



ADCO Constructions Pty Ltd

Marsden Park New Primary School Traffic Assessment Final OTAMP

December 2020

Table of contents

1.	Introduction	1
1.1	Overview	1
1.2	Background Data.....	2
1.3	Subject Site	2
1.4	Signage and Line Marking	5
1.5	Road Network	5
1.6	Teacher Supervision.....	6
2.	OTAMP Conditions	8
2.1	Evidence of Consultation	8
2.2	Access	8
2.3	Active Transport	12
2.4	Parking.....	17
2.5	Pick-up and Drop-off.....	21
2.6	Additional Comments	22
2.7	Temporary School Access Assessment.....	23
3.	Summary	28

Table index

Table 1-1 OTAMP Conditions (D16)	1
Table 3-1 OTAMP Conditions (D16)	34

Figure index

Figure 1-1 Subject site location	3
Figure 1-2 Marsden Park New Primary School Site Development Plan	4
Figure 1-3 Marsden Park New Primary School Signage and Line Marking Plan	5
Figure 1-4 Typical collector road cross-section	6
Figure 1-5 Typical local street cross-section	6
Figure 2-1 Pedestrian and Vehicle Access Points.....	10
Figure 2-2 Swept Path Analysis (11 m truck)	11
Figure 2-3 School Site Road Network.....	13
Figure 2-4 Shared path on Northbourne Drive, frontage to the school	14
Figure 2-5 Shared path on Bolwarra Drive, frontage to the school	14
Figure 2-6 Pedestrian Footpaths on Beale Street	15

Figure 2-7 Pedestrian Footpaths on Enmore Street	15
Figure 2-8 Pedestrian Storage Areas prior Roundabouts	16
Figure 2-9 Bolwarra Drive Signage	17
Figure 2-10 Marsden New Primary School	18
Figure 2-11 Swept Path Analysis (8.8 m MRV)	20
Figure 2-12 Temporary School Master Plan.....	24
Figure 2-13 Beale Street Signage and Line Marking Plan	26

Appendices

Appendix A – Mark Lucas CV

Appendix B – Stakeholder Engagement

Appendix C – School Brochures

Appendix D – OTAMP Schedule of Responses

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The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

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1. Introduction

1.1 Overview

GHD have been commissioned by ADCO Constructions Pty Ltd to provide Transport Planning and Traffic Engineering advice to support the development of Marsden Park New Primary School.

In October 2020, GHD completed the Marsden Park Traffic Assessment (TA). The TA addressed a series of questions/comments raised by Blacktown City Council and TfNSW.

As part of a review of the TA and the proposed school's layout/master plan (June 2020), the Department of Planning, Industry and Environment (DPIE) have issued a request for an Operational Transport and Access Management Plan (OTAMP) for Marsden Park New Primary School. The key conditions of the OTAMP, as detailed in Condition D16 of the Development Consent, namely:

Prior to the commencement of operation, an OTAMP is to be prepared by a suitably qualified person, in consultation with Council and TfNSW, and submitted to the satisfaction of the Planning Secretary.

The D16 specifications (as quoted) are listed in Table 1-1.

Table 1-1 OTAMP Conditions (D16)

Condition	
a	<i>Detailed pedestrian analysis including the identification of safe route options – to identify the need for management measures such as staggered school start and finish times to ensure students and staff are able to access and leave the site in a safe and efficient manner during school start and finish.</i>
b	<i>The location of all car parking spaces on the school campuses and their allocation (i.e. staff, visitor, accessible, emergency, etc.).</i>
c	<i>The location and operational management procedures of the pick-up and drop-off parking located within Northbourne Drive, including staff management/traffic controller arrangements;</i>
d	<i>The location and operational management procedures for the pick-up and drop-off of students by buses and coaches on Bolwarra Drive including staff management/traffic controller arrangements;</i>
e	<i>Delivery and services vehicle and bus access and management arrangements.</i>
f	<i>Management of approved access arrangements.</i>
g	<i>Potential traffic impacts on surrounding road networks and mitigation measures to minimise impacts, including measures to mitigate queuing impacts associated with vehicles accessing pick-up and drop-off parking in Northbourne Drive;</i>
i	<i>Car parking arrangements and management associated with the proposed use of school facilities by community members.</i>
j	<i>Monitoring and review program.</i>

The scope of work of this report is to prepare an OTAMP that addresses Condition D16 of the Development Consent.

The CV of the author of this OTAMP (Mark Lucas) is included in Appendix A.

It is noted that as part of the OTAMP scope of works, a GHD staff member undertook an additional site visit on 6th November 2020.

1.2 Background Data

Marsden Park New Primary School is proposed to be built in two stages, as follows:

- Construction Stage 1 (Temporary School): a temporary school facility will be constructed within the western portion of the development site located on the future sports grounds. This temporary school facility is expected to accommodate a maximum of 500 students and is expected to commence operation in January 2021
- Construction Stage 2 (Construction of Permanent School Facility): ¹a permanent school facility consisting of a consolidated two-storey courtyard building with the capacity to accommodate a maximum of 1,000 students and 50 staff. The permanent school is expected to commence operation in July 2021. Following this the temporary school is planned to be dismantled.

The permanent school will provide:

- A canteen
- Library
- Multi-purpose hall
- Office and administration space
- Out of school hours care accommodation
- Multi-purpose sporting facilities and outdoor play spaces
- A Special Support Unit (SSU) for children with disabilities and learning difficulties

1.3 Subject Site

The proposed Marsden Park New Primary School site is located within the Marsden Park Precinct approximately 40 km to the north-west of the Sydney CBD.

The site is located adjacent to the west of Northbourne Drive and the south of Bolwarra Drive and approximately 400 m to the west of Richmond Road, as shown Figure 1-1 (image dated 3rd August 2020).

The site also has frontage along Beale Street and Enmore Street to the west and south respectively. The site is located within the Blacktown City Council Local Government Area (LGA).

¹ It is noted that the OTAMP conditions relate to the permanent school facilities.



Figure 1-1 Subject site location

Source: Nearmap image modified by GHD

Based on discussions with Council, the key roads in proximity to the school, including Northbourne Drive and Bolwarra Drive, have been recently constructed and handed over to Council (as displayed in Figure 1-1).

The site plan for Marsden Park New Primary School, including the location of the car park, the bus, pick-up/drop-off facility on Bolwarra Drive, the vehicle pick-up/drop-off facility on Northbourne Drive and the proposed raised pedestrian crossings (wombat crossings) are displayed in Figure 1-2.

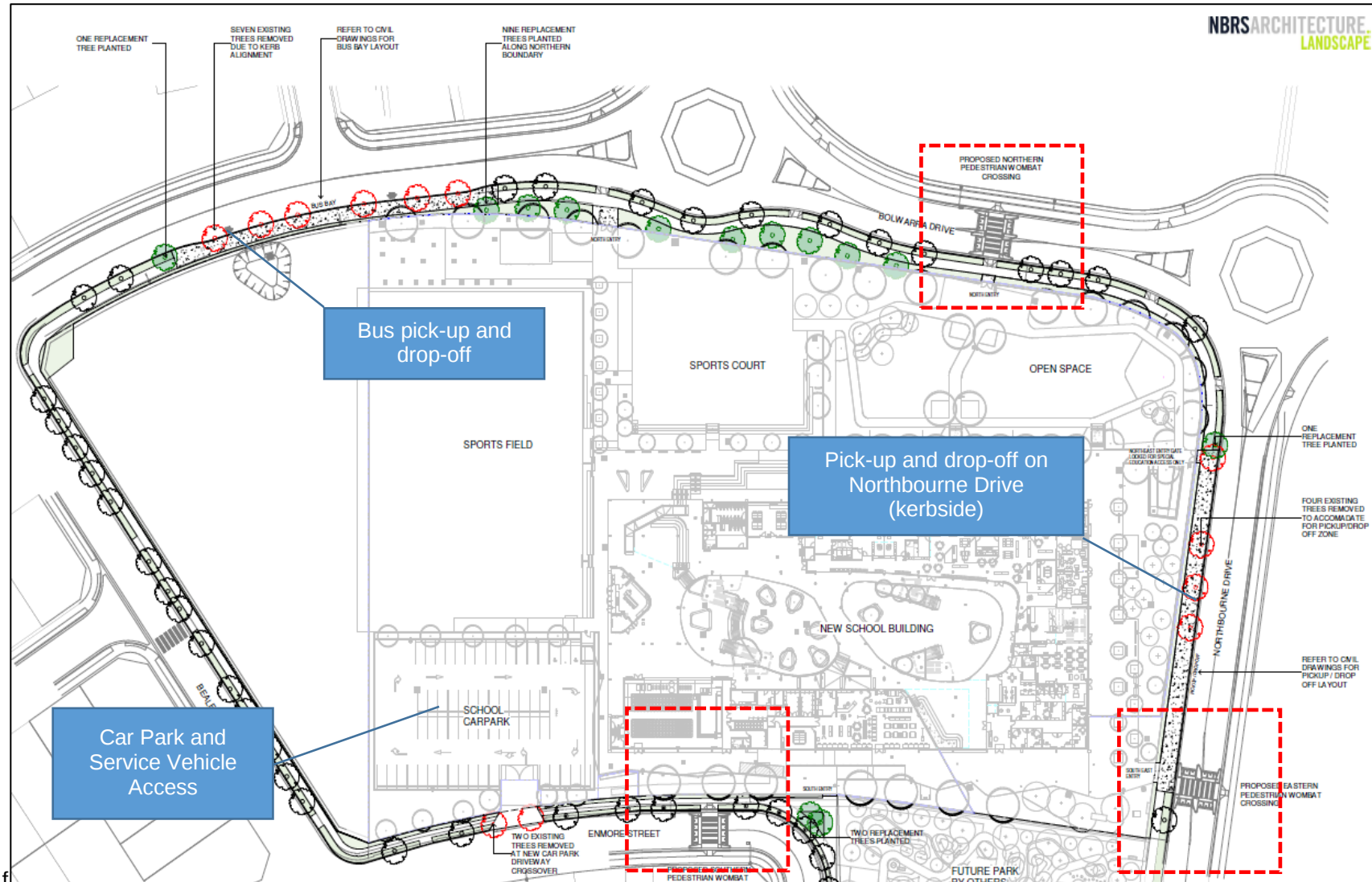


Figure 1-2 Marsden Park New Primary School Site Development Plan

Source: Prepared by NBRS Architects

1.4 Signage and Line Marking

The signage and line marking plan for Marsden Park New Primary School is displayed in Figure 1-3.

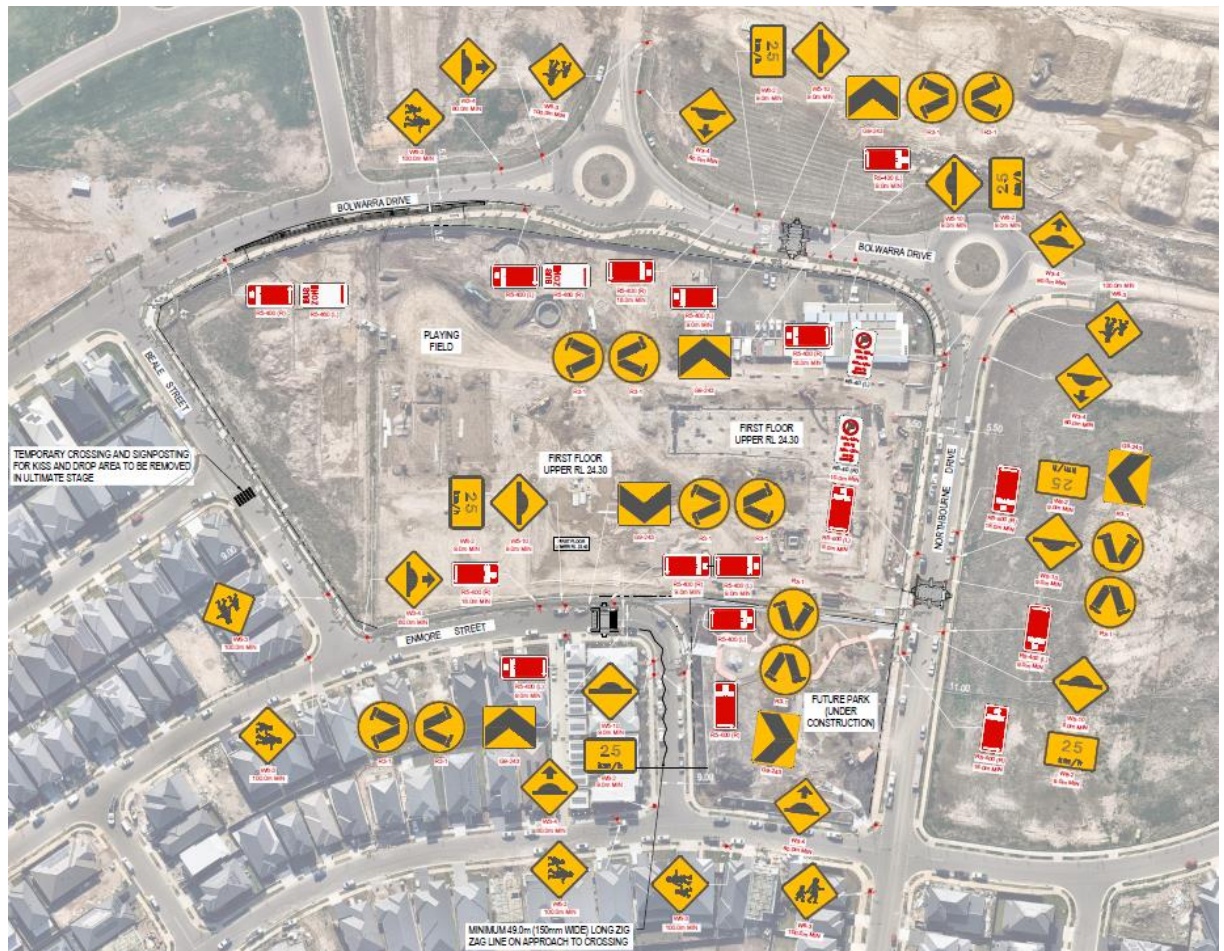


Figure 1-3 Marsden Park New Primary School Signage and Line Marking Plan

Source: Prepared by Henry and Hymas

As displayed in Figure 1-3:

- The proposed wombat crossings on Bolwarra Drive, Northbourne Drive and Enmore Street will be supported by the appropriate signage.
- Bus zone signage will be provided on Bolwarra Drive.
- The proposed pick-up/drop-off zone on Northbourne Drive will be supported by No Parking signage (8:00 am – 9:30 am and 2:30 pm – 4:00 pm Monday to Friday).

1.5 Road Network

In accordance with the information in the Marsden Park Precinct Development Control Plan (DCP) and the Blacktown City Council Growth Centre Precincts DCP, Bolwarra Drive and Northbourne Drive are designated as collector roads, and Beale Street and Enmore Street are designated as local streets. It is noted that:

- Collector roads have been designed to accommodate higher volumes of traffic, bus services, on-street parking and the provision of a 2.5 m wide shared path for bicycle riders and pedestrians and a 1.5 m footpath (see Figure 1-4).

- Local roads have been designed to slow residential traffic in order to give priority to pedestrians and cyclists. On-street parking is provided on both sides of the local road (see Figure 1-5).

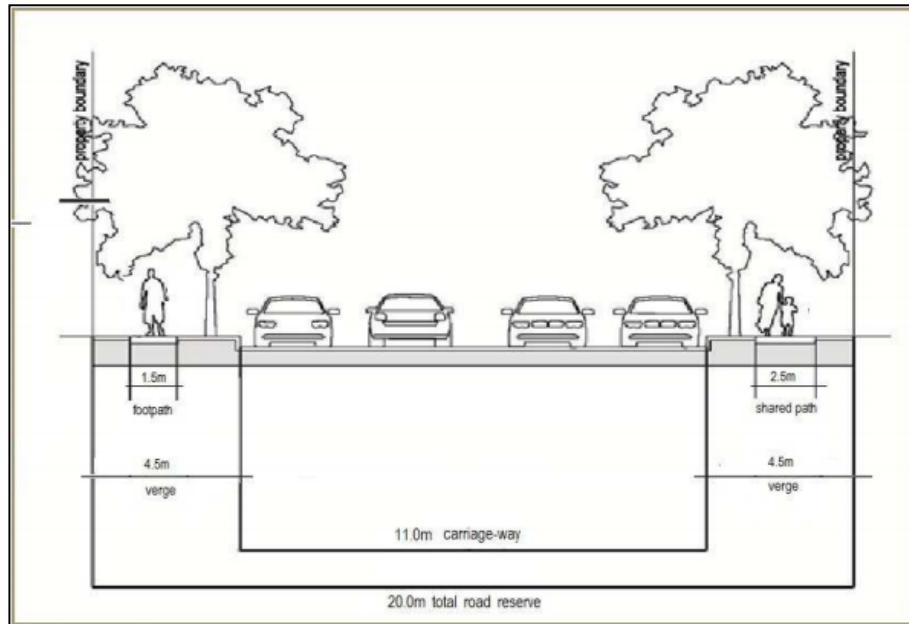


Figure 1-4 Typical collector road cross-section

Source: Blacktown City Council Precincts Development Control Plan

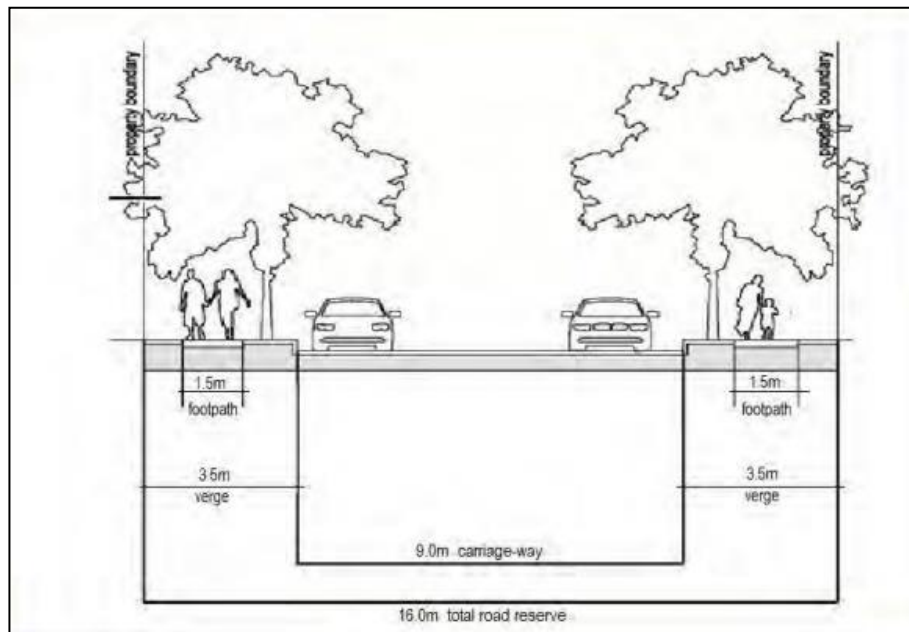


Figure 1-5 Typical local street cross-section

Source: Blacktown City Council Precincts Development Control Plan

1.6 Teacher Supervision

The teaching staff will have a duty of care to students leaving the school in afternoon periods.

The school have committed to providing two teachers to manage each of the pick-up/drop-off zones on Bolwarra Drive (buses) and Northbourne Drive (cars), during peak periods of afternoon activity.

While staff members will not be responsible for directing traffic, they will ensure that students are corralled in the appropriate waiting space and supported to leave the school safely, either onto a bus or to the car of their parents/guardians.

Teacher supervision will be required for a period of approximately 30 minutes, subsequent to the end of the school period.



2. OTAMP Conditions

This section responds to the OTAMP conditions, which are identified in Table 1-1.

2.1 Evidence of Consultation

In the preparation of this OTAMP, the following communications have been made with the following key stakeholders (in November 2020):

- Transport for New South Wales (TfNSW) ²
- Blacktown City Council (Council).

Based on discussions with Council it was noted that:

- The road network in proximity to the school is currently being expanded.
- These roads will include the active transport facilities detailed in the DCP.
- Other than the wombat crossings proposed adjacent to the school, no further upgrades to active transport infrastructure are currently being planned.

On the 1st December 2020, GHD received an email from Blacktown City Council, indicating that they had reviewed the OTAMP and had no further comments or feedback.

TfNSW indicated that they will review potential school bus services to Marsden Park New Primary School in accordance with the geomatic layout and connectivity of the road network within the Marsden Park Precinct.

On the 4th December 2020, GHD received an email from TfNSW indicating that they had reviewed the OTAMP and found it to be acceptable.

Emails of the consultation with the key stakeholders are included in Appendix B.

2.2 Access

Management of approved access arrangements

Delivery and services vehicle and bus access and management arrangements.

The location and operational management procedures for the pick-up and drop-off of students by buses and coaches on Bolwarra Drive, including staff management/traffic controller arrangements.

2.2.1 Proposed Access

A summary of the proposed access arrangements for Marsden Park New Primary School is as follows:

- The main pedestrian access will be provided along Northbourne Drive, with additional pedestrian access points provided on Bolwarra Drive and Enmore Street.
- Access to the parking area (teachers and SSU parents) will be provided on Enmore Street.

² It is noted that Roads and Maritime Services merged with TfNSW in December 2019

- Waste collection will occur via Enmore Street. Collection vehicles will be required to manoeuvre within the car park to access the waste containers.
- Emergency services vehicles will access the school from Bolwarra Drive or via the school car park.

Additional pedestrian access gates are proposed:

- Adjacent to the north of the vehicle pick-up and drop-off zone on Northbourne Drive.
- Adjacent to the east of the bus pick-up and drop-off zone on Bolwarra Drive.

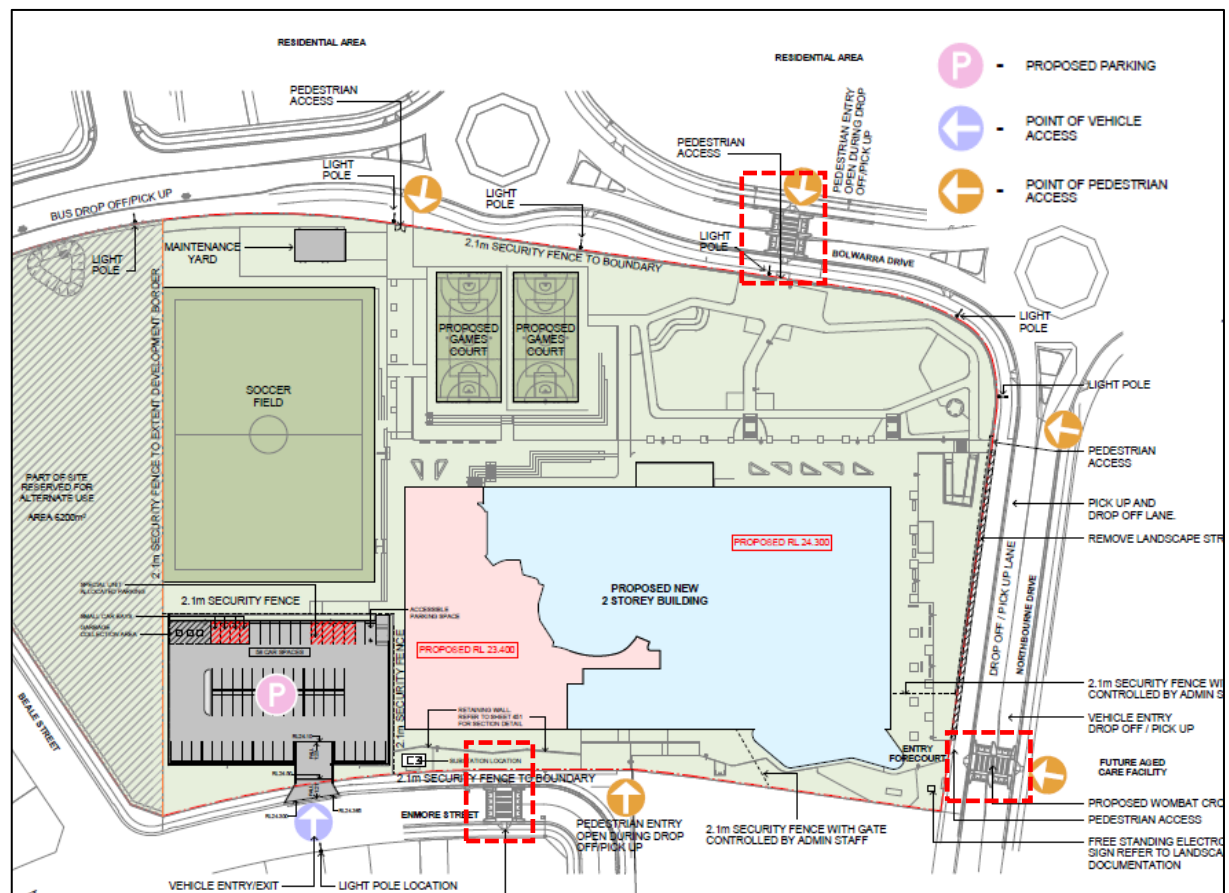
The proposed access points for Marsden Park New Primary School are displayed in Figure 2-1.

Additional access gates are proposed:

- Adjacent to the north of the vehicle pick-up and drop-off zone on Northbourne Drive
- Adjacent to the east of the bus pick-up and drop-off zone on Bolwarra Drive.

These access gates will:

- Enable parents dropping of their children of on Northbourne Drive to watch them enter the school.
- Support safe and efficient access/egress to and from the school by students using buses.





Memorandum

Figure 2-1 Pedestrian and Vehicle Access Points

Source: Prepared by NBRS

2.2.2 Access Control

It is currently proposed that the two access gates adjacent to the pick-up/drop-off zones on Northbourne Drive and Bolwarra Drive will be closed outside peak periods of school activity to encourage visitors to utilise the main pedestrian access points.

Entry to the teachers' car park and waste collection area will be controlled by a card reader/intercom. An induction loop will be constructed within the car park, so the gate automatically opens for outbound vehicles.

2.2.3 Service Vehicle and Bus Access

Service Vehicles

As stated previously, waste collection is proposed within the school's car park.

Based on the information provided by School Infrastructure New South Wales (SINSW), a private company will undertake waste collection at Marsden Park New Primary School. Private companies typically provide a range of bespoke collection vehicles.

The smallest waste collection vehicle used by the Council is 11 m in length.

To be conservative and to enable the future collection of waste by Council (although this is unlikely to be required), it has been assumed that an 11 m front loading waste collection vehicle will be used at the school. A swept path analysis, shown in Figure 2-2, indicates that the waste collection vehicle will need to cross a small number of the parking spaces to access and egress the school.

Waste collection times will be managed so that waste will only be collected when the car park is not in use, outside periods of school activity (at night or very early in the morning), to minimise any potential interaction between collection vehicles and students, their parents, guardians and teachers.

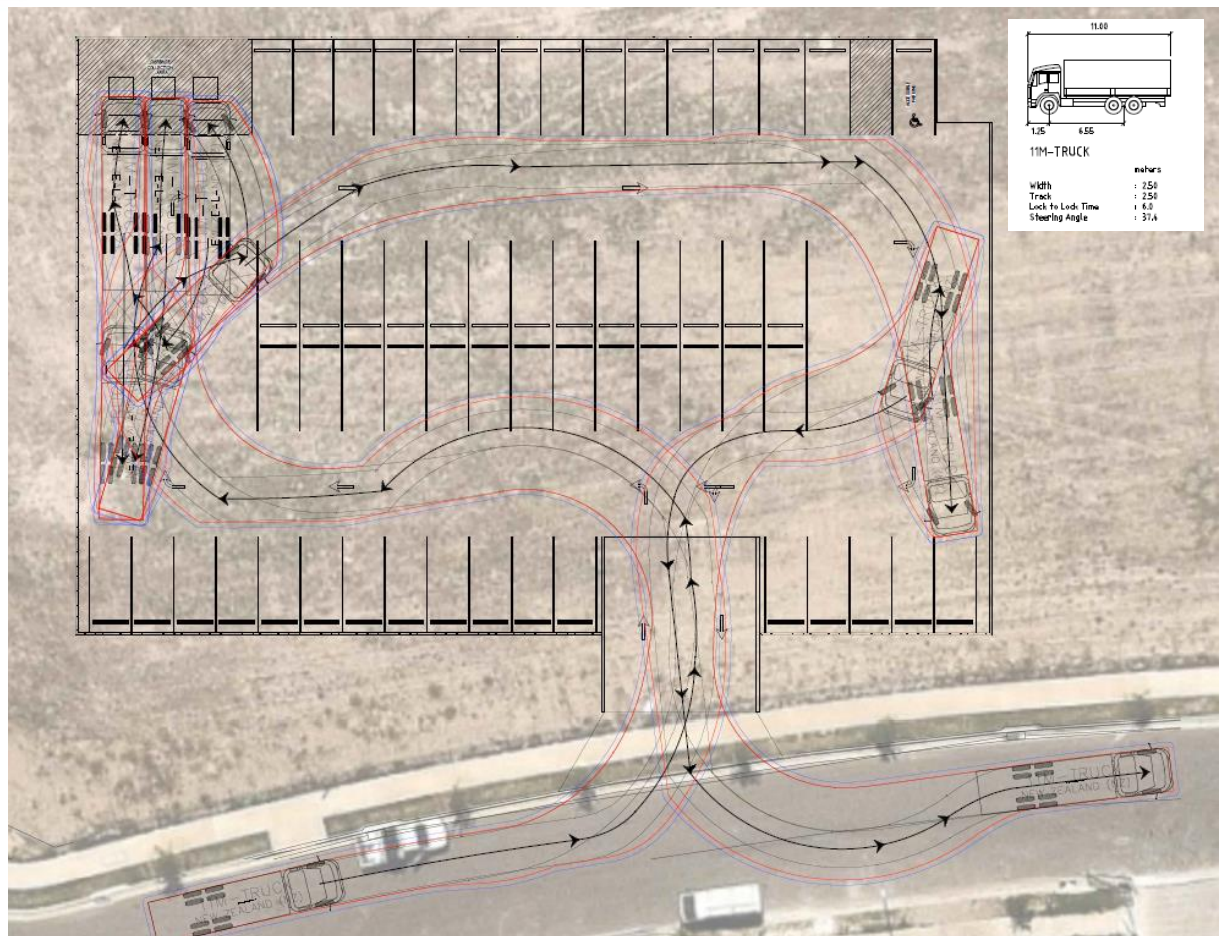


Figure 2-2 Swept Path Analysis (11 m truck)

Source: Prepared by NBRS Architects and modified by GHD

Other service vehicle activities would be associated with canteen deliveries, school supplies and maintenance vehicles. These deliveries would be undertaken by light vehicles, i.e. vans, which would only park for a short period (i.e. the time required to unload their goods). These vehicles could potentially park:

- Within the waste collection area (accessed via the car park).
- Within the vehicle pick-up/drop-off facility (outside periods of peak school activity).
- On-street.

These light vehicle service deliveries can be adequately be accommodated within the above locations. Where possible any delivery of supplies will occur outside peak periods of school traffic activity.

Buses

It is proposed to provide a bus pick-up and drop-off zone (bus zone) to the north of the school on Bolwarra Avenue.



Memorandum

The bus zone on Bolwarra Drive is proposed to be 55 m in length which will enable the storage up to two buses, which will be able to operate independently of each other.

The proposed (one metre) indented pick-up/drop-off bus bay at Bolwarra Drive will also occasionally be used by buses for school excursions. These buses would typically use the pick-up/drop-off facility during off-peak periods only (i.e. during school hours) which would minimise any potential queuing impacts with before and after school pick-up/drop-off periods.

As the school is not currently operational, it is currently unknown what management arrangements will be applied to bus zone on Bolwarra Drive.

It is noted however, that based on GHD's extensive experience in planning for educational facilities, primary schools typically:

- Identify students required to catch the bus.
- Coral these students in proximity to the bus zone in afternoon periods.
- Call out buses as they arrive.
- Support students, so they embark on their designated buses.

As described in Section 1.6, two teachers will manage the operation of the bus zone on Bolwarra Drive, in the afternoon during peak periods of activity (for approximately half an hour).

Further, the OTAMP will be updated to include the details of the operational management/procedures at the bus zone on Bolwarra Drive (once confirmed), when the school becomes operational and this information is available.

The school gate adjacent located adjacent to the bus stop on Bolwarra Drive will support the efficient management of students accessing/egressing the school via public transport.

The NSW Government Road Safety Brochure (see Appendix C) identifies measures parents can adopt to facilitate the safety of their children taking the bus to school. These include:

- Meet children at the bus stop, never on the opposite side of the road.
- Wait for children at least one step back from the kerb.
- If required to cross the road, wait until the bus has departed and then use a safe place to cross.

2.3 Active Transport

Detailed pedestrian analysis including the identification of safe route options – to identify the need for management measures such as staggered school start and finish times to ensure students and staff are able to access and leave the site in a safe and efficient manner during school start and finish.

2.3.1 Existing Facilities

A Nearmap image (2nd October 2020) of the Marsden Park New Primary School subject site is displayed in Figure 2-3.



Figure 2-3 School Site Road Network

Source: Nearmap image modified by GHD

Figure 2-3 indicates that in accordance with the DCP road hierarchy (see Figure 1-4 and Figure 1-5):

- Shared paths have been constructed on the western side of Northbourne Drive (see Figure 2-4) and the southern side of Bolwarra Drive (see Figure 2-5). The shared paths are supported by signage and logos, indicating they are available for use by pedestrians and cyclists.
- Footpaths have been constructed on the eastern side of Northbourne Drive and both sides of Beale Street (see Figure 2-6) and Enmore Street (see Figure 2-7).

Additionally, pedestrian storage areas have been constructed on each leg of the two roundabouts adjacent to the school site on Bolwarra Drive and Northbourne Drive (see Figure 2-8).



Figure 2-4 Shared path on Northbourne Drive, frontage to the school



Figure 2-5 Shared path on Bolwarra Drive, frontage to the school



Figure 2-6 Pedestrian Footpaths on Beale Street



Figure 2-7 Pedestrian Footpaths on Enmore Street



Figure 2-8 Pedestrian Storage Areas prior Roundabouts

2.3.2 Proposed School Facilities

In accordance with discussions with Council, it is proposed to provide wombat crossings on Bolwarra Drive, Northbourne Drive and Enmore Street at each of the school's main access points (see Figure 2-1). These raised crossings will provide priority for pedestrians over vehicles, and also act as a traffic management device, slowing vehicles down in proximity to the school.

It is further noted that:

- Each of these crossings will be illuminated at night in accordance with Aust AS 1158.4 - Part 4: Lighting of pedestrian crossings.
- Signage will be placed on roads adjoining the school informing drivers of the presence of the raised pedestrian crossing and recommended speed of 25 km/h.
- In accordance with the Technical Direction (TDT 2002/12c), Stopping and Parking Restrictions at Intersections and Crossings, to support visibility, No Stopping signage will be implemented 20 m prior and 10 m after the wombat crossings.

An example of the signage that will be used to support the operation of the wombat crossings adjacent to Marsden Park New Primary School is displayed in Figure 2-9.



Figure 2-9 Bolwarra Drive Signage

Source: Prepared by Henry and Hymas

The wombat crossings, lighting and signage will:

- Support the safe and efficient movement of students, teachers and guardians accessing and egressing the school.
- Improve the safety and permeability for the general public within Marden Park.

Based on discussion with SINSW, it is understood that there are currently no plans to introduce staggered start-and-finish times at Marsden Park New Primary School. However, staggered times will be considered (if required) following the completion of the school.

It is also noted that before and after school care (which is proposed at Marden Park New Primary School) and other activities such as band and sports, typically support a staggering of pick-up/drop-off activity, reducing traffic impacts during peak periods of school activity.

The NSW Government Road Safety Brochure (see Appendix C) identifies measures parents can adopt to facilitate the safety of their children walking and cycling to school. These include:

- Holding children hands near schools
- Meeting children at the school gates
- Planning trips to school to use the available pedestrian infrastructure
- Reminding children to stop, look, listen and think prior to crossing a road
- Enforce children to wear helmets
- Encourage children to ride off-road away from vehicles and driveways

2.4 Parking

The location of all car parking spaces on the school campuses and their allocation (i.e. staff, visitor, accessible, emergency, etc.).

Car parking arrangements and management associated with the proposed use of school facilities by community members.

2.4.1 Car Parking

The proposed car park will provide 58 parking spaces, with two parking spaces for the mobility impaired, this includes:

- 54 parking spaces for teachers/staff.
- Four spaces for parents with children at the SSU.

As the school is expected to employ up to 50 staff, should all staff drive to the school, they will be able to park within the school grounds, minimising potential impacts on nearby on-street parking facilities.

The car park has been designed to comply with Australian Standards AS 2890.1-2004 Parking facilities and AS2890.2-2002 Off-street commercial vehicle facilities.

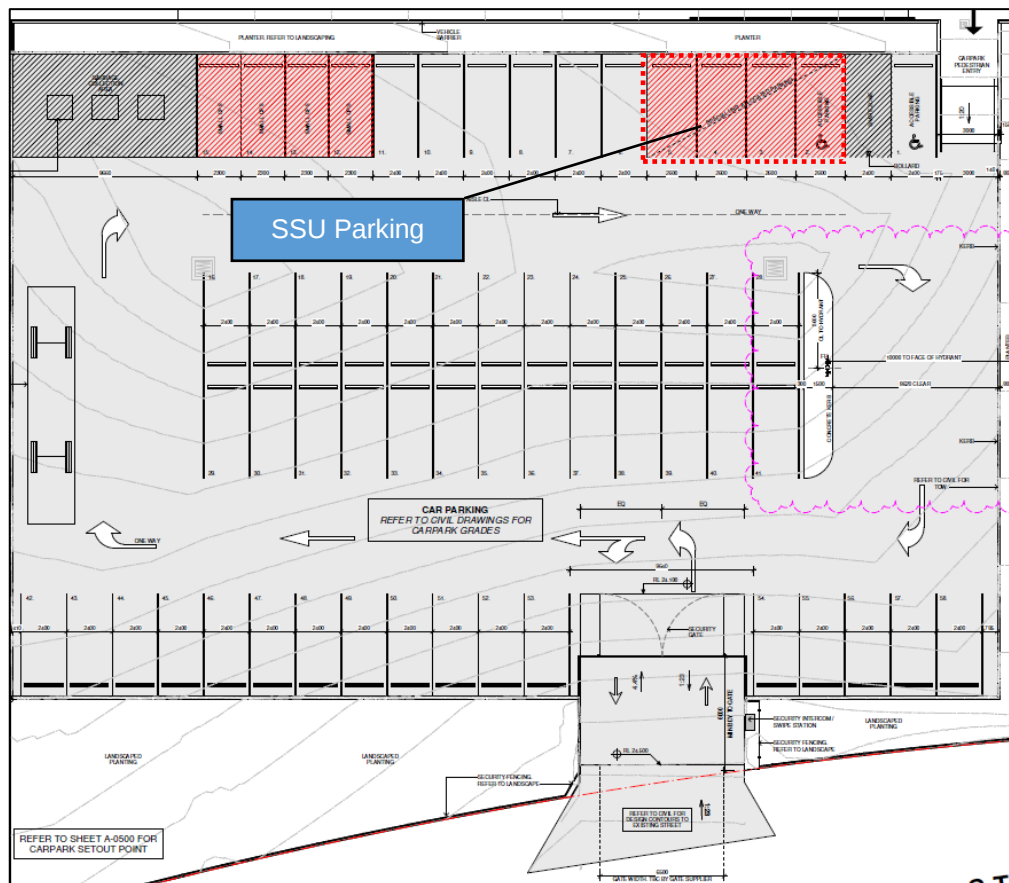


Figure 2-10 Marsden New Primary School

Source: Prepared by NBRS Architects and modified by GHD



Memorandum

Parents/guardians with children at the SSU will also be allowed to use the car park to pick-up and drop-off their children. Typically, it is expected that teachers will arrive at the car park before these parents and leave after them.

A total of four bays will be provided for the SSU. Based upon discussions with SINSW, approximately 12 children will need to utilise these parking bays. The SSU bays would need to turnover three times in an hour (on average every 20 minutes) to accommodate this parking activity.

While the provision of four spaces is expected to be typically sufficient, if a parent seeks to pick-up/drop-off a child while the allocated SSU bays are full, they will be able to temporarily park in the car park's circulation aisle. These procedures have been discussed and agreed with SINSW and Council.

As stated previously, access to the car park will be controlled by swipe card (or similar). Only teachers, SSU parents and waste collection vehicles will be allowed to use the car park, there will be no "community" access to the car park.

Visitors will typically be expected to park on the road network in proximity to the school site. It is noted that all the roads in proximity to the school (in accordance with DCP specifications) will provide on-street parking. It is further noted that visitors will be expected to:

- Park for relatively short periods of time
- Access the school outside periods of peak activity

2.4.2 Emergency Vehicles

The NSW Government's *Fire safety guideline – Access for fire brigade vehicles* specifies that when undertaking swept paths for general fire trucks, an Australian Standard Medium Rigid Vehicle MRV should be used.

A swept path analysis showing an 8.8 m MRV circulating through the proposed car park is displayed in Figure 2-11.

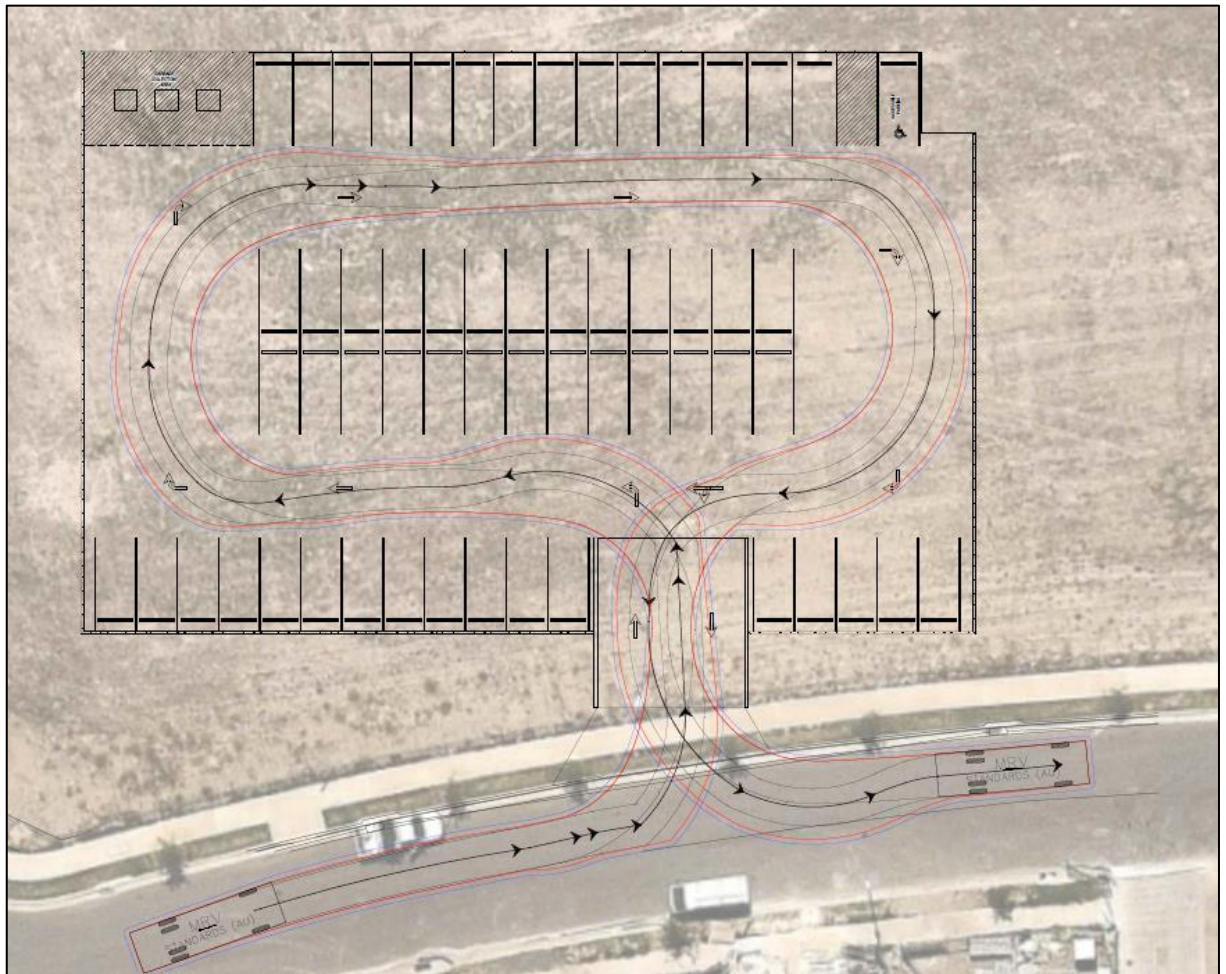


Figure 2-11 Swept Path Analysis (8.8 m MRV)

Source: Prepared by NBRS Architects and modified by GHD

Figure 2-11 indicates that the MRV can circulate within the available aisles and therefore could access the car park when vehicles are parked in it.

2.4.3 Bike Parking

Green Star – Design & As Built v1.2 specifies that bicycle parking for non-residential developments should be provided for 7.5 percent of regular occupants. Based on 40 teachers and ten administration staff, four bicycle spaces or two hoops should be provided.

The Green Star Guide also specifies that for regular occupants working in a building, end of trip facilities such as showers and lockers are required. End of trip facilities do not need to be provided for non-staff, such as students.

Based on 40 teachers and ten administration staff, two showers and four lockers are required.

The Marsden Park New Primary School will provide two hoops for teachers (separate to students), two showers and a minimum of four lockers, which complies with Green Star specifications.



Memorandum

2.5 Pick-up and Drop-off

The location and operational management procedures of the pick-up and drop-off parking located within Northbourne Drive, including staff management/traffic controller arrangements.

Potential traffic impacts on surrounding road networks and mitigation measures to minimise impacts, including measures to mitigate queuing impacts associated with vehicles accessing pick-up and drop-off parking in Northbourne Drive.

2.5.1 Northbourne Drive

The focus for the vehicle pick-up/drop-off facility for Marsden Park New Primary School is proposed on the western side of Northbourne Drive, located to the east of the school and is approximately 70 m in length. In accordance with the instruction from the Council, the pick-up/drop-off facility will be kerbside.

As displayed in the signage and line marking plan (see Figure 1-3), the pick-up and drop-off zone will be designated as a “No Parking (8:00 am – 9:30 am and 2:30 pm – 4:00 pm)”. As vehicles are not permitted to park for more than two minutes, and drivers must remain within three metres of their vehicle, this will facilitate turnover and efficiency of operation during pick-up and drop-off periods as vehicles should be left unattended and dwell times are minimised.

2.5.2 Northbourne Drive Pick-up/Drop-off Zone Operation

Parents will be encouraged to use the designated pick-up/drop-off facility at the front of the school on Northbourne Drive. For safety reasons (in accordance with its proposed collector road functionality), parents travelling in a southbound direction will be discouraged from dropping their children off on the eastern side of Northbourne Drive (opposite the school).

The provision of roundabouts near the school will enable legal U-turn manoeuvres to access/egress the designated facility.

To minimise impacts on local streets, parents will be discouraged from dropping their children off on Beale Street or Enmore Street. This will be done via newsletter, emails etc. requesting parents use the designated facility on Northbourne Drive.³

The functional capacity of the proposed pick-up and drop-off zone will be dependent on a management plan for this facility, which would be developed by the school. There are a number of key activities teachers/staff and parents can do to facilitate the efficiency of pick-up/drop-off activity including:

- Designating the mode of transport a child will take i.e. walking/cycling, buses or cars.
- Corraling children after school into designated areas in proximity to the pick-up/drop-off facilities to reduce waiting times.

³ It is noted that another consultancy is preparing a Green Travel Plan for Marsden Park New Primary School to discourage single occupancy vehicle trips and encourage uses of sustainable modes of transport.



Memorandum

- Communicating details of the initiative's operation and safety procedures to drivers, students, supervising adults and the general school community.
- Designating pick-up times, with parents/guardians/carers not to arrive before this period.
- Staggering the pick-up/drop-off times between grades.

As described in Section 1.6, two teachers will manage the operation of the pick-up/drop-off zone on Northbourne Drive, in the afternoon during peak periods of activity (for approximately half an hour).

Some councils have produced brochures identifying measures parents and teachers can facilitate the safety and efficiency parking and pick-up/drop-off facility. An example prepared by the City of Ryde and Hornsby Shire is provided in Appendix C. It includes the details of the fine and loss of demerit points associated with disobeying signage/controls in proximity to schools.

A similar brochure will be prepared and distributed to parents/guardians with children at Marsden Park New Primary School.

The provision of this information and the potential supervision of teachers/approved adults will assist in minimising potential traffic impacts on Northbourne Drive associated with pick-up/drop-off activity.

It is also noted that the length of the pick-up/drop-off facility on Northbourne Drive has been maximised to support additional capacity.

The NSW Government Road Safety Brochure (see Appendix C) identifies measures parents can do facilitate the safe operation of pick-up/drop-off facilities

- Ensuring children are fastened in the correct car seat for their ages
- Adhere to the 40 km/h speed limit
- Give way to pedestrian at all times
- Park legally and do not undertake dangerous maneuvers i.e.-turns and three-point turns
- Drop and pick-up children as the designated facilities
- Encourage children to exit/enter the vehicle on the side of the vehicle that is farthest from the adjoining traffic lane

2.6 Additional Comments

A monitoring and review program.

The monitoring and review activities applicable to the traffic and transport facilities in proximity to Marsden Park New Primary School include the following:

- Review bus patronage to ensure that there is sufficient capacity for school students.
- Staff will monitor the operation of the proposed pick-up/drop-off facility on Northbourne Drive. If vehicles are observed to undertake illegal manoeuvres or parking behaviour



Memorandum

(which carry heavy fines), Council will be requested to send out rangers to patrol the School Zone.

- Enforcement will quickly stop this behaviour and facilitate the safety and efficiency of the operation of the designated pick-up/drop-off facilities.

Bus patronage monitoring will occur on an annual basis and include a review of Opal data and discussions with the bus operator. While staff will be able to monitor the operation of the pick-up/drop-off facilities on an ad-hoc basis over the course of the academic year. The OTAMP and relevant monitoring measures will be reviewed on an annual basis and updated as required.

2.7 Temporary School Access Assessment

2.7.1 Introduction

While the OTAMP conditions relate to the permanent school, this section provides information on the access arrangements proposed for the temporary school (Stage 1).

It is noted that:

- The temporary school is expected to commence operation in January 2021
- The permanent school is expected to commence operation in July 2021.

The temporary school is proposed to be constructed within the western portion of the development site located on the future sports grounds. This temporary school facility is proposed to accommodate a maximum of 500 students and (approximately) 25 teachers/staff.

Key features of the temporary school include:

- A car park with 45 spaces, accessed from Enmore Street
- Temporary vehicle pick-up/drop-off zones on Beale Street (kerbside)
- A Special Support Unit (SSU) for children with disabilities and learning difficulties
- Pedestrian access gates on Beale Street and Bolwarra Drive.

Upon completion of the permanent school:

- The pick-up/drop-off zones will be relocated from Beale Street to Northbourne Drive
- The car park will be expanded to 58 spaces
- The pedestrian gate will be removed from Beale Street, with additional access gates (and supporting pedestrian crossings) being provided on Northbourne Drive, Bolwarra Drive and Enmore Street.

A copy of the temporary school master plan is displayed in Figure 2-12.

Memorandum

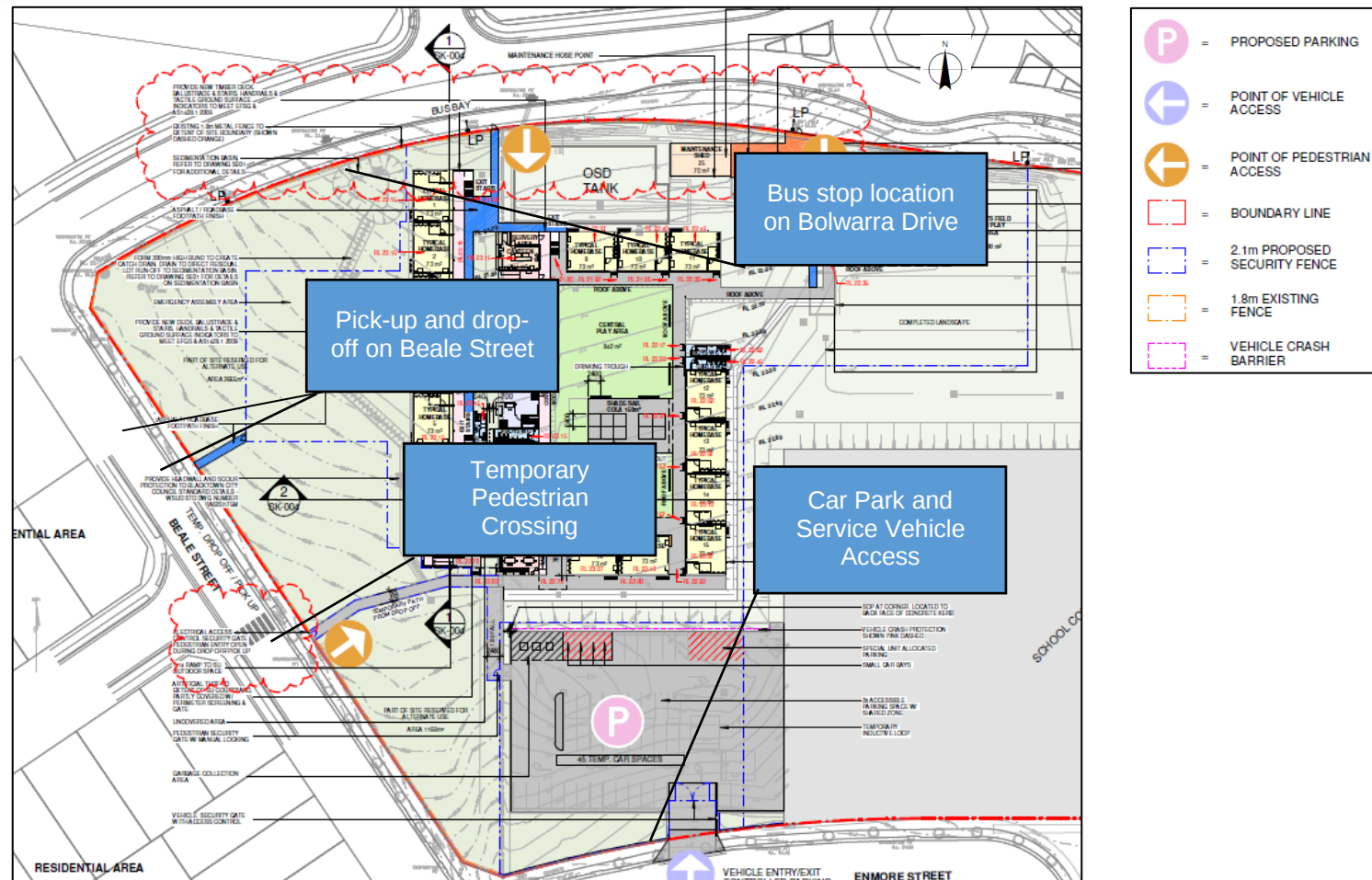


Figure 2-12 Temporary School Master Plan

Source: Prepared by NBRs Architects

Beale Street has been constructed with a travel lane and parking lane in either direction. It is proposed that the parking lanes be allocated to support pick-up/drop-off activity at the temporary school (during peak periods of activity).

A summary of the temporary Marsden Park New Primary School's traffic and transport facilities is described below.

2.7.2 Active Transport

To support the safe movement of teachers, students and their parents/guardians, prior to the opening of the temporary school, a zebra crossing will be installed on Beale Street adjacent to the temporary access gate (as discussed and agreed with Council).

2.7.3 Parking

The proposed car park will provide 45 parking spaces, including two parking spaces for the mobility impaired. This number includes:

- 41 parking spaces for teachers/staff
- Four spaces for parents/carers with children at the SSU

As displayed in Figure 1-2 and Figure 2-12 the location of car park for the permanent and temporary school will be the same.

Similarly to the permanent school's car park, for the temporary school car park:

- Waste collection will occur within the car park
- Access to the car park will be controlled by a gate
- Teachers, SSU parents/carers and waste collection vehicle will be allocated with a swipe card, or similar, to enter the car park
- An inductive loop will be located within the car park, which will be triggered when a vehicle drives over it and will open the gate to enable exit manoeuvres.

2.7.4 Pick-up/drop-off

The signage and line marking plan for the temporary school is displayed in Figure 2-13.

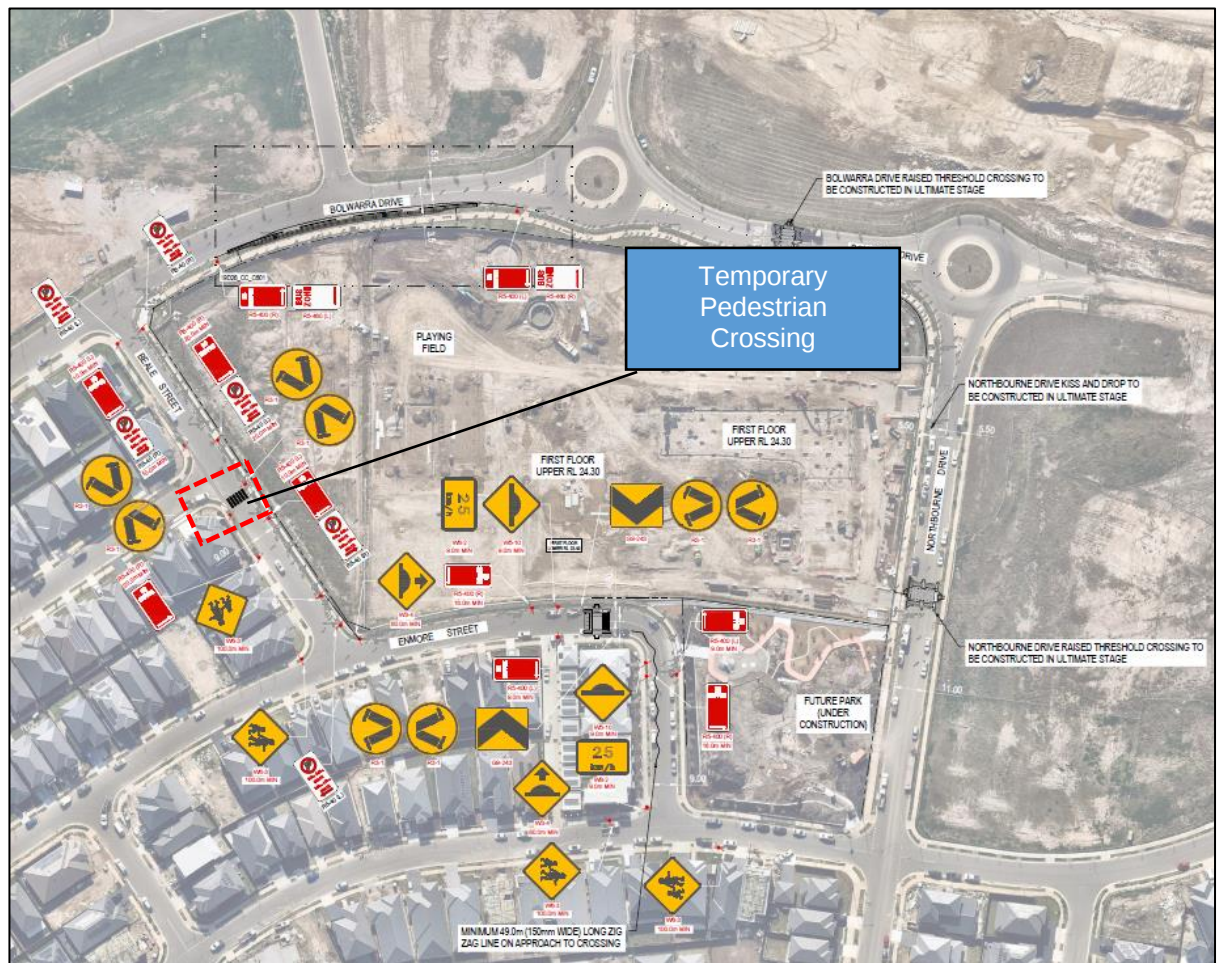


Figure 2-13 Beale Street Signage and Line Marking Plan

Source: Prepared by Henry and Hymas

As displayed in Figure 2-13:

- Two pick-up/drop-off zones are proposed on the eastern side of Beale Street (on either side of the proposed pedestrian crossing), with a combined length of approximately 100 m.
- A pick-up/drop-off zone is proposed on the western side of Beale Street with a length of approximately 45 m.
- The pick-up/drop-off zones will be designated as a 'No Parking' zone (8:00 am – 9:30 am and 2:30 pm – 4:00 pm) as vehicles are not permitted to park for more than two minutes, and drivers must remain within three metres of their vehicle.
- Bus zone signage will be provided on Bolwarra Drive.

It is noted that in afternoon periods, the bus zone on Bolwarra Drive and the pick-up/drop-off zone on Beale Street will be managed by teaching staff.

As stated previously, upon completion of the permanent school, the pick-up/drop-off zone will be relocated from Beale Street to Northbourne Drive. At this time, any signage provided on Beale Street will be removed.



Memorandum

The proposed bus zone on Bolwarra Drive will be built for the temporary school and subsequently maintained once the permanent school commences operation.

In summary, it is expected that the traffic and transport facilities to support the operation of the temporary school will operate in a safe and efficient manner.



Memorandum

3. Summary

GHD have been commissioned by ADCO Constructions Pty Ltd to provide Transport Planning and Traffic Engineering advice to support the development of Marsden Park New Primary School.

Marsden Park New Primary School is proposed to be built in two stages, as follows:

- Construction Stage 1 (Temporary School): a temporary school facility will be constructed within the western portion of the development site located on the future sports grounds. This temporary school facility is expected to accommodate a maximum of 500 students and is expected to commence operation in January 2021
- Construction Stage 2 (Construction of Permanent School Facility): ⁴a permanent school facility consisting of a consolidated two-storey courtyard building with the capacity to accommodate a maximum of 1,000 students and 50 staff. The permanent school is expected to commence operation in July 2021. Following this the temporary school is planned to be dismantled.

The scope of work of this report is to prepare an OTAMP that addresses Condition D16 of the Development Consent.

Prior to the commencement of operation, an OTAMP is to be prepared by a suitably qualified person, in consultation with Council and TfNSW, and submitted to the satisfaction of the Planning Secretary.

A table detailing the location of the responses to each of the D16 conditions within this OTAMP is included in Appendix D.

In summary:

- Both TfNSW and Blacktown City Council have reviewed and approved the OTAMP.
- Pedestrian access will be provided to Marsden Park New Primary School via Bolwarra Drive, Northbourne Drive and Enmore Street.
- Raised pedestrian (wombat) crossings will be provided on all these roads at the school access points.
- All pedestrian entry/exits into the school will be controlled via gates.
- Access to the teachers' car park, waste collection area and special needs student drop-off will occur via Enmore Street.
- Access to the teachers' car park and waste collection area will be controlled by a card reader/intercom.
- Emergency service vehicles will access the school, as required, via Bolwarra Drive or via the teacher's car park.
- The vehicle pick-up and drop-off zone is located on Northbourne Drive will be controlled using "No Parking (8:00 am – 9:30 am and 2:30 pm – 4:00 pm, Monday to Friday) signage.

⁴ It is noted that the OTAMP conditions relate to the permanent school facilities.



Memorandum

- An indented bus zone will be provided adjacent to the north of the school on Bolwarra Drive.
- Two teachers will manage each of the pick-up/drop-off zones on Bolwarra Drive (buses) and Northbourne Drive (cars), during peak periods of afternoon activity.

It is noted that for the temporary school will include:

- A temporary access and pedestrian crossing on Beale Street
- A pick-up/drop-off zone on Beale Street. Upon completion of the permanent school the pick-up/drop-off zones will be relocated from Beale Street to Northbourne Drive.
- A car park with 45 spaces. Upon completion of the permanent school, the car park will be expanded to 58 spaces

It is expected that the traffic and transport facilities serving Marsden Park New Primary School (permanent and temporary) will operate in a safe and efficient manner.



Memorandum

Appendices

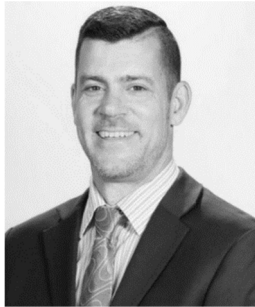


Memorandum

Appendix A – Mark Lucas CV

Mark Lucas

Principal Transport Planner



Qualified. University of New South Wales - Bachelor of Applied Science (Geography Major) 2005.

Relevance to project.

Mark is a transport planner with over 15 years' experience. He has worked extensively in Australia and the United Arab Emirates.

Mark's experience is drawn from a broad range of transport planning projects including master plan level traffic studies, environmental impact assessments, active transport planning, parking, access and circulation studies, traffic impact assessments and traffic studies to support the upgrading of strategic road links.

North Kellyville Operational, Transport and Access Management Plan (OTAMP)

ADCO | Sydney, Australia

Mark completed the OTAMP for a new school in North Kellyville. As part of this assessment, Mark undertook a detailed of the school's parking, access and pick-up/drop-off facilities in accordance with transport planning/traffic engineering principles and Australian Standards and Guidelines. This included the identification of safe route options to identify the need for management measures to ensure students and staff are able to access and leave the site in a safe and efficient manner

Carlingford and Epping Public Schools Traffic Impact Assessment

Department of Education | Sydney

Mark was technical lead in the preparation of Traffic Assessments for the proposed expansion of Epping and Carlingford Public Schools. The scope of work included undertaking an extensive series of surveys (including an online survey completed by parents) to determine the current level of vehicular activity at the school and identify a per student trip rate. This was applied to the proposed increase in student population and the adjoining intersections were assessed using SIDRA software accounting for a ten year horizon.

Kimbriki Resource Recover Centre Traffic Impact Assessment

Kimbriki Environmental Enterprises | Sydney

Mark was technical lead in the preparation of Traffic Assessments for the proposed landfilling of

an area within the Kimbriki Resource Recovery Centre. The facilities weighbridge data was interrogated to determine the daily and peak hour traffic volumes. The impacts of the landfilling was assessed in the context of the proposed road upgrades on Mona Vale Road.

Lucas Heights Recover Centre Traffic Impact Assessment

SUEZ | Sydney

Mark was technical lead in the preparation of Traffic Assessments to support extending the hours of operation at the Lucas Heights Recovery Centre. The analysis determined that changing the hours of operation would reduce queuing on the adjoining roads and improve the efficiency of operation.

Secondment at Lake Macquarie Council Lake Macquarie Council

Mark completed a seven month secondment at Lake Macquarie Council. Key tasks during the secondment included reviewing development applications for a wide range of land uses, providing input into strategic planning documents (including Section 94 studies), undertaking traffic modelling on the local road networks and the provision of ad-hoc transport planning/traffic engineering advice to council staff.

Mangoola Coal Mine Traffic Assessment Umwelt | Hunter Valley, Australia

Mark completed a traffic assessment to support a seven year extension to the mine life of the Mangoola Coal Mine, in accordance with SEARs issued by the RMS. The scope of works included SIDRA analysis at multiple intersections in



Curriculum Vitae

proximity to the mine, accounting for the expected construction and operational traffic volumes.

Kibbleplex Educational Precinct

Transport Assessment

Gosford City Council | Gosford, Australia

Mark undertook a traffic assessment for a major educational precinct in the Central Coast. Based on the analysis a number of physical mitigation measures were identified to ensure the road network surrounding the subject site would continue to operate with an acceptable level of service.

Thomas Mitchell Drive and Denman Road Traffic Study

BHP Billiton | Hunter Valley, Australia

Mark undertook a traffic assessment to review the operation of the intersection of Thomas Mitchell Drive and Denman Road, to determine if the current configuration has sufficient capacity to accommodate the potential increase in vehicle activity in the Hunter Region. The traffic modelling undertaken for the intersection of interest indicated that based upon its current configuration it has the capacity to accommodate expected increases in traffic until 2028.

Cameron Park Sports Complex

Lake Macquarie Council | Newcastle, Australia

Whilst on secondment at Lake Macquarie Council, Mark undertook a traffic assessment the Cameron Park Sports Complex which includes cricket, netball, AFL and rugby league facilities. The trip generation was undertaken on a first principles basis accounting for the expected utilisation for a weekday evening and weekend scenario. SIDRA analysis was completed to determine if the adjoining road network could accommodate the trips associated with each scenario.

Dunloe Sand Quarry Statement of Environmental Effects

Holcim Pty Ltd | Pottsville, Australia

Mark completed a transport study as part of a Statement of Environmental Effects (that was submitted to the Department of Planning and Environment) for a Section 96 modification to a condition of consent relating to vehicular movements at the quarry. The study assessed the impact of the proposed service vehicle activity using absorption capacity analysis. Additionally, warrants included in Austroads Guidelines were

used to identify suitable turning treatments at the intersection formed by the quarry access and the external road network.

Blue Mountains Integrated Transport Strategy

Blue Mountains City Council

Mark was Project Manager and Technical Lead for the Blue Mountains Integrated Transport Strategy 2025 (ITS) was designed to provide policies and actions that will guide the planning, investment and operation of the Blue Mountain City Council's traffic and transport infrastructure.

The scope of works completed by Mark included a movement and place assessment at key road in each of the Blue Mountains population centres and the identification of strategies to enhance the regions public transport networks.

Augmentation and Safety Upgrade to Chaffey Dam

Worley Parsons | Nundle, Australia

Mark completed a transport study to identify the traffic impacts of the proposed augmentation to Chaffey Dam, in response to Director General Requirements. The study assessed the impact of the proposed construction vehicle activity for each of the proposed phases if construction. Additionally, a high level Construction Management Plan was completed to identify mechanisms to minimise traffic impacts and facilitate a safe working environment.

Newcastle GPT Development

The GPT Group | Newcastle, Australia

Mark completed a Traffic Assessment for the Newcastle GPT Development, a proposed major mixed-used development in the Newcastle CBD. The impact analysis included "conservative", "moderate" and "aggressive" trip generation scenarios, accounting for the potential implementation of a variety of travel demand measures such a green travel plan and the potential development of the public transit facilities identified in the Newcastle Urban Renewal Strategy, including the construction of a light rail corridor in the Newcastle CBD.



Memorandum

Appendix B – Stakeholder Engagement

Post Approval Consultation Record

Identified Party to Consult:	Blacktown City Council;
Email	Email and phone calls
When is consultation required?	Prior to operation
Why	Condition D16 – Prior to the commencement of operation, an OTAMP is to be prepared by a suitably qualified person, in consultation with Council and TfNSW, and submitted to the satisfaction of the Planning Secretary.
When was consultation scheduled/held	• 9th November 2020– email from Abdun Noor • 9th November 2020– phone call with Abdun Noor • 1st December 2020 – email from Abdun Noor
When was consultation held	See above
Identify persons and positions who were involved	Abdun Noor Senior Traffic Management Officer
Provide the details of the consultation	The purpose of the consultation was to obtain information to inform the OTAMP.
What specific matters were discussed?	• Council have no planned/proposed upgrades to the traffic and transport network in proximity to the school. • Council have reviewed the OTAMP and have no further comments or feedback.
What matters were resolved?	All required information was obtained.
What matters are unresolved?	Nil
Any remaining points of disagreement?	Nil
How will SINSW address matters not resolved?	NA

Post Approval Consultation Record

Identified Party to Consult:	TfNSW
Email	Email and phone call
When is consultation required?	Prior to operation
Why	Condition D16 – Prior to the commencement of operation, an OTAMP is to be prepared by a suitably qualified person, in consultation with Council and TfNSW, and submitted to the satisfaction of the Planning Secretary.
When was consultation scheduled/held	9th November 2020– email from John Broady 9th November 2020– phone call with John Broady 4th December 2020 – email from Mohammed Irfan
When was consultation held	See above
Identify persons and positions who were involved	John Broady Planner, Metro Bus and Ferry Planning and Development Mohammed Irfan Network and Safety Officer
Provide the details of the consultation	The purpose of the consultation was to obtain information to inform the OTAMP.
What specific matters were discussed?	- TfNSW are reviewing future bus services in Marsden park - The collector road network within Marsden Park have a reserve of 11 m and are bus capable. - There may be potential for the buses at St Luke's College to serve Marsden Park New Primary School. - TfNSW have reviewed the OTAMP and find it acceptable. - The OTAMP should be updated once the operational procedures for managing pick-up/drop-off at the bus zone are determined.
What matters were resolved?	Agreement that bus services should be provided at Marden park New Primary School Agreement that the OTAMP is acceptable.
What matters are unresolved?	Specific bus services for Marden Park New Primary School are yet to be identified. Operational procedures at the bus zone on Bolwarra Drive are yet to be determined.
Any remaining points of disagreement?	No
How will SINSW address matters not resolved?	Continue to have discussions with TfNSW to identify suitable bus services for Marsden Park New Primary School and operation procedures at the bus zone.

From: [Abdun Noor](#)
To: [Mark Lucas](#)
Cc: [Dean Israel](#)
Subject: RE: Marsden Park New Primary School - Operation Transport and Access Management Plan
Date: Tuesday, 1 December 2020 8:38:46 AM
Attachments: [image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)
[image012.png](#)

Hi Mark

We have no further comments/feedback on the OTAMP.

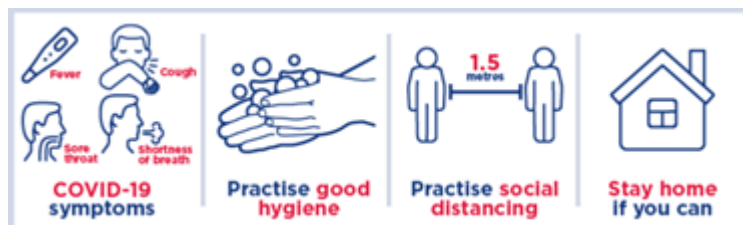
Regards



Abdun Noor
Senior Traffic Management Officer

9839 6336
Abdun.Noor@blacktown.nsw.gov.au
PO Box 63 Blacktown NSW 2148
blacktown.nsw.gov.au

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From: Mark Lucas <Mark.Lucas@ghd.com>
Sent: Wednesday, 18 November 2020 4:26 PM
To: Abdun Noor <Abdun.Noor@blacktown.nsw.gov.au>
Cc: Dean Israel <deani@adcoconstruct.com.au>
Subject: Marsden Park New Primary School - Operation Transport and Access Management Plan

Hi Abdun,

In accordance with Conditions of Development issued by DPIE, GHD has prepared an Operation Transport and Access Management Plan For Marsden Park New Primary School.

The proposed school layout is consistent with ongoing discussions with Blacktown City Council.

Could you please review the document and inform me if Council has any comments/feedback they would like to be included in the report.

Your help with this matter is greatly appreciated.

Regards

MARK LUCAS

Senior Transport Planner

GHD

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Level 15, 133 Castlereagh Street, Sydney, NSW, 2000, Australia

D +61 2 9239 7141 **M** +61 428 269 819 **E** mark.lucas@ghd.com

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From: Mark Lucas

Sent: Monday, 9 November 2020 10:04 AM

To: Abdun Noor <Abdun.Noor@blacktown.nsw.gov.au>

Subject: FW: Marsden Park New Primary School - Operation Transport and Access Management Plan

Hi Abdun,

Thanks again for your time today.

As discussed, other than the expansion of the road network within Marsden Park and the wombat crossings proposed for Marsden Park New Primary School, Council do not have plans to upgrade traffic/transport network in the Marsden Park Precinct.

Regards,

Mark Lucas

Senior Transport Planner

GHD

T: +61 2 9239 7141 | V: 217141 | M: 0428 269819 | E: mark.lucas@ghd.com

Level 15 133 Castlereagh Street Sydney NSW 2000 Australia | www.ghd.com

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From: Mark Lucas

Sent: Wednesday, 4 November 2020 2:47 PM

To: Abdun Noor <Abdun.Noor@blacktown.nsw.gov.au>

Subject: Marsden Park New Primary School - Operation Transport and Access Management Plan

Hi Abdun,

As part of some SSD conditions for Marsden Park New Primary School, GHD have been commissioned to undertake an Operation Transport and Access Management Plan.

I understand that Marsden Park Precinct is in the process of being upgraded/constructed, particularly to the north of the school site. Further, there are a number of traffic/transport facilities associated with the school itself, i.e. wombat crossings.

However, could you please confirm if there are any other proposed upgrades to the traffic and transport facilities in Marsden Park within approximately 1,200 m of the school?

Please feel free to call.

Kind Regards,

Mark Lucas
Senior Transport Planner

GHD

T: +61 2 9239 7141 | V: 217141 | M: 0428 269819 | E: mark.lucas@ghd.com
Level 15 133 Castlereagh Street Sydney NSW 2000 Australia | www.ghd.com

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From: [Mark Lucas](#)
To: [Abdun Noor](#)
Bcc: [12524304](#)
Subject: FW: Marsden Park New Primary School - Operation Transport and Access Management Plan
Date: Monday, 9 November 2020 10:03:00 AM

Hi Abdun,

Thanks again for your time today.

As discussed, other than the expansion of the road network within Marsden Park and the wombat crossings proposed for Marsden Park New Primary School, Council do not have plans to upgrade traffic/transport network in the Marsden Park Precinct.

Regards,

Mark Lucas
Senior Transport Planner

GHD

T: +61 2 9239 7141 | V: 217141 | M: 0428 269819 | E: mark.lucas@ghd.com
Level 15 133 Castlereagh Street Sydney NSW 2000 Australia | www.ghd.com

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From: Mark Lucas
Sent: Wednesday, 4 November 2020 2:47 PM
To: Abdun Noor <Abdun.Noor@blacktown.nsw.gov.au>
Subject: Marsden Park New Primary School - Operation Transport and Access Management Plan

Hi Abdun,

As part of some SSD conditions for Marsden Park New Primary School, GHD have been commissioned to undertake an Operation Transport and Access Management Plan.

I understand that Marsden Park Precinct is in the process of being upgraded/constructed, particularly to the north of the school site. Further, there are a number of traffic/transport facilities associated with the school itself, i.e. wombat crossings.

However, could you please confirm if there are any other proposed upgrades to the traffic and transport facilities in Marsden Park within approximately 1,200 m of the school?

Please feel free to call.

Kind Regards,

Mark Lucas
Senior Transport Planner

GHD

T: +61 2 9239 7141 | V: 217141 | M: 0428 269819 | E: mark.lucas@ghd.com
Level 15 133 Castlereagh Street Sydney NSW 2000 Australia | www.ghd.com

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From: [Mohammed Irfan](#)
To: [Mark Lucas](#)
Cc: [Billy Yung](#); [Malgy Coman](#); [Dean Israel](#); [Emma Bunn](#)
Subject: RE: Marsden Park New Primary School - Operation Transport and Access Management Plan
Date: Friday, 4 December 2020 8:21:28 AM
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Hi Mark,

The OTAMP for the Marsden Park Public school is acceptable. However, TfNSW anticipates the provision of updates to include the operational procedures at the bus zone on Bolwarra Drive as mentioned in section 2.2.3.

Thank you,

Mohammed Irfan

Network and Safety Officer

West Precinct Sydney

Greater Sydney Division

T 02 8849 2505 M 0403912737

Level 5 27 Argyle Street Parramatta NSW 2150

www.transport.nsw.gov.au

From: Mark Lucas [mailto:Mark.Lucas@ghd.com]
Sent: Tuesday, 1 December 2020 8:59 AM
To: Billy Yung <Billy.Yung@transport.nsw.gov.au>; Mohammed Irfan <mohammed.irfan@transport.nsw.gov.au>
Cc: Malgy Coman <Malgy.COMAN@transport.nsw.gov.au>; Dean Israel <deani@adcoconstruct.com.au>; Emma Bunn <Emma.Bunn@tsamgt.com>
Subject: RE: Marsden Park New Primary School - Operation Transport and Access Management Plan

Thanks Billy.

Hi Mo, feel free to call me to discuss the OTAMP.

Kind Regards,

MARK LUCAS

Senior Transport Planner

GHD

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From: Billy Yung <Billy.Yung@transport.nsw.gov.au>
Sent: Tuesday, 1 December 2020 8:57 AM
To: Mohammed Irfan <mohammed.irfan@transport.nsw.gov.au>
Cc: Malgy Coman <Malgy.COMAN@transport.nsw.gov.au>; Mark Lucas <Mark.Lucas@ghd.com>
Subject: RE: Marsden Park New Primary School - Operation Transport and Access Management Plan

Good morning Mo

Trust you're well.

Just to touch base with you regarding the subject matter. Appreciate if you could give an update to Mark Lucas (cc'd) from GHD regarding your review of the OTAMP.

Many thanks,
Billy

Billy Yung
Senior Transport Planner | Land Use Planning & Development
Customer Strategy & Technology
Transport for NSW

M 0481 905 670



SENSITIVE: NSW GOVERNMENT

From: Malgy Coman
Sent: Tuesday, 24 November 2020 12:18 PM
To: Mohammed Irfan <mohammed.irfan@transport.nsw.gov.au>
Cc: Billy Yung <Billy.Yung@transport.nsw.gov.au>
Subject: FW: Marsden Park New Primary School - Operation Transport and Access Management Plan

Hi Mo,

We have received the attached Operation Transport and Access Management Plan for review – Marsden Park Primary School. Are you able to review this document and provide your comments.

Regards,

Malgy

From: Billy Yung

Sent: Tuesday, 24 November 2020 9:00 AM

To: Malgy Coman <Malgy.COMAN@transport.nsw.gov.au>

Subject: FW: Marsden Park New Primary School - Operation Transport and Access Management Plan

Good morning Malgy

Our bus planner had received the request below from GHD regarding review of an Operation Transport and Access Management Plan addressing Condition D16 of the consent for the subject new school.

Operational Transport and Access Management Plan (OTAMP)

- D16.** Prior to the commencement of operation, an OTAMP is to be prepared by a suitably qualified person, in consultation with Council and TfNSW, and submitted to the satisfaction of the Planning Secretary. The OTAMP must address the following:
- (a) detailed pedestrian analysis including the identification of safe route options – to identify the need for management measures such as staggered school start and finish times to ensure students and staff are able to access and leave the Site in a safe and efficient manner during school start and finish;
 - (b) the location of all car parking spaces on the school campuses and their allocation (i.e. staff, visitor, accessible, emergency, etc.);
 - (c) the location and operational management procedures of the pick-up and drop-off parking located within Northbourne Drive, including staff management/traffic controller arrangements;
 - (d) the location and operational management procedures for the pick-up and drop-off of students by buses and coaches on Bolwarra Drive including staff management/traffic controller arrangements;
 - (e) delivery and services vehicle and bus access and management arrangements;
 - (f) management of approved access arrangements;
 - (g) potential traffic impacts on surrounding road networks and mitigation measures to minimise impacts, including measures to mitigate queuing impacts associated with vehicles accessing pick-up and drop-off parking in Northbourne Drive;
 - (h) car parking arrangements and management associated with the proposed use of school facilities by community members; and
 - (i) a monitoring and review program.

I had a quick look at the report. It contains details of access and traffic arrangement proposed in the immediate surrounding of the school. Is it something that needs review and responded by the NSS team (and probably your team)?

Happy to have your advice on how we approach this response.

Many thanks,
Billy

From: Mark Lucas [<mailto:Mark.Lucas@ghd.com>]

Sent: Wednesday, 18 November 2020 4:28 PM

To: John Broady <John.Broady@transport.nsw.gov.au>

Cc: Dean Israel <deani@adcoconstruct.com.au>

Subject: FW: Marsden Park New Primary School - Operation Transport and Access Management Plan

Hi John,

In accordance with Conditions of Development issued by DPIE, GHD has prepared an Operation Transport and Access Management Plan For Marsden Park New Primary School.

Could you (or an appropriate colleague) please review the document and inform me if TfNSW has any comments/feedback they would like to be included in the report.

Your help with this matter is greatly appreciated.

Regards

MARK LUCAS

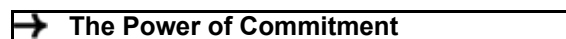
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From: [John Broady](#)
To: [Mark Lucas](#)
Subject: RE: my address
Date: Monday, 9 November 2020 11:51:32 AM

Mark

Thank you for the notification about the new school.

I suppose there are a few things we need when considering bus routes

1. Do you have information on the bell times?
2. I presume they have pretty much completed enrolments by this time. Is it possible to get information on where students are coming from?
3. Do you have a list of all 11 metre and above roads in the suburb?

If the road network really does not support bus operations, (or at least allow buses to penetrate the suburb to where the students are) there may be no buses to the school.

I notice that the centre median in Parkway Drive is not mountable. Do you have the widths of each side of the road. I know Busways are particularly wary of operating buses in streets with a non-mountable median if the road is not wide enough.

John Broady
Planner, Metro Bus and Ferry Planning and Development
Planning and Programs
Greater Sydney
Transport for NSW

M 0434 568 081



**Always Was,
Always Will Be.**
8-15 NOV 2020

From: Mark Lucas [mailto:Mark.Lucas@ghd.com]
Sent: Monday, 9 November 2020 10:59 AM
To: John Broady <John.Broady@transport.nsw.gov.au>
Subject: RE: my address



Mark Lucas
Senior Transport Planner

GHD

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[WATER](#) | [ENERGY & RESOURCES](#) | [ENVIRONMENT](#) | [PROPERTY & BUILDINGS](#) |
[TRANSPORTATION](#)

Please consider our environment before printing this email

From: John Broady <John.Broady@transport.nsw.gov.au>
Sent: Monday, 9 November 2020 10:58 AM
To: Mark Lucas <Mark.Lucas@ghd.com>
Subject: my address

John Broady
Planner, Metro Bus and Ferry Planning and Development
Planning and Programs
Greater Sydney
Transport for NSW



Memorandum

Appendix C – School Brochures

ROAD SAFETY INFORMATION

YOU ARE RESPONSIBLE FOR YOUR CHILDREN'S SAFETY WHEN THEY ARE TRAVELLING TO AND FROM SCHOOL.

Drive and park safely near schools

The beginning and end of the school day are busy times for pedestrians and drivers outside schools.

You can help keep children safe by remembering the following:

- drop off and pick up children on the school side of the road
- never call out to children from across the road – it is very dangerous
- always take extra care when driving in 40km school zones
- follow all parking signs – these help keep children as safe as possible
- park responsibly even if this means you have to walk further to the school gate
- never double park – it is illegal and puts children at risk
- never do a U-turn or three-point turn outside the school as it puts children at risk of harm
- model safe and considerate pedestrian and driver behaviours to your children.

When travelling in a car ensure your children:

- use a booster seat if they are aged between 4 and 7 years old – it's the law
- are correctly buckled up in their seatbelts
- always get in and out of the car through the 'safety door' – the rear door on the footpath side of the car
- are never left alone in the car.



Up to 6 months

Approved rear-facing child car seat



6 months to 4 years

Approved rear- or forward-facing child car seat



4+ years

Approved forward-facing child car seat or booster seat



145cm or taller

Suggested minimum height to use adult lap-sash seatbelt

For further support

Go to the department's Road Safety Education program at education.nsw.gov.au/road-safety-education or visit education.nsw.gov.au and search for road safety education.



ROAD SAFETY INFORMATION

YOU ARE RESPONSIBLE FOR YOUR CHILDREN'S SAFETY WHEN THEY ARE TRAVELLING TO AND FROM SCHOOL.

Walk safely

Always hold your children's hands – when walking on the footpath, in the car park and when crossing the road – until they are at least 8 years old.

When your children are between 8 and 10 years old, supervise them very closely when they are near traffic and crossing the road.

When you decide to let your children over 10 years old walk to and from school by themselves, plan the journey together. Practise being a safe pedestrian by:

- keeping to the left of the footpath
- being aware of vehicles coming in and out of driveways
- not being distracted by mobile devices or by other people
- using a safe, alternative way home in wet weather
- showing respect to other pedestrians.

STOP! one step back from the kerb.

LOOK! continuously look both ways.

LISTEN! for the sounds of approaching traffic.

THINK! is it safe to cross?

Encourage your children:

- to always use a safe place to cross the road such as a pedestrian crossing, traffic lights or a school crossing, if available
- to check for turning vehicles before they cross the road and driveways
- never to assume that a driver can see them or will stop for them
- to make eye contact with a driver so they know the driver has seen them
- to wait till the driver has completely stopped their vehicle before they cross the road or driveway.



For further support

Go to the department's Road Safety Education program at education.nsw.gov.au/road-safety-education or visit education.nsw.gov.au and search for road safety education.

ROAD SAFETY INFORMATION

YOU ARE RESPONSIBLE FOR YOUR CHILDREN'S SAFETY WHEN THEY ARE TRAVELLING TO AND FROM SCHOOL.

Ride a bicycle safely

As younger children are still developing the skills needed to ride alone, the safest place to ride bikes, scooters and skateboards is within fenced areas.

Until children are at least 10 years old they should ride away from vehicles and driveways. As they are learning to ride it is important to ride or walk alongside them and talk about how to be a safe bicycle rider.

Children between 10 years old and 12 years old should ride away from busy roads.

Children under 16 and adult riders accompanying and supervising them may ride on the footpath, unless there are signs specifically prohibiting cycling.

Teach your children to be safe bicycle riders by getting them to always:

- follow bicycle road rules including:
 - ride to the left on footpaths
 - give pedestrians right of way on footpaths
 - watch out for cars entering or leaving driveways
- wear a correctly fitted bicycle helmet – it's the law
- wear bright-coloured clothing such as a vest so other road users can see them.

For older children, think carefully about the following when judging their ability to ride on their own:

- How safe is the travel route?
- What are their riding skills like?
- How aware are they of their surroundings in the traffic environment?
- How well can they manage unexpected hazards?

Your school will have procedures about students bringing bikes onto school grounds. Ensure your children follow these at all times.



For further support

Go to the department's Road Safety Education program at education.nsw.gov.au/road-safety-education or visit education.nsw.gov.au and search for road safety education.



ROAD SAFETY INFORMATION

YOU ARE RESPONSIBLE FOR YOUR CHILDREN'S SAFETY WHEN THEY ARE TRAVELLING TO AND FROM SCHOOL.

Safe bus travel

A child is most at risk of harm just after getting off the bus.

To reduce risk:

- meet your children at the bus stop – never on the opposite side of the road
- hold your children's hands at the bus stop
- stand a few steps back from the edge of the road when waiting at the bus stop
- wait until the bus has gone, then choose a safe place to cross the road.

Help your children to find a safe place to cross such as:

- at a pedestrian crossing or traffic lights, if available
- a clear section of road where they are visible to all traffic.

If you can't be with your children, organise for a trusted adult to meet them at the bus stop.



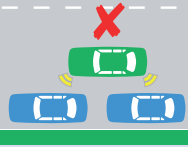
For further support

Go to the department's Road Safety Education program at education.nsw.gov.au/road-safety-education or visit education.nsw.gov.au and search for road safety education.

Parking and traffic rules in school zones

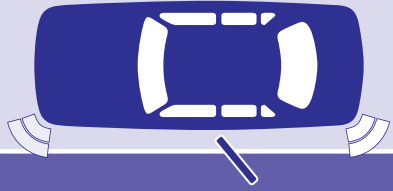
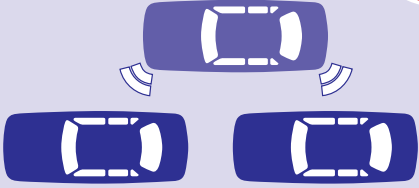
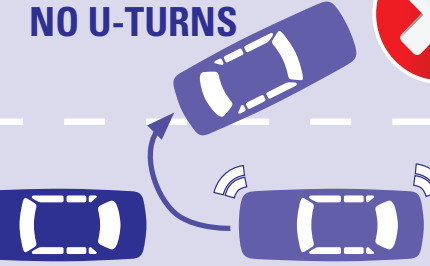
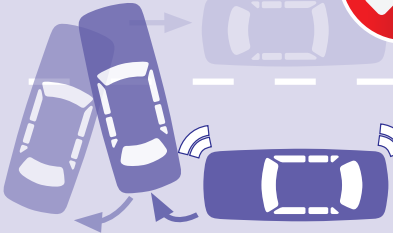
You need to take extra care when driving and parking in school zones. Make sure that you and your child understand the road rules. If you break the traffic rules in a school zone you are putting not only your child but other children at risk. The parking and traffic rules around our schools are there to protect your children. If you break the rules you will be fined. **Please choose safety over convenience.**

QUICK REFERENCE GUIDE TO IMPORTANT SAFETY TRAFFIC RULES

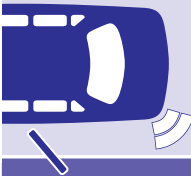
ZONE	WHAT DOES IT MEAN?	WHY IS IT THERE?	PENALTY	DEMERIT POINTS*
	You cannot stop in a NO STOPPING zone for any reason (including queuing or waiting for a space). 	Keeps clear sight lines between drivers and children / pedestrians.	EXCEEDS \$330 	(School Zone) 2 
	You can stop in a NO PARKING zone for a max. of two minutes to drop off and pick up passengers. If no spaces are available you cannot queue on the road way or in any other zones while waiting for a space. You will need to drive away and park elsewhere, only returning when there is space to pull up. You must stay within 3 metres of your vehicle at all times and cannot leave your vehicle unattended.	Provides a safe place for children / pedestrian set down and pick up.	EXCEEDS \$183 	(School Zone) 2 
	You must not stop or park in a BUS ZONE for any reason (including queuing or waiting for a space) unless you are driving a bus. If times are shown on the sign, you are not allowed to stop during those times.	Provides a safe place for large buses to set down and pick up school children.	EXCEEDS \$330 	(School Zone) 2 
	You must not stop on or within 20 metres before a PEDESTRIAN CROSSING or 10 metres after a crossing unless there is a control sign permitting parking.	So drivers can clearly see pedestrians on the crossing.	EXCEEDS \$439 	(School Zone) 2 
	DOUBLE PARKING You must not stop on the road adjacent to another vehicle at any time even to drop off or pick up passengers.	Double parking blocks visibility and forces other cars to go around you.	EXCEEDS \$330 	(School Zone) 2 
	You must not stop on any FOOTPATH or NATURE STRIP , or even a DRIVEWAY crossing a footpath or nature strip for any reason.	You could easily run over a child or force pedestrians onto the road to get around you.	EXCEEDS \$183 	(School Zone) 2 

Please note: The above information is current as of 1 December 2017. Penalties set by NSW State Government and reviewed on 1 July each year.

Safety tips for school zones:

EXITING THE CAR  Make sure children use the footpath-side door when getting in and out of a car.	APPLY BRAKE  Make sure the park brake is applied when the vehicle is stationary.
PARKING  NEVER double park.	CROSSING  NEVER park across a pedestrian crossing.
NO U-TURNS  NEVER undertake a U-turn in close proximity to the school.	NO 3 POINT TURNS  NEVER undertake a three-point turn in close proximity to the school.

Safety tips for students:

BUCKLE UP  Stay buckled up until the vehicle has stopped.	STORE ITEMS  Make sure your school bag and other items are in a safe position.	BE READY  Be ready to get out of the car with your belongings when the car has stopped and you have unbuckled your seat belt.	EXIT SAFELY  Always get in and out of the back seat through the safety door - the rear foot path-side door.
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Demerit Points:

* The **Demerit Points** Scheme is a national program that allocates penalty points (demerits) for a range of driving offences. A driver who has not committed any offences has '**zero**' points. If you commit an offence that carries demerit points, the points are added to your driving record. If you incur the threshold number of demerit points within a three-year period, a licence suspension or refusal is applied. The three-year period is calculated between the dates the offences were committed. It ends on the day your most recent offence was committed.

For further information regarding demerit points please visit: rms.nsw.gov.au/roads/safety-rules/demerits-offences/



Appendix D – OTAMP Schedule of Responses

Table 3-1 OTAMP Conditions (D16)

Condition		Response Location
a	<i>Detailed pedestrian analysis including the identification of safe route options – to identify the need for management measures such as staggered school start and finish times to ensure students and staff are able to access and leave the site in a safe and efficient manner during school start and finish.</i>	Page number 12. Section number 2.3
b	<i>The location of all car parking spaces on the school campuses and their allocation (i.e. staff, visitor, accessible, emergency, etc.).</i>	Page number 17 Section number 2.4
c	<i>The location and operational management procedures of the pick-up and drop-off parking located within Northbourne Drive, including staff management/traffic controller arrangements;</i>	Page number 21 Section number 2.5
d	<i>The location and operational management procedures for the pick-up and drop-off of students by buses and coaches on Bolwarra Drive including staff management/traffic controller arrangements;</i>	Page number 8 Section number 2.2
e	<i>Delivery and services vehicle and bus access and management arrangements.</i>	Page number 8 Section number 2.2
f	<i>Management of approved access arrangements.</i>	Page number 8 Section number 2.2
g	<i>Potential traffic impacts on surrounding road networks and mitigation measures to minimise impacts, including measures to mitigate queuing impacts associated with vehicles accessing pick-up and drop-off parking in Northbourne Drive;</i>	Page number 21 Section number 2.5
i	<i>Car parking arrangements and management associated with the proposed use of school facilities by community members.</i>	Page number 17 Section number 2.4
j	<i>Monitoring and review program.</i>	Page number 22 Section number 2.6



Memorandum

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REP OTAMP Rev 3.docx

Document Status

Revision	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
A	M Lucas	S Clarke	On file	J Akstein	On file	10/11/20
0	M Lucas	J Akstein	On file	J Akstein	On file	11/11/20
1	M Lucas	J Akstein	On file	J Akstein	On file	18/11/20
2	M Lucas	J Akstein	On file	J Akstein	On file	04/12/20



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