



Central Park Proposed Mixed Use
Development

State Significant Development
Application for Block 1

Proposed Residential
Development

Traffic and Transport Report

transportation planning, design and delivery

Central Park Proposed Mixed Use Development

State Significant Development Application for Block 1, Proposed Residential Development

Traffic and Transport Report

Issue: B 15/08/14

Client: Central Park JV No. 2

Reference: 12S1395000

GTA Consultants Office: NSW

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
A	30/06/14	Final	Michael Lee	Michael Lee	Michael Lee	Michael Lee
B	15/08/14	Final – Update	Michael Lee	Michael Lee	Michael Lee	

Table of Contents

1. Introduction	1
2. Project to Date	4
2.1 Original Concept Plan	4
2.2 Amended Concept Plan	5
3. Project Description	7
3.1 Proposed Development	7
3.2 Proposed Vehicular Access	8
4. Traffic Assessment	9
4.1 Concept Plan Traffic Assessment	9
4.2 Modifications to Kensington Precinct	10
4.3 Block 8 Proposed Development	10
4.4 Concept Plan Blocks 1 and 4 Traffic Estimates	11
4.5 Blocks 1 and 4 Revised Traffic Estimates	11
4.6 Traffic Generation and its Effects Arising from this Application	12
4.7 Service Vehicle Traffic Generation	12
5. Parking Assessment	14
5.1 Parking Requirement	14
5.2 Proposed Parking Provisions	15
5.3 Internal Parking Layout	16
6. Other Transport Implications	17
6.1 Existing Public Transport	17
6.2 Existing Walking & Cycling Facilities	17
6.3 Existing Bicycle Parking Provision	17
6.4 Proposed Cycling and Walking Arrangements	18
6.5 Future Public Transport Patronage	18
7. Workplace/Green Travel Plan	19
7.1 Introduction	19
7.2 What is a Workplace/Green Travel Plan	19
7.3 Key Objectives	19
7.4 Site Specific Measures	20
7.5 Travel Access Guide	21
7.6 Summary	21
8. Summary and Conclusion	22

Appendices

- A: Service Vehicle Traffic Movement Estimate
- B: Car Park Architectural Layouts
- C: Travel Access Guide

Figures

Figure 1.1:	Locality Plan	1
Figure 2.1:	Original Approved Concept Plan	4
Figure 2.2:	Amended Concept Plan	6

Tables

Table 1.1:	Secretary's Environmental Assessment Requirements	2
Table 4.1:	Intersection Performance Results	9
Table 4.2:	Traffic Change Summary	12
Table 5.1:	LEP and DCP Required Parking for Block 1 Proposed Development	15

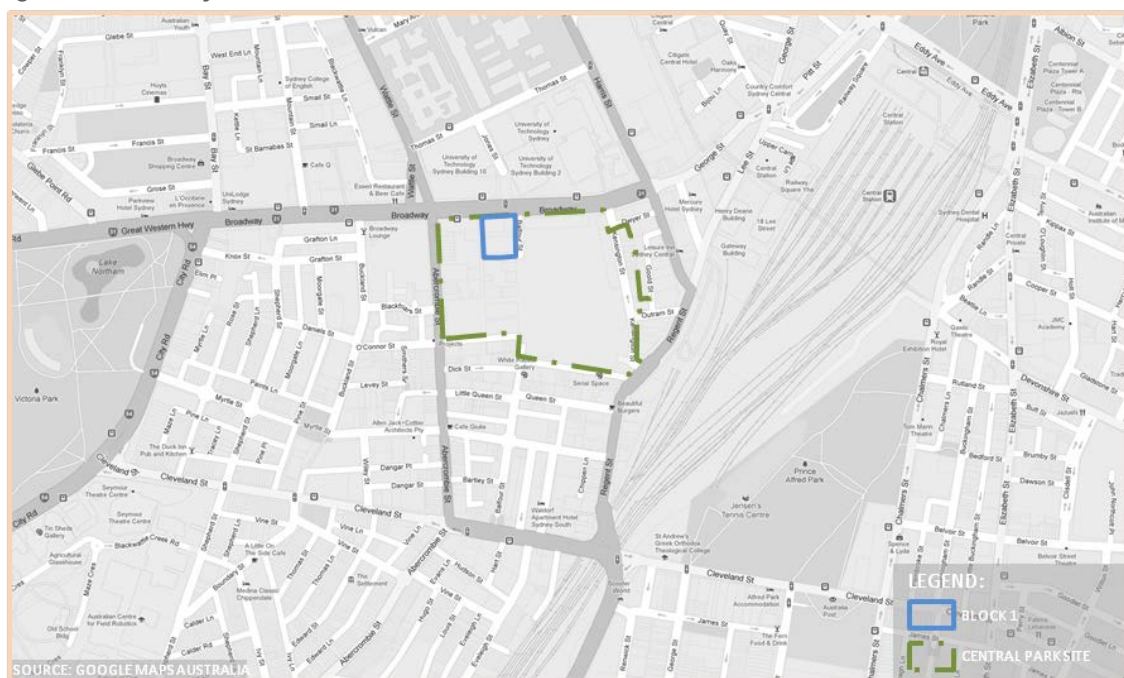
1. Introduction

This traffic and transport report has been prepared to accompany a State Significant Development Application (SSDA) for a proposed residential building on Block 1 in the Central Park development site in Chippendale. The Concept Plan approval (as amended) allows Block 1 to be developed for residential use with retail tenancies on the ground levels.

Concurrent to the SSDA, a separate application (MP 08_0253 MOD 5) has been lodged seeking approval to excise Block 1 from Block 4N in order to enable Block 1 to be developed independent of Block 4N. The application MP 08_0253 MOD 5 involves the modification to the approved floor plates and the eastern facade of Block 4N by removing the bridges that connect Block 4N to Block 1. As indicated in the accompanying traffic statement to the MP 08_0253 MOD 5 application, the proposed modification would not result in any additional traffic and parking impacts.

Figure 1.1 shows the location of the Central Park site as well as the location of Block 1.

Figure 1.1: Locality Plan



The Department of Planning and Environment has issued the Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement for the proposed development. The issues raised in the SEARs have been considered during the preparation of this transport assessment report. Table 1.1 summarises the relevant issues (as related to transport and traffic) together with descriptions how the issues have been addressed.

Table 1.1: Secretary's Environmental Assessment Requirements

Issues	How Addressed	Report Section
Detail access arrangements at all stages of construction.	This is addressed in the Construction Traffic Management Plan prepared by GTA Consultants (Ref: 140630rep-12S1395000 Block 1 + 4N CTMP dated 30 June 2014).	The CTMP is provided under a separate cover (see GTA Report Ref: 140630rep-12S1395000 Block 1 + 4N CTMP dated 30 June 2014).
Detail the type of service vehicles and number of service vehicle movements.	The expected service vehicle number is a maximum of 66 two-way movements per day. The types of service vehicles comprise of 8.8m long medium rigid trucks and various van/ute type vehicles.	See Section 4.7
Demonstrate how users of the development will be able to make travel choices that support the achievement of State Plan targets.	The site is located in close proximity to high frequency, good quality public transport services. In addition, it is proposed to provide constrained parking consistent with the LEP requirements. The Concept Plan approval (Condition B7) requires commercially operated car schemes be available to residents. Some 70 car share pods would be available within the wider Central Park site. In addition, the amended Concept Plan for the overall site proposes a number of additional pedestrian and cycle facilities. A Workplace/Green Travel Plan and Travel Access Guide will be prepared for the development to assist tenants and visitors to the site with better informed transport modal choice. Section 7 provides a framework from which a travel plan and travel access guide can be prepared.	See Sections 1, 5 and 6. See Section 6. See Section 7
Provide accurate details of daily and peak vehicle movements and assess the impacts of this traffic on the local network, including intersection capacity.	The then RTA assessed the traffic effects arising from the Concept Plan, which the RTA has subsequently approved. The Concept Plan traffic assessment has an allowance of 117 vph during the peak periods for Blocks 1 and 4. This included the subject site proposed as commercial office tower. With the proposed modifications of Blocks 1 and 4, it is now expected to generate about 103 vph. As the estimated traffic has reduced, the proposed development would have positive benefits.	See Section 4.
Demonstrate appropriate provision of on-site car parking.	It is proposed to provide parking in accordance with the LEP and DCP requirements.	See Section 5.
Address pedestrian movements through and around the site and identify an appropriate alternate route for pedestrians during construction.	This is addressed in Section 4 of the CTMP (Ref: 140630rep-12S1395000 Block 1 + 4N CTMP dated 30 June 2014).	The CTMP is provided under a separate cover (see GTA Report Ref: 140630rep-12S1395000 Block 1 + 4N CTMP dated 30 June 2014).

The remainder of this report is set out below:

- Chapter 2 provides an overview of the project to date
- Chapter 3 describes the development proposal
- Chapter 4 reviews the traffic implications of the proposal
- Chapter 5 assesses the off street car park provision and servicing arrangements
- Chapter 6 reviews the other transport implications arising from the proposed development
- Chapter 7 presents a preliminary Workplace/Green Travel Plan, and

- Chapter 8 presents a summary and concludes the study.

2. Project to Date

2.1 Original Concept Plan

The Carlton and United Brewery site (as it was known back then) was originally approved for redevelopment in February 2007 (MP06_0171) under the Part 3A process. The proposed redevelopment of the site includes high density residential, commercial and retail uses.

A plan showing the development as approved in February 2007 is shown in Figure 2.1.

Figure 2.1: Original Approved Concept Plan



Halcrow (formerly Masson Wilson Twiney Pty Limited) prepared a traffic and transport assessment report¹ for the original concept scheme. The findings and recommendations of this report were taken into account in the concept plan approval.

Traffic implications of the original concept plan were examined in detail by the then RTA (now known as Roads and Maritime Services, RMS) using a Paramics microsimulation traffic model. The RTA found the traffic impacts of the development were within acceptable limits and granted its agreement to the concept plan transport elements including all proposed road connections to the surrounding road network.

¹ Carlton and United Brewery Site – Stage 1 Masterplan Traffic Report, Masson Wilson Twiney Pty Limited October 2006

2.2 Amended Concept Plan

The site was purchased in June 2007 by Frasers.

Following a series of stakeholder consultations, Frasers developed an amended scheme for the site. The amended Concept Plan was approved by the then Department of Planning (DoP) in July 2007 (MP 06_171 MOD 1). This was followed by a number of further modifications² to the original approval. The last one being MP 06_0171 MOD 8 approved in December 2013. This approval, amongst a number of other modifications granted, also allows the development of Blocks 1 and 4N to include a residential use.

It is noted there is one further proposed modification (MP 06_0171 MOD9) currently before the Department for determination in relation to the approved Concept Plan. In relation to traffic and parking, MP 06_0171 MOD 9 seeks approval to relocate the vehicular access to Blocks 1 and 4N basement car park and provision of a new vehicular access for Block 8 proposed basement car park.

The approved amended Concept Plan included the same grid like building configuration as the original concept scheme. Below is a summary of the relevant amendments to the original approval (from the six approved modifications):

- increase in site area and gross floor area with revised residential and commercial land use mix
- changes to building envelopes for the 11 development blocks
- increase in area of public open space
- reduced car parking provision (maximum of 2,000 car spaces) provided within various combined underground car parks proposed to minimise surface traffic within the site
- removal of some internal streets to create a low speed traffic environment within the precinct.

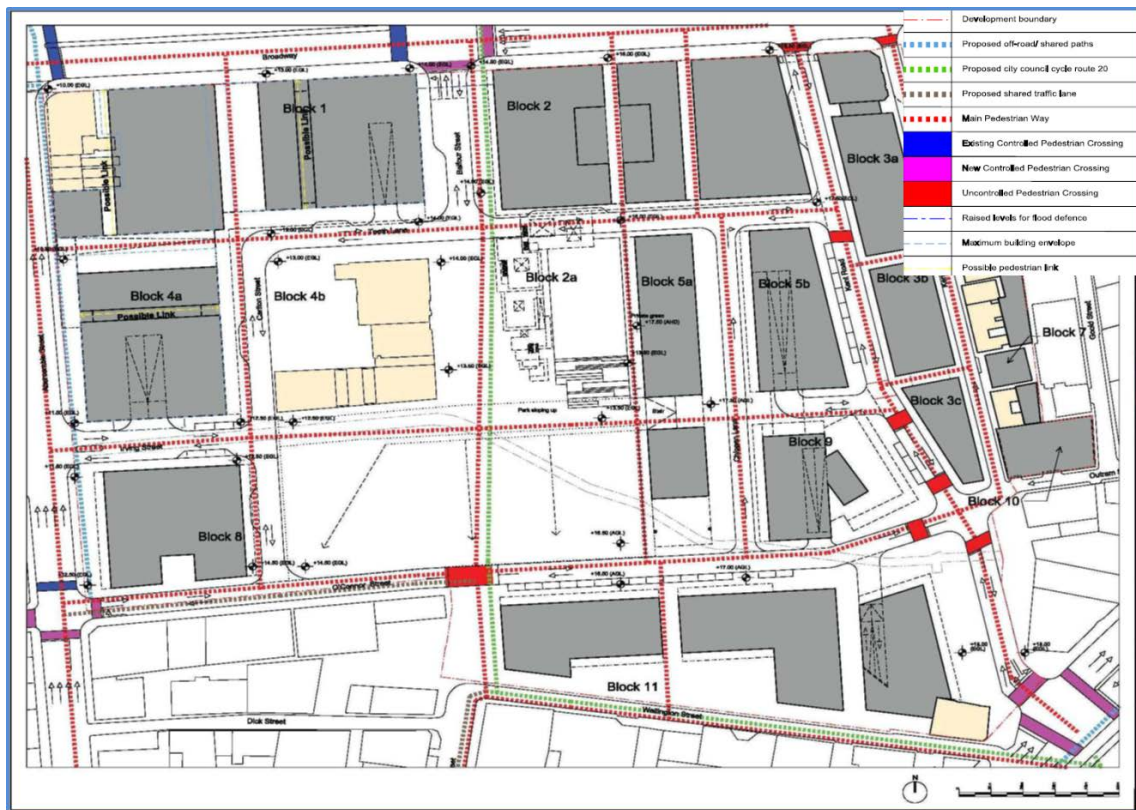
The current approved development mix is as follows:

- up to a maximum of 255,500m² GFA for mixed use
- a minimum of 59,515m² of non-residential floor space
- a maximum of 195,985m² of residential use.

A plan showing the approved amended Concept Plan including the internal road network and external road network connections is shown in Figure 2.2.

² MP 06_0171 (MOD 2) was the last significant modification relating to this approval. Subsequent approvals MP 06_0171 (MOD 3 and MOD 4) are of no significance to traffic and transport impacts. MP 06_0171 (MOD 6) allows the modification of the approved floor areas and building envelopes to Blocks 6 and 10. In addition, the Department approved an application (MP 06_0171 MOD 7) to re-allocate gross floor area within the Kensington Precinct with the total gross floor area across the site staying the same.

Figure 2.2: Amended Concept Plan



3. Project Description

3.1 Proposed Development

The SSDA seeks approval for the development of Block 1 as an 18 storey residential building with ground floor non-residential uses. The proposed building on Block 1 would accommodate a total of 281 apartments with the following mix:

- studio units – 94 units
- 1-bedroom units – 91 units
- 2-bedroom units – 72 units, and
- 3-bedroom units – 24 units.

Of the 281 apartments, 42 (approximately 15 per cent of total number of apartments proposed) of these would be provided as adaptable units.

The proposed gross floor area (GFA) for the residential use would be 23,356m².

The non-residential uses would be provided as a number of small retail tenancies on the ground floor. This would have some 1,098m² of retail GFA. The proposed building would include communal spaces such as gym, pool and change facilities as well as lounge areas.

The total GFA for the proposed building would be 24,454m². The proposed GFA is in accordance with the current Concept Plan approval.

The SSDA also seeks approval for the construction of a combined basement below Block 1 and Block 4N to accommodate parking requirements (including service vehicle loading area and bicycle and motorcycle parking) from Block 1 development as well as future development of Block 4N and the proposed Brewery Yard development. The proposed combined basement car park would have four levels.

It is proposed to provide a total of 209 car parking spaces to serve the proposed Block 1 development. In addition, 17 motorcycle parking spaces and bicycle parking spaces consistent with development control plan requirements (provided as part of the storage area to residential apartments) are also proposed. Proposed parking provisions are discussed further in Section 5.

In addition, the combined basement would also include some 134 additional car parking spaces for a future development on Block 4N and the proposed Brewery Yard development. The provision of these additional parking spaces will be subject to future applications relating to these future uses.

The service vehicle loading area includes a total of 20 service vehicle bays which are made up as follows:

- four truck bays with dimensions 3.5m wide by 8.8m long (accommodating service vehicles up to an Australian Standard 8.8m long vehicle)
- 16 van/utility type vehicle bays with dimensions 2.6m wide by 5.4m long (accommodating an Australian Standard B99 vehicle) located in the loading area as well as the combined basement car park.

3.2 Proposed Vehicular Access

General vehicle access to the proposed combined basement car park beneath Blocks 1 and 4N is proposed to be provided off Central Park Avenue via a combined entry and exit driveway. A vehicular access for the combined basement car park off Central Park Avenue is in accordance with the project approval for Blocks 1 and 4 in MP 08_0253.

As indicated previously, there is an application (MP 06_0171 MOD9) currently before the Department seeking approval to modify the Concept Plan to allow the relocation of Blocks 1 and 4N basement car vehicular access further west along Central Park Avenue and further away from Chippendale Way.

The Department has consulted a number of State Government agencies (including RMS and Transport for NSW (TfNSW)) as well as the City of Sydney (CoS) in relation to the application MP 06_0171 MOD9. These agencies have indicated support for the proposed relocation of the driveway to Blocks 1 and 4N combined basement car park.

The proposed location for this driveway is in accordance with that proposed in the MP 06_0171 MOD 9.

The design of the Central Park Avenue driveway and associated ramp are proposed to comply with Australian Standard AS2890.1:2004 to accommodate Australian Standard B99 5.2m long vehicles.

In addition to the proposed general vehicle access to the combined basement car park, a separate driveway is also proposed on Abercrombie Street. This driveway is proposed to provide access for service vehicles to the loading areas serving both Blocks 1 and 4N as well as the proposed student accommodation development in Block 4S and the Brewery Yard proposed development.

The proposed service vehicle access off Abercrombie Street is consistent with the project approval for Blocks 1 and 4 in MP 08_0253. It is also noted that RMS has also indicated support for the proposed service vehicle access off Abercrombie Street.

The Abercrombie Street service vehicle access and associated ramp are proposed to be designed in accordance with Australian Standard AS2890.2:2002 accommodating vehicles up to 8.8m long (Australian Standard 8.8m medium rigid vehicles, MRV).

4. Traffic Assessment

4.1 Concept Plan Traffic Assessment

RMS (formerly RTA) previously examined the traffic implications on the surrounding road network due to the Central Park development as proposed under the Concept Plan including consideration of the proposed connections to the surrounding road network. RMS found that the surrounding road network would continue to operate satisfactorily.

The approved Concept Plan (and the subsequent approved modifications to the Concept Plan) estimated that the entire development would generate some 493 vehicles per hour (vph).

Subsequent modifications to the original approval for Blocks 2 and 5 resulted in the overall development traffic increasing from 493 vph to 532 vph – an increase of 39 vph.

Consultants Halcrow conducted additional intersection analysis to examine the effects of this additional traffic³. Table 4.1 compares the analysis results under the original approval with the additional traffic arising from the proposed changes to Blocks 2 and 5.

Table 4.1: Intersection Performance Results

	Morning Peak Hour		Evening Peak Hour	
	LoS	Ave. Delay (sec/veh)	LoS	Ave. Delay (sec/veh)
Original Approval				
- Abercrombie St Access	A	11	A	10
- Broadway Access	A	13	B	16
- Regent St Access	B	15	B	15
Amended PA				
- Abercrombie St Access	A	11	A	10
- Broadway Access	A	13	B	16
- Regent St Access	B	16	B	16

Source: Halcrow

Note: The level of service (LoS) provides an indication of the operational efficiency of a given intersection. LoS A indicates that an intersection has good operating conditions, while LoS F indicates that the intersection operates unsatisfactorily. LoS D is the long term desirable level of service.

It was found that the extra traffic would have negligible effects on the operation of the surrounding intersections. They would continue to operate at the same levels of service as those applying to the original approval i.e. level of service B or better for both peak periods.

Subsequent to the above, additional changes to the Blocks 2 and 5 unit mix resulted in an additional 3 vph increasing the overall development traffic to 535 vph. It was considered that the additional 3 vph was too small to have any traffic impact.

³ Halcrow report *Central Park Mixed Use Development – Project Application for Block 5C Residential Building Traffic Report* (Ref: CTLRDO05 110819 Final.doc) dated Final, 19 August 2011.

4.2 Modifications to Kensington Precinct

Kensington Precinct within Central Park comprises Blocks 3, 6, 7 and 10. These were assessed collectively in terms of traffic effects in the Concept Plan traffic assessment. The traffic assessment made an allowance of some 20 vph arising from the assumed developments within the Kensington Precinct.

Following the approval of the amended Concept Plan, a number of approvals relating to the Kensington Precinct were granted by the Department. The approved modifications are as follows:

- Blocks 3B, 3C and 10 Student Accommodation PA (MP 11_0090) – 7,294m² of student accommodation plus 650m² of retail floor space area
- Blocks 3A Boutique Hotel PA (MP 11_0089) – 3,996m² of boutique hotel development (60 rooms) plus 600m² floor area of food and drink premises, and
- Blocks 6 and 7 PA (MP 11_0091) – 2,997m² of commercial and retail uses.

It was estimated the cumulative traffic generation of these PAs would result in the Kensington Precinct generating about 25 vph during the peak period as follows:

- Block 3A 60-room boutique hotel @ 0.26 trips per room = 16 vph
- Blocks 3A food and drink premises (600m² 4 car spaces @ 0.32 trips per space = 1 vph
- Blocks 3B, 3C and 10 (Student Accommodation) = 5 vph
- Block 6 & 7 (3,100m² max) 10 car spaces @ 0.32 trips per space = 3 vph
- Total trips (for Kensington Precinct) = 25 vph

In summary, an additional 5 vph would be generated by the Kensington Precinct above the original traffic generation allowance in the Concept Plan. This change would increase the overall site development traffic from 535 vph to 540 vph.

4.3 Block 8 Proposed Development

Separately, there is an application (SSD 6093) seeking development approval for some 178 residential apartments with ground floor retail use in Block 8. This application is currently under assessment by the Department. The accompanying traffic report⁴ estimates that the current proposed development would generate some 5 vph in addition to the amended Concept Plan traffic allowance for Block 8.

⁴ GTA report Central Park Block 8 Mixed Use Development – State Significant Development Application Traffic and Transport Report (Ref: 140122rep-12S1239502 Block 8 Issue B) dated 22 January 2014

4.4 Concept Plan Blocks 1 and 4 Traffic Estimates

The Concept Plan traffic assessment estimated that Blocks 1 and 4 (including the Brewery Yard) would generate about 117 vph during the peak periods⁵. The make-up of this is as follows:

- Block 1 – 23,000m² of commercial use
(102 spaces @ 0.32 peak hour trips per space⁶) = 33 vph
- Block 4 – 59,000m² of commercial use
(262 spaces @ 0.32 peak hour trips per space⁶) = 84 vph
- Total Blocks 1 & 4 (including Brewery Yard) = 117 vph

This traffic was included in the total site traffic generation of 493 vph discussed above.

4.5 Blocks 1 and 4 Revised Traffic Estimates

The subject SSDA seeks approval for a residential building to accommodate 281 residential apartments with an apartment mix as discussed in Section 3.1 of this report. The subject SSDA also seeks approval for ground floor retail use. However, consistent with the traffic assessment conducted as part of the concept plan traffic assessment, the retail use is not expected to generate any development traffic.

For traffic analytical purposes, it is assumed Block 4N would continue to be developed as a non-residential use (predominantly commercial) with a total GFA of 25,515m² in accordance with current approvals.

The Brewery Yard would be developed as a commercial use with some 3,898m² of GFA.

It is also noted that Block 4S has been approved for a 16 storey building to be constructed to provide student accommodation in approval SSD-5700-2012. This is currently under construction. The approved student accommodation on Block 4S has been estimated to generate no development traffic.

The revised traffic estimates arising from the proposed modifications are as follows:

- Block 1 – residential apartments
 - 94 x studio units @ 0.20 peak hour trips per unit⁶ = 19 vph
 - 91 x 1-bed units @ 0.20 peak hour trips per unit⁶ = 18 vph
 - 72 x 2-bed units @ 0.24 peak hour trips per unit⁶ = 17 vph
 - 24 x 3-bed units @ 0.24 peak hour trips per unit⁶ = 6 vph
- Block 4N – 25,515m² of commercial use
115 spaces⁷ @ 0.32 peak hour trips per space⁶ = 37 vph
- Block 4S – student accommodation
(no parking proposed) = nil
- Brewery Yard – 3,898m² of commercial use
18 spaces⁷ @ 0.32 peak hour trips per space⁶ = 6 vph
- Total Blocks 1 and 4 = 103 vph

⁵ The traffic generation for the retail component has been excluded as per the original traffic assessment.

⁶ Traffic generation rates for residential and commercial uses are consistent with those adopted in the original traffic assessment.

⁷ Sydney City Council Local Environmental Plan maximum parking requirements

From the above, the proposed development in Block 1 would generate a total of 60 vph, while the remaining Block 4N would generate some 43 vph. In total, Blocks 1 and 4 is expected to generate some 103 vph during the busiest peak hour.

As indicated previously, the amended Concept Plan traffic allowance for Blocks 1 and 4 was some 117 vph. Therefore, the current scheme would result in a decrease of some 14 vph for Blocks 1 and 4.

4.6 Traffic Generation and its Effects Arising from this Application

Following the above discussions, the traffic changes are summarised Table 4.2.

Table 4.2: Traffic Change Summary

	Traffic Change	Overall Development Traffic
Approved Concept Plan	-	493 vph
Modifications to Blocks 2 and 5	+ 39 vph	532 vph
Additional changes to Blocks 2 and 5 unit mix	+ 3 vph	535 vph
Modifications to Kensington Precinct	+ 5 vph	540 vph
Block 8 Proposed Development	+ 5 vph	545 vph
Blocks 1 and 4 Modifications	- 14 vph	531 vph

From Table 4.2, it can be seen that the overall development traffic for the Central Park site would reduce to 531 vph during the peak hours. The overall development traffic would reduce to a level similar to that assessed by consultants Halcrow. The analysis results for this level of traffic were presented in Table 4.1 which indicates the surrounding access intersections would continue to operate satisfactorily.

Therefore, it is considered that the proposed development on Block 1 with consideration to other recent changes would have negligible traffic effects. The surrounding road network would continue to operate well in the future as originally planned.

4.7 Service Vehicle Traffic Generation

Under the previous approval where Blocks 1 and 4 would be developed with predominantly commercial use and Block 4S as student accommodation, the expected daily service vehicle traffic movements was expected to be approximately 66 two-way movements per day (i.e. 33 in plus 33 out) or approximately 16 two-way movements per peak hour. Appendix A contains a letter presenting how the service vehicle traffic movements were estimated.

Given that Block 1 is now proposed a residential use, the above estimate service vehicle traffic movements would be reduced as service vehicle traffic movements for a residential use would be less intensive than that for a commercial use.

Nevertheless, it is not expected that the traffic movements generated by service vehicle serving the site would create any additional traffic impacts as a vast majority of service vehicle movements are expected to occur outside of the peak hour periods.

The types of service vehicles expected at the site are as follows:

- waste collection vehicles typically similar to an Australian Standard 8.8m long medium truck

- retail delivery vehicles typically similar to an Australian Standard 6.4m long small truck, and
- various trade vehicles typically similar to an Australian Standard 5.2m long B99 vehicle.

5. Parking Assessment

5.1 Parking Requirement

The City of Sydney Council's *Local Environmental Plan 2005 Chapter 2 Central Sydney* (LEP) and *Sydney Development Control Plan 2012* (DCP) requires parking for various types of development uses.

5.1.1 Residential Uses

For residential uses, the LEP stipulates the following maximum parking rates:

- Studio units 0.25 spaces per unit
- 1 bedroom units 0.5 spaces per unit
- 2 bedroom units 1.2 spaces per unit, and
- 3 bedroom units 2 spaces per unit.

5.1.2 Non-Residential Uses

The LEP stipulates on-site parking for non-residential uses to be provided in accordance with the formula below:

$$\text{Max. Car Parking} = \frac{\text{Total Other FSA}}{\text{Total FSA within Development}} \times \frac{\text{Site Area}}{50}$$

The LEP requires that 1-2 per cent of the total number of commercial/retail parking spaces to be accessible for persons with mobility impairment.

5.1.3 DCP Parking Requirements

The DCP also requires parking for service vehicles as follows:

- residential – one space per first 50 apartments + 0.5 for every 50 apartments thereafter, and
- retail (shops) – one space per 350m² GFA (up to 2,000m²).

The DCP also requires motorcycle parking be provided at a rate of one motorcycle parking space for every 12 car parking spaces provided.

In relation to parking for bicycles, the DCP requires one space per dwelling for residential tenants plus one space per 10 dwellings for residential visitors. For retail use, one space per 250m² for employees is required plus an additional two spaces plus 1 space per 100m² over 100m² GFA for visitors.

5.1.4 Parking Requirement Summary

Table 5.1 presents a summary of the LEP and DCP required parking provisions for Block 1.

Table 5.1: LEP and DCP Required Parking for Block 1 Proposed Development

Proposed Use	Car Parking	Service Bays	Motorcycle Parking	Bicycle Parking [†]
Residential Use				
- Tenants	204	3	17 [†]	281
- Visitors	Nil	N/A	N/A	28
Non-Residential Use				
- Tenants	5	4	Nil	4
- Visitors	Nil	N/A	N/A	12
Total	209 [∞]	7	17	325

[∞] maximum required provision

[†] based on a proposed provision of 209 car parking spaces

The LEP stipulates a maximum of 209 car parking spaces to be provided. In addition, seven service vehicle bays are required. It is also required to provide a total of 325 bicycle parking spaces including 40 visitor bicycle parking spaces.

It should be noted that the above required parking provision does not include parking requirements for the future development of Block 4N and the Brewery Yard site. It is anticipated some 115 car parking spaces would be required for Block 4N, and some 18 car parking spaces would be required for the Brewery Yard site. These additional parking requires will need to be accommodated in the combined basement car park beneath Blocks 1 and 4N.

5.2 Proposed Parking Provisions

It is proposed to provide a total of 209 car parking spaces to serve the Block 1 proposed development. This is made up as follows:

- 195 residential tenant parking spaces (including 42 accessible spaces and 18 small car spaces)
- five retail parking spaces, and
- nine car share spaces.

The proposed provision of 209 car parking spaces complies with the LEP requirement parking provision. Therefore, car parking provision is satisfactory. In addition, Frasers is committed to providing the lesser of the LEP required car parking provision and 2,000 car parking spaces across the entire Central Park site.

In relation to provision for motorcycle parking (see Table 5.1), 17 motorcycle parking spaces are required to be provided. The architectural plans indicate 17 motorcycle parking spaces are proposed.

It is proposed to provide bicycle parking spaces for tenants and visitors for both residential and non-residential uses in accordance with DCP requirements (see Table 5.1). Bicycle parking spaces will be provided to comply with dimensional requirements set out in AS2890.3:1993 as follows:

- residential tenants – Class 1 bicycle parking facilities i.e. individual bicycle lockers (minimum dimensions of 1840mm by 715mm) with some lockers provided as part of the residential storage requirement

- non-residential tenants – Class 2 bicycle parking facilities i.e. bike racks within lockable communal area, and
- residential visitors – Class 3 bicycle parking facilities i.e. bike racks.

Finally, in relation to service vehicle bays it is proposed to provide 20 loading bays to be shared between the different uses within Blocks 1 and 4N (including the Brewery Yard development). The proposed loading area comprises:

- four truck loading bays (3.5m wide by 8.8m long), and
- seven van/utility type vehicle bays (2.6m wide by 5.4m long).

The combined basement car park would also have an addition nine van/utility type vehicle bays.

5.3 Internal Parking Layout

The proposed Blocks 1 and 4N basement car park is proposed to be accessed from Central Park Avenue. A straight ramp with a maximum gradient of 1:5 (with appropriate transitions) is proposed to provide access into the basement levels.

From the ground level, the straight ramp from Central Park Avenue would be located to the western side of Block 1 core. It continues down into the site towards Broadway and wraps around Block 1 core in a clockwise direction from Level B0 to Level B4 with a gentle slope of 1:20. Block 1 parking spaces would be provided along this gentle ramp. The car spaces would generally be configured as 90 degree spaces off the ramp.

From Level B2 onwards, cross aisles would be provided off the western side of the ramp to provide access to parking spaces beneath Block 4N. Parking spaces beneath Block 4N are proposed to be configured as 90 degree parking spaces. The parking aisles would be arranged in an east-west direction.

It is proposed that the car park and associated elements such as space dimensions, circulation aisles, ramp be designed in accordance with the relevant Australian Standard for car parking facilities, namely AS2890.1: 2004 and AS2890.6:2009.

General car parking spaces for tenants and visitors are proposed to be designed as a Class 1A car park facility as specified in the Australian Standard. That is, general car parking spaces would have dimensions 2.4m wide by 5.4m long with an aisle width of 5.8m. Accessible car spaces would also have dimensions of 2.4m wide by 5.4m long. An additional shared area for accessible spaces with the same dimensions would also be provided.

Design of the car park has only been taken to a level to demonstrate that the proposed car park could be designed to comply with the relevant Australian Standard, while providing sufficient parking spaces to comply with requirements stipulated in the LEP.

The shared loading dock (between Blocks 1 and 4N as well as the Brewery Yard development) would be located beneath Block 4N on Level B0. The loading dock is proposed to be accessed from Abercrombie Street. The loading dock and associated elements are proposed to be designed in accordance with AS2890.2:2002.

The proposed car park and loading dock layout plans are contained in Appendix B.

6. Other Transport Implications

6.1 Existing Public Transport

The site, being within the Sydney City Centre, is well served by regular bus services along Parramatta Road/Broadway as well as Harris Street with direct services into the CBD and surrounding destinations such as Glebe, Newtown, Abbotsford, Kogarah etc. The nearest bus stop is on Broadway which is literally at the “door step” to the site.

In addition, the site is located approximately within 550m walking distance to Central Railway Station. Central Railway Station services all train lines within the CityRail network, and is a major terminus for suburban as well as interstate rail services. As such, all CityRail railway stations could be accessed from Central.

The site is also located within walking distance of a light rail stop at Central Railway Station. Running from Central Railway Station, the light railway network connects Lilyfield to the inner city areas such as Darling Harbour and Ultimo. It has a peak period frequency of 10 minutes.

The Travel Access Guide prepared for the site (see Appendix C) provides details on the available bus and train services near the site. The Travel Access Guide indicates that the area is very well served by public transport.

6.2 Existing Walking & Cycling Facilities

The site is also very well situated in terms of provision for walking and cycling. There are a number of strategic and local cycling routes and links in the vicinity of the site.

Public footpaths are currently provided along the majority of roads in the local network. Fully constructed footpaths are available on both sides of Broadway in the vicinity of the site with generous width. Similarly, along Harris Street, Regent Street, and Abercrombie Street fully constructed pedestrian footpaths are also available on both sides of the streets. The pedestrian network continues into the residential streets to the south and west of the site as well as across Broadway into the area to the north of the site.

There is an existing on-road cycle path that runs along Wilson Street near Newtown that joins on to Shepherd Street to continue along Broadway near Mountain Street before heading north along Jones Street towards Pyrmont Bay. The section along Broadway is provided as off-road shared pedestrian/cycle path.

A combination of other on-road and off-road cycle links provide access to the surrounding suburbs.

In addition, on-road cycling is also permissible on the local road network where traffic volumes are generally considered to be moderate.

6.3 Existing Bicycle Parking Provision

City of Sydney Council provides free bicycle parking spaces on most streets within its local government area. They are provided either as bicycle parking rings or U-rail parking. There are a number of bicycle parking rings located on Broadway within the immediate vicinity of the site.

6.4 Proposed Cycling and Walking Arrangements

It is anticipated that the development would attract some additional walking and cycling trips. However, it is considered that the development would have minimal impact on existing walking and cycling facilities on the surrounding road network.

The following enhancements to pedestrian and cycle networks are proposed as part of the amended Concept Plan for the overall Central Park development site.

Pedestrian crossing facilities will be provided across the main roads surrounding the site, namely Broadway, Abercrombie Street and Regent Street. Pedestrian pathways will be provided on both sides of all internal streets within the site. A shared pedestrian/cycleway link to Wellington Street would be provided through the proposed park. This shared pathway would continue through the park to connect to Chippendale Way. A raised pedestrian threshold is also proposed across O'Connor Street adjacent to the main park at the centre of the overall site.

The provision of bicycle facilities through the site has accounted for external linkages to existing and proposed bicycle routes as part of the City of Sydney Council's Bicycle Plan.

A shared pedestrian/cycleway will be provided through the park from Wellington Street to Chippendale Way. Recreational cyclists will utilise the shared laneways to access Central Park Avenue before making their way to Broadway. Non-recreational cyclists will utilise the sign posted cycle route through the site along Chippendale Way.

This will create a permeable pedestrian/cycle network through the Central Park site which will be fully accessible by local people and people traversing the site. This accessibility will thus enhance existing pedestrian/cycle accessibility between Chippendale and the node of public transport represented by Railway Square/Central Station.

In addition, Councils has plans for an off road shared pedestrian/cycle pathway along the eastern side of Abercrombie Street.

Figure 2.1 also shows the above amended Concept Plan proposed additional pedestrian and cycle facilities.

In addition, the proposed overall Central Park development proposes to provide bicycle parking spaces in accordance with the requirements set out in Council's LEP and DCP.

6.5 Future Public Transport Patronage

It is expected that employees working and residents living on the site would make use of the existing available public transport services. However, as the site is well serviced by both bus and heavy rail services, it is not expected that it would require further augmentation to enhance existing public transport services in the area.

Further, any improvement to public transport services would be a matter for the consideration of Transport for NSW as part of its long term strategic planning and implementation of public transport services.

7. Workplace/Green Travel Plan

A Workplace/Green Travel Plan applicable to both residential tenants living and employees working on the site would be prepared to promote sustainable travel. The section below provides a framework for the implementation of such a travel plan.

7.1 Introduction

Transport is a necessary part of life, but it has economic, public health and environmental consequences. The transport sector is one of the fastest growing emissions sectors in Australia, and therefore is one of the key opportunities for reducing greenhouse gases. As well as delivering better environmental outcomes, providing a range of travel choices with a focus on walking, cycling and public transport will have major public health benefits and will ensure a strong and prosperous community.

The physical infrastructure being provided as part of the development is only part of the solution. A Workplace/Green Travel Plan will ensure that the transport infrastructure, services and policies both within and external to the site are tailored to the users and co-ordinated to achieve the most sustainable outcome possible.

7.2 What is a Workplace/Green Travel Plan

A Workplace/Green Travel Plan is a package of measures aimed at promoting sustainable travel and reducing reliance on the private car. It is not designed to be 'anti-car', but will encourage and support people's aspirations for carrying out their daily business in a more sustainable way. Travel Plans can provide both:

- measures which restrict car use (disincentives or 'sticks')
- measures which encourage or support sustainable travel, reduce the need to travel or make travelling more efficient (incentives or 'carrots').

The Travel Plan would promote the use of transport, other than the private car, provide choice for travel to and from the site (for both residential tenants and employees living and working on the site), which is more sustainable and environmentally friendly.

Indeed, there are a range of "non-car" transport options that are available at the site which have been described in this report.

7.3 Key Objectives

The aim of the Workplace/Green Travel Plan is to bring about better transport arrangements for residents living on the site. The key objectives of the Travel Plan are:

- to encourage walking
- to encourage cycling
- to encourage the use of public transport
- to reduce the use of the car, in particular single car occupancy
- where it is necessary to use the car, encourage more efficient use.

It is the intention therefore that the Travel Plan will deliver the following benefits:

- enable higher mode share targets to be achieved

- contribute to greenhouse gas emission reductions and carbon footprint minimisation
- contribute to healthy living for all
- contribute to social equity and reduction in social exclusion
- improve knowledge and contribute to learning.

Green travel plans are historically the most common type of travel plan in the UK and the USA as regular journeys such as the daily commute to work tend to be the easiest to influence.

It is difficult at this stage without knowing the type and location of the occupants to prepare a detailed Workplace/Green Travel Plan. It would be reasonable for a condition to be imposed on a development consent which would ask the developer to design and implement a plan prior to occupation of the site and Frasers (and any future owners of the buildings) will commit to providing such a Travel Plan.

7.4 Site Specific Measures

As stated earlier, it is difficult to be specific about the measures that might be introduced until the demographics of the occupants are fully understood.

However, it is likely that the Travel Plan at this site could include the following measures:

- compliance with the stringent parking controls applicable to the site
- creation of street networks and associated cycle ways, footpaths and links to encourage cycling and walking
- provision of a TAG (the proposed guide is contained in Appendix C) which would be given to every new occupant of the dwellings (this information will need to be updated prior to occupation to ensure that the most up to date information is available to new residents)
- public transport information boards to make residents and visitors more aware of the alternative transport options available (the format of such information boards would be based upon the travel access guide)
- provision of free weekly/quarterly public transport tickets for the initial occupation of the dwellings so that residents will be encouraged to make public transport their modal choice from the day they occupy the property
- in accordance with NBN requirements, all properties will be provided with high quality telecommunication points which will provide residents with the opportunity to work from home thus reducing the need to travel
- provision of bicycle parking spaces both for residents and for visitors to the site
- a half yearly newsletter to be provided to every household for up to two years after occupation bringing the latest news on sustainable travel initiatives in the area, and
- provision of half yearly membership to a car sharing.

All of these measures would need to be in place from 'Day One' as people will establish habits of a lifetime from day one.

Frasers has therefore put together the framework of a Travel Plan which would form the basis of the formal document. Future building owners will also make a commitment in how the plan will be practically managed.

7.5 Travel Access Guide

A Travel Access Guide (TAG) provides information to residents and visitors on how to travel to the site using sustainable transport modes such as walking and public transport. The information is presented visually in the format of a map showing the site location and nearby transport nodes highlighting available pedestrian and cycle routes. The information is usually presented as a brochure to be included in a welcome pack or on the back of company stationery and business cards.

A preliminary TAG has been specifically prepared for the subject proposed development. This is contained in Appendix C.

7.6 Summary

Future building owners/managers should be required to develop and utilise a Travel Plan to improve the use of sustainable transport by the tenants living and employees working in the building. Although it is difficult to predict what measures might be achievable until the building is occupied, the above measures provide a framework for the development and implementation of a future Travel Plan for the site.

It is considered that it is appropriate that any development consent is conditioned to ensure that a Travel Plan is implemented prior to occupation of the development.

8. Summary and Conclusion

This report examines the traffic and transport implications of a proposed development on Block 1 within the Central Park development site in Chippendale. This report accompanies a State Significant Development application to the Department of Planning seeking development approval for 281 residential apartments in an 18 storey building with ground retail tenancies. In addition, the application also seeks approval to construct a combined basement car park beneath Blocks 1 and 4N to accommodate parking demand from both the proposed Block 1 development as well as a future development on Block 4N.

Concurrent to the SSDA, there is a separate application (MP 08_0253 MOD 5) to modify the relevant approval to excise Building 4N from Building 1 so that these can be developed independent of each other. A separate traffic report has been prepared to accompany the S75W application.

The Central Park development was granted Concept Plan approval in February 2007. Subsequent to this, an amended Concept Plan was approved in July 2007. This was followed by a number of further modifications to the Concept Plan. The last approved modifications allow Block 1 to be developed as a residential use.

Under the amended Concept Plan, the entire Central Park development was estimated to some 493 vph. Of the estimated 493 vph, Blocks 1 and 4 were estimated to generate some 117 vph.

A number of modifications (as discussed in the preceding sections of this report) to the proposed Central Park development resulted in the overall development traffic increasing from 493 vph to 545 vph. Following these modifications, Blocks 1 and 4 are expected to continue to generate some 117 vph.

The subject proposed development on Block 1 together with recent changes to developments within the wider Blocks 1 and 4 precinct (e.g. Block 4S approved as student housing) is expected to generate some 103 vph. This is approximately 14 vph less than the traffic allowance for Blocks 1 and 4 in the Concept Plan traffic assessment.

Therefore, the overall development traffic for Central Park would also be reduced by the same amount to 531 vph. The consultants Halcrow conducted traffic capacity assessment of the nearby intersections for a similar level of development traffic and found that the surrounding intersections would operate satisfactorily with good level of service. On this basis, following the completion of the Block 1 development the surrounding intersections are expected to continue to operate satisfactorily.

City of Sydney Council's LEP stipulates a maximum permissible parking provision of 209 car parking spaces for Block 1 proposed development. It is proposed to provide parking to comply with the LEP maximum permissible parking.

Similarly, the DCP requires seven service vehicle bays to be provided. The required service bays are proposed to be provided as stipulated in the DCP.

Motorcycle and bicycle parking provisions are also proposed to comply with Council's requirements as stipulated in the DCP.

Overall, it is concluded that the traffic and parking aspects of the proposed development would be satisfactory.

Appendix A

Appendix A

Service Vehicle Traffic Movement Estimate

Our Ref: 12S13950000

26 June 2012

Frasers Property Australia Pty Ltd
Suite 11, Lumiere Commercial
Level 12, 101 Bathurst Street
SYDNEY NSW 2000

Attention: Mr Michael Goldrick

Dear Michael

RE: CENTRAL PARK BLOCKS 1 & 4 – SERVICE VEHICLES

As requested, we provide herein our advice in relation to the expected service vehicle movement number for Blocks 1 and 4 at Central Park.

Frasers is seeking modifications to the approved uses and access arrangements for Blocks 1, 4 and 8. The following modifications are sought:

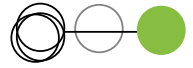
- Blocks 1 and 4N are to remain as commercial office development with retail use on the ground floor
- Block 4S is proposed to provide student accommodation
- Block 8 continues to be residential development, but with its separate basement parking and accesses beneath the building
- a new access is proposed on Abercrombie Street providing ingress and egress movements for service vehicles, but ingress only for general traffic (for Blocks 1 and 4)
- general traffic from Blocks 1 and 4 continues to exit onto Central Park Avenue (RMS' preference) as per current approval or on to Balfour Street (subject to further negotiation with RMS).

The proposed development yields for Blocks 1 and 4 are as follows:

- retail – approximately 3,000m² GFA (in separate tenancies)
- commercial – approximately 52,000m² GFA
- student accommodation – 800 beds.

Based on our experience, the above anticipated development yields are expected to generate relatively low daily service vehicle movements to and from the site.

Based on our experience the proposed retail use is expected to generate up to four small sized truck (6.4m long) movements per day (i.e. two in plus two out). Whilst the majority of these are expected to occur outside of the peak hour, a maximum of (say) two small truck movements (one in and one out) per hour during the peak period is expected.



In relation to the proposed commercial development, based on recent surveys conducted on behalf of RMS¹, it is expected to generate up to 60 service vehicle movements per day (i.e. 30 in plus 30 out) with a peak hour generation of about 14 truck two-way movements per hour (i.e. seven in and seven out).

Finally, as the proposed student accommodation will be provided fully furnished, we expect it to have very little service vehicle generated on a regular basis other than the weekly waste collection. On occasions, there may be a need for a utility van to come on site to provide general maintenance e.g. plumber, electrician etc. In total, up to two service vehicles or four movements per week (two in plus two out) is expected (say two movements per day). These are also expected to occur outside of the peak periods.

In summary, the proposed development on Blocks 1 and 4 is expected to generate a total of 66 two-way movements per day (i.e. 33 in plus 33 out) or 16 two-way movements per peak hour (i.e. eight in plus eight out).

These service vehicle movements will access the site via a proposed driveway on Abercrombie Street allowing both ingress and egress movements. Traffic volume data available from RMS indicates that the current daily traffic on Abercrombie Street is in the order of about 20,000 vehicles per day (or approximately 2,000 vehicles per peak hour). The expected number of service vehicles is relatively low in comparison to the existing traffic on Abercrombie Street. Therefore, it is considered that the exiting of the service vehicles on to Abercrombie Street is unlikely to create any materially adverse impact on to the operation of Abercrombie Street including its nearby intersections.

We trust the above is to your satisfaction. Naturally, should you have any questions or require any further information, please do not hesitate to contact me in our Sydney office on (02) 8448 1800.

Yours sincerely

GTA CONSULTANTS

Michael Lee
Associate

¹ Trip Generation and Parking Generation Surveys (Office Blocks) by GTA Consultants (September 2010)

Appendix B

Car Park Architectural Layouts

Appendix B

- General Notes**
1. Do not scale.
 2. All dimensions are in feet.
 3. All dimensions are with the work.
 4. Foster + Partners discrepancies.
 5. Any areas indicated are indicative only.

Key	
Concept/Plan development boundary	
PA Boundary	

[illegible]

For Information

Key Plan:



FRASERS PROPERTY

Project	Fraser's Broadway 20 - 102 Broadway Sydney NSW 2000
Client	Fraser's Broadway L11, 488 Kent Street Sydney NSW 2000 T: 02 8823 8800 F: 02 8823 8801

Foster + Partners

Riverside, 22 Hester Road
London SW11 4AN
T +44 (0)20 7738 0455
F +44 (0)20 7738 1107

Local Collaborating Architect:

PTW Architects

Level 13, 9 Castlereagh St
Sydney NSW 2000 Australia
T +61 (0)29232 5877
F +61 (0)29221 4139
www.dfw.com.au

Title
BLOCK 1 +4N
BASEMENT B4

Project No. 212028	Scale @ A0 As indicated	Date: 06/13/14	Drawn By: PTW
Number PA-A1-1755			Revision: 0



1 BASEMENT B4 PLAN
1 : 200

Appendix C

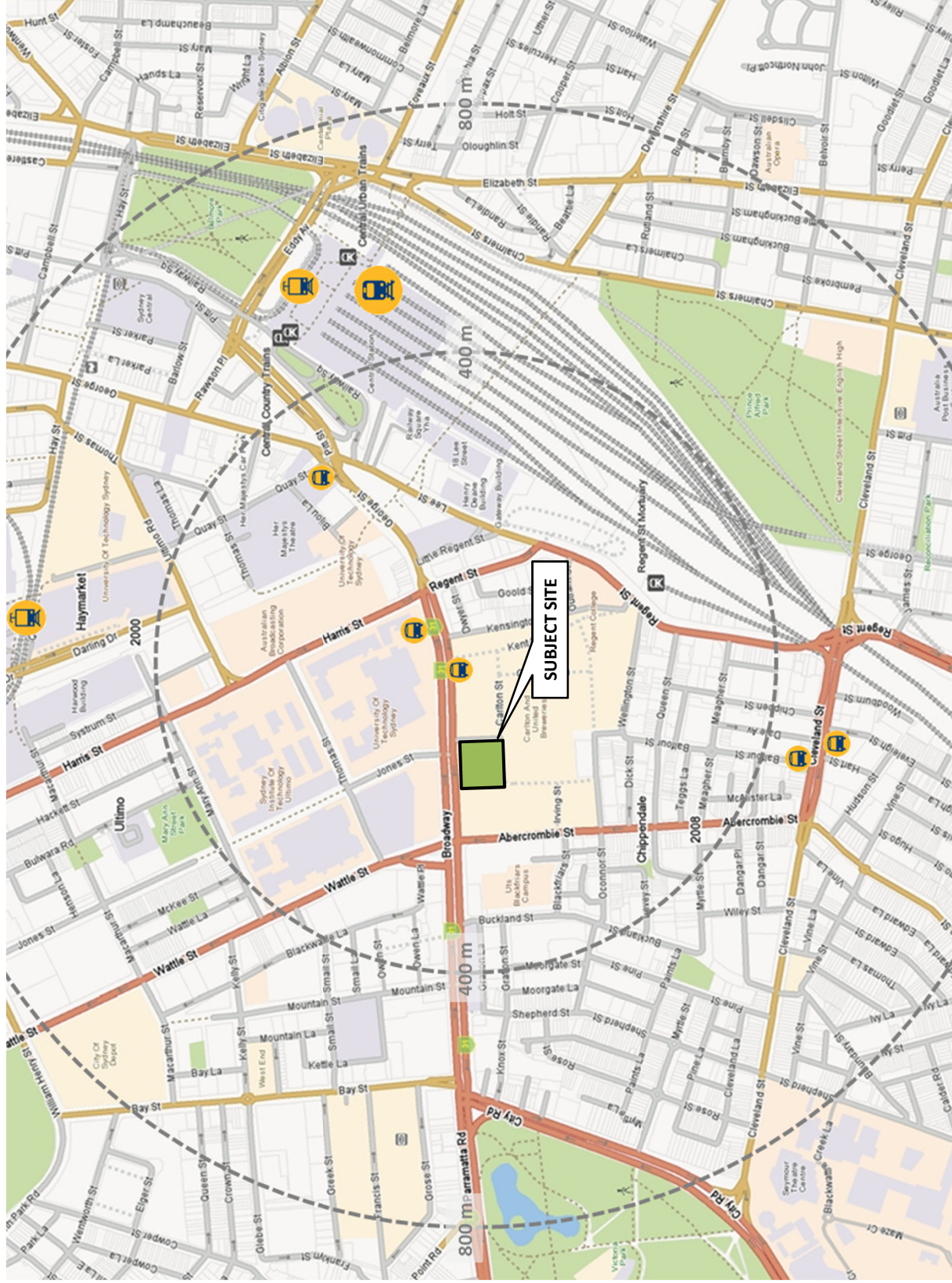
Travel Access Guide

Central Park Block 1 SSDA – Travel Access Guide

Transport Services and Facilities

 Train	Central Railway Station, located 500 metres away from the site, is one of the largest railway station and transport interchange in Australia. It serves all Sydney suburban, intercity, country and interstate trains except for the Cumberland Line and the regional Hunter Line.					
	Suburban Line Eastern Suburbs & Illawarra Line Bankstown Line Airport Line Inner West & South Line Western Line Carlingford Line North Shore/ Northern Line Intercity Line South Coast Southern Highlands Blue Mountains Central Coast & Newcastle	Frequency – AM Peak		Frequency – PM Peak		
		<i>To city</i>	<i>From City</i>	<i>To city</i>	<i>From City</i>	
		4 min	10 min	4 min	10 min	
		5 - 10 min	10 - 15 min	10 - 15 min	5 - 15 min	
 Bus	Route No.	Service Route	Frequency – AM Peak		Frequency – PM Peak	
	M10	Leichhardt to Maroubra Jn	10 min		10 min	
	M30	Mosman to Sydenham	10 min		10 min	
	352	Marrickville to Bondi	20 – 35 min		20 min	
	412	City to Campsie Station	20 min		15 min	
	413	City to Campsie Station	30 min		15 min	
	422	City to Kogarah	20 min		10 – 15 min	
	423/ L23	City to Kingsgrove	10 – 20 min		5 – 15 min	
	426	City to Dulwich Hill	20 min		5 – 10 min	
	428/ L28	City to Canterbury	20 min		5 – 10 min	
	431	Glebe Point to Millers Point	3 – 5 min		15 min	
	433	Balmain to Millers Point	10 – 15 min		15 min	
	436	City to Chiswick	20 min		15 min	
	438/ L38	City to Abbotsford	10 – 20 min		5 – 15 min	
	439/ L39	City to Mortlake	30 min		15 – 25 min	
	440	City to Rozelle	5 – 10 min		5 – 10 min	
461	City to Burwood	5 – 20 min		10 – 15 min		
470	City to Lilyfield	15 min		5 min		
480/ 483	City to Strathfield Station	20 min		5 – 10 min		
 Light Rail	Light Rail operates every 10-15 minutes on day time from Central Station to Lilyfield and Central Station to The Star. Services to Lilyfield finish at 11pm and overnight service is available from Central Station to The Star for every 30 minutes					
	Wheelchair accessible buses operate on some routes. Contact Sydney Buses or the Transport Infoline for details.					
	The closet cycle routes run along Jones Street, Shepherd Street and Meagher Street. The cycle routes are connected to Sydney CBD, inner west and eastern suburbs.					

Note: See attached maps of *Existing Public Transport Nodes*, *Existing Bus Routes* and *Existing Cycle Network*.



Legend



Train Station

Light Rail stop

Bus stop

GTA CONSULTANTS
12S1395000 – CENTRAL PARK, BLOCK 1 SSDA: PROPOSED MIXED USE
DEVELOPMENT
EXISTING PUBLIC TRANSPORT NODES



www.gta.com.au

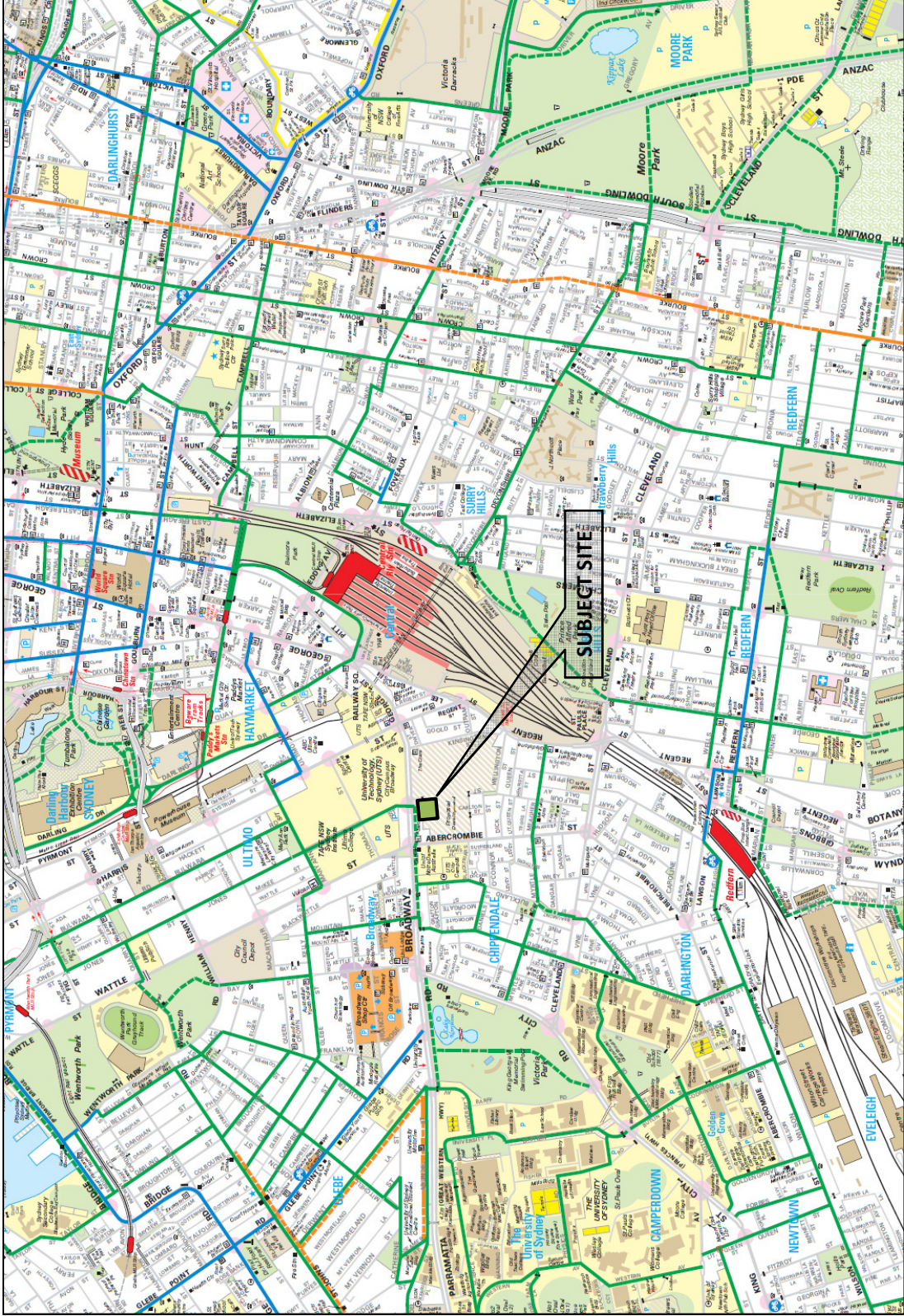
Melbourne 03 9851 9600
Sydney 02 8448 1800
Brisbane 07 3113 5000
Canberra 02 8243 4826
Adelaide 08 8113 3393
Gold Coast 07 5510 4814
Townsville 07 4722 2745

DATE:

2014-06-19

DRAWING NO.

12S1395000 FIG-01-01



Published by City of Sydney
Base map by Sydney Publishing Pty. Ltd.

Legend

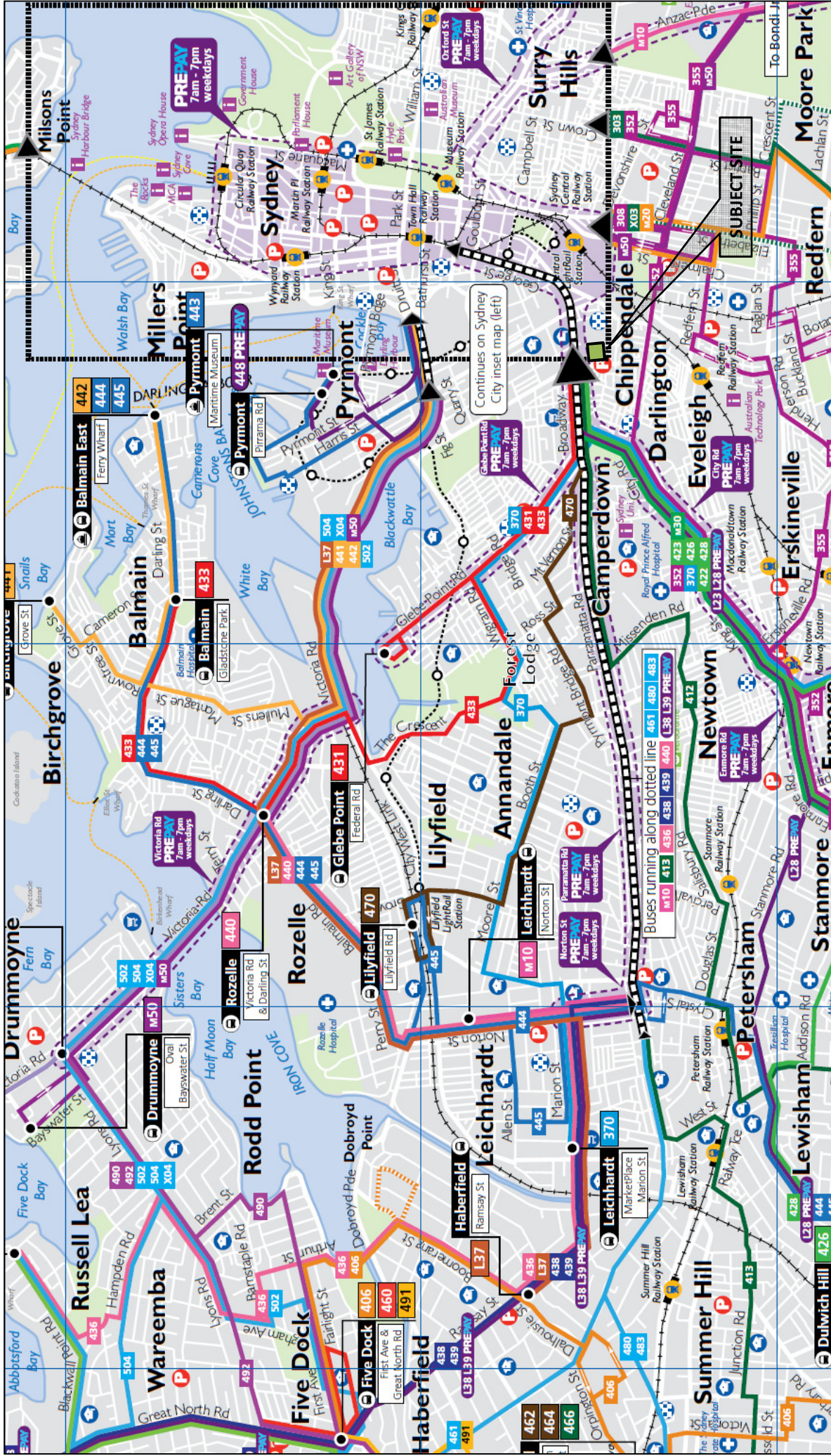
- Cycle routes on separated cycleway, existing / underway
- Cycle routes on road low to medium traffic on road / off road
- Cycle routes on road heavy traffic
- Chiswick
- Metro Light Rail with Station
- Railway line, with Station and distance to city
- Shops, Bike Shop
- Traffic Light or Pedestrian Crossing

GTA CONSULTANTS
12S1395000 – CENTRAL PARK, BLOCK 1 SSDA: PROPOSED MIXED USE
DEVELOPMENT
EXISTING CYCLE NETWORK



Melbourne 03 9851 9400
Sydney 02 8448 1800
Brisbane 07 3113 5000
Canberra 02 8243 4826
Adelaide 08 8113 3393
Gold Coast 07 5510 4814
Townsville 07 4722 2745

DATE: 2014-06-19
DRAWING NO. 12S1395000-FIG-01-02



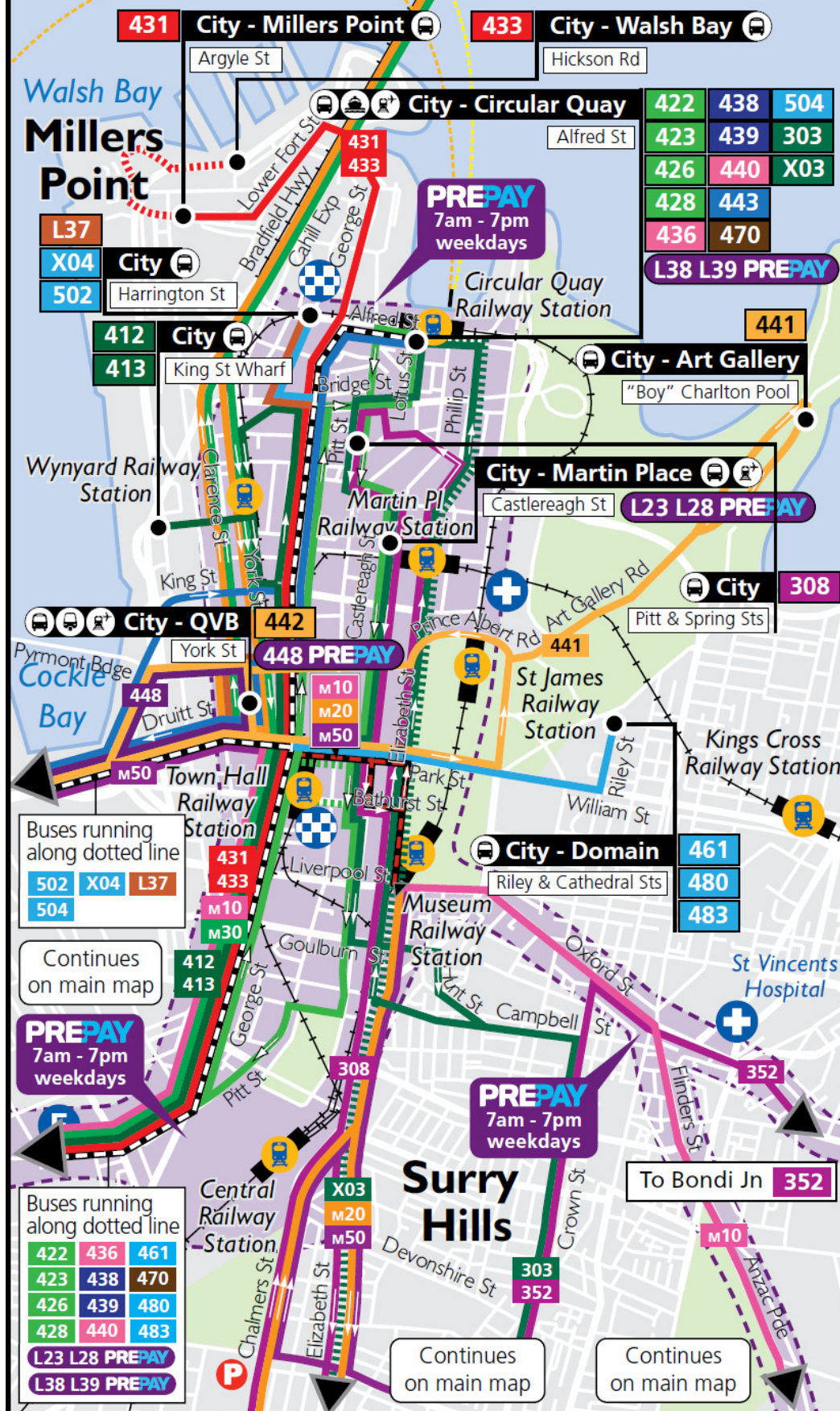
GTA CONSULTANTS
12S1395000 – CENTRAL PARK, BLOCK 1 SSDA: PROPOSED MIXED USE
DEVELOPMENT
EXISTING BUS ROUTES



Melbourne 03 9851 9600
Sydney 02 8448 1800
Brisbane 07 3113 5000
Canberra 02 8243 4826
Adelaide 08 8113 3833
Gold Coast 07 5510 4814
Townsville 07 4722 2745

DATE: 2014-06-19
DRAWING NO. 12S1395000-FIG-01-03

Milsons Point



Melbourne

A Level 25, 55 Collins Street
PO Box 24055
MELBOURNE VIC 3000
P +613 9851 9600
F +613 9851 9610
E melbourne@gta.com.au

Sydney

A Level 6, 15 Help Street
CHATSWOOD NSW 2067
PO Box 5254
WEST CHATSWOOD NSW 1515
P +612 8448 1800
F +612 8448 1810
E sydney@gta.com.au

Brisbane

A Level 4, 283 Elizabeth Street
BRISBANE QLD 4000
GPO Box 115
BRISBANE QLD 4001
P +617 3113 5000
F +617 3113 5010
E brisbane@gta.com.au

Canberra

A Unit 4, Level 1, Sparta Building, 55 Woolley Street
PO Box 62
DICKSON ACT 2602
P +612 6243 4826
F +612 6243 4848
E canberra@gta.com.au

Adelaide

A Suite 4, Level 1, 136 The Parade
PO Box 3421
NORWOOD SA 5067
P +618 8334 3600
F +618 8334 3610
E adelaide@gta.com.au

Gold Coast

A Level 9, Corporate Centre 2
Box 37
1 Corporate Court
BUNDALL QLD 4217
P +617 5510 4800
F +617 5510 4814
E goldcoast@gta.com.au

Townsville

A Level 1, 25 Sturt Street
PO Box 1064
TOWNSVILLE QLD 4810
P +617 4722 2765
F +617 4722 2761
E townsville@gta.com.au