6	LOS A	0.1	0.4	0.03	0.03	0.03	38.6
2	T1	All MCs	267	3.9	267	3.9	0.144	0.0	LOS A	0.1	0.4	0.03	0.03	0.03	39.9
3	R2	All MCs	6	16.7	6	16.7	0.144	4.9	LOS A	0.1	0.4	0.03	0.03	0.03	38.5
Approach			275	4.2	275	4.2	0.144	0.2	NA	0.1	0.4	0.03	0.03	0.03	39.8
East: Alexandra Parade_E															
4	L2	All MCs	18	11.8	18	11.8	0.170	8.5	LOS A	0.5	3.8	0.46	0.98	0.46	32.8
5	T1	All MCs	1	0.0	1	0.0	0.170	8.5	LOS A	0.5	3.8	0.46	0.98	0.46	33.2
6	R2	All MCs	104	4.0	104	4.0	0.170	9.6	LOS A	0.5	3.8	0.46	0.98	0.46	35.4
Approach			123	5.1	123	5.1	0.170	9.4	LOS A	0.5	3.8	0.46	0.98	0.46	35.1
North: Dunoon Road_N															
7	L2	All MCs	45	23.3	45	23.3	0.186	3.5	LOS A	0.0	0.1	0.00	0.06	0.00	39.1
8	T1	All MCs	322	3.3	322	3.3	0.186	0.0	LOS A	0.0	0.1	0.00	0.06	0.00	39.8
9	R2	All MCs	1	0.0	1	0.0	0.186	3.6	LOS A	0.0	0.1	0.00	0.06	0.00	39.0
Approach			368	5.7	368	5.7	0.186	0.4	NA	0.0	0.1	0.00	0.06	0.00	39.7
West: Alexandra Parade_W															
10	L2	All MCs	1	0.0	1	0.0	0.003	7.5	LOS A	0.0	0.1	0.39	0.83	0.39	35.4
11	T1	All MCs	1	0.0	1	0.0	0.003	8.2	LOS A	0.0	0.1	0.39	0.83	0.39	33.9
12	R2	All MCs	1	0.0	1	0.0	0.003	8.6	LOS A	0.0	0.1	0.39	0.83	0.39	32.0
Approach			3	0.0	3	0.0	0.003	8.1	LOS A	0.0	0.1	0.39	0.83	0.39	34.0
All Vehicles			769	5.1	769	5.1	0.186	1.8	NA	0.5	3.8	0.09	0.20	0.09	38.8

Site Level of Service (LOS) Method: Delay (NSW). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).
Two-Way Sign Control Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Appendix C – Traffic Count Survey





Appendix D – Consultation Records

D1 Transport Working Group Meeting 1

The first Transport Working Group (TWG) meeting for Richmond River High Campus was held on 23 September 2024.

Agencies in Attendance:

- Department of Education (DoE)
- Transport for NSW (TfNSW)
- Lismore City Council (LCC)
- TSA Riley
- TTW - Civil
- Crossley Transport Planning (CrossleyTP)

Key Discussion Points:

TWG participants were briefed on the Richmond River High Campus project, including the proposed scope of works and the target mode share objectives.

LCC:

LCC provided updates on the following projects:

- Submitted a funding application for delivery of various walking/cycling infrastructure projects.
- Other transport links have not received funding. Noted the new school would elevate priority of planned long-term projects.
- Noted no works are planned for section between Alexandra Parade and Terania Street.

TfNSW:

- TfNSW was tasked to review the speed zone along Dunoon Road to ensure they are suitable for the changed traffic environment. Noted changes in speed zones will not be made until the school is in construction/operation.
- Noted a crossing facility will need to be provided if proposing bus stops on either side of Dunoon Road.

DoE:

- DoE noted that DoE and NSW Reconstruction Authority will review the upgrade requirements for Secondary Road but upgrades to intersection and Dunoon Road will need to be funded by Council.

Actions for Further Investigation:

1. CrossleyTP:

- Investigate bus route planning to interchange at Old Trinity College site
 - Investigate separation of kiss and drop zone and bus zone
 - Investigate the need for bus stop along the eastern side of Dunoon Road
 - Remove opportunity 4, 6 and 7 from RTA.
2. LCC:
- Inform TWG participants of the outcome of funding application (expected by mid-November).
3. TfNSW:
- Review speed zone along Dunoon Road
 - Review bus requirements

D2 Transport Working Group Meeting 2

The second Transport Working Group (TWG) meeting for Richmond River High Campus was held on 14 October 2024.

Agencies in Attendance:

- Department of Education (DoE)
- Transport for NSW (TfNSW)
- Lismore City Council (LCC)
- TSA Riley
- TTW – Civil
- NSW Reconstruction Authority
- Crossley Transport Planning (CrossleyTP)

Key Discussion Points:

CrossleyTP:

- Noted that bus service data discrepancies were identified.
- Noted the school bus zone is 60 metres long and can accommodate approximately 3 buses.
- Provided an overview of the Get NSW Active funding program, highlighting it as Plan B if the Council does not receive funding.

TfNSW:

- Noted that the Trinity College interchange operated effectively and there are no plans to relocate the interchange at this point. While peak periods are intense, the system is functioning well, and they are confident the new school will not tip the system.
- Noted it is too early to determine if the addition of a “growth bus” is necessary. The analysis will need to be based on actual student enrolments rather than forecasted.
- Noted the proposed bus route from Trinity College interchange to the proposed school site would not be functional due to low-level rail bridge on Alexandra Parade. It is heritage listed so it is up to heritage to approve the removal of the rail bridge (risk). Noted that this is the best remove, but it would need the rail bridge to be removed. The alternative route is via the CBD (Terania Street) if the bridge cannot be removed.

- Noted the extent of the school zone will be calculated depending on the location of the gates.
- Noted speed zone review takes around 2 months from request to authorisation, then Council will install signs on behalf of TfNSW.
- Post meeting – Noted the bus zone and kiss and drop should be at separate locations.

Actions for Further Investigation:

1. TfNSW
 - Review list of bus services and confirm they are current and in operation
 - Review speed zone along Dunoon Road

D3 Transport Working Group Meeting 3

The third Transport Working Group (TWG) meeting for Richmond River High Campus was held on 25 November 2024.

Agencies in Attendance:

- Department of Education (DoE)
- Transport for NSW (TfNSW)
- Lismore City Council (LCC)
- TSA Riley
- NSW Reconstruction Authority
- Crossley Transport Planning (CrossleyTP)

Key Discussion Points:

TfNSW:

- Noted that TfNSW would require 18 months prior to school opening to assess and plan the bus services for the school.
- Noted the approval of bus stops along Dunoon Road will take maximum 2 months.

LCC:

- Noted the funding application outcome announcement is delayed to the end of the year.
- Council will be putting an application for the Get Active NSW today or tomorrow.

Actions for Further Investigation:

1. TfNSW:
 - Assess additional bus stop on Dunoon Road

D4 Transport Working Group Meeting 4

The fourth Transport Working Group (TWG) meeting for Richmond River High Campus was held on 8 May 2025.

Agencies in Attendance:

- Department of Education (DoE)

- Transport for NSW (TfNSW)
- Lismore City Council (LCC)
- Crossley Transport Planning (CrossleyTP)

Key Discussion Points:

TfNSW:

- TfNSW has raised no objections to have the proposed school access along Dunoon Road.

LCC:

- LCC has raised no objections to have the proposed school access along Dunoon Road.

Appendix E – School Travel Plan

School Transport Plan Northern Rivers Flood Recovery – Richmond River High Campus Redevelopment

Rev 04



Quality Assurance

Project Details

Project	School Transport Plan for Richmond River High Campus Flood Recovery Rebuild		
Project Reference	P2305	Contract Number	DDWO05289-23
Client	Department of Education (DoE)	ABN	40 300 173 822
Prepared by	Crossley Transport Planning	ABN	18 632 881 602

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02	Draft – Second release	Sharon Chungpattana Kevin Nathaniel	Jennifer Chen	Stephanie Crossley
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		25/06/25	16/05/25	16/05/25

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Glossary

Term	Description
Future school site	Future school site refers to the future school location at Dunoon Road, North Lismore.
Hands-up travel survey	A survey conducted in class. Teachers read out the various transport options students could choose to arrive at school. Then the students are asked to raise their hand to indicate which travel option was chosen on that day. The number of hands are counted to survey the transport mode share for that class. This survey is conducted on the same day, for every class to capture the mode share of the school.
Mode share	Mode share refers to the percentage share of students or teachers walking, cycling, catching transport or being driven to and from school.
Rapid Transport Assessment (RTA)	A Rapid Transport Assessment was completed to assess how students travel to school currently and determined how students could get to school in the future. It identified the infrastructural and operational improvements that could be implemented to encourage more students to walk, cycle and catch public transport to school.
School Student Transport Scheme (SSTS)	<p>The School Student Transport Scheme (SSTS) provides eligible school students with free or subsidised travel on public transport between home and school.</p> <p>To be eligible for a free school travel pass at secondary school, the student must be a resident of NSW and live more than 2 km (straight line distance) from school, or 2.9 km or more by the most direct practical walking route to the nearest entry point to the school.</p>
Temporary school site	Temporary school site refers to the temporary learning facilities located at 1 Military Road, East Lismore. Teachers and students are currently using this site.
Travel Coordinator	The individual responsible for implementing the transport program to achieve travel behaviour change during the duration of construction and first year of post-occupancy.
Traffic management	This refers to traffic signs and road markings which control or direct the operation and behaviour of people and vehicles. For example, this includes measures like speed limits, street parking restrictions, and pedestrian crossings.

1 Transport goals

1.1 Introduction

Crossley Transport Planning has been engaged to prepare a School Transport Plan (STP) for Richmond River High Campus (RRHC).

This School Transport Plan (STP) has been prepared to support a Review of Environmental Factors (REF) for the rebuild of Richmond River High Campus (the activity) (RRHC). The REF has been prepared to support an approval for the RRHC development under Section 68 of the NSW Reconstruction Authority Act 2022 (RA Act).

The purpose of this report is to enhance the school's transport operations and address barriers that discourage active travel choice.

1.1.1 Site location

Richmond River High Campus at the Lake Street site was damaged by a flood in 2022, necessitating a temporary relocation to 1 Military Road, East Lismore, where classes are now being conducted in temporary teaching spaces (demountable classrooms) (**Figure 1-1**).

The proposed activity comprises the relocation and rebuild of the Richmond River High Campus at a new site located at 163 and 170 Alexandra Parade, North Lismore.

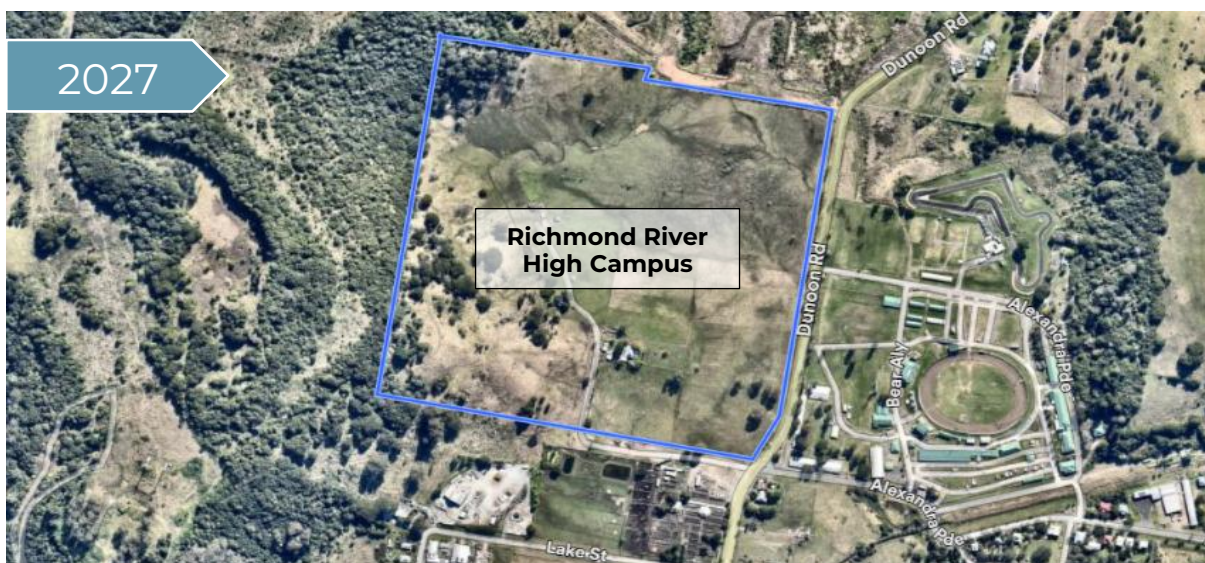
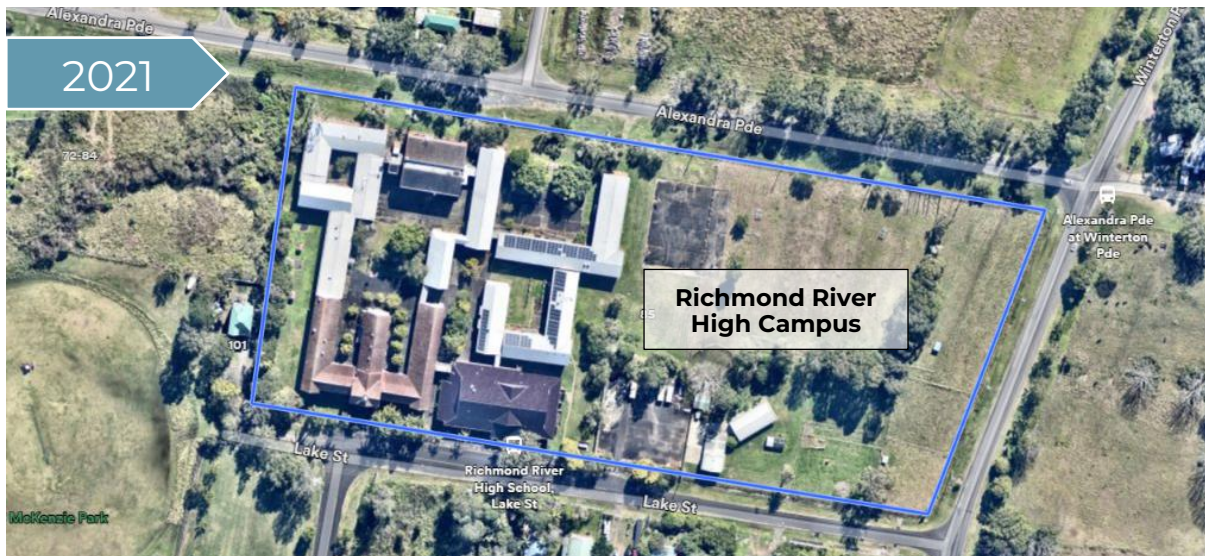


Figure 1-1: Richmond River High Campus location pre-flood (2021), post-flood (2024) and future (2027) (Nearmap, 2024)

1.1.2 Proposed activity

The proposed activity comprises the relocation and rebuild of the Richmond River High Campus from its existing temporary location alongside The Rivers Secondary College Lismore High Campus at East Lismore to the proposed site at 163 and 170 Alexandra Parade, North Lismore.

The school proposal will be delivered in one stage. A detailed description of the proposal is as follows:

1. Demolition of existing features including existing buildings, cattle drinking well, cattle sheds, and wire fencing, and removal of 19 trees to accommodate the proposed activity.
2. Construction of a new 3 storey building on the northeastern portion of the site for the proposed public secondary school including:
 - a. General and Specialist Learning Spaces and Workshops
 - b. Administration and Staff facilities,
 - c. Library, Hall and Movement Studio
 - d. Construction, Hospitality and Agricultural Learning Facilities
 - e. Amenity, Plant, Circulation and Storage areas
 - f. Outdoor Learning Spaces and play spaces
3. Landscaping and public domain works, including tree planting and boundary treatments.
4. Outdoor spaces including an assembly zone, open space, sports fields, and sports courts.
5. Car parking spaces, including accessible spaces and provision for EV charging spaces.
6. Ancillary public domain mitigation measures comprising:
 - a. New drop-off and pick up zones.
 - b. Improve bus transport arrangements with bus bays.

The architectural plan for the school is shown in **Figure 1-2**.

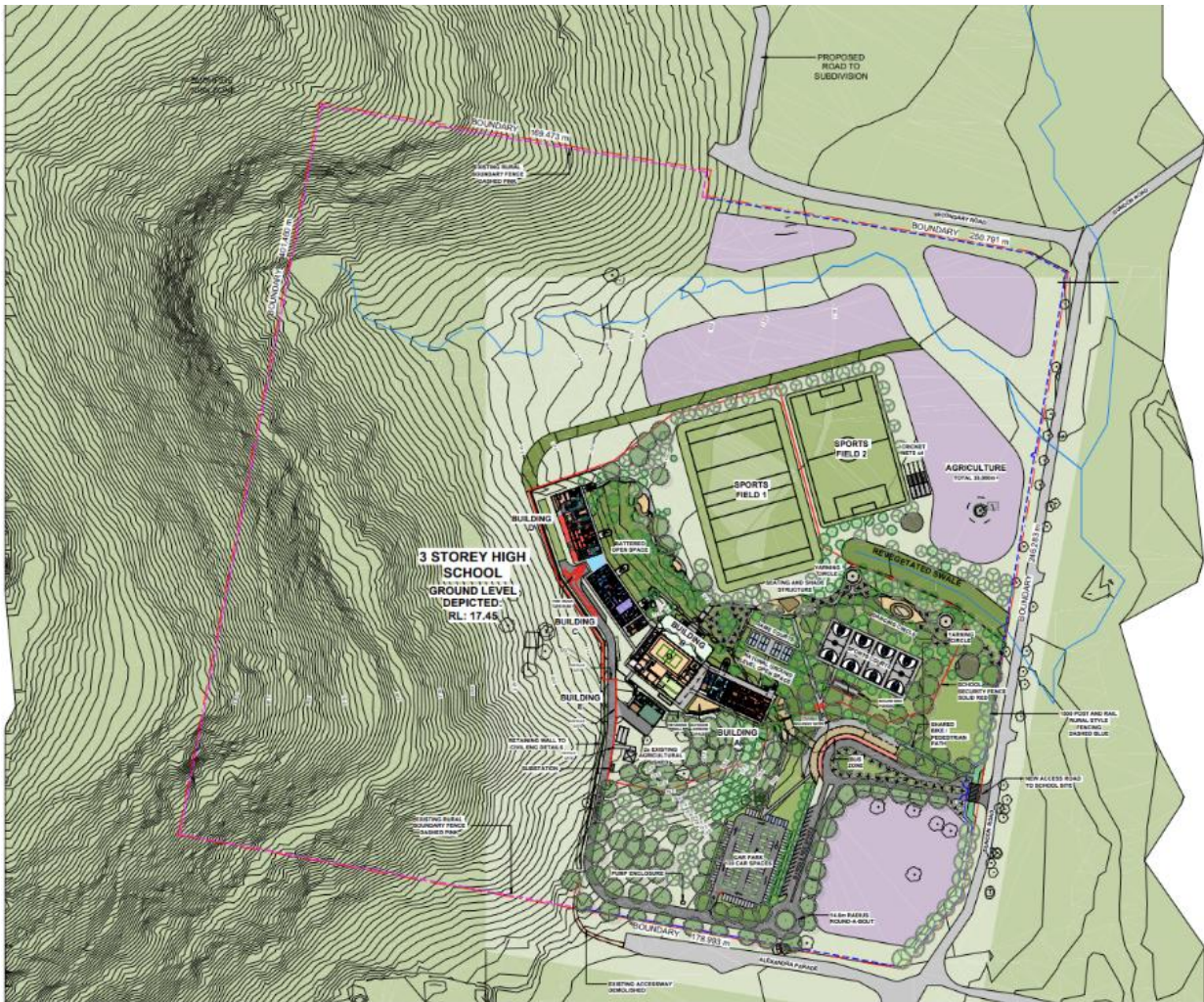


Figure 1-2: Overall Site Context Plan

(EJE, 2025)

1.2 School Transport Plan vision and objectives

The overall vision is to promote more students to walk, cycle, and use public transport to reach Richmond River High Campus. This will support active lifestyles and improve road safety around the school gates during drop-off and pick-up times. The goal is to achieve 68% of students regularly walking, cycling, or choosing public transport, based on the reach mode share target. This can be achieved by providing additional walking and cycling facilities as well as providing bus services between the school and the Trinity College interchange, where students can access further bus routes to their homes.

To achieve this goal, the School Transport Plan (STP) includes the following objectives:

- Promoting initiatives that enhance awareness among students, staff, parents, and caregivers regarding their travel choices to and from the school, fostering a culture of active living.
- Identifying steps to sustain and increase the number of students walking and cycling to school and utilising bus services.
- Providing tools to identify barriers to active travel and collaborating with Council and Transport for NSW to develop solutions and support in funding their implementation.
- Setting up accountability and responsibility for rolling out the School Transport Plan.

- Establishing ways to monitor progress and celebrate success in achieving the goals.

The purpose of this STP is to guide the school in making step changes to achieve the reach mode share target of 68% of students walking, cycling or choosing public transport to school. This target comes from the school hands up survey, which gathered students' stated preferences for how they would like to travel to school if suitable infrastructure were available. The actions within the STP aim to provide options for students, parents, and teachers to reduce congestion at the school gates and to promote healthy, active transport choices.

The key objectives will be reviewed and amended as required by the Principal and/or School Travel Coordinator each year.

1.3 Consultation

Consultation with Department of Education (DoE), Lismore City Council (LCC) and Transport for NSW (TfNSW) has been conducted as part of the Transport Working Group (TWG) on the following dates:

- 23 September 2024
- 14 October 2024
- 25 November 2024
- 8 May 2025

The TWG meetings focus on discussing and addressing transport-related issues at RRHC to ensure students have access to safe, efficient, and sustainable transport options. A summary of the TWG meeting minutes is found in **Appendix F**.

1.4 Links to other application documentation

The **Environmentally Sustainable Design (ESD)** report prepared by LCI Consultants for Richmond River High Campus outlines the goal of achieving a 4 Star award under the Green Star Scheme. To achieve this accreditation, the school must implement sustainable practices with the aim of:

- Reducing the impact of climate change
- Enhancing our health and quality of life
- Restoring and protecting our planet's biodiversity and ecosystems
- Driving resiliency in buildings, fit outs, and communities

The School Transport Plan aligns with these objectives by promoting active and public transport, which complements the ESD goals. By encouraging sustainable travel options, the plan contributes to the desired sustainability outcomes and supports the school's Green Star criteria.

Richmond River High Campus - Flood Recovery Build – Transport Accessibility and Impact Assessment: This document provides a comprehensive analysis of the traffic and, transport impacts associated with the proposed school upgrade. It evaluates existing travel patterns, identifies transport deficiencies, and assesses the projected impacts of the activity. The document outlines proposed enhancements, including improved pedestrian, cycling and public transport infrastructure. These measures are designed to support an increased population of students travelling via walking, cycling, and public transport.

2 School travel survey

2.1 Current travel to school

Students at Richmond River High Campus participated in a hand-up survey on Friday 7 June 2024 detailing how they currently travel to the temporary school site as part of the Rapid Transport Assessment (RTA) prepared by Crossley Transport Planning dated 07/08/24. The survey questions are attached in **Appendix D** and responses illustrated in **Figure 2-1** and **Figure 2-2**.

The results show that the most students (42%) use public transport to get to and from school, suggesting that students may be open to using public transport to the new school site if adequate bus services are available. Currently, 20% of students travel to school using active transport.

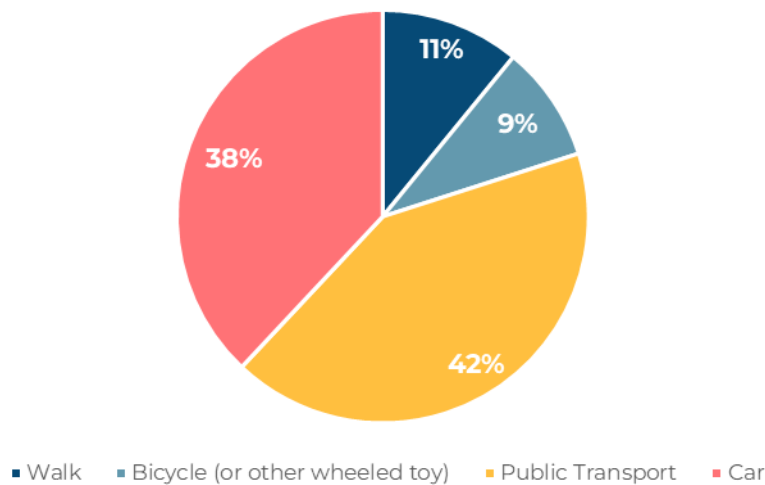


Figure 2-1: Morning school drop-off travel mode share

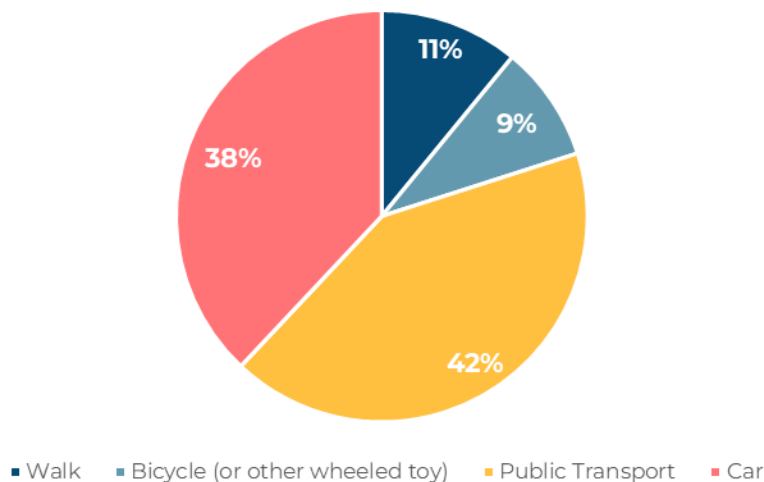


Figure 2-2: Afternoon school pick-up travel mode share

3 Future travel analysis

3.1 Walking catchment analysis

A walking catchment analysis was completed based on the current student depersonalised data. The analysis included identifying the number of students who live within the following distances to school:

- 400m / 5-minute walking distance
- 800m / 10-minute walking distance
- 1200m / 15-minute walking distance
- 2900m walking distance / 2000m straight line - School Student Transport Scheme exclusion (SSTS) zone

The catchment extents are shown in **Figure 3-1**.

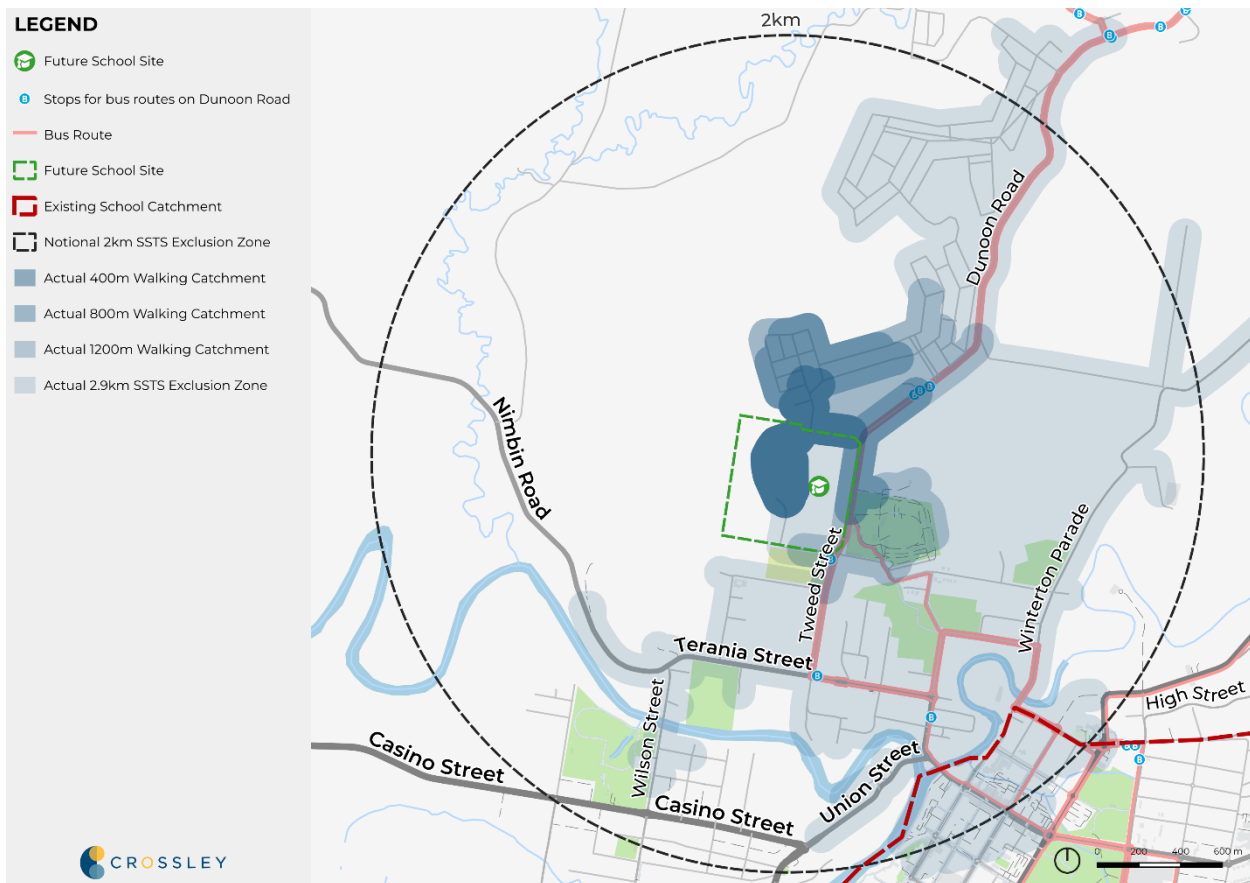


Figure 3-1: Walking catchment

(CrossleyTP, TfNSW GTFS, 2024)

The results from the walking catchment analysis are shown in **Table 3-1**. The analysis indicates that currently, 0% of students live within a 15-minute walk to the school. However, this percentage is expected to increase as families relocate closer to the school site and as more residential houses enter the market as part of the residential development at North Lismore Plateau.

Table 3-1: Walking catchment analysis

Catchment Analysis	Actual (on path / using road network as a proxy)
1-400m (5-min walk)	0%
401-800m (10-min walk)	0%
801-1200m (15-min walk)	0%
1201-2900m (SSTS exclusion zone)	4%

3.2 Public transport catchment analysis

The public transport catchment analysis identifies students who live too far to walk comfortably to school. It also considers the number of students eligible for the SSTS, as their entitlement to free public transport could influence their likelihood of using these services.

A 400m walking catchment from bus stops has been considered as the realistic maximum distance that most students will likely walk from home to a bus stop.

The results from the public transport catchment analysis are shown in **Table 3-2**. The analysis indicates that most students live more than 400 metres from a bus stop that provides access to the school. This situation is primarily due to the current lack of bus services serving the future school site.

Table 3-2: Public transport catchment analysis

Catchment Analysis – Future school site	Actual (on path/using road network as a proxy)
Within 400m of a bus stop that brings them closer to school	4%
Within 800m of a bus stop that brings them closer to school	6%
Outside SSTS zone, within 400m of a bus stop	4%
Outside SSTS zone, greater than 400m to public transport	85%

However, there is a bus interchange site at the Old Trinity College located at Leycester Street and Hindmarsh Street. This interchange is a hub for multiple bus services, enabling students to transfer to buses that can take them to their school.

An analysis of 400m walking catchment from bus stops that interchange at Old Trinity College indicated that, if bus services are provided from Old Trinity College to the future school site, up to 59% of students could take public transport to school, see **Figure 3-2**.

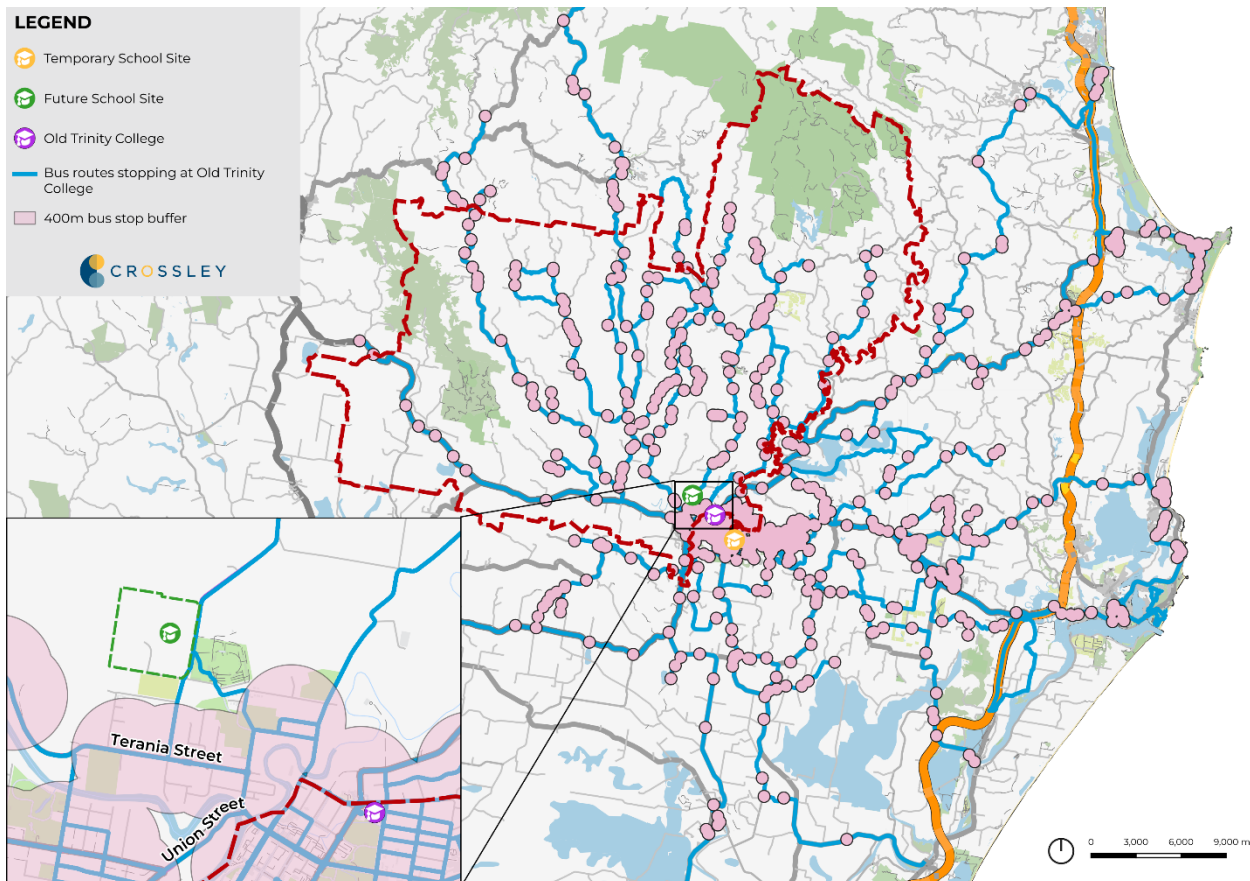


Figure 3-2: Bus routes servicing Old Trinity College Interchange

3.3 Mode share targets and assumptions

The purpose of these mode share targets is to quantify the vision of promoting active travel to school and to understand what is feasibly achievable. These targets help to guide the School Transport Plan in identifying practical steps to increase walking, cycling, and public transport use among students, thereby supporting the overall goal of active lifestyles and improved road safety.

The mode share targets are based on the results of a hands-up travel survey developed by CrossleyTP. This survey was distributed and completed by enrolled students at Richmond River High Campus on Friday, 6 August 2024. The travel survey asked students about their preferred mode of travel to the proposed school site at Dunoon Road. This survey collected the preferred mode choice of students depending on current infrastructure (baseline mode share) and the potential introduction of bus routes in addition to walking and cycling pathways (reach mode share). The moderate target mode share represents the mid-point between the baseline and reach scenarios. It reflects a partial uptake of sustainable transport choices, driven by students' desire to walk and cycle. The survey questions are attached in **Appendix D**.

The targets presented in **Table 3-3**, represent the potential for walking, cycling, and travelling by bus based on the current school catchment and student enrolments.

Table 3-3: Travel mode share targets

Travel mode	Potential mode share with current infrastructure	Moderate mode share	Reach mode share with added infrastructure
Walk	6%	8%	10%
Bicycle (or other wheeled toy)	6%	8%	9%
Public transport	10%	30%	49%
Car passenger	69%	46%	24%
Drive a car	9%	8%	8%

The feasibility of achieving the moderate and reach mode share targets depends on the level of infrastructure provided for students. It is assumed that walking, cycling, and public transport infrastructure will be introduced progressively around the school, with some projects delivered earlier than others.

The moderate mode share target assumes that, as certain infrastructure links are constructed, students with access to those links will transition from car travel to more sustainable modes. In contrast, the reach mode share target assumes that all proposed infrastructure will be completed.

Funding for this infrastructure has not been confirmed. If the infrastructure improvements are not delivered or are delayed, it will impact the achievement of the reach mode share targets.

4 Policies and procedures

The School Transport Plan (STP) aligns directions and actions with local planning policies, plans, and strategies such as Lismore City Council Walking, Cycling and Micromobility Strategy. To support sustainable transport at Richmond River High Campus (RRHC), we have developed a preliminary set of policies and procedures to be discussed and approved in consultation with DoE and Richmond River High Campus. These measures aim to create a safer, more efficient and environmentally friendly environment for students and staff. The following sections outline our strategies to improve walking infrastructure, support public transport use, formalise kiss-and-drop locations, and meet 4-star Green Star requirements.

The implementation and communication of the policies and procedures are outlined in the action plan and the communication plan together with infrastructure recommendations (refer to **Section 5** and **Section 6**).

4.1 Creating an improved walking environment

Policy Statement

“Richmond River High Campus is committed to creating a safe, accessible and pleasant walking environment.”

Policy Aim

To make walking a more convenient, attractive, and enjoyable option, encouraging more individuals to incorporate it into their daily routines.

Procedures:

- Regularly inspect walking paths and report any hazards to the local council for maintenance.
- Encourage students and staff walking to school to report hazards via the “snap, send, solve” app.
- Promote walking to school through school newsletters, assemblies, and events such as Walk Safely to School Day.
- Provide internal footpaths within the site to connect school access points.

4.2 Support public transport use with bus routes to the school site

Policy Statement

“Richmond River High Campus aims to support and increase the use of public transport by working with Transport for NSW (TfNSW) to introduce bus routes that connect directly to the school site from the Old Trinity College interchange.”

Policy Aim

To enable students from various areas to easily transfer at Old Trinity College interchange, making their commutes more convenient and efficient.

Procedures:

- Collaboration with TfNSW to introduce bus routes that serve the school community.
- Provide up-to-date information on bus routes, schedules and the benefits of using public transport through the school website, newsletters and social media.

4.3 Formalising kiss-and-drop locations

Policy Statement

“DoE will provide formalised kiss and drop zones. Richmond River High Campus will support the safe use and self-enforcement of the facility.”

Policy Aim

Clearly designated kiss-and-drop zones help manage vehicle traffic flow during peak times, reducing congestion and improving traffic efficiency around the school. These zones prevent vehicles from stopping in unsafe or obstructive locations, which helps protect pedestrians and cyclists from potential accidents. By formalising the kiss-and-drop zone, the pick-up and drop-off processes are conducted more safely and efficiently.

Procedures:

- DoE will provide formalised kiss and drop zone.
- Communicate the location of the kiss and drop zones to parents and caregivers and associated rules to support self-enforcement.
- Offer supervision to ensure that vehicles do not stop in unsafe or obstructive locations on the school boundary.

4.4 Meet 4-star Green Star requirements

Policy Statement

“Richmond River High Campus is committed to meeting the 4-star Green Star requirements by promoting sustainable transport options and reducing the environmental impact of school travel.”

Policy Aim

To increase active transport use among students.

Procedures:

- DoE to provide bike parking facilities within the school and support in creating a support and inviting environment that encourages students to walk or cycle to school.
- Regularly monitor and report on the school's progress towards meeting Green Star requirements and adjust strategies as needed.

5 School transport operations

To ensure the safe and efficient access to the school for staff, students, caregivers, and visitors, the following actions will be implemented as part of the activity. These strategies encompass the management of site transport access, day-to-day school operations, and event transport operations, along with initiatives to encourage sustainable transport. The Department of Education's (DoE) Travel Coordinator will collaborate with the school community, as outlined in the Communications Plan, to ensure the safe and efficient operation of the school.

5.1 Site transport access

Access to Richmond River High Campus is provided by two pedestrian gates located along the school access road and Dunoon Road and one vehicle gate located along the school access road. (see **Figure 5-1**).

- **Pedestrian and Bicycle Access:** Students walking, cycling or getting picked up and dropped off at school can use any of the two pedestrian entrances (Gate 1 and 2). The school aims to provide a safe and convenient environment for these modes of transport, ensuring that walkways and bicycle storage facilities are easily accessible and well-maintained.
- **School Bus Access:** Students arriving by bus can use any of the two pedestrian entry gates (Gate 1 and 2), where a designated bus zone is located. The bus services are scheduled to align with school start and end times, ensuring timely and efficient transportation for students. This coordination will be achieved through discussions with Transport for NSW and local bus providers.
- **Public Bus Access:** Students who are using public transport services can alight at Dunoon Road and enter the school via Gate 1 or 2. Bus bays along Dunoon Road are being investigated through discussions with Transport for NSW.
- **Kiss-and-Drop Zones:** For parents driving their children to school, kiss-and-drop zones can be access via the school access road. These zones are designed to minimise congestion and enhance safety during peak drop-off and pick-up times.
- **Vehicle parking:** Parking is provided for staff within the on-site car park with entrance located along the school access road. There is sufficient parking to accommodate the planned number of staff located at the school.
- **Accessible parking:** Provision of four dedicated parking spaces for mobility parking scheme badge holders is provided within the staff car park and located nearest to the internal pedestrian footpath linking to the school entrance.

Refer to **Table 5-2** for further details of each school gate.

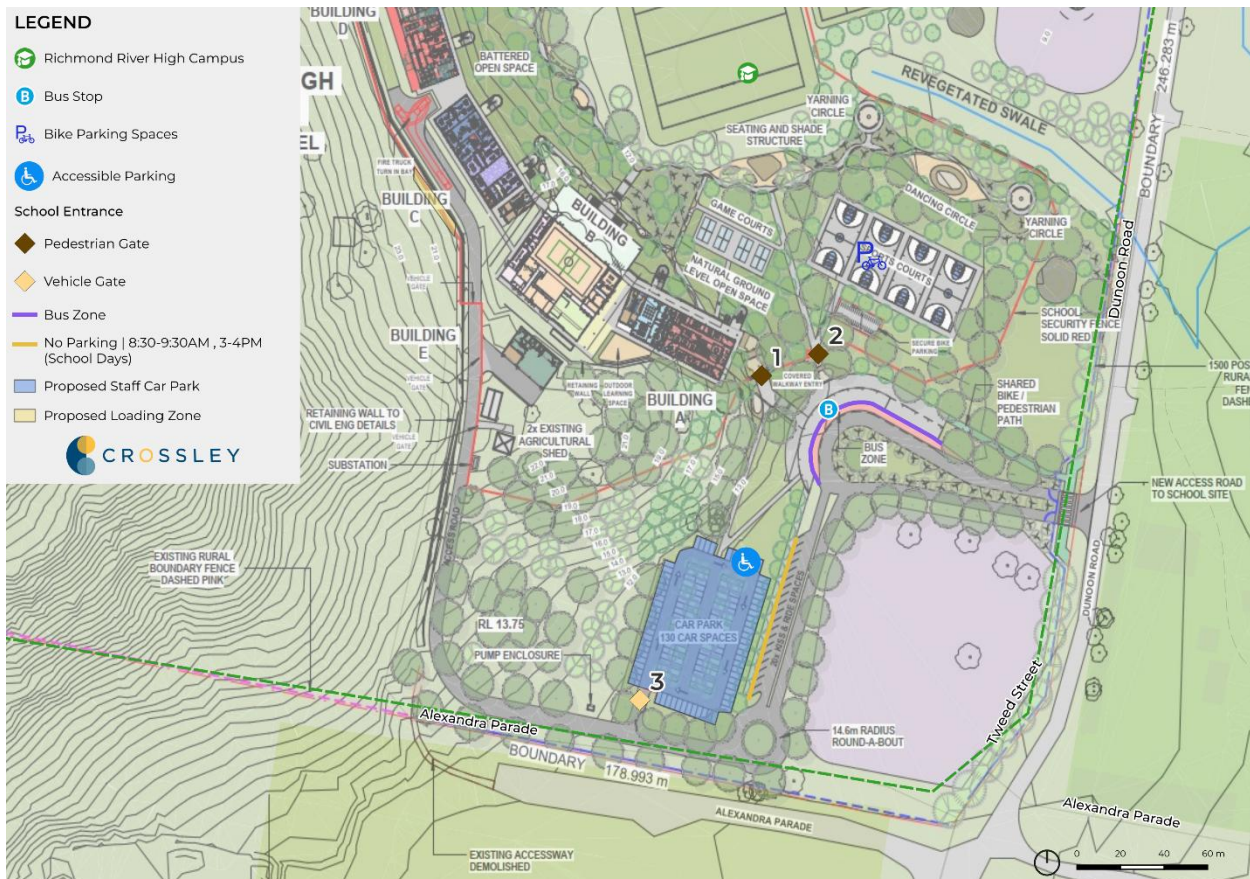


Figure 5-1: Proposed Site Transport Access for Richmond River High Campus (CrossleyTP, EJE, 2025)

5.2 Traffic management

Traffic management refers to strategies, policies, and systems put in place to control the movement of vehicles, cyclists, and pedestrians on roads and public spaces. It includes the use of traffic signals, road signs, lane markings, speed limits, and other mechanisms to guide road users effectively.

Traffic management measures in operation around the school boundary are designed to support safe access for students to and from school. These measures include:

- A 40km/h school zone which operates Monday to Friday from 8:00am-9:30am and 2:30pm-4:00pm term-time.
- A 50km default speed zone which operates outside of the school drop-off and pick-up periods.
- There is a bus zone which secures space for school bus services to drop-off and pick up students Monday to Friday. Access to and from the bus zone is supported by Pedestrian Gate 1 and 2.
- There is a No Parking Zone which is operated on school days from 8:30-9:30am and 2:30-3:30pm. This provides kiss and drop facilities for up to 20 cars at a time and is supported by access to the school via Pedestrian Gate 1 and 2. Outside of these times, it can be accessed by visitors, who then report at Reception accessed from Gate 1.

5.3 Day-to-day school operations

The day-to-day transport operations at Richmond River High Campus involve managing various aspects of student and staff movement. This covers school drop-off, pick-up, movement between buildings within the site, access to the sports fields and other external venues, parking, and service vehicle access.

Table 5-1 summarises the types of site access for walking, cycling, public transport, and general vehicle for day-to-day school operations to as well as where management measures can be found in this document.

Table 5-1: Day-to-Day School Operations

Types of Site Access	On-site	Adjacent-to-site	Management measures
Site entries, pedestrian and vehicle	Yes	No	Yes (refer to section 3.2.1)
Kiss-and-drop including Assisted School Transport Program	Yes	No	Yes (refer to section 3.2.3)
Buses	Yes	No	Yes (refer to section 3.2.2)
Parking incl carpool, carshare pod	Yes	No	Yes (refer to section 3.2.4)
Deliveries and service vehicles	Yes	No	Yes (refer to section 3.2.5)

5.3.1 Site entries

The school site features two pedestrian access gates and one vehicle access gate as illustrated in **Figure 5-2**, each serving a specific purpose as detailed in **Table 5-2**. The purpose of each access gate is influenced by the school operating hours and activities in the nearest building, as well as the availability of specific end-of-trip facilities such as pedestrian crossing facilities, bicycle parking, adjacent kiss and drop zones and car parking. The gates are carefully managed to ensure the smooth flow of students and vehicles during school hours.

The specifics of each gate and the recommended operating hours and procedures are presented in **Figure 5-2**, while **Table 5-2** summarises the location and function of each school gate.



Figure 5-2: School Access Locations

(CrossleyTP, EJE, 2025)

Table 5-2: Details of operation for each school gate

Gate No.	Location	Purpose of gate	Operating hours and procedures
Gate 1	South of the site	Pedestrian access for: <ul style="list-style-type: none"> Student entry for bus arrivals. Students arriving at the Kiss and Drop Zone. 	School caretakers will open gates during the following times to allow students to enter and exit the school grounds: <ul style="list-style-type: none"> Weekdays: Open between 8:00-9:30 am and 2:30-4:00 pm for arrivals/departures. On Tuesdays and Thursdays, when extension classes end at 5:00 pm (as advised by the Principal), the gates will remain open until 5:30 pm. Weekends: Only upon arrangement with the school for special events.
Gate 2	South of the site	Pedestrian access for: <ul style="list-style-type: none"> Student entry for bus arrivals. Students arriving at the Kiss and Drop Zone. 	School caretakers will open gates during the following times to allow students to enter and exit the school grounds: <ul style="list-style-type: none"> Weekdays: Open between 8:00-9:30 am and 2:30-4:00 pm for arrivals/departures. Weekends: Only upon arrangement with the school for special events.
Gate 3	South of the site	Vehicle access and egress for:	<ul style="list-style-type: none"> Two-way operation for site entry and exit from the car park. Weekdays: Accessible via a staff swipe card or intercom.

Gate No.	Location	Purpose of gate	Operating hours and procedures
		<ul style="list-style-type: none"> Staff car park Weekends: Only upon arrangement with the school for special events. 	

5.3.2 Bus services

School bus services will operate from the bus stop located on the school access road. The bus zone is located adjacent to Pedestrian Gate 1 and 2, between 8:00-9:30am and 2:30-4:00pm for arrivals/departures. On Tuesdays and Thursdays, when extension classes end at 5:00pm (as advised by the Principal), Pedestrian Gate 1 will remain open until 5:30 pm.

To ensure the safety of students during bus operations, the following procedures will be implemented:

Morning Procedure

A staff member will be at the school gate to supervise students alighting the bus.

Afternoon Procedure

Students will be grouped within the school grounds according to the bus they need to take. When a bus service arrives, the teacher stationed at Gate 1 will notify the teacher in the bus waiting area. The students will then walk in an orderly manner to their respective bus.

To facilitate this process, it is recommended that a Bus Arrival Electronic Sign be provided to communicate bus arrivals to students. These signs, shown in **Figure 5-3**, are operated by a teacher who inputs the bus numbers into the software via a smartphone or tablet. The signs are colour-coded to indicate the expected departure times, ensuring students are ready to board promptly.

Safety Measures

The school will communicate the following road safety guidelines to parents and carers to enhance student safety when disembarking from buses:

- Wait until the bus departs before choosing a safe place to cross.
- Maintain a safe distance from the road's edge while waiting at the bus stop.
- Use the pedestrian crossing to cross the road after the bus has left.



Figure 5-3: Bus arrival electronic signage

(Electronic Signs, 2024)

5.3.3 Kiss-and-drop

A formal kiss and drop zone can be accessed via the school access road, providing space for 20 vehicles (see **Figure 5-4**). This arrangement is sufficient to accommodate the estimated 455 vehicles arriving at the site for student drop-off and pick-up.

During each school day (Monday to Friday), school caretakers will open gates between 8:00am-9:30 am and 2:30pm-4:00pm for drop-off and pick-up respectively. On Tuesdays and Thursdays, when extension classes end at 5:00 pm (as advised by the Principal), the gates will remain open until 5:30pm.

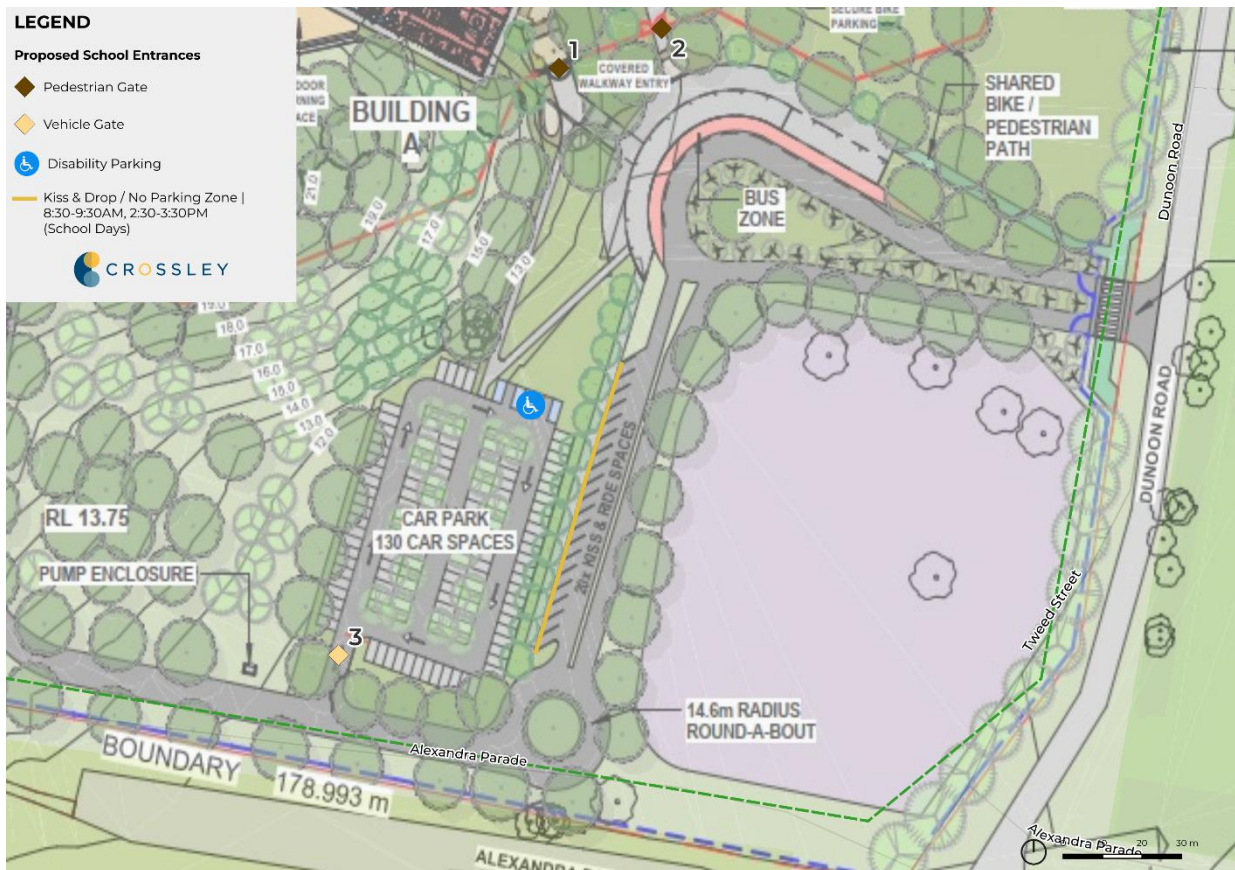


Figure 5-4: Kiss and drop locations

(EJE, 2025)

5.3.4 Parking

The school will have an on-site car park with 130 car parking spaces, which will include 117 standard parking spaces, 4 accessible parking space and 9 EV charging spaces. With approximately 66 staff members, all staff will be accommodated on-site with the additional space made available for part time and volunteer staff.

The following car park management measures are proposed for Richmond River High Campus:

Parking arrangements for staff

- The staff car park is located on the southern side of the school within the site, with access via Gate 3 off the school access road. The on-site car park will accommodate full time staff, part time staff and volunteers.
- All staff will be accommodated in the on-site car park, eliminating the need for overflow parking.
- Staff will be issued swipe cards for car park access.
- Staff are encouraged to arrive and depart outside of pick-up and drop-off peak times (between 8:00am-9:30am and 2:30pm-4:00pm) to minimise conflicts with parents/carers.
- These parking arrangements will be communicated to staff at the start of each school year and reinforced with reminders at the start of each school term.

Parking arrangements for parents and carers:

Parents and Caregivers will use the designated kiss and drop zones outside of the kiss and drop operation times.

Parking arrangements for visitors:

All visitors and volunteers entering the school grounds between 9:00am and 3:00pm are required to sign in at the school office accessed from Gate 1. Unrestricted parking is permitted within the kiss and drop zone from 9:30am-2:30pm.

Parking arrangement for students:

The hands-up survey revealed that no students are currently driving to the temporary school site. To ensure students maintain the habit of choosing more sustainable transport modes, students will not be allowed to park in the school car park. As per the policy of DoE, the school will not provide student parking spaces.

5.3.5 Service vehicles

Waste collection/service vehicle (including emergency vehicles) access is along the school access road. Waste collection and larger truck deliveries shall be provided outside of school hours before 7:00am and/or after 6:00pm during the week to eliminate potential conflicts between pick-up, drop-off and other service vehicles.

Any changes need to be discussed with the school and recorded in this document. Access to the waste storage area will be provided by the school caretaker.

Small deliveries can occur throughout the day if previously arranged with the school. Delivery vehicles will go to the loading zone.

5.4 Event management

Special events at the school, such as parent-teacher interviews, sports days, and excursions, require additional transport management measures. These include:

- School Information Session
- Parent Teacher Interviews
- Sport events such as sports carnival
- Camp
- Excursions

For events held outside of regular school hours, the main pedestrian gate (Gate 1) will serve as the primary access point. Other gates may be used depending on the specific needs of the event.

For excursions requiring students to be transported off-site by bus, the buses will be coordinated to arrive and depart within a designated timeframe to avoid congestion. Students will be organised into groups and supervised by staff to ensure orderly boarding and alighting.

For events where students are walking to a specific location like a local sports facility for a sports carnival, students will be asked to gather at a specific gate and will walk in groups supervised by staff and volunteers who will facilitate students crossing the road and keeping students safe.

5.5 Transport encouragement programs

Richmond River High Campus is committed to promoting sustainable transport options through various programs aimed at encouraging active travel among students.

Active Transport Initiatives: The school will implement programs such as walking school buses and cycling groups to foster a culture of active travel. These initiatives not only promote physical health but also reduce the environmental impact of school commutes.

Public Transport Support: The school will work with local transport providers to ensure that public transport services meet the needs of the school community. Regular surveys will be conducted to assess satisfaction and identify areas for improvement.

Carpooling and Park-and-Walk: To further reduce traffic congestion, the school will promote carpooling among families and designate safe drop-off points within walking distance of the school.

The following action plan details guidance on how these actions will be implemented to achieve the school's transport policy objectives.

Table 5-3: Available transport encouragement programs (action plan)

Action	Details	How	Responsibility	Collaboration	Target timescales	Frequency	Monitoring
Deliver the road safety education program	This program aims to enhance road safety awareness among students, providing them with valuable knowledge to navigate pedestrian hazards. It enhances students' awareness of cycling safety hazards and provides peace of mind for parents and caregivers.	Integrate road safety into the school curriculum and integrate State, National and/or World road safety days into school's calendar of recognised days.	School Travel Coordinator	Transport for NSW provides funding to support the delivery of road safety education and events. https://www.transport.nsw.gov.au/roadsafety/community/schools/road-safety-education	Short-term	Start of the Term 1 and 3	Annually review the plan.
Launch a school walking bus	The walking school bus is a group of students walking to school with one or more adults. This initiative is designed to inspire students / parents to adopt walking as their primary mode of transportation to school. It contributes to healthier lifestyles, reduces traffic congestion, and minimises	Identify key walking routes (to school or off-site locations for excursions), potential volunteers to run the initiative, and complete required training and work health and safety policy procedures.	School Travel Coordinator	NSW Government Department of Education provides resources to set up Walking School Buses https://education.nsw.gov.au/teaching-and-learning/curriculum/road-safety-education/safe-travel/walking#:~:text=A%20walking%20school%20bus%20is,route%2C%20accompanied%20by%20supervising%20adults.	Medium/ Long term	This could be implemented as part of the first few weeks of the Summer Term, as a method to support the new Year 7 cohort to learn and gain confidence walking to school. For school excursions, this could be used to reduce private bus operations to access nearby sports facilities etc.	Number of students per walking bus Frequency of walking bus Cost savings on private bus hire.

Action	Details	How	Responsibility	Collaboration	Target timescales	Frequency	Monitoring
	environmental impact.						
Walk safely to school day	Walk Safely to School Day is an event that encourages students and families to walk to school safely, highlighting the importance of pedestrian safety and physical activity.	Register to participate in the walk safely to school day. Plan communications with staff and caregivers to encourage participation and distribute event information. Consider organising an intra-school competition or quiz on safety.	School Travel Coordinator	NSW Government Department of Education provides funding to host the Walk safely to school day event https://education.nsw.gov.au/teaching-and-learning/curriculum/road-safety-education/news/walk-safely-to-school-day--can-be-the-start-of-a-new-routine	Medium/Long term	Occurs yearly with the next event being held on 16 May 2025	Number of participants (hands-up survey on the day)
National Ride2School Day	Ride to School Day is part of the National Ride2School program, an Australia-wide initiative. It encourages students to cycle to school on a specific day,	Register to participate in National Ride to School Day. Plan with staff and caregivers to encourage participation and distribute event information and resources from the	School Travel Coordinator	Bike Network provides resources to set up Ride to School Day for each school https://bicyclenetwork.com.au/rides-and-events/ride2school/ride2school-day/	Medium/Long term	Occurs yearly with the next event being held on 21 March 2025	Number of participants (hands-up survey on the day)

Action	Details	How	Responsibility	Collaboration	Target timescales	Frequency	Monitoring
	promoting cycling as a viable and enjoyable mode of transportation.	website. Consider organising an intra-school competition or quiz on safety.					
Cycling School Bus	The Cycling School Bus is a group of students who cycle to school together under the supervision of an adult leader. It is designed to make cycling to school a social and organised activity.	Identify key cycling routes to school, potential volunteers to run the initiative, and complete required training and work health and safety policy procedures.	School Travel Coordinator	Cycling school buses are supported by NSW Government Department of Education. https://education.nsw.gov.au/teaching-and-learning/curriculum/road-safety-education/safe-travel/riding#:~:text=A%20cycling%20school%20bus%20is,rear%20of%20the%20'bus' .	Medium/Long term	Depending on levels of participation and volunteers. For travel to school, this could be once a month and then increase regularity year-on-year.	Number of students per cycling school bus Frequency of cycling school bus
Review demand and provision of public transport	Ensure that public transport is sufficient and satisfactory to cater for students and staff.	Audit the number of students catching public transport once a year and identify if the buses they are taking have sufficient capacity when they are arriving or departing the school. Monitor any complaints from	School Travel Coordinator	n/a	Medium/Long term	Review of public transport needs can be completed once a year	Capacity of buses arriving and leaving the school.

Action	Details	How	Responsibility	Collaboration	Target timescales	Frequency	Monitoring
		parents regarding bus capacity.					
Establish carpooling Staff and Students	Carpooling involves sharing a car ride with other staff members or between families to reduce the number of vehicles commuting to school. It aims to decrease traffic congestion, lower emissions, and foster community connections.	<p>Communicate with parents and caregivers on the benefits of carpooling. Encourage the facilitation of carpooling in social media groups</p> <p>Encourage staff to car pool and consider allocating prime parking spaces to carpool vehicles.</p>	School Travel Coordinator	n/a	Medium/Long term	Review of carpooling participation can be completed once a year	Number of parents/caregivers participating in carpooling on social media

6 Communication plan

The communication plan outlines the strategy for promoting and disseminating information about the various transport options detailed in the School Transport Plan (STP). This section is designed to ensure that all stakeholders, including students, parents, and school staff, are well-informed about available transportation methods, access points, and any operational changes. The Travel Coordinator will employ a variety of communication channels and methods to effectively reach these stakeholders, ensuring transparency and encouraging active participation.

6.1 Communication channels

The school will use multiple communication channels to keep parents and the school community informed, depending on the nature and frequency of the messages.

Table 6-1 provides a summary of the required communication channels, their purposes, and the individuals responsible.

Table 6-1: Communication Channels

Communication Channel	Purpose	Frequency of use	Individuals responsible
School starter kit	<p>Parents will receive a starter kit on enrolment. This kit will include formal information on:</p> <ul style="list-style-type: none"> • Bell times • Gate locations • Transport options to/from the school • What travel programs are available at the school and when they are held (e.g. walk safely to school day) • Bus route maps and timetables • Information on how to obtain a bus pass • Where parents can pick up and drop off their children • Information on appropriate behaviour during pick-up and drop-off etc. 	A school starter kit should be updated each year and distributed to new enrolments	Travel Coordinator alongside the School Registrar
School Newsletter	The school newsletter will feature regular articles to keep the community informed about transport-related matters. These articles will highlight key events related to the School Road Safety Plan and Active Transport initiatives, promote upcoming events, and celebrate successes. The goal is to engage parents and carers, reinforce safe behaviour, and encourage participation in school transport programs.	The school newsletter is distributed monthly, the requirement for articles will need to be planned as part of the school's action plan.	Travel Coordinator alongside school principal and admin
School website	The school website will update the site's <i>Location and transport</i> page to include comprehensive information on transport options to the school, with focus on active and public transport.	The school website will be updated to include any transport operations changes.	Travel Coordinator alongside school principal and admin
Facebook group	The school Facebook group will be used as a promotional channel to remind parents of active and public transport options, and transport programs organised by the school.	The Facebook group will be used throughout the school year to promote road safety education and active travel events, posting as needed according to the calendar of activities.	Travel Coordinator alongside school principal and admin

Email	Emails will be used to send important updates, reminders and specific information directly to parents regarding transport-related matters, such as change in bus schedules, special events or urgent notices.	Emails will be sent as needed based on the urgency of the information.	Travel Coordinator alongside school principal and admin
Sentral app	The Sentral app will be used to provide real-time notifications and updates on transport-related issues, such as changes to bus routes or important reminders about travel programs and events.	The app will be used throughout the school year for immediate and urgent notifications as well as periodic updates.	Travel Coordinator alongside school principal and admin

6.2 Messages

The school will regularly distribute information using a combination of the above channels to inform parents of the following:

- School start and end times,
- Principal's message about transport goals and expectations
- Construction works near the school which may impact on walking, cycling and travel routes for parents and students.
- Transport access modes, with links for more information on road safety, bus passes, and reporting issues.
- Proper behaviour at pick-up and drop-off points
- Contacting the governance committee

Appendix B provides sample messages that would be used for the School Community.

The school should also communicate with parents and caregivers on how to efficiently use the existing traffic controls surrounding the school. Messages which should be communicated to parents and caregivers include the following:

6.2.1 Kiss and Drop zones

The following messages should be communicated at the beginning of each school year through the school starter kit which will be distributed to the school community:

- Parents should try to limit their kiss and drop activities to 2 minutes. For safe and efficient operation, parents/guardians should remain in their vehicles and refrain from exiting them to collect their students.
- Parents should ensure that students exit the vehicle from the rear left door.

6.2.2 Parking zones

Parents/carers driving must adhere to legal and safe parking practices, even if it means walking a longer distance to reach the school gate. Parents/carers will be advised by the school to:

- Avoid illegal parking practices, such as double parking and dangerous manoeuvres like U-turns and three-point turns, as they pose risks to children's safety.
- Avoid parking in bus zones.

6.3 Travel Access Guide

A Travel Access Guide (TAG) has been prepared for the school, refer to **Appendix E**. This information will be shared through multiple channels, including the school website, newsletters, and during school inductions for new and returning students. The guide will cover the following key areas:

- School entry points
- Transport access, including footpaths, cycleways, public transport options, the local road network, and pedestrian crossing facilities
- Bike parking locations

- Kiss and drop zone location and expectations
- Reporting issues through Send Snap Solve

7 Data collection and monitoring

The success of the School Transport Plan (STP) hinges on the continuous monitoring and evaluation of travel behaviours among students and staff at Richmond River High Campus. This chapter outlines the processes for data collection, program evaluation, and reporting, which are essential for ensuring that the transport strategies are meeting the school's sustainable transport objectives.

7.1 Data collection

To accurately assess travel patterns and identify areas for improvement, the following actions will be undertaken:

Once per year

- Transport catchment analysis: Using anonymised student data, a 5, 10, and 15-minute walking catchment analysis will be conducted to determine how accessible the school is by foot for students living nearby.
- Travel to school questionnaire: A questionnaire will be distributed to staff and parents/carers at the start of Term 1 and reviewed annually. This survey will gather consistent data on travel habits, preferences, and any barriers to active transport.

Twice a year

- Hands-up survey: Conducted in-class twice a year, this survey will provide a quick snapshot of how students are traveling to school. The questions will remain consistent year on year to track changes in behaviour.

Once per term

- Site observations: Observations of student behaviours while traveling to school will be conducted to identify safety issues and opportunities for operational improvements. This includes monitoring how students walk, cycle, board and alight from buses, and use kiss-and-drop facilities.
- Infrastructure audit: An audit of the conditions and capacity of school bus stops, bike parking facilities, footpaths, and crossing facilities within the vicinity of the school will be carried out. This will help identify any outdated or overcrowded infrastructure that may require upgrades.

7.2 Program evaluation

The collected data will be analysed to assess the performance of the School Transport Plan. Success will be measured by evaluating the effectiveness of the action plan against the achievement of the mode share targets. Key areas of focus will include:

Increase in Active and Public Transport Usage: Monitoring the percentage of students walking, cycling, and using public transport year on year will help assess progress towards the school's sustainable transport goals. The target is for 19% of students to walk or cycle and 49% to use public transport. Regular tracking of these figures will identify trends and areas requiring intervention.

Car and Bicycle Parking Occupancy: Regular checks on car and bicycle parking usage will provide insight into the effectiveness of the school's transport policies. High car usage at kiss-and-drop areas or underutilised bicycle parking may indicate a need for additional initiatives to promote walking, cycling, or public transport.

Evaluate road safety and active transport marketing strategies: Understanding how the school community interacts with transport-related information provided to them helps tailor communication and engagement strategies.

- By tracking clicks on articles and links about school transport, the school can gauge which topics resonate most with students, parents, and staff. High engagement might indicate a strong interest in certain areas, such as safety tips for walking or updates on bus routes. Conversely, low engagement could suggest that the information is not reaching the audience effectively or that different topics should be prioritised.
- This approach will allow the school to refine its communication strategies, ensuring that the most relevant and useful information is reaching the community, which in turn supports the overall goals of the School Transport Plan.

Program Participation Rates: Monitoring student participation rates in various transport programs and events will help identify which events are:

- Successful and could be considered for program expansion or increased frequency.
- Not engaging sufficient levels of participation and may require investigating potential barriers to participation and/or appropriateness for school travel needs.

7.3 Program reporting

Following each annual review, the Department of Education (DoE) and the Travel Coordinator will compile a report summarising the findings and recommendations for the Council. This report will include:

- **Student and Staff Numbers:** An overview of the current population of the school.
- **Travel Mode Split:** Details on the distribution of different modes of transport used by students and staff, compared against the mode share targets.
- **Success or Failure of Strategies:** Evaluation of strategies based on their effectiveness in increasing active transport modes. Successful strategies will show increased participation in walking or cycling, while unsuccessful strategies will be identified by a lack of participation or no significant change.
- **Adjustment Measures:** Recommendations for any necessary adjustments, such as the installation of additional bike parking facilities to meet increased demand.

Approved modifications to the STP or actions resulting from the findings will be implemented promptly. **Appendix A** provides an Implementation Checklist summarising the necessary steps as part of the plan.

7.4 Staff induction

To ensure new staff members are well-informed about transportation arrangements and the roles of the STP, it is essential to incorporate this information into their induction process:

- A concise overview of the STP, highlighting its objectives and importance.
- A tour of the school facilities, including a visit to the bike parking areas.

8 Governance framework

This section outlines the governance structure for implementing and managing the School Transport Plan (STP), defining the roles of key stakeholders and establishing collaborative frameworks to ensure the effective execution and sustainability of the plan. The Travel Coordinator will oversee the plan's execution during construction and the first year, supported by two working groups: the Internal School Working Group and the External Transport Working Group. These groups will facilitate effective communication, stakeholder engagement, and the ongoing adaptation of the plan to meet travel behaviour goals and operational needs.

8.1 Travel Coordinator

To implement the STP and effectively engage stakeholders, a dedicated Travel Coordinator is essential throughout the construction phase and the first year of post-occupancy. This role, initially funded by the project, is crucial for driving travel behaviour change. Future arrangements for the continuation of this role will be determined by Department of Education (DoE), the Department of Education and Training (DET), Transport for NSW (TfNSW), and the Department of Planning and Environment (DPE) after the first year.

The responsibilities of the Travel Coordinator are:

- **Communicating Transport Options:** Clearly convey available transport options to the school community, ensuring that information is accessible and engaging.
- **Coordinating Implementation Efforts:** Oversee the execution of transport programs and initiatives outlined in the STP.
- **Conducting Surveys and Data Collection:** Regularly gather and analyse data to measure progress and assess the effectiveness of the STP.
- **Engaging Stakeholders:** Maintain effective communication with the school principal, Road Safety Education Officer, Council, and TfNSW to align efforts and address concerns.
- **Coordinating Events and Promotions:** Organise events to raise awareness and promote the STP and associated initiatives.
- **Monitoring and Reviewing the STP:** Continuously review and update the STP based on feedback and performance data.

8.2 Internal school working group (consultation stream 3)

The Internal School Working Group will be established before the commencement of construction, focusing on school-specific issues to be discussed at quarterly meetings. This group will be formed during Consultation Stream 3, which emphasises the development of transport options.

Participants will include school leadership, the Road Safety Education Officer, the Asset Management Unit, Workplace Health and Safety, and members of the Parents and Friends committee. This group will serve as a sounding board for the Travel Coordinator and school leadership, playing a critical role in implementing and monitoring the STP's measures and goals.

The responsibilities for the internal school working group are:

- **Oversee the Implementation of STP Measures:** Ensure the STP remains a living document and adapt strategies based on performance evaluations.
- **Measure Progress:** Track progress against key targets and work towards achieving positive changes in travel behaviour.
- **Identify issues:** Report any operational, training or infrastructure issues observed during the day-to-day activities of the school.

8.3 External transport working group (consultation stream 2)

The External Transport Working Group will be established during Consultation Stream 2, focusing on broader transport concerns discussed at quarterly meetings. This group will include participants such as the Council, bus operators, and TfNSW. If an existing group from a previous SINSW project is available, its Terms of Reference will be updated to include this school project. The responsibilities for the external transport working group are:

- **Regular Meetings:** Schedule and hold regular meetings, quarterly, to ensure ongoing communication and progress tracking. A monthly meeting may be held if an urgent issue arises.
- **Confirm Annual Changes in Travel Demand:** Monitor changes such as new student enrolments or graduating classes.
- **Report on Transport Usage:** Provide updates on transport usage and suggest necessary updates to the STP.
- **Inform Updates to the STP:** Use data and insights to inform and update the STP as needed.
- **Explore Funding Options:** Identify and pursue funding to address missing links or operational issues.
- **Formulate Collaborative Responses:** Develop responses to key issues by incorporating input from all stakeholders.
- **Communicate new legislation:** To communicate any changes to local planning policies, plans or standards that may impact school transport operations and associated goals for the transport plan.

Appendix A

checklist

Implementation

Task	Timeframe	Responsibility	Notes	Estimated Cost
Programs				
Recruit Travel Coordinator	Before construction commences	Project Team	Appoint Travel Coordinator before construction commences	-
Develop Travel Access Guide (Brochure)	Attached to this STP	Travel Coordinator	Staff to provide assistance	-
Convene Internal School Working Group	December 2026	Travel Coordinator	Internal school working group will consists of Staff, students, parents	-
Develop Transport Access Guide (Brochure)	December 2026	Travel Coordinator	Staff to provide assistance	-
Develop and Distribute New Starter Kits	December 2026	Travel Coordinator	Staff to provide assistance	-
Occupancy	Term 1 2027	Project Team	-	-
Annual Transport Survey	Start of term 1 and reviewed after 6 months.	Travel Coordinator	Staff to provide assistance	-
Road Safety Program	On-going	Travel Coordinator	Currently undertaken by Staff	-
Walking bus program launch	Term 1 2027	Travel Coordinator	This program will need two volunteers per group (e.g. parent, staff) to lead the walking group, with one volunteer positioned at the front and the other at the back of the group.	-
Cycling bus program launch	Term 1 2027	Travel Coordinator	Staff to provide assistance	-
Car Share/Carpooling launch	Term 1 2027	Travel Coordinator	Staff to provide assistance	-
Review demand and provision of public transport	Annually	Travel Coordinator	Surveys to be undertaken to assess the demand	-
Engage with TfNSW on improving public transport access	On-going	Travel Coordinator	-	-
Engage with council on improving active transport access	Annually, tied into the active travel funding submission timescales	Travel Coordinator	-	-
Infrastructure				
Install bike parking facility	Pre-occupancy	Project	-	-

Appendix B Sample messages

Sample 1 – National Road Safety Week

We have some exciting news for you. From (Date) to (Date), we are joining the National Road Safety Week, an annual campaign to raise awareness and prevent road accidents. Did you know that traffic injury is the biggest threat to Australian children under 15? That's why we need your help to make our roads safer for everyone.

Each day of the week will have a different theme. You can pledge and participate in these themes by following the tips and resources on the National Road Safety Week website. You can also show your support by wearing a yellow ribbon or displaying a sticker on your car. We encourage you to embrace healthier travel options when possible. Walking or cycling is not only good for your health and the environment, but also a great way to bond with other students and avoid traffic stress. Our school has bicycle racks for your convenience.

We appreciate your cooperation and participation in this campaign. Together, we can make our school and our community a safer, greener, and happier place for everyone.

Sample 2 – National Walk Safely to School Day

Join us for a safe and fun walk to school!

We are thrilled to tell you that on (Date), we are taking part in the National Walk Safely to School Day! This is an awesome initiative by the NSW Government and Transport for NSW to encourage walking and cycling as healthy and safe ways to get to school. We would love you to join us in this fun and meaningful event!

Why participate? Walking to school offers incredible benefits:

- **Stay Active:** It's a great way to get exercise and boost your energy levels.
- **Help the Environment:** Reduce traffic and pollution by choosing a greener mode of transport.
- **Clear your mind:** Start your day feeling refreshed.

How to get involved?

- **Plan your route:** Choose a safe and pleasant path to school.
- **Buddy up:** Invite friends or family to join you. Walking with others makes it more fun and safe.
- **Be prepared:** Wear comfortable shoes, dress for the weather, and stay hydrated.

Special treats await: For those who take on the challenge and walk to school, we've got a special reward waiting for you!

We look forward to seeing everyone involved!

Sample 3 – National Ride2School Day

Ride to school on National Ride2School Day!

We are excited to announce that our school will be participating in the National Ride2School Day on (Date). This is a great opportunity for us to enjoy the benefits of cycling and active travel, such as:

- **Improving our physical and mental health:** Cycling is a fun and easy way to get our daily dose of exercise, which can boost our immune system, mood, and concentration.
- **Reducing our environmental impact:** Cycling reduces greenhouse gas emissions, air pollution, and traffic congestion, which can make our school and community more liveable and sustainable.
- **Developing our independence and confidence:** Cycling teaches us valuable skills such as road safety, time management, and problem-solving, which can help us grow as responsible and capable individuals.
- **Having fun and making friends:** Cycling is a social activity that can help us bond with our family, classmates, and neighbours. We can also discover new places and experiences along the way.

To join the National Ride2School Day, all you need to do is bring your bike, helmet, and water bottle to school on (Date). We will have a designated area for bike parking and a special assembly to celebrate our achievements. We will also have prizes for the most creative bikes and outfits, so feel free to dress up and decorate your bike!

If you don't have a bike or need some tips on how to cycle safely, you can visit the Bicycle Network website (<https://bicyclenetwork.com.au/rides-and-events/ride2school/>) for more information and resources.

We hope that you will join us in this exciting event and make cycling a regular part of your school routine. Let's ride together and make a positive difference for ourselves and our planet!

Sample 4 – Walking School Bus

Join the Walking School Bus: A Fun and Healthy Way to Get to School!

We're excited to share a fantastic opportunity for our students to get active, have fun, and contribute to a greener environment! Introducing our **Walking School Bus** – a safe and enjoyable way for kids to walk to school together.

Why Join the Walking School Bus?

1. **Stay Active and Healthy:** Walking is a great way for students to get their daily exercise. It helps build strong muscles and bones, improves cardiovascular health, and keeps energy levels high throughout the day.
2. **Enjoy the Fresh Air:** Instead of being stuck in a car, students can enjoy the fresh air and beautiful surroundings of our community. It's a great way to start the day on a positive note!
3. **Build Friendships:** Walking with friends and classmates makes the journey to school more enjoyable. It's a perfect opportunity to chat, play, and make new friends.

4. **Help the Environment:** By choosing to walk, students are reducing traffic congestion and lowering their carbon footprint. It's a simple way to help our planet and make our community cleaner and greener.

How Does It Work?

The Walking School Bus operates on a set route with designated pick-up and drop-off points. We have scheduled times and routes to make it easy and convenient for families to participate.

Get Involved!

Joining the Walking School Bus is easy! Simply sign up at the school office or visit our website for more details. We encourage all families to take part in this fun and healthy initiative. The more, the merrier!

Appendix C Journey to school questionnaire

Please explain the "hands up" protocol to the principal during the interview.				
Prepare the 5 question survey in your survey tool.				
Principal to distribute the link to this survey on a typical day with no excursions and fine weather.				
<p>Please read the below before starting the questionnaire:</p> <p>School Infrastructure NSW are conducting this questionnaire to understand how your students travel to and from school. This should take 5 minutes to complete. Please complete the survey by xx/xx/xx.</p> <p>If you have transport feedback for our team, please contact us at _____@.com.au</p>				
<i>required</i>	1	About this class:	year group	[free form]
			name of person completing this survey	[free form]
			total students in your class	[free form]
			total absent today	[free form]
<i>required</i>	2	How did you travel to school on the survey day?	walked the whole trip	[for each option, please ask students to raise their hand if this is how they travelled to school this morning]
			rode a bicycle or other rideable toy (incl ped scooter, skateboard, rollerblades)	
			bus	
			train	
			dropped off (driver did not stay)	
			drove a car and parked on-site	<i>additional options, high school only</i>
			drove a car and parked nearby	
			motorcycle / motorscooter	
<i>required</i>	3	How will you go home this afternoon?	walk the whole trip	[for each option, please ask students to raise their hand if this is how they will travel home this afternoon]
			ride a bicycle or other rideable toy (incl ped scooter, skateboard, rollerblades)	
			bus	
			train	
			picked up by car	
			drive a car	<i>additional options, high school only</i>
			motorcycle / motorscooter	

<i>optional</i>	4	How did you travel to school today?	walked the whole trip	[drop down, select one]		
			rode a bicycle or other rideable toy (incl ped scooter, skateboard, rollerblades)			
			bus			
			train			
			dropped off (driver did not stay)			
			drove a car and parked on-site			
			drove a car and parked nearby			
			motorcycle / motorscooter			
<i>optional</i>	5	Any other transport feedback or road safety issues you would like to alert our team to?	[free form]			

Appendix D

Hands-up travel survey

Hands-up travel survey questions for current temporary site

About this class

- Date of survey completion
- Year group
- Name of class/roll call
- Name of person completing this survey
- How did you (the teacher) travel to school today?
- Total students in your class (including students who are absent)
- Total students absent today.

How did you travel to school on the survey day?

- How many students walked the whole trip?
- How many students rode a bicycle or other rideable toy (incl ped scooter, skateboard, rollerblades) to school?
- How many students caught a bus to school?
- How many students were dropped off (driver did not stay)?
- How many students got to school by other methods (please specify)

How will you go home this afternoon?

- How many students will walk the whole trip home from school?
- How many students will ride a bicycle or other rideable toy (incl ped scooter, skateboard, rollerblades) home?
- How many students will catch a train home?
- How many students will be picked up by car from school?
- For students who will use other methods of travel, please provide some more details here.

Hands-up travel survey questions for future school site

About this class

- Date of survey completion
- Year group
- Name of class/roll call
- Name of person completing this survey
- Total students in your class (including students who are absent)
- Total students absent today.
- How will you (the teacher) travel to school with the current infrastructure?
- How will you (the teacher) travel to school in the case of a bus route and footpaths?

How would you travel to school with the current infrastructure?

In this section, we would like to know how students expect to get to school given there are currently no continuous footpaths or appropriate bus services.

Please tally all students based on their travel method.

If the travel method option is not available, please specify in the "other" section provided.

- How many students will walk the whole trip?

- How many students will ride a bicycle or other rideable (incl ped scooter, skateboard, rollerblades) to school?
- How many students will catch a bus to school?
- How many students will be a passenger in a car?
- How many students will drive?
- How many students will get to school by other methods (please specify)

How would you travel to school with potential infrastructure?

In this section, we would like to know how students expect to get to school if bus services and continuous footpaths are provided.

Please tally all students based on their travel method.

If the travel method option is not available, please specify in the "other" section provided.

- How many students will walk the whole trip?
- How many students will ride a bicycle or other rideable (incl ped scooter, skateboard, rollerblades) to school?
- How many students will catch a bus to school?
- How many students will be a passenger in a car?
- How many students will drive?
- How many students will get to school by other methods (please specify)

Appendix E Travel Access Guide



Richmond River High Campus

Travel Access Guide

09 April 2025

Project overview

Planning is underway to rebuild The Rivers Secondary College Richmond River High Campus to provide new permanent learning spaces and bring Northern Rivers students the latest education facilities.

Using public transport to get to school

School buses and public buses



- There are three bus stops along Dunoon Road which will allow students to take the bus directly to school. These bus stops are Stop ID 24801124, 24801897 and 24801893. Routes stopping at these bus stops include: 652, 653, S258, S377, S897, S989.
- Students are also able to catch buses to the Trinity College site and interchange onto a bus which travels to Richmond River High Campus. Bus routes to the Trinity College interchange can be found on Table 1. The bus stop located at the school entrance provides bus services operating from Trinity College Interchange.
- Always wait until the school/public bus has gone, then find and use a safe place to cross.
- Plan the trip ahead and allow extra time to avoid trips and falls due to rushing.

Message from your Principal

- Insert text from Principal that lets the school community know they are becoming a public transport school.
- Principal message to include relevant safety information.
- Principal message may include their own commitment to public transport.
- Include Principal photo and signature block.

Message from your P&C President

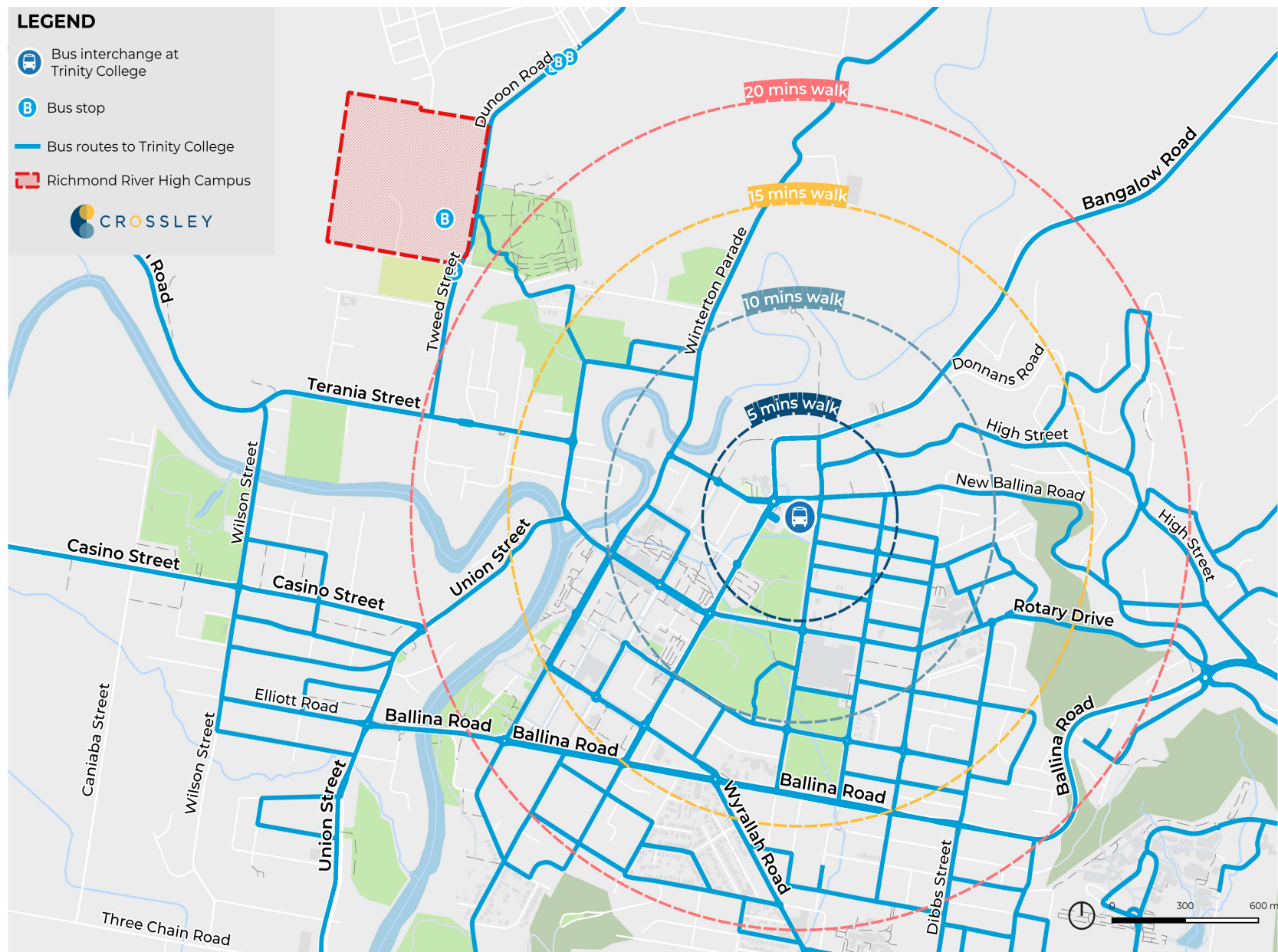
- Insert text from P&C President that outlines their support for becoming a public transport school.
- P&C message may include information about how changing the way you get to school even one day per week can make a 20% difference to local traffic congestion.
- Include P&C President photo and signature block.

Kiss and drop code of conduct

- Parents and carers can stop in the Kiss and Drop zone for a maximum of 2 minutes to drop off their children.
- Parents and carers must remain in their vehicles at all times in the Kiss and Drop zone.
- Please ensure that children use the car door adjacent to the footpath side for entering and exiting the car.

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au



Plan your trip to school

You can plan ahead to make sure you get to school on time!

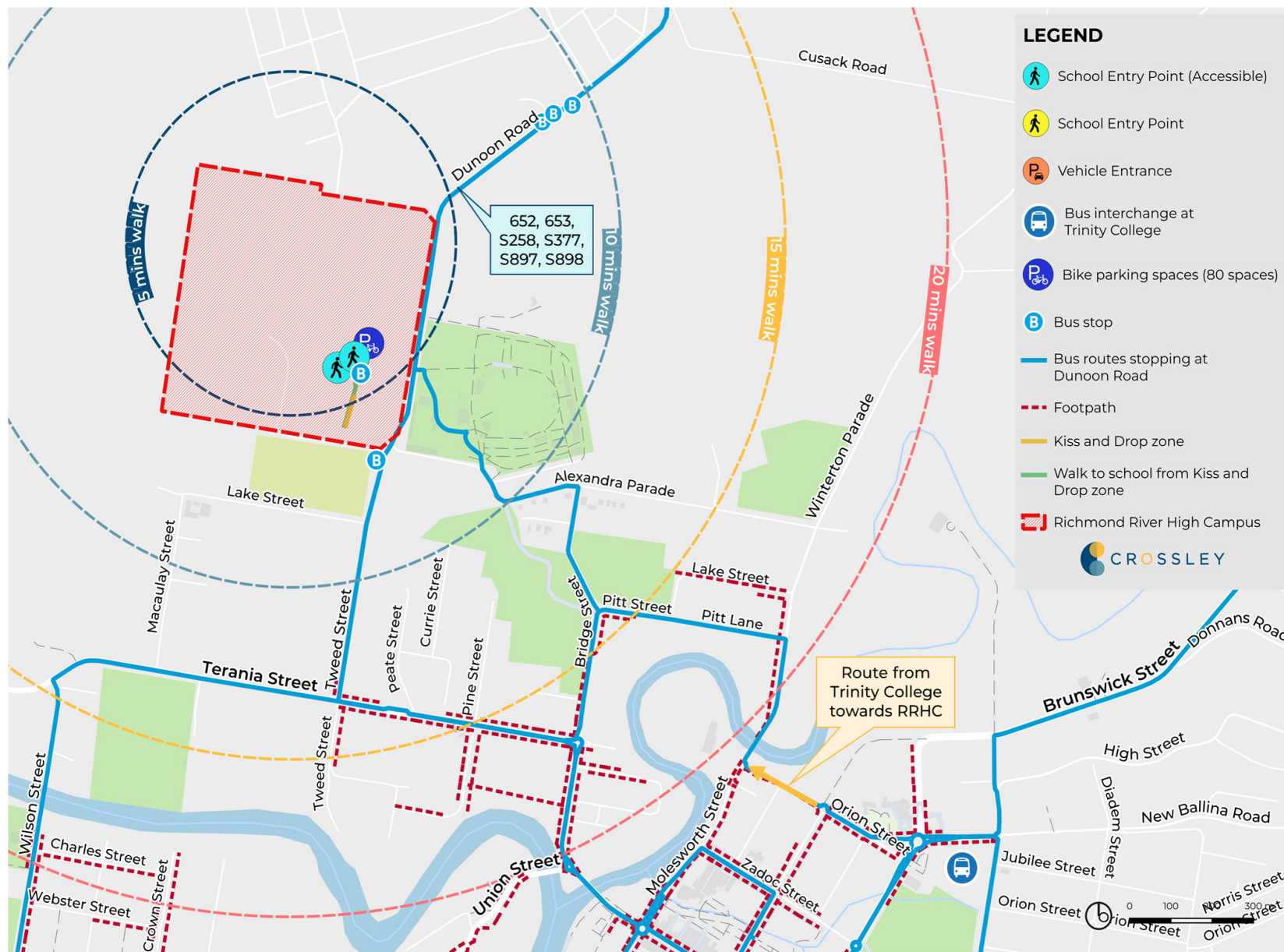
Visit transport.info or download an app to help:

- Trip View
- Next There

Students can catch a bus to the Trinity College interchange, where transfer buses are available to take them directly to Richmond River High Campus. All bus routes travelling to Trinity College interchange can be found on Table 1.

For more information contact:

School Infrastructure NSW
 Email: schoolinfrastructure@det.nsw.edu.au
 Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au



Tap on and tap off every time

Use your School Opal card every time you catch public transport to school.

It tells us how many people are using public transport to help us plan

Apply for a School Opal Card | School Term Bus Pass

- The School Student Transport Scheme (SSTS) provides free or subsidised travel to and from school for eligible school students. Visit transportnsw.info/school-travel-apply to check if you are eligible.
- Students are expected to follow the school's code of conduct while travelling on public transport.

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au

How to reach Trinity College School Bus Interchange?

Table 1: Bus routes to Trinity College Interchange

Bus number	Bus route description	Bus operator
610	Byron Bay to Lismore via Bangalow	Northern Rivers Buslines
635	Lismore to Mullumbimby	Northern Rivers Buslines
650	Lismore to Nimbin	Northern Rivers Buslines
652	Lismore to Tunttable Creek via Keerrong and The Channon	Quinns Buses
652	Lismore to Tunttable Creek	Quinns Buses
653	Dorrroughby & Dunoon to Lismore	Dunoon Bus Service
661	Ballina to Lismore via Wollongbar and Alstonville	Northern Rivers Buslines
662	Lismore to Lennox Head via Wollongbar	Northern Rivers Buslines
N0124	Bangalow to Lismore Schools via Booyong & Richmond Hill	Bulzomi Bros Pty Ltd
N0218	Bangalow to Lismore Schools via Fernleigh, Pearces Creek & Woodlawn	Bulzomi Bros Pty Ltd
N0220	Teven to Kadina via Blue Hills, Summerland & Bexhill Schools	Bulzomi Bros Pty Ltd
N0295	Whian Whian to South Lismore via Lismore Schools	Halls Bus Company Pty Ltd
N0356	Larnook to Blakebrook Public & Lismore Schools via Rock Valley	SB Coaches Pty Ltd
N0357	Cawongla to Lismore Schools	SB Coaches Pty Ltd
N0835	Leycester to Lismore Schools via Leycester Rd	Halls Bus Company Pty Ltd
N0902	Koonorigan to Blakebrook Primary & Lismore Schools via Goolmangar	Balanco Pty Ltd
N1045	-	Williams, Michael
N1169	-	Williams, Michael
N1694	Woodlawn & Numulgi to Lismore Schools via Bexhill	Halls Bus Company Pty Ltd
N2551	Terania Creek to Modanville Public & Lismore Schools	MT & CJ QUINN PTY LTD
N2568	Alstonville to Lismore via Tregeagle Rd	Sodhi Transport Pty Ltd
N2569	Wardell to Lismore Schools via Rous Rd	Sodhi Transport Pty Ltd
N2734	Kyogle to Lismore Schools via Bentley	Sodhi Transport Pty Ltd
N2823	Caniaba Rd to Caniaba Public & Lismore Schools	SB Coaches Pty Ltd
N2891	Broadwater to Lismore Schools & Goonellabah Schools via Wyrallah	MT & CJ QUINN PTY LTD
N2892	Tucki Tucki Rd to Lismore Schools via Riverbank & East Gundurimba	MT & CJ QUINN PTY LTD
N2900	Hillyards Rd to Lismore Schools via Bentley	Sodhi Transport Pty Ltd
S231	Lismore Schools to Leycester via Leycester Rd	Halls Bus Company
S232	Lismore Schools to Whian Whian via Dunoon	Halls Bus Company
S233	Lismore Schools to Numulgi and Woodlawn via Bexhill	Halls Bus Company

For more information contact:

School Infrastructure NSW
 Email: schoolinfrastructure@det.nsw.edu.au
 Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au

How to reach Trinity College School Bus Interchange?

Bus number	Bus route description	Bus operator
S264	Goonellabah Schools and Lismore Schools to Broadwater via Wyrallah	Quinns Buses
S265	Lismore Schools to Tucki Tucki via East Gundurimba	Quinns Buses
S347	Whale Bus - Lismore Schools to East Lismore via Coraki	Northern Rivers Buslines
S348	Rosella Bus - Lismore Schools to Lismore Military St via Goonellabah	Northern Rivers Buslines
S349	Kookaburra Bus - Kadina High to Lismore via Lismore Heights	Northern Rivers Buslines
S354	Kangaroo Bus - Goonellabah to East Lismore	Northern Rivers Buslines
S355	Butterfly Bus - Blue Hills Coll to East Lismore via Trinity Catholic Coll and Goonellabah	Northern Rivers Buslines
S356	Swan Bus - Southern Cross University to Lismore via East Lismore	Northern Rivers Buslines
S357	Turkey Bus - East Lismore to Lismore Schools via Lismore and Goonellabah	Northern Rivers Buslines
S358	Dragonfly Bus - Albert Park Public to Lismore via Lismore Schools and Goonellabah	Northern Rivers Buslines
S360	Snail Bus - Wyrallah Road Public to East Lismore via Lismore Schools and Goonellabah	Northern Rivers Buslines
S363	Duck Bus - Lismore High School to Lismore Schools and East Lismore Schools	Northern Rivers Buslines
S365	Rabbit Bus - St John's Coll to Lismore, Goonellabah Schools and East Lismore Schools	Northern Rivers Buslines
S366	Starfish Bus - East Lismore and Lismore Hts Schools to Goonellabah via Richmond Hill	Northern Rivers Buslines
S367	Marlin Bus - Lismore High to Lismore, N Lismore, South Lismore Schools and Lismore	Northern Rivers Buslines
S368	Platypus Bus - Summerland Christian Coll to Lismore, South Lismore Schools and Casino	Northern Rivers Buslines
S369	Seashell (Fan) Bus - Summerland Christian Coll to Bexhill, Eureka, Lismore Schools and E Lismore	Northern Rivers Buslines
S370	Polar Bear Bus - Southern Cross Uni to Lismore, Albert Park Schools & East Lismore	Northern Rivers Buslines
S373	Llama Bus - South Lismore to Southern Cross University via East Lismore	Northern Rivers Buslines
S375	Brown Bear Bus - Summerland Christian Coll to Southern Cross University via Blue Hills Coll	Northern Rivers Buslines
S376	Sheep Bus - Evans River Community to Evans Head via Woodburn St	Northern Rivers Buslines

For more information contact:

School Infrastructure NSW
 Email: schoolinfrastructure@det.nsw.edu.au
 Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au

How to reach Trinity College School Bus Interchange?

Bus number	Bus route description	Bus operator
S377	Fire Breathing Dragon Bus - Vistara Primary to Southern Cross University via North Lismore	Northern Rivers Buslines
S378	Skunk Bus - Summerland Christian Coll to Lismore via Blue Hills Coll and East Lismore	Northern Rivers Buslines
S379	Flamingo Bus - Evans Head to Woodburn Schools, Coraki Schools and Lismore	Northern Rivers Buslines
S383	Dolphin Bus - Southern Cross University to Gwynne Rd via Tuncester and East Lismore	Northern Rivers Buslines
S384	Ant Bus - St John's College to Nimbin via Blakebrook Public and East Lismore	Northern Rivers Buslines
S385	Honey Bee Bus - Southern Cross University to Jiggi Rd via Blakebrook Public	Northern Rivers Buslines
S386	Ibis Bus - Southern Cross University to Nimbin via Blakebrook Public	Northern Rivers Buslines
S507	Cat Bus - Goonellabah to East Ballina via Lismore and Lennox Head	Northern Rivers Buslines
S514	Koala Bus - St John's College to Ballina via Lismore	Northern Rivers Buslines
S519	Dog Bus - Lismore Heights Primary to Alstonville via Coolgardie	Northern Rivers Buslines
S520	Cow Bus - St John's to Byron Bay via Lismore Rd	Northern Rivers Buslines
S524	Snake Bus - St John's Coll Woodlawn to Alstonville via McLeans Ridges and Wollongbar	Northern Rivers Buslines
S527	Fox Bus - St John's to Alstonvale via Tuckombil	Northern Rivers Buslines
S528	Lion Bus - Southern Cross Public to Molesworth St	Ballina Buslines
S529	Squirrell Bus - Wollongbar Public to Alstonville High	Ballina Buslines
S563	Lismore Schools to Bangalow via Boat Harbour and Fernleigh	Bulzomi Bros Pty Ltd
S891	Geneva & Kyogle to Lismore Schools	Dunoon Bus Service
S893	Lismore to Alstonville via Tregeagle Rd	Dunoon Bus Service
S894	Lismore Schools to Wardell via Rous Rd	Dunoon Bus Service
S896	Lismore Schools to Hillyards Rd via Bentley	Dunoon Bus Service
S897	Dorroughby & Dunoon to Lismore Schools	Dunoon Bus Service
S898	Lismore Schools to Dunoon and Modanville via Borton Rd Tullera	Dunoon Bus Service
S916	Lismore Schools and Blakebrook Primary to Koonorigan via Goolmangar	Koonorigan Bus Service
S964	Lismore to Repentance Creek via St Johns College	Williams, Michael
S966	Repentance Creek to Lismore via Corndale & Bexhill	Williams Bus Lines

For more information contact:

School Infrastructure NSW
 Email: schoolinfrastructure@det.nsw.edu.au
 Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au

How to reach Trinity College School Bus Interchange?

Bus number	Bus route description	Operator
S978	Lismore Schools and Blakebrook Public to Larnook via Rock Valley	Simes Bros. Coaches
S979	East Lismore Schools to Cawongla	Simes Bros. Coaches
S980	Caniaba Public and Lismore Schools to Casino and Caniaba via Spring Grove	Simes Bros. Coaches
S982	Goonellabah and Lismore Schools to South Lismore via Caniaba	Simes Bros. Coaches

Something broken on the way to school?

Use the Snap Send Solve app or website to report issues to the people who can fix them.

Things like abandoned trolleys, broken footpaths or water leaks can all be reported in the app.

Download it today from the App Store or Google Play.
Or visit www.snapsendsolve.com

Discounts, offers or initiatives for students and parents

Bicycle NSW

If you or a member of your family joins Bicycle NSW, you have access to many benefits, such as 15% discounts on bicycle insurance and news about bicycle events in NSW.

Please contact Bicycle NSW: www.bicyclensw.org.au

Email: info@bicycle.org.au

Phone: (02) 9704 0800

For more information contact:

School Infrastructure NSW
Email: schoolinfrastructure@det.nsw.edu.au
Phone: 1300 482 651
www.schoolinfrastructure.nsw.gov.au

Appendix F TWG minutes

TWG #1

TSA Riley

Minutes

Northern Rivers Flood Recovery (NRFR) Transport Working Group (TWG) #2 Richmond River High Campus (RRHC) Meeting Minutes

Meeting title:	Richmond River High Campus, TWG#2	
Date:	23 September 2024	
Time:	11:00am – 12:00pm	
Location:	MS Teams	
Attendees:		
Name	Role	Email
Andy Parks (AP)	Lismore Council – Planning	andy.parks@lismore.nsw.gov.au
Barry Goodwin (BG)	Lismore Council - Design	barry.goodwin@lismore.nsw.gov.au
Lucas Myers (LM)	Lismore Council - Engineering	lucas.myers@lismore.nsw.gov.au
Court Walsh (CM)	Transport NSW – Development Services	court.walsh@transport.nsw.gov.au
Brad Crispin (BC)	Transport NSW – Community Partnering	bradley.crispin@transport.nsw.gov.au
Josh Tang (JT)	Transport NSW – Public Transport Planning	joshua.tang@transport.nsw.gov.au
Paul Marks (PM)	Transport NSW – Contracts Manager	paul.marks@transport.nsw.gov.au
Jamie Simmonds (JS)	NSW Reconstruction Authority	jamie.simmonds@reconstruction.nsw.gov.au
Stephen Timms (ST)	NSW Reconstruction Authority	stephen.timms@reconstruction.nsw.gov.au
Dean Birkett (DB)	SINSW	dean.birkett@det.nsw.edu.au
Jessica Ng (JN)	SINSW	jessica.ng11@det.nsw.edu.au
Emma Viljoen (EV)	TSA Riley	emma.viljoen@tsariley.au
Michael Trajkov (MT)	TSA Riley	michael.trajkov@tsariley.au
Malcolm Taylor (MTa)	TSA Riley	malcolm.taylor@tsariley.au
Stephanie Crossley (SC)	Crossley TP	stephanie@crossleytp.com.au
Jennifer Chen (JC)	Crossley TP	jennifer@crossleytp.com.au
Sharon Chungpattana (SCH)	Crossley TP	sharon@crossleytp.com.au
Grace Carpp (GC)	TTW Civil	grace.carpp@ttw.com.au
Apologies:	Role:	Email:
Liz Smith (LS)	Transport for NSW	liz.smith@transport.nsw.gov.au

TSA Riley

Minutes

Item	Comments	Action	Date
1.0	Welcome & Introductions		
1.1	<ul style="list-style-type: none"> DB facilitated introductions and noted apologies. 	Note	
1.2	<ul style="list-style-type: none"> DB provided an acknowledgment of country. 	Note	
1.3	<ul style="list-style-type: none"> DB noted any information presented during the meeting is commercial in confidence. 	Note	
2.0	Key Actions		
2.1	Key Actions from Meeting: <ul style="list-style-type: none"> TfNSW to review TWG package and provide comment on speed limits on roads adjacent to new high school. Crossley to investigate bus route planning to interchange at Old Trinity College. Crossley to investigate separation of Kiss & Drop zone/ Bus Zone. Crossley to investigate bus stop on eastern side of Dunoon Rd. Lismore Council to inform TWG of outcomes of funding application (expected by mid - November). Crossley to remove opportunity 4,6, and 7 from RTA. TfNSW to review bus requirements. 	TfNSW Crossley Crossley Crossley Council Crossley TfNSW	14 Oct 24 Ongoing Ongoing Ongoing 14 Nov 24 14 Oct 24 Ongoing
3.0	Project Overview		
3.1	<ul style="list-style-type: none"> DB noted SINSW have purchased the land and site investigations are underway. DB advised SINSW does not have funding for any external infrastructure works due to the like for like funding nature of the project provided via Icare. DB noted the site will be rezoned through NSW RA and a Part 5 REF or NSW RA Ministerial Order will be the planning application. DB noted the school will have capacity for 660 students and will open in 2027. DB advised there will be no entry to the school from Alexandra Parade (in response to query from AP). DB noted a second entrance point on Alexandra Parade has been considered but not included at this point due to issues with maintenance, security, flood planning and potential future development. 	Note	
4.0	Transport Assessment Findings		
4.1	<ul style="list-style-type: none"> Mode share findings were presented as per Slides 6 – 8 of the attached presentation. SC provided an overview of paths to planned housing areas and proposed active transport network as per Slides 9 – 10. AP noted Lismore Council have submitted a funding application for delivery of various walking/ cycling infrastructure projects. AP noted other active transport links have not received funding yet. AP noted new school would elevate priority of planned long-term projects. 	Note	
5.0	Proposed Site Access		
5.1	<ul style="list-style-type: none"> SC provided an overview of the proposed site access as per Slide 11 of the attached presentation. SC noted the proposed access gate on Dunoon Road will be for pedestrians and cyclists only. 	Note	

TSA Riley

Minutes

	<ul style="list-style-type: none"> BC queried current design which combined Kiss N Drop and Bus Drop Off. SC noted Crossley are reviewing this design. 	
6.0	Opportunities SINSW	
6.1	<ul style="list-style-type: none"> Assessment has identified opportunity for bike racks within the site and a new pedestrian access point on Dunoon Road for students walking/cycling to school or students arriving at proposed bus bay. 	Note
7.0	Opportunities NSW RA	
7.1	<ul style="list-style-type: none"> AP noted upgrades to Secondary Rd infrastructure such as kerbside parking, roundabouts etc. would need to be funded in some way. DB noted SINSW and RA will review upgrade requirements for Secondary Rd, but upgrades to intersection and Dunoon Rd will need to be funded by Council. AP noted contributions plan and grant fund includes request for upgrades to Dunoon Rd; LM noted the intention was for infrastructure upgrades to Dunoon Rd/Secondary Road to completed with future housing projects (20+ years). 	Note
8.0	Opportunities Lismore Council/TfNSW	
8.1	<ul style="list-style-type: none"> AP noted no works are planned for section between Alexandra and Terania. AP noted walking/cycling strategy focused more on Bridge St to connect to Lismore CBD. AP noted roundabout requested in funding application but crossing facilities will need to be considered by Council. SC opportunities 4, 6 and 7 will be removed. BG noted speed zones in the area will need to be reviewed to ensure they are suitable for the changed traffic environment. BC noted TfNSW agreed in principle to changes in speed zones to suit changes to the traffic environment, however changes won't be made until the school is in construction/ operation. BG noted changes to the speed limits would also mean changes to the deceleration zone and intersection would need to be considered. BC advised TfNSW need to review specifics and provide advice on requirements. SC noted there are currently only plans for potential bus stop on the western side of Dunoon Rd and could be a public bus stop (in response to question from JT). DB noted a this is only a potential opportunity. BG noted some form of device would be required to enable pedestrians to cross the road if there were bus stops on either side of the road. BC noted this would not necessarily need to be a formalised pedestrian crossing. 	Note
9.0	Next Meeting	
9.1	<ul style="list-style-type: none"> October Monday 14th @ 11:00am PMN: meeting invite for TWG#3 issued by Crossley 	- 14 Oct 24

TSA Riley

Minutes

Northern Rivers Flood Recovery (NRFR) Transport Working Group (TWG) #2 Richmond River High Campus (RRHC) Meeting Minutes

Meeting title: Richmond River High Campus, TWG#2

Date: 14 October 2024

Time: 11:00am – 11:45am

Location: MS Teams

Attendees: *italicised names denotes partial attendance (first 30mins)*

Name	Role	Email
Barry Goodwin (BG)	Lismore City Council - Design	barry.goodwin@lismore.nsw.gov.au
Lucas Myers (LM)	Lismore City Council - Engineering	lucas.myers@lismore.nsw.gov.au
Andy Parks (AP)	Lismore City Council - Planning	andy.parks@lismore.nsw.gov.au
Graham Snow (GS)	Lismore City Council	graham.snow@lismore.nsw.gov.au
Caleisse Dunston (CD)	Transport for NSW	caleisse.dunston@transport.nsw.gov.au
Paul Marks (PM)	Transport for NSW – Contracts Manager	Paul.Marks@transport.nsw.gov.au
Laine Muller (LM)	Transport for NSW	
Josh Tang (JT)	Transport for NSW – Public Transport Planning	Joshua.Tang@transport.nsw.gov.au
Shelby Wells (SW)	Transport for NSW – Acting Team leader development services	
Paul Collis (PC)	NSW Reconstruction Authority	Paul.Collis@reconstruction.nsw.gov.au
Stephen Timms (ST)	NSW Reconstruction Authority	stephen.timms@reconstruction.nsw.gov.au
Dean Birkett (DB)	SINSW – Project Director	Dean.Birkett@det.nsw.edu.au
Russell Humble (RH)	SINSW – Transport Planning	Russell.Humble@det.nsw.edu.au
Jessica Ng (JN)	SINSW – Transport Planning	Jessica.Ng11@det.nsw.edu.au
Emma Viljoen (EV)	TSA Riley	emma.viljoen@tsariley.au
Michael Trajkov (MT)	TSA Riley	michael.trajkov@tsariley.au
Jessica Lee (JL)	TSA Riley	Jessica.Lee@tsariley.au
Stephanie Crossley (SC)	Crossley TP	Stephanie@crossleytp.com.au
Jennifer Chen (JC)	Crossley TP	Jennifer@crossleytp.com.au
Sharon Chungpattana (SCh)	Crossley TP	Sharon@crossleytp.com.au
Grace Carpp (GC)	TTW Civil	Grace.carpp@ttw.com.au

Apologies:

Liz Smith (LS)

Court Walsh (CM)

Role:

Transport for NSW

Transport for NSW – Development Services

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TSA Riley

Minutes

Item	Comments	Action	Date
1.0	Welcome & Introductions		
1.1	<ul style="list-style-type: none"> DB facilitated introductions and noted apologies. 	Note	
1.2	<ul style="list-style-type: none"> DB provided an acknowledgment of country. 	Note	
1.3	<ul style="list-style-type: none"> DB noted any information presented during the meeting is commercial in confidence. 	Note	
2.0	Key Actions		
2.1	Key Actions from Meeting: <ul style="list-style-type: none"> TfNSW (JT) to review list of bus services and confirm they are current and in operation Request for TfNSW to review Speed Zones BG to consider with Christie 26/27 funding for the active transport network requirements. 	TfNSW (JT) TfNSW (CD) LCC (AP)	25 Oct 24 (TBC) 20 Dec 24 15 Nov 24
3.0	Bus Route Planning		
3.1	Bus route analysis <ul style="list-style-type: none"> JC outlined the methodology in reviewing the bus services (existing) and future need. JC identified the data discrepancy of around 20 buses between GTFS feed and Bus Line. JT noted there are other operators as well as Bus Line that provide the services and agreed to confirm the bus services going to the Old Trinity College. 	Note	
3.2	Trinity College Interchange: <ul style="list-style-type: none"> TfNSW noted that the interchange operates effectively and there are no plans to relocate the interchange at this point, highlighting recent upgrades to the shelters at the site. While peak periods are intense, the system is functioning well, and they are confident new school will not tip the system. SC1 inquired if there is a capacity to increase the number of buses going to the Old Trinity College as data indicates 1 additional service would be required. CD noted it is worth checking the interchange has the capacity. PM indicated that Bus Line would need to conduct an assessment to determine if the addition of a "growth bus" is warranted. Have to see if there is capacity in existing scope to reassign first. JT will need enrolment and student addresses for analysis. Note – RRHC will have capacity for 660 students JT mentioned students coming from the north could be dropped off on the way rather than via Trinity would be ideal. JT noted school services are reviewed on an annual basis to respond to changes in enrolment periods. PM – Forecast is nice to have in the background, but it is not enough to bus service changes, it needs to be based on actual. JT noted it is too early to look at it now due to enrolments. 	Note	
3.2	Proposed bus services from Old Trinity College to RRHC:		

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	<ul style="list-style-type: none"> CD - Proposed new route would not be functional due to low-level rail bridge on Alexandra Parade. It is heritage listed so it is up to heritage to approve the removal of the rail bridge (risk). AP noted the rail bridge has a 2.8m height restriction. One rail bridge has been removed on Terania Street, strengthening the case for council to remove the rail bridge. AP and CD noted this is the best route, but it would need the rail bridge to be removed. The alternative is via the CBD (Terania Street) if bridge cannot be removed. [Action] TfNSW (JT) to review list of bus services and confirm they are current and in operation 	
4.0	TWG #1 Actions discussion	
4.1	TfNSW Request to assess the additional bus stop on Dunoon Road. <ul style="list-style-type: none"> SW noted TfNSW would have to provide concurrence to the works for a refuge island. This would however, come via Council and be presented at the Lismore local traffic committee. (Every 3rd Wednesday – 23rd Oct is next). DB noted that this may also fall into the funding discussion and process AP highlighted that this was not originally costed in funding application. They would require a basic concept plan for further discussion. 	Note
4.2	Passenger kiss and drop and bus stop zone <ul style="list-style-type: none"> JC noted the bus zone is 60 metres long and can accommodate approximately 3 buses. Note – This was further discussed in a separate meeting with JT and the minutes are found in section 6.0 of minutes. 	
4.3	TfNSW Speed Limit Review on Dunoon Road <ul style="list-style-type: none"> CD noted: <ul style="list-style-type: none"> Speed limit should extend 50 or 60km/h along and across new development area. Need to know the location of the gates before we can calculate the school zone. RH inquired about the duration for implementing flashing lights, to which CD responded that it typically takes a minimum of three months. CD confirmed that the speed limit review is a TfNSW matter and is not under the Council's jurisdiction. CD also noted that Dunoon Road might require a speed zone review, as it does not currently meet the required standards. The anticipated speed limit would likely be around 50-60 km/h, and installation could occur as soon as it is approved. SC1 noted a formalised request for speed zone review will be as part of minutes. CD agreed to keep the project team up to date on the speed zone review to support other designs. CD noted the speed zone review takes around 2-months from request to authorisation, then Council will install the signs on behalf of TfNSW. [Action] Request for TfNSW to review Speed Zones 	
5.0	Funding Discussion	
5.1	<ul style="list-style-type: none"> SC1 provided an overview of the Get NSW Active funding program, highlight it as a Plan B if the funding does not come through. 	Note

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Minutes

	<ul style="list-style-type: none"> SC1 noted the Get NSW active funding application has to be for design only or construction only. AP noted we will know about the funding results in a month. SC1 asked if there were concept design ready and suggested putting in an application for the Get NSW Active funding for the 2026-2027 period. [Action] BG to consider with Christie 26/27 funding for the active transport network requirements. 	
6.0	Bus Stop Discussion (post meeting from 12-12:30pm)	
6.1	<ul style="list-style-type: none"> Attendees: JT (TfNSW) JC, SC (Crossley), RH, JN (SfNSW Transport Planning), EV, MT, JL (TSA Riley) 	Note
6.2	<p>Bus zone design considerations:</p> <ul style="list-style-type: none"> SC1 queried whether the bus zone should be designed to meet the required services or if the bus timetable should be adjusted to accommodate the available bus spaces. JT noted The School Travel Guidelines working group are working out which modes of transport to prioritise over others but would advocate for more spaces for smooth public transport operations. 	
6.3	<p>Alternative kiss and drop discussion:</p> <ul style="list-style-type: none"> JC noted student capacity is 660 students and expected 324 students to catch public transport. Crossley's analysis shows 395 students are within 400m of a bus stop that interchanges at Old Trinity College. JT –identified the Trinity interchange is a constraint on how buses can service with this new school. It gives fewer options which may lead to a need for a greater capacity for the bus zone. A shared drop off and bus zone will introduce delays. In terms of numbers, 60m will allow 3 buses to use independently. This number is at the lower end of what TfNSW would want. Would like to see an alternative location for kiss and drop. JC queried if it is ideal to keep all the space for buses, how do bus planners plan the interchange? JT – If bell times don't change, bus timetables are unlikely to change. JC queried if we have a restricted time period for buses to come to school e.g. 3pm to 3:30pm, and after the time period, kiss and drop is allowed at the bus zone. Is that possible? SC1 added that this will support the extra-curricular activities. JT – 30 minutes for the timed bus zone is too constrained and does not allow much flexibility. It would be ideal for the timed bus zone to be longer than 30 minutes. [Action] Crossley to issue JT with editable spreadsheet of the bus routes interchanging at Old Trinity College. 	
7.1	Next Meeting	
7.2	<ul style="list-style-type: none"> TWG #3 to be held on 11th November 2024. Crossley to issue out meeting invite 	Crossley 11/11/24

TWG #3



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Minutes

Richmond River High Campus

Meeting Title	Transport Working Group #3	Date	25/11/24
Location	Microsoft Teams Meeting	Time	11:00AM to 11:50AM
Facilitator	Stephanie Crossley and Jennifer Chen	Note Taker	Sharon Chungpattana
Attendees	Stephanie Crossley (SC) Jennifer Chen (JC) Sharon Chungpattana Dean Birkett (DB) Russell Humble (RH) Chris Lanham (CL) Andy Parks (AP) Lucas Myers (LM) Paul Marks (PM) Caleisse Dunston (CD) Michael Trajkov (MT) Jessica Lee (JL) Emma Viljoen (EV) Stephen Timms (ST) Paul Collis (PC)	Crossley Transport Planning Crossley Transport Planning Crossley Transport Planning School Infrastructure NSW School Infrastructure NSW Buslines Lismore City Council Lismore City Council Transport for NSW Transport for NSW TSA TSA TSA Reconstruction Authority Reconstruction Authority	

Transport Working Group

Presenter	Stephanie Crossley, Dean Birkett and Jennifer Chen	Time Allotted	50 minutes
Discussion	<p>Meeting agenda SC went through the meeting agenda.</p> <p>Acknowledgement of Country DB provided an acknowledgement of country.</p> <p>TWG discussions to date SC went through the slides.</p> <p>Proposed bus services from Old Trinity College to RRHC JC presented the slide.</p> <p>JC - Can we assume that the buses going to existing RRHC will be shifted to the new campus once it is opened? CL - Will need to put in a request to Transport. JC - What are your requirements to get new bus service and get the process started? CL - Will need to know the student locations and go to Transport to request,</p>		

AP – The bus will not be able to travel on the proposed bus route shown as there is currently a rail bridge on Alexandra Parade and buses will not be able to go under.

DB – Is the removal of the rail bridge included in the funding application?

AP – The funding application includes the realignment of Alexandra Parade. Since the rail bridge is a heritage listed site, removal would require approval.

JC – For future documents, should we show the alternative route that goes through Terania Street and Tweed Street?

CL – Why is additional bus services required?

JC explained the analysis that there currently 395 students can catch a bus to school and this would require 5 bus services rather than 4 currently.

CL – We will work with Transport to review the requirement.

PM – There might be existing capacity, will need to analyse if there is a full network before providing additional services.

SC – When do we need to start triggering these procedures?

PM – Josh Tang is not here but would say 6-12 months to review the network.

CL – Agree that 12 month review is needed.

RH – 6 months review is the minimum, would flag that 12 month is the trigger.

SC – Would it be 18 months from planning to implementation?

CL – Would say minimum 12 months from planning to implementation.

RH – Would say 18 months prior to opening to start the conversation with Transport and Buslines.

Additional bus stop along Dunoon Road

JC went through the slides.

JC – Are these two proposed bus stops acceptable for bus operators?

CL – Think buses would need to ability to turn right and go back down towards Lismore. Are the bus stops undercover?

SC – We have just identified potential bus stop locations to provide connectivity to school and residential area without having to divert the bus to the school bus stop. There are no shelters proposed currently.

AP – That would be subject to the speed zone review. The design for the grant application did not include a bus turnaround.

CL – What is the intersection treatment for Dunoon Road/Secondary Road intersection?

LM – Currently as part of the DA, it is condition left and right turn. Dependent of funding to provide roundabout.

CL – Recommend moving the entry to the on-site carpark as cars might conflict with buses.

JC – Our assumption is teachers would not arrive at the same time as buses.

CD – Something to consider is that year 11 and 12 may be parking on-site.

RH – The students will be directed not to park in the on-site parking, they would need to look for somewhere else to park.

CD – Is there anywhere else to park?

JC – Northern side of Secondary Road.

DB – Consultation with RA is needed for the design of Secondary Road. Currently, the DA does not have on-street parking on Dunoon Road.

CL – An example school to look at that has a similar situation as Secondary Road is Peak High School in Tamworth. Have a look at Cole Road.

JC – What kind of requirements to have a bus stop on Dunoon Road and the timescale to implement it?

CL – Think bus length of at least 45-50 metres should be provided.

JC – Our assumption is the Dunoon Road bus stop is to have space for one bus.

RH – The Dunoon Road bus stop would be for overflow, would not need much space.

CL – Will have a look at that and get back to the group. What is the length of the current bus zone in the school?

JC – Around 60 metres.

CL – A bus zone for 3 to 4 buses may be too short for a school of this size.

JC – Any comments from Transport?

CD – In terms of safety, it is preferred that students use the dedicated school bus. However, Lismore showgrounds have many events on so a bus stop on Dunoon Road may be beneficial.

CL – It would be good to know the width of the bus. Suggest a fence along the edge of the bus stop can stop students from running through buses.

RH – We would be putting bus information signs and student would not be waiting on the footpath. A bus supervisor would supervise students getting on the bus. Students will be waiting on the school site.

JC – What is the timeline to approve bus stops on Dunoon Road?

CL – Once the need for it comes up, it would go to Council, then would need to work out funding source, design and approval via the local traffic committee (Barry Goodwin is the council person). The committee meets up once a month and the group looks at the overall safety of the zone. The approval stage would be maximum 2 months.

JC – Who would the request come from?

CD – The request would come from Schools Infrastructure or Transport bus contracts or directly to Lismore City Council.

RH – Think there needs to be additional analysis completed before the request of bus stop.

SC – Is that action coming back to Crossley?

RH – That would be for CL and Josh Tang to look at.

CL – Yes, Josh Tang will need to be engaged.

Speed limit review

JC asked if there are any updates.

CL – Last week the initial report was completed for the speed zone review. The reviewer has provided two potential recommendations for two speed zone set ups. Both are in reductions at the section part of the school. One option is extending the 50 zone out and the next option is putting 60 zone. I want to do consultation with LCC and police to go ahead with either option. Once we have comments and decide on recommendations, it would go for approval for two approvers which can take a couple of weeks. When it is approved, it can be installed. I asked the reviewer to complete the review based on current road environment and then we can install.

Bus zone and kiss and drop

JC provided an update.

Secondary Road and Dunoon Road design update

DB – Will be meeting this Friday with RA to move the design of Secondary Road and Dunoon Road forward.

JC – Will follow up on the outcomes of the meeting early next week.

Council update on funding applications

AP – The funding application outcome was supposed to be announced Mid November, but they extended it to be by the end of the year. Council will be putting an application in for the Get Active NSW today or tomorrow.

SC – There is another opportunity to apply for funding. Applications close 13 Jan 2025, funding for up to \$100 million - <https://investmentinfrastructure.gov.au/resources/funding-recipients/active-transport-fund-resources>

Next steps and questions

DB – The next meeting will be on hold until we get answers for Councils funding application.

RH – I will be finishing up with Department of Education on 20th of December.

Action Items	Responsible	Deadline
CL to Josh Tang to assess additional bus stop on Dunoon Road	<Name>	<Date>
JC to follow up on the outcomes of the SINSW/RA meeting	< Name >	<Date>

TWG #4



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Minutes

Richmond River High Campus

Meeting Title	Transport Working Group #4Richmond River High Campus TWG #4Transport Working Group #4	Date	08/05/25
Location	Microsoft Teams Meeting	Time	11AM to 12PM
Facilitator	Stephanie Crossley	Note Taker	Stephanie Crossley
Attendees	Stephanie Crossley (SC) Greg Hall (GH) Gareth James (GJ) Tim Field (TF) Jessica Ng (JN) Andy Parks (AP) Graham Snow (GS) Kate Leonard (KL) Calaisse Dunston (CD) Paul Marks (PM) Joshua Tang (JT) Shelby Wells (SW) Michelle Andrews (MA) Lachlan Woods (LW)	Crossley Transport Planning School Infrastructure NSW School Infrastructure NSW School Infrastructure NSW School Infrastructure NSW Lismore City Council Lismore City Council Transport for NSW Transport for NSW Transport for NSW Transport for NSW Transport for NSW Transport for NSW Transport for NSW	

Transport Working Group

Presenter	Stephanie Crossley	Time Allotted	1 hour
Discussion	<p>Background and Purpose of Meeting</p> <p>The current proposed locates the school access road mid-block along Dunoon Road. As this is a change from the previous plan discussed at the last TWG meeting, CrossleyTP sent an email to TfNSW and Lismore City Council to consult on the revised access proposal for RRHC. TfNSW responded with recommendations.</p> <p>The purpose of this TWG is to go through these comments and outline the project teams response to these comments.</p> <p>Introductions</p> <p>Participants Introduced themselves.</p> <p>Overview of Site Access Investigations</p> <p>SC presented an overview of the site access investigations.</p> <p>TfNSW recommendation: Provide pedestrian refuge on Dunoon Road to facilitate safe crossing for pedestrian accessing bus stops and the school grounds.</p> <ul style="list-style-type: none"> SC - Pedestrian refuge not required as all school buses will enter the school site for student drop-off and pick-up. Outcome - No objections from stakeholders Item closed 		

	<p>TfNSW recommendation: Formalising and upgrading the Intersection of Dunoon Road and Alexandra Parade to ensure safe and efficient operation due to anticipated increase in vehicle usage</p> <ul style="list-style-type: none"> • SC - Traffic modelling and crash analysis confirm the intersection continues to operate at Level of Service (LoS) A with the projected school traffic. • Outcome - No objections from stakeholders • Item closed <p>TfNSW recommendation: Ensuring the pavement width along Tweed Street is suitable to accommodate school buses and other general traffic safely and efficiently</p> <ul style="list-style-type: none"> • SC - Road function, crash data, and traffic modelling indicate the current design should be adequate. • Outcome - No objections from stakeholders • Item closed <p>TfNSW recommendation: The provision of a channelised right-turn (CHR) treatment on Terania Street to facilitate safe right turns into Tweed Street. Additionally, an auxiliary left-turn (AUL) lane should be considered to accommodate the anticipated increase in left-turning traffic accessing the school</p> <ul style="list-style-type: none"> • SC - Turning movement analysis is adequate for current design. • Outcome - No objections from stakeholders • Item closed <p>Next Steps</p> <ul style="list-style-type: none"> • TfNSW to plan bus route and service plan for RRHC.
Conclusions	<p>All TfNSW comments are closed out. Stakeholder have no objections to the proposed access road off Dunoon Road.</p>