asongroup

Prepared for

SCHOOL INFRASTRUCTURE NSW

Preliminary School Transport Plan

Hastings Secondary College – Port Macquarie Campus
16 Owen Street, Port Macquarie

Ref: P1600r02v4
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Revision History

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Appendices

1 Introduction

1.1 Background

Ason Group has been commissioned by School Infrastructure NSW (SINSW) on behalf of the Department of Education (DOE) to prepare a Preliminary School Transport Plan (PSTP) to accompany a State Significant Development Application (DA) to the NSW Department of Planning, Industry and Environment (DPIE) for proposed upgrades to Hastings Secondary College (Port Macquarie Campus), described in the report as 'the school'.

Hastings Secondary College consists of two campuses, being Westport and Port Macquarie. This report has been prepared for proposed works at the Port Macquarie Campus, which consists of two properties; the main campus and the Ag Plot.

The works subject to this proposal are to be carried out on the main Port Macquarie campus, which is located at 16 Owen Street, Port Macquarie (the site). The site has a secondary street frontage to Burrawan Street and adjoins Oxley Oval along the eastern boundary.

On 23 December 2020, the Secretary of the DPIE issued Secretary's Environmental Assessment Requirements (SEARs) for SSDA Application No. SSD-11920082. This report has been prepared to address the SEARs requirements.

The Plan covers all aspects of transport and traffic items relating to the School. These items include site transport amenities, existing conditions of the site, provision of measures to encourage sustainable travel modes, and operational management of access, pedestrian access and circulation arrangements, car park access, service vehicle arrangements, and School Kiss-and-Drop arrangement. This is discussed in further detail below.

1.1.1 Site Amenities and Existing Conditions

Section 2 of this Plan details the location and amenities of the site, i.e., bicycle parking, carparking, access locations, and drop-off / pick-up facilities. Analysis is also provided on the anticipated mode share of the school for students and staff when the upgrade works are completed. Details regarding the public transport within the area and pedestrian accessibility are also provided.

1.1.2 School Travel Plan

Section 3 of this Plan, describes the School Travel Plan (STP) and is intended to develop a package of site-specific measures to promote and maximise the use of sustainable travel modes, including walking, cycling, public transport, and carpooling. These strategies will assist in less reliance on the use of

private vehicles for travel to and from the school, supporting sustainability initiatives for growth into the future, providing sustainable travel modes that support independent travel of children attending the school and potential health benefits associated with walking, scooter riding and cycling.

The STP sets out objectives and strategies to assist the School in achieving green travel goals to improve sustainability.

It also includes a review of the existing transport choices and sets targets so that the effective implementation of the Plan can be assessed. These targets are intended to be realistic but ambitious enough to initiate substantiative behavioural change to achieve the desired outcomes, given existing and future multi-modal transport networks. This is expected to be coordinated with the School or their representatives. It shall be reviewed regularly to ensure it remains relevant and reflective of current conditions.

1.1.3 Operational Transport and Access Management Plan

Section 4 of this Plan, herein referred to as the Operational Transport and Access Management Plan (OTAMP), is to provide guidance in relation to the traffic management arrangements for the site. The overall objective is to ensure safe and efficient movement of vehicles, students, visitors, and staff. In particular, this Plan details the following:

- A pedestrian access plan;
- Drop-off / Pick-up facilities management plan;
- Car parking plan;
- Servicing plan; and
- Details on the governance and administration of the plans.

1.2 Detailed Stakeholder Engagement

Over the course of the development of this Plan, Ason Group has consulted with key stakeholders including Transport for NSW (TfNSW), Port Macquarie – Hastings Council, and the Deputy School Principal. This report provides details of consultation undertaken by the Project Team in its preparation of this STP.

1.2.1 Port Macquarie – Hastings Council Stakeholder Engagement

Table 1: Port Macquarie – Hastings Council Consultation

Identified Party to Consult:	Port Macquarie – Hastings Council
Consultation type:	Email correspondence Phone call
When is consultation required?	Prior to submission
Why?	To organise a meeting between Ason Group and Council. To discuss existing traffic issues in the surrounding road network and discuss the Preliminary School Travel Plan.
When was consultation scheduled?	15th February 2021
When was consultation held?	25th February 2021
Identify persons and positions who were involved	**Traffic Consultant** – Ason Group: Dora Choi (Principal Lead - Traffic Management & Operations), Rebecca Butler-Madden (Senior Transport Planner), Thomas Lehmann (Traffic Engineer), Matthew Tangonan (Traffic Engineer) **Council** – Grant Burge Development Engineering Coordinator
Provide the details of the consultation	Discussion regarding shared path and parking arrangement review for Preliminary School Transport Plan.
What specific matters were discussed?	Discussion regarding shared path and parking arrangement review for Preliminary School Transport Plan. • Grant raised no concerns regarding a review into the existing parking arrangement or shared path. It was noted that no shared path is currently proposed to the School. • Grant noted that formal feedback would be provided by 26th February 2021, with additional queries regarding parking provision and planning items to be forwarded on to the relevant teams at Council.
What matters were resolved?	22nd February 2021: this was a preliminary discussion with no matters to be resolved.

1.2.2 TfNSW Stakeholder Engagement

Table 2: TfNSW Consultation

Identified Party to Consult:	Transport for NSW
Consultation type:	Email correspondence Video Conference
When is consultation required?	Prior to submission
Why?	To organise a meeting between Ason Group and TfNSW. To discuss existing traffic issues in the surrounding road network and discuss the Preliminary School Travel Plan.
When was consultation scheduled?	15th February 2021 22nd February 2021

When was consultation held?	3rd February 2021 22nd February 2021
Identify persons and positions who were involved	**Traffic Consultant** – Ason Group: Dora Choi (Principal Lead - Traffic Management & Operations), Rebecca Butler-Madden (Senior Transport Planner), Thomas Lehmann (Traffic Engineer), Matthew Tangonan (Traffic Engineer) **TfNSW** - Matt Adams (Team Leader, Development Services | Community and Place | Region North | Regional & Outer Metropolitan) Gregory Aitken (Development Services | Community and Place | Region North | Regional & Outer Metropolitan) Leisa Sedger (Development Services | Community and Place | Region North | Regional & Outer Metropolitan)
Provide the details of the consultation	3rd February 2021: Ason Group emailed TfNSW and Busways to make introductions and request a meeting to discuss the existing bus routes and provision. No response was provided from TfNSW. 10th February 2021: Ason Group emailed TfNSW to request a meeting to discuss the existing bus routes and provision. TfNSW was unable to attend the meeting on the 15h February 2021. 11th February 2021: Ason Group emailed TfNSW to commence liaising as required by the SSDA to discuss the Transport Assessment and School Transport Plan. The contact details of Matt Adams were provided. 18th February 2021: Ason Group emailed TfNSW to commence liaising as required by the SSDA to discuss the Transport Assessment and School Transport Plan. Matt Adams confirmed attendance. 22nd February 2021: the key items for review and inclusion into the Preliminary School Transport Plan.

What specific matters were discussed?	• 22nd February 2021: the key items for review and inclusion into the Preliminary School Transport Plan. This included shared paths, parking, and future bus infrastructure.
	  • TfNSW recommended undertaking a review of the central parking row on Owen Street outside of the School. Ason Group undertook a review and determined that the parking can be rearranged however it would require the realignment of Owen Street.
	  • TfNSW also recommended that shared paths be provided to the School. This has been included as part of the Action Plan detailed in Section 4.2.
	  • Ason Group queried the school zone times noting it does not coincide with the school operating hours. TfNSW said this is unlikely to be changed since as the existing road is 40km/h.
	  • TfNSW informed Ason Group that the bus services in Port Macquarie are being reviewed as part of a review of 16 cities in regional NSW.

What matters were resolved?	This was a preliminary discussion with no matters to be resolved. Ason Group has undertaken reviews of the suggestions as detailed above.

1.2.3 Busways Stakeholder Engagement

Table 3: Busways Consultation

Identified Party to Consult:	Busways
Consultation type:	Email correspondence Video Conference
When is consultation required?	Prior to submission

Why?	To organise a meeting between Ason Group and Busways. To discuss existing traffic issues in the surrounding road network and discuss the Preliminary School Travel Plan.
When was consultation scheduled?	15th February 2021
When was consultation held?	3rd February 2021 15th February 2021
Identify persons and positions who were involved	**Traffic Consultant** – Ason Group: Dora Choi (Principal Traffic Engineer), Rebecca Butler-Madden (Senior Transport Planner), Thomas Lehmann (Traffic Engineer), Matthew Tangonan (Traffic Engineer) **Busways** – Julie Ashby Scheduling Daily Operations Manager – School & Route
Provide the details of the consultation	3rd February 2021: Ason Group emailed TfNSW and Busways to liaise and request a meeting to discuss the existing bus routes and provision. 15th February 2021: existing operation of bus routes and any concerns held by Busways. Potential for bus between the Port Macquarie Campus and the Westport Campus.

What specific matters were discussed?	• 15th February 2021: existing operation of bus routes and any concerns held by Busways. Potential for bus between the Port Macquarie Campus and the Westport Campus.
	  • Busways detailed that the buses would be reducing in capacity following the installation of seatbelts.
	  • Busways confirmed that there are no capacity issues for the existing services.

What matters were resolved?	All matters yet to be resolved.

1.2.4 School Principal Stakeholder Engagement

Table 4: School Principal Consultation

Identified Party to Consult:	Deputy School Principal (Acting Campus Principal)
Consultation type:	Email correspondence In-person meeting
When is consultation required?	Prior to submission
Why	To organise a meeting between Ason Group and the School Principal. To discuss existing traffic issues in the surrounding road network, traffic operations of the School and discuss the Preliminary School Travel Plan.
When was consultation scheduled/held	4th February 2021
When was consultation held	4th February 2021
Identify persons and positions who were involved	**Traffic Consultant** – Ason Group: Dora Choi (Principal Traffic Engineer), Rebecca Butler-Madden (Senior Transport Planner). **School Principal** – Jacynta Moylan, Deputy School Principal
Provide the details of the consultation	4th February 2021: Consultation to gain understanding of existing traffic and transport management of the School.

What specific matters were discussed?	• 4th February 2021: School drop-off / pick-up periods, parking provisions, general travel behaviour by staff and students, servicing activities and travel between campuses.
What matters were resolved?	All matters yet to be resolved.

1.3 Reference Documents

In preparing this Plan, Ason Group has made reference the following key planning documents:

- Transport for NSW (TfNSW), *Public Transport Service Planning Guidelines, Rural and Regional NSW*, October 2015
- TfNSW, *Future Transport Strategy 2056*, March 2018
- NSW Government, *Planning Guidelines for Walking and Cycling*; November 2019
- Port Macquarie – Hastings Bike Plan; May 2015
- NSW Department of Education, *Master planning guidelines for schools,* October 2020
- NSW Department of Education, *SINSW Community of Practice Architects + Transport Planners*, 29th October 2020
- Ason Group, *Transport Assessment; State Significant Development Application; Hastings Secondary College – Port Macquarie Campus*; April 2021 (The Ason TA)

2 Existing Conditions

2.1 Site Location

The site is located approximately 1.2km south east of the Port Macquarie town centre, with access from Oxley Highway (Gordon Street) via Owen Street to the centre, William Street via Owen Street to the north and Burrawan Street via Owen Street to the south. A maintenance access road exists to the east of the site along Burrawan Street.

The site is located at 16 Owen Street, Port Macquarie (the Site) and is legally known as Lot 111 in DP 1270315. The Port Macquarie Campus site is located within a coastal setting (east), with residential (single two storey and residential flat buildings) located to the west and south and Port Macquarie Bowling Club to the north. The surrounding street network provides on-street parking. Maintenance vehicular access is located off Burrawan Street.

No natural watercourses are mapped as traversing the site. Scattered vegetation is located throughout the site, with a small area of vegetation concentrated towards the pedestrian access area.

The Port Macquarie Campus site is gently sloping downwards in three general 'platforms' towards the north, with distinct views out towards the ocean and the Hastings River. It also has a distinct view line to the row of Norfolk pine trees along the coastline. The siting of the campus provides many opportunities for ongoing cultural connection to Country. Current built form has an established language of two (2) storey, face brick, low pitched metal roof buildings.

Figure 1: Site Location

Source: Nearmap, November 2020

2.2 Site Transport Facilities

As it relates to travel planning, the School and immediate surroundings of the School Site provide the following transport facilities:

- 155 bicycle parking rails (adjacent to the Principal's office at the southern end of the School);
- A time restricted on-street Kiss and Ride area along Owen Street, between Gordon Street and Burrawan Street which can accommodate 6 cars;
- Bus bay capable of holding 3 buses on Owen Street along the School frontage (eastern side) between Gordon Street and Burrawan Street;
- Inter-campus transfer bay within the existing bus bay area;
- Constructed concrete footpath along Owen Street, frontage of the School; and
- Existing pedestrian refuges at midblock along Owen Street, between Gordon Street and Burrawan Street, and on the northern leg of the intersection of Owen Street / Burrawan Street.

These facilities are detailed in **Figure 2**.

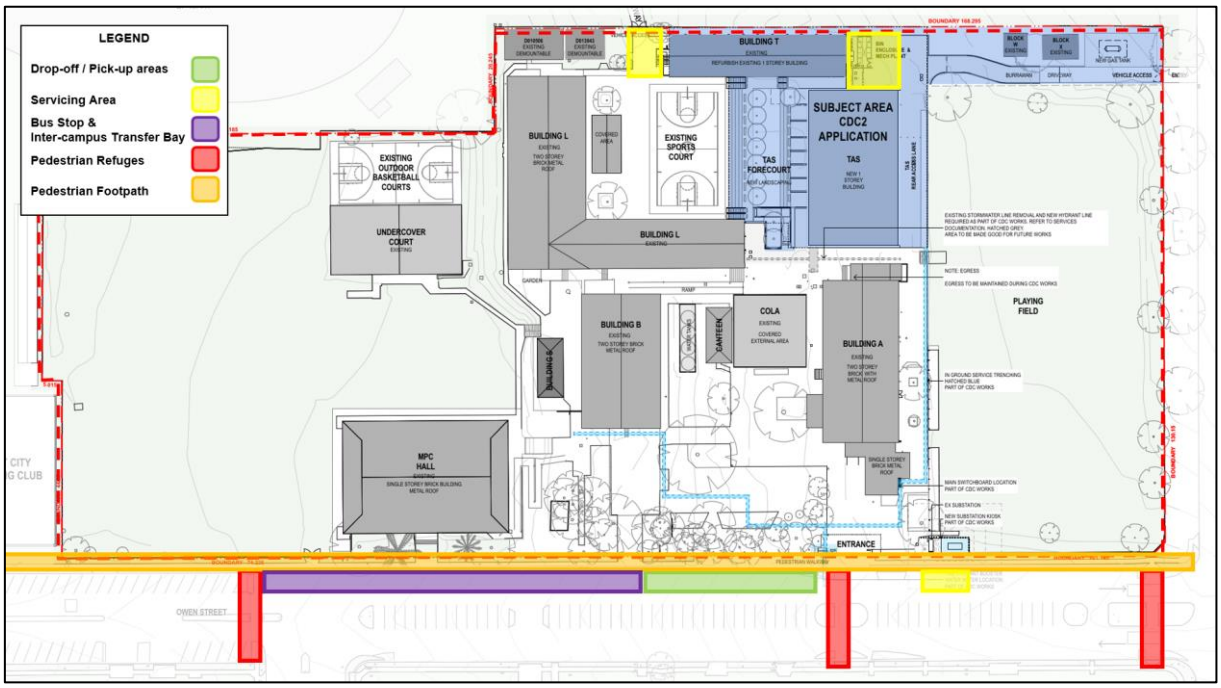


Figure 2: Site Amenities

Source: FJMT, marked up by Ason Group

With consideration for these facilities, Ason Group has prepared a Signage and Line Marking Plan to detail the proposed conditions of the Site as per the Ason TA. This is detailed in **Figure 3** and has also been attached in **Appendix A** for further information.

This Signage and Line Marking Plan details the traffic controls on Owen Street along the School frontage and the intersection of Owen Street and Burrawan Street, in particular: parking restrictions relating to the drop-off / pick-up facilities; bus stop controls; pedestrian crossings; and school zone signage.

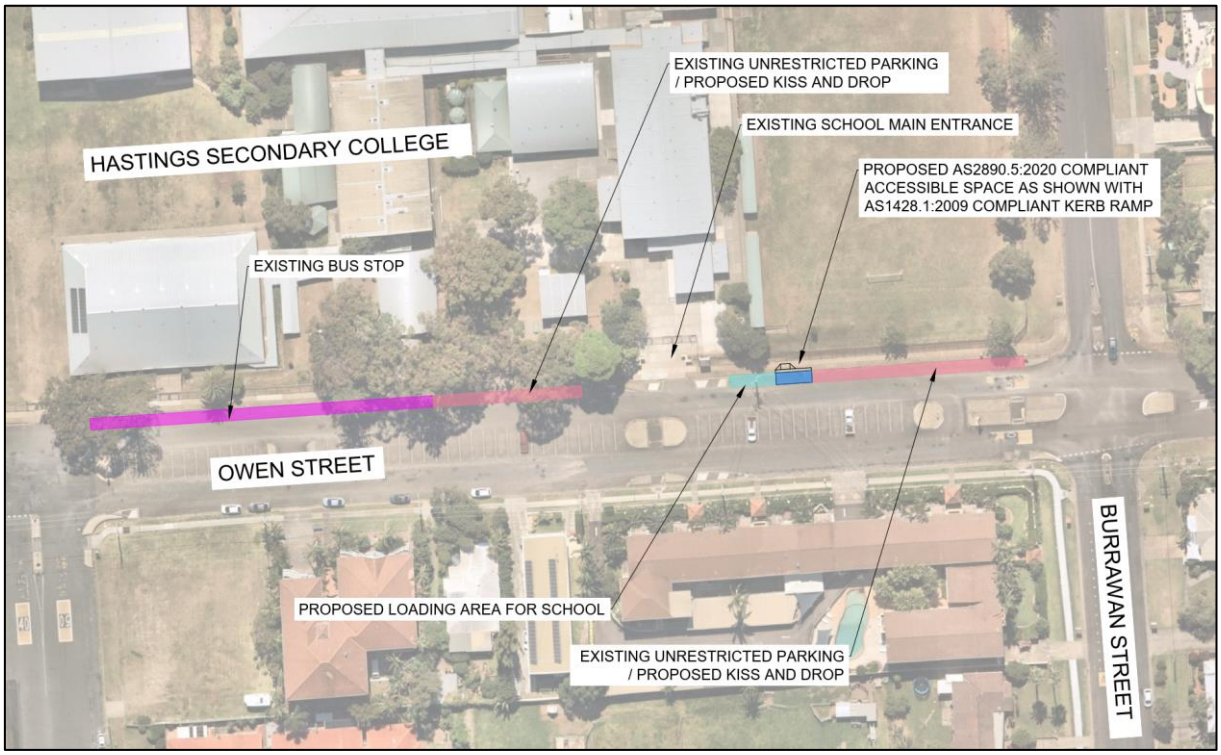


Figure 3: Signage and Line Marking Plan

It should be noted that school zone signs are provided along Owen Street and Burrawan Street however, these signs do not coincide with the operating hours of the School. As such it is recommended that the timings are changed to match the School bell times. This is further detailed in Section 4.2.

2.3 Surrounding Public Transport Services

2.3.1 Bus Services

Figure 4 details the bus network map for the Port Macquarie, Thrumster, Lake Cathie, and Lake Innes region provided by Busabout. Having regard to the standard bus travel, the *Integrated Public Transport Service Planning Guidelines* state that bus services influence the travel mode choices of sites within 800 metres of a bus stop in regional areas.

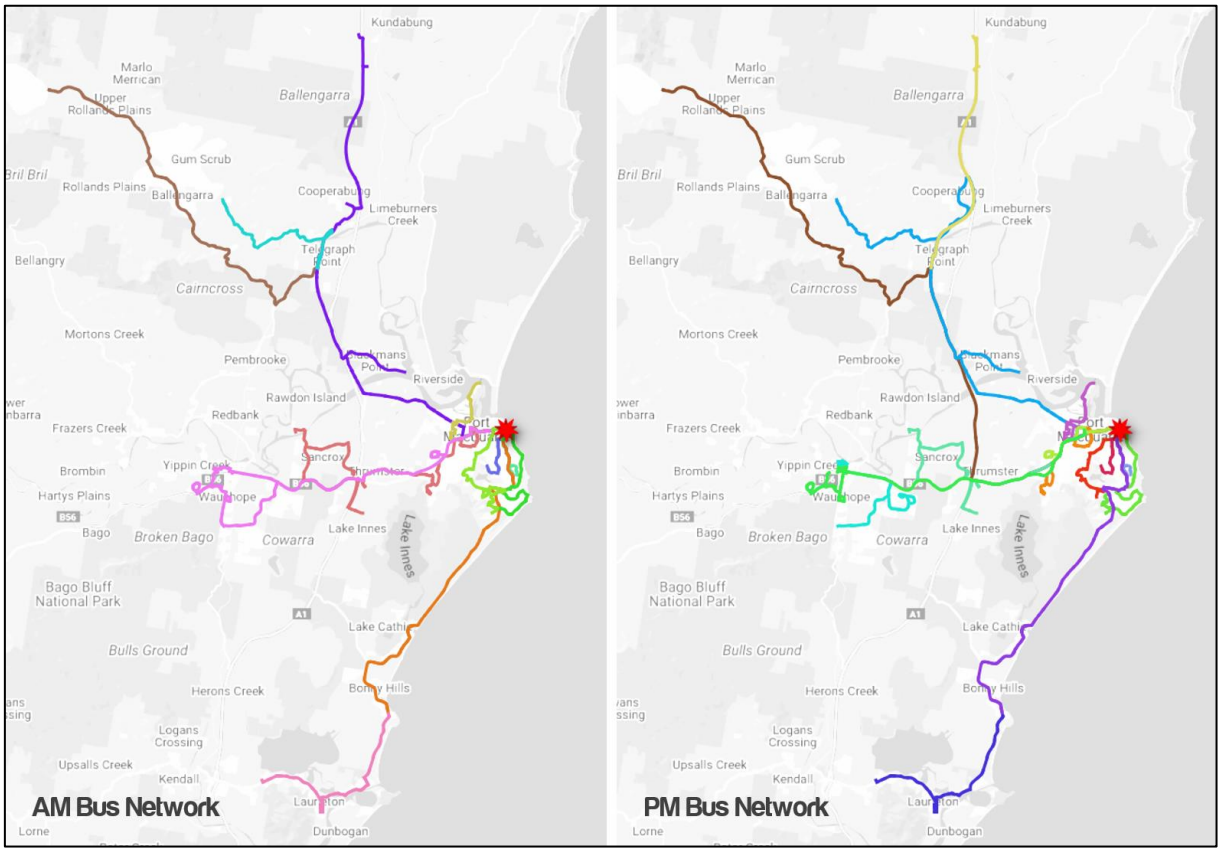


Figure 4: Bus Routes

Source: Google Maps 2021, marked up by Ason Group

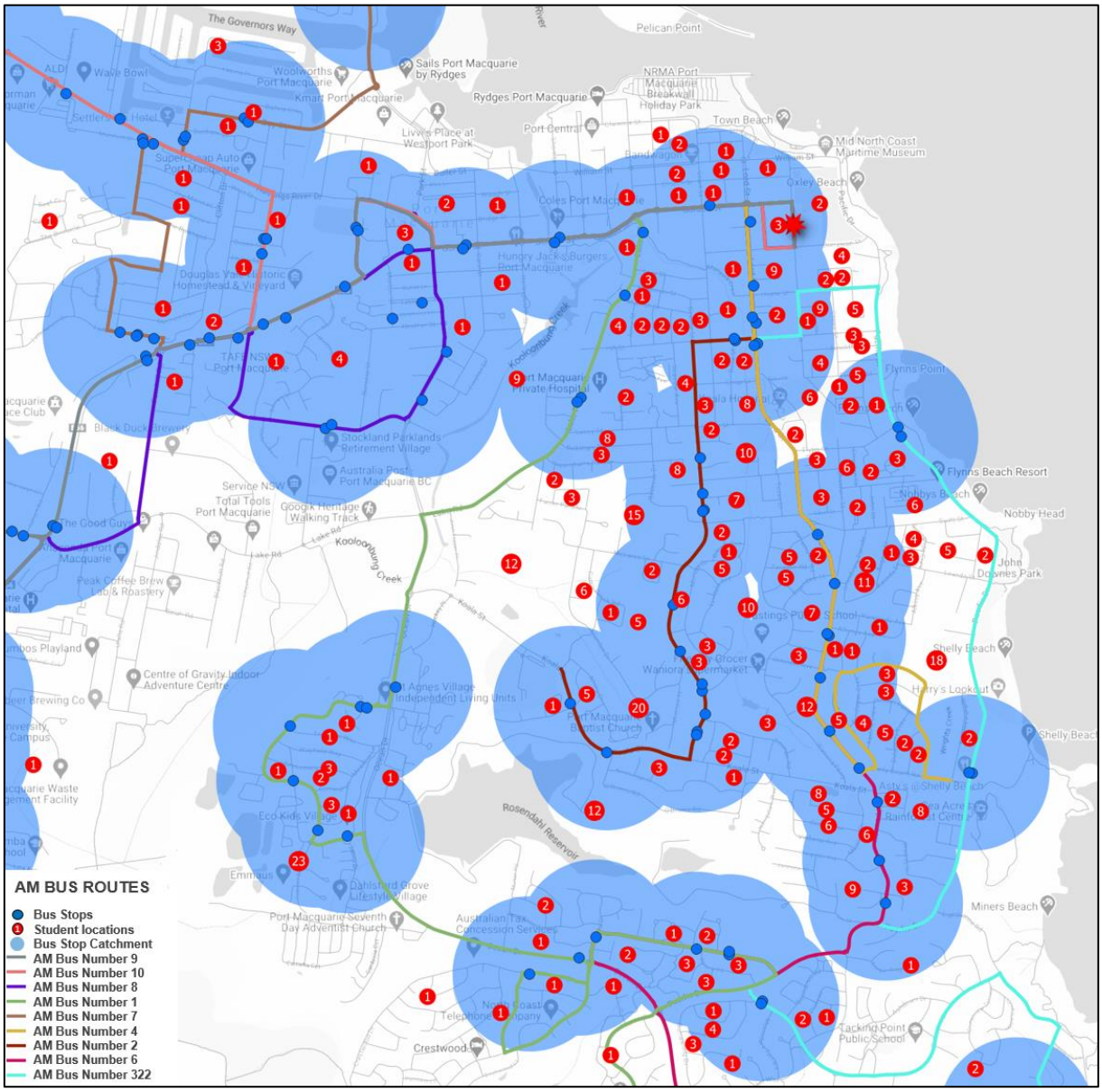


Figure 5: AM Bus Routes – Port Macquarie Centre

Note: Student locations are indicative only

Source: Google Maps 2021, marked up by Ason Group

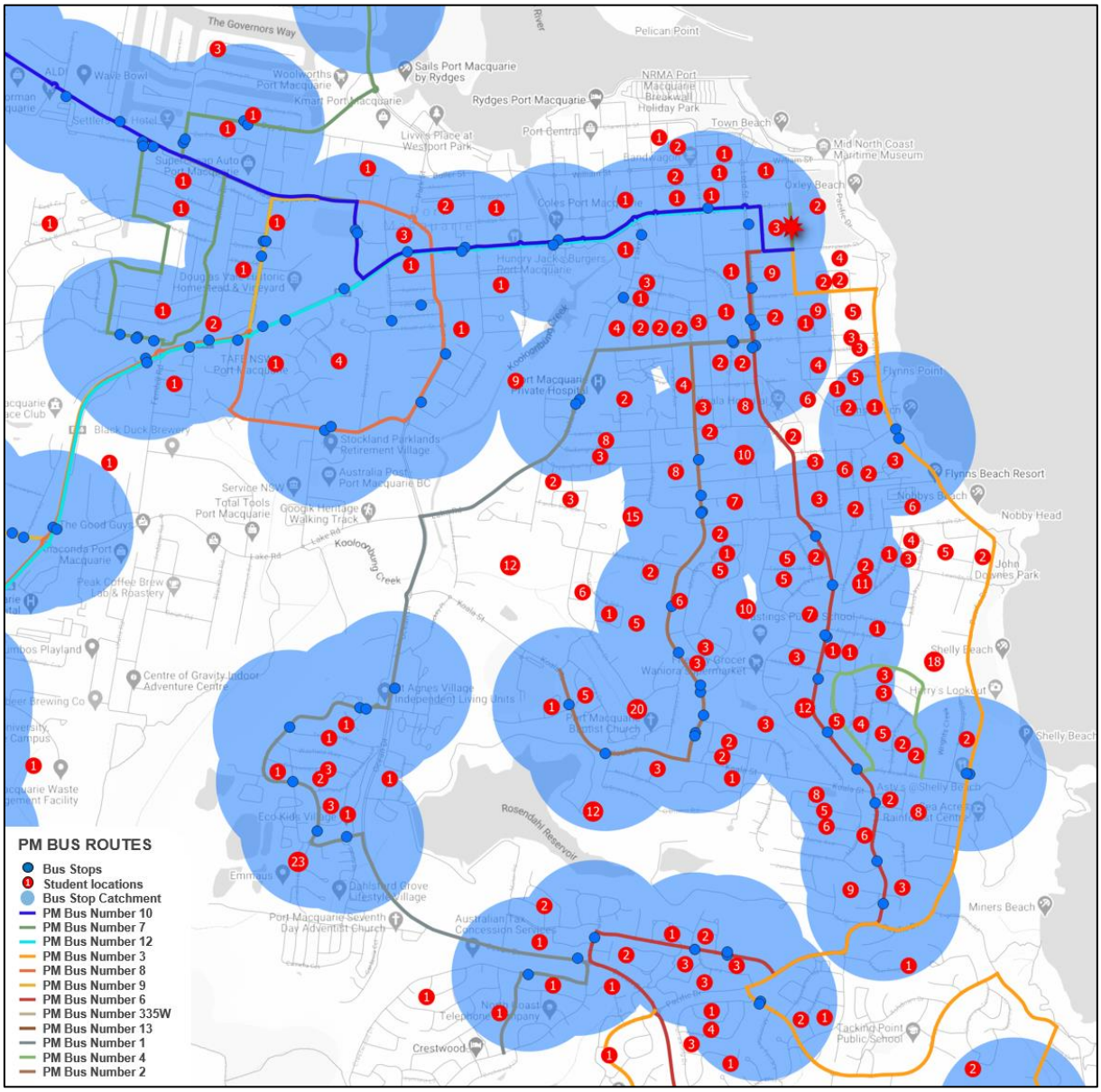


Figure 6: PM Bus Routes – Port Macquarie Centre

Note: Student locations are indicative only

Source: Google Maps 2021, marked up by Ason Group

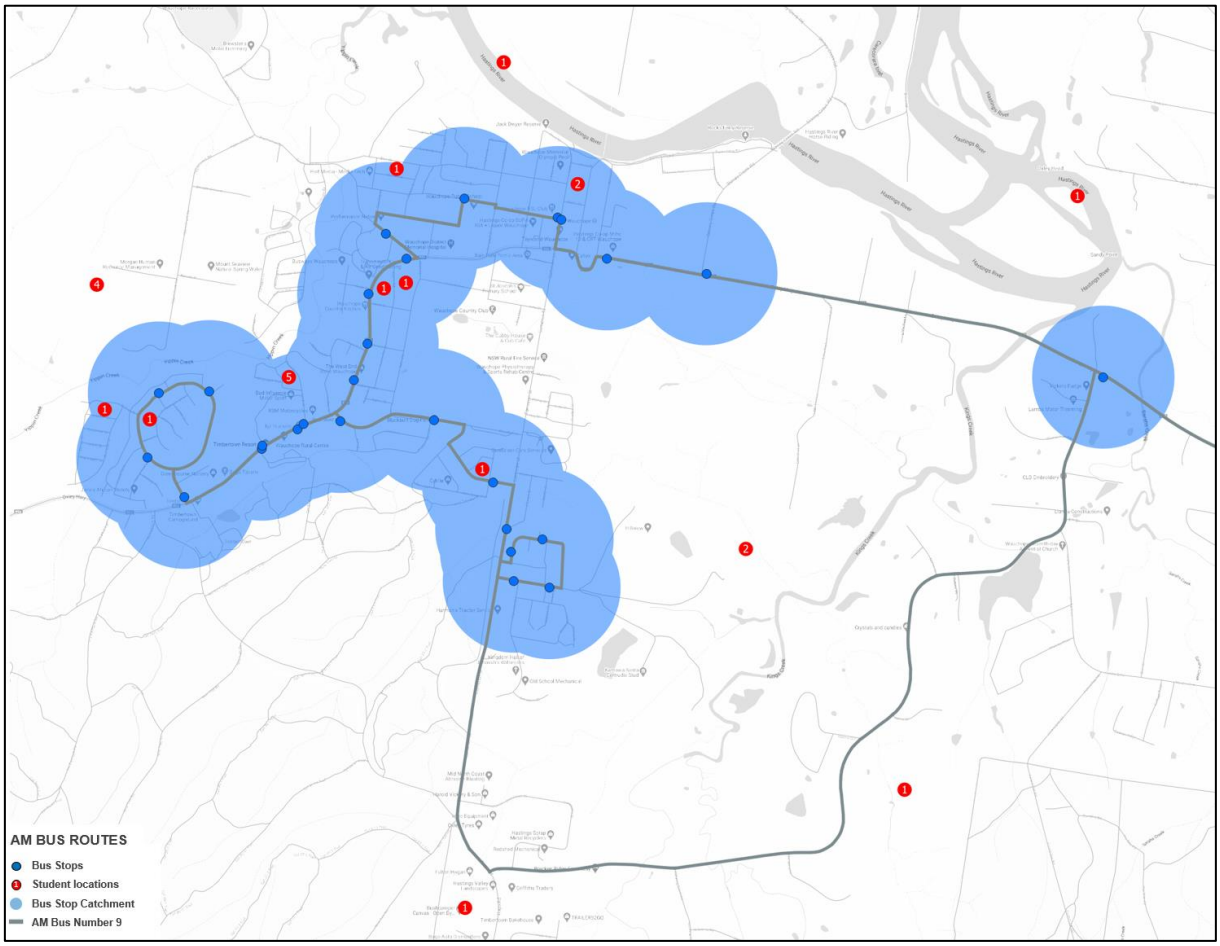


Figure 7: AM Bus Routes – Wauchope

Note: Student locations are indicative only

Source: Google Maps 2021, marked up by Ason Group

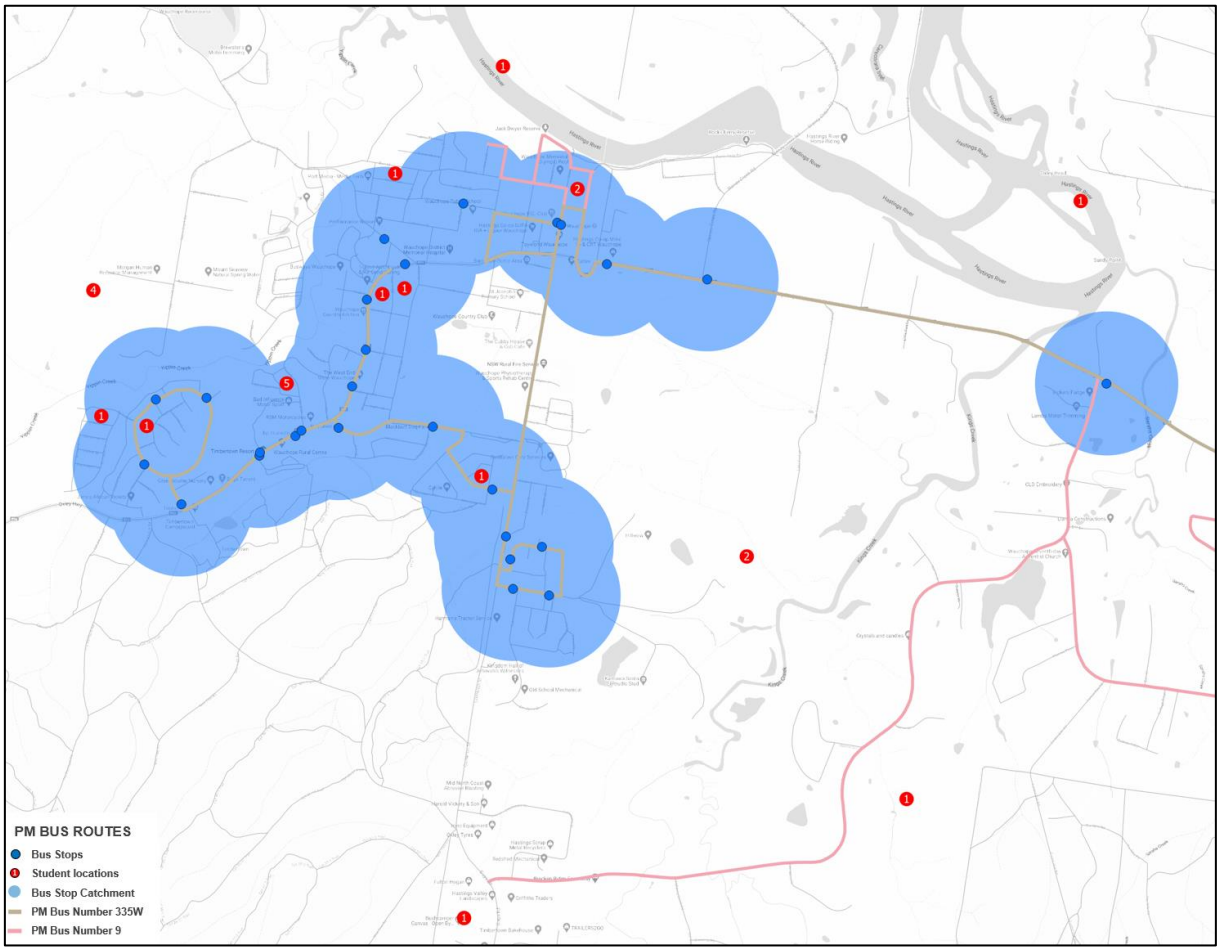


Figure 8: PM Bus Routes – Wauchope

Note: Student locations are indicative only

Source: Google Maps 2021, marked up by Ason Group

As is evident from the above, a vast majority of the students within these two areas are within the catchment of the bus services. This explains the high-level of bus utilisation discussed further in Section 2.7.

Following conversations with Busways, it is understood that these buses are being upgraded to provide seatbelts thereby improving the safety of the buses. This, however, will have the effect of reducing the capacity of the existing buses by 33%. Notwithstanding, it is understood that there is sufficient capacity to accommodate this reduction.

A detailed description of the Busways bus routes is provided in **Appendix B**.

2.4 Active Transport Connectivity

2.4.1 Pedestrian Accessibility

To facilitate pedestrian access from the surrounding road network and drop-off / pick-up facilities pedestrian access points are provided at key location. These are detailed in **Figure 9**.

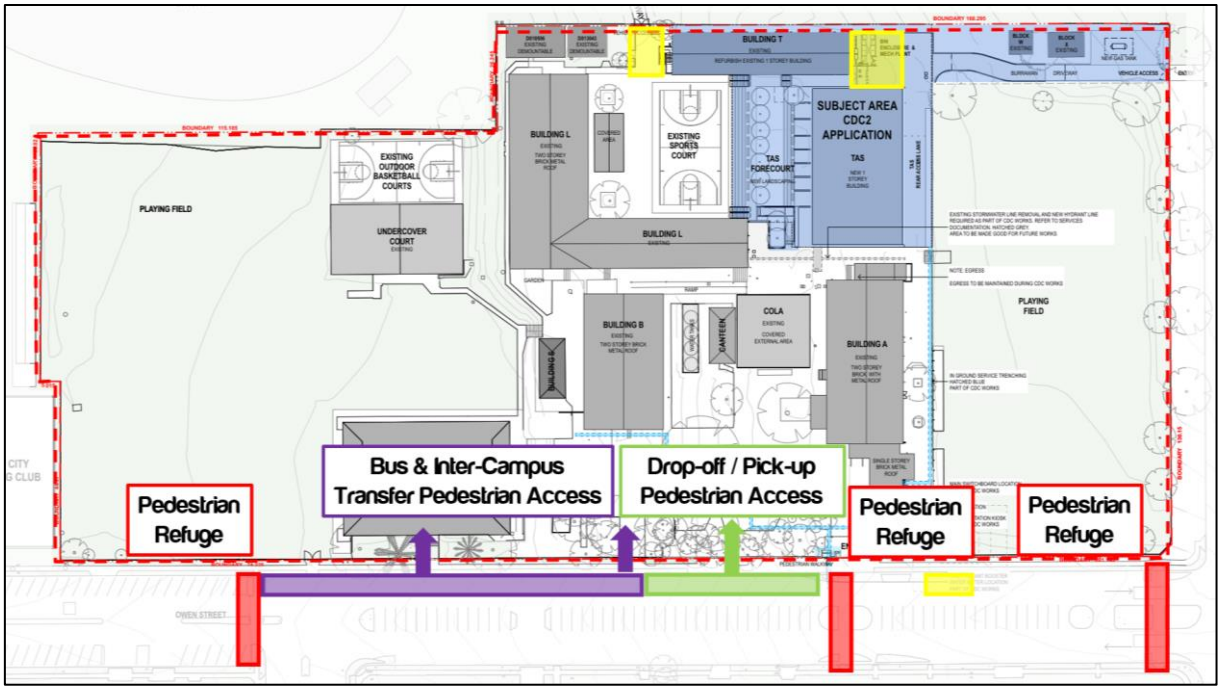


Figure 9: Pedestrian Access Points

Existing pedestrian footpaths facilitate access to the School and the local road network and are detailed in **Figure 9**. The key pedestrian accesses are all located along Owen Street and are adjacent to the kiss and drop area and bus zone. Not all roads within the walking catchment of the School provide footpaths or shared paths.

As detailed in Section 2.2, pedestrian refuges are provided midblock on Owen Street and on the northern leg of the intersection of Owen Street / Burrawan Street.

Ason Group has undertaken a preliminary review of replacing the pedestrian refuge midblock on Owen Street between Burrawan Street and Gordon Street with a Children's Crossing. As such, special warrants outlined in the TfNSW Supplement to AS1742.10-2009: Manual of Uniform Traffic Control Devices (v3) need to be met to support the proposed children's crossing. These warrants are as follows:

Reduced warrant for sites used predominantly by children and by aged or impaired pedestrians. If the crossing is used predominantly by school children, is not suitable site for a children's crossing and in two counts of one hour duration immediately before and after school hours: -

(a) P ≥ 30

AND

(b) V ≥ 200

A pedestrian (zebra) crossing may be installed.

If at least 50% of pedestrians using the crossing are aged or impaired and for each three one-hour periods in a typical day

(a) P ≥ 30

AND

(b) V ≥ 200

AND

(c) PV ≥ 60,000

A pedestrian (zebra) crossing may be installed.

Intersection and pedestrian surveys detail the following volumes during the one-hour duration immediately before and after school hours.

Table 5: Pedestrian and Traffic Volumes

Time	Pedestrian Volumes (P)	Traffic Volumes (V)	P * V
7:15-8:15am	118	429	50,622
2:15-3:15am	111	285	31,635

As is evident from the above, while the pedestrian and traffic volumes exceed the requirements, the total does not exceed the product sum. As such, the warrants for a children's crossing are not met.

In addition to the above, a review of the requirements for a school crossing supervisor has been undertaken. These requirements are detailed below:

- *The site must have an existing children's crossing, pedestrian crossing (zebra) or combined crossing (children's and zebra)*
- *The crossing must be used by infant and/or primary school children*

- *The site must be located within a 40km/h school zone*
- *In the morning or afternoon, the crossing must register counts of either:*
  - *50 or more unaccompanied infant and/or primary school children, or*
  - *300 or more passenger car units (heavy vehicles over three tonnes unladen are counted as two passenger car units)*
- *The site must be considered a safe working environment for a school crossing supervisor*

The current environment therefore meets 3 of the 5 requirements:

- With reference to **Table 5**, it is noted that AM peak experiences more than 300 passenger car units.
- The site is located within a school zone.
- The site must be considered a safe working environment for a school crossing supervisor.

However, the site is not used by infants or primary school children, does not have an existing children's crossing, pedestrian crossing (zebra) or combined crossing (children's and zebra).

As such, no proposal for a children's crossing is proposed.

2.4.2 Cycle Routes

Council's Bike Plan prepared in May 2015 details the existing bicycle network and proposed upgrades to the broader LGA. The proposed and existing bicycle network within Port Macquarie is shown in **Figure 10**.

The Bike Plan proposes new shared paths and road shoulders that would improve the accessibility and safety of cycling within Port Macquarie. The routes primarily connect residential areas within existing on-road cycle paths and shared paths linking the town centre, and with the sub-regional and regional cycle network. The bicycle network primarily consists of road shoulder bike paths as well as off-road shared paths.

In the vicinity of the site, shared paths are to be provided on Home Street, with existing shared paths along Wrights Creek and as well as the broader road network.

Figure 10: Proposed and Existing Bicycle Network

Source: Port Macquarie – Hastings Bike Plan, Port Macquarie Hastings, May 2015

2.5 Student Catchment

The following figures detail the overall student distribution for the Port Macquarie Campus, as well as the walking, cycling, and bus catchments.

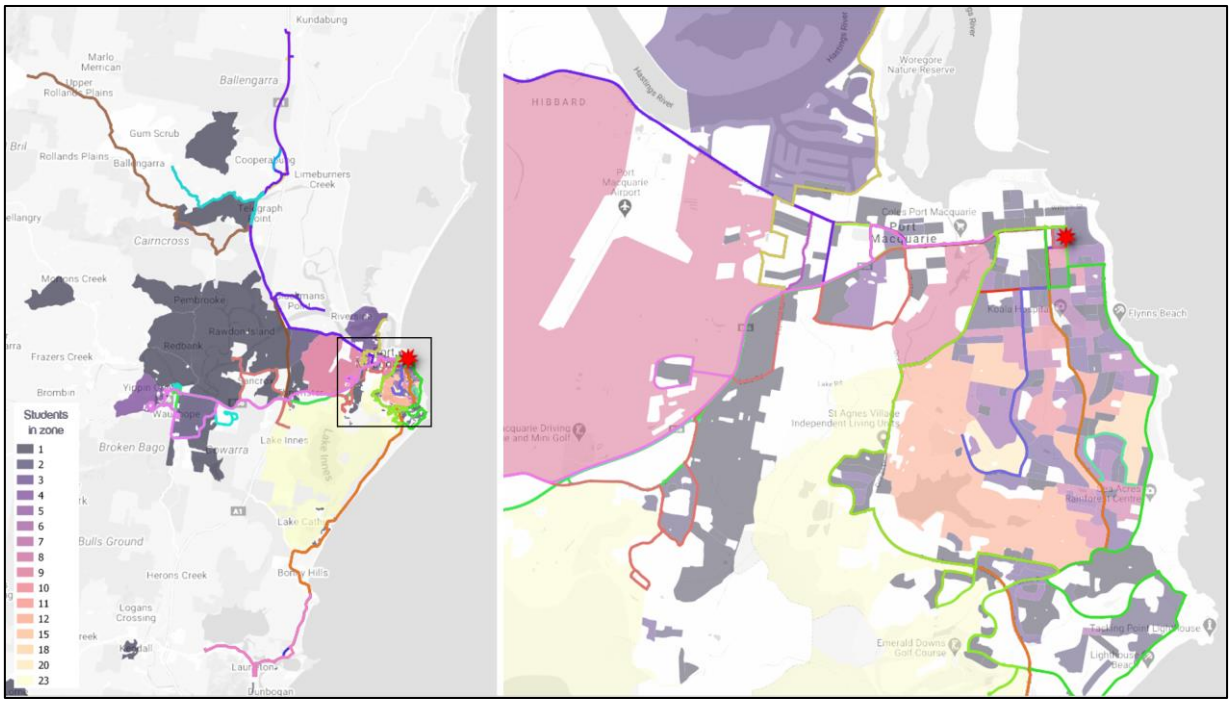


Figure 11: Student Distribution – Overall Distribution

Source: Google Maps 2021, adapted by Ason Group

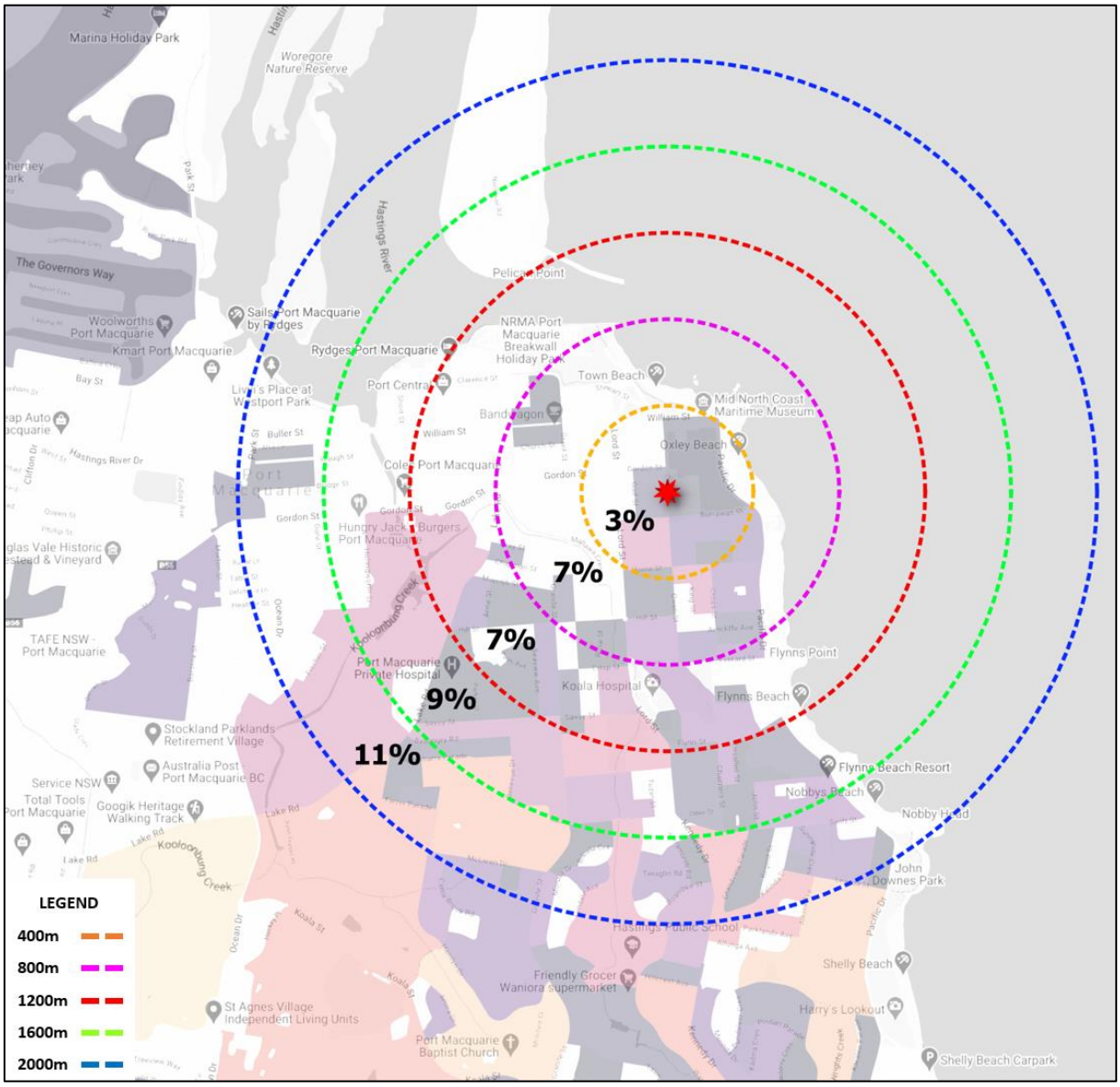


Figure 12: Student Distribution – Radial Distribution

Source: Google Maps 2021, adapted by Ason Group

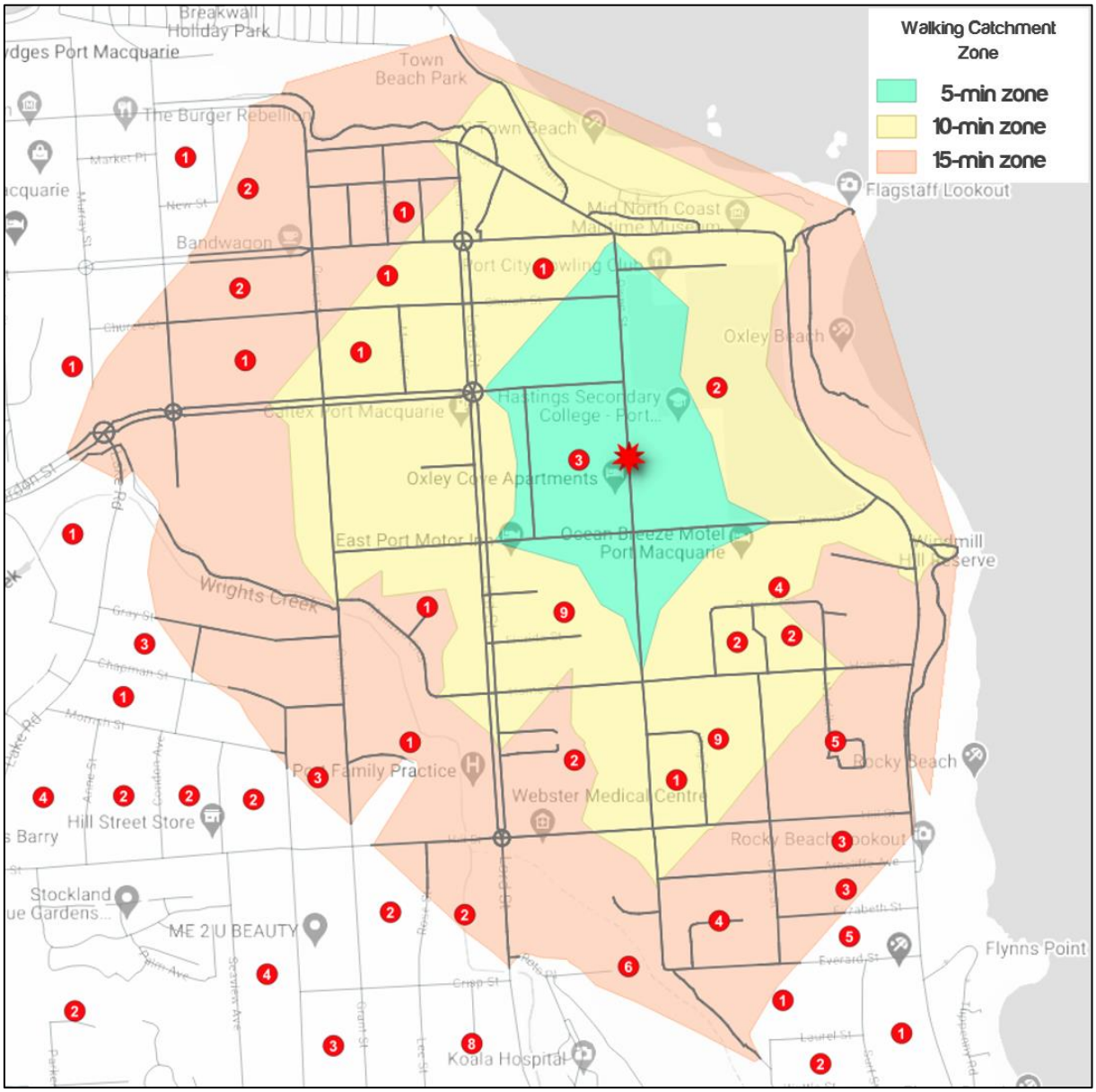


Figure 13: Walking Catchment

Note: Student locations are indicative only

Source: Google Maps 2021, adapted by Ason Group

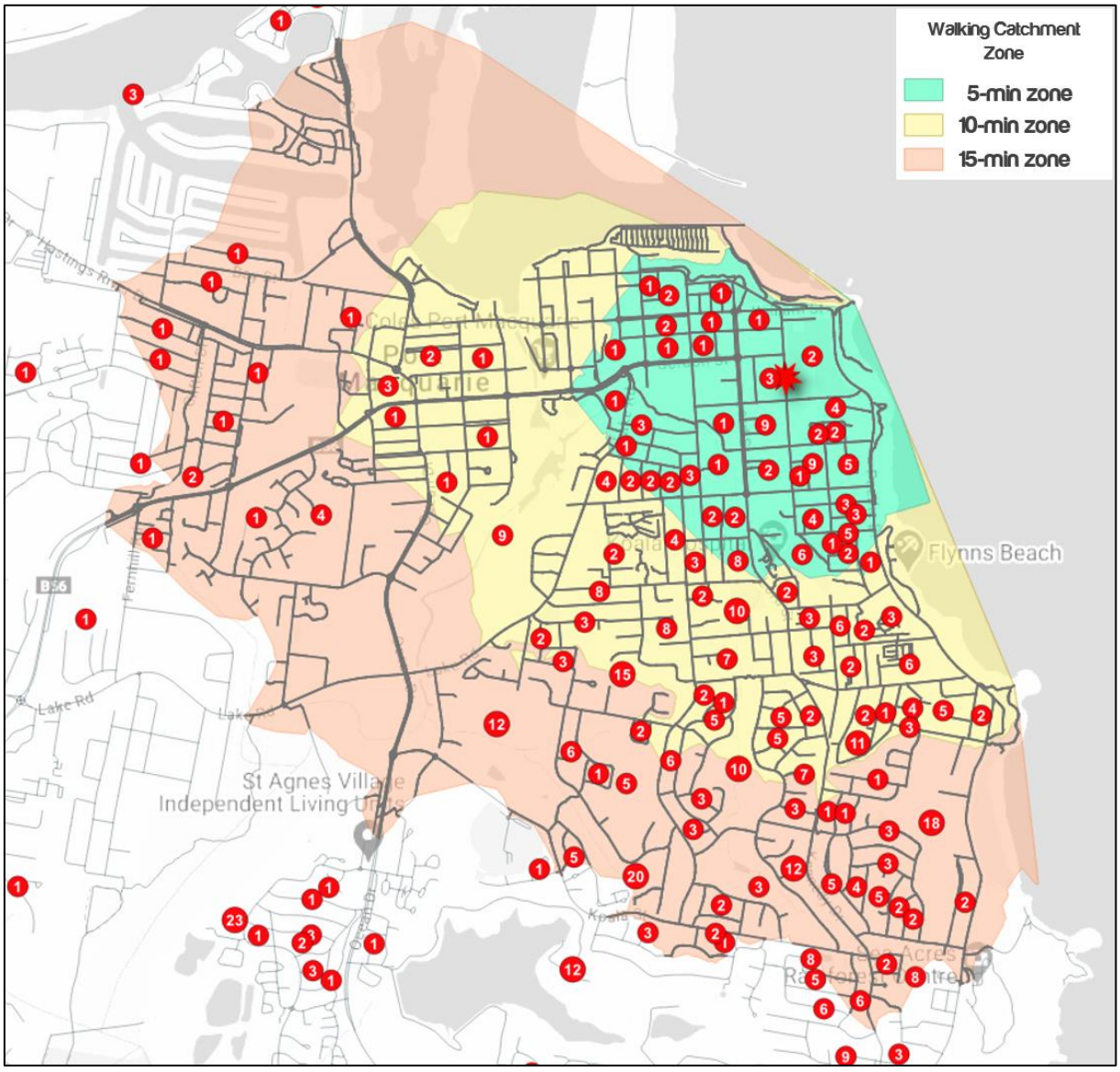


Figure 14: Cycling Catchment

Source: Google Maps 2021, adapted by Ason Group

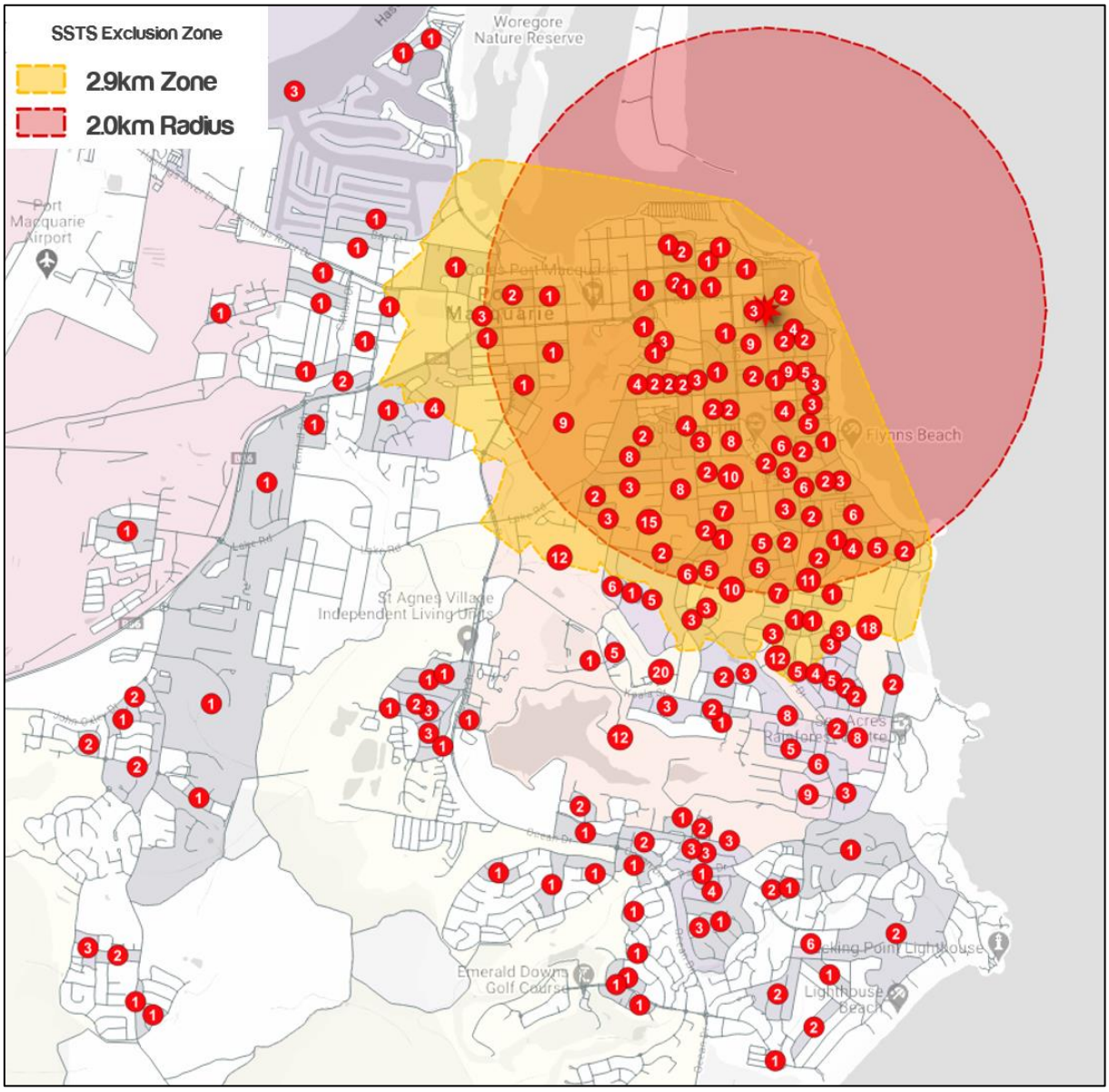


Figure 15: Bus Catchment

Note: Student locations are indicative only

Source: Google Maps 2021, adapted by Ason Group

With reference to the above figures, the following details the student locations in proximity to the School:

- 3% of students live within 400m radius from the school
- 10% of students live within 800m radius from the school
- 17% of students live within 1200m radius from the school.
- 28% of students live within 1600m radius from the school.

- 39% of students live within 2000m radius from the school.
- 46% of students live within 2.9km driving distance from the school.

A more detailed breakdown for the 5-minute, 10-minute, and 15-minute walking and cycling distances is presented in **Table 6**.

Table 6: Cycling and Walking Catchment

Catchment	Travel Mode	
	Walking	Cycling
5-Minute	1%	13%
10-Minute	4%	22%
15-Minute	4%	23%

2.6 Travel Mode Survey

Ason Group has undertaken a travel mode survey of the staff and students at the School. The purpose of the survey was to determine key traffic and parking characteristics of existing students and staff, including:

- Travel mode for both the arrival and departure trips; and
- Vehicle occupancy;
- Interest in different green travel strategies and initiatives; and
- Number of students travelling between the Westport Campus and the Port Macquarie Campus.

The questions are provided in **Appendix C**. The results are discussed in further detail below.

2.7 Student Surveys

A total of 188 students / parents responded to the survey which corresponds to 25% of the total student numbers. This is considered a below ideal sample size, however it is noted that at the writing of this PSTP, students are continuing to complete the survey. The results of the student surveys are discussed below.

2.7.1 Student Travel Mode

Figure 16 and **Figure 17** provide details of the surveyed student travel modes during the AM and PM peaks.

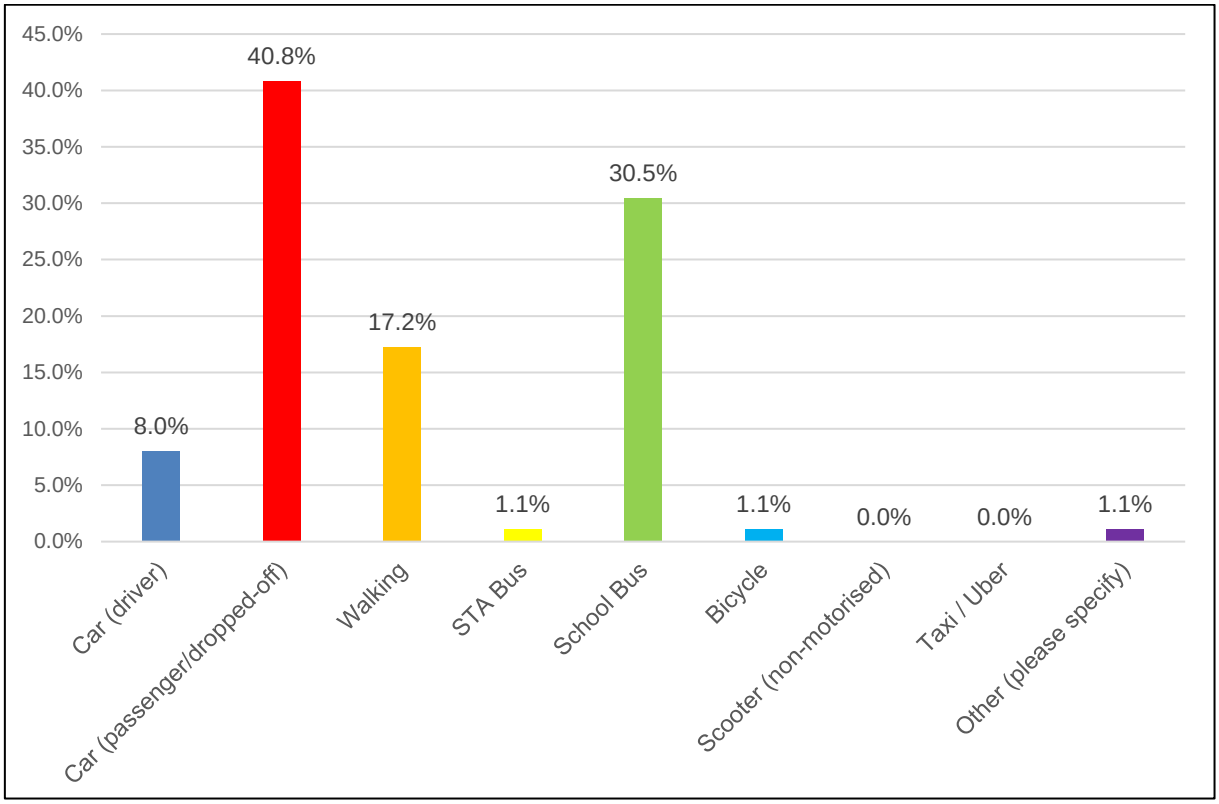


Figure 16: Student Travel Modes – AM

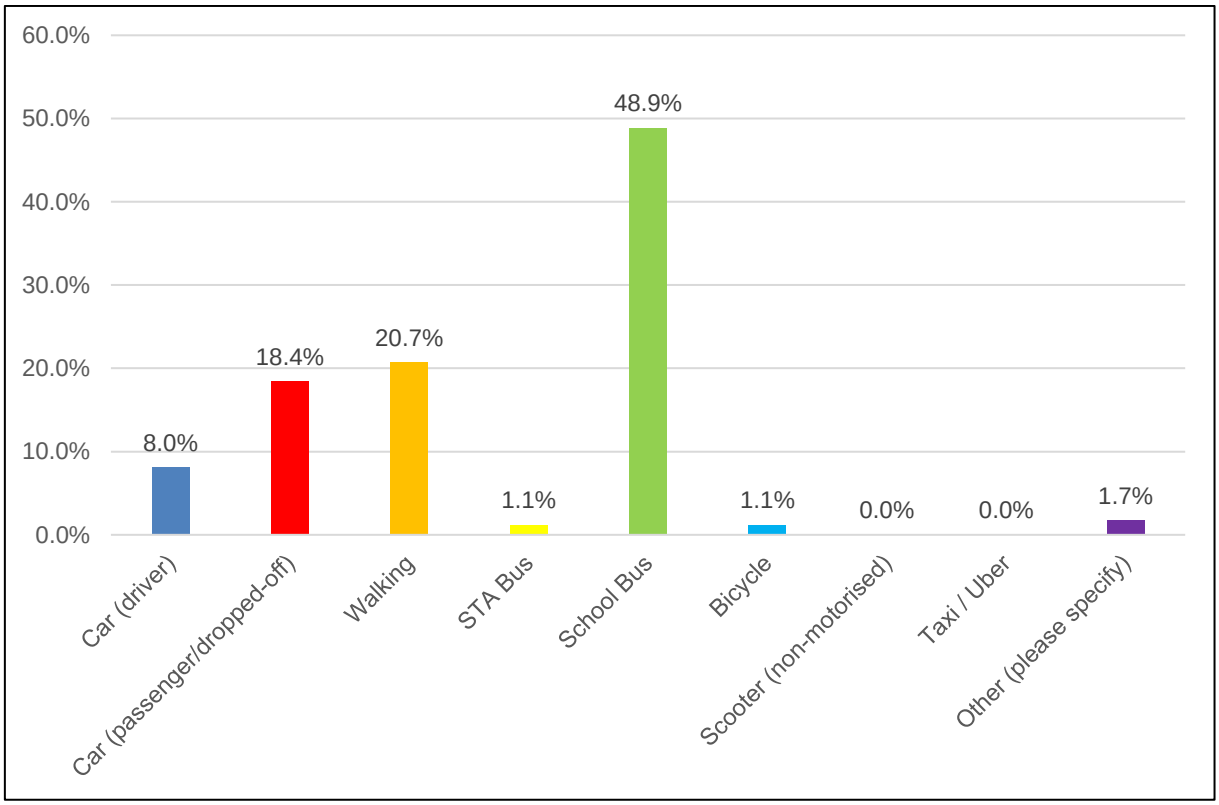


Figure 17: Student Travel Modes – PM

For the students with a travel mode as 'other'; based on a review of the survey information, it is apparent that this response was generally provided by students undertaking multi-modal trips, such as being driven to a bus stop and then catching the bus to the School. Importantly, such trips would not generally include a private vehicle trip to/from the School itself.

In summary, the student travel mode survey indicates the following:

- Approximately 49% of students drive / are driven to the School during the AM peak.
- Approximately 26% of students drive / are driven from the School during the PM peak.
- Approximately 32% of students use public and/or active transport modes to travel to the School during the AM peak.
- Approximately 50% of students use public and/or active transport modes to travel from the School during the PM peak.
- Approximately 17% of students walk to travel to the School during the AM peak.
- Approximately 21% of students walk to travel to the School during the PM peak.

2.7.2 Vehicle Occupancy

As previously detailed, students / parents were asked to detail how many other students are in the car when they travel via car during the AM and PM peak periods. The results are detailed in **Table 7** and **Table 8**.

Table 7: Vehicle Occupancy – AM

Travel Mode	Additional Students in Vehicle					
	0 (no other students)	1	2	3	4	5+
Car (driver)	6	4	2	1	0	0
Car (passenger / dropped off)	38	18	9	0	1	0
Total	**44**	**22**	**11**	**1**	**1**	**0**

Table 8: Vehicle Occupancy – PM

Travel Mode	Additional Students in Vehicle					
	0 (no other students)	1	2	3	4	5+
Car (driver)	5	5	3	1	0	0
Car (passenger / picked-up)	16	7	5	0	1	0
Total	**21**	**12**	**8**	**1**	**1**	**0**

With consideration for the number of students that travelled via private vehicle, the average vehicle occupancy is as follows:

- 1.65 during the AM peak.
- 1.81 during the AM peak.

2.7.3 Travel Mode Summary

With reference to sections above, **Table 9** provides a summary of travel modes for all school students.

Table 9: Existing Mode Share Summary

Travel Mode	AM Peak	PM Peak
Car (driver)	6.9%	8.0%
Car (passenger)	42.5%	18.4%
Walking	17.5%	20.7%
STA Bus	0.6%	1.1%
School Bus	30.6%	48.9%
Bicycle	1.3%	1.1%
Scooter (non-motorised)	0.0%	0.0%
Taxi / Uber	0.0%	0.0%
Other mode	0.6%	1.7%

2.7.4 Movement Between Campuses

Information provided by the School Principal details that Year 11 and Year 12 students travel between the Westport Campus and Port Macquarie Campus due to curriculum requirements. The following tables details the mode share for the students travelling between the campuses.

Table 10: Existing Mode Between Campuses

Travel Mode	Starting Campus	
	Westport Campus %	Port Macquarie Campus %
Car (as driver)	26.3%	11.1%
Car (as passenger)	5.3%	22.2%
Taxi / Uber	31.6%	40.7%
Bus	15.8%	11.1%
Shuttle Bus	5.3%	11.1%
Walking	5.3%	3.7%
Other mode	10.5%	0.0%

As is evident from the above, students travelling between campuses primarily do so via car, either by taxi / uber or private vehicle.

2.7.5 Transport Initiatives

Staff were surveyed for their opinions on transport initiatives and the likelihood of these changing their existing travel behaviours. These initiatives and their responses are detailed in **Figure 18**.

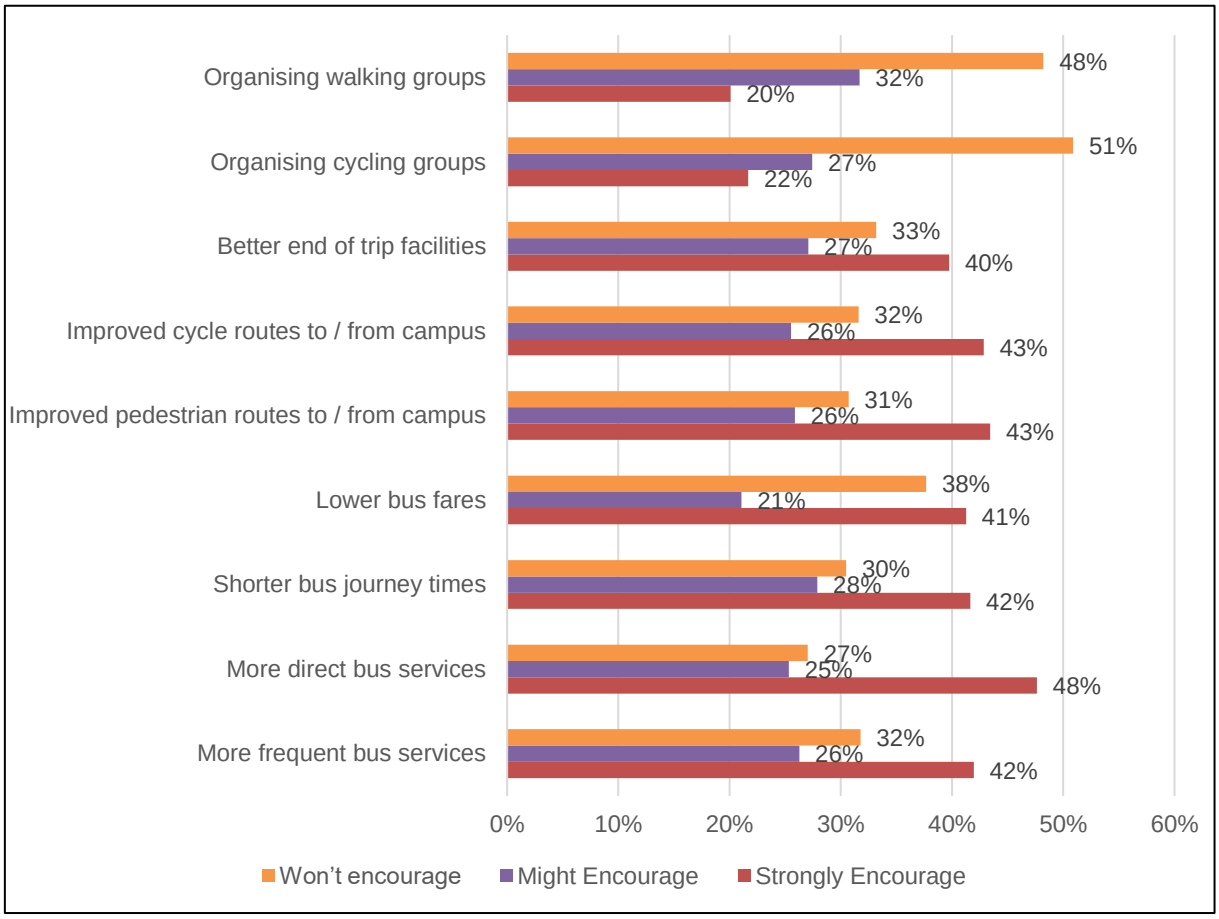


Figure 18: Transport Initiatives – Student Response

Some of the key takeaways are as follows:

- 73% of students say that more direct bus services might or would strongly encourage them to change their travel mode.
- Approximately 68% of students say that improved pedestrian and cycle facilities might or would strongly encourage them to change their travel mode to cycling.
- Similarly, 67% of students say that improved end of trip facilities might or would strongly encourage them to change their travel mode to cycling or walking.
- Conversely, approximately 48% of students said that organising a cycling or walking group would not encourage them into changing their travel mode.

As is evident from the above, there is interest in a number of transport initiatives that would improve the existing mode share and reduce the existing traffic generation.

The implementation of the action plan and the communication strategies are discussed further in Section 4.2.

2.8 Staff Surveys

A total of 65 staff members responded to the survey which corresponds to 100% of the total staff numbers for the School. This is considered a good sample size. The results of the surveys are discussed below.

2.8.1 Staff Travel Mode

Figure 19 provide details of the surveyed student travel modes during peak periods.

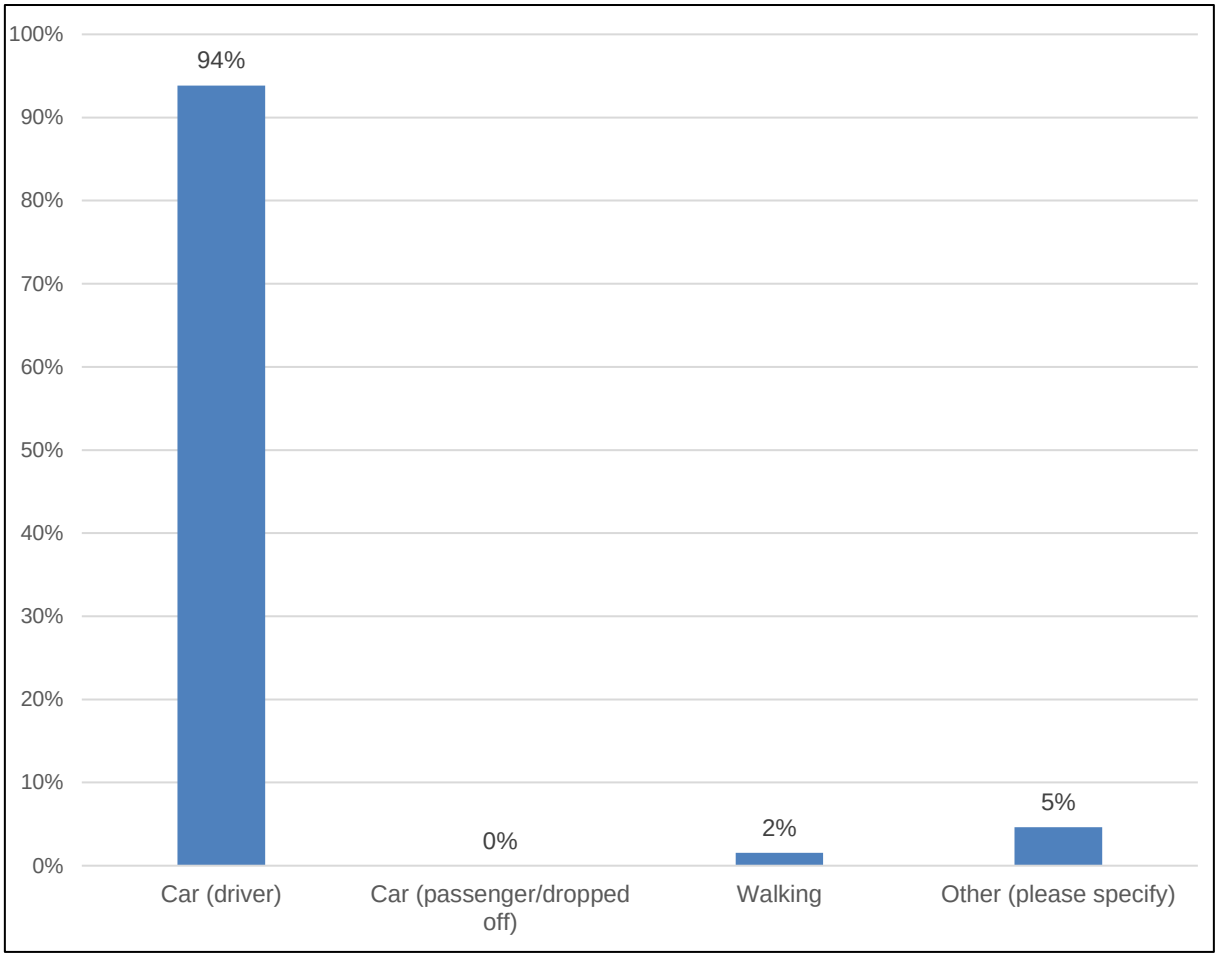


Figure 19: Staff Travel Modes

For the staff with a travel mode as 'other'; based on a review of the survey information, it is apparent that this response was generally provided by staff members who travel via motorcycle. Importantly, such trips would not generally include a private vehicle trip to/from the School itself.

2.8.2 Movement Between Campuses

Similar to students detailed in Section 2.7.4, staff are often required to travel to the Westport Campus and vice versa. This was assessed as part of the travel mode survey which indicated that all staff members travel between the campus via private vehicle.

2.8.3 Transport Initiatives

Staff were surveyed for their opinions on transport initiatives and the likelihood of these changing their existing travel behaviours. These initiatives and their responses are detailed in **Figure 20**.

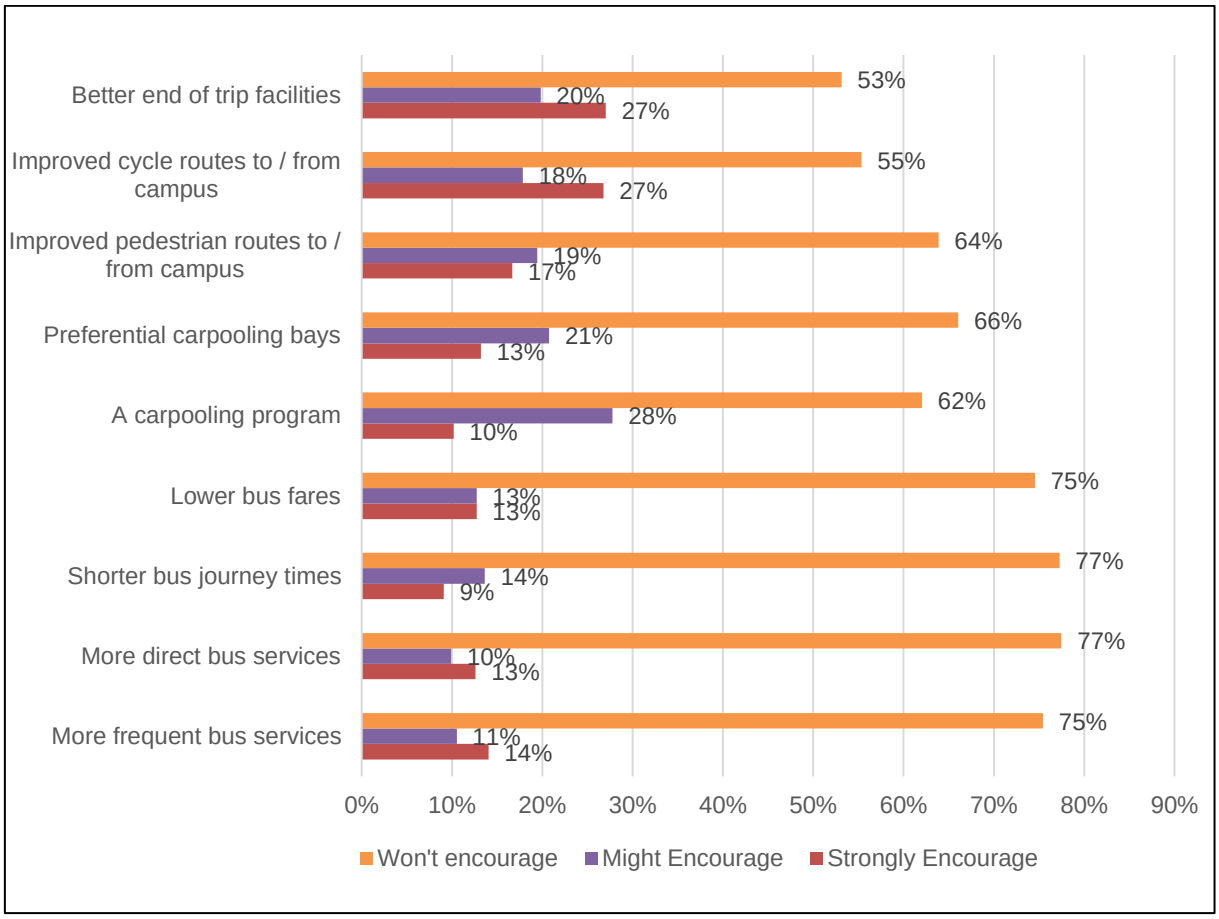


Figure 20: Transport Initiatives – Staff Response

Some of the key takeaways are as follows:

- Approximately 38% of staff say that a carpooling program might or would strongly encourage them to carpool with other staff members.
- 47% of staff say that improved end of trip facilities might or would strongly encourage them to change their travel mode to cycling or walking.

- However, it should be noted that a minimum of 53% of surveyed staff members responded that none of the above initiatives would change their existing travel mode.

As is evident from the above, there is interest in a number of transport initiatives that would improve the existing mode share and reduce the existing traffic generation.

The implementation of the action plan and the communication strategies are discussed further in Section 4.2.

2.9 School Traffic Generation

With reference to the travel survey information outlined in sections above, an estimate of the peak traffic generation of the School in the broader AM arrival and PM departure peak periods considers the following:

- Student drop-off/pick-up: Generate both and arrival and departure trip in both the AM peak and PM peak periods.
- Student car driver: Generate an arrival trip in the AM peak period and a departure trip in the PM peak period.
- Staff car driver: Generating an arrival trip in the AM peak period and a departure trip in the PM peak period.
- For students travelling to the school by car, car occupancy (i.e., how many students per vehicle).

The existing baseline modelling assessments undertaken in as part of the Transport Assessment prepared by Ason Group uses the data captured in the travel mode survey to develop a trip generation rate for both staff and students. The results of this exercise indicate the following number of trips associated with the Port Macquarie Campus and account for both student and staff trips:

- 435 total trips during the AM, consisting of 272 inbound trips and 163 outbound trips.
- 213 total trips during the School PM Peak, consisting of 49 inbound trips and 163 outbound trips.

It should be considered that the outbound trips during the AM speculatively account for vehicles leaving the Site after attending the Kiss & Ride facilities or similar drop-off arrangement, and the inbound trips during the PM account for vehicles arriving for pick-up. Furthermore, it should be noted that the above calculation considers the vehicle occupancy calculated in Section 2.7.2.

3 Future Network Operation

Ason Group undertook intersection modelling of the 10 years post development with consideration for the proposed PCYC development, the results of which are provided in Table 11, and in detail in **Appendix D**.

Table 11: 10-year Post Development Modelling Results

Intersection	Control Type	Period	Average Vehicle Delay (seconds)	Level of Service
Owen St / Gordon St	Priority	AM	6.7	A
		School PM Peak	6.7	A
		Network PM	6.5	A
Owen St / Burrawan St	Priority	AM	8	A
		School PM Peak	7.1	A
		Network PM	6.1	A

The intersections are demonstrated to perform at LoS A during all assessed modelling periods, including traffic peaks associated with the campus as well as the afternoon network peak. The post-development modelling results demonstrate that there is sufficient network capacity to provide for both the demands of background growth, as well as traffic associated with the Port Macquarie Campus and the PCYC facility.

Refer to Sections 4.2 of this report for detailed actions, developed to supporting a reduction in reliance in private vehicle usage for travel to / from the school. Section 4.3 of this report outlines the mode share target delivered based on analysis undertaken in the development of this Preliminary School Travel Plan.

4 School Travel Plan Framework

4.1 Transport Objectives

The primary objectives of this Plan are to:

- Reduce the environmental footprint of the school,
- Promote the use of 'active transport' modes such walking and cycling, particularly for short-medium distance journeys,
- Reduce reliance on the use of private vehicles for travel to / from the School, and
- Encourage a healthier, happier, and more active social culture.

Having regard for the above, this Plan adopts the following movement hierarchy with priority given to 'active transport' followed by mass public transport and lastly the use of cars and other private vehicles. This hierarchy is reflected in the recently released *Road User Space Allocation Policy, January 2021* prepared by TfNSW.

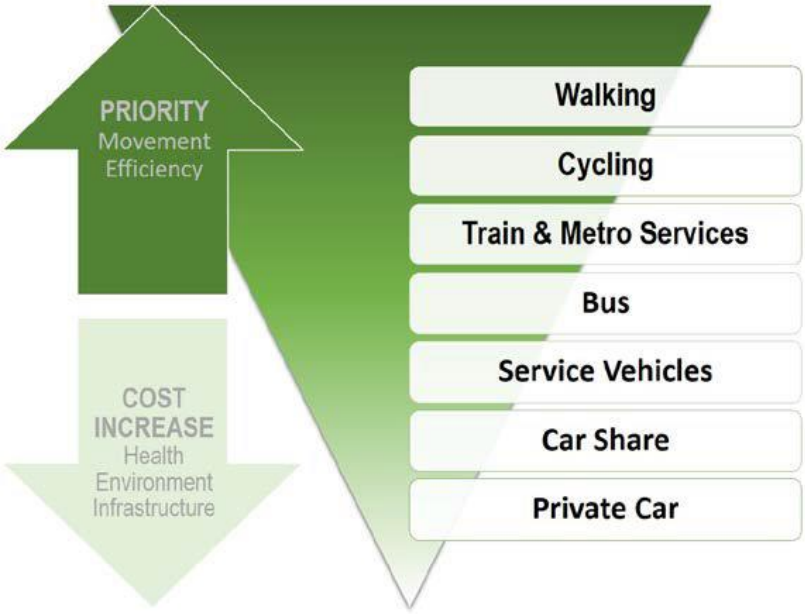


Figure 21: Movement Hierarchy

In a broad sense, this Plan is intended to encourage the use of active transport thereby reducing the overall distance travelled by private vehicles.

4.2 Action Plan

4.2.1 Action Plan Measures

The following specific actions have been identified to aid achievement of the STP targets. These identified strategies include promotion of some event or day-specific activities. As detailed in Section 4.1, the key objective of this Action Plan is to reduce the dependency on single occupancy vehicles. In isolation, these may not dramatically alter the day-to-day travel of staff. However, there are benefits of such activities whereby participation can increase awareness of alternative modes of travel that can then form the basis of future travel patterns, and therefore reduce the reliance on private vehicles.

Furthermore, these strategies have been informed by the travel mode surveys and the response from students and staff regarding travel initiatives, detailed in Section 2.7.5 and 2.8.3.

Table 12: Action Plan Measures

Item No.	Action / Description	Responsibility
1. General		
1.1	Establish a centralised Travel Plan Coordinator (TPC) which is to take responsibility for the ongoing review and monitoring of this Plan. This person(s) shall also provide direction to staff / parents in relation to -specific requirements arising from the Plan. This requires funding of approximately $80k for 13 months and requires approval from DoE.	DoE / School
1.2	Establish and maintain a transport coordinator to engage with the overall transport coordinator above.	School
1.3	Provide 'Travel Welcome Pack' for newly employed staff, highlighting alternate modes of transport other than use of a private vehicle.	School
1.4	Review of Plan as a regular item on the agenda of staff / management meetings.	TPC
1.5	Encourage flexible work hours. Whilst not reducing mode share, this can permit travel outside of peak periods which has other positive benefits.	Employers
1.6	Preparation of a Transport Access Guide (TAG). This has been provided in **Appendix E**.	TPC
2. Walking and Cycling		
2.1	Lobby Council / DPIE for improved cycle connections in the broader area. Specifically the eastern side of Owen Street between William Street to Everard Street, and improved connectivity to existing shared paths	TPC / DoE

Item No.	Action / Description	Responsibility
2.2	Promote participation in the community activities and events, such as: — National Ride2Work Day — Walk to Work Day — and other similar event	School / TPC
2.3	Develop further school-specific activities designed to get people moving with a reward participation. For example, a competition to see which staff and/or student in each year can get the most 'steps' in a given time period; similar to Steptember activities.	TPC
2.4	Provide and maintain clearly signposted bicycle parking within the Site.	School
2.5	Encourage a 10% cycling mode share target, sufficient secure parking spaces and 'EoJ' facilities shall be provided and maintained. *(NOTE: this can be staged to reflect realised demand)*	School
3. Public Transport		
3.1	Display route maps and timetables (for services within 10 minutes walking distance) on noticeboards, regular flyers, emails, and social media.	DoE / TPC
3.2	Advocate for TfNSW to improve public transport services in response to increased development within the surrounding area.	DoE / TPC
3.3	Update this Plan and TAG to reflect changes to any bus routes and service times.	TPC
3.4	Undertake review of Bus capacity noting that bus capacity is being reduced by the installation of seatbelts. Reduced capacity may require additional bus services.	TPC
3.5	Undertake a review to promote initiatives for staff using public transport. This may include a review of potential tax incentives for Government employees that use public transport.	TPC
4. Shared Vehicles		
4.1	Review initiatives for staff to promote car-pooling. This may include (but not limited to) the provision of online services or forums to facilitate ease of finding carpooling scheme participants.	TPC
4.2	Undertake research in the feasibility of providing shuttle services to and from the Site to train stations or other interchange nodes. This may require additional coordination with surrounding precincts to facilitate additional capacity potential.	TPC
5. Infrastructure Amendments		
5.1	Lobby TfNSW to amend the existing School zone timings to match the School bell times, such as: • 7:30 to 9:00am • 1:30 to 3:00pm	DoE / TfNSW / Council
5.2	Consider upgrading existing pedestrian refuge on Owen Street midblock between Gordon Street and Burrawan Street to children's crossing to improve pedestrian safety.	Council / DoE

4.3 Mode Share Targets

With consideration for the Action Plan and the communication strategy, the following target mode shares have been identified. It is expected that further travel mode surveys would be undertaken once the upgrade works are completed to establish baseline figures from which progress can be measured.

Table 13: Mode Share Targets – Students

Travel Mode	AM Peak	PM Peak
Car (driver)	5%	5%
Car (passenger)	10%	10%
Walking	25%	25%
Bus	50%	50%
Bicycle	10%	10%

Table 14: Mode Share Targets – Staff

Travel Mode	Split
Car (driver)	60%
Car (passenger)	25%
Walking	5%
Bus	5%
Bicycle	5%

4.4 Communications Strategy

With consideration to the above measures, a communication strategy has been developed that can be adopted by the future school administration and TPC to communicate the measures detailed above. It should be noted that this communication strategy is subject to review following further discussions with the School administration.

Table 15: Communication Strategies

What	When	Method	Target	Responsibility
Share objectives and goals with the student body and staff	Prior to school opening and every term during operation	Welcome packs to new staff and families. Social media. Website.	Staff, Students, Parents	School / TPC
Provide information regarding transport options to and from the school, and on-site end-of-trip facilities.	Prior to school opening. This information is to be available always and presented every term	Welcome packs to new staff and families. Website. Information boards within school grounds.	Staff, Students, Parents	School / TPC
Provide details regarding school promoted initiative that encourage alternative modes of transport, such as: Ride2School Day, Walk-To-School Day, Steptember, etc.	Annually prior to the event	Social Media Website. E-newsletters.	Staff, Students, Parents	School / TCP
Provide details regarding the safety and volunteer process to manage a walking school bus	This information is to be available always and presented every term	Welcome packs to new families. Website. E-newsletters.	Students and Parents	School / TCP
Provide details regarding availability of student bus passes	Prior to, and at school opening. This information is to be available always and presented every term	Welcome packs to new families. Website.	Students and Parents	School / TCP
Liaise with parents regarding the education programs provided by the school that encourage alternative transport modes	Prior to school opening. This information is to be available always and presented every term	Welcome packs to new families. Website.	Students and Parents	School / TCP

What	When	Method	Target	Responsibility
Link key resources regarding operation of school zones, road safety, and parking restrictions within the local area.	Prior to, and at school opening. This information is to be available always and presented every term.	Welcome packs to new families. Social Media Website. E-newsletters.	Parents	School / TPC
Detail information regarding operation of drop-off / pick-up area	Prior to, and at school opening. This information is to be available always and presented every term.	Welcome packs to new families. Social Media Website. E-newsletters.	Parents	School / TPC

4.4.1 Welcome Packs

As detailed above, new staff and families shall be provided with a 'welcome pack' as part of the on-site induction process which includes the Plan and other information in relation to sustainable transport choices. This pack shall include a copy of the Plan as well as general information regarding the health and social benefits of active transport. Advice on where to find further information should also be included.

4.4.2 Accurate Transport Information

In addition to these 'welcome packs', a Travel Access Guide (TAG) shall be provided to all staff.

A copy of the TAG should also be displayed prominently in staff areas, such as lunchrooms and foyer areas, and information boards throughout the school for parents and students. The TAG shall be presented in a form that is reflective of the commitment to achieving positive transport objectives. This TAG is presented in Appendix E.

5 School Transport Operations and Access Management Plan

5.1 Operational Management Measures

5.1.1 Plan of Management

The School is responsible for coordinating pedestrian and vehicle movements on-site and within the local road network to meet operational requirements and ensure the safety of students while maintaining an efficient road network. The following management measures are proposed.

5.1.2 Key responsibilities of Management

Management shall:

- Ensure all staff are provided with sufficient training to undertake the required tasks. This includes responsibility for measures to ensure that all staff, parents/carers, visitors, and students are familiar with site specific rules through appropriate site induction procedures.
- Be familiar with and address their respective duty of care requirements in accordance with the applicable state Work Health and Safety legislation.
- Ensure WHS Incident logbooks are maintained and undertake necessary action(s) in relation to any reported issues.

5.1.3 Hours of Operations

The School would be accessible from 7:30AM – 4:30PM on weekdays with restricted access outside of these hours.

5.1.4 Pedestrian Access

As detailed in Section 2.4.1, there are a number of different pedestrian access points. Following liaison with the School Principal, it is understood that the pedestrian access points are not monitored by staff.

With consideration for the Signage and Line Marking Plan attached in Appendix A, it is noted that children's crossings are proposed at the following locations:

- Children's crossings midblock along Owen Street; and
- Children's crossing on the northern leg of the intersection of Owen Street / Burrawan Street.

The Children's Crossing in particular will require management by an authorised School Crossing Supervisor, who will need to install the flags to establish the crossing.

It is recommended that traffic counts be commissioned initially at 6 months following Day 1 operations to review and validate whether the level of pedestrian / traffic activities meet the criteria.

At the time of preparation of this PSTP, Ason Group is seeking further information regarding the operation of the pedestrian access points, namely for visitors and out-of-hours. This is discussed below.

5.1.5 Visitor Access

Visitor pedestrian access to the school is currently via the main access gate on Owen Street. Visitors are required to travel to the main office and sign-in. This arrangement will be maintained.

5.1.6 Out of Hours Access

Access is restricted at these times:

- weekdays: before 7:30am and after 4:30pm
- weekends and public holidays: No access permitted

Notwithstanding the above, prior to any larger scale out of school hour activities (fete, sporting events, carnivals, etc), an Event Traffic Management Plan specific to the activity should be prepared to address traffic and parking management matters.

5.1.7 Vehicle Access

Given the nature of the site, different vehicle types will be required to access the School and will utilise the drop-off / pick-up areas. As detailed in Section 2.2, the School currently has a single drop-off / pick-up area along the western boundary, a bus zone directly adjacent to the drop-off / pick-up area, and a service area along the eastern frontage accessed via the Pacific Drive carpark. Access to these areas is detailed in **Figure 22**.

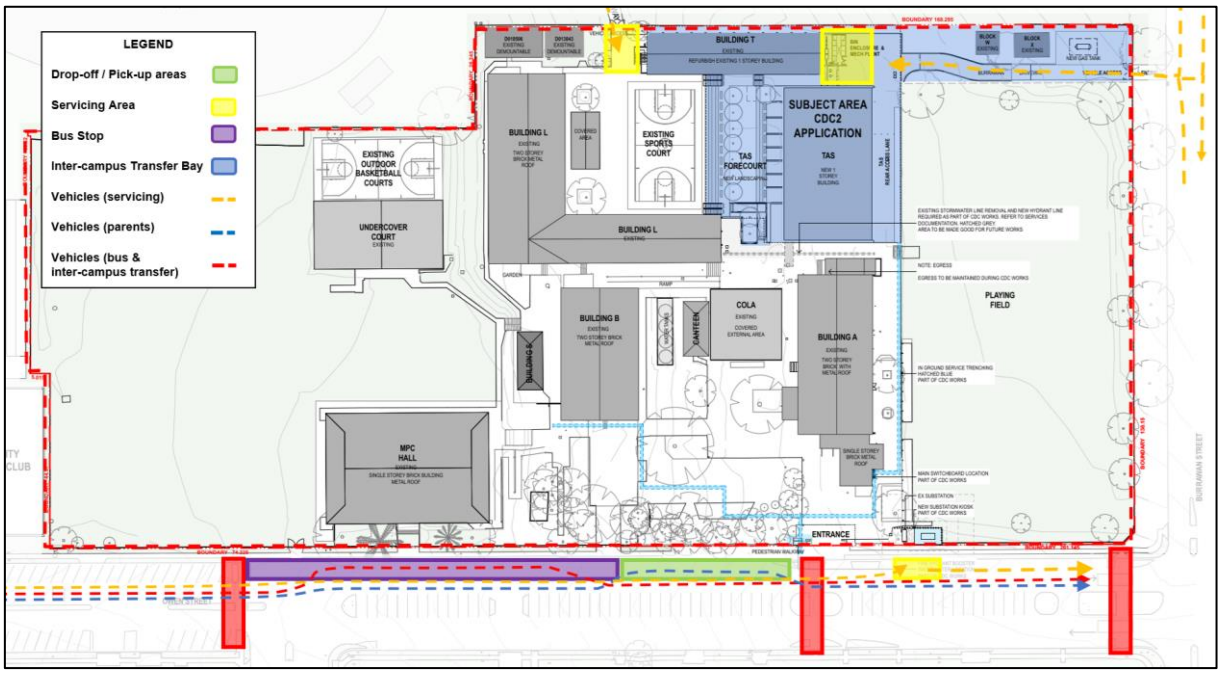


Figure 22: Vehicles Access

The management procedures of these amenities are discussed below.

5.1.8 Drop-off / Pick-up Facilities

As detailed in Section 2.2 and Figure 22 , the School provides a single drop-off / pick-up facility along the western frontage on Owen Street. Special education students will utilise the Owen Street drop-off / pick-up area along the western frontage as well.

As part of the Signage and Line Marking Plan prepared by Ason Group, these areas are signposted as “No Parking” at all times. This means parents are unable to leave 3m from the vehicle or stay for longer than 2 minutes.

With consideration for Section 2.9, the traffic generation of the School during the morning and afternoon peak periods is as follows:

- Morning peak hour: 364 vehicle trips
- Afternoon peak hour: 146 vehicle trips

The Transport Assessment detailed a peak queue of 66 vehicles during the afternoon peak 15 minutes prior to the final bell. During on-site investigations, it was observed that the pick-up of students took between 20-40 seconds, for an average of 30 seconds. Therefore, this corresponds to a turnover of 3.6

vehicles every 30 seconds, which can be accommodated by the existing provision of 6 spaces. This provision exceeds the anticipated peak demand.

Following conversations with the School Principal, it is understood that staff currently do not manage the drop-ff / pick-up area.

As such, the following recommendations for the management of the drop-off / pick-up area are recommended:

- During the morning peak period, parents using the drop-off / pick-up areas will not be permitted to park and escort children into the School. However, for special education drop-off / pick-up, parents will be permitted to escort children into the School.

Transport for NSW has prepared information documentation titled *School Drop-off and Pick-up; Organising the Initiative* details additional methods that can be adopted to assist in a safe and efficient management system for drop-off / pick-up areas. This has been attached in **Appendix F**.

5.1.9 Bus Access

As per Section 2.2 (Refer to Appendix A), the existing bus stops that service the School are located to the north of the drop-off / pick-up area on Owen Street adjacent to the School boundary. These bus stops are currently operational during the School peak periods to allow students to travel to and from the School. It is understood that the students are currently marshalled on-site, once a bus arrives a staff member with a megaphone announces the bus number and route and the students get on the bus. Once the bus departs, the process is repeated with the next bus.

The existing bus stops are adequate to support the needs of the school buses. School bus services are scheduled on a basis that no more than 2 buses will be stopping at the stop at any given time. Refer to Appendix B for the school bus timetable for details.

When students arrive on-site, students exit the bus and then enter the School via one of the access points on Owen Street.

For special events such as excursions, these bus stops are currently utilised. Students would be escorted to and from the bus stops and traffic will be managed by staff when students are using the crossings.

The existing bus stop will remain unchanged.

5.1.10 Inter Campus Travel

To safely accommodate transfer of students between campuses, a transfer area will be located on Owen street utilising the same area as the existing bus stop and maintained during school hours for this purpose.

5.1.11 Servicing

Waste collection and larger deliveries will occur via the Burrawan Street access along the southern boundary of the School. For smaller deliveries such as for the canteen, these currently occur via the front gate on Owen Street.

To improve the safety of the Owen Street deliveries, a formalised loading area for the School is proposed on Owen Street south of the main access. **Appendix G** details the proposed Owen Street servicing area in detail.

Delivery times would be strictly managed to ensure the minimum movements possible, and these occur outside of the school peak periods.

5.1.12 Driver Code of Conduct

All drivers are to operate in a manner consistent with the requirements of applicable Work Health and Safety (WHS) legislation and other business specific policies.

All commercial vehicle drivers are to be familiar with the Driver Code of Conduct before attending the Site. A copy of the Code is included in **Appendix H**.

6 Governance and Support

6.1 Travel Plan Coordinator

To assist with the management of the School Travel Plan, a person(s) shall be nominated as the Travel Plan Coordinator (TPC) and be responsible for:

- Engagement with the staff and parent bodies,
- Implementation and promotion of the School Travel Plan actions,
- Monitoring the effectiveness of the Plan (refer to monitoring requirements outlined in **Section 7**) and ongoing maintenance of the School Travel Plan,
- Provide advice in relation to transport-related subjects to staff, management, and visitors, as required, and
- Liaise with external parties (i.e., Council, public transport, and car share operators) in relation to Travel Plan matters.

This role does not necessarily require a full-time position; however, it should be clearly designated among the key responsibilities of the building management group.

This may include financial incentives for staff to use active transport and public transport to travel to work. However, this is not a mandatory requirement and would be subject to the management discretion.

6.2 Resourcing

It is not anticipated that the maintenance of this Plan will have significant ongoing cost implications and shall be reviewed on an annual basis by the TPC in order for the best outcome. To fund the monitoring of the PSTP, it is recommended that $5k per year is allocated by DoE.

7 Monitoring and Review Process

7.1 Plan Maintenance

This Plan shall be subject to ongoing review, ideally every two (2) years, and will be updated accordingly. Regular reviews will be undertaken by the TPC, as required.

Key considerations regarding the review of the Plan shall be:

- Updating baseline conditions to reflect any changes to the transport environment in the vicinity of the site such as changes to bus services, new cycle routes, new roads, etc. In this regard, review of the Plan – and associated Travel Access Guide (TAG) in particular – may be undertaken on a more frequent basis,
- Tracking progress against proposed travel mode targets,
- To identify any shortfalls and develop an updated action plan and OTAMP measures to address issues, and
- To ensure travel mode targets are updated (if necessary) to ensure they remain realistic but also ambitious.

7.2 Monitoring and Review Actions

To assess the efficacy of the Plan strategies, the following actions are to be undertaken by the TPC:

- Review updated de-personalised data from the NSW Department of Education via a GIS analysis.
- Conduct Travel mode surveys to determine the proportion of persons travelling to/from the site by each transport mode. This will be in the form of annual travel mode questionnaire surveys to be completed by all persons attending the site, as far as practicable. This survey may be undertaken online or in-person at the discretion of the TPC.
- Review information regarding participation in active travel programs.
- Undertake community consultation to gauge feedback regarding implemented operational management strategies, action plan initiatives, and areas for improvement to further encourage use of alternative modes of transport and improve traffic conditions.
- Periodic on-site review of facilities such as the drop-off / pick-up area, bicycle racks.

It is recommended that an initial audit be undertaken within 6-months of the works being completed to establish baseline mode share as early as possible.

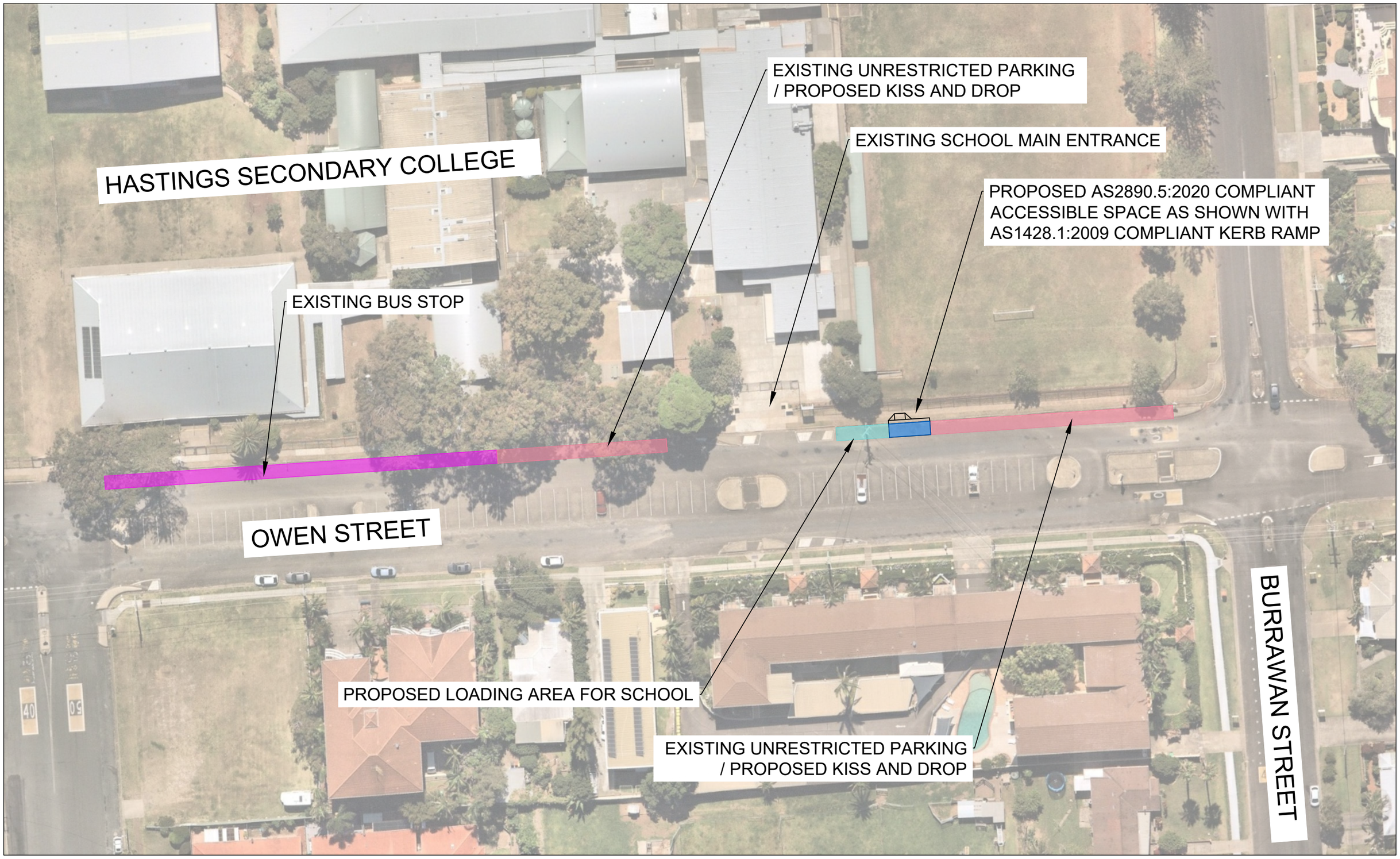
Following the review process, the Plan would be updated with consideration for the findings and resubmitted to DPIE. It is noted that the initial review will be undertaken in December 2021, and submitted to DPIE, and following reviews will be similarly undertaken in December 2022, followed by yearly review by the TPC.

7.3 Feedback Framework

Following the actions undertaken as part of the review process, feedback is to be provided to key stakeholders including: the community, TfNSW, Council, and the Department of Education, detailing the efficacy of the strategies. The strategies and Plan will be adapted accordingly.

Appendix A

Traffic Signage and Line Marking Plan



Notes:
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Project:
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HASTINGS SECONDARY COLLEGE

Drawing Title:
OWEN STREET PARKING
CONCEPT PARKING RESTRICTIONS PLAN

Date:
8-Apr-21

Scale @ A3:
NTS

Drawing Number:
01

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Appendix B

Busways Bus Routes

Busways

SCHOOL TIMETABLE PORT MACQUARIE REGION

Hastings Secondary College - Port Macquarie High School Campus

Timetable effective from Monday 17 February 2020

Amended 18/12/2019

(R) Bus Turns Right - (L) Bus Turns Left

MORNING

Bus Number	Route Number	Time	Locations Serviced	Route Description
12	**-**	**6:26 AM**	Upper Rollands Plains Telegraph Point	Departs Littles Loop Rd via Upper Rollands Plains Rd, Rollands Plains Rd (R)Reids Rd **(6:49am)** (L)Pembrooke Rd (L)Mooney St to Telegraph Point Public School **(7:08am).** **TRANSFER TO BUS 10**
-	**334K**	**6:41 AM**	Lakewood West Haven Laurieton North Haven	Departs Lakewood Bus Shelter via Sirius Dr to roundabout, turns around & returns Sirius Dr (L)Ocean Dr, Kew Rd (R)Tunis St (L)Lord St (L)Laurie St (L)Bold St to Laurieton Coles **(6:50am),** continues Bold St (R)Bold St (R)Ocean Dr (R)The Parade (L)Edith St (R)Ocean Dr to Jungara Cres **(6:59am).** **TRANSFER TO BUS 6**
9	**-**	**6:43 AM**	King Creek Wauchope Blackbutt Dr Colonial Cct Thrumster Sherwood Rd	Departs King Creek Rd & The Oxley Hwy via King Creek Rd (R)Bago Rd, Cameron St (R)Ellenborough Cl (L)Fairmont Dr (R)Weismantle St (R)Cameron St (L)Tallowood Av (R)Mahogany Wy (L)Blackbutt Dr (L)Oxley Hwy (R)Forest Wy (L)Colonial Cct to Homestead Dr **(7:02am)** continues Colonial Cct (L)Forest Wy (L)Oxley Hwy (L)Beechwood Rd (R)Cowdery St (R)Johnstone St (L)Mackay St (R)Waugh St (R)Campbell St (L)Young St (R)Cameron St **(7:15am)** (L)Oxley Hwy (L)John Oxley Dr (West) (R)Oxley Hwy (East) (L)Sherwood Rd **(7:34am)** (R)Lincoln Rd (L)Marian Dr (L)Lincoln Rd (R)Sherwood Rd (L)Oxley Hwy (L)Findlay Av then to School.
10	**-**	**6:47 AM**	Kundabung Cooperabung Telegraph Point Blackmans Point	Departs Rodeo Dr bus shelter via Rodeo Dr (L)Kundabung Rd (R)Pacific Mwy (southbound) (L)Wharf Rd to bus shelter, turns around & returns Wharf Rd (L)Pacific Mwy (L)Telegraph Point Exit (R)Haydons Wharf Rd (L)Telegraph Point Rd (R)Wyndell Wy (R)Cooperabung Dr to Federation Wy, turns around & returns Cooperabung Dr (R)Rollands Plains Rd (L)Telegraph Point Rd (R)Pembrooke Rd (R)Mooney St to Telegraph Point Public School **(7:08am),** continues Mooney St (R)Morse Ln (R)Telegraph Point Rd (L)Blackmans Point Rd to Boat Ramp, turns around & returns Blackmans Point Rd (L)Hasting River Dr (L)Hastings River Dr to Oakes Cr **(7:32am),** continues Hastings River Dr (R)Widderson St (L)Oxley Hwy (L)Findlay Av (R)Hasings River Dr to School.
11	**-**	**6:48 AM**	Gum Scrub Telegraph Point	Departs Ballengara-Bransdon Rd & Gum Scrub Rd via Ballengara-Bransdon Rd (L)Rollands Plains Rd (L)Telegraph Point Rd (R)Pembrooke Rd (R)Mooney St to Telegraph Point Public School **(7:08am).** **TRANSFER TO BUS 10**
8	**-**	**6:50 AM**	Sancrox Rawdon Island Lake Innes Thrumster The Ruins Way Lake Rd	Departs Billabong Dr & Bushland Dr via (L)Bushland Dr (L)Sancrox Rd (R)Rawdon Island Rd (L)River Downs Rd **(6:58am)** to the end, turns around & returns River Downs Rd (R)Rawdon Island Rd (L)Oxley Hwy (R)Pacific Hwy on ramp (southbound) (L)Lake Innes Dr to the junction of Lake Innes Dr **(7:12am)**, turns around & returns Lake Innes Dr (R)Pacific Hwy (L)Port Macquarie Exit (R)Oxley Hwy (R)Sovereign Dr to Cohen Wy **(7:17am)**, turns around & returns Sovereign Dr, John Oxley Dr (R)The Ruins Wy to Currawong Dr **(7:28am)** continues The Ruins Wy (R)The Point Dr (R)2nd Wonga Cr (L)The Point Dr (R)The Ruins Wy (L)Major Innes Rd (R)John Oxley Dr (R)Oxley Hwy (R)Lake Rd **(7:38am)** (L)Fernhill Rd (R)Oxley Hwy (R)Widderson St (L)Hindman St (L)Ocean Dr (L)Oxley Hwy (R)Findlay Av to Westport High School **(7:48am)**, continues Findlay Av (R)Hastings River Dr (L)Gordon St (R)Owen St to School.
6	**-**	**7:09 AM**	Bonny Hills Lake Cathie Ocean Dr	**LAST PICK UP KENNEDY DR & KOALA ST** Departs Ocean Dr & Jungara Cr via Ocean Dr to Dirah St **(7:22am)** continues Ocean Dr (R)Dahlsford Dr (R)Livingstone Rd (L)Pacific Dr (L)Kennedy Dr to Koala St **(7:35am)**, then to School.
1	**-**	**7:17 AM**	Port Macquarie	Departs Marbuk Av & Amethyst Wy via Marbuk Av (L)Emerald Dr (R)2nd Sapphire Dr (L)Jonas Absalom Dr, Pacific Dr (L)Livingstone Rd (L)Dahlsford Dr **(7:24am),** Crestwood Dr (R)Crestwood Dr (L)Rowthorne Wy (L)Crestwood Dr (L)Ocean Dr (L)Greenmeadows Dr (L)Ocean Dr **(7:34am)** (R)Lake Rd (R)Gordon St (R)Owen St to School.

7	**-**	**7:29 AM**	Settlement Point The Jib	Departs Settlement Point Rd via Settlement Point Rd, Park St (R)Bay St (L)Newport Island Rd (R)Hastings River Dr (L)Mumford St (L)Kemp St (L)The Bulkhead (R)The Boom (R)The Jib (L)Doncaster Av (L)Lady Nelson Dr (R)Clifton Dr (L)Oxley Hwy (L)Findlay Av (R)Hastings River Dr (L)Gordon St (R)Owen St to School.
4	**-**	**7:30 AM**	Shelly Beach	Departs Shelly Beach Rd & Calwalla Cr via Shelly Beach Rd (R)Calwalla Cr (L)Merinda Dr (R)Shelly Beach Rd (R)Kennedy Dr, Lord St (R)Gordon St (R)Owen St to School.
2	**-**	**7:35 AM**	Granite St Lord St	Departs Koala St & Shearer St via Koala St (L)Granite St (R)Hill St (L)Lord St (R)Gordon St (R)Owen St to School.
-	**322**	**7:43 AM**	Lighthouse Plaza Bangalay Dr Pacific Dr	Departs Emerald Dr & Ocean Dr via Emerald Dr, Matthew Flinders Dr (L)Lighthouse Rd (L)Bangalay Dr to Burrawong Dr **(7:53am)** continues Bangalay Dr (R)Pacific Dr (L)Home St (L)Owen St (R)Hill St (R)Lord St to Hill St **(8:07am)** continues Lord St (R)Gordon St (R)Owen St to School.

AFTERNOON

Bus Number	Route Number	Time	Locations Serviced	Route Description
10	**-**	**2:20 PM**	Cooperabung Dr Gum Scrub	Departs School via Owen St (R)Burrawan St (R)Golf St (L)Gordon St, Oxley Hwy (R)Findlay Av (L)Hastings River Dr to opposite Oakes Cres **(2:36pm)**, continues Hastings River Dr (R)Hastings River Dr (R)Blackmans Point Rd to Boat Ramp, turns around & returns Blackmans Point Rd (RTelegraph Point Rd (L)Pembrooke Rd (R)Mooney St to Telegraph Point Public School **(3:00pm).** Then **continues as School Bus 56** via Mooney St (R)Morse Ln (L)Telegraph Point Rd, Pacific Mwy (northbound) (L)Cooperabung Dr to Rollands Plains Rd **(3:30pm)**, continues Rollands Plains Rd (R)Bellengarra-Bransdon Rd to Gum Scrub Rd **(3:48pm)**.
7	**-**	**2:23 PM**	Port Macquarie The Bulkhead The Jib Settlement Point	Departs School via Owen St (R)Burrawan St (R)Golf St (L)Gordon St, Oxley Hwy (R)Findlay Av to Westport High School **(2:30pm),** continues Findlay Av (L)Hastings River Dr (L)Mumford St (L)Kemp St (L)The Bulkhead (R)The Boom (R)The Jib (L)Doncaster Av (L)Lady Nelson Dr (L)Clifton Dr (L)Hastings River Dr (R)Newport Island Rd (R)Bay St (L)Park St, Settlement Point Rd to the end.
12	**-**	**2:25 PM**	Rollands Plains Upper Rollands Plains	**FIRST SET DOWN PEMBROOKE ROAD** Departs School via Owen St, then to Pembrooke Rd (R)Reids Rd (L)Rollands Plains Rd, Upper Rollands Plains Rd to Littles Loop Rd **(3:18pm).**
3	**-**	**2:25 PM**	Jonas Absalom Emerald Dr Lighthouse Beach Pacific Dr	Departs School via Owen St (L)Home St (R)Pacific Dr (L)Bangalay Dr (R)Lighthouse Rd (R)Matthew Flinders Dr, Emerald Dr (L)Marbuk Av to roundabout, turns around & returns Marbuk Av (L)Emerald Dr (R)2nd Sapphire Dr (L)Jonas Absalom Dr to Ocean Dr.
8	**-**	**2:28 PM**	The Ruins Wy The Point Dr	Departs School via Owen St (R)Burrawan St (R)Golf St (L)Gordon St, Oxley Hwy (R)Findlay Av (R)Hastings River Dr, Ocean Dr (R)Hindman St (R)Widderson St (L)Oxley Hwy (L)John Oxley Dr (L)The Ruins Wy (R)The Point Dr (R)2nd Wonga Cr (L)The Point Dr (R)The Ruins Wy (L)Major Innes Rd to Forest Grove.
9	**-**	**2:28 PM**	Widderson Rd Sherwood Rd	Departs School via Owen St (R)Burrawan St (R)Golf St (L)Gordon St, Oxley Hwy (R)Findlay Av (L)Hastings River Dr (L)Widderson St (R)Oxley Hwy (R)Sherwood Rd (R)Lincoln Rd (L)Marian Dr (L)Lincoln Rd to Sherwood Rd.
6	**-**	**2:29 PM**	Lighthouse Plaza Lake Cathie Bonny Hills	**FIRST SET DOWN KENNEDY DR & SHELLY BEACH RD** Departs School via Owen St, then to Kennedy Dr & Shelly Beach Rd, continues Kennedy Dr (R)Pacific Dr (R)Livingstone Av (L)Dahlsford Dr (L)Ocean Dr to opposite Lighthouse Plaza **(2:41pm),** continues Ocean Dr to Third Av.
-	**335W**	**2:30 PM**	Thrumster Wauchope	**CATCH BUS 7 FROM SCHOOL & TRANSFER AT WESTPORT HIGH SCHOOL** Departs Westport High School via Findlay Av (R)Oxley Hwy (L)John Oxley Dr (East) (R)Oxley Hwy (R)Wallace St (L)Webb St (L)Cameron St to Young St **(3:06pm)** continues Cameron St (R)High St (R)Campbell St (R)Young St (R)Cameron St (L)Ellenborough Cl (L)Fairmont Dr (R)Weismantle St (R)Cameron St (L)Tallowood Av (R)Mahogany Wy (L)Blackbutt Dr (L)High St (R)Forest Wy (L)Colonial Cct (L)Forest Wy (L)High St to Wauchope Showground.
13	**-**	**2:32 PM**	Thrumster Lake Innes Rawdon Island Sancrox	**CATCH BUS 7 FROM SCHOOL & TRANSFER AT WESTPORT HIGH SCHOOL** Departs Westport High School via Findlay Av (L)Hastings River Dr (L)Widderson St (R)Oxley Hwy (L)Sovereign Dr to Cohen Wy **(2:44pm)**, turns around & returns Sovereign Dr (L)Oxley Hwy (L)Pacific Hwy on ramp (southbound) (L)Lake Innes Dr to junction of Lake Innes Dr **(2:49pm),** turns around & returns Lake Innes Dr (R)Pacific Hwy (L)Port Macquarie Exit (L)Oxley Hwy (R)Billabong Dr (L)Bushland Dr (L)Sancrox Rd (R)Rawdon Island Rd (L)River Downs Rd **(3:02pm)** to the end, turns around & returns River Downs Rd (R)Rawdon Island Rd to Oxley Hwy **(3:09pm)**.

1	**-**	**2:32 PM**	Chrestwood Dr	Departs School via Owen St (R)Burrawan St (L)Lord St (R)Hill St (L)Lake Rd (L)Ocean Dr (R)1st Greenmeadows Dr (R)Ocean Dr (R)Crestwood Dr (R)Crestwood Dr (L)Rowthorne Wy to Crestwood Dr.
4	**-**	**2:34 PM**	Kennedy Dr Calwalla Cres	Departs School via Owen St (R)Burrawan St (L)Lord St, Kennedy Dr (L)Shelly Beach Rd (L)Merinda Dr (R)Calwalla Cr to Shelly Beach Rd.
2	**-**	**2:34 PM**	Granite St Koala St	Departs School via Owen St (R)Burrawan St (L)Lord St (R)Hill St (L)Granite St (R)Koala St to Shearer St.
93	**-**	**3:00 PM**	Telegraph Point Kundabung	**CATCH BUS 10 FROM SCHOOL & TRANSFER AT TELEGRAPH POINT PUBLIC SCHOOL** Departs Telegraph Point Public School via Mooney St (R)Morse Ln (L)Telegraph Point Rd, Pacific Hwy (northnound) (L)Upper Smiths Creek Rd to bus stop **(3:10pm)**, returns Upper Smiths Creek Rd (L)Pacific Mwy (LKundabung Rd (R)Rodeo Dr to Bus Shelter **(3:14pm)**, returns Rodeo Dr (L)Kundabung Rd (R)Pacific Mwy (southbound) (L)Wharf Rd to bus stop.
-	**334K**	**3:11 PM**	North Haven Laurieton Lakewood	**CATCH BUS 6 FROM SCHOOL & TRANSFER AT OCEAN DR & THIRD AV** Departs Ocean Dr & Third Av via Ocean Dr (L)Bold St (R)Tunis St (L)Lord St (L)Laurie St (L)Bold St, Kew Rd, Ocean Dr (R)Sirius Dr to Lakewood Bus Shelter **(3:33pm).**
28	**-**	**3:17 PM**	Wauchope Sarahs Cr King Creek	**CATCH BUS 7 FROM SCHOOL & TRANSFER AT WESTPORT HIGH SCHOOL TO ROUTE 335W THEN TRANSFER AT CAMERON ST & YOUNG ST** Departs Cameron St & Young St via Cameron St to Wauchope High School (Nelson St) via Nelson St (R)Campbell St (L)Bain St (L)Hastings St (R)River St (L)Alma St (R)Wallace St (L)Oxley Hwy (R)King Creek Rd (L)Sarahs Cr to the end **(3:51pm),** turns around Sarahs Cr (L)Warrew Cres (L)Sarahs Cr (L)King Creek Rd to Bago Rd.

Appendix C

Travel Mode Survey Questions

HASTINGS
SECONDARY COLLEGE
PORT MACQUARIE CAMPUS

Hastings Secondary College, Staff Travel Survey Questionnaire

1. Which campus are you employed at?

- ◯ Port Macquarie Campus
- ◯ Westport Campus

2 / 13 15%

Prev Next

2. What is the postcode of the suburb you live in?

3 / 13 23%

Prev Next

3. Do you work:

- ◯ Full time
- ◯ Part Time
- ◯ Contract / Temp
- ◯ Casual
- ◯ Other (please specify)

4. Which faculty do you work in?

- ◯ Business and Administration
- ◯ Teaching
- ◯ Maintenance
- ◯ Other (please specify)

5. How often do you travel to School?

- ◯ >5 days a week
- ◯ 5 days a week
- ◯ 4 days a week
- ◯ 3 days a week
- ◯ 2 days a week
- ◯ 1 day per week
- ◯ Once every 2 weeks
- ◯ Monthly or less

6. What is your usual time of arrival?

- ◯ Before 6:15AM
- ◯ 6:15-6:30AM
- ◯ 6:30-6:45AM
- ◯ 6:45-7:00AM
- ◯ 7:00-7:15AM
- ◯ 7:15-7:30AM
- ◯ 7:30-7:45AM
- ◯ 7:45-8:00AM
- ◯ 8:00-8:15AM
- ◯ 8:15-8:30AM
- ◯ 8:30-8:45AM
- ◯ 8:45-9:00AM
- ◯ After 9:00AM

7. What is your usual time of departure?

- ◯ Before 1:00PM
- ◯ 1:00-1:15PM
- ◯ 1:15-1:30PM
- ◯ 1:30-1:45PM
- ◯ 1:45-2:00PM
- ◯ 2:00-2:15PM
- ◯ 2:15-2:30PM
- ◯ 2:30-2:45PM
- ◯ 2:45-3:00PM
- ◯ 3:00-3:15PM
- ◯ 3:15-3:30PM
- ◯ 3:30-3:45PM
- ◯ 3:45-4:00PM
- ◯ 4:00-4:15PM
- ◯ 4:15-4:30PM
- ◯ 4:30-4:45PM
- ◯ 4:45-5:00PM
- ◯ 5:00-5:15PM
- ◯ 5:15-5:30PM
- ◯ After 5:30PM

5 / 13 — 38%

Prev | Next

8. Do you normally participate in any sport or co-curricular activity on school grounds?

- ☐ Before School
- ☐ After School
- ☐ Neither

9. If you do participate in co-curricular activities, how frequently?

- ◯ 1 day a week
- ◯ 2 days a week
- ◯ 3 days a week
- ◯ 4 days a week
- ◯ 5 days a week
- ◯ Once every 2 weeks
- ◯ Monthly or less
- ◯ I don't participate in co-curricular activities

6 / 13 — 46%

Prev | Next

14. If you drive, where do you normally park?

- ◯ Pacific Drive carpark - Port Macquarie Campus
- ◯ Owen Street - Port Macquarie Campus
- ◯ Burrawan Street - Port Macquarie Campus
- ◯ Gordon Street - Port Macquarie Campus
- ◯ Goff Street - Port Macquarie Campus
- ◯ Home Street - Port Macquarie Campus
- ◯ Lord Street - Port Macquarie Campus
- ◯ Findlay Avenue - Westport Campus
- ◯ Other (please specify)
- ◯ Mayworth Avenue - Westport Campus
- ◯ Widderson Street - Westport Campus
- ◯ Catherine Street - Westport Campus
- ◯ Waratah Street - Westport Campus
- ◯ Phillip Street - Westport Campus
- ◯ Queen Street - Westport Campus
- ◯ Hudson Avenue - Westport Campus
- ◯ I don't drive

15. If you are normally dropped-off, where are you dropped-off?

- ◯ Pacific Drive carpark - Port Macquarie Campus
- ◯ Owen Street - Port Macquarie Campus
- ◯ Burrawan Street - Port Macquarie Campus
- ◯ Gordon Street - Port Macquarie Campus
- ◯ Goff Street - Port Macquarie Campus
- ◯ Home Street - Port Macquarie Campus
- ◯ Lord Street - Port Macquarie Campus
- ◯ Findlay Avenue - Westport Campus
- ◯ Other (please specify)
- ◯ Mayworth Avenue - Westport Campus
- ◯ Widderson Street - Westport Campus
- ◯ Catherine Street - Westport Campus
- ◯ Waratah Street - Westport Campus
- ◯ Phillip Street - Westport Campus
- ◯ Queen Street - Westport Campus
- ◯ Hudson Avenue - Westport Campus
- ◯ I don't get dropped off

16. If you are normally picked-up, where are you picked-up?

- ◯ Pacific Drive carpark - Port Macquarie Campus
- ◯ Owen Street - Port Macquarie Campus
- ◯ Burrawan Street - Port Macquarie Campus
- ◯ Gordon Street - Port Macquarie Campus
- ◯ Goff Street - Port Macquarie Campus
- ◯ Home Street - Port Macquarie Campus
- ◯ Lord Street - Port Macquarie Campus
- ◯ Findlay Avenue - Westport Campus
- ◯ Other (please specify)
- ◯ Mayworth Avenue - Westport Campus
- ◯ Widderson Street - Westport Campus
- ◯ Catherine Street - Westport Campus
- ◯ Waratah Street - Westport Campus
- ◯ Phillip Street - Westport Campus
- ◯ Queen Street - Westport Campus
- ◯ Hudson Avenue - Westport Campus
- ◯ I don't get picked up

17. Do you have at least 1 child enrolled at the Hastings Secondary College

- ◯ Yes
- ◯ No

18. If you answered "**Yes**" to Question 17, how many of your children are attending Hastings Secondary College?

19. If you answered "**Yes**" to Question 17, does your child/children travel with you?

- ◯ Yes
- ◯ No
- ◯ N/A

9 / 13 69%

Prev Next

20. What is your approximate travel distance between your place of residence and school?

- ◯ Less than 2.3 km
- ◯ 2.3 – 2.9 km
- ◯ 2.9 - 5 km
- ◯ 5 – 15 km
- ◯ More than 15 km

21. How long does your journey normally take?

- ◯ Less than 15 mins
- ◯ 15 – 30 mins
- ◯ 30 – 45 mins
- ◯ 45 – 60 mins
- ◯ More than 1 hour

10 / 13 77%

Prev Next

22. Are you ever required to travel to the other campus during the school day?

- ◯ Yes
- ◯ No

23. How often do you travel to the other campus?

- ◯ 5 days a week
- ◯ 4 days a week
- ◯ 3 days a week
- ◯ 2 days a week
- ◯ 1 day per week
- ◯ Once every 2 weeks
- ◯ Monthly or less

24. If you answered "**Yes**" to Question 22, how do you travel to the other campus?

- ◯ Car (as driver)
- ◯ Car (as passenger)
- ◯ Bus
- ◯ Shuttle Bus
- ◯ Taxi / Uber
- ◯ Other (please specify)
- ◯ Bicycle
- ◯ Scooter (non-motorised)
- ◯ Walking
- ◯ I don't travel to the other campus

25. If you answered "Car (as driver)" to Question 24, where do you park?

- ◯ Pacific Drive carpark - Port Macquarie Campus
- ◯ Owen Street - Port Macquarie Campus
- ◯ Burrawan Street - Port Macquarie Campus
- ◯ Gordon Street - Port Macquarie Campus
- ◯ Goff Street - Port Macquarie Campus
- ◯ Home Street - Port Macquarie Campus
- ◯ Lord Street - Port Macquarie Campus
- ◯ Findlay Avenue - Westport Campus
- ◯ Other (please specify)
- ◯ Mayworth Avenue - Westport Campus
- ◯ Widderson Street - Westport Campus
- ◯ Catherine Street - Westport Campus
- ◯ Waratah Street - Westport Campus
- ◯ Phillip Street - Westport Campus
- ◯ Queen Street - Westport Campus
- ◯ Hudson Avenue - Westport Campus
- ◯ I don't drive

26. Please indicate how likely it is that the following measures would encourage you to use an alternative mode of travel to the car or to encourage you to car share:

	Strongly Encourage	Might Encourage	Won't encourage
More frequent bus services	○	○	○
More direct bus services	○	○	○
Shorter bus journey times	○	○	○
Lower bus fares	○	○	○
A carpooling program	○	○	○
Preferential carpooling bays	○	○	○
Improved pedestrian routes to / from campus	○	○	○
Improved cycle routes to / from campus	○	○	○
Better cycle facilities at school (showers/ lockers/ changing facilities)	○	○	○

12 / 13 92%

Prev Next

27. Are there any transport initiatives you would like to see implemented?

13 / 13 100%

Prev Done

HASTINGS
SECONDARY COLLEGE
PORT MACQUARIE CAMPUS

Hasting Secondary College, Student Travel Survey Questionnaire

Privacy

Thank you for participating in our survey. Your feedback is important for the future development of the school.

All information provided in this survey is completely anonymous and there is no collection of any personal information or tracking.

1 / 12 8%

Next

1. What campus do you attend?

- ◯ Port Macquarie Campus
- ◯ Westport Campus

2 / 12 17%

Prev Next

2. What is the postcode of the suburb you live in?

3. What is your current school year?

- ◯ Year 7
- ◯ Year 8
- ◯ Year 9
- ◯ Year 10
- ◯ Year 11
- ◯ Year 12

4. Do you have any siblings that are attending Hastings Secondary College?

- ◯ Yes
- ◯ No

5. If you answered "Yes" to Question 3, what is their current school year? Select all that are applicable

- ☐ Year 7
- ☐ Year 8
- ☐ Year 9
- ☐ Year 10
- ☐ Year 11
- ☐ Year 12

6. On a normal school day, what is your usual arrival time at school?

- ◯ Before 6:15AM
- ◯ 6:15-6:30AM
- ◯ 6:30-6:45AM
- ◯ 6:45-7:00AM
- ◯ 7:00-7:15AM
- ◯ 7:15-7:30AM
- ◯ 7:30-7:45AM
- ◯ 7:45-8:00AM
- ◯ 8:00-8:15AM
- ◯ 8:15-8:30AM
- ◯ 8:30-8:45AM
- ◯ 8:45-9:00AM
- ◯ After 9:00AM

7. On a normal school day, what is your usual departure time from school?

- ◯ Before 1:00PM
- ◯ 1:00-1:15PM
- ◯ 1:15-1:30PM
- ◯ 1:30-1:45PM
- ◯ 1:45-2:00PM
- ◯ 2:00-2:15PM
- ◯ 2:15-2:30PM
- ◯ 2:30-2:45PM
- ◯ 2:45-3:00PM
- ◯ 3:00-3:15PM
- ◯ 3:15-3:30PM
- ◯ 3:30-3:45PM
- ◯ 3:45-4:00PM
- ◯ 4:00-4:15PM
- ◯ 4:15-4:30PM
- ◯ 4:30-4:45PM
- ◯ 4:45-5:00PM
- ◯ 5:00-5:15PM
- ◯ 5:15-5:30PM
- ◯ After 5:30PM

Prev Next

8. Do you participate in any co-curricular activity on school grounds?

- ☐ Before school
- ☐ After school care
- ☐ Neither

9. If you do participate in co-curricular activities, how frequently?

- ◯ 1 day a week
- ◯ 2 days a week
- ◯ 3 days a week
- ◯ 4 days a week
- ◯ 5 days a week
- ◯ Once every 2 weeks
- ◯ Monthly or less
- ◯ I don't participate in co-curricular activities

Prev Next

10. How do you travel **to** school?

- ◯ Car (driver)
- ◯ Car (passenger/dropped-off)
- ◯ Train
- ◯ STA Bus
- ◯ School Bus
- ◯ Other (please specify)
- ◯ Taxi / Uber
- ◯ Bicycle
- ◯ Scooter (non-motorised)
- ◯ Skateboard
- ◯ Walking

11. If your usual mode of travel is not available when travelling **to** school, what alternative mode would you use?

- ◯ Car (driver)
- ◯ Car (passenger/ Dropped-Off)
- ◯ Train
- ◯ STA Bus
- ◯ School Bus
- ◯ Other (please specify)
- ◯ Taxi / Uber
- ◯ Bicycle
- ◯ Scooter (non-motorised)
- ◯ Skateboard
- ◯ Walking

12. How do you travel **from** school?

- ◯ Car (driver)
- ◯ Car (passenger/dropped-off)
- ◯ Train
- ◯ STA Bus
- ◯ School Bus
- ◯ Other (please specify)
- ◯ Taxi / Uber
- ◯ Bicycle
- ◯ Scooter (non-motorised)
- ◯ Skateboard
- ◯ Walking

13. If your usual mode of travel is not available when travelling **from** school, what alternative mode would you use?

- ◯ Car (driver)
- ◯ Car (passenger/ Dropped-Off)
- ◯ Train
- ◯ STA Bus
- ◯ School Bus
- ◯ Other (please specify)
- ◯ Taxi / Uber
- ◯ Bicycle
- ◯ Scooter (non-motorised)
- ◯ Skateboard
- ◯ Walking

14. If you drive, where do you park?

- ◯ Pacific Drive carpark - Port Macquarie Campus
- ◯ Owen Street - Port Macquarie Campus
- ◯ Burrawan Street - Port Macquarie Campus
- ◯ Gordon Street - Port Macquarie Campus
- ◯ Goff Street - Port Macquarie Campus
- ◯ Home Street - Port Macquarie Campus
- ◯ Lord Street - Port Macquarie Campus
- ◯ Findlay Avenue - Westport Campus
- ◯ Mayworth Avenue - Westport Campus
- ◯ Widderson Street - Westport Campus
- ◯ Catherine Street - Westport Campus
- ◯ Waratah Street - Westport Campus
- ◯ Phillip Street - Westport Campus
- ◯ Queen Street - Westport Campus
- ◯ Hudson Avenue - Westport Campus
- ◯ I don't drive
- ◯ Other (please specify)

15. If you are dropped-off, where are you dropped off?

- ◯ Pacific Drive carpark - Port Macquarie Campus
- ◯ Owen Street - Port Macquarie Campus
- ◯ Burrawan Street - Port Macquarie Campus
- ◯ Gordon Street - Port Macquarie Campus
- ◯ Goff Street - Port Macquarie Campus
- ◯ Home Street - Port Macquarie Campus
- ◯ Lord Street - Port Macquarie Campus
- ◯ Findlay Avenue - Westport Campus
- ◯ Mayworth Avenue - Westport Campus
- ◯ Widderson Street - Westport Campus
- ◯ Catherine Street - Westport Campus
- ◯ Waratah Street - Westport Campus
- ◯ Phillip Street - Westport Campus
- ◯ Queen Street - Westport Campus
- ◯ Hudson Avenue - Westport Campus
- ◯ I don't get dropped off
- ◯ Other (please specify)

17. If you are picked-up, dropped-off, or are a student driver; how many additional students are normally in the vehicle with you?

- ◯ 0 (no other students)
- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4

18. Do you own any of the following? Select all that are applicable

- [ ] Bicycle
- [ ] Scooter
- [ ] Skateboard

8 / 12 67%

Prev Next

19. What is your approximate driving distance between your place of residence and school?

- ◯ Less than 2.3 km
- ◯ 2.3 – 2.9 km
- ◯ 2.9 - 5 km
- ◯ 5 – 15 km
- ◯ More than 15 km

20. How long does your journey normally take?

- ◯ Less than 15 mins
- ◯ 15 – 30 mins
- ◯ 30 – 45 mins
- ◯ 45 – 60 mins
- ◯ More than 1 hour

9 / 12 75%

Prev Next

21. Are you ever required to travel to the other campus during the school day?

- ◯ Yes
- ◯ No

22. How often do you travel to the other campus?

- ◯ >5 days a week
- ◯ 5 days a week
- ◯ 4 days a week
- ◯ 3 days a week
- ◯ 2 days a week
- ◯ 1 day per week
- ◯ Once every 2 weeks
- ◯ Monthly or less
- ◯ I don't travel to the other campus

23. If you answered "Yes" to Question 21, how do you travel to the other campus?

- ◯ Car (as driver)
- ◯ Car (as passenger)
- ◯ Bus
- ◯ Shuttle Bus
- ◯ Other (please specify)
- ◯ Taxi / Uber
- ◯ Bicycle / Scooter / Skateboard
- ◯ Walking
- ◯ I don't travel to the other campus

24. If you answered "Car (as driver)" to Question 23, where do you park?

- ◯ Pacific Drive carpark - Port Macquarie Campus
- ◯ Owen Street - Port Macquarie Campus
- ◯ Burrawan Street - Port Macquarie Campus
- ◯ Gordon Street - Port Macquarie Campus
- ◯ Goff Street - Port Macquarie Campus
- ◯ Home Street - Port Macquarie Campus
- ◯ Lord Street - Port Macquarie Campus
- ◯ Findlay Avenue - Westport Campus
- ◯ Other (please specify)
- ◯ Mayworth Avenue - Westport Campus
- ◯ Widderson Street - Westport Campus
- ◯ Catherine Street - Westport Campus
- ◯ Waratah Street - Westport Campus
- ◯ Phillip Street - Westport Campus
- ◯ Queen Street - Westport Campus
- ◯ Hudson Avenue - Westport Campus
- ◯ I don't drive

25. Please indicate how likely it is that the following measures would encourage you to use an alternative mode of travel to the car:

	Strongly Encourage	Might Encourage	Won't encourage
More frequent bus services	○	○	○
More direct bus services	○	○	○
Shorter bus journey times	○	○	○
Lower bus fares	○	○	○
Improved pedestrian routes to / from campus	○	○	○
Improved cycle routes to / from campus	○	○	○
Better cycle facilities at school (showers / lockers / changing facilities)	○	○	○
Organising cycling groups	○	○	○
Organising walking groups	○	○	○

Prev Next

26. Are there any transport initiatives you would like to see implemented?

Prev Done

Appendix D

SIDRA Modelling Results

MOVEMENT SUMMARY

Site: 102 [[Sc.2 PM] 2021 PCYC_Owen St x Burrawan St 1600-1700]

2021 Existing Configuration
2021 Baseline Traffic 1600-1700 + PCYC Traffic
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Owen Street (230m)												
1	L2	7	0.0	0.063	4.6	LOS A	0.3	2.1	0.04	0.26	0.04	46.2
2	T1	66	1.6	0.063	1.3	LOS A	0.3	2.1	0.04	0.26	0.04	42.5
3	R2	3	0.0	0.063	5.2	LOS A	0.3	2.1	0.04	0.26	0.04	47.5
Approach		77	1.4	0.063	1.8	NA	0.3	2.1	0.04	0.26	0.04	43.1
East: Burrawan Street (375m)												
4	L2	7	0.0	0.005	4.9	LOS A	0.0	0.1	0.21	0.49	0.21	44.0
5	T1	9	0.0	0.043	4.4	LOS A	0.1	1.0	0.32	0.55	0.32	43.8
6	R2	29	0.0	0.043	5.8	LOS A	0.1	1.0	0.32	0.55	0.32	41.3
Approach		46	0.0	0.043	5.4	LOS A	0.1	1.0	0.31	0.54	0.31	42.2
North: Owen Street (230m)												
7	L2	72	0.0	0.144	3.5	LOS A	0.7	5.0	0.05	0.19	0.05	43.4
8	T1	108	1.0	0.144	0.0	LOS A	0.7	5.0	0.05	0.19	0.05	43.5
9	R2	4	0.0	0.144	3.6	LOS A	0.7	5.0	0.05	0.19	0.05	41.6
Approach		184	0.6	0.144	1.5	NA	0.7	5.0	0.05	0.19	0.05	43.4
West: Burrawan Street (200m)												
10	L2	5	0.0	0.003	4.8	LOS A	0.0	0.1	0.16	0.49	0.16	39.0
11	T1	12	0.0	0.013	4.5	LOS A	0.0	0.3	0.33	0.49	0.33	44.5
12	R2	1	0.0	0.013	5.5	LOS A	0.0	0.3	0.33	0.49	0.33	42.5
Approach		18	0.0	0.013	4.6	LOS A	0.0	0.3	0.28	0.49	0.28	42.9
All Vehicles		325	0.6	0.144	2.3	NA	0.7	5.0	0.10	0.27	0.10	43.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [[Sc.2 PM] 2021 PCYC_Owen St x Gordon St 1600-1700]

2021 Existing Configuration
2021 Baseline Traffic 1600-1700 + PCYC Traffic
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Owen Street (230m)												
1	L2	67	1.6	0.084	3.5	LOS A	0.4	2.6	0.09	0.29	0.09	40.4
2	T1	41	0.0	0.084	0.1	LOS A	0.4	2.6	0.09	0.29	0.09	37.2
3u	U	1	0.0	0.084	5.1	LOS A	0.4	2.6	0.09	0.29	0.09	37.6
Approach		109	1.0	0.084	2.2	NA	0.4	2.6	0.09	0.29	0.09	39.2
North: Owen Street (125m)												
8	T1	66	1.6	0.083	0.1	LOS A	0.4	2.8	0.09	0.18	0.09	38.1
9	R2	42	0.0	0.083	3.7	LOS A	0.4	2.8	0.09	0.18	0.09	42.4
Approach		108	1.0	0.083	1.5	NA	0.4	2.8	0.09	0.18	0.09	39.6
West: Gordon Street (200m)												
10	L2	68	3.1	0.045	4.8	LOS A	0.2	1.3	0.16	0.50	0.16	38.7
12	R2	116	0.0	0.109	5.3	LOS A	0.4	2.6	0.28	0.54	0.28	39.3
12u	U	1	0.0	0.109	6.4	LOS A	0.4	2.6	0.28	0.54	0.28	41.7
Approach		185	1.1	0.109	5.1	LOS A	0.4	2.6	0.24	0.53	0.24	39.1
All Vehicles		403	1.0	0.109	3.4	NA	0.4	2.8	0.16	0.37	0.16	39.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 102 [[Sc.3a AM] 2031 Growth_Owen St x Burrawan St]

2021 Existing Configuration
2031 Baseline Traffic (2% Growth) + School Traffic
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Owen Street (230m)												
1	L2	13	0.0	0.220	4.7	LOS A	1.2	8.5	0.11	0.26	0.11	46.0
2	T1	235	0.0	0.220	1.4	LOS A	1.2	8.5	0.11	0.26	0.11	42.3
3	R2	16	0.0	0.220	5.3	LOS A	1.2	8.5	0.11	0.26	0.11	47.3
Approach		263	0.0	0.220	1.8	NA	1.2	8.5	0.11	0.26	0.11	42.8
East: Burrawan Street (375m)												
4	L2	19	0.0	0.013	5.0	LOS A	0.1	0.4	0.23	0.50	0.23	43.9
5	T1	24	4.3	0.104	6.1	LOS A	0.4	2.5	0.49	0.70	0.49	42.3
6	R2	45	2.3	0.104	7.9	LOS A	0.4	2.5	0.49	0.70	0.49	40.1
Approach		88	2.4	0.104	6.8	LOS A	0.4	2.5	0.44	0.66	0.44	41.4
North: Owen Street (230m)												
7	L2	55	1.9	0.160	3.7	LOS A	0.8	5.8	0.10	0.23	0.10	43.2
8	T1	103	0.0	0.160	0.1	LOS A	0.8	5.8	0.10	0.23	0.10	43.2
9	R2	34	34.4	0.160	5.1	LOS A	0.8	5.8	0.10	0.23	0.10	41.1
9u	U	1	0.0	0.160	6.6	LOS A	0.8	5.8	0.10	0.23	0.10	38.2
Approach		193	6.6	0.160	2.0	NA	0.8	5.8	0.10	0.23	0.10	42.8
West: Burrawan Street (200m)												
10	L2	25	4.2	0.020	5.5	LOS A	0.1	0.6	0.34	0.54	0.34	38.3
11	T1	14	7.7	0.022	6.1	LOS A	0.1	0.5	0.47	0.60	0.47	43.2
12	R2	2	0.0	0.022	7.2	LOS A	0.1	0.5	0.47	0.60	0.47	41.1
Approach		41	5.1	0.022	5.8	LOS A	0.1	0.6	0.39	0.56	0.39	40.2
All Vehicles		585	2.9	0.220	2.9	NA	1.2	8.5	0.17	0.33	0.17	42.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 101 [[Sc.3a AM] 2031 Growth_Owen St x Gordon St]

2021 Existing Configuration
2031 Baseline Traffic (2% Growth) + School Traffic
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Owen Street (230m)												
1	L2	201	3.1	0.217	3.5	LOS A	1.1	7.8	0.11	0.32	0.11	40.0
2	T1	83	0.0	0.217	0.2	LOS A	1.1	7.8	0.11	0.32	0.11	36.9
3u	U	1	100.0	0.217	5.9	LOS A	1.1	7.8	0.11	0.32	0.11	37.0
Approach		285	2.6	0.217	2.6	NA	1.1	7.8	0.11	0.32	0.11	39.1
North: Owen Street (125m)												
8	T1	44	4.8	0.064	0.1	LOS A	0.3	2.1	0.08	0.21	0.08	37.8
9	R2	34	0.0	0.064	4.3	LOS A	0.3	2.1	0.08	0.21	0.08	42.0
Approach		78	2.7	0.064	1.9	NA	0.3	2.1	0.08	0.21	0.08	39.4
West: Gordon Street (200m)												
10	L2	61	1.7	0.041	4.9	LOS A	0.2	1.2	0.20	0.50	0.20	38.5
12	R2	168	8.1	0.179	5.9	LOS A	0.6	4.8	0.36	0.60	0.36	38.9
12u	U	1	0.0	0.179	6.7	LOS A	0.6	4.8	0.36	0.60	0.36	41.3
Approach		231	6.4	0.179	5.7	LOS A	0.6	4.8	0.32	0.57	0.32	38.8
All Vehicles		594	4.1	0.217	3.7	NA	1.1	7.8	0.19	0.40	0.19	39.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 102 [[Sc.3a PM] 2031 Growth_Owen St x Burrawan St 1400-1500]

2021 Existing Configuration
2031 Baseline Traffic 1400-1500 (2% Growth) + School Traffic
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Owen Street (230m)												
1	L2	11	0.0	0.104	4.6	LOS A	0.5	3.6	0.06	0.31	0.06	45.5
2	T1	92	5.7	0.104	1.4	LOS A	0.5	3.6	0.06	0.31	0.06	41.9
3	R2	23	0.0	0.104	5.5	LOS A	0.5	3.6	0.06	0.31	0.06	47.0
Approach		125	4.2	0.104	2.4	NA	0.5	3.6	0.06	0.31	0.06	43.3
East: Burrawan Street (375m)												
4	L2	18	0.0	0.013	5.2	LOS A	0.1	0.4	0.29	0.51	0.29	43.7
5	T1	29	17.9	0.089	5.9	LOS A	0.3	2.3	0.45	0.65	0.45	42.7
6	R2	37	0.0	0.089	7.1	LOS A	0.3	2.3	0.45	0.65	0.45	40.6
Approach		84	6.3	0.089	6.2	LOS A	0.3	2.3	0.41	0.62	0.41	41.9
North: Owen Street (230m)												
7	L2	64	3.3	0.162	3.9	LOS A	0.8	6.0	0.08	0.22	0.08	43.3
8	T1	107	2.0	0.162	0.1	LOS A	0.8	6.0	0.08	0.22	0.08	43.4
9	R2	25	50.0	0.162	4.3	LOS A	0.8	6.0	0.08	0.22	0.08	41.1
Approach		197	8.6	0.162	1.9	NA	0.8	6.0	0.08	0.22	0.08	43.1
West: Burrawan Street (200m)												
10	L2	15	0.0	0.010	4.9	LOS A	0.0	0.3	0.21	0.49	0.21	38.9
11	T1	12	9.1	0.029	5.7	LOS A	0.1	0.7	0.40	0.58	0.40	43.4
12	R2	12	0.0	0.029	6.2	LOS A	0.1	0.7	0.40	0.58	0.40	41.4
Approach		38	2.8	0.029	5.5	LOS A	0.1	0.7	0.33	0.55	0.33	41.1
All Vehicles		444	6.4	0.162	3.2	NA	0.8	6.0	0.16	0.35	0.16	42.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [[Sc.3a PM] 2031 Growth_Owen St x Gordon St 1400-1500]

2021 Existing Configuration
2031 Baseline Traffic 1400-1500 (2% Growth) + School Traffic
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Owen Street (230m)												
1	L2	126	1.7	0.159	3.5	LOS A	0.8	5.4	0.10	0.31	0.10	40.1
2	T1	68	3.1	0.159	0.2	LOS A	0.8	5.4	0.10	0.31	0.10	36.9
3u	U	11	0.0	0.159	5.2	LOS A	0.8	5.4	0.10	0.31	0.10	37.4
Approach		205	2.1	0.159	2.5	NA	0.8	5.4	0.10	0.31	0.10	38.9
North: Owen Street (125m)												
8	T1	72	1.5	0.122	0.2	LOS A	0.6	4.2	0.11	0.26	0.11	37.5
9	R2	86	2.4	0.122	4.1	LOS A	0.6	4.2	0.11	0.26	0.11	41.5
Approach		158	2.0	0.122	2.3	NA	0.6	4.2	0.11	0.26	0.11	39.5
West: Gordon Street (200m)												
10	L2	92	2.3	0.062	4.9	LOS A	0.3	1.8	0.19	0.50	0.19	38.6
12	R2	133	11.1	0.149	6.2	LOS A	0.5	3.9	0.38	0.61	0.38	38.8
12u	U	1	0.0	0.149	6.7	LOS A	0.5	3.9	0.38	0.61	0.38	41.2
Approach		225	7.5	0.149	5.6	LOS A	0.5	3.9	0.30	0.57	0.30	38.7
All Vehicles		588	4.1	0.159	3.6	NA	0.8	5.4	0.18	0.40	0.18	39.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 102 [[Sc.3b PM] 2031 Growth_Owen St x Burrawan St 1600-1700]

2021 Existing Configuration
2031 Baseline Traffic 1600-1700 (2% Growth) + PCYC Traffic
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Owen Street (230m)												
1	L2	9	0.0	0.075	4.6	LOS A	0.4	2.5	0.04	0.27	0.04	46.2
2	T1	78	1.4	0.075	1.3	LOS A	0.4	2.5	0.04	0.27	0.04	42.5
3	R2	4	0.0	0.075	5.3	LOS A	0.4	2.5	0.04	0.27	0.04	47.5
Approach		92	1.1	0.075	1.8	NA	0.4	2.5	0.04	0.27	0.04	43.1
East: Burrawan Street (375m)												
4	L2	9	0.0	0.007	5.0	LOS A	0.0	0.2	0.23	0.49	0.23	43.9
5	T1	12	0.0	0.053	4.6	LOS A	0.2	1.3	0.36	0.57	0.36	43.7
6	R2	35	0.0	0.053	6.1	LOS A	0.2	1.3	0.36	0.57	0.36	41.2
Approach		56	0.0	0.053	5.6	LOS A	0.2	1.3	0.33	0.56	0.33	42.1
North: Owen Street (230m)												
7	L2	84	0.0	0.170	3.5	LOS A	0.9	6.0	0.06	0.19	0.06	43.4
8	T1	128	0.8	0.170	0.0	LOS A	0.9	6.0	0.06	0.19	0.06	43.5
9	R2	4	0.0	0.170	3.7	LOS A	0.9	6.0	0.06	0.19	0.06	41.6
Approach		217	0.5	0.170	1.4	NA	0.9	6.0	0.06	0.19	0.06	43.4
West: Burrawan Street (200m)												
10	L2	6	0.0	0.004	4.8	LOS A	0.0	0.1	0.17	0.49	0.17	39.0
11	T1	14	0.0	0.015	4.7	LOS A	0.1	0.4	0.36	0.51	0.36	44.4
12	R2	1	0.0	0.015	5.8	LOS A	0.1	0.4	0.36	0.51	0.36	42.4
Approach		21	0.0	0.015	4.8	LOS A	0.1	0.4	0.31	0.51	0.31	42.8
All Vehicles		385	0.5	0.170	2.3	NA	0.9	6.0	0.11	0.28	0.11	43.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [[Sc.3b PM] 2031 Growth_Owen St x Gordon St 1600-1700]

2021 Existing Configuration
2031 Baseline Traffic 1600-1700 (2% Growth) + PCYC Traffic
Site Category: (None)
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Owen Street (230m)												
1	L2	79	1.3	0.099	3.5	LOS A	0.4	3.1	0.09	0.29	0.09	40.4
2	T1	48	0.0	0.099	0.1	LOS A	0.4	3.1	0.09	0.29	0.09	37.2
3u	U	1	0.0	0.099	5.2	LOS A	0.4	3.1	0.09	0.29	0.09	37.6
Approach		128	0.8	0.099	2.2	NA	0.4	3.1	0.09	0.29	0.09	39.2
North: Owen Street (125m)												
8	T1	78	1.4	0.100	0.1	LOS A	0.5	3.4	0.09	0.19	0.09	38.1
9	R2	52	0.0	0.100	3.8	LOS A	0.5	3.4	0.09	0.19	0.09	42.4
Approach		129	0.8	0.100	1.6	NA	0.5	3.4	0.09	0.19	0.09	39.6
West: Gordon Street (200m)												
10	L2	83	2.5	0.055	4.8	LOS A	0.2	1.6	0.17	0.50	0.17	38.7
12	R2	137	0.0	0.132	5.5	LOS A	0.5	3.2	0.31	0.56	0.31	39.1
12u	U	1	0.0	0.132	6.5	LOS A	0.5	3.2	0.31	0.56	0.31	41.6
Approach		221	1.0	0.132	5.2	LOS A	0.5	3.2	0.26	0.54	0.26	39.0
All Vehicles		479	0.9	0.132	3.5	NA	0.5	3.4	0.17	0.38	0.17	39.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site 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: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Appendix E

Travel Access Guide

Transport Access Guide

Hastings Secondary College is committed to providing students with safe, easy, and sustainable ways of getting to and from School. The options below include walking, cycling, catching public transport, or by car.

Walking to School

Students living around Port Macquarie could walk to school in 15 minutes or less, saving the need for drop-off and pick-up by car.

The map over the page shows safe and accessible walking trails for your child to travel to and from home and Hastings Secondary College. Footpaths are available on both sides of Owen Street between Burrawan Street and William Street. A footpath is provided on the north of Burrawan Street between Owen Street and Lord Street.

Pedestrian refuges are located at Owen Street to the north of the intersection with Gordon Street, midblock between Gordon Street and Burrawan Street, and north of the intersection with Burrawan Street.

Investigations into additional footpath facilities are currently being undertaken.

Cycling to School

Families who live approximately 2km from the school, have the options of cycling to school. Children under 16 and adult riders accompanying and supervising them may ride on the footpath unless there are signs specifically prohibiting cycling.

To facilitate children cycling to school, road shoulder paths are provided along Lord Street, Gordon Street, and Pacific Drive. Shared paths are also provided along Kooloonbung Creek, Hollingworth Street, and Pacific Drive between Windmill Street and Elizabeth Street.

Children can then secure their bicycle at the school's bicycle parking spaces.

Public Transport

Your child may be eligible for free public transport to and from home and the school.

Get your child access to free public transport by registering with Transport for NSW at https://apps.transport.nsw.gov.au/ssts/#/

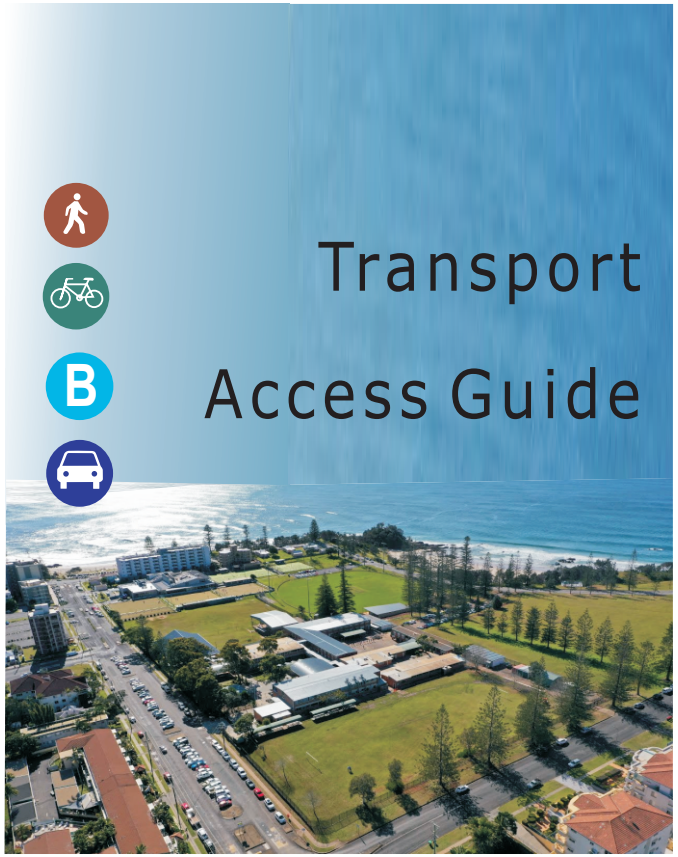
There are numerous bus routes available to students that are in walking distance of the school and within the broader regional area. These routes are detailed at https://www.busways.com.au/sites/default/files/school_timetables/Hastings_Secondary_College_-_Port_Macquarie_High_School_Campus.pdf

Car

Carpooling is a great way to share the daily school drop off. Parents and carers are encouraged to get in touch with each other to make carpooling arrangements that suit them.

Students can be dropped off or picked up from school at the school's Kiss and Ride zone. This is located on Owen Street.

asongroup
info@asongroup.com.au | +61 2 9083 6601 | Suite 502, Level 5, 1 Castlereagh Street, Sydney NSW 2000



Transport Access Guide

How to travel to and from

Hastings Secondary College
Port Macquarie Campus

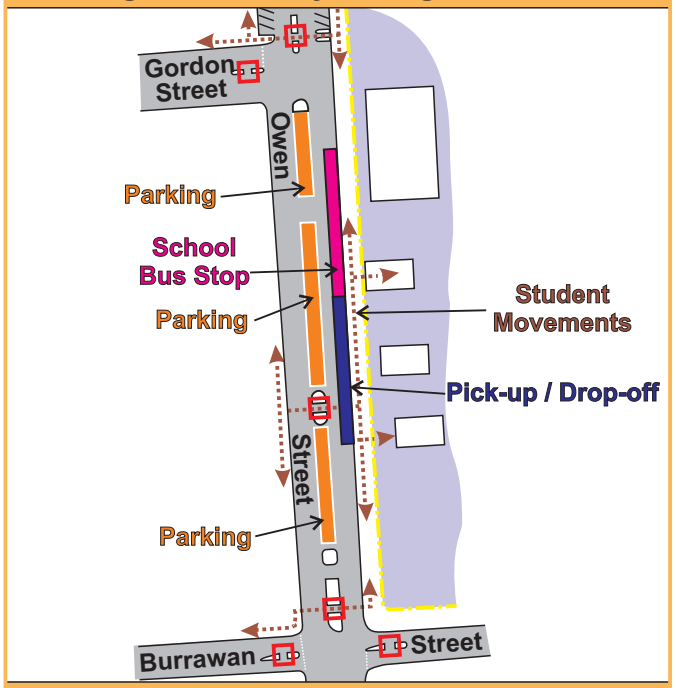
16 Owen St
Port Macquarie 2444

HASTINGS
SECONDARY COLLEGE

April 2021

Transport Access Guide: Hastings Secondary College

Hastings Secondary College Detail



Public Transport

Port Macquarie to:

- 332 Lighthouse Plaza via Shelly Beach
- 334 Lighthouse Plaza via Lord Street/Kennedy Drive
- 334K Kendall via Laurieton

Public Bus Stops | School Bus Stop

Useful Links:

Google Maps | https://maps.google.com/

School Student Transport Scheme | www.apps.transport.nsw.gov.au/ssts/#/

Safe Travel | www.education.nsw.gov.au/parents-and-carers/wellbeing/health-and-safety/safe-travel

Drop-off and Pick-up Initiative | www.safety.transport.nsw.gov.au/stayingsafe/schools/dropoff_pickup.html

Active Transport

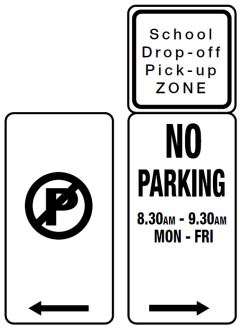
- Existing Shared Path
- Existing Cycling Road Shoulder
- Proposed Shared Path
- Proposed Cycling Road Shoulder
- Planned Footpaths
- School Access
- Pedestrian Refuge
- Crossing
- 5 Approximate walking distance

Appendix F

TfNSW School Drop-off and Pick-up: Organising the Initiative

School Drop-off and Pick-up
Organising the initiative

What is a school Drop-off and Pick-up zone?



Some schools and councils use No Parking areas, signed as Drop-off and Pick-up, Kiss and Ride, or Kiss and Drop zones.

These areas are always on the school side of the road and are designated by “No Parking” signs.

They provide a safe spot for parents and carers to drop off and collect their children from school by car.

Drivers may drop off and pick up passengers legally within a two-minute timeframe.

What is a school Drop-off and Pick-up initiative?

This strategy allows the efficient use of the Drop-off and Pick-up area during busy times at the beginning and end of the school day.

A driver pulls into the kerb and remains in control of the vehicle while an identified supervising adult from the school community assists students to exit or enter the vehicle.

Kids and Traffic
Safety Door sticker
RTA45091021K

What must be planned?

The school community needs to:

- Consult with the local council to consider whether the traffic environment outside the school would support the initiative without disrupting traffic flow.
- Consider existing school access points and school entry and exit procedures.
- Confirm school community support for the initiative.
- Fully understand all legal issues regarding liability in respect of students and volunteers.

How to implement the initiative

The school community needs to:

- Consider relevant insurance policies and child protection guidelines.
- Determine the operating times of the initiative.
- Develop a system for matching the child to the correct vehicle at pick-up times.
- Develop a roster of those adults approved by the school community to supervise students as they exit or enter a vehicle.
- Communicate details of the initiative’s operation and safety procedures to drivers, students, supervising adults and the general school community.
- Keeping our kids safe around schools has information for principals, parents and members of the school community. Order Safety Door stickers from our online catalogue.

roadsafety.transport.nsw.gov.au

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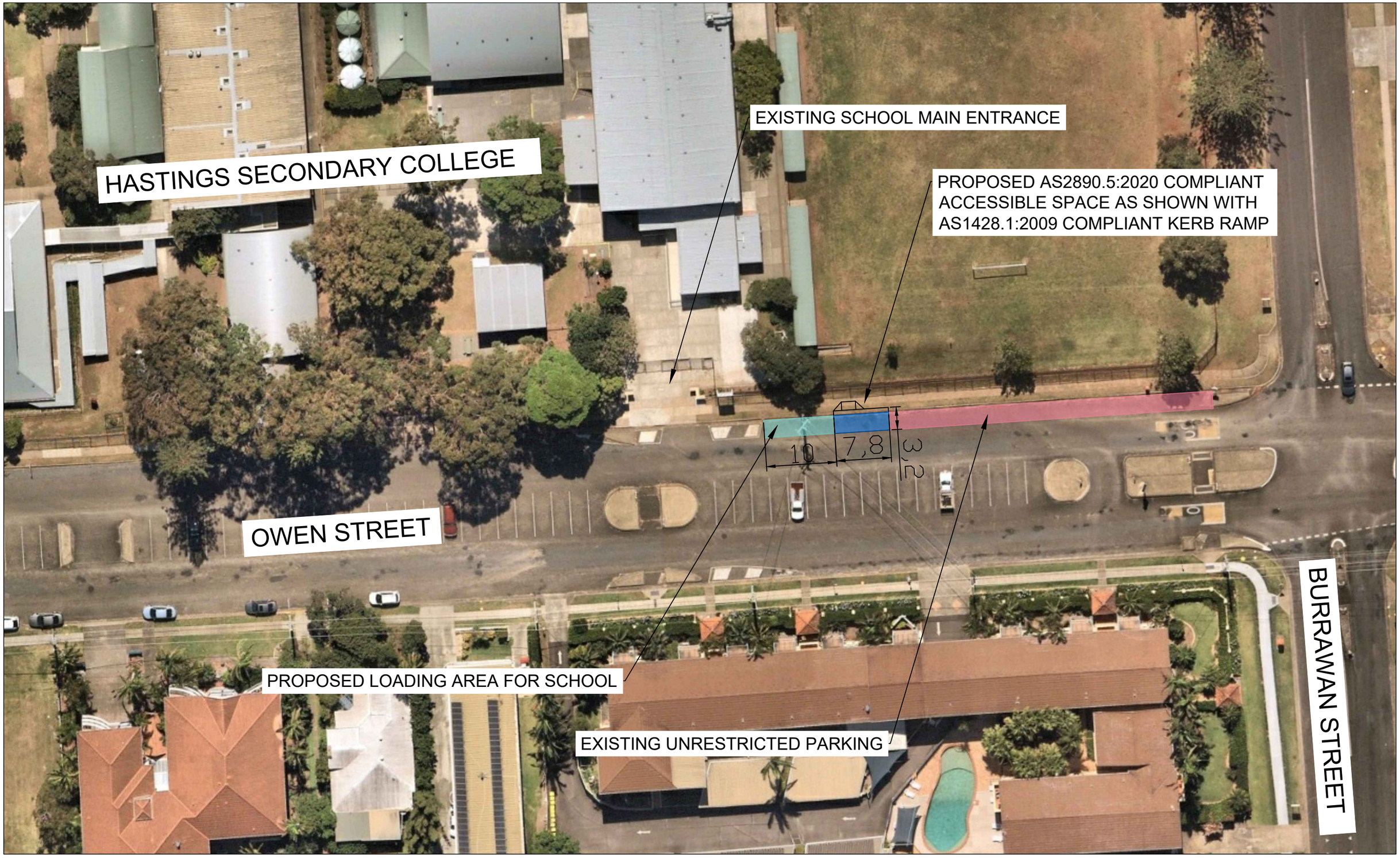
NSW GOVERNMENT | Transport for NSW
Centre for Road Safety

Appendix G

Servicing Areas



Notes:

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Document Info:

Drawn by: Wendy Zheng

File name: AG1600-01-v1.dwg

Client:

CURRIE & BROWN

Project:

1600

HASTINGS SECONDARY COLLEGE

Drawing Title:

OWEN STREET PARKING

CONCEPT PLAN

Date:

25-Feb-21

Scale @ A3:

1:500

Drawing Number:

01

asongroup

Suite 5.02, Level 5, 1 Castlereagh St
Sydney NSW 2000

info@asongroup.com.au

6 April 2021

Schools Infrastructure NSW
Level 8, 259 George Street,
Sydney NSW 2000

Attention: David Wheeler, Project Director

RE: Hastings Secondary College, Port Macquarie Campus – Waste Management Area CDC2 Transport Assessment

Dear David,

This letter has been prepared to address compliance of the traffic access and circulation arrangements to/from the waste compound at the Hastings Secondary College, Port Macquarie Campus, forming part of CDC2.

The following Education State Environmental Planning Policy (ESEPP) requirements are applicable to this assessment:

10 Waste

(1) Appendices C and D, for the design of openings of waste storage areas and loading bay turning circles for waste removal vehicles

The architectural drawing prepared for the loading area has been assessed, and our assessment demonstrated that access and circulation arrangements meet the design requirements. Specifically:

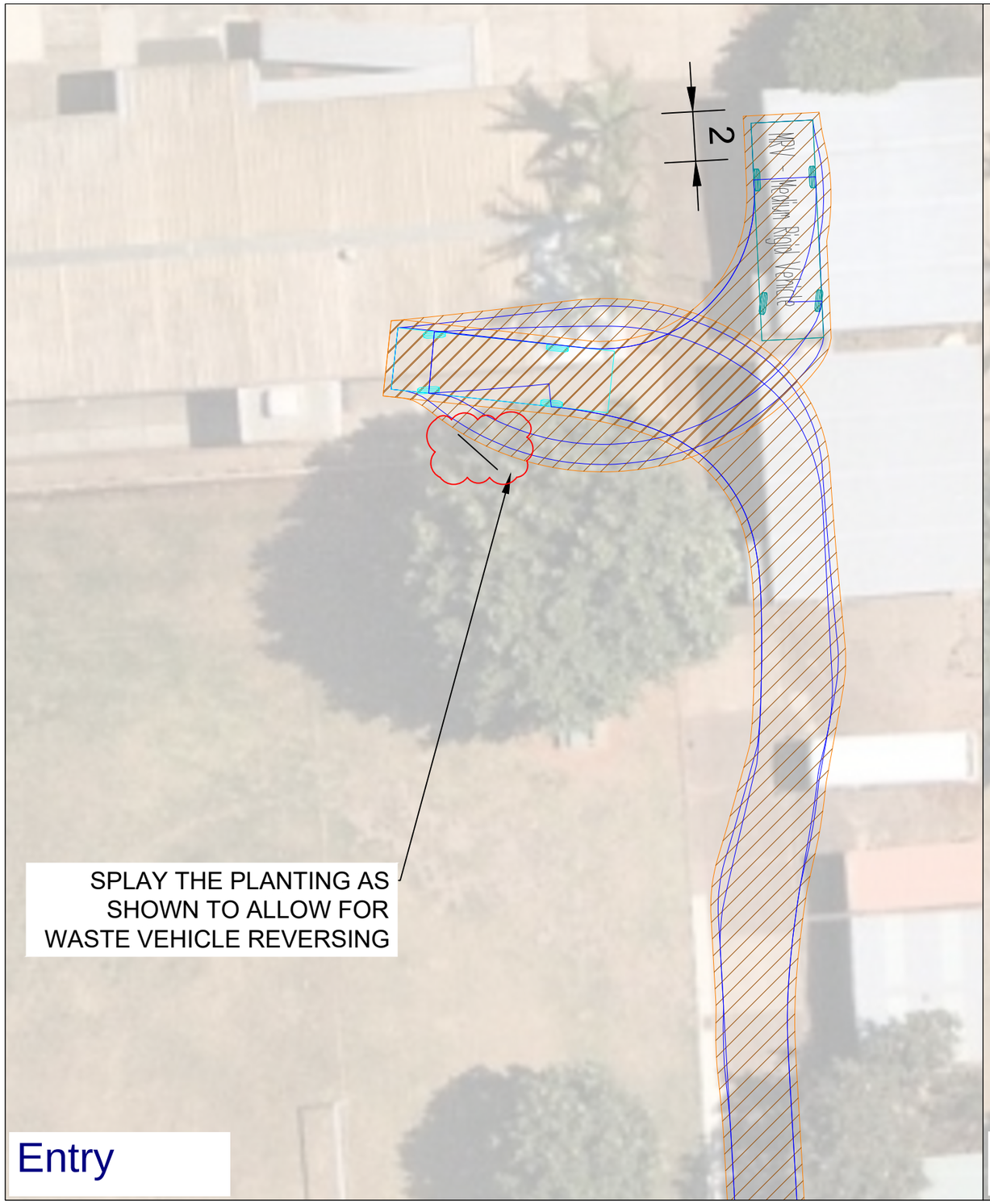
- Design Vehicle: 8.8m Medium Rigid Vehicle, meeting the requirements outlined in Appendix C and D of the *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (NSW EPA, 2012)*. Specifically, based on the size of bins specified, the design vehicle is a rear-lift vehicle that falls within the dimensions of an 8.8m Medium Rigid Vehicle as defined in AS2890.2:2018.
- Speed Setting for Vehicle Swept Paths: 10km/h
- Clearance: 300mm as per AS2890.2:2018
- The site access is an existing access driveway to / from Burrawan Street, measured at approximately 3.92 metres wide.
- The design vehicle can enter the site in a forwards direction, then perform a left turn into the access driveway running along the south side of the building, followed by a reverse manoeuvre. The swept path assessment has been prepared in accordance with Appendix D of the *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities (NSW EPA, 2012),* and AS2890.2:2018 and demonstrated that vehicles can access the hard stand located to the south of the bin enclosure in a satisfactory manner, subject to adjustments to landscaping area as identified in the attached assessment.
- The path of travel between Burrawan Street, the hardstand utilised for vehicle manoeuvre and the area where waste collection activities occur are open areas with no known head height restrictions.

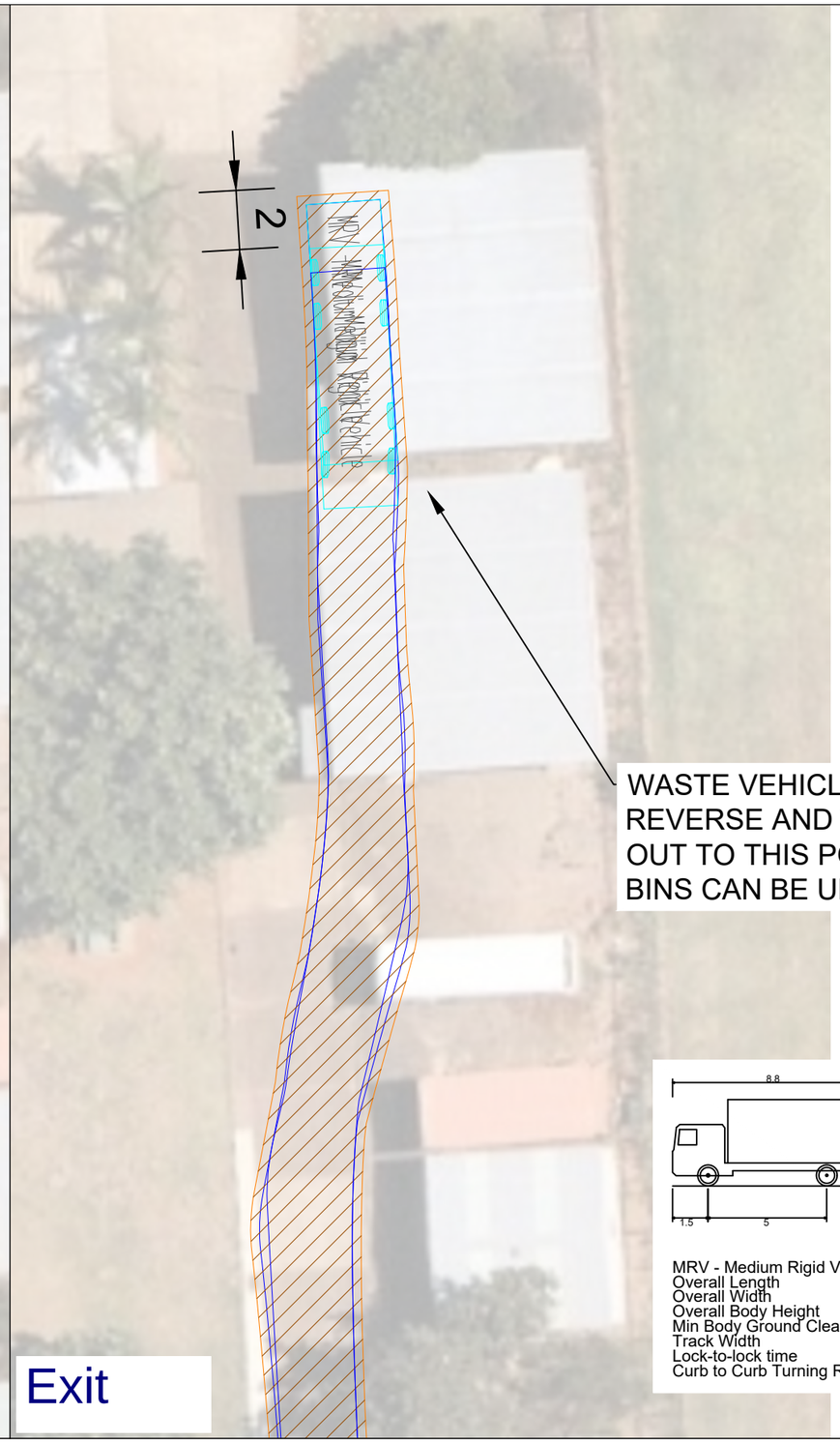
- The layout is considered appropriate on the basis that waste collection is to occur only before or after school bell time (8am – 2:15pm), and the loading area is not accessible to students during waste collection times.

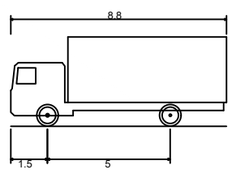
Should you require any further information or clarification, please do not hesitate to contact the undersigned.

Yours sincerely,

Principal Lead – Traffic Management & Operations – Ason Group
Email: dora.choi@asongroup.com.au







MRV - Medium Rigid Vehicle	
Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	3.633m
Min Body Ground Clearance	0.428m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.000m

Notes:

This drawing is provided for information purposes only and should not be used for construction.

Note that this plan was provided by fjmt on 31.03.2021, swept paths were undertaken at 10km/hr with 300mm clearances

Document Info:
Drawn by: Wendy Zheng
File name: AG1600-04-v2.dwg

Client:
CURRIE & BROWN

Project:
1600
HASTINGS SECONDARY COLLEGE

Drawing Title:
PORT MACQUARIE CAMPUS WASTE COLLECTION
SWEPT PATH ASSESSMENT

Date:
01.04.21

Scale @ A3:
1:200

Drawing Number:
AG01

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Appendix H

Drivers Code of Conduct

- Driver Code of Conduct -

Drivers Code of Conduct

Safe Driving Policy for Hastings Secondary College School – Port Macquarie Campus.

Objectives of the Drivers Code of conduct

- Minimise conflict with other road users;
- Minimise road traffic noise; and
- Ensure minibus and bus drivers use specified routes.

Code of Conduct

All vehicle operators accessing the site must:

- Take reasonable care for his or her own personal health and safety.
- Not adversely, by way of actions or otherwise, impact on the health and safety of other persons.
- Notify their employer if they are not fit for duty prior to commencing their shift.
- Obey all applicable road rules and laws at all times.
- In the event an emergency vehicle behind your vehicle, pull over and allow the emergency vehicle to pass immediately.
- Obey the applicable driving hours in accordance with legislation and take all reasonable steps to manage their fatigue and not drive with high levels of drowsiness.
- Obey all on-site signposted speed limits and comply with directions of traffic control supervisors in relation to movements in and around temporary or fixed work areas.
- Ensure all loads are safely restrained, as necessary.
- Operate their vehicles in a safe and professional manner, with consideration for all other road users.
- Hold a current Australian State or Territory issued driver's licence.
- Notify their employer or operator immediately should the status or conditions of their driver's license change in any way.
- Comply with other applicable workplace policies, including a zero tolerance of driving while under the influence of alcohol and/or illicit drugs.

- Not use mobile phones when driving a vehicle or operating equipment. If the use of a mobile device is required, the driver shall pull over in a safe and legal location prior to the use of any mobile device.
- Advise management of any situations in which you know, or think may, present a threat to workplace health and safety.
- Drive according to prevailing conditions (such as during inclement weather) and reduce speed, if necessary.
- Have necessary identification documentation at hand and ready to present to security staff on entry and departure from the site, as necessary, to avoid unnecessary delays to other vehicles.

Crash or incident Procedure

- Stop your vehicle as close to it as possible to the scene, making sure you are not hindering traffic. Ensure your own safety first, then help any injured people and seek assistance immediately if required.
- Ensure the following information is noted:
  - Details of the other vehicles and registration numbers
  - Names and addresses of the other vehicle drivers
  - Names and addresses of witnesses
  - Insurers details
- Give the following information to the involved parties:
  - Name, address, and company details
- If the damaged vehicle is not occupied, provide a note with your contact details for the owner to contact the company.
- Ensure that the police are contacted should the following circumstances occur:
  - If there is a disagreement over the cause of the crash.
  - If there are injuries.
  - If you damage property other than your own.
- As soon as reasonably practical, report all details gathered to your manager.