Proposed Student Accommodation
104-116 Regent Street, Redfern

Framework Construction Traffic Management Plan

Prepared for:

Wee Hur Capital Pty Ltd

7 December 2021

The Transport Planning Partnership

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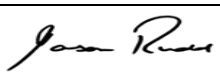
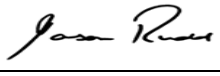
Client: Wee Hur Capital Pty Ltd

Version: V03

Date: 7 December 2021

TTPP Reference: 20481

Quality Record

Version	Date	Prepared By	Approved by	Signature
V01	29/11/21	Jason Huang	Jason Rudd	-
V02	2/12/21	Jason Huang	Jason Rudd	
V03	7/12/21	Jason Huang	Jason Rudd	

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1 Introduction

1.1 Background

This *Framework Construction Pedestrian and Traffic Management Plan* (CPTMP) has been prepared on behalf of The Trust Company (Australia) Limited ATF WH Redfern Trust is associated with the State Significant Development Application (SSDA) for a proposed student accommodation development at 104-116 Regent Street Redfern.

This CPTMP is intended to provide a framework for the future preparation of a detailed CPTMP following SSDA approval and development of a detailed construction methodology.

Moreover, this Framework CPTMP establishes the principles and objectives for construction traffic management, evaluates the potential traffic-related impacts arising from the proposed construction activities of the subject development and sets out appropriate mitigation measures and management arrangements to address these implications.

This report provides an outline of an indicative construction methodology and details management measures to ensure the safety of the public and workers.

It is envisaged that if approved, the consent will include a condition requiring a detailed CPTMP to be prepared in consultation with Sydney Coordination Office (now called Customer Journey Planning) and Transport for NSW (TfNSW) prior to construction activities commencing on site.

1.2 Site Description

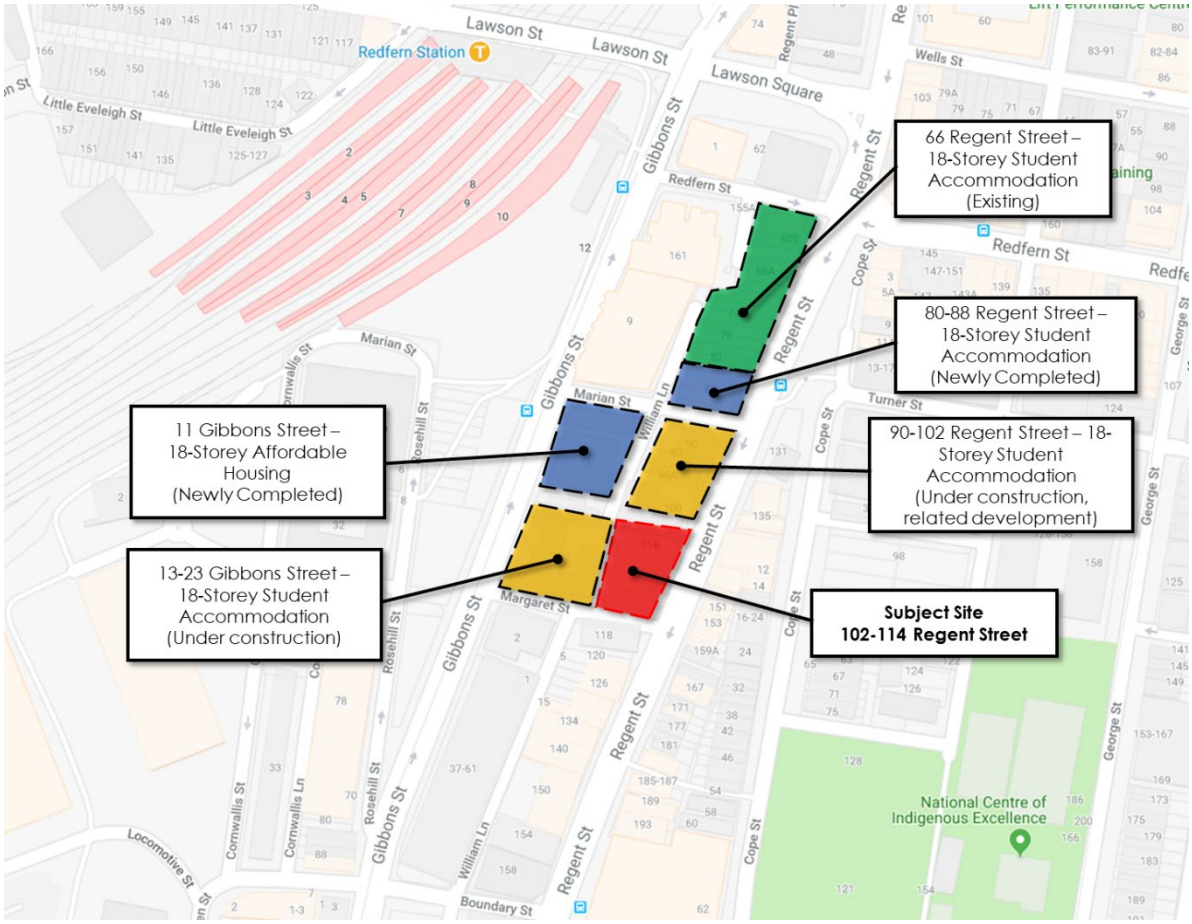
The subject site is located at 104-116 Regent Street, Redfern and falls within the local government area of the City of Sydney Council.

The site has road frontages to Regent Street to the east, Margaret Lane to the south and a small frontage to William Lane to the west.

The site is serviced by two wide driveways to Regent Street. These driveways were used to access the BP service station and have been retained during approved demolition works on the site. A garage driveway access is currently provided via William Lane to the 2-storey building on the site.

The location of the site and its surrounds is presented in Figure 1.1.

Figure 1.1: Locality Plan



Source: Google Maps

The surrounding land use predominately comprises a mix of residential, commercial, and retail shop/ café use.

The Redfern Railway Station (Redfern Station) is located approximately 300m (walking distance) north-west of the site and provides various rail service connections to numerous destinations across Sydney.

1.3 Purpose of this Framework CPTMP

This Framework CPTMP considers the potential traffic and transport implications during the construction phase of the development and establishes overall principles of traffic management during construction. These principles include:

- manage vehicle and pedestrian access to / from adjacent properties;
- restrict construction vehicle movements to designated routes to / from the site;
- manage and control construction vehicle activity in the vicinity of the site;
- estimate indicative traffic generation associated with construction works;

- provide an appropriate and convenient environment for pedestrians and cyclists;
- minimise the impact on traffic flows, emergency vehicles and pedestrian movements;
- minimise the use of on-street works zones by accommodating, where practical, on-site loading areas;
- maintain appropriate public transport access; and
- carry out construction activity in accordance with the approved work hours.

2 Indicative Construction Methodology

2.1 Construction Staging and Activities Program

Demolition, excavation and construction works associated with the proposed student accommodation are expected to have a total duration of 12 - 18 months.

Construction activities for this project will generally involve:

- Excavation/ earthworks for basement, and
- Building Works (ie. structure works, façade and internal fit out)

2.2 Construction Site Access and Work Zones

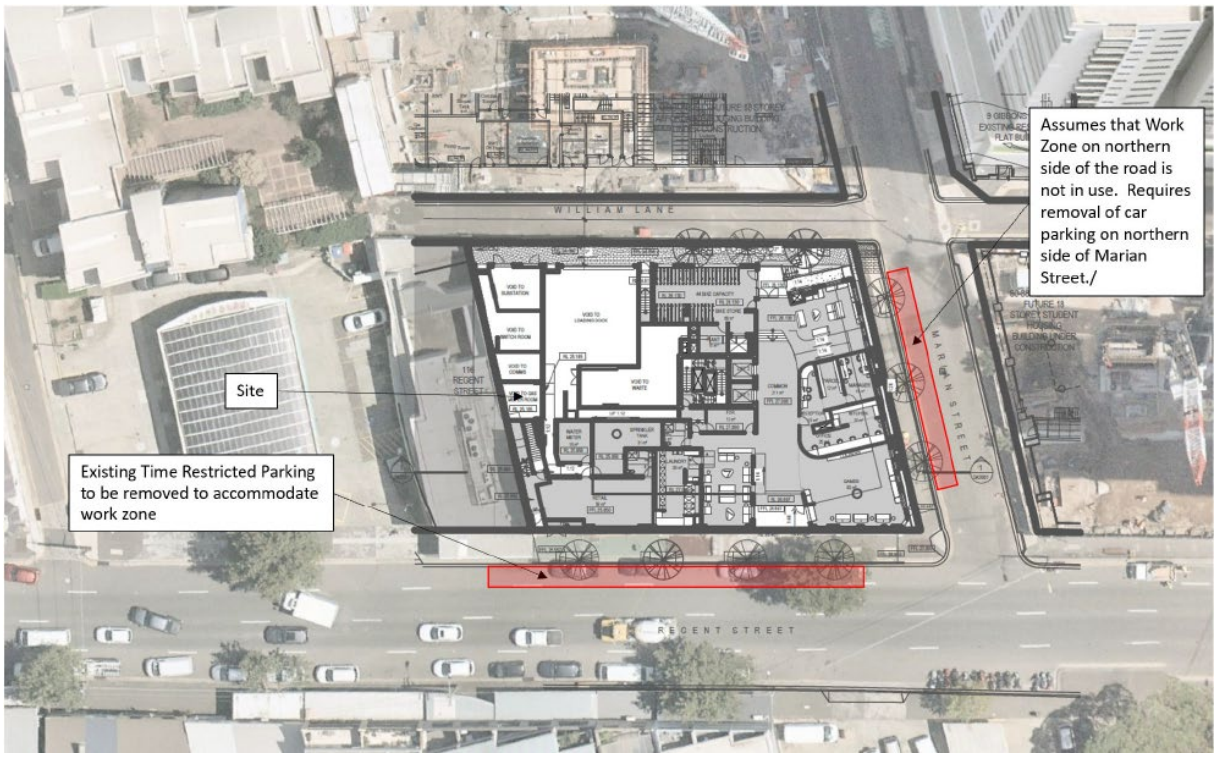
2.2.1 Consideration of Surrounding Developments

The site has three road frontages, namely Regent Street, Margaret Street and a short frontage to William Lane.

It is noted that construction works on surrounding sites is currently being undertaken. The site at 13-23 Gibbons Street has approval to utilise a 'work zone' along Gibbons Street at various times throughout the construction period.

The approved student accommodation development on the site at 90-102 Regent Street has commenced construction. As part of the construction methodology, works zones will be required at certain stages of development along Regent Street and Miriam Street. This is shown in Figure 2.1.

Figure 2.1: 90 – 102 Regent Street Potential Works Zones



Source: 19139_r03v02_201013_Framework CTMP, prepared by TTPP October 2021

Throughout the preparation of the detailed CPTMP, consideration of the cumulative implication of the various construction sites, their indicated staging and work zone arrangements will be undertaken.

The construction methodology for all stages of construction shall be developed with a principal objective of maintaining pedestrian access along the Regent Street frontage at all times.

To be contingent for any conflicts, primary and secondary access points have been outlined for the site, and primary and secondary works zones also indicated for fit out and finishing.

These arrangements are shown in Figure 2.2 overleaf.

2.2.2 Construction Vehicle Access Arrangements

The site has three road frontages, namely:

- Regent Street
- Margaret Street
- William Lane

The availability of three road frontages provides potential opportunities for through site construction vehicle access routes and on-site. Four through-site construction access routes are described below and shown in Figure 2.2.

1. **Enter and Exit Regent Street:** Vehicles travel southbound along Regent Street, enter the site on the Regent Street (north) access and exit the site on the Regent Street (south) access
2. **Enter Regent Street (north) and Exit Margaret Street:** Vehicles travel southbound along Regent Street, enter the site on the Regent Street (north) access exit the site on the Margaret Street access and travel westbound on Margaret Street
3. **Enter Regent Street (south) and Exit Margaret Street:** Vehicles travel southbound along Regent Street, enter the site on the Regent Street (south) access exit the site on the Margaret Street access and travel westbound on Margaret Street
4. **Enter Regent Street (north) and Exit William Lane:** Vehicles travel southbound along Regent Street, access the site on the Regent Street (north) access, exit the site on the William Lane access and travel northbound on Gibbons Street

In addition, some works zones would be required during the fit out and finishing stages of works and during delivery of prefabricated structural elements. Potential locations have been outlined in Figure 2.3.

Figure 2.2: Construction Vehicle Site Access and Works Zones

Source: Nearmap (accessed 24 November 2021) and Antoniodes Architects, dated 19 November 2021)

Figure 2.3: Subject Site Potential Works Zones

Source: Nearmap (accessed 24 November 2021) and Antoniodes Architects, dated 19 November 2021)

2.2.3 Principles for Construction Vehicle Access

The following principles for construction vehicle access shall be considered during the preparation of the detailed CPTMP.

- Whenever practicable, vehicle unloading/ loading of construction vehicles should be undertaken via on-site loading zone.
- Access to and from on-site loading area shall be undertaken via existing site access driveways where practical.
- The use of on-street loading areas (ie. Works Zones) shall be minimised and generally limited to accommodate large construction vehicles unable to access the site and/ or when the building phase prohibits on-site access.
- The length and duration of occupation of any work zone shall be minimised such as to minimise the loss of any on-street parking.
- To the greatest extent possible, vehicle movements to and from the site or works zones shall be in a forward direction. Any reversing movements shall be undertaken under the supervision and direction of traffic controllers.
- Notwithstanding the above, reversing movements of construction vehicles on Regent Street shall be avoided in order to maintain efficient and safe traffic flows along the major road.
- Pedestrian access along the Regent Street frontage shall be maintained during construction. Pedestrian movements along the footpath shall be protected with appropriate hoarding and/ or site fencing.
- Pedestrian access along Margaret Street and potentially William Lane shall be maintained during construction or via appropriate alternative routes.
- Co-ordination with adjacent construction sites to be undertaken to avoid simultaneous periods of peak construction vehicle generations (e.g. simultaneous concrete pours).
- Vehicle access to and from the site will be via prescribed and approved construction vehicle routes
- All traffic and pedestrian control associated with the construction works to be undertaken by accredited traffic controllers.

2.2.4 Construction Vehicle Access to On-Site Loading Areas

The road alignment and configuration of the surrounding streets will determine the size of vehicle able to access site access driveways and/ or works zones. Appendix A shows vehicle swept path analyses, demonstrating that a 12.5m Heavy Rigid Vehicle (HRV) can access the site via Regent Street and exit via Margaret Street, whereas an 8.8m Medium Rigid Vehicle (MRV) can enter via Regent Street and exit via William Lane.

Consequently, Figure 2.2 outlines the potential construction vehicle access options for on-site loading/ unloading during construction.

The location of driveways in each option are viable and considering the intention to renew public works/ footpaths along the frontage, vehicles can likely enter/ exit the site without strict regard of where existing driveways are located.

It is anticipated that traffic controlled would be used to assist with traffic flows for each option.

2.3 Work Hours

The proposed construction hours are:

- Monday to Friday 7:30am – 5:30pm
- Saturday 7:30am – 3:30pm, and
- Sunday and Public Holiday No work.

Any works outside these times will only occur with approval from the relevant authorities prior to the commencement of any works.

2.4 Construction Vehicle Type and Volumes

It is understood that the size of vehicles accessing the site would include the following:

- Articulated semi-trailers (19m long) – for delivery of large structural elements
- Truck and Dog – used removal of bulk excavated material
- Heavy Rigid Vehicles (12.5m long) – delivery of building materials
- Medium and Small Rigid Vehicles - Delivery of building materials, removal of waste etc.

Peak construction traffic generation during construction will occur during concrete pouring activities. During concrete pours up to four concrete trucks per hour will be required. The maximum traffic volumes will be up to 80 two-way movements (40 in / 40 out) on a 10-hour working day.

2.5 Construction Workers

It is envisaged that there will be an average of 100 construction staff on site, and up to 150 construction staff during peak activities.

2.6 Site Access and Construction Vehicle Routes

Construction vehicles shall be restricted to designated and approved construction vehicle routes for access to and from the site.

Construction vehicle routes shall seek to minimise the use of local roads and direct construction vehicles along the most direct route to and from the arterial road network.

It is envisaged that construction vehicles will generally be able to approach the site from Regent Street and should seek to leave via Gibbons Street, as both are B-Double Approved routes. All movements should therefore prioritise travel along these streets. An extract of the TfNSW B-Double approved roads near the site is shown in Figure 2.4.

The application of various routes may be required subject to where building materials are sourced and to address sensitive surrounding land uses at peak periods.

Figure 2.4: Indicative Construction Vehicle Routes

Source: Transport for NSW (accessed 24 November 2021)

All truck drivers will be advised of the designated truck routes to / from the site and be required to adhere to the nominated routes.

3 Construction Traffic Assessment and Implications

3.1 Construction Traffic Generation

The proposed peak construction activities are estimated to generate up to four concrete trucks per hour during the peak activities, equivalent to 80 two-way movements (40 in/ 40 out per day) on a 10-hour working day.

These peaks flows will only occur during concrete pours. Outside of these pours, traffic generation will be significantly less.

The low levels of construction traffic volumes could not be expected to result in adverse impact on the operation of the surrounding road network.

Notwithstanding the above, consideration shall be given in the detailed CPTMP to the cumulative traffic implications associated with other adjacent developments, including but not exclusive to 13-23 Gibbons Street and 90-102 Regent Street.

3.2 Pedestrian and Cycle Access

Pedestrian and cycle access will be maintained as per existing conditions during the project, when works zones are not installed.

Pedestrians and cyclists will be temporarily held on Regent Street with traffic controllers when vehicles are entering or exiting the site.

It is noted that pedestrians may be held only for very short periods to ensure safety when trucks are leaving or entering but must not be stopped in anticipation of truck arrival (i.e. at all times the pedestrians have right-of-way on the footpath not the trucks).

All appropriate site hoarding and fencing will be installed to ensure pedestrian safety along the site's frontages.

If/ when works zones are installed along Regent Street, signage and traffic controller placement will be in accordance with NSW traffic control guidelines. TCPs associated with the detailed CPTMP should include direction for pedestrians.

3.3 Public Transport Facilities

The proposed construction activities will not result in any changes to existing public transport services. All existing bus facilities and bus stops will be maintained at all times during the works.

Additionally, workers shall be encouraged to utilise public transport to access the site.

4 Indicative Construction Traffic Management Measures

4.1 Traffic Management Measures

Traffic Control Plans (TCPs) shall be prepared to depict the proposed traffic control measures including static signage to guide motorists past the subject site.

The TCPs shall be designed in accordance with Roads and Maritime Services' Traffic Control at Works Sites manual, with all relevant approvals and permits to be obtained prior to the commencement of any construction works.

The proposed construction truck movements to/from the site shall be accompanied by advisory traffic control signage to minimise the traffic impact on the surrounding road network.

All advisory road signage shall be installed in accordance with AS1742.3 Manual of uniform traffic control devices - Traffic control devices for works on roads and the Roads and Maritime Services Traffic Control at Worksites Manual. Signs shall be installed and maintained throughout the construction period.

4.2 Vehicle Access

Construction vehicles shall radio / call the site office on approach to the site to ensure that space is available within the site loading area.

All loading and unloading shall be undertaken within the site/ work zones.

Notwithstanding this, if there are any materials spilt onto the road, site personnel and equipment shall rectify the issue accordingly, subject to appropriate OH&S provision.

4.3 Truck Routes

Protocols must be in place to ensure:

- site induction shall include procedures for accessing the site during demolition, excavation and construction stages;
- drivers shall adhere to the B-Double approved routes as shown in Figure 2.4 where practical, and access routes as outlined in Figure 2.2;
- drivers shall be aware of pedestrians and cyclists in the vicinity of the site; and

- drivers shall be aware of existing signposted speed limits.

4.4 Construction Worker Parking

It is envisaged that most workers at the site will utilise public transport to access the site.

A tool drop-off and storage facility shall be provided on-site. This will allow construction workers to drop off and store their tools, allowing them to use public transport to travel to and from the site. This will be incorporated in the workers induction program to ensure minimal parking impact on the surrounding streets.

It is proposed to implement the following measures to encourage workers to use public transport:

- provide an on-site tool drop-off and storage facility to allow tradespeople to drop off and store their specific machinery for the project
- inform staff during the induction and regular management meetings that no on-site car parking will be available
- instruct staff to use public transport to access the site during the induction and regular management meetings
- display public transport timetable information at key locations within the work site and ensure that it is easily accessible by staff.

4.5 Neighbouring Properties

The proposed construction works will not impact existing local access to / from properties.

Local access to properties will be maintained at all times during the works.

4.6 Sydney Metro / Other Construction Activates

The Sydney Metro City and Southwest construction works are expected to be ongoing during the demolition works of the proposed development.

It should be noted that the Sydney Metro works may affect the proposed construction activities if there are any road closures and/or changes to traffic conditions in the Redfern area.

As such, Wee Hur's demolition contractor will be responsible to liaise with the relevant Project Site Engineer/Manager and/or check with authorised representatives from Sydney Metro

project team for updates on a regular basis to mitigate any potential impacts and manage construction vehicle access to/from the site as required.

4.7 Site Inspections and Record Keeping

The demolition, excavation and construction stages shall be monitored to ensure that it proceeds as set out in the Contractor's Construction Management Plan provided by the Principal Contractor.

A daily inspection before the start of construction activity shall take place to ensure that conditions accord with those stipulated in the plan and that there are no potential hazards. Any possible adverse impacts shall be recorded and dealt with as they arise.

4.8 Site Induction

All staff employed on the site by the Principal Contractor shall be required to undergo a site induction.

The induction shall include permitted access routes to and from the works site for site staff and delivery vehicles as well as standard environmental, OH&S, driver protocols and emergency procedures.

The workers are to be informed to use public transport to access the site during the induction.

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