

## Appendix 03 – Construction traffic management plan

# Arthur Phillip High School and Parramatta Public School

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This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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# 1 Introduction

This report details the Construction Traffic Management Plan (CTMP) for the proposed works at Arthur Phillip High School and Parramatta Public School. The plan has been created by Arup on behalf of the Department of Education in for the Planning Application for State Significant Development (SSD) 15\_7235.

The purpose of the CTMP is to assess the proposed access and operation of construction traffic associated with the proposed development with respect to safety and capacity. The CTMP is to be submitted for comment by the relevant authorities.

This plan will detail the management needed to control construction traffic, while minimising effects on the surrounding developments and allowing for appropriate access at all times. The Construction Contractor will prepare a CTMP with detailed Traffic Control Plans detailing specific methods of safely managing construction vehicle traffic within the surrounding area when appointed.

## 2 Description of proposed works

### 2.1 Location

The site is located on the north-eastern corner of the Parramatta City Centre, to the north and south of Macquarie Street, between Smith and Charles streets. The site is made up of two lots, with addresses at 175 Macquarie Street and 800-100 Macquarie Street, Parramatta.

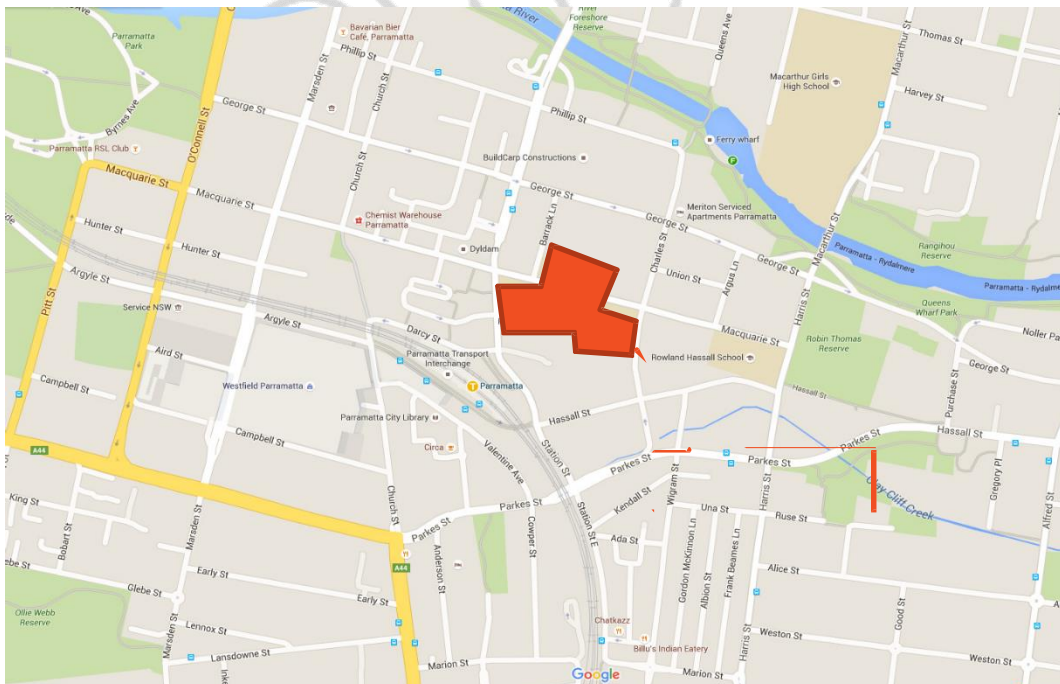


Figure 1: Site location

## 2.2 Overview of proposed works

It is proposed that the existing primary and high school be substantially demolished and replaced with two multi-story buildings, with smaller existing historic buildings retained for supporting functions. The northern site parcel would be developed for the high school and the southern parcel for the primary school, refer below.

The high school comprises a tower building of 17 storey equivalent height (11 primary levels plus mezzanines) towards the north east corner plus a sports hall on the western site with a total floor area of approximately 18,000m<sup>2</sup>.

The primary school building is a 4-storey “U-shaped” building opening onto the school courtyard with a floor area of approximately 10,000m<sup>2</sup>.

## 2.3 Programme

Construction of the development is estimated to typically occur over an indicative two year period, but this may vary depending on staging. As the project is in its preliminary stages, this timeframe is approximate only and may vary considerably once a contractor is appointed.

Table 1: Indicative construction staging and timing

Construction Stage	Duration
Demolition/Excavation	6 months
Structure	12 months
Fit Out	6 months

## 2.4 Vehicle types

Vehicles that will access the site during construction will mainly comprise private vehicles for workers. Heavy vehicles including Articulated Vehicles (AV) such as precast delivery trucks and Heavy Rigid (HR) such as concrete trucks are also expected to access the site. These different types of vehicles may access the site at the same time.

All heavy goods such as machinery plants will need to be delivered outside of peak traffic hours. It is envisaged that a number of mobile crane days will be required during the construction stage of the program, with limited lifting operations in off-peak periods. These operations would be subject to a separate application for partial road closure with the Roads and Maritime Services and Parramatta City Council as required.

### 3 Impact of proposed measures

#### 3.1 Truck routes and controls

Construction vehicles would be restricted the state road network and vehicles will likely originate from this network, with movements along local streets prohibited. These routes are shown in Figure 2.

It is envisaged the key inbound traffic routes for construction vehicles would be via Parkes Street and Harris Street from the surrounding state road network. Macquarie Street and Charles Street would form the local roads for access into the site.

Outbound routes would either continue down Macquarie Street to O’Connell Street or Smith Street / Station Street / Wilde Avenue to Victoria Road / Parkes Street.

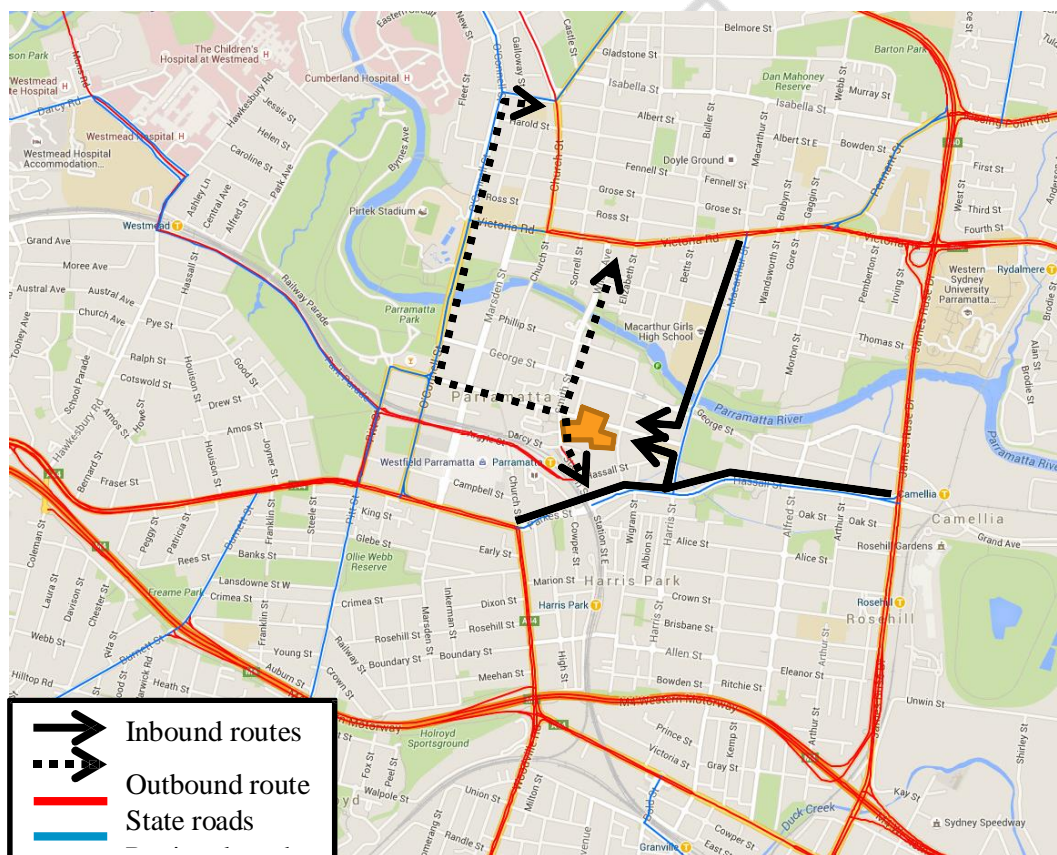


Figure 2 Construction Vehicle Routes

#### 3.2 Construction traffic

Workers will generate additional traffic to the site. Road network impacts will be

mitigated by the fact that construction workers generally start earlier and finish earlier than the commuter peak periods, and would likely not coincide with the school or CBD peak periods. Construction workers driving to sites in constrained parking environments typically carpool – further reducing the impact on the road network.

The impact of construction traffic will be discussed once specific construction details are provided however heavy vehicle volumes are expected to be low, in the order of 100 vehicles per day. This usually occurs during concrete pours or the demolition stage. The traffic generation of this magnitude is less than the amount of trips generated and assessed for the operational phase of the development and therefore the potential impacts are anticipated to be minimal.

### **3.3 Parking**

It is likely that on-site parking will not be provided for private construction vehicles, with construction vehicles utilising works zones and internal circulation routes. Given that parking is restricted and metered in surrounding streets and parking stations, a number of construction workers may choose to take public transport to the site and store their larger tools on site.

### **3.4 Pedestrians**

Pedestrians will be diverted and controlled by traffic controllers as necessary.

They will control pedestrians as well as vehicles. Pedestrians will be directed through the B-class hoarding along the street frontages.

When vehicles require access, pedestrians may be held for very short periods of time as trucks enter and exit the site to minimise delay for vehicles to the streets. Concertino gates may be considered to control pedestrians safely.

Pedestrians will be managed by qualified traffic controllers so that they will not conflict with heavy vehicles accessing the site to maximise pedestrian safety. As a result, additional delays to pedestrians around the site will be minimal.

## **4 Effects on existing and future developments**

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There may be some impacts associated with the construction works to the schools as they continue to operate. Construction vehicles will often need to carefully enter the site, and may turn in and out slowly. Suitably qualified traffic controllers will be present to ensure that traffic is safely and adequately managed around the

## **5 Detailed of provisions made for emergency vehicles, heavy vehicles and cyclists**

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Construction works and vehicle storage will be mainly confined to the site. As such, no additional specific provisions for emergency vehicles, heavy vehicles, cyclists or pedestrians have been identified on the surrounding road network.

## **6 Measures to ameliorate impacts**

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The measures proposed to ameliorate the impacts of the construction work are:

- The establishment of a Works zone
- Traffic control
- B-class hoarding

These measures are discussed in earlier sections of the report. Additionally, drivers wishing to access the site for any reason will need to report to the traffic controllers and receive instructions and guidance. Scheduling will be the main management method in ensuring minimal multi-vehicle arrivals. A radio set-up will manage multiple vehicle arrivals and allow for circulation routes around the site.

Traffic control plans will be developed and submitted with a finalised version of this plan. Traffic will not be impacted on entry or exit unless a temporary partial road closure is in place during the few occasions in off-peak periods that a mobile crane is required. These temporary road closures would be obtained through the normal approvals process.

### **6.1 Vehicle movements**

Mitigation measures would be adopted during the construction phase to ensure traffic movements have minimal impact on surrounding land uses and the community in general, and would include the following:

- Truck loads would be covered during transportation off-site
- Establishment and enforcement of appropriate on-site vehicle speed limits (20km/h), which would be reviewed depending on weather conditions or safety requirements
- Neighbouring properties would be notified of construction works and timing. Any

comments would be recorded and taken into consideration when planning construction activities.

- All activities, including the delivery of materials would not impede traffic flow along local roads and highways
- Materials would be delivered and spoil removed during standard construction hours
- Avoid idling trucks alongside sensitive receivers
- Deliveries would be planned to ensure a consistent and minimal number of trucks arriving at site at any one time
- Parramatta City Council will be notified of any future disruption to roadways and footpaths

## **6.2 Driver code of conduct**

No queuing or marshalling of trucks is permitted on a public road. All vehicles must enter and exit the site in a forward direction. Traffic Controllers are not to stop traffic on public street(s) to allow trucks to enter or leave the site. They must wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site – the vehicles already on the road have right-of-way.

Vehicles entering, exiting and driving around the site will be required to give way to pedestrians at all times.

## **6.3 Roads and Maritime Services discussions**

Roads and Maritime Services will be contacted and to provide feedback prior to the Local Traffic Committee meeting. Any comments will be incorporated into a finalised plan.

## **7 Public transport services affected**

The 900 'Parramatta Free Shuttle' bus service may be impacted by construction traffic as the works will likely require the relocation or removal of the bus stop in Macquarie Street. No other bus services are expected to be impacted as Macquarie Street and Charles Street do not form a bus route for other services.

## **8 Public consultation**

Parramatta City Council, Sydney Buses and Roads and Maritime Services will be given the opportunity to contribute to this report on submission of this plan to Local Area Traffic Committee.

Should temporary road closures be required at any stage during the construction period, they would be obtained separately through the normal approvals process.

Ongoing consultation will be conducted with the schools and surrounding residents and businesses by the Construction Contractor to ensure everyone is updated on the construction of the works.