

Central Park Mixed Use Development – Project
Application for Blocks 3B, 3C & 10 Student
Accommodation

Construction Traffic Management Plan

20 April 2012

FINAL

Prepared for

Frasers Broadway Pty Ltd

Central Park Mixed Use Development – Project Application for Blocks 3B, 3C & 10 Student Accommodation Construction Traffic Management Plan

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This report has been issued and amended as follows:

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1 Introduction

Halcrow has been commissioned by Frasers Broadway Pty Ltd to prepare a construction traffic management plan (CTMP) for the earthworks/site grading, infrastructure and remediation works associated with the Central Park development site (formerly known as Frasers Broadway).

The CTMP will assist in preparing the site for the proposed construction of the student accommodation in Blocks 3B, 3C and Block 10 within Central Park.

The Central Park development site is located between Broadway and Regent Street in Ultimo. The site location is shown in **Figure 1**.

The purpose of this CTMP is to describe the:

- proposed construction activities with regard to construction vehicle movements and access arrangements;
- impact of these activities on the movement of road users; and
- management of those impacts.

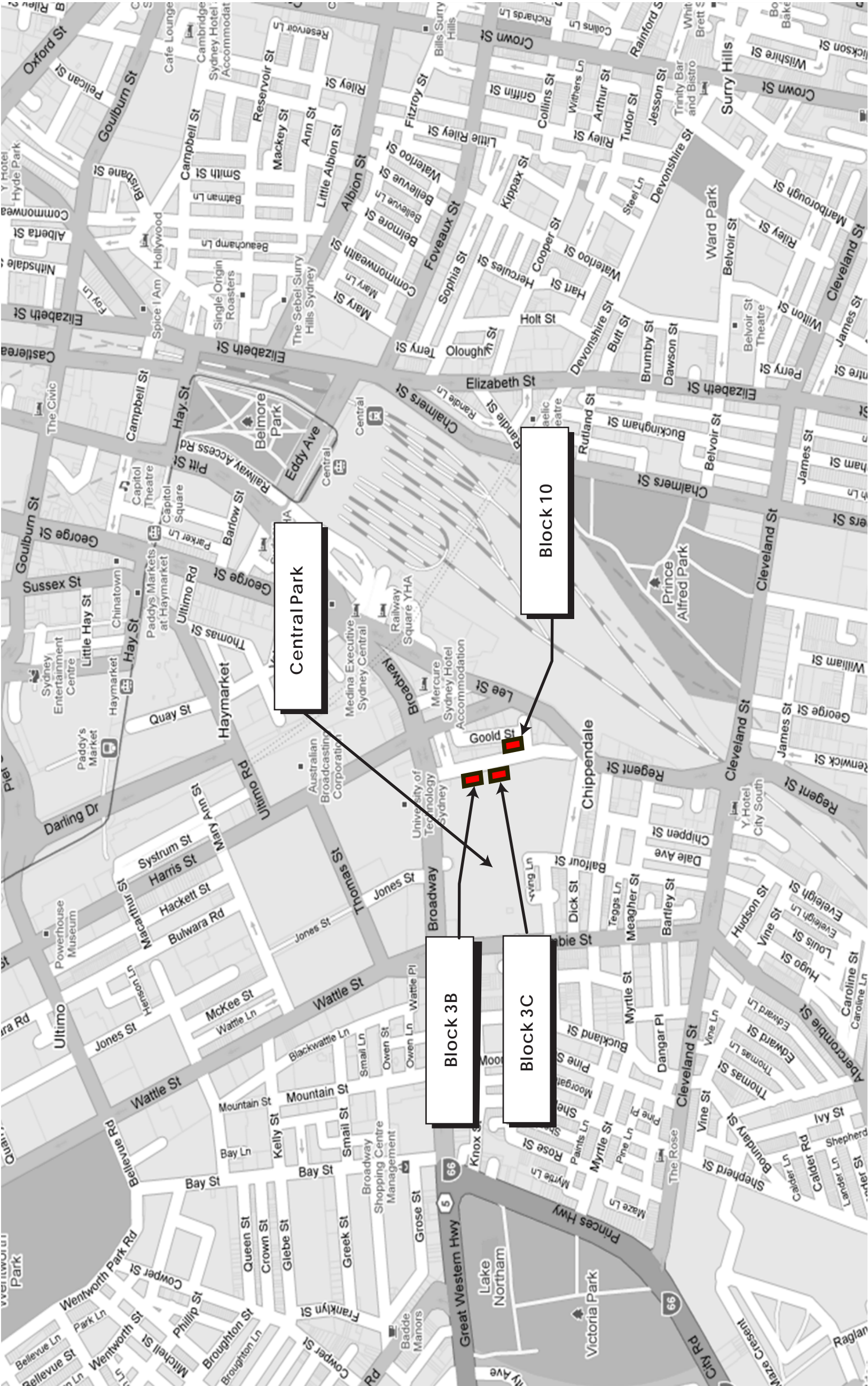
It is noted that at this stage a building contractor has yet to be appointed. Therefore, this CTMP will be reviewed and updated accordingly by the appointed contractor at the appropriate time in the future. The review and updating of the CTMP will need to have consideration to the adopted construction methods, any revised construction programme and the completion of the construction stages on the adjacent Blocks 2 and 5.

This report together with a separate traffic and transport assessment report will accompany the project application for Blocks 3B, 3C and 10.

The report has been prepared and checked by engineers who hold the RTA Design/Amend Traffic Control Plans (Red Card) and Audit Traffic Control Plans (Orange Card) certification.

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2 Existing Conditions

The overall Central Park site is located adjacent to Broadway in the southern fringes of the Sydney CBD area.

Blocks 3B and 3C are bounded by Block 3A (to the immediate south of Dwyer Street) to the north, Kensington Street in the east, Outram Street in the south and Kent Road in the west.

Block 10 is bounded by existing residential terraces to the north, Goold Street in the east, Outram Street in the south and Kensington Street in the west.

Broadway is the major east-west arterial road into and out of the Sydney CBD from the west. It generally consists of three travel lanes in both directions. Across the frontage of the site, a dedicated bus lane is in place in both directions.

Abercrombie Street is a one-way northbound sub arterial road through the Chippendale area linking Cleveland Street in the south to Broadway and Wattle Street in the north.

2.1 *Existing Public Transport Services*

The site is within convenient walking distance of Central Railway Station and Railway Square. In combination these provide unparalleled public transport accessibility with the provision of:

- a wide range of bus and rail services;
- light rail linkage to the inner west; and
- taxi rank.

A bus stop adjacent to the subject site provides access to Broadway's high frequency bus corridor, providing direct service to the Eastern Suburbs and the Inner West.

It is a short walk to:

- Lee St for direct buses to Northern Beaches and some eastern services;

- Central Station for rail services throughout Sydney, intercity, country and interstate services, plus Light Rail; and
- Eddy Avenue for express bus services to UNSW and eastern suburbs services.

2.2 Existing Walking/Cycling Facilities

The site does not currently have public access and as a result pedestrians and cyclists will not be affected by the construction works.

3 Overview of Proposed Construction Activities

This section of the report outlines the proposed methodology with regard to construction works on Blocks 3B, 3C and 10.

3.1 Outline of Proposed Construction Works and Timing

All three blocks will be built by the same contractor at the same time, they are all interlinked and depend on each other for common infrastructure. Construction will commence during the fourth quarter of 2012 and will take approximately 12 months to complete.

3.1.1 Description of the Construction Works – Blocks 3B, 3C and 10

The work involves the following:

- Blocks 3B and 3C will be eight and six storeys in height, respectively.
 - Works include site remediation, foundation works, superstructure, fit out and commissioning.
- Block 10 includes retention of existing façade and a new six storey building.
 - In ground remediation, foundation works, superstructure, fit out and commissioning (as per Blocks 3B/3C).

3.2 Work Hours

Construction activities would generally be undertaken between 7:00am - 7:00pm Monday to Fridays and 7:00am to 5:00pm on Saturdays with no work on Sundays or public holidays in accordance with Council's consent conditions.

3.3 Construction Traffic Vehicle Types

Construction vehicles which are likely to be generated by the proposed construction activities include:

- articulated flat bed trucks would be used to transport large machinery (i.e. two 20 tonne excavators, tower crane and a piling rig) at the start and at the completion of their use;
- heavy and medium rigid trucks for the importation and exportation material fill from the site; and
- small rigid vehicles, vans and couriers.

4 Traffic Implications

4.1 *Traffic Generation*

4.1.1 *Site Clearance Works*

This stage of work would generate heavy rigid trucks to dispose of the cleared material.

It is estimated that approximately four to six trucks per day will enter/leave the site during the site clearance stage collectively for all three blocks.

4.1.2 *Excavation Works*

The excavation work would generate two oversized trucks for delivery of two 20 tonne excavators at the start and end of works.

Construction of building basements is not required resulting in minimal mass removal of fill or rock material. The fill and rock material will be exported by 17.0m Truck and Dogs.

During this phase of work, it is expected that on average there will be approximately four to six trucks per day and approximately two to three trucks per peak hour collectively for all three blocks.

4.1.3 *Construction of Blocks 3B, 3C and 10*

This phase of work would generate an oversized truck to deliver a piling rig and a large articulated truck for delivery of a tower crane at the start and end of works.

During this phase of work, it is expected that on average there will be approximately four to six trucks per day and approximately two to three trucks per peak hour collectively for all three blocks.

4.1.4 *Remediation of Site*

The site remediation works would generate small to medium trucks to remove waste material and to reinstate Buildings 3B, 3C and 10.

4.2 *Traffic Generation Summary*

The estimated traffic generation of each stage for Blocks 3B, 3C and 10 is summarised in **Table 4.1**.

Table 4.1 – Summary of Construction Traffic Generation (Blocks 3B, 3C and 10)

Stages of Construction	Daily Truck Generation (truck deliveries/day) [†]	Peak Hour Truck Generation (truck deliveries/hour) [†]
Stage 1 - Site Clearance Works	4-6	1-2
Stage 2 - Excavation Works	4-6	1-2
Stage 3 - Construction of Blocks 3B, 3C and 10	9-12	2-3
Stage 4 - Site Remediation	4-6	1-2

Note:

[†] 1 truck delivery = 2 movements (1 movement in + 1 movement out)

With only 2-3 vehicles per hour during the peak construction period, it is considered that the construction vehicles will have very little impact on the adjacent road network.

4.3 *Traffic Control Management Measures*

The traffic management for the construction of Blocks 3B and 3C will involve the following:

- construction vehicles will access Blocks 3B and 3C from the apex of the Kensington Street and Kent Road intersection, via Kensington Street off Regent Street;
- entry to and exit from the site would occur in a forward direction;
- unloading/loading would occur on-site and during the later stages of construction, a crane/hoist may be stationed between Blocks 3B and 3C;
- heavy vehicle warning signs would be installed to warn motorists that heavy vehicles are accessing the work site as shown in **Appendix A - TCP 1**;
- a traffic controller would be stationed at the access to Blocks 3B and 3C to assist truck drivers accessing the site, as shown in **Appendix A - TCP 1**; and
- wash down and cleaning facilities will be provided at the construction access.

The traffic management of the construction of Block 10 will involve the following:

- construction vehicles will access Block 10 from Outram Street, via Kensington Street and Regent Street;
- entry to and exit from the site would occur in a forward direction;
- unloading/loading would occur on-site;
- heavy vehicle warning signs would be installed to warn motorists that heavy vehicles are accessing the work site, as shown in **Appendix A - TCP 2**;
- a traffic controller would be stationed at the access to Block 10 to assist truck drivers accessing the site, as shown in **Appendix A - TCP 2**; and
- wash down and cleaning facilities will be provided at the construction access.

4.4 Construction Traffic Routes

General construction vehicle traffic will have origins/destinations throughout Sydney.

The proposed routes aim to take the shortest distances to/from the arterial road network and are shown on **Figure 2**.

There are currently 'Construction Vehicles Only' accesses Broadway (via the Heritage Gates) and Regent Street for the construction of Blocks 2 and 5. Blocks 3B, 3C and 10 construction vehicles are not proposing to use these existing construction access points.

Truck and Dog swept paths for the exportation of material are shown in **Appendix B – 17m Truck and Dog Swept Paths**.

All building contractors shall be notified of the truck routes and are required to adhere to the nominated routes.

If a holding area for construction vehicles is required there is scope to utilise the eastern side of Block 11 as a holding/staging area.

4.4.1 Truck Routes

The designated truck routes for construction vehicles travelling to and from the construction accesses to Blocks 3B, 3C and 10 are:

CONSTRUCTION TRAFFIC ROUTES - BLOCK 3B, 3C AND 10

CENTRAL PARK



- inbound from south – travel north along Regent Street, turn left into Kensington Street and then into Block 3B and 3C access at the apex of the Kensington Street and Kent Road intersection;
- inbound from north – travel south along Harris Street, turn right into Regent Street, turn right into Kensington Street and then into the Block 3B and 3C access at the apex of the Kensington Street and Kent Road intersection;
- inbound from west – travel west along Parramatta Road, turn right into City Road, turn left into Cleveland Street, left into Regent Street, left into Kensington Street and then into the Block 3B and 3C access at the apex of the Kensington Street and Kent Road intersection;
- outbound to south – turn right from the Block 3B and 3C access, travel south along Kensington Street and then right into Regent Street; and
- outbound to north and west – turn right from the Block 3B and 3C access, travel north along Kensington Street and turn left in Broadway.

4.5 *Pedestrian and Cyclist Access*

Pedestrians and cyclists are not expected to be affected as a result of the construction works.

A traffic controller will be stationed at the Block 3B/3C access and the Block 10 access to assist with pedestrians and cyclists, if required. A traffic controller would be particularly mindful of pedestrians when trucks are entering and exiting the site.

4.6 *Staff Parking*

On site parking for construction workers will not be available throughout the period of construction for reasons indicated below.

The site is well serviced by public transport and it is expected that staff would be able to access at the site using buses and train.

The site is within convenient walking distance of Central Railway Station and Railway Square.

4.7 *Public Transport*

It is not expected that public transport services would need to be detoured during construction works.

4.8 *Emergency Vehicle and Pedestrian Access*

Access to the subject site and neighbouring sites by emergency vehicles would not be affected by the works as their road and footpath frontage would be unaffected. Emergency protocols on the site would include a requirement for the traffic controller to assist with emergency access from the street.

Consequently, any potential impacts on emergency access would be effectively managed throughout the works.

5 Driver Protocols

The following construction traffic management measures would be applied to all four construction stages.

Traffic Signs and Devices

- Advisory road signage would be installed in accordance with AS 1742.3 Manual of uniform traffic control devices - Traffic control devices for works on roads and the RTA's Traffic Control at Worksites. Signs must be installed and maintained throughout the construction stages.

Vehicle Access

- Site induction would include procedures for accessing the site from Broadway and Regent Street.
- Drivers are to be mindful of the pedestrians and bicycles when entering and exiting the site.
- Drivers must use the wash down facilities at the exit to ensure that trucks which have been on the site do not carry dirt and debris onto the road. If there are any materials spilt onto the road, site personnel and equipment would be sent to clear it up, subject to appropriate OH&S provision.

Truck Routes

- Drivers must adhere to the nominated truck routes.
- Drivers must be mindful of pedestrian safety.
- Drivers should be aware that the local area is signposted as 50km/h and that construction speed zones may be in place.
- Drivers must be aware of pedestrian crossings in the area.

Pedestrian Access

- Traffic controllers are to be used to assist with pedestrians and bicycles, if required.

6 Conclusion

This CTMP has been prepared to document the associated construction traffic management measures necessary to facilitate the proposed construction of Blocks 3B, 3C and 10 for the proposed student accommodation within the Central Park development.

Based on the finding of this CTMP, it is concluded that:

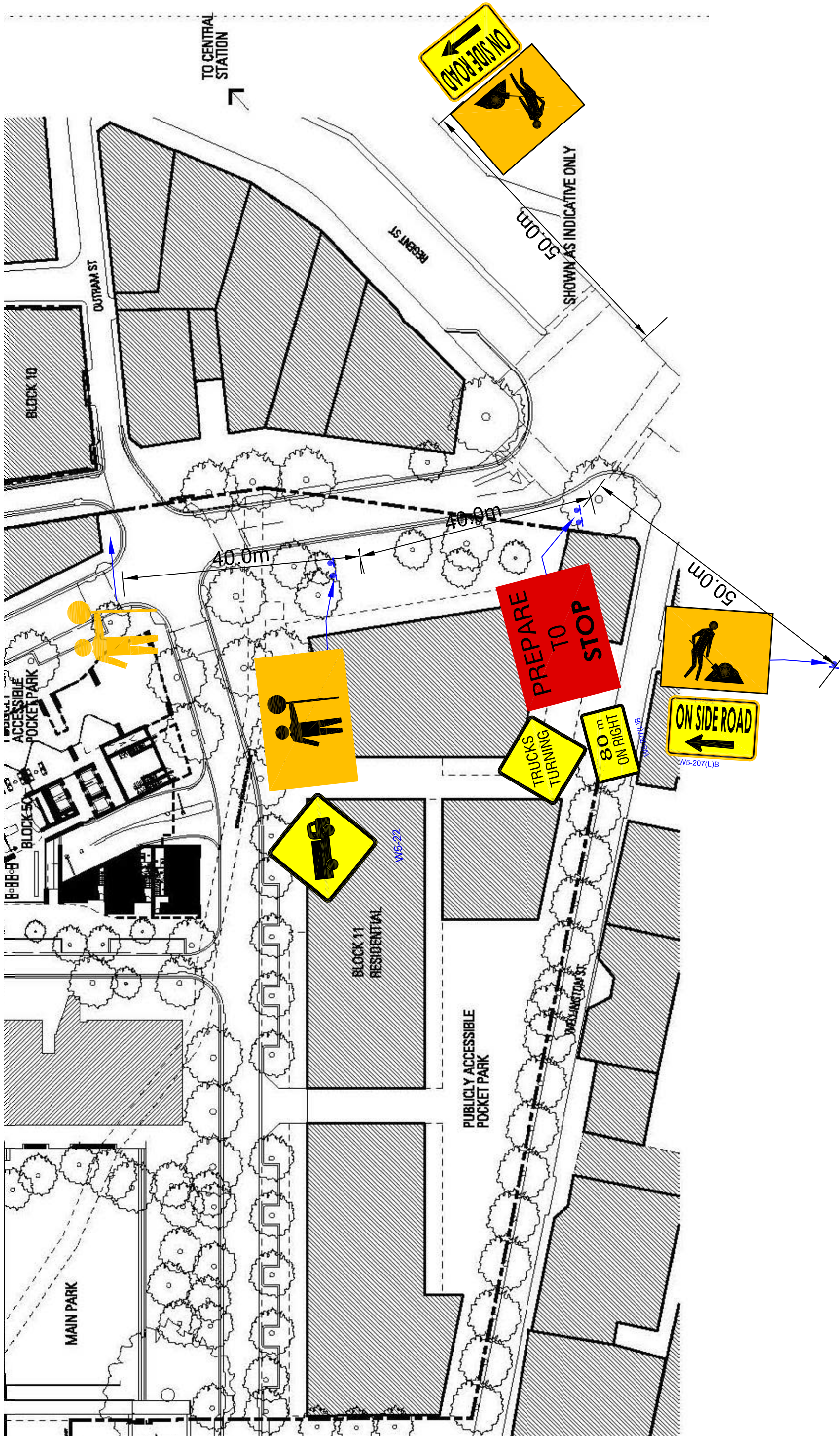
- construction vehicle movements to and from the site would be minimal and as such would be satisfactorily accommodated by the surrounding road network;
- construction vehicles will access Blocks 3B and 3C from the apex of the Kensington Street and Kent Road intersection, via Kent Road and Regent Street;
- construction vehicles will access Block 10 from Outram Street, via Kensington Street and Regent Street;
- the subject site is well serviced by public transport and it is expected that construction staff would use public transport to travel to/from the subject site;
- construction vehicles will not adversely affect the safety of motorists, pedestrians, cyclists and the amenity of local residents; and
- a number of driver protocols would be established for drivers to ensure the safety for motorists, pedestrians and cyclists and amenity of residents.

In summary, it is concluded that the proposed CTMP measures would adequately address potential implications associated with the proposed construction activities.

Appendix A Traffic Control Plan (TCP)

BLOCKS 3B & 3C - INDICATIVE TRAFFIC CONTROL PLAN (TCP - 1)

CENTRAL PARK BLOCKS 3B, 3C & 10 PROJECT APPLICATION



Scale: NTS