

# **Attachment A7**

<b>Traffic and Transport Study</b>
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# 169-173 Victoria Street & 92-98 Brougham Street, Potts Point

Boutique Hotel

Transport Impact Assessment



Prepared by: GTA Consultants (NSW) Pty Ltd for Harrphil Pty Ltd

on 02/06/2020

Reference: N223340

Issue #: A

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## Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By	Signed
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# 1. INTRODUCTION

01



## 1.1. Background

It is understood that a planning proposal is to be lodged with the City of Sydney for a proposed boutique 43-room hotel on land at 169-173 Victoria Street and 92-98 Brougham Street, Potts Point. The site comprises the Piccadilly Hotel (171-173 Victoria Street) and adjoining terrace (169 Victoria Street – Golden Apple), as well as residential terraces fronting Brougham Street.

The proposed 43-room hotel at 92-98 Brougham Street, Potts Point as an additional permitted use in Sydney Local Environment Plan 2012 (Schedule 1). The site is zoned R1 General Residential, which prohibits hotel accommodation but adjoins the Piccadilly Hotel zoned B4 Mixed Use. The objective of this Planning Proposal is to remove a barrier to the supply of high quality hotel accommodation across the sites in an appropriate location consistent with the objectives and actions of City's Visitor Accommodation (Hotels and Serviced Apartments) Action Plan and recently endorsed Local Strategic Planning Statement.

Oakstand engaged GTA Consultants (GTA) on behalf of Harrphil Pty Ltd in April 2020 to complete a transport impact assessment as part of the planning proposal.

## 1.2. Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the planning proposal, including consideration of the following:

- existing traffic and parking conditions surrounding the site
- suitability of the proposed parking in terms of supply (quantum) and layout
- service vehicle requirements
- pedestrian and bicycle requirements
- the traffic generating characteristics of the planning proposal
- suitability of the proposed access arrangements for the site
- the transport impact of the proposal on the surrounding road network.

## 1.3. References

In preparing this report, reference has been made to the following:

- an inspection of the site and its surrounds completed on 28 April 2020
- City of Sydney Development Control Plan (DCP) 2012
- City of Sydney Local Environmental Plan (LEP) 2012
- Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004
- Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS 2890.2:2018
- Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009
- 169-173 Victoria Street & 92-98 Brougham Street, Potts Point Sydney, Planning Proposal Urban Design Report, prepared by Woods Bagot dated 29 May 2020
- other documents and data as referenced in this report.

## 2. EXISTING CONDITIONS

02



## 2.1. Location

The subject site is at 169-173 Victoria Street and 92-98 Brougham Street, Potts Point. The site is an irregular shape and has a combined site area of approximately 1,905 square metres with frontages of 26.8 metres to Victoria Street and 27.3 metres to Brougham Street.

The site has good connectivity to a variety of key destinations, including convenient pedestrian connections to the local Kings Cross area, as well as rail and vehicular connections to key metropolitan areas though Kings Cross Railway Station located 150 metres to the south and William Street within 200 metres. The site is in a high-activity pedestrian and cyclist area with adjacent properties including a mix of hotels, retail, commercial and residential uses.

The location of the subject site and its surrounding environs is shown in Figure 2.1, with the LEP land use map shown in Figure 2.2.

Figure 2.1: Subject site and its environs



Base image source: Sydney



State. Transport for NSW (TfNSW) is responsible for funding, prioritising and carrying out works on State roads. State roads generally include roads classified as freeways, state highways, and main roads under the Roads Act 1993, and the regulation to manage the road system is stated in the Australian Road Rules, most recently amended on 19 March 2018.

TfNSW defines four levels in a typical functional road hierarchy, ranking from high mobility and low accessibility, to high accessibility and low mobility. These road classes are:

**Arterial Roads** – Controlled by TfNSW, typically no limit in flow and designed to carry vehicles long distance between regional centres.

**Sub-Arterial Roads** – Managed by either Council or TfNSW under a joint agreement. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day, and their aim is to carry through traffic between specific areas in a sub region or provide connectivity from arterial road routes (regional links).

**Collector Roads** – Provide connectivity between local sites and the sub-arterial road network, and typically carry between 2,000 and 10,000 vehicles per day.

**Local Roads** – Provide direct access to properties and the collector road system and typically carry between 500 and 4,000 vehicles per day.

### 2.3.2. Surrounding Road Network

The streets in the immediate vicinity include Victoria Street, Brougham Street, Hourigan Lane and Darlinghurst Road. All of these roads are local or collector roads under the jurisdiction of City of Sydney.

Victoria Street travels in a north-south direction along the eastern boundary of the site. It is a two-way road configured with two lanes in each direction, set within an approximate 12.5-metre-wide carriageway. Victoria Street has a posted speed limit of 50km/h which reduces to 40km/h near the school at its northern end.

Brougham Street travels in a north-south direction along the western boundary of the site. It is a one-way road (southbound only) set within an approximately 6.5-metre-wide carriageway. Entry is provided from Cooper Wharf Roadway, with exit via William Street or Victoria Street. Brougham Street has a posted speed limit of 40km/h.

Hourigan Lane primarily travels in a north-south direction between Victoria Street and Brougham Street providing access to the rear of developments fronting both streets. Access is provided via an east-west connector to Brougham Street, located around six metres north of the site. Pedestrian access between the site and Hourigan Lane is along the northern boundary of the site, noting the access is too narrow to facilitate vehicle movements from Hourigan Lane.

Victoria Street intersects with Darlinghurst Road 180 metres south of the site. Darlinghurst Road is the main corridor through Potts Point, with a plethora of retail and restaurant venues along its length. It also provides connections to key metro and regional destinations through its interchange with William Street, 200 metres south of the site.

With the exception of Hourigan Lane, kerbside parking is generally permitted on both sides of each street. Parking is subject to time restrictions, permit parking and loading at different times of the day.

The surrounding road network is shown in Figure 2.3 to Figure 2.8.



Figure 2.3: Victoria Street (looking north)



Figure 2.4: Victoria Street (looking south)



Figure 2.5: Brougham Street (looking north)



Figure 2.6: Brougham Street (looking south)



Figure 2.7: Darlinghurst Road (looking north)



Figure 2.8: Hourigan Lane (looking east)



### 2.3.3. Surrounding Intersections

The following key intersections currently exist near the site:

- Darlinghurst/ Bayswater Road (signalised)
- Victoria Street/ Darlinghurst Road (unsignalised)
- Darlinghurst Road/ William Street/ Kings Cross Road (signalised).

## 2.4. Road Network Operation

Typically, GTA would complete classified intersection surveys to support the transport assessment. Given ongoing global events related to COVID-19, it is acknowledged that current traffic conditions are

not considered 'normal' and as such traffic surveys completed at this time would not be considered representative of typical conditions.

It is noted that in this case, the planning proposal is expected to have minimal impact to the surrounding road network performance (see Section 4.5), hence completing classified intersection surveys would not have a material effect on the planning proposal submission itself.

Notwithstanding, traffic surveys can be completed as part of any future development applications associated with the proposal.

## 2.5. Car Parking

Demand for on-street parking is generally high on weekdays and weekends. As discussed, the site is surrounded by a range of on-street parking that is subject to time restrictions, and for use by permit holders and taxis. Bus zones and loading zones are also common. The time restricted parking is generally limited to 1P and 2P on weekdays, and only selected spaces 8:30am to 12:30pm on Saturdays.

GTA compiled an inventory of publicly available on-street parking within about 150 metres north and south of the site. The parking survey area is shown in Figure 2.9 with the parking supply breakdown and corresponding restrictions detailed in Table 2.1.

Figure 2.9: Car parking survey area



Base image source: Google Maps

Table 2.1: Car parking supply

Location	Restrictions/ Supply					
	Loading	Car Share	1P	2P	Taxi	Bus
Victoria Street - West	6	3	33	2	0	1
Victoria Street - East	5	1	30	4	2	1
Brougham Street - West	0	3	1	35	0	0
Brougham Street - East	5	0	42	0	0	0
<b>Total</b>	<b>16</b>	<b>7</b>	<b>106</b>	<b>41</b>	<b>2</b>	<b>2</b>

The inventory identified a total of 174 on-street spaces. This includes six loading zones along Victoria Street, including a 17-metre zone along the site frontage with capacity for three cars and subject to weekday time restrictions between 7:00am and 6:00pm. It is understood that prior to mid-2018 and while the Piccadilly Hotel was operating as a club, this zone was signposted as a loading zone 8:30am to 5:15pm Monday to Friday and taxi zone 5:30pm to 7:30am<sup>3</sup> seven days.

Two bus zones with 15-minute limits are also on either side of Victoria Street near Darlinghurst Road, with a taxi zone also on the eastern side of Victoria Street close to the Kings Cross Station pedestrian entries.

## 2.6. Public Transport

The site is ideally located relative to public transport services. Kings Cross Railway Station is 150 metres south of the site, with pedestrian entries on both sides of Victoria Street and an accessible lift provided as part of the western access. Kings Cross Station is serviced by the T4 South Coast Line and provides easy access to Sydney CBD (via Martin Place Station and Central Station) and Sydney's southern suburbs including Wolli Creek, Hurstville, Sutherland and Cronulla. Peak services are at about five-minute headways with the key stations also facilitating convenient connections to other services to connect with all areas on the Sydney Trains network.

Bus services travel on Darlinghurst Road and Bayswater Road that provide convenient connections to local areas such as Wollomooloo, Watsons Bay and Bondi. Bus stops on both streets are within 270 metres, a four-minute walk from the site.

A review of the public transport services available near the site is shown in Figure 2.10.

<sup>3</sup> Local Pedestrian, Cycling and Traffic Calming Committee, Parking - Loading Zone and Permit Parking - Victoria Street, Potts Point, Ganesh Vengadasalam, 19 April 2018 <https://meetings.cityofsydney.nsw.gov.au/documents>



Figure 2.10: Surrounding public transport network



Base image source: Transport for NSW, accessed 23 April 2020

## 2.7. Pedestrian Infrastructure

Kings Cross and Potts Point cater well for high pedestrian activity with established pedestrian footpaths, through site links and provision of ample formal crossing facilities. Pedestrian activity is generally high, especially along and across Darlinghurst Road and Victoria Street. Marked pedestrian crossings are on Victoria Street at its intersection with Darlinghurst Road, as well as at the entry to Kings Cross Station. This established pedestrian environment and amenity generally is shown in Figure 2.11 and Figure 2.12.

Figure 2.11: Victoria Street marked pedestrian crossing (looking east)



Figure 2.12: Victoria Street marked pedestrian crossing (looking north)





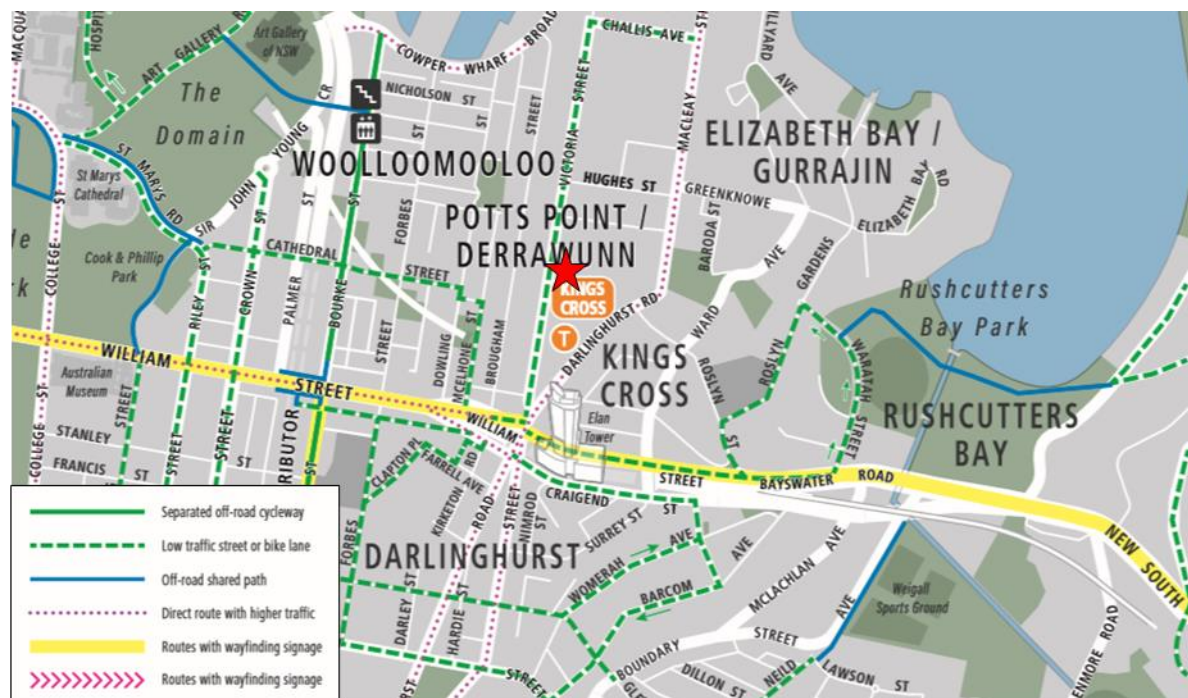
City of Sydney carry out walking count surveys twice a year at key locations to understand walking trends across key areas. Review of the City of Sydney walking count explorer<sup>4</sup> indicates that pedestrian volumes along Victoria Street declined by 25 per cent between 2015 and 2017 however have since shown to have somewhat recovered to the point that in 2019 a total of 6,000 pedestrians walked along Victoria Street north of Hughes Street with an estimated 9,000<sup>5</sup> walking along Victoria Street past the site frontage.

By comparison, pedestrian volumes along Darlinghurst Road declined by 12 per cent between 2015 and 2017 from 29,300 to 25,800. No additional more recent data is provided.

## 2.8. Cycling Infrastructure

An extensive bicycle network is present throughout City of Sydney local government area, with the site well positioned within this network. The full length of Victoria Street is considered bicycle friendly being a low traffic volume street. An extract from the Sydney Cycleways website is presented in Figure 2.13.

Figure 2.13: Surrounding cycling network



Base image source: Sydney Cycling Map [https://www.cityofsydney.nsw.gov.au/\\_data/assets](https://www.cityofsydney.nsw.gov.au/_data/assets)

## 2.9. Existing Travel Behaviour

Journey to Work data has been sourced from the Australian Bureau of Statistics 2016 census and provides an indication of existing travel patterns from the local area. Figure 2.14 details the catchment of the census data analysed which corresponds to the Australian Bureau of Statistics 2016 Destination Zones (DZN).

<sup>4</sup> Walking count surveys conducted by City of Sydney twice a year <https://data.cityofsydney.nsw.gov.au/>

<sup>5</sup> Based on comparison of 2013/2014 counts completed at the two locations, noting no count was completed at the site frontage after 2014.

Figure 2.14: 2016 destination zones



Base image source: Google Maps

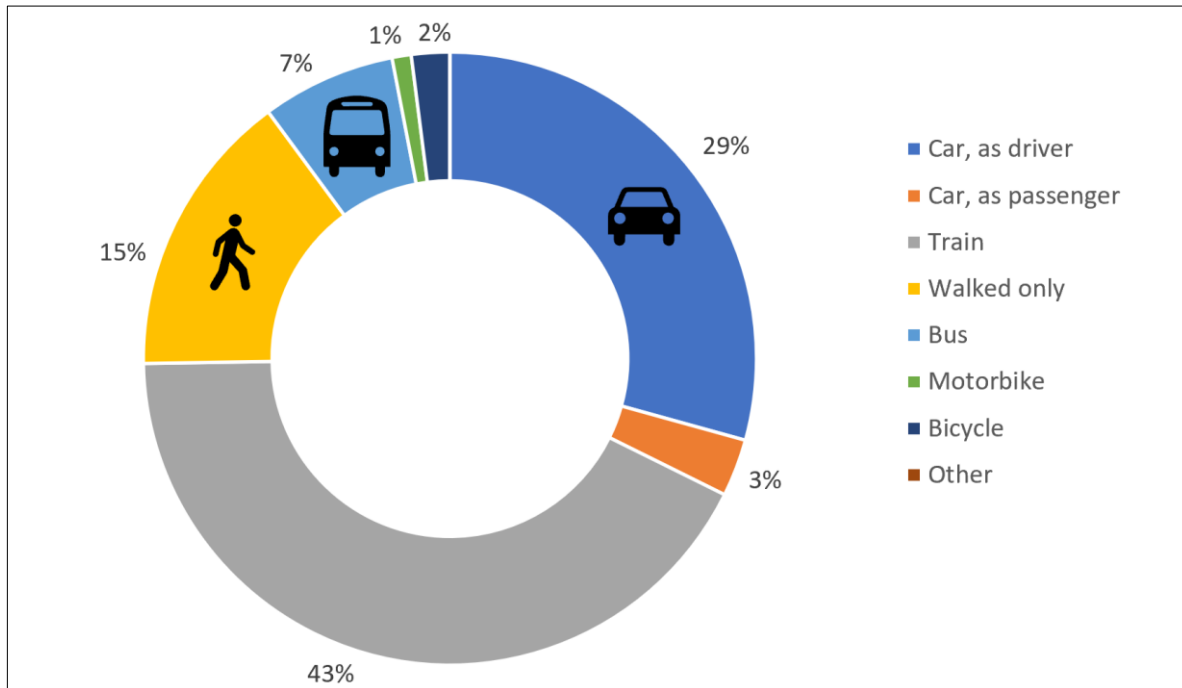
Table 2.2 and Figure 2.14 provide a summary of the existing modes of travel to work for the surrounding area. The results indicate that driving is the most common mode of transport to the area, followed by bus and walking.

Table 2.2: Existing primary mode of travel

Mode of Travel	Mode Share [1]
Car as driver	29%
Bus	7%
Walked only	15%
Car as passenger	3%
Train	42%
Motorcycle	1%
Bicycle	2%
Other	0%
<b>Total</b>	<b>100%</b>

[1] Does not include residents who worked at home or did not go to work.

Figure 2.15: Existing travel mode share

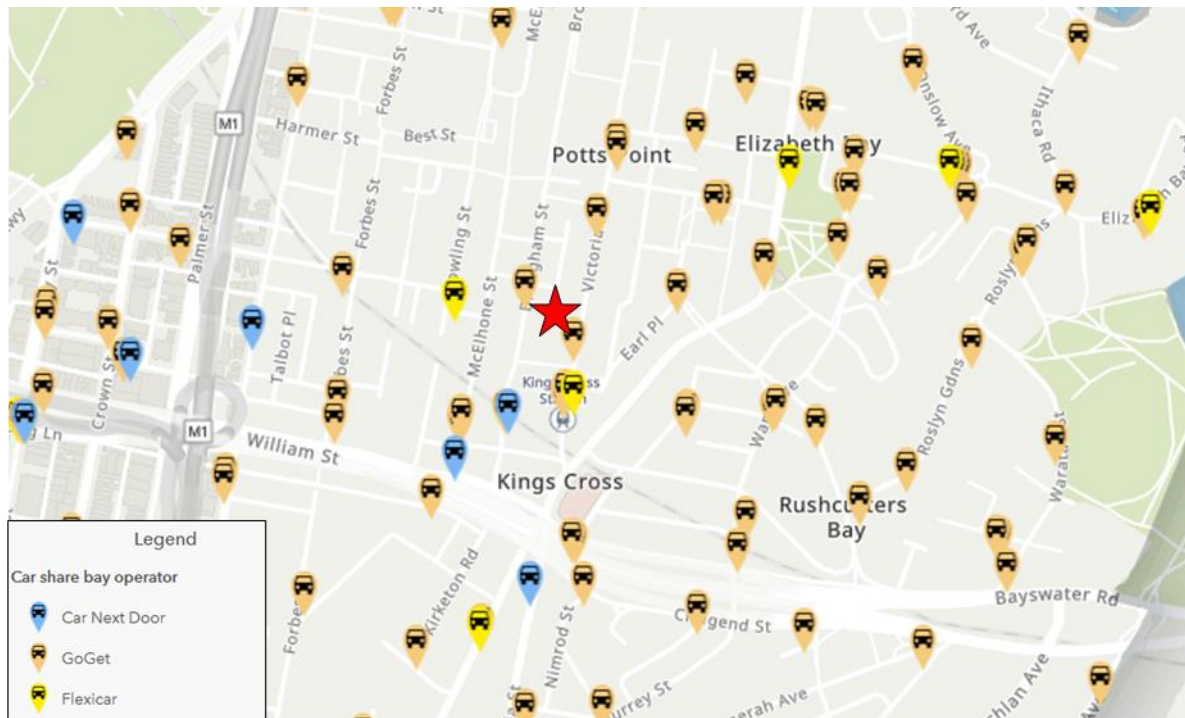


## 2.10. Local Car Share Initiatives

Car share schemes have become increasingly common throughout Sydney and are now recognised as a viable transport option. They are now a well-utilised service, especially in the inner suburbs due to limited parking availability and the expense involved in parking close to the Sydney CBD. Sydney car sharing services including GoGet, Car Next Door and Flexicar offer a viable alternative to hire car, taxi and public transport for hotel patrons.

Car share pods located close to the site are shown in Figure 2.16 with the closest pod about 25 metres from the site on Victoria Street.

Figure 2.16: Surrounding car share pod locations



Source: <https://www.cityofsydney.nsw.gov.au/live/residents/car-share>, accessed 24/04/2020

## 2.11. Crash History

An analysis of the most recent five-year period of available crash data between 2014 and 2018 has been completed based on crash data supplied by TfNSW Centre for Road Safety for Victoria Street near the site. The locations and severity of the crash data for the five-year period is shown in Figure 2.17.

Figure 2.17: TfNSW Centre for Road Safety historical crash data



Figure 2.17 indicates that five crashes have occurred along Victoria Street and Brougham Road near the site within the five-year period.

Victoria Street has recorded two crashes resulting in moderate injuries and one crash resulting in serious injury. The moderate crashes attributed to a vehicle leaving a parking space and colliding with a moving vehicle, and a vehicle turning left off the carriageway colliding into an object or parked vehicle just south of the site. A crash north of the site involving a pedestrian crossing the street also occurred resulting in serious injury.

Brougham Street has recorded two crashes resulting in a serious injury and a non-casualty (tow-away). The crash that resulted in a serious injury occurred at the Brougham Street/ Brougham Lane intersection and involved a pedestrian crossing the street. The second crash involved a vehicle turning left off the carriageway colliding into an object or parked vehicle.

Based on the above, the available crash data does not indicate that the planning proposal will compromise the safety of the surrounding road environment.



### 3. PLANNING PROPOSAL

03

### 3.1. Land Uses

The planning proposal includes construction of a 43-room boutique hotel, with ground and lower ground floor food and beverage offerings comprising 956 square metres Gross Floor Area (GFA). This would be accommodated within the existing on-site buildings and retains the heritage status.

The proposed design focuses on activation of Victoria Street with the hotel lobby and food and beverage uses accessed from Victoria Street only. To ensure good activation, the food and beverage offerings will be for use by hotel guests and the general public. A secondary staff only pedestrian access is proposed via Hourigan Lane providing access to back of house areas and staff bicycle parking and end of trip facilities. No pedestrian access will be provided via Brougham Street, with the existing residential entrances intended to be locked (to prevent entry) and used for fire evacuation purposes only.

No on-site car parking is proposed. All vehicle activity, including patron drop-off/ pick-up and service vehicle activity will be limited to Victoria Street only. This is consistent with the previous operation of the Piccadilly Hotel (when it was a club/ entertainment venue). The existing 17-metre long loading zone along the site's frontage is proposed to be re-instated as a loading zone between 8:30am and 5:15pm weekdays. Time restricted 10-minute parking is also proposed outside these times on weekdays, and right across weekends.

This parking zone is proposed to balance the service vehicle requirements of the site and surrounding developments during the week, while also accommodating short-stay drop-off/ pick-up activity associated with the hotel to ensure convenient access and limit impacts on the surrounding area. It is also noted that Transport for NSW loading zone parking guidelines permit vehicles to drop-off and/ or pick-up passengers at the kerb. Such activity typically takes less than two or three minutes.

As per the previous operation of the Piccadilly Hotel, all loading activity will be accommodated within the Victoria Street loading zone within the specified periods. A service lift will be installed on the Victoria Street frontage and in the location of the existing keg ramp that serviced the previous use. The service lift will transport goods to both level one and basement facilitating efficient transport of goods to the relevant areas. Internal pedestrian connections will ensure efficient movement of goods to the Brougham Street terraces. Waste collection will also continue to occur from the Victoria Street loading zone, with bin storage proposed within the basement of the current Piccadilly Hotel.

As noted, bicycle parking and end of trip facilities will be provided for staff within the basement of 169 Victoria Street, with direct access from Hourigan Lane.



## 4. PARKING AND TRANSPORT ASSESSMENT

04

## 4.1. Parking Requirements

The parking requirements for different development types and land uses are set out in City of Sydney LEP 2012 and DCP 2012.

### 4.1.1. Car and Motorcycle Parking

With 43 hotel rooms proposed, the applicable maximum LEP 2012 parking rate is one car space for every five rooms indicating that the proposal could provide between zero and nine on-site parking spaces. With 956 square metres of retail (food and beverage)<sup>6</sup>, the applicable maximum parking rate is one car space per 50 square metres GFA<sup>7</sup> indicating that the proposal could provide between zero and 20 retail parking spaces.

The planning proposal does not include provision of on-site parking. This absence of parking is consistent with the maximum LEP 2012 parking requirements for hotel and retail (food and beverage) developments and is considered appropriate having consideration for the site's location and proximity to public and active transport. Inner city hotels have a diverse customer base. Mid-week guests are expected to be dominated by the business sector who would mostly use ride share services (Uber etc.), taxis or walk catch public transport. The demand for parking would be low. Weekend demand is also expected to be low with guests recognising the sites location when choosing hotel accommodation.

Any such minor guest parking demand would be able to be accommodated within off-site commercially operated car parks in the local area. Such arrangements are consistent with inner-city hotels that commonly have commercial agreements in place (with and without valet services). Obvious CBD hotel examples include Hyatt Regency on Sussex Street Sydney and QT Sydney on Market Street. The hotel under construction at 280 George Street also has no on-site parking for guests.

DCP 2012 requires one motorcycle parking space for every 12 car parking spaces. With no on-site parking, no motorcycle parking spaces are required.

### 4.1.1. Bicycle Parking

DCP 2012 design controls for the provision of bicycle parking for different development types are summarised in Table 4.1.

**Table 4.1: DCP bicycle parking requirements**

Use	User Group	Size	DCP Bicycle Parking Rate	Minimum DCP Bicycle Parking Rate
Hotel	Guest	43 rooms	1 space per 20 rooms	3 spaces
	Employees	5 staff [1]	1 space per 4 staff	2 spaces
Shop, restaurant or café	Visitor	956m² GFA	2 plus 1 per 100 m² over 100 m² GFA	11 spaces
	Employees		1 space per 250 m²	6 spaces
Total				22 spaces

[1] The number of employees is not known at this stage of the development. 1 staff per 10 rooms has been assumed.

<sup>6</sup> LEP 2012 defines food and drink premises as a type of retail premise and includes a restaurant or café, takeaway food and drink premises, a pub and small bar.

<sup>7</sup> LEP 2012 land in category F of the public transport accessibility level map, dated 14 December 2012.

Table 4.1 indicates that the planning proposal requires 22 on-site bicycle parking spaces including 14 visitor/ guest spaces and eight staff spaces. The architectural plans indicate that secure staff bicycle parking is proposed in the basement of 169 Victoria Street. It is recommended that bicycle hoops/ racks also be provided on the Victoria Street frontage as part of the public domain, for convenient use by hotel guests and visitors.

Bicycle parking spaces, as a minimum, need to be designed in accordance with relevant Australian Standard (AS2890.3 Bicycle Parking Facilities).

### 4.2. Walking and Cycling network

The proposal works hard to ensure pedestrians and cyclists remain a key consideration. The design includes a high level of pedestrian amenity that will ensure good activation of the public domain along Victoria Street.

The convenient connections between site and the well-established Kings Cross area/ Potts Point existing pedestrian network along the site frontage will also be key to ensuring the area functions as intended.

### 4.3. Public Transport

As discussed, the site is already well served by several high frequency rail and bus services. Both provide access to key local and regional destinations, including Sydney CBD, Sydney Airport, Bondi Junction, Watsons Bay and Blue Mountains.

Considering the small size of the proposal, and convenient access to a variety of high frequency public transport services, it is unlikely that the proposal would noticeably affect the surrounding public transport network. In addition, these services and the proposal itself encourage a travel mode shift away from private vehicles.

### 4.4. Loading Arrangements

#### 4.4.1. Service Vehicle Parking Requirements

The service vehicle parking requirements for different development types are set out in DCP 2012 and as they relate to the proposal, summarised in Table 4.2.

**Table 4.2: DCP 2012 loading parking requirements**

Use	No. of Rooms/ Area	DCP Loading Parking Rate	Minimum DCP Loading Parking Rate
Hotel	43 rooms	1 space per 50 rooms up to 100 rooms	1
Food and beverage	956m <sup>2</sup> GFA	1 space per 350m <sup>2</sup> GFA or part thereof	3
<b>Total</b>			<b>4 spaces</b>

Table 4.2 indicates the site is required to provide four loading spaces.

## 4.4.2. Anticipated Loading Demand

DCP 2012 has not been based on an empirical assessment of loading demands, having regard to the expected needs of the proposed uses and ability for a mix of land uses to share the same loading bays. In this regard, a first principles assessment to appreciate the real or 'practical' loading demand of the proposal is set out in the following section.

It is understood that loading activity for hotel will likely be limited to general hotel deliveries (e.g. deliveries of stock/ guest consumables/ marketing collateral etc.), as well as linen service and boutique laundry services (dry cleaning etc.). With this in mind, GTA has assumed that the hotel would generate a demand of up to five deliveries per day. With the exception of the linen truck (size dependant on contractor), all deliveries are assumed to typically arrive via vans/ utes and small rigid trucks.

GTA's database of loading demand indicates that retail (food and beverage) tenancies typically receive an average of 1.1 deliveries per day per tenant with an average 18-minute stay. Conservatively assuming that up to three separately operated food and beverage tenancies will be provided, and without consolidation of deliveries they would likely generate three to four deliveries per day. These would be via small vans/ utes and small trucks. Keg deliveries could be in slightly larger vehicles (10 to 12-metre rigid trucks and dependant on supplier) with once a week deliveries. These servicing demands represent a significant reduction compared to the sites previous use as a club/ entertainment venue.

Occasional maintenance vehicles will also need to service the site with an assumed demand of two to three maintenance vehicles per month. It is noted that the typical duration of stay for maintenance vehicles tends to be more than the maximum 30-minute length of stay permitted in loading zones. As such, it is assumed that these service vehicles would need to park on-street or surrounding car parks once tools/ equipment have been unloaded. This is consistent with such operations associated with the previous use.

A summary of the forecast loading demand is included in Table 4.4.

**Table 4.3: Anticipated loading demand**

Description	Number of deliveries	Vehicle	Duration of stay
Linen	1 per day	n/a	15-30 minutes
Boutique laundry services	1 per day	van	15-30 minutes
Other [1]	3 per day	van/ SRV	5-30 minutes
Food and beverage tenancy deliveries	4 per day	van/ small rigid truck	10-20 minutes
Waste Collection	1 per day	small-medium rigid truck	5-10 minutes

[1] Guest consumables, marketing collateral, office and cleaning supplies, noting each of these individual services would typically deliver once a week.

As discussed, the existing 17-metre loading zone along the site frontage is proposed to be re-instated with its previous loading zone hours of 8:30am to 5:15pm weekdays. This would provide for up to three cars/ vans/ utes (or two small rigid trucks and one medium rigid truck/ one small rigid truck combination). Adopting the maximum 30-minute stay and assuming an average capacity of two vehicles (to allow for use by various vehicles across the day), the loading zone is capable of being used by 30 to 40 vehicles per day. Assuming an average loading time of 20 minutes, this increases to more than 50 vehicles.

With a forecast typical loading demand of 10 vehicles across the day, the loading zone will be able to easily cater for the loading demands of the site. This will also leave more than sufficient capacity for hotel patron drop-off/ pick-up, as well as any such latent loading demand associated with other existing surrounding sites.

### 4.4.3. Historical Loading Demand

Given that the existing site previously operated as a club/ entertainment venue it is also important to understand the historical loading demands of the site. Without the benefit of detailed records, an assessment based on GTA's own database has been completed.

This indicates that licensed premises typically receive an average of five to seven deliveries per 1,000 square metres GFA per day, including waste vehicles. To account for the historical use of the site offering limited food compared to typical licensed premises, a 0.5 factor has been applied to the daily loading demand. Application of this to the proposed GFA of around 1,300 square metres results in between three to five deliveries per day.

Overall, the net change in loading demand associated with the planning proposal would be minor and likely about five service vehicles per day. Given the loading zone would be active for about nine hours per day on weekdays, this equates to one service vehicle every 1.5 to two hours. Most vehicles, other than for waste collection and keg deliveries are expected to be small rigid trucks or smaller.

### 4.4.4. Proposed Loading Arrangements

Overall, the provision of a 17-metre loading zone along the site frontage to be shared by the hotel and food and beverage land uses, as well as short stay hotel guest drop-off/ pick-up is considered appropriate for the proposal. Other local area demand would likely also be minor.

The use of the loading zone is to be administered/ monitored by the hotel manager to ensure capacity of the loading zone is not exceeded at any time. All service vehicles, including Council or private contractor garbage trucks, will enter and exit the zone in a forward direction. Such an arrangement is considered acceptable in the circumstances, particularly given that this is a negligible increase compared to the previous operation of the site.

It should also be noted that while the Brougham Street terraces have historically been serviced from Brougham Street, the revised arrangement for consolidated servicing of the whole site via Victoria Street has a negligible impact to forecast loading operations. A total of 12 hotel rooms are proposed along Brougham Street, representing 27 per cent of the total hotel capacity, with associated loading demand consolidated within service vehicles associated with the remaining 31 rooms along Victoria Street. Internal pedestrian connections will ensure efficient movement of goods from Victoria Street to the Brougham Street terraces.

## 4.5. Pick-Up/ Set-Down Parking Requirements

DCP 2012 specifies set-down and pick-up requirements for hotel developments. It states that the following minimum provision must be accommodated:

- two car spaces
- one bus/ coach space per 100 rooms, for hotels with greater than 100 rooms.

As such, the proposal requires capacity for up to two car spaces to accommodate set-down/ pick-up activity.

As discussed, the existing 17-metre loading zone is proposed to be re-instated as a signposted loading zone between 8:30am and 5:15pm weekdays and as time restricted ten-minute parking at other times. This will accommodate any short term (less than two minute) drop off/ pick up activity associated with the hotel during loading zone hours, as well as longer term (up to 10 minute) drop off/ pick up activity outside loading zone hours.

Considering the proposal is for at least a five-star hotel, it is not anticipated to cater for large groups of tourists and is likely to attract smaller groups (and business travellers) instead that will be transported by vans and minibus or Uber, taxi etc. In the unlikely event that coaches are required, it is typical for smaller inner-city hotels to have a location elsewhere in metropolitan Sydney where they transfer guests via van/ minibus as required.

### 4.6. On-Street Parking Impacts

Removal of all vehicular activity along Brougham Street will naturally benefit the local residential street, with reduced traffic and parking demand associated with the existing terraces.

Re-instating parking restrictions along Victoria Street outside the proposed weekday loading zone hours, as well as extending the parking restrictions to the weekends, will naturally impact residential parking along Victoria Street. A total of three parking spaces would need to be removed. Notwithstanding, the proposal is generally consistent with the previous operation of the site.

### 4.7. Traffic Impact

#### 4.7.1. Design Rates

TfNSW Guide to Traffic Generating Developments 2002 (the Guide) specifies traffic generation rates for various uses and associated parking provisions.

The Guide does not provide a traffic generation rate for hotels and instead recommends that analysis of proposed hotel developments be based on surveys of similar existing hotels. GTA has previously undertaken surveys of similar inner-city hotels which found an average trip generation rate of 0.17 movements and 0.15 movements per room in the AM and PM peak hours respectively. These rates are considered appropriate for the proposal.

The Guide suggests a rate of five trips per 100 metres GFA for restaurant use and this has been applied to the food and beverage uses. Hotel guests are expected to make up a significant proportional use of the food and beverage on offer with a 30 per cent discount applied to reflect less traffic movements (given hotel guests are already travelling to the hotel itself). A 0.5 factor has also been applied to the weekday morning peak to account for the expected lower demand (mostly just hotel guests using part of the food and beverage for breakfast etc.). The estimates of peak hour traffic volumes are set out in Table 4.4.

Table 4.4: Traffic generation estimates

Use	Size	Traffic generation rate (trips / hour)		Traffic generation estimates (trips / hour)	
		AM	PM	AM	PM
Hotel	43 rooms	0.17 movements per room	0.15 movements per room	7	6
Food and beverage	956m <sup>2</sup> GFA	1.75 per 100m <sup>2</sup> GFA	3.5 per 100m <sup>2</sup> GFA	12-17 [1]	24-34 [1]
<b>Total</b>				<b>19-24</b>	<b>30-40</b>

[1] reduction factor of 30 per cent also considered to account for linked and internal trips.

Table 4.4 indicates that the site could potentially generate between 20 and 40 vehicle trips in any peak hour.

## 4.7.2. Traffic Distribution

The majority of vehicles would likely approach the site from the south along Victoria Street to allow for convenient use of the kerb space along the sites frontage. Given the low traffic volumes generated by the proposal, this additional traffic could not be expected to compromise the safety or function of the surrounding road network. In this respect it is evident that any additional vehicle activity on Victoria Street, including service vehicle activity is likely to be minor.



## 5. CONCLUSION

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## CONCLUSION

Based on the analysis and discussions presented within this report, the following conclusions are made:

1. The planning proposal incorporates a boutique hotel with ground and lower ground floor food and beverage uses. It intends to deliver 43 hotel rooms with 956 square metres of publicly accessible food and beverage area.
2. The site access arrangements are appropriate for the surrounding area, with both pedestrian and vehicular access restricted to Victoria Street, with the exception of a secondary staff pedestrian access via Hourigan Lane.
3. The proposal intends to retain existing arrangements by not providing on-site parking and complies with the maximum rates defined in DCP 2012.
4. The proposal is expected to generate low traffic volumes, with between 20 and 40 vehicle trips in any peak hour.
5. Secure parking for eight staff bicycles would ensure active travel end-of-trip facilities are provided in accordance with DCP 2012.
6. It is recommended that bicycle hoops/ racks be provided as part of the Victoria Street public domain for convenient visitor bicycle parking.
7. All loading activity will be accommodated in the existing Victoria Street loading zone which is expected to be more than sufficient to service forecast loading demands of the proposal.
8. The proposal would have negligible impact on existing active and public transport networks near the site.
9. From a transport perspective, the proposal does not raise specific issues with respect to impacts on the road network.

