

DRAFT CONSTRUCTION TRAFFIC MANAGEMENT PLAN

**SCEGGS Darlinghurst Concept and Stage 1
165-215 Forbes Street, Darlinghurst**

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TRAFFIC CONTROL PLAN CERTIFICATES

Prepare a Work Zone Traffic Management Plan			
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1. INTRODUCTION

TRAFFIX has been commissioned by Sydney Church of England Girls' Grammar School (SCEGGS), Darlinghurst to prepare a Draft Construction Traffic Management Plan (CTMP) report for the redevelopment of SCEGGS Darlinghurst Concept and Stage 1 (SSD-8993) at 215 Forbes Street, Darlinghurst.

This report documents the preliminary construction traffic management arrangements and methodology relating to the proposed works and should be read in conjunction with any other construction documentation prepared in relation to SCEGGS Darlinghurst. It should be noted that a comprehensive CTMP will be prepared once a builder has been appointed to the project and the exact construction mythology is determined.

The report is structured as follows:

- ▶ Section 2: Outlines the CTMP requirements
- ▶ Section 3: Documents existing traffic conditions
- ▶ Section 4: Description of the operational details
- ▶ Section 5: Outlines the construction program
- ▶ Section 6: Concludes the report



2. CTMP REQUIREMENTS

2.1 Traffic Control Plan

The Traffic Control Plan (TCP) that is included in this report, should be implemented taking due account of on-site conditions as will occur over the construction period. Accordingly, construction crews are expected to respond in a pro-active manner to ensure that this plan is implemented to maximum effect and with no obvious safety issues being overlooked. In particular, the following matters are considered noteworthy:

- ▶ All signs are to be placed where clear visibility is available;
- ▶ Installations should be checked intermittently during the course of the day/s; and
- ▶ A Roads and Maritimes Services (RMS) certified Traffic Controllers shall be on-site during work hours to supervise vehicle and pedestrian movements.

It is noted that TRAFFIX is responsible for the preparation of the CTMP only and not for its implementation, which is the responsibility of the project manager/builder.

2.2 CTMP Requirements

The NSW Department of Planning Industry and Environment have requested a Draft CTMP be prepared and included with the development application, as outlined in the request for additional information (dated 19 December 2019) item 2, which states:

2. *The Department notes the comment made by TfNSW (RMS) at point three of its submission on the Rts. The Department requests that a draft construction traffic management plan be provided.*



3. EXISTING CONDITIONS

3.1 Location and Site

SCEGGS Darlinghurst is located at 165-215 Forbes Street in Darlinghurst, approximately 400 metres southwest of Kings Cross Railway Station. More specifically, it is situated on the southern side of St Peters Street and bounded by the area between Forbes Street and Bourke Street.

The site is irregular shaped in configuration with a total area of 13,676.2m². It has a northern frontage to St Peters Street of approximately 62 metres and a southern boundary to neighbouring residential properties of approximately 86 metres. The eastern frontage to Forbes Street and western frontage to Bourke Street measure approximately 133 metres and 84 metres, respectively. The site is presently served by four (4) existing vehicular accesses, comprising two (2) driveways off Forbes Street, one (1) driveway off Bourke Street and one (1) driveway off St Peters Street.

The SCEGGS Darlinghurst School is partitioned between a primary school (Kindergarten to Year 6) and the secondary school (Year 7 to Year 12). The main pedestrian access for the primary school is accommodated onto Bourke Street, while the secondary school mainly utilizes pedestrian accesses on Forbes Street and St Peters Street. It is noted that St Peters Street is typically only open during the AM and PM peak periods, with a remote operated gate closed at both ends during other times.

A Location Plan is presented in **Figure 1**, with a Site Plan presented in **Figure 2** below. Reference should also be made to the Photographic Record presented in **Appendix A**, which provides an appreciation of the general character of roads and other key attributes in proximity to the site.

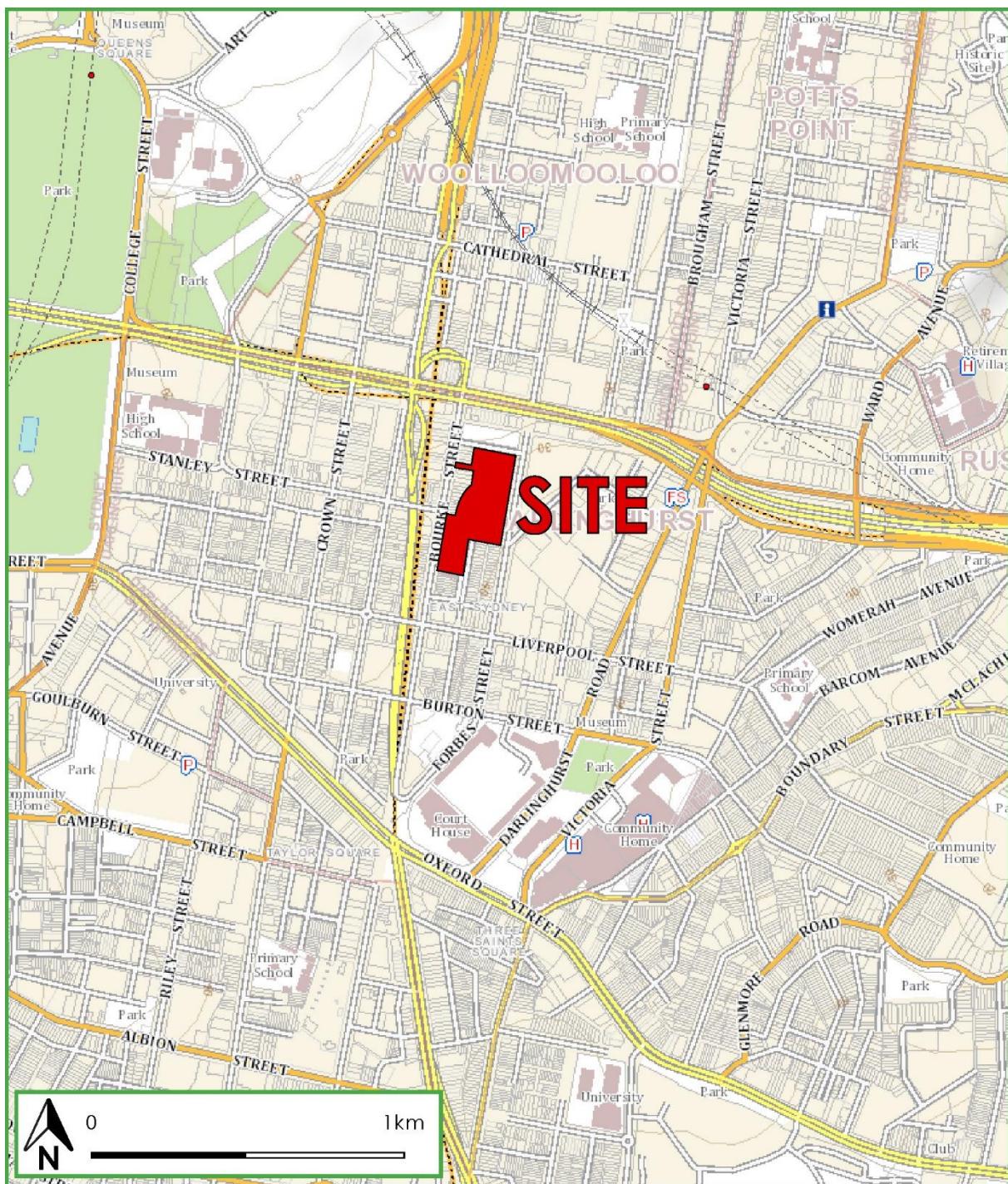


Figure 1: Location Plan



Figure 2: Site Plan



3.2 Road Network

The road hierarchy in the vicinity of the site is shown in **Figure 3** with the following roads of particular interest:

- ▶ William Street: an RMS Main Road (MR173) that traverses east-west between New South Head Road in the east and Park Street in the west. It is generally subject to 50km/h speed zoning and accommodates two (2) lanes of traffic in each direction. William Street permits on-street parking, subject to various restrictions.
- ▶ Forbes Street: a local road that traverses north-south between a no through road at Cowper Wharf Road in the north and Bourke Street in the south. Within the vicinity of the site, it is subject to 40km/h speed zoning and accommodates a single lane of traffic in each direction. Forbes Street permits on-street parallel and 45 degree angled parking, subject to various restrictions.
- ▶ Bourke Street: a local road that traverses north-south between Cowper Wharf Road in the north and Forbes Street in the south. Within the vicinity of the site, it is subject to 40km/h speed zoning and accommodates a single lane of traffic in each direction. Bourke Street permits on-street parking, subject to various restrictions.
- ▶ Liverpool Street: a local road that traverses east-west between Boundary Street in the east and Harbour Street in the west. Within the vicinity of the site, it is subject to 40km/h speed zoning and accommodates a single lane of traffic in each direction. Liverpool Street permits on-street parking, subject to various restrictions.
- ▶ Crown Street: a local road that traverses north-south between Sir John Young Crescent in the north and Cleveland Street in the south. Within the vicinity of the site, it is subject to 40km/h speed zoning and accommodates a single lane of traffic in each direction. Crown Street permits on-street parking, subject to various restrictions.



- ▶ Stanley Street: a local road that traverses east-west between Bourke Street in the east and College Street in the west, noting that Stanley Street is one-way (eastbound) between College Street and Yurong Street. It is subject to 40km/h speed zoning and accommodates a single lane of traffic in each direction. Stanley Street permits on-street parking, subject to various restrictions.
- ▶ St Peters Street: a local street that traverses east-west between Forbes Street in the east and Bourke Street in the west. It is subject to 40km/h speed zoning and accommodates westbound traffic via single one-way lane. St Peters Street provides pedestrian footpaths along both sides of the road, as well as a pedestrian crossing midway through the street. In addition, this street is typically only open during the AM and PM peak periods of the school, with a remotely operated gate closed at both ends during other times.

It can be seen from Figure 3 that the site is conveniently located with respect to the surrounding arterial roads serving the region, noting access to the Eastern Distributor via William Street.

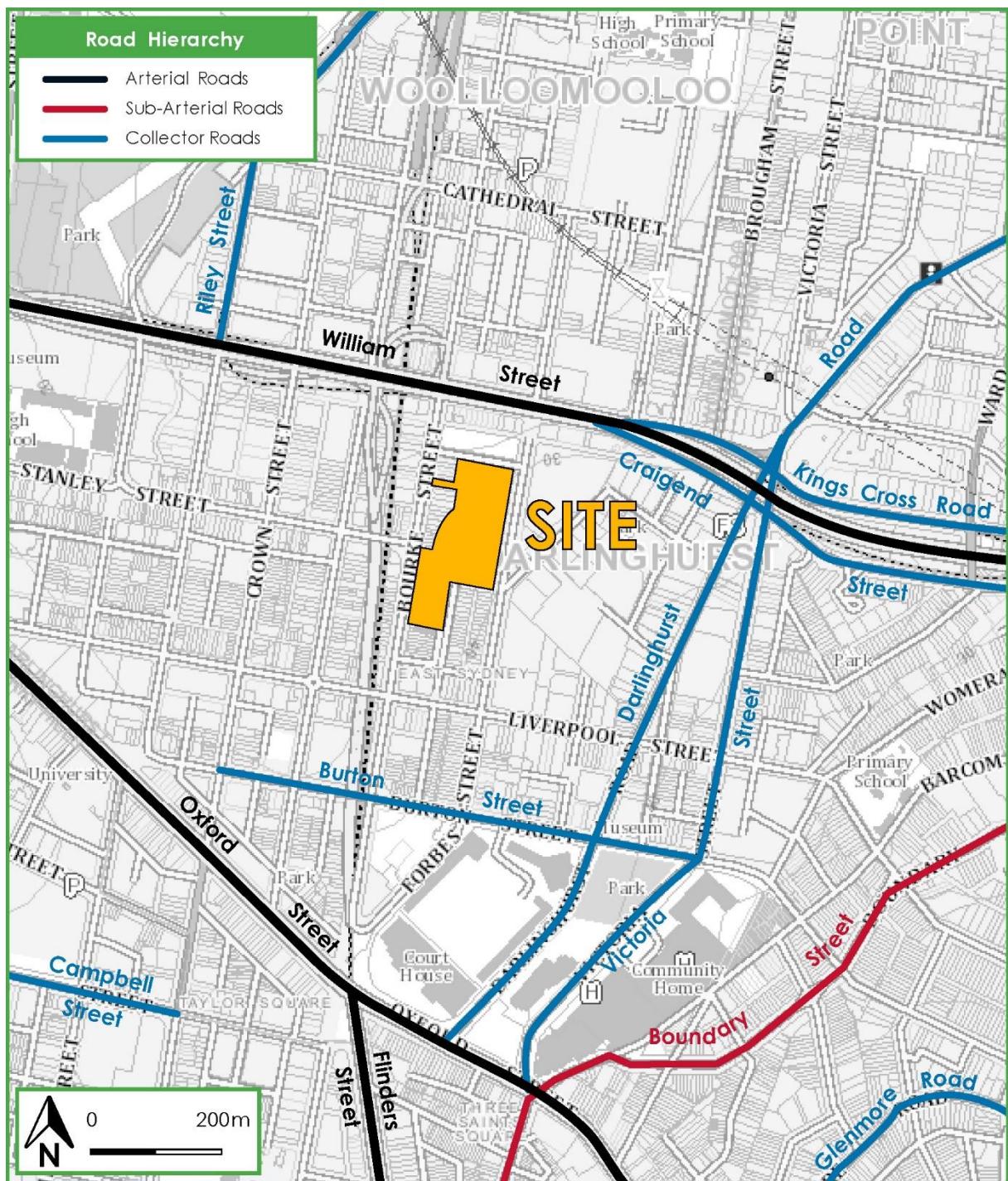


Figure 3: Road Hierarchy



3.3 Public Transport

The existing public transport services that operate in the locality are very good as shown in **Figure 4** and these services are available for staff, students and visitors throughout the day on weekdays as well as weekends.

3.3.1 Bus Services

The subject site is located within optimal walking distance (400 metres) of several bus stops which are served by the following routes:

- ▶ 200 – Bondi Junction to Chatswood
- ▶ 311 – Millers Point to Central Railway Square via Darlinghurst and Potts Point
- ▶ 324 – Watsons Bay to Walsh Bay via Old South Head Road
- ▶ 325 – Watsons Bay to Walsh Bay via Vaucluse Road
- ▶ 389 – Bondi Junction to Pyrmont
- ▶ L24 – Vaucluse to City Wynyard

3.3.2 Railway Services

The subject site is located approximately 400 metres southwest of Kings Cross Railway Station that provides railways services along the T4 Eastern Suburbs and Illawarra Line.

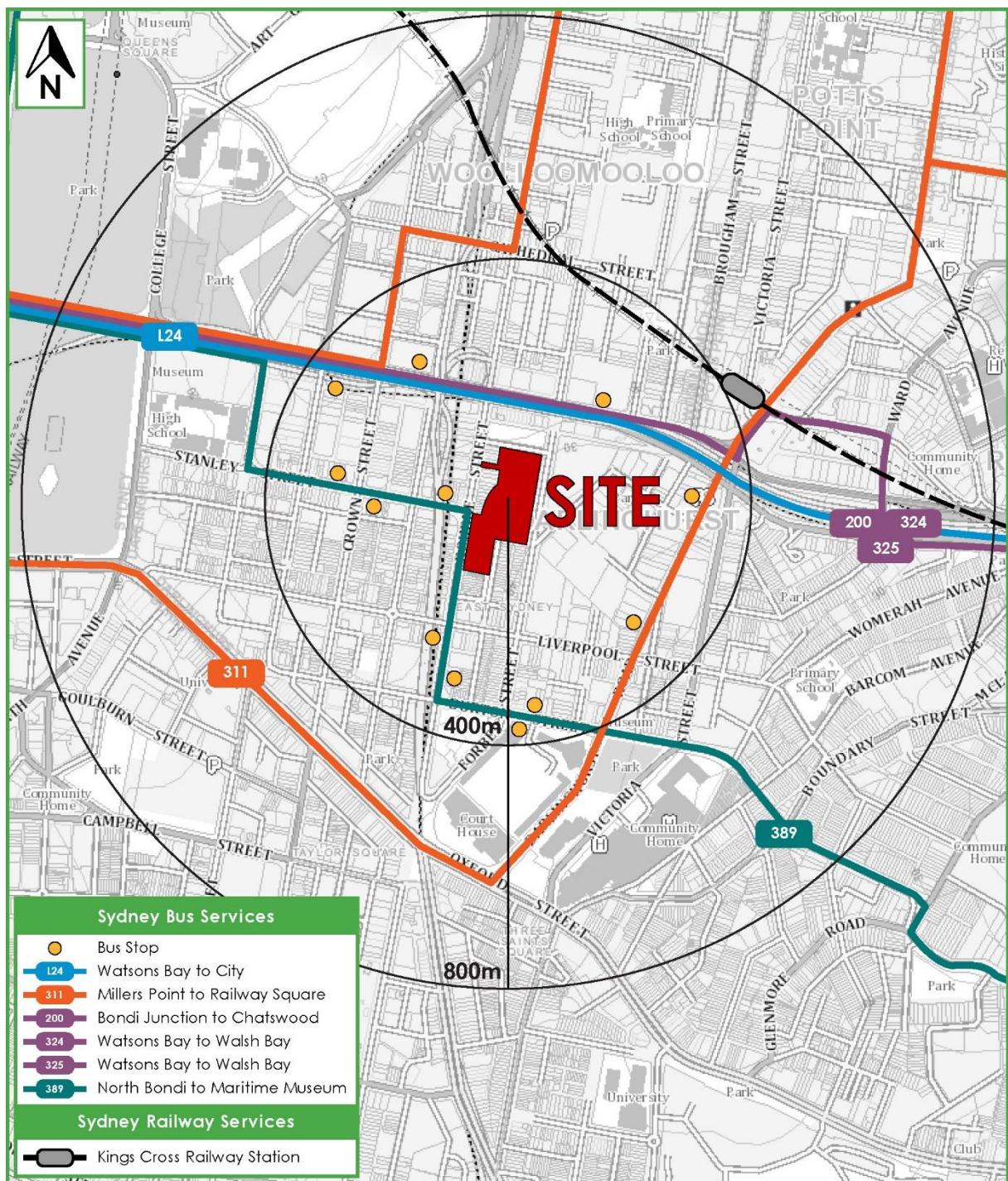


Figure 4: Public Transport



4. OPERATIONAL DETAILS

4.1 Working Hours

Construction hours will be in accordance with City of Sydney regulations (Outside Sydney CBD), as summarised below:

- ▶ Monday to Friday 7:30am to 5:30pm;
- ▶ Saturday 7:30am to 3:30pm; and
- ▶ Sunday or Public Holiday No building activities are to be carried out at any time.

4.2 Temporary Learning Areas

The construction program will allow for the delivery and installation of ten (10) temporary demountable functional learning areas. It will be proposed that these temporary areas will be installed in the Centenary Sports Hall for use during the Stage 1 works of the Wilkinson House Building.

These temporary areas will need to be coordinated with school operations upon the appointment of a builder and finalisation of the construction methodology.



5. OVERVIEW OF CONSTRUCTION PROGRAM

5.1 Construction Stages

The indicative stages of construction for the Wilkinson House redevelopment are summarised below, noting that this is subject to change once a builder has been appointed to the project and the exact construction mythology determined.

5.1.1 Demolition Stage

It is envisaged that the demolition stage for the Wilkinson House Building will be approximately 15 weeks, comprising of the following works:

- ▶ Scaffolding and edge protection;
- ▶ Installation of walkway protection for Peter Street and Forbes Street with B-Class hoarding over the protected walkways for site offices;
- ▶ 3 weeks for Hazmat removal; and
- ▶ 12 weeks for demolition works.

5.1.2 Bulk Excavation

It is envisaged that the bulk excavation stage will be approximately two (2) weeks however, this is subject to change upon a detailed review of a geotechnical investigation and design development. This stage will comprise of the following works:

- ▶ Excavation of approximately 300 cubic metres of rock to be disposed off-site; and
- ▶ Underpinning of existing foundations, as appropriate.

5.1.3 Structure and Building Envelope

It is envisaged that the structure and building envelope stage will cater for a typical construction cycle of nine (9) days per floor. The basement slab will be situated on the ground, with the construction of the post-tensioned suspended floor slabs to be constructed thereafter.



5.1.4 Internal Service and Finishes

It is envisaged that the internal services and finishes stage will cater for a duration of nine (9) weeks in the learning areas of each floor. It is assumed that during the rectification of defects and sign-off periods, any FFE to be re-used will be relocated from the demountable back into the new Wilkinson House Building.

5.2 Construction Vehicles

5.2.1 Trucks and Frequency

It is expected that the maximum sized vehicle to be utilised during the aforementioned construction stages be an 8.8 metre medium rigid vehicle (MRV), with a payload capacity of 12 tonnes.

The anticipated truck frequencies range between two (2) trucks per day (2 in, 2 out) to a maximum of 16 trucks per day (16 in, 16 out).

5.2.2 Tower Crane

It is envisaged that a tower crane will be erected within the floor area which loading would take place of bulk materials and dismantled after the installation of the roof structure works. The indicative construction program allows for an eight (8) week period, comprising of works including, but not limited to casting slab infills and closing out the internal services and finishes.

5.3 Works Zone

A Works Zone is proposed along the Forbes Street site frontage, starting at the northern side of the existing Centenary Sports Hall driveway and continuing along the kerb for approximately 10 metres. This Works Zone will be applicable between the standard working hours stated within Section 4.1 excluding the school's morning drop-off (8:00am to 9:30am) and afternoon pick-up (2:30pm to 4:00pm) periods.

A swept path analysis has been undertaken for the maximum sized vehicle demonstrating satisfactory entry and exit movements into the proposed Works Zone. This analysis is provided in **Appendix B**.



5.4 Truck Routes

The truck routes utilised for the construction of the development would utilise the arterial road network, where possible. The proposed truck routes are recommended so that all vehicles could access and egress the works zone in a forward direction, noting that truck movements will be restricted to outside the school's morning and afternoon peak periods. A copy of the routes would be provided to all drivers prior to attending the site, with the proposed routes outlined below.

5.4.1 Inbound Truck Route

The inbound truck route is presented in **Figure 5** and summarised as follows:

- Routes to works zone (IN):
 1. Arrive on the Eastern Distributor, northbound.
 2. Exit left onto William Street, westbound.
 3. Turn left onto Crown Street, southbound.
 4. Turn left onto Liverpool Street, eastbound.
 5. Turn left onto Forbes Street, northbound.
 6. Access the works zone on Forbes Street.



Figure 5: Inbound Truck Route



5.4.2 Outbound Truck Route

The inbound truck route is presented in **Figure 6** and summarised as follows:

- ▶ Routes from works zone (OUT):
 1. Depart the works zone onto Forbes Street, northbound
 2. Turn left onto St Peters Street, westbound.
 3. Turn left onto Bourke Street, southbound.
 4. Turn right onto Stanley Street, westbound.
 5. Turn right onto Crown Street, northbound.
 6. Turn right onto William Street, eastbound.
 7. Turn left onto Bourke Street, northbound.
 8. Continue on the Eastern Distributor, southbound.



Figure 6: Outbound Truck Route



5.5 Employee Vehicles

Workers will be encouraged to carpool and utilise the various public transport services available in the locality so as to minimise on-street parking impacts in the area.

5.6 Pedestrian Control

Pedestrian access surrounding the site will be managed safely during all construction stages. Temporary fencing and hoarding is proposed to be installed at all key areas around the construction areas to minimise potential conflicts between construction activities and students, staff and visitors of the school.

5.7 Traffic Control Plan

The TCP included in **Appendix C** demonstrate the proposed signage to be adopted during all stages of construction. More specifically, the TCP is catered to accommodate the proposed Works Zone along the Forbes Street frontage.

The TCP has been designed in accordance with the requirements of the *RMS Traffic Control at Work Sites Manual* and is recommended for adoption. In addition, it is noted that copies of the TCP is to be kept on-site at all times.

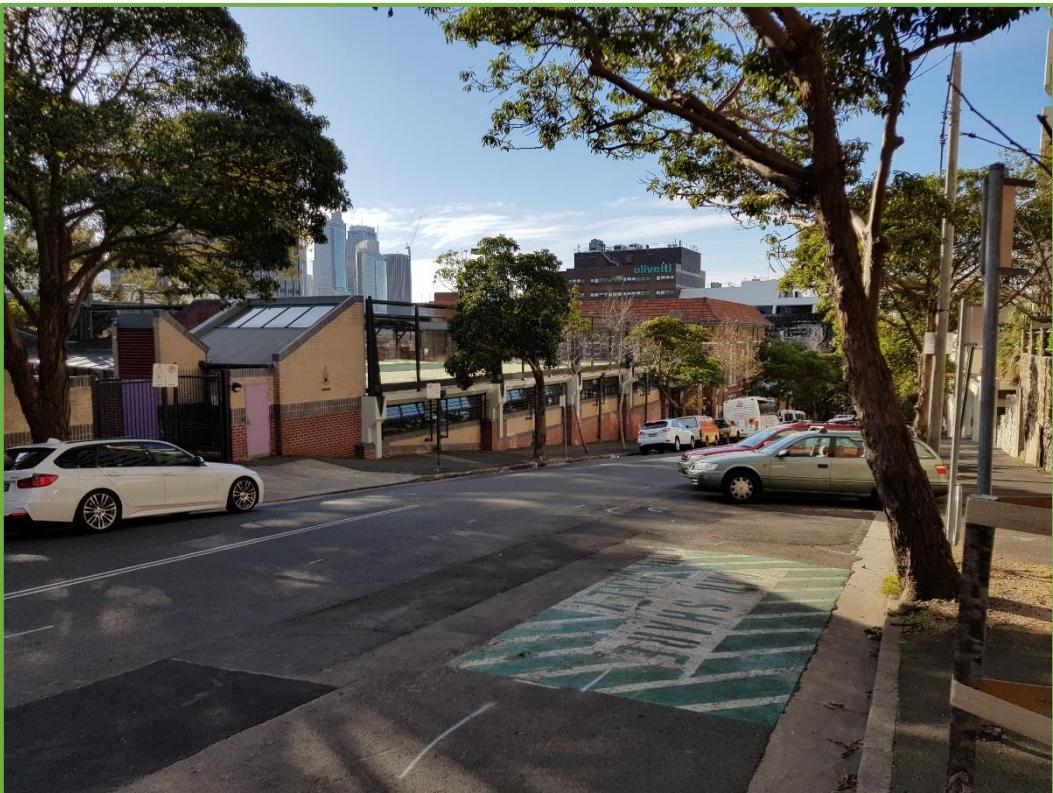


6. CONCLUSION

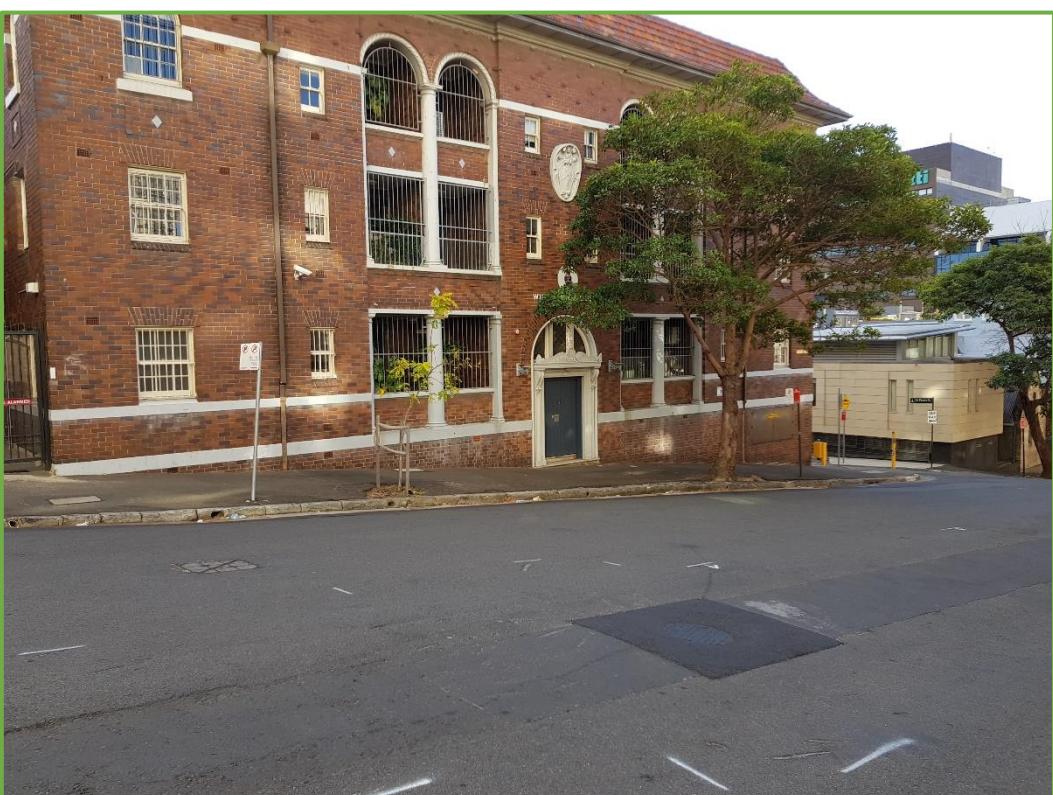
This report should be read in conjunction with construction documentation prepared in relation to SCEGGS Darlinghurst. The indicative plan is considered satisfactory for the purposes of a Draft CTMP, subject to confirmation and amendments upon the appointment of a builder and finalisation of the construction methodology.

APPENDIX A

Photographic Record



View looking north from Forbes Street towards the subject site



View looking west from Forbes Street towards the proposed Works Zone



View looking west from Forbes Street towards St Peters Street



View looking east from Bourke Street towards St Peters Street

APPENDIX B

Swept Path Analysis













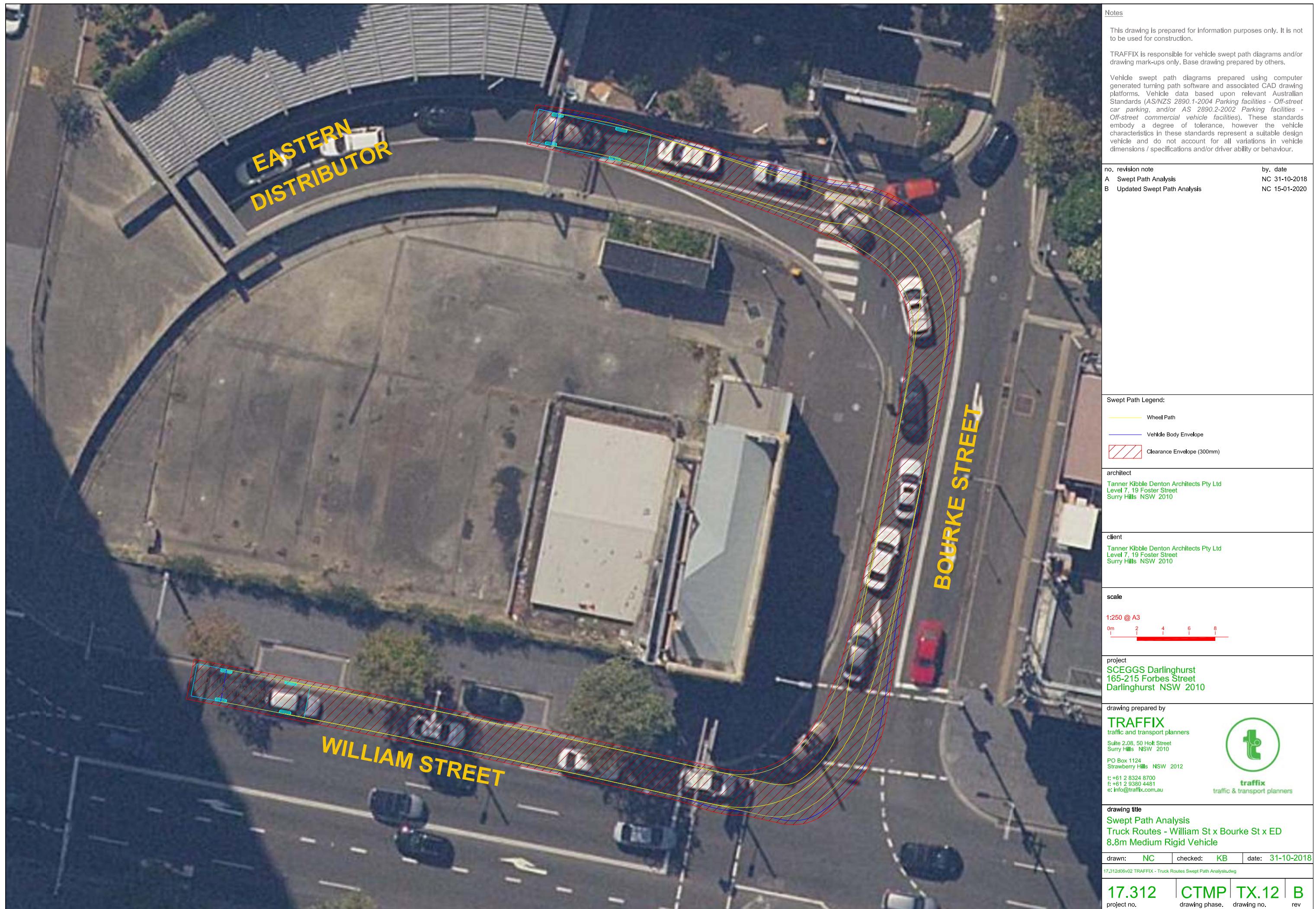






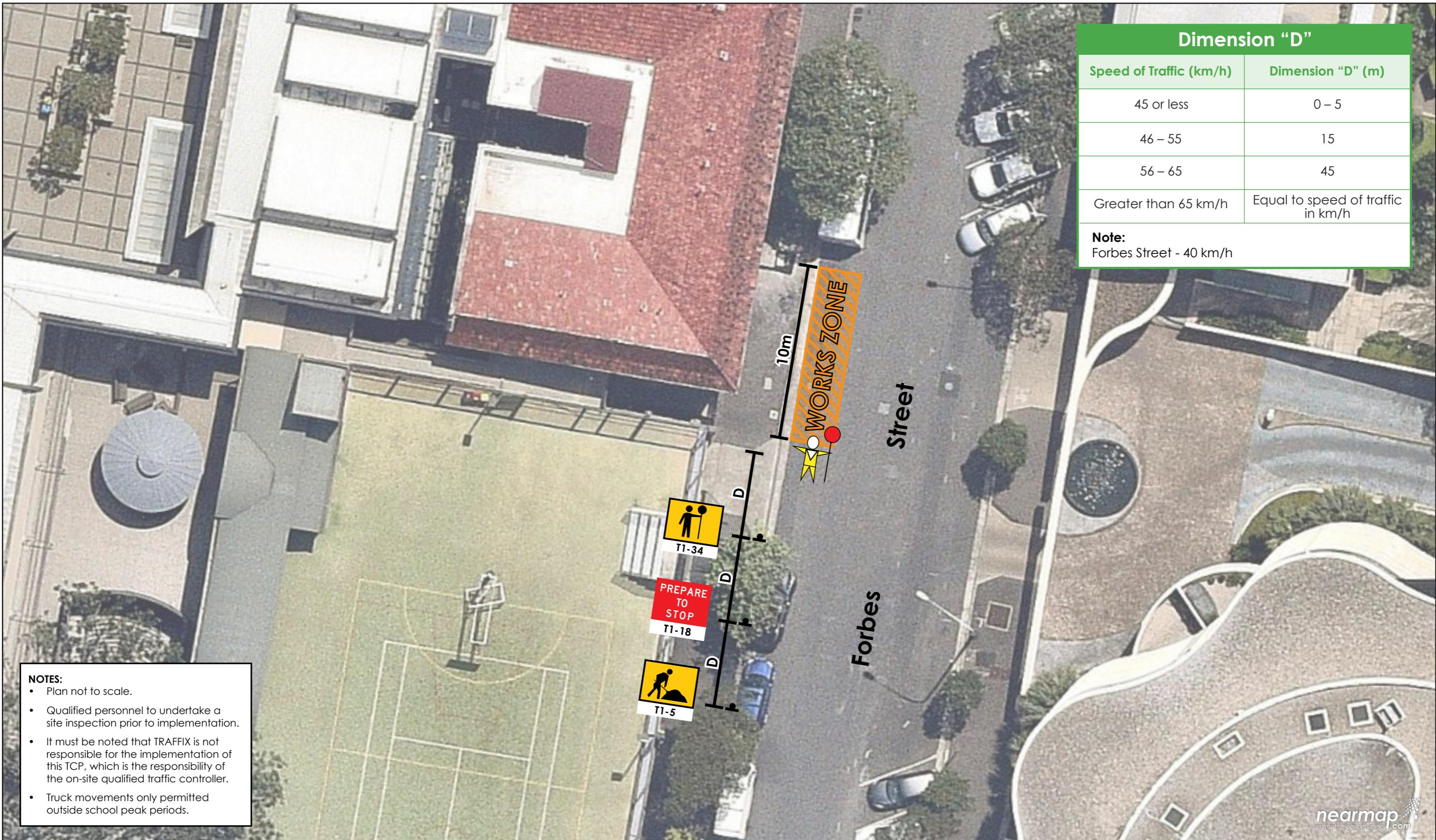






APPENDIX C

Traffic Control Plan



TCP 01 : Works Zone		Date:	15.01.2020	TRAFFIC & TRANSPORT PLANNERS Suite 2.08 50 Holt Street Surry Hills NSW 2010 (02) 8324 8700 info@traffix.com.au
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Client:	SCEGGS Darlinghurst	Signature:		



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