



NEW PRIMARY SCHOOL AT WARNERVALE PRELIMINARY CONSTRUCTION TRAFFIC MANAGEMENT PLAN

PREPARED FOR BILLARD LEECE PARTNERSHIP

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Billard Leece Partnership

Preliminary Construction Traffic Management Plan

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1. Introduction

The Preliminary Construction Traffic Management Plan (CTMP) provides a review of the traffic, parking and pedestrian implications of the construction traffic management measures proposed as part of the construction of the New Primary School at Warnervale.

The proposed development will include the following:

- New Core 35 Hall;
- New Core 21 Administration & Staff Building;
- New Core 21 OOSH;
- New Core 21 Canteen;
- New Core 21 Library;
- New Core 21 (2x) Special Programs;
- 20 New Teaching Spaces (Includes 2 Special Education Teaching Spaces);
- New Core 21 Student Amenities;
- New Core 21 Covered Outdoor Learning Area (COLA);
- Considerations for Future Expansion ;
- Staff Carpark 21 Spaces;
- Visitor 5 Spaces;
- Accessible 2 Spaces;
- Related Road Works & Drop off/pick up Zone;
- New Games Court;
- 18 informal overflow parking spaces;
- Offsite Carparking Provision:
 - 16 Short term parking
 - 1 Accessible short term parking; and
 - 8 pick up and drop off spaces.

The construction works associated with the construction of the buildings are to be confined to the subject site, with minimal disruption expected to vehicular traffic, pedestrians and cyclists.

There will be impacts on the surrounding roads during construction of the site accesses, but these will be managed and mitigated as far as practical.

The construction work timeline is to be confirmed but is anticipated to be around 18 months.

The primary traffic and parking effects relate to the traffic generation associated with the transport of materials and staff to and from the site. As the existing school is decommissioned the level of conflict with other road network users will be reduced in comparison to works adjacent to an active school site. By way of a summary it is concluded that these effects can be managed within acceptable bounds.

This Preliminary CTMP is based on the information available for the proposed development at the time of writing (May 2019). However, it cannot be guaranteed that the specific methodology described herein is to be that employed at the time of construction. Any changes are to be incorporated into the appropriate Construction Traffic Management Plans (CTMP) prior to the commencement of those works.

The CTMP is to be submitted to the relevant authorities prior to the commencement of work.

2. Transport Environment

2.1 Site location

The proposed development is located at 75 Warnervale Road, Warnervale. **Figure 2-1** shows the location of the site in relation to Warnervale and the surrounding transport network.

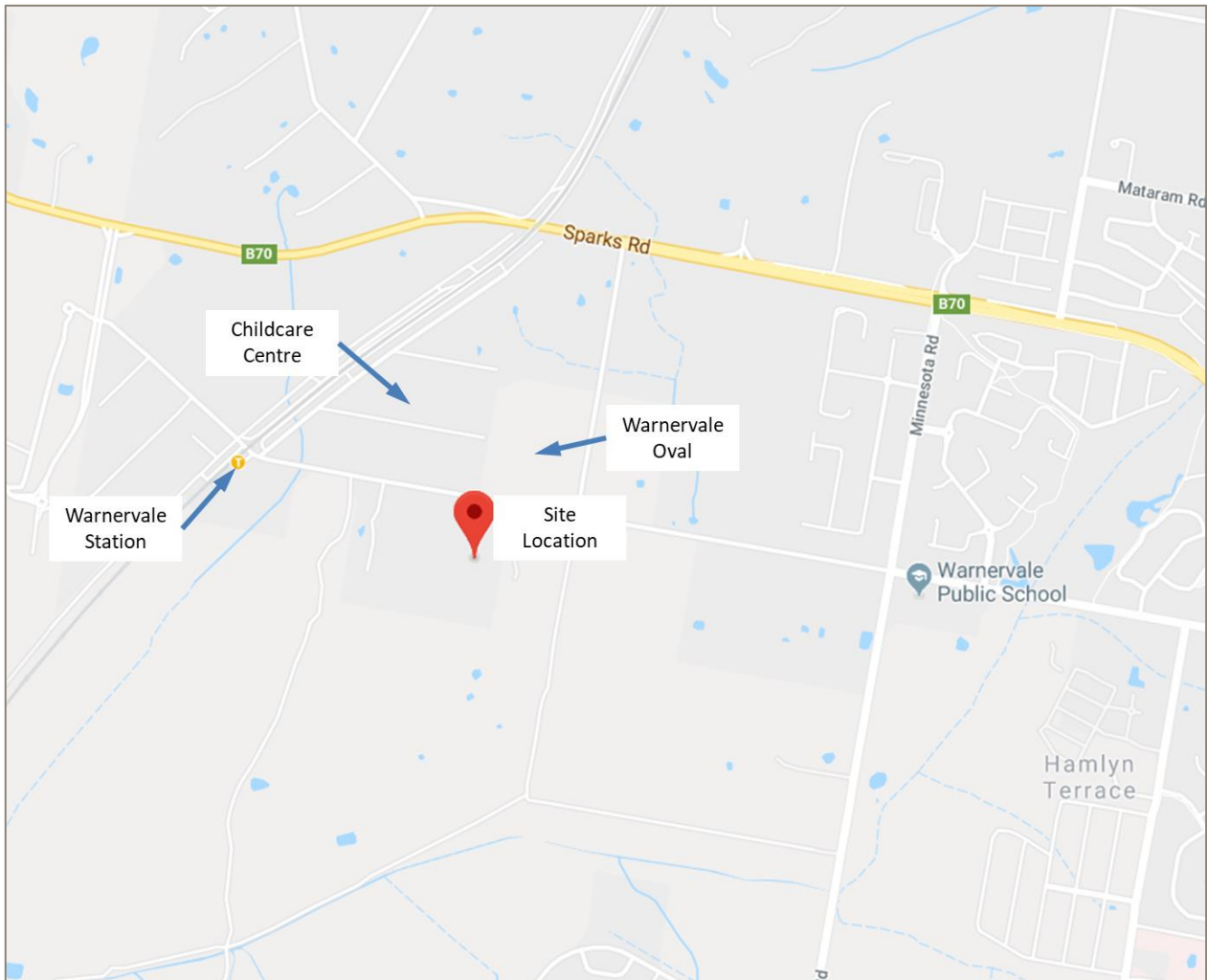


Figure 2-1: Site Location¹

The site is currently occupied by the decommissioned Warnervale Public School, and majority of the site is covered in vegetation. The site has a primary frontage to Warnervale Road, with access to the site provided at the northern site boundary. Warnervale Road connects to the wider road network via Albert Warner Road in the westbound direction and Virginia Road in the northbound direction.

The surrounding land uses are predominantly residential, with the following key features of the surrounds 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.

An aerial photo view of the site in relation to the local road network is shown in **Figure 2-2**.

¹ Source: Googlemaps



Figure 2-2: Aerial Image of the Site²

2.2 Road Environment

The roads in the immediate vicinity of the site are maintained and controlled by Central Coast Council. Other roads are controlled by Roads and Maritime Services as detailed below and summarised in **Table 2-1**.

- Warnervale Road is local road with a speed limit of 50km/h, extending from Warnervale Road to its termination at the Sparks Road. It runs in an east-west alignment with a sealed carriageway width of ranging from 7.4 metres to 10.8 metres. It provides one lane of traffic in each direction, allowing for simultaneous two-way traffic movement.
- Virginia Road is a local road that runs in an east-west alignment. On the northern approach for the intersection of Virginia Road and Warnervale road, Virginia Road has a sealed carriageway width ranging from 6.6 metres to 10.2metres. On the southern approach, Virginia Road has an unsealed carriageway width of 2.9 metres.
- Albert Warner Drive is a local road with a speed limit of 50km/h. It runs in a north-south alignment, extending from Warnervale Road to its intersection with Sparks Road. It has a sealed carriageway width ranging from 7.4 metres to approximately 28 metres upon approaching its intersection with Sparks Road.
- Sparks Road is an arterial road controlled by Roads and Maritime Services (RMS) with a speed limit of 70km/h. It runs in an east-west alignment with a sealed carriageway width of ranging from 9.6 metres to approximately 28 metres at its intersection at Minnesota Road. At its intersection with Virginia Road, it provides one lane of traffic in each direction.
- Minnesota Road is a local road that runs in a north-south alignment. It has a sealed carriageway of approximately 10.5 metres, allowing for simultaneous two-way traffic movement. It typically has a posted speed limit of 50km/h, which slows to 40km/h as it approaches the intersection of Minnesota Road and Warnervale Road during school times.

² Source: Spookfish

- Between 8:00-9:30am and 2:30-4:00pm on school days a speed limit of 40km/h applies on the surrounding streets in the vicinity of the school.
- All the immediate intersections surrounding the school are priority controlled, with 'Give Way' signage provided for vehicles exiting Virginia Road and Railway Road to Warnervale Road.
- Pedestrians footpaths are provided on the southerly side of Warnervale Road within the vicinity of the site.

Table 2-1: Road Characteristics

Road Name	Speed Limit	Lanes	Road Authority
Warnervale Road	40 / 50km/h	2 lanes	Council
Virginia Road	40 / 50km/h	2 lanes	Council
Albert Warner Road	40 / 50km/h	2 lanes	Council
Sparks Road	70km/h	2 to 4 lanes	RMS
Minnesota Road	40 / 50km/h	2 Lanes	Council

2.3 Sustainable Transport

2.3.1 Public Transport

Bus stops are provided on both sides of Warnervale Road, within 100 metres walking distance of the proposed site.

- Route 11 – Lake Haven to Tuggerah via Warnervale
- Route 78 – Lake Haven to Tuggerah via Sparks Road, Warnervale and Wadalba

The bus routes provide drop-offs at the Warnervale Railway Station, which links with the wider Sydney public transport network.

The services which operate within the vicinity of the site are shown within **Figure 2-3**.

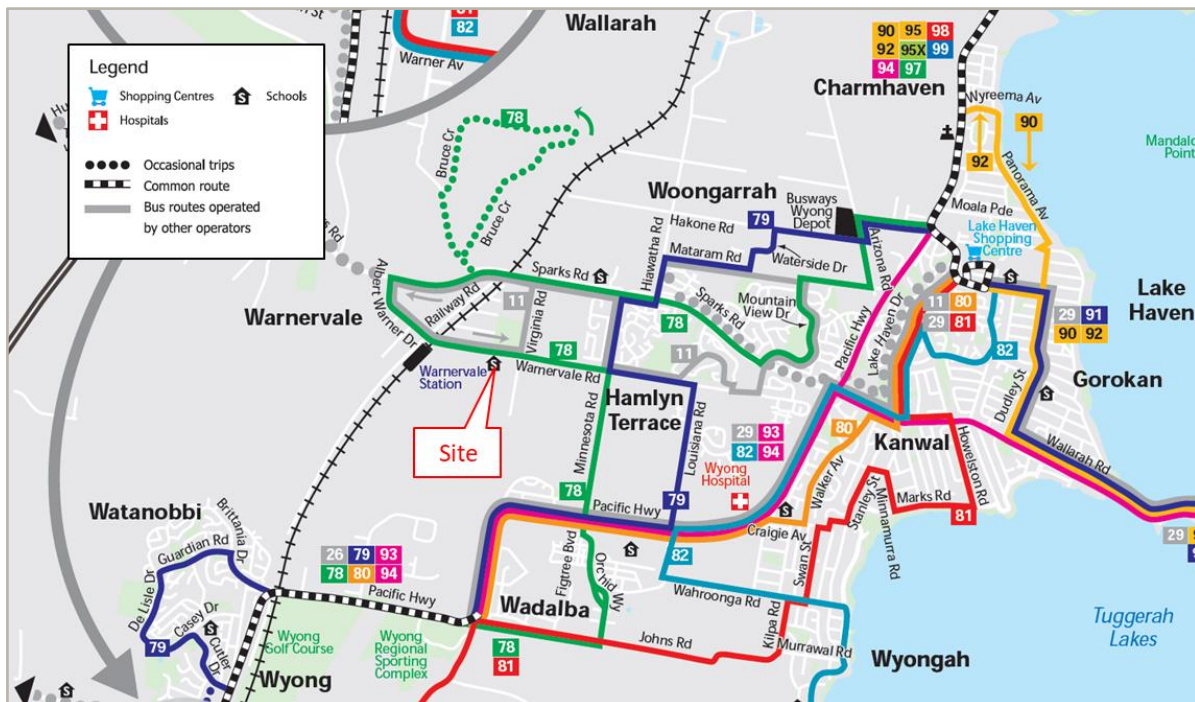


Figure 2-3: Bus Route Network Map³

³ Source: Busways Network Maps (<https://www.busways.com.au/plan-your-trip/network-maps>)

Pedestrian footpaths are provided on the southerly side of Warnervale Road near the school, with wide grass berms on both sides of Warnervale Road.

The RMS cycle finder is shown in **Figure 2-4** with no dedicated cycling facilities provided within the vicinity of the site.

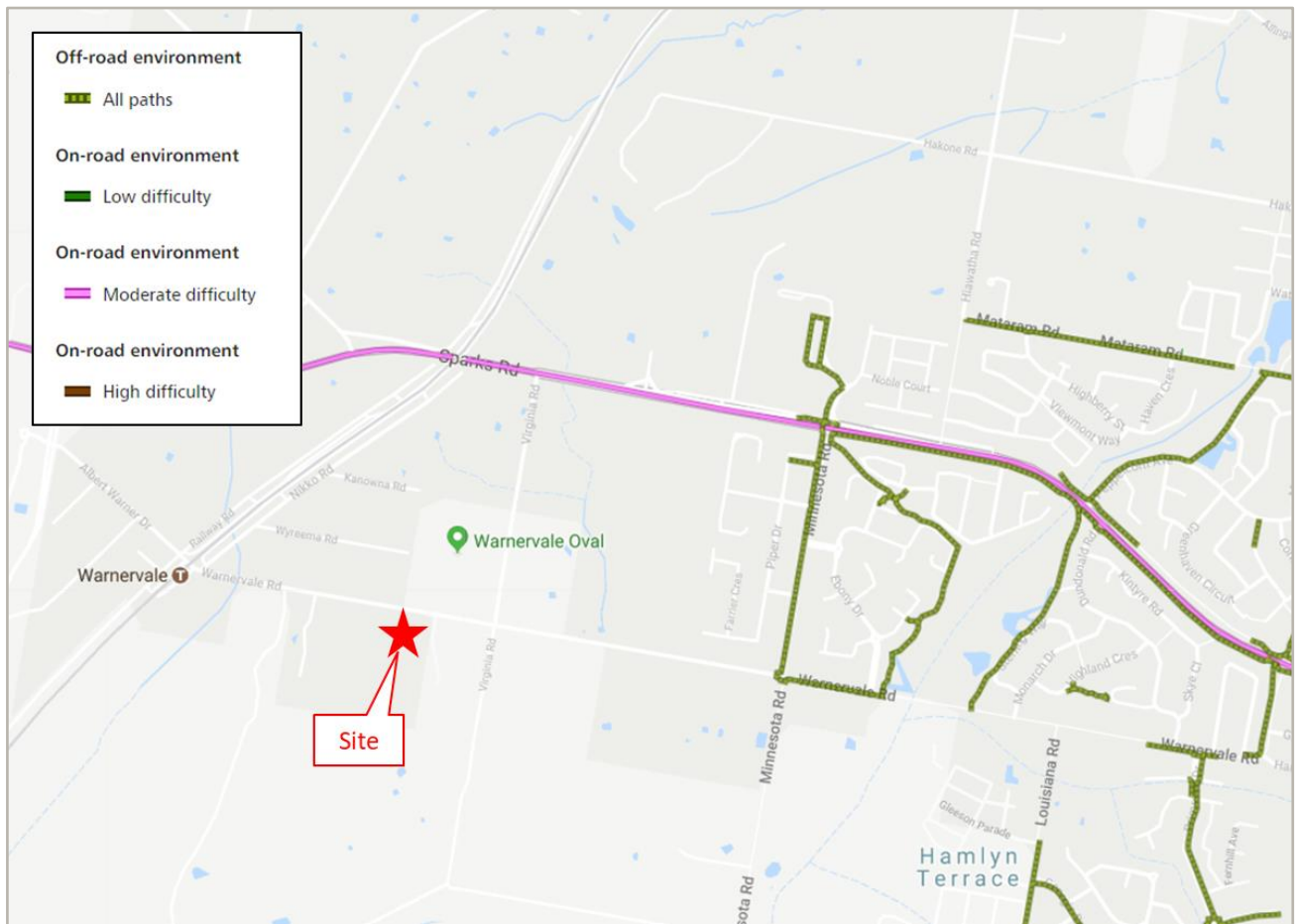


Figure 2-4: RMS Cycle Finder⁴

⁴ Source: Transport Roads and Maritime Services Cycleway Finder (http://www.rms.nsw.gov.au/maps/cycleway_finder)

3. Scope of Works

3.1 Development Proposal

The proposed School Upgrades will include clearing of existing buildings and infrastructure and construction of the new school facilities as described in Section 1.

3.2 Staging of Construction Works and Duration

The proposed construction works is separated into two stages. A breakdown of the construction works is provided below:

- Stage 1 – Demolition;
- Stage 2 – Earthworks and civil works; and
- Stage 3 – Construction works.

The constructions works timeline is to be confirmed but is anticipated to be around 18 months.

3.3 Report Scope

The Construction Traffic Management Plan covers the traffic management measures associated with the construction of the New Primary School at Warnervale.

4. Construction Operations and Management

4.1 Construction Times, Staging and Volumes

The construction works are to be undertaken in accordance with council's conditions. The construction works includes demolition and deliveries of building materials and equipment.

The proposed construction hours of work are as follows:

- Monday to Friday 7:00am to 6:00pm; and
- Saturday from 8:00am to 1:00pm.

Table 4-1 identifies the relevant stages of construction, proposed construction duration and the estimated maximum and average number of truck movements per day.

Table 4-1: Construction Programme Staging

Construction Stage	Construction works durations	Estimated Maximum Number of Trucks Per Day	Estimated Average Number of Trucks Per Day
Stage 1: Demolition	4 to 6 weeks	Up to 20 to 25 trucks per day	To be verified.
Stage 2: Civil and Earthworks	5 to 8 weeks	Up to 20 to 25 trucks per day	To be verified.
Stage 3: Construction	8 to 12 months	Up to 20 to 25 trucks per day	To be verified.

The anticipated maximum sized design vehicle during the project is a 42.5 tonnes Class 3 truck and dog trailer. Use of these vehicles will be mostly limited to Stages 1 and 2. At other stages smaller vehicles including Heavy Rigid Vehicles and 19m Articulated Vehicles will be associated with the delivery of equipment and materials.

The number of construction vehicles to service the site is up to 20 to 25 trucks per day at peak times during the construction period (*This is not forecast to occur for extended periods*). This is equivalent to two to three truck movements per hour but will be less outside peak construction periods. Typically, the number of construction vehicles will be lower than this.

It is anticipated that up to 20 construction staff will be based at the site during construction.

As such it is anticipated that vehicle arrivals and departures at the site will be in the order of 25 vehicles during the peak hour period. This level of traffic generation is not anticipated to result in any significant impact on the surrounding local road network during the construction period.

4.2 Truck Routing

The majority of trucks associated with the construction activities will access the site via Warnervale Road.

The proposed construction vehicle movement plan accessing the site is shown in **Figure 4-1**.

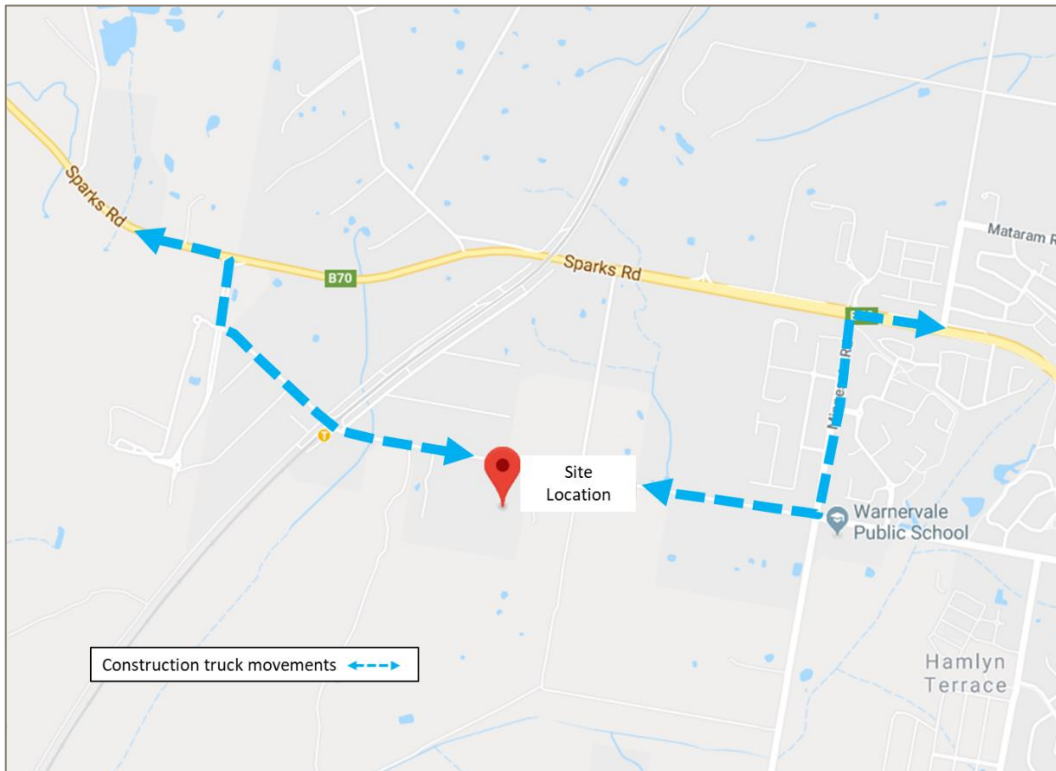


Figure 4-1: Construction Vehicle Movement Plan ⁵

The majority of heavy vehicles associated with the construction at the site will use Sparks Road, Albert Warner Drive, Warnervale Road and Minnesota Road to travel to and from the site via Pacific Highway and Pacific Motorway, depending on the direction of travel.

4.3 Traffic Environmental Impact Considerations

The environmental measures and controls that may be imposed as part of other construction operations should be detailed in the reporting appropriate to those construction aspects. As a minimum, it is proposed to install or impose the following operational environmental measures as part of the proposed traffic operations:

- Fencing is to be installed around the site to prevent inadvertent / unauthorised pedestrian access;
- A wheel-wash is to be installed at the site egress points for truck cleaning prior to departure when there is exposed ground on the site; and
- All excavated material is to be covered prior to leaving the site to prevent aerial dispersal onto the road network.

4.4 Loading and unloading

All regular Loading and Unloading is proposed to occur on-site. On infrequent occasions during delivery of outsize equipment loading and unloading may be required beyond the site extent but this will be minimized, and appropriate traffic management provided.

4.5 Construction Vehicles and Equipment

The maximum sized design vehicle for the project is a 42.5 tonnes truck and dog trailer (Class 3), these vehicles will be used during site preparation works. The majority of site deliveries will occur using smaller vehicles including Heavy Rigid Vehicles and 19m Articulated Vehicles. At most, typical construction vehicles are expected to generate up to 25 construction larger vehicle movements per day (refer to Table 4-1). This is not forecast to occur for extended periods.

⁵ Source: google maps

The types of vehicles used on the project may include, but not be limited to:

- Mobile Cranes;
- Cherry Pickers;
- Telehandlers;
- Elevated Working Platforms;
- Excavation;
- Dump trucks;
- Heavy Rigid Vehicle;
- Articulated Vehicle;
- Watercarts; and
- Truck and dog trailer.

4.6 Pedestrian Management

During the construction works, pedestrian movements around the site will be maintained as much as possible. Where works require the closure of an existing pedestrian route, a suitable alternative is to be provided. Where required these routes will be managed by Traffic Controllers.

4.7 Site Fencing

The construction site will be enclosed by fencing to prevent access to the property and to protect the public / roadway from construction activities.

4.8 Signage

The temporary construction traffic related signage is to be erected and maintained for the duration of the construction works on the site. All signposting is to be developed in accordance with the Australian Standards (AS1742.3:2009 – *Traffic Control Devices for Works on Roads*) and Roads and Maritime Services (RMS) Traffic Control at Work Sites Manual.

A Traffic Control Plan (TCP) will be developed during major construction works, and designed in accordance with the Australian Standards and the Roads and Maritime Services (RMS) Traffic Control at Work Sites Manual and prepared by an RMS Accredited Traffic Control Plan Developer.

4.9 Methods of Communicating Change

Local residents and the local community will be informed of the construction works, site access and dates by letter box drops, advertisement in the local newspaper. The notifications will occur 2 weeks in advance of the commencement date. All notifications will be coordinated by the DoE or SINSW Communication Manager.

4.10 Monitoring of Traffic Control Plans (TCPs)

During the construction works, the contractor shall ensure that each morning prior to works commencing, all signage is correctly erected and positioned in accordance with the Traffic Control Plan (TCP) that will be prepared. Every evening after works are completed for the day, the contractor shall ensure that relevant signage is removed or covered as necessary.

Any variations to the layout or operations of the TCP on-site are to be recorded and certified by authorised RMS accredited personnel.

A review of TCPs is to be undertaken as necessary in order to determine the requirement for any adjustments.

4.11 Construction Permits

4.11.1 Temporary Road Closures

Where any road closures or partial road closures that are required during the construction works, an application will be submitted to Council for approval.

4.11.2 Road Occupancy License

A Road Occupancy Licence 'ROL' will be submitted to the relevant authorities when works are required within the road carriageway. A ROL is required for any activity likely to impact on traffic flow, even if that activity takes place off-road. Council are the assessing authority for the roadway adjacent to the site.

4.12 Construction Vehicle Access

The proposed construction vehicle access to the site will be provided via Warnervale Road. A turning area for trucks will be provided on-site, to allow trucks to manoeuvre and exit in a forward direction.

4.13 Construction Workers Parking

There will be on-site parking provided to construction staff. This will be confirmed once the principal contractor has been engaged. The availability of staff parking will depend on the site arrangement and the construction program the contractor provides.

5. Conclusion

The Preliminary Construction Traffic Management Plan (CTMP) discusses proposed temporary traffic and pedestrian management measures to be employed during the construction works for the proposed New Primary School at Warnervale.

The primary traffic and parking effects relate to the traffic generation associated with the transport of materials and construction staff to and from the site. By way of a summary, it is concluded that these effects can be managed within acceptable bounds.

Appendices



Appendix A Site Plans

Sydney

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