Porters Creek Public School

Operational Transport and Access Management Plan

PREPARED FOR RICHARD CROOKES CONSTRUCTION | JANUARY 2022

We design with community in mind

Revision Schedule

Rev No.	Date	Description	Signature or Typed Name (documentation on file)			
			Prepared by	Checked by	Reviewed by	Approved by
1	20/04/21	Draft for client comments	OM/SH	SH	AW	AW
2	03/09/21	Draft 2 for TfNSW and Council comments	SH	SH	AW	AW
3	14/01/22	Draft 3 incorporating Council comments (awaiting TfNSW review)	SH	SH	AW	AW
4	20/01/22	Final				

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1.0 INTRODUCTION

1.1 SITE CONTEXT

Stantec has been engaged by Richard Crookes Construction, to prepare an Operational Transport and Access Management Plan (OTAMP) for Porters Creek Public School (herein referred to as 'the School') at 75 Warnervale Road, Warnervale NSW.

The site is occupied by the decommissioned Warnervale Public School with the majority of the site is covered in vegetation. The site is accessed via Warnervale Road and shown in Figure 1.

Figure 1: Site Location

The surrounding land uses are predominantly low density residential to the north and undeveloped rural lands to the south (with plans for residential development). The following key features of the surrounds are as follows:

- Warnervale Oval is located approximately 160 metres north-east of the site;
- Warnervale Train Station is located approximately 600 metres west of the site; and
- Active Littles Child Care Centre is located approximately 300 metres north-west of the site.

1.2 CONDITIONS OF CONSENT

This OTAMP has been prepared to address the following State Significant Development Application (SSDA) conditions of consent (dated 1 May 2020):

Condition D12

Prior to the commencement of operation, an OTAMP is to be prepared by a suitably qualified person, in consultation with Council and Transport for NSW, and submitted to the Certifier and a copy provided for the information 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 the school, 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 for excursions and sporting activities during the hours of bus operations along Warnervale Road, 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 minimize impacts, including measures to mitigate queueing impacts associated with vehicles accessing pick-up and drop-off parking in the school;*

h) *car parking arrangements and management associated with the proposed use of the school facilities by community members; and*

i) *a monitoring and review program.*

This OTAMP has been prepared by a suitably qualified traffic engineer (see Appendix A for CVs).

1.3 AIM OF THIS OTAMP

The primary objectives of this OTAMP are as follows:

- Ensure the safety of students, parents and staff during the School's hours of operation;
- Ensure that surrounding road users are aware of any proposed changed traffic conditions and that risks are identified and mitigated; and
- Ensure that the impact on the local road network can be minimised through efficient and safe management.

2.0 PORTERS CREEK PUBLIC SCHOOL

Porters Creek Public School will have an initial enrolment of 460 students, with enrolment expected to increase to 1,000 students by year 2030, and 34 staff to meet the growing demand for public education as the Warnervale area is developed from rural lands and bushland to a low-density residential use. The School is expected to include the following features:

- Out of school care (OOSH);
- Special education unit;
- Western car park comprising of 37 spaces (with space allocated for a potential future expansion of an additional 18 spaces) and a drop-off and pick-up area with 13 spaces (including one accessible). These drop-off and pick-up spaces can be used as visitor parking spaces outside drop-off and pick-up hours; and
- Eastern car park including 7 spaces (including two accessible) and a loading bay.

The proposed Porters Creek Public School site plan is shown in Figure 2. This site plan is also included in Appendix A.

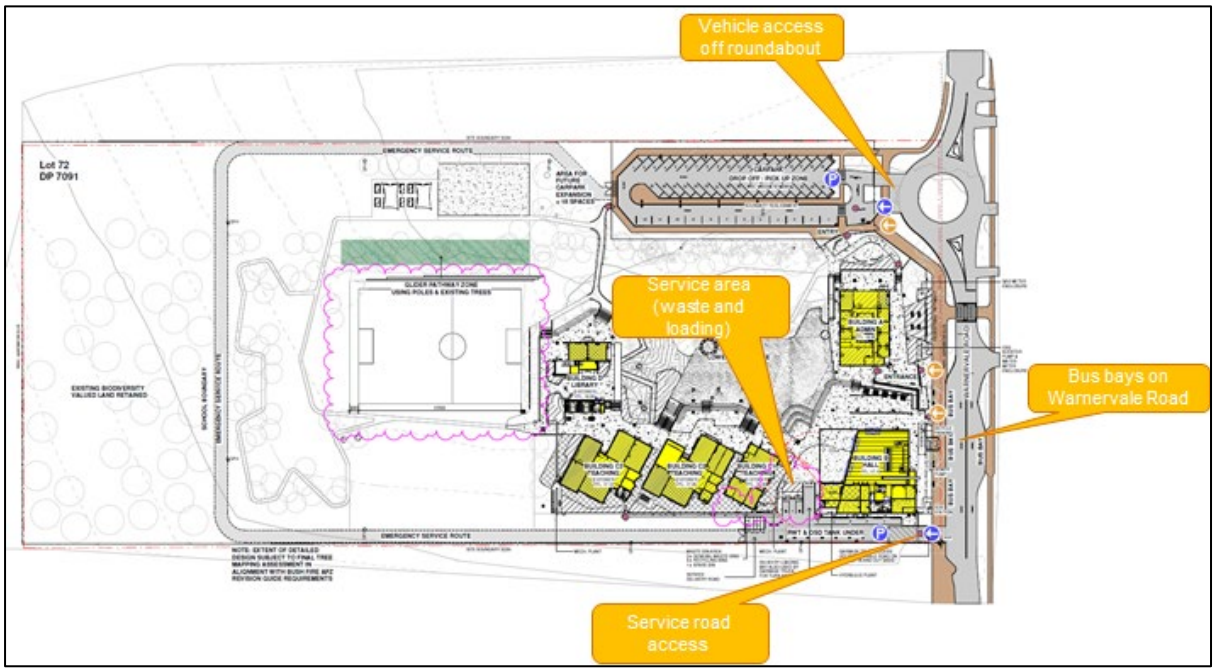


Figure 2: Site plan (source: NBRS Architecture)

Key transport features for the School are summarised as:

- Bus drop-off and pick for students on Warnervale Road with three bus bays located on the southern side of Warnervale and one bus bay on the northern side;
- Student pick-up and drop-off is located within the site via an access road off Warnervale Road (southern leg of roundabout) and will operate in conjunction with the car park;
- An emergency service road is on the perimeter of the site with access via Warnervale Road in the north-east. This service road connects to the proposed car park;
- A service and loading area is located off the emergency servicer road (north-west part of the site) which accommodates vehicles up to a Heavy Rigid Vehicle (HRV). Two accessible parking spaces are also located here for close access to the school; and
- Bicycle parking located near the school entrance and the school hall.

3.0 EXISTING ROAD NETWORK

3.1 SURROUNDING ROADS

The roads in the vicinity of the School are primarily maintained and controlled by Central Coast Council, except for Sparks Road which is maintained and controlled by Transport for NSW (TfNSW). The local road environment is summarised in Table 1.

Table 1: Surrounding road characteristics

Road Name	Speed Limit	Lanes	Road Authority
Warnervale Road	• 40km/h (school zone speed limit) • 50km/h	2 lanes	Council
Virginia Road	• 40km/h (school zone speed limit) • 50km/h	2 lanes	Council
Albert Warner Road	• 40km/h (school zone speed limit) • 50km/h	2 lanes	Council
Minnesota Road	• 40km/h (school zone speed limit) • 50km/h	2 lanes	Council
Sparks Road	• Varies (up to 80km/h in sections towards Pacific Motorway)	2 to 4 lanes	TfNSW

3.2 CRASH ANALYSIS

Transport for New South Wales' (TfNSW) Centre for Road Safety provides a database which records crashes for the most recent five-year period of available data (i.e. 2015 to 2019). Crash statistics are confined to crashes that conform to the national guidelines for reporting and classifying road vehicle crashes. The guidelines include crashes that met the following criteria:

- Were reported to the police;
- Occurred on a road open to the general public;
- Involved at least one moving road vehicle; and
- Involved at least one person being injured, killed or at least one motor vehicle being towed away.

The search area comprised the road network within a 400 metre radius of the site.

Figure 3 overleaf, shows the locations of the crashes that meet the above criteria.

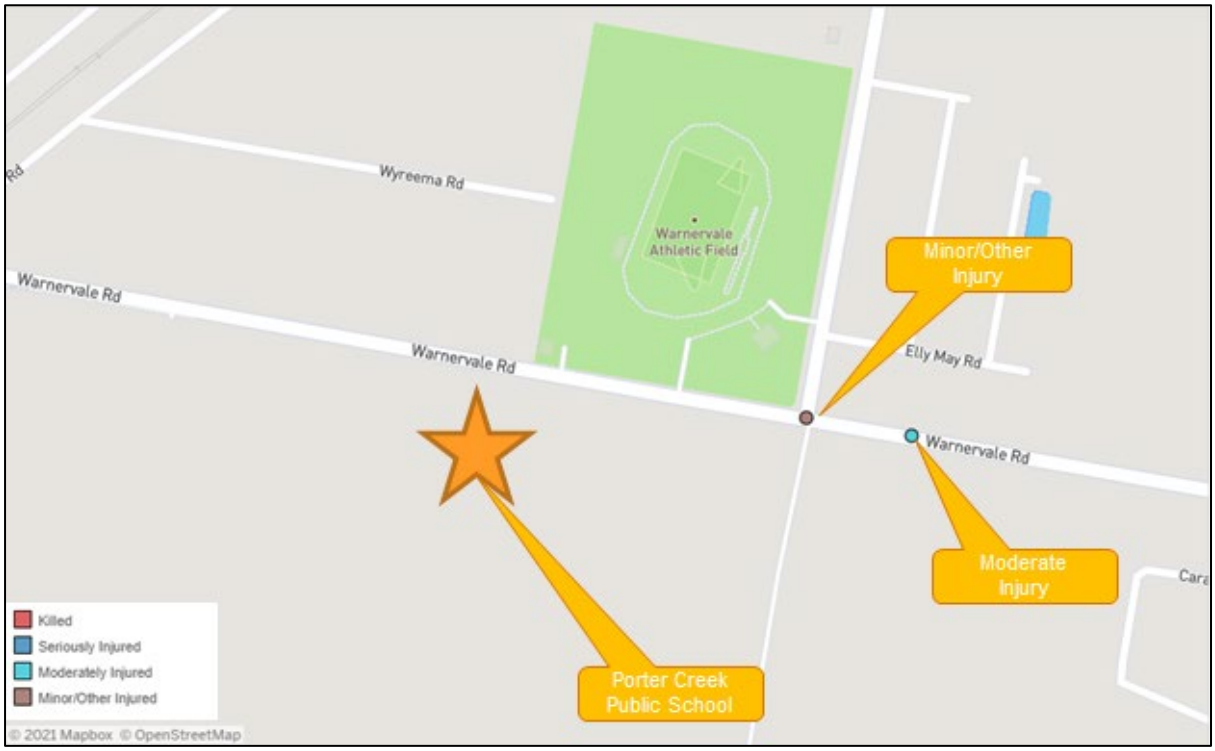


Figure 3: Crashes on surrounding roads (source: TfNSW Centre for Road Safety)

As shown above, there have been two crashes that have occurred along Warnervale Road:

- one minor injury crash at the intersection of Warnervale Road / Virginia Road; and
- one moderate injury crash along Warnervale Road, east of the Warnervale Road / Virginia Road intersection.

Based on the data provided from TfNSW Centre for Road Safety, there is no evidence of a recurrent and persistent road crash history within the immediate vicinity of the School.

3.3 EXISTING ON-STREET PARKING

Existing on-street parking along Warnervale Road near the School is generally unrestricted. However, the narrow width of Warnervale Road coupled unsuitable shoulders consisting of deep drains and culverts restrict locations for on-street parking along Warnervale Road. The existing Warnervale Road in the immediate vicinity of the School site is shown in Figure 4 overleaf.

Figure 4: Warnervale Road frontage

It is noted that the Warnervale Road frontage will change significantly as part of the development of the school with proposed roadworks which will introduce a roundabout into the northern carpark entrance, bus laybys, shared path along the southern side of Warnervale Road, pedestrian footpath along the northern side of Warnervale Road and a raised pedestrian crossing. This is shown in the civil and road works plans in Appendix C.

4.0 EXISTING TRAVEL BEHAVIOUR

Considering that the School is not yet built, travel mode surveys cannot be undertaken to gather data on existing travel behaviours. However, travel mode surveys were conducted at Warnervale Public School (located approximately 1.0 kilometre to the east of the School) in 2018 and is considered a good indication of travel behaviours as Porters Creek Public School will be serviced by the same public transport services and similar walking and cycling infrastructure.

There have been no major upgrades in public transport or walking and cycling infrastructure in the area, and as such the 2018 travel surveys are still considered relevant.

The travel mode split from the Warnervale Public School travel surveys is summarised in Table 2.

Table 2: Indicative travel mode split from Warnervale Public School

Travel Mode	Students		Staff	
	No. of students	%	Number of staff	%
Train	0	0%	0	0%
Bus	64	14%	0	0%
Walk	47	10%	0	0%
Bicycle	6	1%	1	3%
By car – dropped off/picked-up	346	73%	0	0%
Carpooling	3	1%	0	0%
Car as driver	0	0%	33	97%
Other	2	1%	0	0%
TOTAL	**468**	**100%**	**34**	**100%**

The data indicates the following:

- Nearly 75 per cent of students at Warnervale Public School are driven to school;
- A combined 25 per cent travel by bus, walk or cycle; and
- Almost all of the staff drive to work, with only one travelled by another mode (bicycle).

It is recommended that the School conducts a travel mode survey to collect baseline data when the school becomes operational. This will provide a better understanding of how the students and staff travel to school and allow the identification of any operational issues that require more focus (e.g. is there a need for more bus services and connection to wider area? Is there a need for more bicycle parking facilities?)

5.0 OPERATIONAL MANAGEMENT STRATEGIES

5.1 VEHCIULAR ACTIVITIES

5.1.1 Vehicle Access Points

All access points into/out of the School will be via the three driveway crossovers along the Warnervale Road frontage:

- Western driveway 1: exit-only driveway from car park;
- Western driveway 2: entry-only driveway into car park; and
- Eastern driveway: entry and exit driveway into loading dock and accessible spaces.

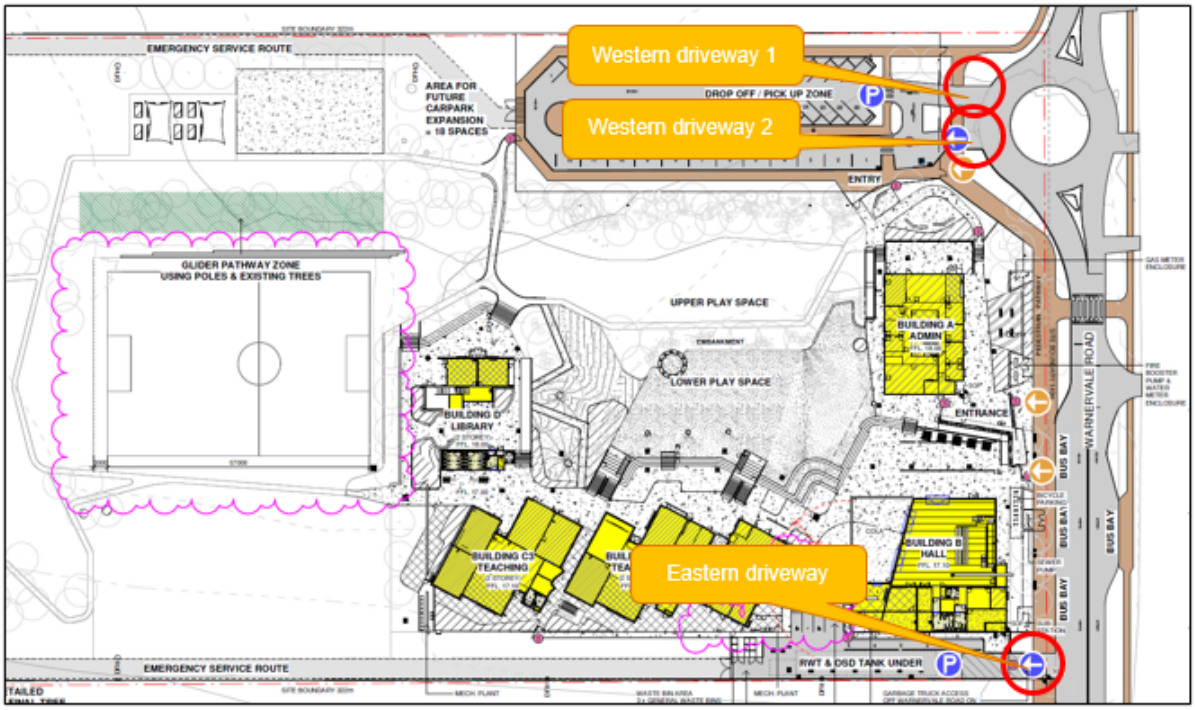


Figure 5: Access locations

Vehicle access into the School will be controlled via gates which will be installed at each of the access points. These gates will remain open during drop-off and pick-up hours and will be closed outside these hours. General public access will be maintained.

These gates will be controlled via card access. A card reader and intercom will be installed at each of the vehicle entry and exit points (i.e. western car park and eastern car park which includes DDA spaces and service vehicle bay).

5.1.2 Bus Services

A bus layby will be provided along the Warnevale Road frontage, on both sides of the road. The southern layby will accommodate three buses whilst the northern layby will accommodate one bus at a time.

The layby will allow the buses to pull over and drop-off/pick-up students without disrupting the through traffic along Warnervale Road.

During drop-off and pick-up hours, staff members will supervise the bus laybys to ensure safety and students are able to quickly alight and board the buses. The School will ensure that, during pick-up hours, the egress of

students from the school to the buses is coordinated and staged, by keeping students within school ground until their respective buses are called.

A crossing supervisor will be present during pick-up and drop-off time (subject to a crossing supervisor application to be submitted by the School and to be approved by TfNSW prior to operation). In the absence of a crossing supervisor, parents will need to escort students between the vehicle and the school gates.

It is recommended that 'Bus Zone' signage are installed along the bus layover to ensure that parents do not park in this area during drop-off and pick-up hours.

5.1.3 Drop-off & Pick-up Operations

The western car park will provide 13 drop-off and pick-up spaces (including one accessible space).

Vehicles will enter from the roundabout via Western Driveway 2 and exit via Western Driveway 1 once they have completed their drop-off/pick-up.

It is recommended that the School implements the following measures to ensure safety of students and parents and improve the overall drop-off and pick-up operations including minimising queuing along Warnervale Road:

- The School should develop clear guidelines for parent drop-off and pick-up students. This could be communicated via the school website, newsletter, email and social meadia. The school will develop a Safe Arrival and Departure Management plans which will include clear guidelines for safe drop-off and pick-up of student.
- All parents should be asked to sign an agreement that they understand and will abide by the school's safety policy at the beginning of each year and any updates to the safety policy should be communicated to the parents via the school website, newsletter,email and social media;
- Dwell time in the drop-off and pick-up spaces should be no longer than 2-minutes. The drop-off and pick-up spaces should be marked as '2-minute Parking 8:00am-9:30am & 2:30pm-4:00pm' signage;
- The School can investigate the possibility of providing a remote drop-off and pick-up area near the school (i.e. along a street with low traffic volume or in a park) where parents can park their vehicles and walk/cycle their child for the remaining distance. This will decrease the drop-off and pick-up demand within the western car park and reduce the traffic volume/ conflict near the school gates and along Warnervale Road. This will require consultation with Council;
- Establish a forum to allow carpooling groups to be formed and encourage parents and staff to carpool where possible. The School can investigate feasibility of providing designated drop-off and pick-up spaces for carpooling;
- Any students being dropped-off or picked-up outside the school grounds or outside of regular drop-off/pick-up times (i.e. along Warnervale Road or surrounding streets) will need to be escorted to/from the vehicle and the school gates. All parents and students are to cross the Warnervale Road at the new raised pedestrian crossing;
- A crossing supervisor will be present during pick-up and drop-off time (subject to a crossing supervisor application to be submitted by the School and to be approved by TfNSW prior to operation). In the absence of a crossing supervisor, parents will need to escort students between the vehicle and the school gates; and
- Accessible drop-off and pick-up will occur along the eastern access road, where accessible parking spaces are provided. The Assisted School Transport vehicles will also use these spaces for drop-off and pick-up.

A 40km/h school zone will be implemented along Warnevale Road frontage during school drop-off and pick-up hours. The School will need to work with TfNSW in regards to the implementation of this school zone.

5.1.4 On-site Parking Facilities

A total of 57 parking spaces will be provided on-site and will be comprised as follows:

- 21 staff spaces: the staff spaces will be located within the western car park which will provide 21 angled spaces;
- 16 short-term parking spaces (including one accessible space): these spaces will also be located within the western car park, along with the staff spaces

- 12 general drop-off and pick-up spaces: these drop-off and pick-up spaces will located within the western car park as parallel bays. Outside drop-off and pick-up hours, these spaces can be used as visitor parking spaces;
- 2 Assisted School Transport drop-off & pick-up spaces: these spaces will be provided in the eastern car park.
- 5 visitor spaces: parallel visitor spaces will be provided in the eastern car park.

The western car park has also allowed for an informal overflow parking area which can accommodate 18 additional spaces.

A loading bay will also be provided in the eastern car park.

The car park locations and allocation is shown in Appendix A.

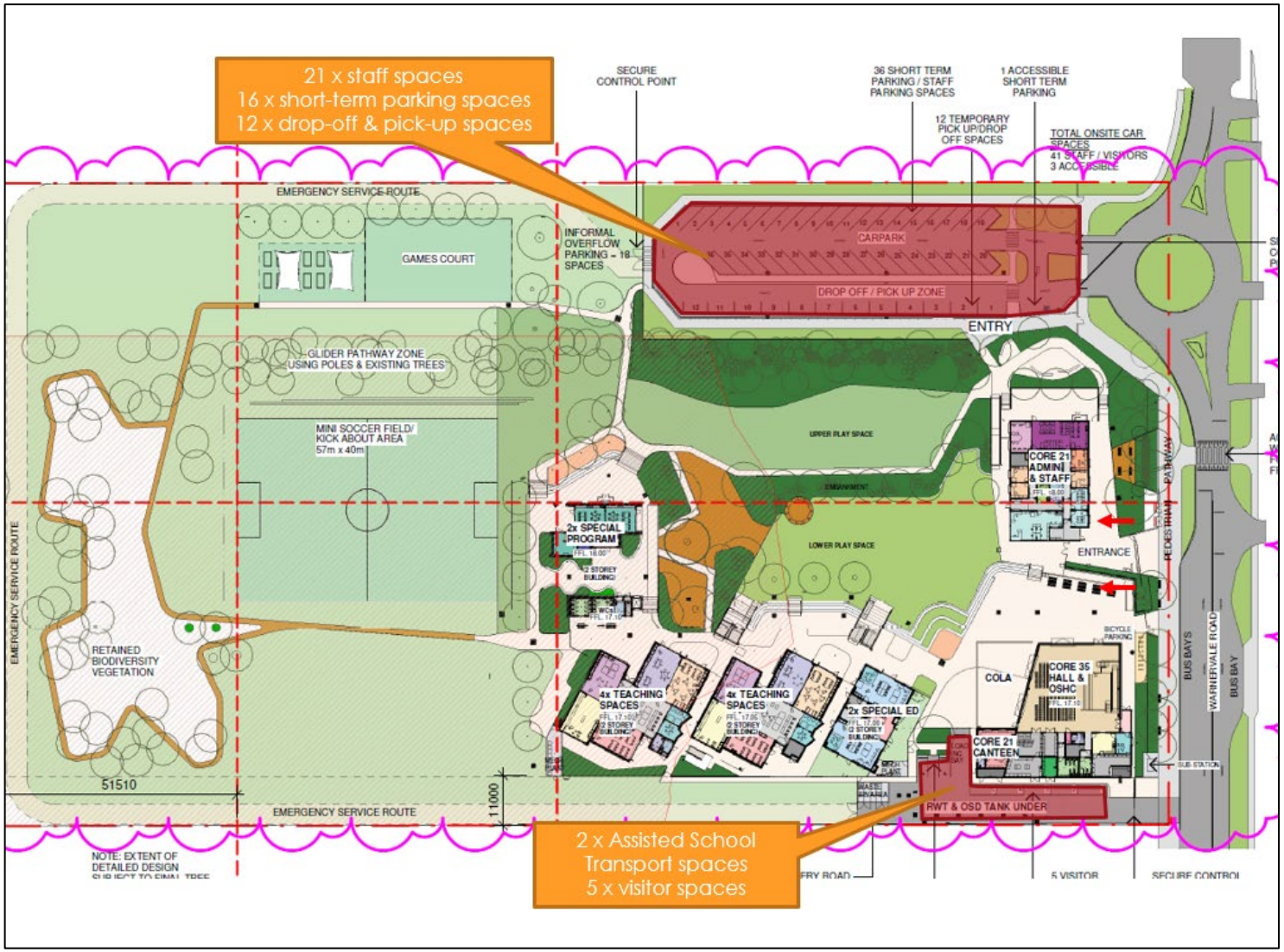


Figure 6: On-site car park locations

5.1.5 Delivery & Service Vehicle Access & Route

The loading bay will be accessible via the eastern driveway off Warnervale Road.

All waste collection and loading/unloading activities will occur on-site and within the loading bay.

The largest vehicle that can be accommodated in the loading bay will be a 12.5 metres long heavy rigid vehicle (HRV). It is not anticipated that the School will be required to accommodate a larger vehicle.

Servicing and delivery requirements will generally be limited to waste collection, delivery of sports equipment, catering and small courier deliveries.

For deliveries, the School will communicate directly with the suppliers to advise of them of the location of the loading bay and ensure that the delivery occurs outside of drop-off and pick-up hours where possible. Waste collection generally occur outside of school drop-off and pick-up hours.

5.1.6 Emergency Vehicle Access & Route

Emergency vehicles will access the site via the driveways along Warnervale Road and will be able to park in either the loading bay (eastern side) or the car park (western side). The School will ensure that the gates remain open to allow emergency vehicles to enter the site and the loading bay is vacant.

An emergency service route will also be provided to allow emergency vehicles to access the southern side of the school.

5.2 PEDESTRIAN AND CYCLIST ROUTE & ACCESS

During school pick and up drop off times, the School will generate a large number of pedestrian movements across and along Warnervale Road. This includes pedestrians generated by the bus laybys, and the western pick up/ drop off zone.

Pedestrian footpaths will be provided along both sides of the Warnervale Road frontage with a raised pedestrian crossing, directly adjacent to the school entrance to provide access for pedestrians from the north and bus passengers using the northern layby. Footpaths will also be provided around the perimeter of the western car park with pedestrian crossings located near the car park entry/exit.

To increase pedestrian and cyclist safety, and mitigate risks associated with conflicts between students, buses and general traffic, the following measures will be adopted:

- School zones will be implemented along Warnervale Road frontage and approximately 200 metres approach distance to the school entry gates;
- A crossing supervisor will manage and control pedestrian activity across the pedestrian crossing during drop-off and pick-up hours (subject to a crossing supervisor application to be submitted by the School and approved by TfNSW prior to operation. This will be subject to a warrants based assessment);
- A 1.5 metre-wide footpath on the northern side of Warnervale Road to connect pedestrians traveling from either the east (including bus layby) or west with the School entrance;
- A shared path on the southern side of Warnervale Road will provide access for pedestrians and cyclists travelling from the east or the west. This path will also facilitate access from the western car park as well as allow students to board and alight at the southern bus layby;
- Pedestrian footpaths will be provided around the new western car park to minimise pedestrians travelling across the vehicle travel lanes; and
- Cyclists will have to dismount near the school entrance and walk their bicycle to the racks that will be provided at the Warnervale Road frontage, in front of the southern bus layby.

Majority of pedestrian traffic will be around the new western carpark and to/from the bus laybys along the Warnervale Road frontage. There will be some pedestrian and cyclist activity to/ from the west and east of the School which will predominantly be local students who live within walking/cycling distance to the School.

It is not expected that students will be required to cross the rail line at the level crossing when travelling to/ from the school. If required to do this, this will be infrequent and the number of students required to do so is expected

to be small. The School will inform parents, via the school website, newsletter, email and social media that students cycling and walking to/ from the school will need to be supervised by a parent/ guardian.

The Warnervale Road frontage and the new western carpark has been designed to minimise conflict between pedestrians/cyclists and vehicles.

The pedestrian routes are shown in Figure 6.

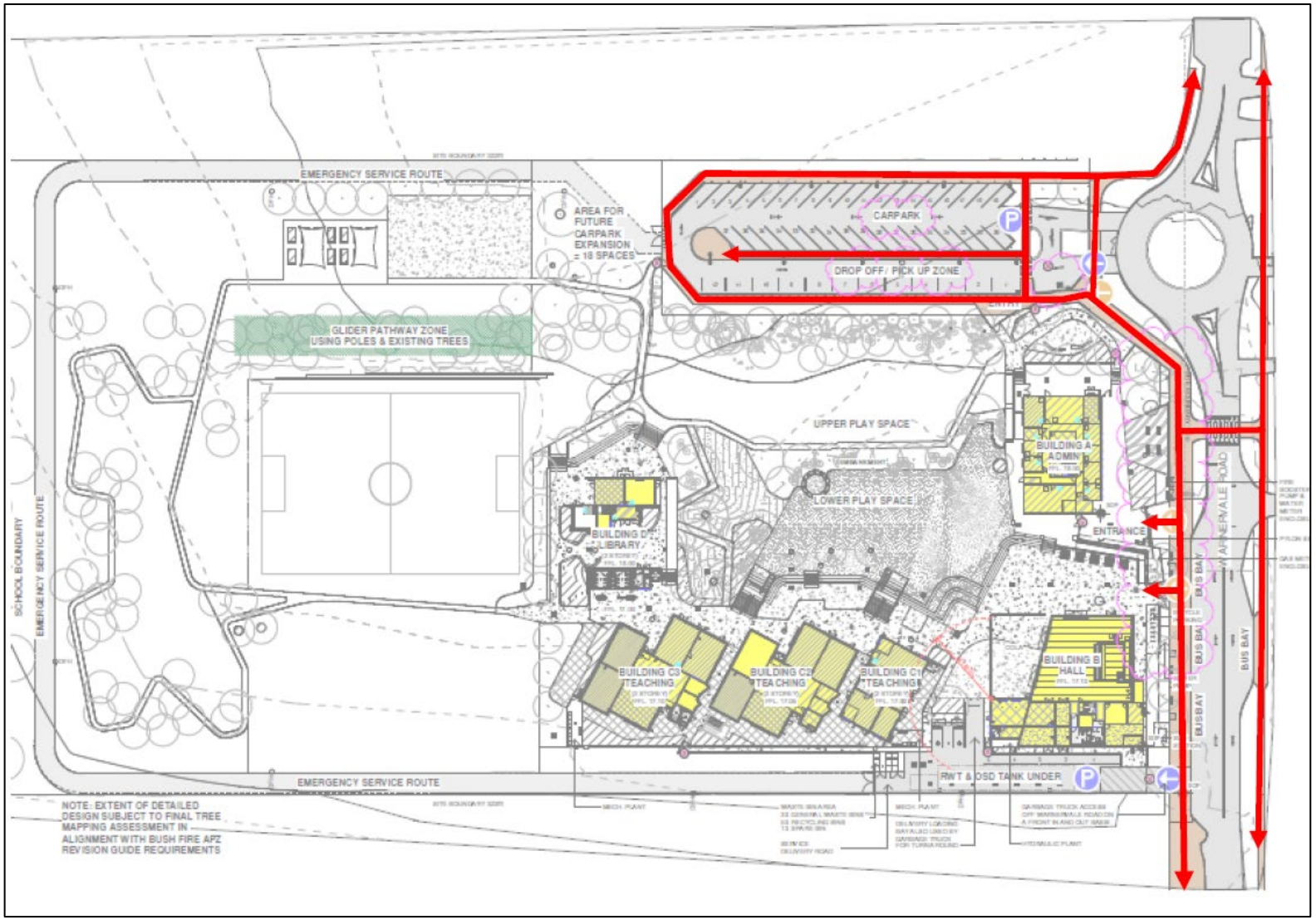


Figure 7: Pedestrian and Cyclist Routes

5.3 TRAVEL MODE SHIFT

In order to reduce the parking demand, traffic volumes and conflict within the school car parks and along the Warnervale Road frontage in the long term, there needs to be an overall shift in how students and staff travel to and from the School.

The results in Table 2 indicate that there are significant opportunities to:

- Promote and encourage carpooling as an alternative mode of transport for both staff and students;
- Increase the number of students and staff travelling by bus, particularly as service offerings increase over time; and
- Promote and encourage students (and staff) to walk, bike or use another active mode (such as scooter or a skateboard) for some or all of their trip.

A Green Travel Plan (GTP) has been prepared by Stantec which sets out short-term and long-term travel mode targets and initiatives that the School can implement to achieve these targets.

6.0 SPECIAL EVENTS

6.1 SPORTING EVENTS & EXCURSIONS

During sporting events and excursions that take place outside the School, students will travel to/from the location by bus, unless they are allowed to make their own way to/from the venue.

Students will arrive at the School, where they will be marshalled to the bus bays along Warnervale Road by staff members. Upon return, the buses will drop-off students along the same bus bays and staff members will marshal the students back into the school grounds.

The Travel Plan and School Bus Coordinators will be responsible for coordinating the arrival times of buses to/from the event site, to ensure impact to the surrounding road network is minimized (i.e. will occur outside of network peak periods whenever possible).

For sporting events that occur within school grounds, there will likely be a temporary increase in parking demand, depending on whether parents and visitors are invited. The School will inform parents and visitors that there will be limited on-site parking spaces available and should use alternative modes of transport (e.g. carpooling, taxi etc.).

It is noted, however, that these sporting events are not expected to be frequent throughout the year.

6.2 OUT-OF-HOUR EVENTS

From time to time there may be community events held at the school after hours, or on non-school days such as the weekend.

The School is to communicate travel options and car parking arrangements for these community use events, through their website, newsletter or social media. If the event is to be held by external parties, this should be communicated through their website and/or information packages.

Unlike the school events described in Section 6.1, there will be additional capacity for visitors to utilise the on-site parking facilities. The on-site parking spaces will ensure that any out-of-hour events held at the school will have minimal impact to the local community and the surrounding road network.

Alternative modes of transport will be encouraged such as public transport, carpooling, walking, cycling and taxis to minimise the impact on car parking.

7.0 MONITORING AND REVIEW

A monitoring and review process for the OTAMP will be set out by the school management to ensure that the OTAMP is constantly updated to reflect any changes to the operations of the school and transportation network.

The School will appoint a Travel Plan Coordinator who, from the support of the Travel Plan Committee, will review the OTAMP, GTP and the School Safety Policy.

The OTAMP should be reviewed annually to determine if the management strategies implemented are successful and whether alternative or supplementary measure are necessary.

The following table identifies the roles and responsibilities in the delivery of this OTAMP.

Table 3: Roles and responsibilities

Role	Person Responsible	Contact Details	Responsibilities
Travel Plan Coordinator	TBC by the School	TBC by the School	Regularly review and update the OTAMP, GTP and School Safety Policy to reflect changes to school operations and transportation network. Identify any issues related to the transport management strategies and determine if alternative measures are necessary. Collect and collate annual travel mode information of students and staff. Provide annual reporting to the Travel Plan Committee.
School Bus Coordinator	TBC by the School	TBC by the School	Work with the school bus operator to manage daily bus services for the school. Review of bus routes and student uptake. Discuss with school bus operator if more services are required.
Travel Plan Committee	TBC by the School	TBC by the School	Monitoring and review of the OTAMP, GTP and School Safety Policy. Working with the Travel Plan Coordinator to determine what alternative measures are required if transport management strategies are unsuccessful. Providing governance and financial support.

Appendices

Appendix A CONDITIONS SATISFATION TABLE

Porters Creek Public School (SSD 9439): Submission of Operational Transport and Access Management Plan in accordance with Condition D12

Condition	Condition requirements	Document reference
D12	Prior to the commencement of operation, an OTAMP is to be prepared by a suitably qualified person, in consultation with Council and Transport for NSW, and submitted to the Certifier and a copy provided for the information of the Planning Secretary. The OTAMP must address the following:	Refer to Appendix B for CVs Refer to Appendix D for consultation with TfNSW Refer to Appendix E for consultation with Council
	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	Refer to Section 5.2
	b) the location of all car parking spaces on the school campuses and their allocation (i.e. staff, visitor, accessible, emergency, etc.)	Refer to Section 5.1.4
	c) the location and operational management procedures of the pick-up and drop-off parking located within the school, including staff management/ traffic controller arrangements	Refer to Section 5.1.3
	d) the location and operational management procedures for the pick-up and drop-off of students by buses and coaches for excursions and sporting activities during the hours of bus operations along Warnervale Road, including staff management/ traffic controller arrangements	Refer to Section 6.1
	e) delivery and services vehicle and bus access and management arrangements	Refer to Section 5.1.5 for service vehicle access and management arrangements

		Refer to Section 5.1.2 for bus access and management arrangements.
	f) management of approved access arrangements	Refer to Section 5.1.1
	g) potential traffic impacts on surrounding road networks and mitigation measures to minimize impacts, including measures to mitigate queueing impacts associated with vehicles accessing pick-up and drop-off parking in the school	Refer to Section 5.1.3
	h) car parking arrangements and management associated with the proposed use of the school facilities by community members	Refer to Section 6.2
	i) a monitoring and review program	Refer to Section 7.0

Appendix B CURRICULUM VITAE

Sunny Hong BE (Civil) & BCom

Transportation Engineer
5 years of experience · North Sydney, NSW, Australia

Sunny has been working in the traffic and transportation industry for approximately 5 years with experience in both the local government and private consultancy level.

He started working as a student engineer at Lane Cove Council for approximately 6 months where he assisted senior engineers with the assessment of Development Applications and the delivery of major infrastructure upgrade projects around the local government area (e.g. road and intersection upgrades, footpath maintenance programs, provision of new cycleways etc.).

He also has experience in private consultancy working as Graduate Traffic Engineer, before gradually becoming a Traffic Engineer, at a parking and traffic consultancy. This has provided him skills in design, traffic modelling and transport planning whilst working on a variety of projects including, hospital and school redevelopments, moderate to large scale private developments and local government transport planning projects.

EDUCATION

Bachelor of Engineering (Civil) & Bachelor of Commerce, University of Sydney, Sydney, New South Wales, 2019

PROJECT EXPERIENCE

TRAFFIC ENGINEERING

Northern Beaches Hospital* | Northern Beaches Hospital | Northern Beaches Hospital | 2019 | Traffic Engineer

Sunny was involved in preparing the Green Travel Plan for the Northern Beaches Hospital. This involved undertaking travel mode surveys, data analysis and consultations with stakeholders (hospital representatives, Northern Beaches Council, Transport for NSW and bus operators). He was also involved with writing the Green Travel Plan.

Picton High School Redevelopment | School Infrastructure NSW | Picton High School | 2021 | Traffic Engineer

Sunny is currently involved with preparing the Green Travel Plan for Picton High School. He has been involved with assisting the school in preparing the travel mode surveys, analysing the results and holding consultations with stakeholders (the School, project team, Council and TfNSW). He has also been involved with writing the Green Travel Plan.

Anglicare Social Housing Development* | Anglicare | 2017-2019 | Traffic Engineer

Sunny was involved in preparing Traffic Impact Assessments for a number of Anglicare Social Housing Developments including Liverpool, Fairfield, Mount Druitt and Minto. He was responsible for determining parking requirements based on SEPP and Council DCP requirements, calculating the traffic generation based on RMS guidelines, undertaking SIDRA models for the existing and future scenarios, assessing the traffic and parking impact the development will have on the existing road network and whether or not this will trigger the need to upgrade existing facilities on the road network such as nearby intersections. Sunny was also extensively involved in liaising with the project team to assist with the design of the vehicular access, ramps, car parks, loading docks and bicycle parking facilities.

Uniting Residential Developments* | Uniting | Leichhardt, New South Wales, Australia | Traffic Engineer

Sunny was involved in preparing Traffic Impact Assessments for two affordable rental housing developments for seniors, led by Uniting. He was responsible for determining parking requirements based on SEPP and Council DCP requirements, calculating the traffic generation based on RMS guidelines, undertaking SIDRA models for the existing and future scenarios, assessing the traffic and parking impact the development will have on the existing road network and whether or not this will trigger the need to upgrade existing facilities on the road network such as nearby intersections. Sunny was also in providing design advice to the architects and civil engineers to assist with the design of the vehicular access, ramps, car parks, loading docks and bicycle parking facilities.

** denotes projects completed with other firms*

Menangle Neighbourhood Precinct | Mirvac Homes | Menangle, New South Wales, Australia | 2020-Present | Traffic Engineer

Sunny is currently involved in providing traffic engineering advice to Mirvac and the project team regarding a planned neighbourhood precinct in Menangle. The neighbourhood precinct will comprise of low-medium density residential developments, a commercial centre, function centres, cafes and restaurants etc. The development is planned to be constructed in stages. Sunny has been involved in determining the traffic generation for each of the stages and at ultimate development. He has also been responsible for undertaking the SIDRA assessment and sensitivity analysis to determine any upgrades required in surrounding intersections and at what stage this will be triggered. Sunny has also been involved with providing advice regarding the design of new roadways within the precinct which includes sight distance assessments and swept path assessments.

120 Herring Road, Macquarie Park * | Toga Group | Macquarie Park, New South Wales, Australia | 2019 | Traffic Engineer

Sunny was responsible for preparing the Traffic Impact Assessment for a mixed-use residential development at 120 Herring Road, Macquarie Park (also known as One Twenty Macquarie). This involved determining parking requirements based on Council DCPs, calculating potential traffic generation, processing SIDRA models and liaising with the project team to coordinate the design of the car park, loading areas and access ramps to ensure that they were in accordance with the AS2890 series. Sunny was also involved in consultations with Council to discuss post-development impacts along Herring Road and planned upgrades along this road corridor. This involved developing mitigation measures and discussing with Council to determine the most appropriate measures.

Griffith Base Hospital Redevelopment* | Health Infrastructure | Griffith, New South Wales, Australia | 2017-2019 | Lead Traffic Engineer

Sunny was the lead traffic engineer and was responsible for providing the design team with traffic engineering advice to ensure that the car parks, emergency departments and loadings docks were designed to provide the most efficient vehicular circulation and optimal interface between pedestrians and vehicles. Sunny was also involved with preparing multiple Traffic Impact Assessments for different stages of the project, including the TIA for the SSDA.

21-23 Lexington Drive, Bella Vista | Capital Corporation | 21-23 Lexington Dr, Bella Vista NSW 2153, Australia | 2020 | Traffic Engineer

Sunny was responsible for preparing the Traffic Impact Assessment for the development of a large mixed-use development at 21-23 Lexington Drive, Bella Vista. He was involved with preparing the SIDRA models, calculating parking requirements and potential traffic generation, as well as liaising with the design team to ensure that the design of the vehicle access points, basement car parks and loading docks were in accordance with the AS2890 series.

8 Solent Circuit, Baulkham Hills | EBH Investments Pty Ltd | 8 Solent Circuit, Baulkham Hills NSW, Australia | 2020 | Traffic Engineer

Sunny was responsible for the preparation of the Traffic Impact Assessment. This involved reviewing state/local government regulations and policies, determining parking requirements, calculating potential traffic generation, SIDRA modelling and reviewing architectural plans to ensure that they were in accordance with the AS2890 series. Sunny was also the primary point of contact with the client and was involved in a number of workshops and client consultations.

Campbelltown Hospital Redevelopment* | Health Infrastructure | Campbelltown, New South Wales, Australia | 2017-2018 | Traffic Engineer

Sunny assisted the senior traffic engineer and architects with designing the new multi-deck car park at Campbelltown Hospital. He was also responsible for undertaking the SIDRA modelling for the post-redevelopment scenario, which incorporate the proposed intersection upgrades in the surrounding road network. Sunny was also responsible for preparing the Traffic Impact Assessments for the SSDA.

Nepean Hospital Redevelopment* | Health Infrastructure | Sydney, New South Wales, Australia | 2017-2018 | Traffic Engineer

Sunny assisted senior traffic engineers with modelling (SIDRA Network) the road network surrounding the hospital, under a number of different scenarios, and identifying the ideal location for the multi-storey car parks and any intersection upgrades required. Sunny was also involved with preparing the Traffic Impact Assessments for the SSDA.

Mudgee Hospital Redevelopment* | Health Infrastructure | Mudgee, New South Wales, Australia | 2017 | Traffic Engineer

Sunny assisted the senior engineers with preparing the Traffic Impact Assessment and Parking Demand Studies for the hospital redevelopment. He also assisted the design team by providing advice regarding the design of the car park, circulation, access control for the staff car park, pedestrian circulation through the car park, ambulance and service vehicle circulation.

Rural Ambulance Infrastructure Reconfiguration (RAIR) Program* | Health Infrastructure | Sydney, New South Wales , Australia | 2017-2019 | Lead Traffic Engineer

Sunny was the lead traffic engineer and was responsible for providing traffic engineering advice to the design team and preparing the Traffic Impact Assessments for the Development Applications and Review of Environmental Effects for over 10 sites. This involved calculating parking requirements and potential traffic generation, processing SIDRA models and undertaking swept paths of emergency vehicles. He was also responsible for undertaking site visits and preparing due diligence reports outlining the potential risks and identifying mitigation measures for the proposed locations of the ambulance stations. He also liaised with the design team to ensure that the proposed design options optimised response time for emergency vehicles.

** denotes projects completed with other firms*

One Sydney Park* | HPG | Sydney, New South Wales , Australia | Traffic Engineer

Sunny assisted the senior engineer with preparing the Traffic Impact Assessment for a mixed-use residential development at Sydney Park. This involved determining parking requirements based on City of Sydney Development Control Plans, calculating potential traffic generation, processing SIDRA models and liaising with the project team to coordinate the design of the car park, loading areas and access ramps to ensure that they were in accordance with the AS2890 series. Sunny was also extensively involved in liaising with the Westconnex team to coordinate the vehicle access points proposed along Euston Road.

St Edmunds College Expansion* | St Edmunds College | Sydney, New South Wales, Australia | 2019 | Lead Traffic Engineer

Sunny was involved in assisting the architect with designing the new at-grade car park for the school and providing design advice regarding the upgrade works for the pick-up/drop-off zone. Sunny was also involved with the preparation of the Traffic Impact Assessment for the Development Application.

St Gabriel's School Expansion* | St Gabriel's School | Sydney, New South Wales , Australia | 2019 | Lead Traffic Engineer

Sunny was involved in assisting the architect with designing the new at-grade car park for the school and providing design advice regarding the circulation and access points for the car parks. Sunny was also involved with the preparation of the Traffic Impact Assessment for the Development Application.

Campbelltown Sports and Health Centre of Excellence * | Campbelltown City Council | Campbelltown | Traffic Engineer

Sunny was the traffic engineer responsible for preparing the Traffic Impact Assessment for the Campbelltown Sports & Health Centre of Excellence, which is a facility designed for elite sports teams and athletes. This involved calculating the parking requirements based on Campbelltown Council and RMS guidelines, determining the potential traffic generation, SIDRA modelling and reviewing the proposed design of the car park and coach/bus laybys to ensure that they were in accordance with the AS2890 series.

Sandstone Precinct - Public Domain Works | Built | 35-39 Bridge Street, Sydney NSW, Australia | Traffic Engineer

Sunny is currently involved in assisting the project team with delivering works for the Sandstone Precinct Project which involves upgrades to the public domain at 1 Farrer Place, Sydney. The upgrade involves kerb extensions which will activate a larger pedestrianised area and provide a vehicular layby for hotel pick-up & drop-off. Sunny has assisted the design team with investigating how this kerb realignment will impact existing vehicular conditions, particularly the turning ability for State Transit buses.

Subiaco Precinct Study | Stantec WA | Subiaco | 2020 | Traffic Engineer

Sunny assisted the technical lead and project team with developing high level options for extending Subiaco Road to Haydn Bunton Drive and creating a left-in/left-out access into Subiaco Road from Haydn Bunton Drive. Five high level options were developed based on road safety, sight distance and distance to nearby intersections in accordance with relevant guidelines and standards.

** denotes projects completed with other firms*

Stantec

ANNA WILKINS

Senior Principal Transportation Engineer

Anna has over 18 years' experience as a Traffic Engineer, Transport Planner and Project Manager across New Zealand and Australia. She has a wealth of consultancy experience, working for a wide range of private and public sector clients on projects ranging from single-site developments to large-scale infrastructure projects.

She has also held public sector delivery and planning roles with VicRoads, Major Road Projects Victoria, and the Department of Transport. Through these roles, Anna has developed an understanding of the client perspective and the role of traffic engineering and modelling in the project lifecycle from inception and business case, through to on-site delivery with the contractor and directly affected communities.

Anna's core skills and experience include transport planning, intersection and network modelling, structure planning and corridor studies, impact assessment, design development and review, consent and permit planning, stakeholder consultation, property impacts and compulsory acquisition, project documentation and technical reporting.

Anna brings a practical and pragmatic approach to projects. She works well in multi-disciplinary and multi-stakeholder environments and enjoys distilling complex issues into workable, best-for-project solutions.

EDUCATION AND MEMBERSHIPS

- Graduate Diploma in Business Studies (Massey University), 2015
- Master of Engineering Transportation (University of Canterbury), 2008
- Bachelor of Engineering (Civil) (University of Canterbury), 2001
- Chartered Member of Engineering New Zealand (CMEngNZ)
- Member of the Australian Institute of Traffic Planning and Management (AITPM)
- Construction Industry White Card (2018)

PROJECT EXPERIENCE

Halcyon Senior Citizens Village Refurbishment, Brighton East, Melbourne, Victoria | Housing First | 2020-21

Anna was the lead traffic engineer on the design and build phases of this project, which involved a major refurbishment of an established seniors' village to accommodate more residents in a more modern facility. Tasks included parking and access design, securing Council and VicRoads approvals for variations to the planning permit, and preparation of a carpark management plan.

Marlborough House Apartment Development, Balaclava, Melbourne, Victoria | Housing First | 2020-21

Anna was the lead traffic engineer on the design development phase of this project, which involved construction of a multi-level apartment building with integrated retail and public parking area. Tasks included parking and access design and supporting consultation with neighbours regarding parking impacts.

Waikato Regional Transportation Model (WRTM) | Local Authority Shared Services | 2014-2016

Anna was the Communications Manager for the WRTM (a four-step regional TRACKS model) operations contract, acting as the interface between the model development and operations team, and the client user group (a consortium of local Councils and NZTA).

She was responsible for overseeing all applications of the model. Her key role was understanding the nature of the client's problem or challenge and converting that into a model brief and set of outputs that gave the client the insight they needed to make a better decision.

Anna also provided modelling advice, analysis and interpretation, reporting, quality assurance, facilitated User Group meetings, and prepared Quarterly Service Reports.

Major projects performed under the Operations Contract included economic appraisals of new infrastructure, assessment of effects and option assessments for the Waikato Expressway, and assessment of major land use and Structure Plan projects around the region.

Ruakura Inland Port and Structure Plan, Hamilton, New Zealand | Tainui Group Holdings | 2009-2016

Anna was the Transportation advisor and lead modeller for the Ruakura Private Plan Change, providing modelling and assessment for the proposed Tainui Group Holdings and Chedworth Properties Private Plan Change request for approximately 400ha of residential, commercial, industrial and logistics development centres on an Inland Port and the junction of the Waikato Expressway and East Coast Main Truck Railway. Anna's role included:

- Macro (WRTM TRACKS model) and micro (SIDRA) modelling

- Working collaboratively with Council and Transport Agency experts to understand, assess and mitigate concerns on their networks
- Drafting impact assessment and modelling reports.
- Presenting expert modelling evidence to the Board of Inquiry
- Facilitating joint scoping of a WRTM model brief and preparation of outputs and analysis to form a common evidence base and management framework for the Board.

Yan Yean Road Stage 1 Duplication, Melbourne, Victoria | VicRoads | 2016-2018

Anna was part of the project delivery team for the design and construction phases of the $131M Yan Yean Road Stage 1 upgrade, a 4km peri-urban duplication. In her role, Anna:

- Co-ordinated and prepared documentation to successfully navigate DTF Gateway Reviews for high value, high risk projects
- Represented VicRoads/MRPV at numerous community information sessions, the site office, and one-on-one meetings with landowners.
- Managed the compulsory acquisition of over 70 properties, working with Property Specialists and each landowner to understand access, parking, utility services and fencing impacts
- Developed and tested mitigation options and converted them into works packages with the contractor.
- Provided technical advice and traffic modelling to enable rapid and well-informed decisions about traffic management, business impacts, construction management and resolution of design conflicts.
- Developed dashboard tools to monitor and report on real-time traffic performance. These were applied on Yan Yean Road and also the Chandler Highway, Plenty Road and Swan Street Bridge upgrades.

Level Crossing Removal Project, Melbourne, Victoria | Level Crossing Removal Authority | 2018

Anna provided technical advice (as part of the Technical Advisor JV) to support the State Government initiative to remove 50 of Melbourne's worst level crossings. Her responsibilities included:

- Technical analysis and reporting to inform site selection, design options, construction methodology and management of network impacts
- Review of Alliance design packages and pricing proposals
- Data collection, analysis, impact assessment and evaluation for potential treatment options (over, under, closure)
- Before and after studies to inform benefit appraisal and investment monitoring.

Waikato Expressway Cambridge Section | New Zealand Transport Agency | 2013-2015

Anna was the Transportation Discipline Lead for the design and construction of the $218M Cambridge Section of the Waikato Expressway (16km of greenfield expressway), as a subconsultant to lead designers URS and contractors HEB.

She was responsible for the intersection design and analysis package including modelling of the proposed signalised central interchange in SIDRA and S-Paramics.

Anna managed this package and all Stantec inputs including signs and marking, temporary traffic management, geometric design and safety auditing.

Multi-level Carpark Design Reconfiguration, Centre Place | Kiwi Income Property Trust | Hamilton, New Zealand | 2014-16

Anna led the redesign of the internal and external layout of an existing six-level parking building in the Hamilton CBD, on behalf of the owner Kiwi Income Property Trust.

The redesign facilitated a nested parking layout within the upper levels of the building, to enable the operator to implement a new parking pricing and allocation strategy. Design work included vehicle swept path analysis, integration with pedestrian crossings and cycle parking areas, as well as liaison with technology providers regarding barrier arm layouts and access technologies.

The external access to the building was converted from left-in, left-out only to enable a new access route via a right turn entry. Land formerly used a single-lane access road was then able to be repurposed into an alfresco dining lane and pedestrian area.

Anna led the design review and impact assessment, including network modelling, to demonstrate to Council that the impacts of the changes were acceptable and could be integrated with Council's broader objectives for the CBD and surrounding streetscape.

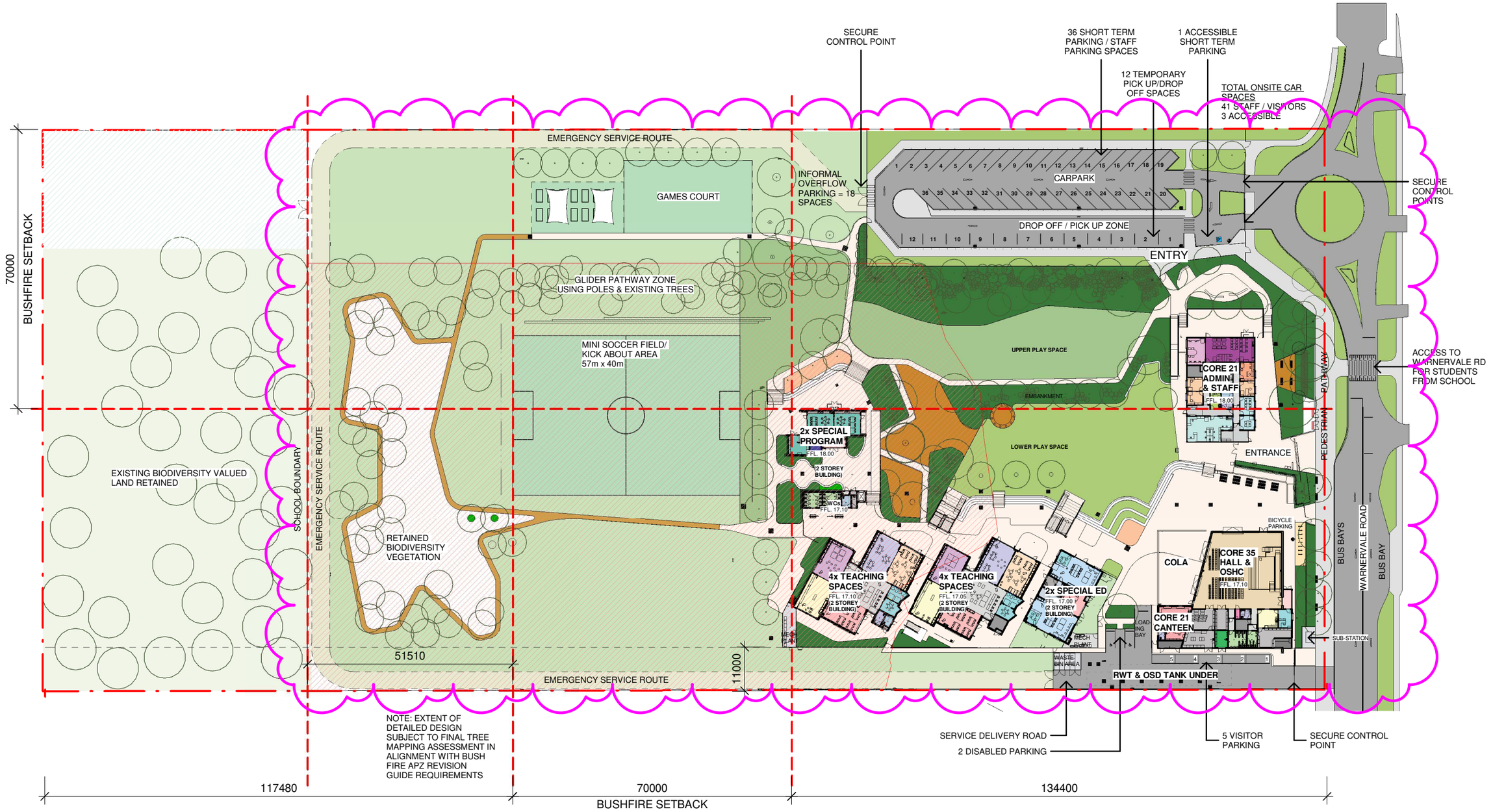
Thomas Road Mixed Use Development Travel Demand Management Plan and Monitoring| Hamilton, New Zealand | 2015-16

Peer reviewer, traffic impact assessment, travel demand management plan and monitoring reports for a mixed-use retail, commercial and apartment living development in Rototuna Hamilton. The project obtained planning approval for what was, at the time, a non-complying development form because of its limited on-site parking supply and mix of ground floor retail/commercial mixed with residential apartments on upper levels.

Airport West Transport Strategy and Tram/Bus Interchange Redevelopment, Moonee Valley City Council | Melbourne, Victoria | 2018

Refreshing the transport strategy supporting the Airport West Structure Plan to integrate vehicle, pedestrian, cycle, public transport and open space networks in Council's overall strategy. Developing concept designs to achieve better integration and walkability between the Route 58 tram terminus, bus interchange and adjacent shopping precinct. Assessing impacts across users of all modes including vehicle level of service and pedestrian walk times through adjacent intersections.

Appendix C SITE PLAN



Issue

No.	Date	Description	Chkd
1	02/08/2021	Section 4.55 Modification - Coordination	KLC

CLIENT

NSW GOVERNMENT Education

FOR SECTION 4.55

Drawing Title
SITE CONTEXT PLAN - PROPOSED LOWER GROUND

Project
Porters Creek Public School

at
75 Warnervale Road, Warnervale, NSW, 2259

for
Richard Crookes Constructions

Architect
NBRSARCHITECTURE.
Sydney
61 2 9922 2344 nbrsarchitecture.com

Date 2/08/2021 5:29:00 PM
Scale 1 : 1000 @ A3

Drawing Reference 20018-NBRS-AA03-0001
Revision 1

0 10 20 30 40 50

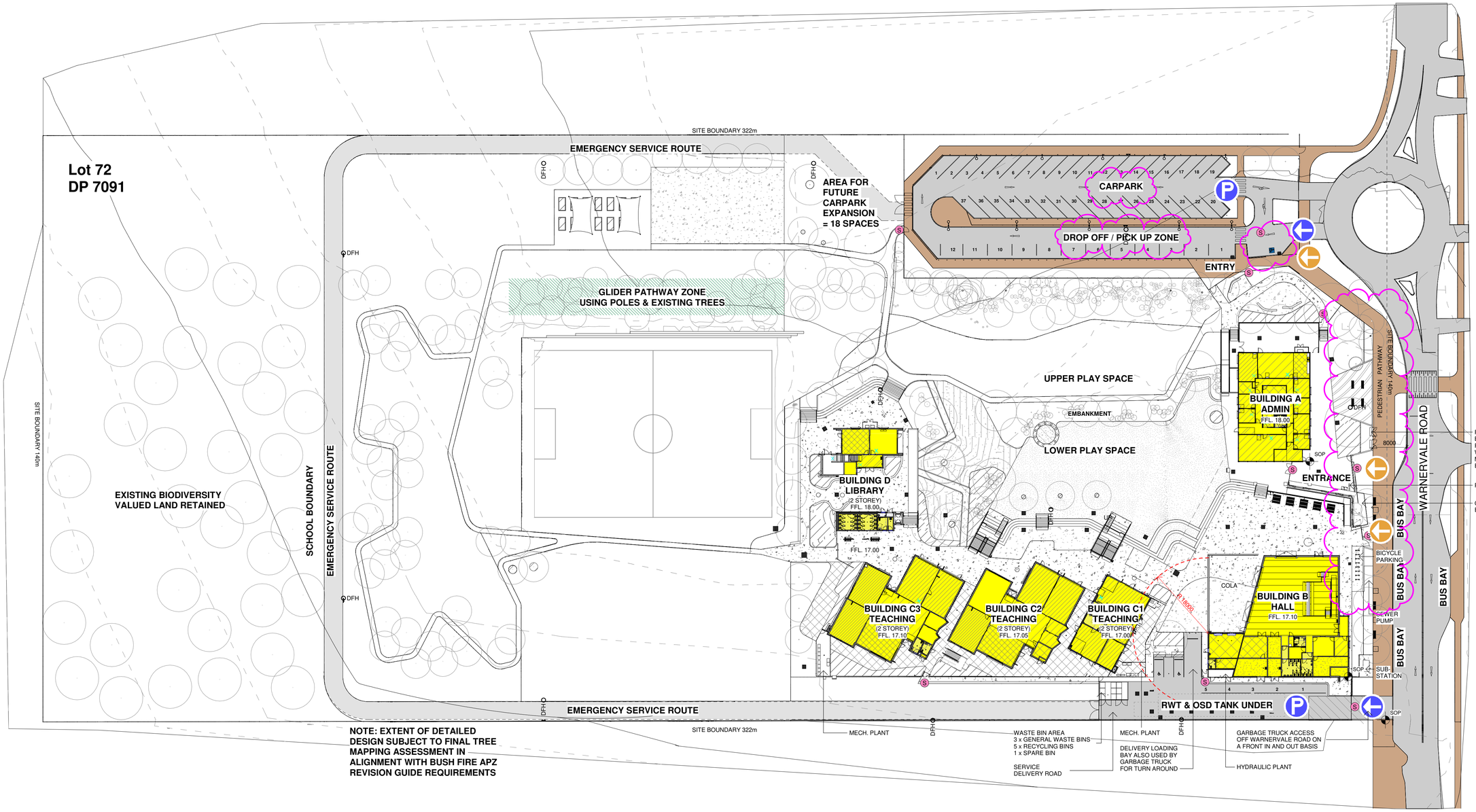
Appendix D CIVIL & ROAD WORKS

TOTAL FOR WESTERN CARPARK

1 X DISABLED SHORT TERM PARKING
12 X TEMPORARY PICK UP/DROP OFF SPACES
17 X SHORT TERM PARKING
19 X STAFF PARKING SPACES

TOTAL FOR EASTERN CARPARK

1 X LOADING BAY
2 X DISABLED SHORT TERM PARKING
5 X TEMPORARY PICK UP/DROP OFF SPACES



NOTE: EXTENT OF DETAILED DESIGN SUBJECT TO FINAL TREE MAPPING ASSESSMENT IN ALIGNMENT WITH BUSH FIRE APZ REVISION GUIDE REQUIREMENTS

1 SITE PLAN - LOWER GROUND LEVEL
1 : 500

NBRSARCHITECTURE.

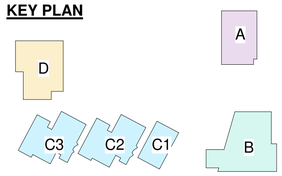
LEGEND

- SITE BOUNDARY
- SITE FENCE
- VEHICLE ACCESS
- PEDESTRIAN ACCESS
- VEHICLE PARKING
- MAIN ROAD
- PEDESTRIAN PATHWAY
- GRATED PIT (TO ENG. DETAILS)
- KERB PIT (TO ENG. DETAILS)
- DFH — DOUBLE FIRE HYDRANT (TO ENG. DETAILS)
- SECURITY CONTROL POINT
- EXTERNAL LIGHTING
- E.J — EXPANSION JOINT
- M.J — MOVEMENT JOINT

EXTERNAL LIGHTING DESIGN

- EXTERNAL LIGHTING DESIGN IS TO COMPLY WITH REQUIREMENTS OF AS4282-2019
- POLE TYPE LUMINARIES TO CARPARK TO PROVIDE SECURITY LIGHTING ON BOTH SIDES OF CARPARK PER ELECTRICAL DESIGN & EFSG REQUIREMENTS
- PROVIDE LIGHTING TO ALL EXTERNAL STAIRS AND RAMPS PER ELECTRICAL DESIGN & EFSG REQUIREMENTS
- PROVIDE EXTERNAL DOWNLIGHT TO COVERED AREAS & WALKWAYS PER ELECTRICAL DESIGN & EFSG REQUIREMENTS

KEY PLAN



NOTE:

BUILDING A - ADMIN
BUILDING B - HALL
BUILDING C - TEACHING BLOCKS
BUILDING D - LIBRARY

CONSTRUCTION

Issue

No.	Date	Description	Chkd
8	30/10/2020	For EFSG DD3	JK
9	09/11/2020	For Revised CC2	JK
10	13/11/2020	For Revised DD3	JK
11	17/12/2020	For EFSG DD4	KLC
12	15/02/2021	Revised EFSG DD4	SW
A	07/05/2021	For Construction	KLC
B	27/05/2021	For Construction	KLC
C	18/06/2021	For Construction	KLC

Architect
NBRSARCHITECTURE.
Sydney
61 2 9922 2344 nbrsarchitecture.com

Nominated Architect:
Andrew Duffin NSW 5602, VIC 51197
NBRS & Partners Pty Ltd

ABN 16 002 247 565

Project
Porters Creek Public School

at
75 Warnervale Road, Warnervale, NSW, 2259

for
Richard Crookes Constructions

Drawing Title
OVERALL LOWER GROUND PLAN (SITE PLAN)

Date 18/06/2021 3:12:52 PM
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Drawing Reference
20018-NBRS-DR-A-0300

Revision
C

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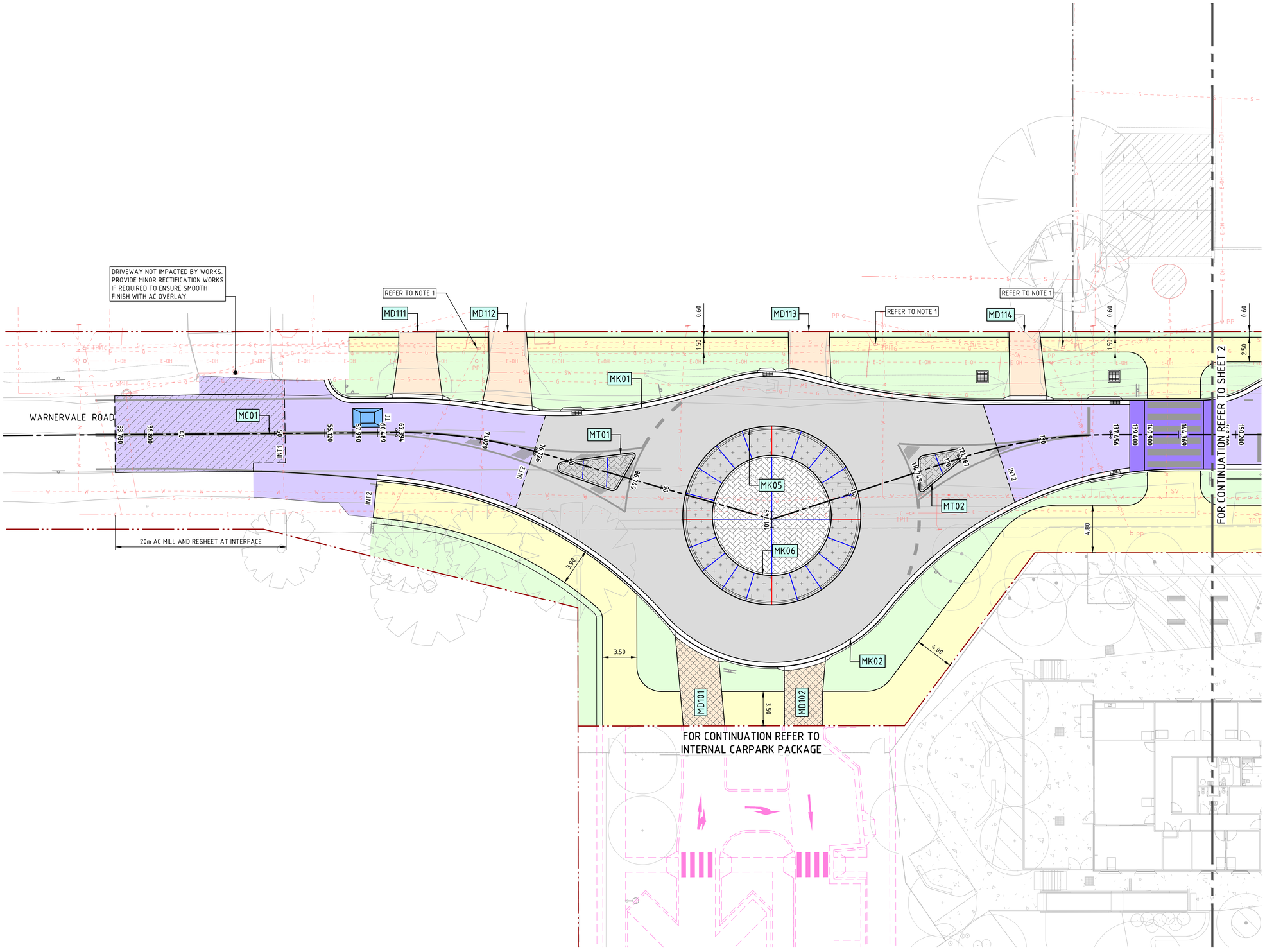

LEGEND

- SITE BOUNDARY LINE
- EXISTING BOUNDARY LINE
- EASEMENT LINE
- AC MILL AND RESHEET PAVEMENT REFER TO DRAWINGS C14.61 - C14.62
- AC ROAD PAVEMENT REFER TO DRAWINGS C14.61 - C14.62
- AC ROUNDABOUT PAVEMENT REFER TO DRAWINGS C14.61 - C14.62
- CONCRETE APRON PAVEMENT REFER TO DRAWINGS C14.61 - C14.62
- CONCRETE MEDIAN PAVEMENT REFER TO DRAWINGS C14.61 - C14.62
- RAISED THRESHOLD REFER TO DRAWINGS C14.61 - C14.62
- ROAD CUSHION REFER TO DRAWINGS C14.61 - C14.62
- CONCRETE FOOTPATH PAVEMENT CONSTRUCTED IN ACCORDANCE WITH COUNCIL STANDARD DRAWING SD0601. REFER TO NOTE 1.
- RESIDENTIAL CONCRETE DRIVEWAY CONSTRUCTED IN ACCORDANCE WITH COUNCIL STANDARD DRAWING SD0503. REFER TO NOTE 1.
- COMMERCIAL CONCRETE DRIVEWAY CONSTRUCTED IN ACCORDANCE WITH COUNCIL STANDARD DRAWING SD0506. REFER TO NOTE 1.
- TURF OR PLANTING REFER TO LANDSCAPE ARCHITECT DRAWINGS FOR FURTHER DETAILS.
- INT1 — AC ROAD PAVEMENT TO TIE INTO EXISTING PAVEMENT REFER TO DRAWINGS C14.61 - C14.62
- INT2 — AC ROAD PAVEMENT TO TIE INTO CONCRETE FOOTPATH PAVEMENT REFER TO DRAWINGS C14.61 - C14.62
- INT3 — AC ROAD PAVEMENT TO TIE INTO AC ROUNDABOUT PAVEMENT REFER TO DRAWINGS C14.61 - C14.62
- MC — MAIN CONTROL LINE ALIGNMENT LONGITUDINAL SECTIONS C15.01 - C15.03 CROSS SECTIONS C15.21 - C15.30
- MK MT — ROUNDABOUT CONTROL LINE ALIGNMENTS REFER TO ROUNDABOUT SETOUT PLAN ON DRAWINGS C16.01 - C16.04
- MD — DRIVEWAY CONTROL LINE ALIGNMENT REFER TO DRIVEWAY SETOUT PLAN ON DRAWINGS C16.21 - C16.23
- CONSTRUCTION JOINT
- SAWN JOINT

NOTES

1. PAVEMENT JOINTS AND TRIMMER BARS TO BE ALLOWED FOR AND CONSTRUCTED IN ACCORDANCE WITH RELEVANT COUNCIL STANDARD ASSOCIATED TO THE PAVEMENT TYPE.

PRIOR TO WORKS ON NEIGHBOURING PROPERTIES, WRITTEN PERMISSION FROM LANDOWNER TO BE GAINED. (TYPICAL).

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FOR CONSTRUCTION

DESIGNED: P. BURL
DRAWN: R. GRIEVE
JOB MANAGER: B. CLARK
VERIFIER: B. CLARK

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
3	ISSUED FOR CLIENT REVIEW	RG		PB	05.03.21
4	ISSUED FOR COUNCIL REVIEW AND APPROVAL	RG		PB	22.03.21
5	ISSUED FOR APPROVAL	RG	BC	PB	22.04.21
6	ISSUED FOR APPROVAL	RG	BC	PB	27.04.21
7	ISSUED FOR APPROVAL	RG	BC	PB	11.06.21
8	ISSUED FOR CONSTRUCTION	RG	BC	PB	22.07.21

CLIENT: NSW GOVERNMENT Education

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ARCHITECT: TSA

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SCALE 1:200@ A1 (0 2 4 6 8 10m)

NORTHROP
Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT: PORTERS CREEK PUBLIC SCHOOL
75 WARNERVALE ROAD, WARNERVALE NSW 2259

EXTERNAL ROAD WORKS

DRAWING TITLE: CIVIL ENGINEERING PACKAGE

PAVEMENT PLAN - SHEET 1

JOB NUMBER: NL200053
DRAWING NUMBER: DD-C14.21
REVISION: 8
DRAWING SHEET SIZE = A1

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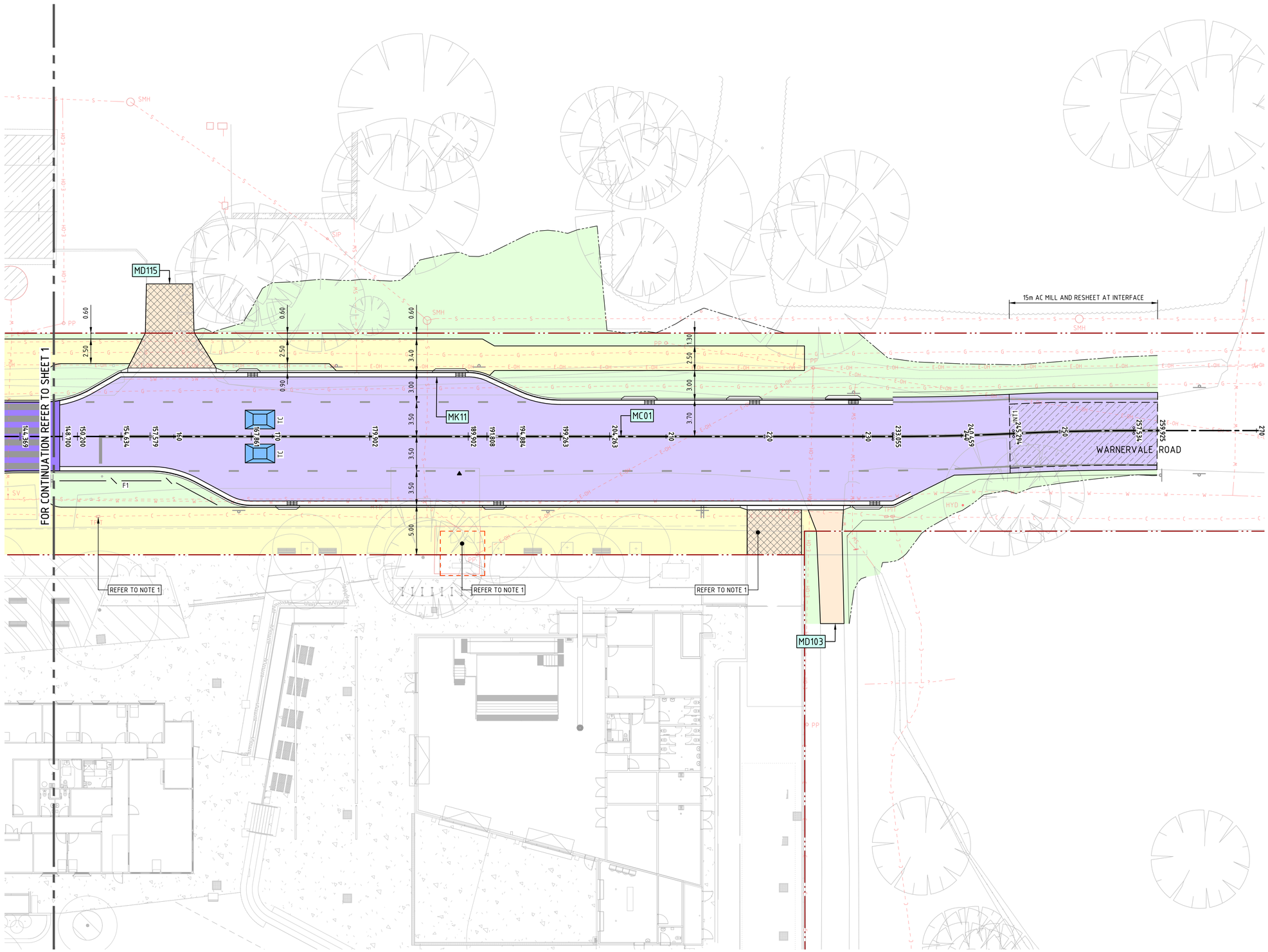

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- CONSTRUCTION JOINT
- SAWN JOINT

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PRIOR TO WORKS ON NEIGHBOURING PROPERTIES, WRITTEN PERMISSION FROM LANDOWNER TO BE GAINED. (TYPICAL).

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FOR CONSTRUCTION

DRAWN: R. GRIEVE
DESIGNED: P. BURL
JOB MANAGER: B. CLARK
VERIFIER: B. CLARK

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
2	ISSUED FOR COUNCIL REVIEW AND APPROVAL	RG	BC	PB	18.12.20
3	ISSUED FOR CLIENT REVIEW	RG		PB	05.03.21
4	ISSUED FOR COUNCIL REVIEW AND APPROVAL	RG		PB	22.03.21
5	ISSUED FOR APPROVAL	RG	BC	PB	22.04.21
6	ISSUED FOR APPROVAL	RG	BC	PB	27.04.21
7	ISSUED FOR CONSTRUCTION	RG	BC	PB	22.07.21

CLIENT: NSW GOVERNMENT Education

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SCALE 1:200@ A1 — 0 2 4 6 8 10m

NORTHROP
Newcastle
Level 1, 215 Pacific Hwy, Charlestown NSW 2290
Ph (02) 4943 1777 Email newcastle@northrop.com.au
ABN 81 094 433 100

PROJECT: **PORTERS CREEK PUBLIC SCHOOL**
75 WARNERVALE ROAD, WARNERVALE NSW 2259
EXTERNAL ROAD WORKS

DRAWING TITLE: **CIVIL ENGINEERING PACKAGE**
PAVEMENT PLAN - SHEET 2

JOB NUMBER: **NL200053**
DRAWING NUMBER: **DD-C14.22**
REVISION: **7**
DRAWING SHEET SIZE = A1

Date : 23.07.2021 9:16 AM Plotted By : ROBERT GRIEVE Found : y:\year 2020 jobs\nl200053 - warnervale primary school\o - drawings\CIVIL\03-CAD\02-DD EXTERNAL ROAD\NL200053-DD-C14.21 PAV PLAN.dwg

Appendix E TFNSW CONSULTATION

Post Approval – Consultation

Consultation needs to be meaningful, done with courtesy and respect and be well documented. These are people/ organisations that we need to be building meaningful relationships with.

Conditions of all consent can require consultation with a range of stakeholders. Consultation in the post approval world needs to be well documented to satisfy the condition requirements.

Examples include Council, service providers (eg. Electricity gas etc.), consult with local bus provider and TfNSW.

Read each condition carefully, any reference to consult triggers consultation.

Typically on State Significant Development, there will be a specific consultation condition as to how this piece can be appropriately addressed.

Consultation is not:

- A token gesture
- Done at the end of the piece of work,
- An email to the relevant stakeholder with no response;
- A meeting with the stakeholder with no meeting minutes.

Consultation is:

- Meaningful
- Done prior to the requirement,
- Captures an outcome,
- Identifies matters resolved,
- Identifies matters unresolved,
- Any disagreements are disclosed; and
- How we are going to address unresolved matters?

How to capture all the relevant details on consultation requirements? Any consultation requirement in a condition is required to be accompanied with the following table:

Post Approval Consultation Record

Date: 20/01/2022

Job: 1203 – Porters Creek Public School

Prepared by: Sunny Hong (Stantec)

Identified Party to Consult:	Transport for NSW (TfNSW)
Consultation type:	TfNSW review of Operational Transport & Access Management Plan and Stantec receiving feedback and comments through email correspondence.
When is consultation required?	As required by SSDA Conditions of Consent D12
Why	As required by SSDA Conditions of Consent D12
When was consultation scheduled/held	Email sent through to Central Coast Council for review on 9 September 2021 and feedback received on 20 January 2022.
When was consultation held	See above
Identify persons and positions who were involved	Masa Kimura (Development Services Case Officer)
Provide the details of the consultation	Emails sent through to TfNSW for review and feedback. Comments will be incorporated into the final OTAMP as required.
What specific matters were discussed?	Refer to table overleaf and attached email correspondence
What matters were resolved?	Refer to table overleaf.
What matters are unresolved?	Refer to table overleaf.
Any remaining points of disagreement?	N/A
How will SINSW address matters not resolved?	N/A

TfNSW's comments on the OTAMP have been repeated in the table below, along with Stantec's response.

TfNSW Comments	Stantec Response
Generally the OTAMP seems to cover most of the issues relevant to TfNSW (noting that the roads surrounding the school are local roads under the management of Central Coast Council) however I do note (refer Page 12) that it is stated "A crossing supervisor will manage and control pedestrian activity across the pedestrian crossing during drop-off and pick-up hours (to be determined with Council)". Management of the School Crossing Supervisor program is a TfNSW responsibilities with the provision of supervisors only occurring following a warrants based assessment (supervisors are paid employees of TfNSW).	Refer to Section 5.2. Crossing Supervisor application and warrants based assessment is not within the scope of the OTAMP and will need to be prepared separately by the Project Team.
Discussions should occur between the school and the local bus provider to discuss services and timetabling which may need to consider utilisation of existing bus services for nearby schools thereby effecting school bell times.	Bus timetabling is not within the scope of the OTAMP. The School will need to work with local bus providers to agree on services and timetabling that will work for school operations.
The school will also need to work with TfNSW concerning the provision of 40km/h school zone infrastructure.	Refer to Section 5.1.3. The Project Team to work with TfNSW regarding the implementation of the 40km/h school zone.

Hong, Sunny

From: Masa Kimura <Masa.Kimura@transport.nsw.gov.au>
Sent: Thursday, January 20, 2022 9:05 AM
To: Hong, Sunny
Subject: RE: SSD 9439 - Porters Creek Public School - OTAMP

Hi Sunny,

Thanks for this additional information below. I have received a response from the relevant internal SME with the following provided for your consideration in response to your submitted revised OTAMP:

Generally the OTAMP seems to cover most of the issues relevant to TfNSW (noting that the roads surrounding the school are local roads under the management of Central Coast Council) however I do note (refer Page 12) that it is stated "A crossing supervisor will manage and control pedestrian activity across the pedestrian crossing during drop-off and pick-up hours (to be determined with Council)". Management of the School Crossing Supervisor program is a TfNSW responsibilities with the provision of supervisors only occurring following a warrants based assessment (supervisors are paid employees of TfNSW).

Discussions should occur between the school and the local bus provider to discuss services and timetabling which may need to consider utilisation of existing bus services for nearby schools thereby effecting school bell times.

The school will also need to work with TfNSW concerning the provision of 40km/h school zone infrastructure.

Kind Regards,

Regards,

Masa Kimura
Development Services Case Officer
Regional and Outer Metropolitan
Development Services
Transport for NSW

T (02) 4908 7688 **M** 0407 707 999 **E** masa.kimura@transport.nsw.gov.au

transport.nsw.gov.au

6 Stewart Avenue, Newcastle NSW 2302
Locked Bag 2030, Newcastle NSW 2302

Working days Monday to Friday, 8:00am – 3:30pm

Transport for NSW

From: Hong, Sunny <Sunny.Hong@stantec.com>
Sent: Wednesday, 19 January 2022 3:19 PM
To: Masa Kimura <Masa.Kimura@transport.nsw.gov.au>
Cc: Tim Hastings <HastingsT@richardcrookes.com.au>; Adrian Connell <ConnellA@richardcrookes.com.au>
Subject: SSD 9439 - Porters Creek Public School - OTAMP

Hi Masa,

Thanks for the phone call earlier.

As discussed, I have spoken with my client and I can confirm that the civil works will be completed prior to the school becoming operational.

I can also confirm that submitted modification will not have any significant impact to the content of the OTAMP.

We have received feedback on the GTP and we're just awaiting comments back from your team.

As discussed, could you please send through your feedback on the OTAMP by tomorrow morning?

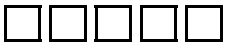
Appreciate your assistance.

Regards,

Sunny Hong
Transportation Engineer

Direct: +61 2 9493 9741
Sunny.Hong@stantec.com

Stantec
Level 4, 99 Walker Street
NORTH SYDNEY NSW 2060



Appendix F COUNCIL CONSULTATION

Post Approval – Consultation

Consultation needs to be meaningful, done with courtesy and respect and be well documented. These are people/ organisations that we need to be building meaningful relationships with.

Conditions of all consent can require consultation with a range of stakeholders. Consultation in the post approval world needs to be well documented to satisfy the condition requirements.

Examples include Council, service providers (eg. Electricity gas etc.), consult with local bus provider and TfNSW.

Read each condition carefully, any reference to consult triggers consultation.

Typically on State Significant Development, there will be a specific consultation condition as to how this piece can be appropriately addressed.

Consultation is not:

- A token gesture
- Done at the end of the piece of work,
- An email to the relevant stakeholder with no response;
- A meeting with the stakeholder with no meeting minutes.

Consultation is:

- Meaningful
- Done prior to the requirement,
- Captures an outcome,
- Identifies matters resolved,
- Identifies matters unresolved,
- Any disagreements are disclosed; and
- How we are going to address unresolved matters?

How to capture all the relevant details on consultation requirements? Any consultation requirement in a condition is required to be accompanied with the following table:

Post Approval Consultation Record

Date: 14/01/2022

Job: 1203 – Porters Creek Public School

Prepared by: Sunny Hong (Stantec)

Identified Party to Consult:	Central Coast Council
Consultation type:	Council review of Operational Transport & Access Management Plan and Stantec receiving feedback and comments through email correspondence.
When is consultation required?	As required by SSDA Conditions of Consent D12
Why	As required by SSDA Conditions of Consent D12
When was consultation scheduled/held	Email sent through to Central Coast Council for review on 9 September 2021 and feedback received on 30 September 2021.
When was consultation held	See above
Identify persons and positions who were involved	Steven McDonald (Traffic and Transport Engineer)
Provide the details of the consultation	Emails sent through to Central Coast Council for review and feedback. Comments will be incorporated into the final OTAMP as required.
What specific matters were discussed?	Refer to table overleaf and attached email correspondence
What matters were resolved?	Refer to table overleaf.
What matters are unresolved?	All matters have been resolved
Any remaining points of disagreement?	N/A
How will SINSW address matters not resolved?	N/A

Central Coast Council's comments on the OTAMP have been repeated in the table below, along with Stantec's response.

Central Coast Council Comments	Stantec Response
Section 5.1.2 Bus Services	
The location of the northern bus bays will necessitate the engagement of a school crossing supervisor. This should be resolved with TfNSW as soon as possible and approved prior to the school opening to students	Added to Section 5.1.2
The safety of children who may be required to cross the rail line at the level crossing should be considered	It is not expected that students will be required to cross the rail line at the level crossing when travelling to/ from the school. If this is the case, the number of students required to do this is expected to be low. The school will make it clear that any students walking to/ from the school will need to be supervised by a parent/ guardian.
Section 5.1.3 Drop-off and Pick-up operations	
Reference is made to a crossing supervisor (to be determined by Council). Council is not the responsible authority for crossing supervisors (TfNSW).	This has been amended. Refer to Section 5.1.3 and 5.2
Steps must be taken to ensure that queuing does not extend out of this zone and on-to Warnervale Road.	Refer to Section 5.1.3

Hong, Sunny

From: Steven McDonald <Steven.McDonald@centralcoast.nsw.gov.au>
Sent: Thursday, September 30, 2021 12:19 PM
To: Hong, Sunny
Cc: Adam Mularczyk
Subject: RE: SSD 9439 - Porters Creek Public School - GTP & OTAMP

Hi Sunny

I have reviewed both documents and offer the following comments on the OTAMP

5.1.2 Bus Services

The location of the northern bus bays will necessitate the engagement of a school crossing supervisor.

This should be resolved with TfNSW as soon as possible and approved prior to the school opening to students.

The safety of children who may be required to cross the rail line at the level crossing should be considered.

5.1.3 Drop-off and Pick-up operations

Reference is made to a crossing supervisor (to be determined by Council)

Council is not the responsible authority for crossing supervisors (TfSW)

Steps must be taken to ensure that queuing does not extend out of this zone and on-to Warnervale Road.

Officer-Group-Structure	Task Type	Estimated Start Date	Actual Start Date	Completed
Steven McDonald - Module Maintenance - Officer - Development	Refer to Engineer Traffic / Transport	14/04/2021 11:53:56 AM	14/04/2021 12:03:02 PM	False

Steven McDonald
Traffic and Transport Engineer
Engineering Certification
Central Coast Council
P.O. Box 20 Wyong, NSW 2259
t: 02 4350 5539
m: 0428 612 228
e: Steven.McDonald@centralcoast.nsw.gov.au

From: Hong, Sunny <Sunny.Hong@stantec.com>
Sent: Thursday, 9 September 2021 3:08 PM
To: Adam Mularczyk <Adam.Mularczyk@centralcoast.nsw.gov.au>; Steven McDonald <Steven.McDonald@centralcoast.nsw.gov.au>
Cc: Tim Hastings <HastingsT@richardcrookes.com.au>
Subject: SSD 9439 - Porters Creek Public School - GTP & OTAMP

Hi Adam and Steven,

Hope you have been well.

We got in contact with you this time last year, regarding the Construction Traffic and Pedestrian Management Sub Plan for Porters Creek Public School (previously called Warnervale New Primary School).

As part of the SSDA conditions of consent, the School is also required to prepare a Green Travel Plan and Operational Transport and Assessment Management Plan in consultation with Council and TfNSW.

I have attached the two reports that have been prepared for Council's review and feedback.

Could you please confirm timeframe when we may receive your comments/ feedback. If you prefer, we will be happy to set up a meeting with Council to discuss the two reports.

Appreciate your assistance on this.

Regards,

Sunny Hong
Transportation Engineer

Direct: +61 2 9493 9741
Sunny.Hong@stantec.com

Stantec
Level 4, 99 Walker Street
NORTH SYDNEY NSW 2060

CREATING COMMUNITIES

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of belonging. That's why at Stantec, we always **design with community in mind**.

We care about the communities we serve—because they're our communities too. We're designers, engineers, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe.

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