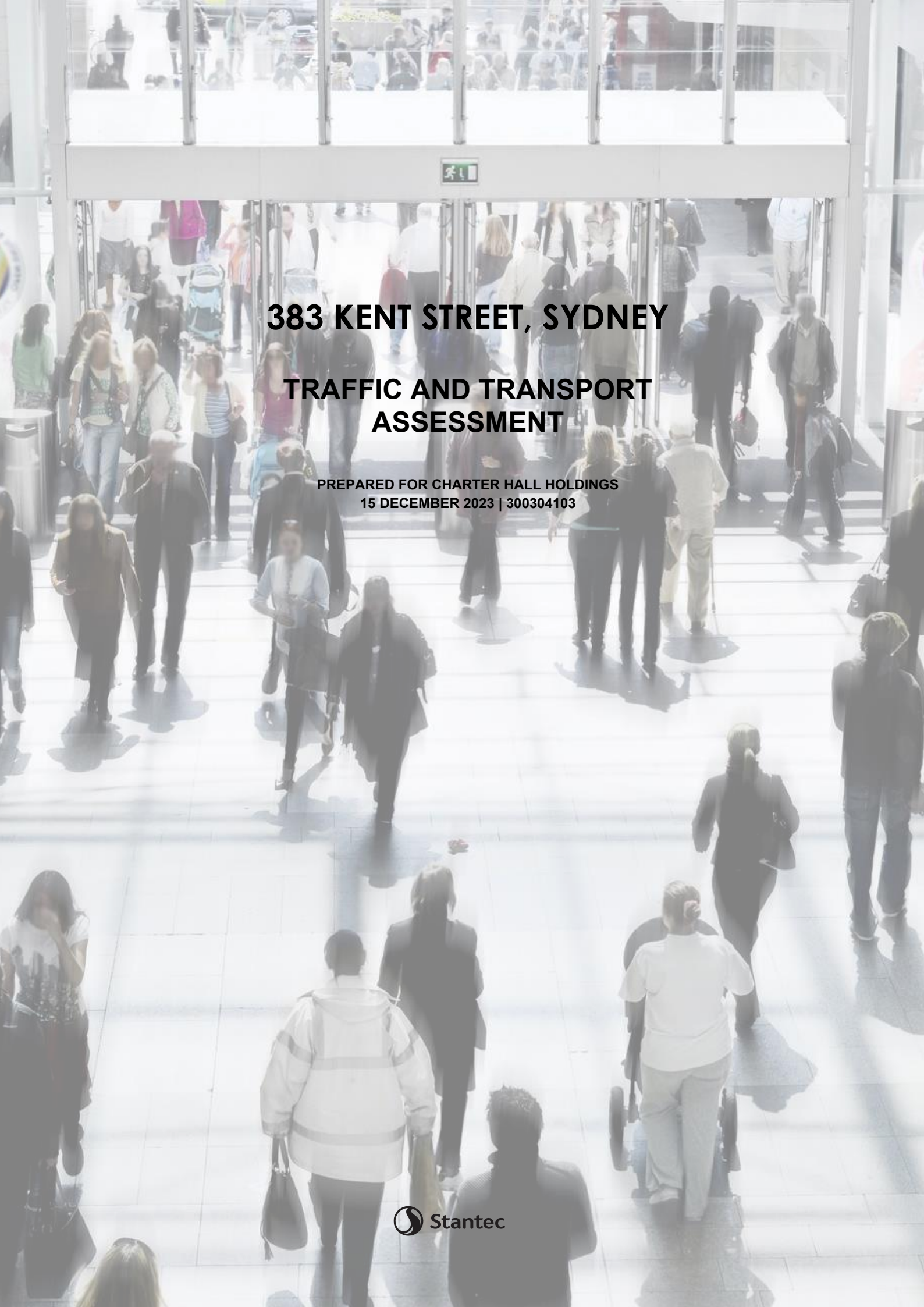
Attachment A13

Traffic and Transport Assessment



383 KENT STREET, SYDNEY

TRAFFIC AND TRANSPORT ASSESSMENT

PREPARED FOR CHARTER HALL HOLDINGS
15 DECEMBER 2023 | 300304103

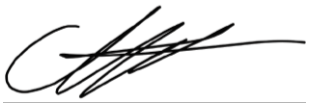
Stantec

Revision	Date	Description	Author	Quality Check	Approver
A	07/06/2023	Final	Patrick Obmasca, Ashish Modessa	Ashish Modessa	Rhys Hazell
B	23/06/2023	Final updated to include minor modifications	Patrick Obmasca, Ashish Modessa	Ashish Modessa	Rhys Hazell
C	11/07/2023	Final updated to include minor modifications	Patrick Obmasca, Ashish Modessa	Ashish Modessa	Rhys Hazell
D	11/12/2023	Final updated to include minor modifications	Bernadette Chuan	Connor Hoang	Bayzid Khan
E	14/12/2023	Final updated to include minor modifications	Connor Hoang	Connor Hoang	Bayzid Khan
F	15/12/2023	Final updated to include minor modifications	Connor Hoang	Connor Hoang	Bayzid Khan

The conclusions in the Report titled 383 Kent Street, Sydney are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from Charter Hall Holdings (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

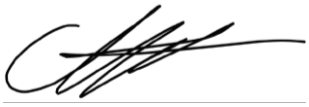
This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided to applicable authorities having jurisdiction and others for whom the Client is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.

Prepared by: 

Signature

Connor Hoang

Printed Name

Reviewed by: 

Signature

Connor Hoang

Printed Name

Approved by: 

Signature

Bayzid Khan

Printed Name

Table of Contents

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

Executive Summary

A Planning Proposal has been lodged with City of Sydney for the redevelopment of the multi-level commercial building located at 383 Kent Street in Sydney.

The Planning Proposal aims to amend the site's maximum Height of Building development standard and maximum Floor Space Ratio (FSR) to unlock additional floor space to be used exclusively for employment generating land uses, consistent with the vision and intent of the Central Sydney Planning Strategy (CSPS) for tower cluster sites. It also seeks to facilitate significant public benefits through additional site activation by way of a new pedestrian through-site link, shared loading dock facilities and delivering on sustainable initiatives to contribute to the City of Sydney's vision to achieve net zero energy buildings.

The proposed Sydney LEP amendment is part of the broader redevelopment plan for the site to demolish the existing structure (including the existing 10 storey car park) and construct a new 42-level commercial office tower with a total GFA of about 73,191m^2 (inclusive of 640m^2 GFA of retail and 609m^2 of wellness/ fitness uses). This large strategic site presents a unique opportunity to deliver a landmark tower site that will exhibit design excellence and redefine the western edge of the CBD, whilst offering significant employment opportunities for global Sydney.

This report documents the transport related impacts associated with the Planning Proposal. It considers the benefits for the surrounding road and pedestrian networks together with the traffic and pedestrian generation, parking (vehicle and bicycle) and servicing requirements. Additionally, an Overview Loading Dock Management Plan, Green Travel Initiatives and Construction Transport Management Plan have been detailed to facilitate delivery of the development. A separate shared precinct loading dock strategy report has also been prepared to further document the practicalities of implementing such loading dock strategies.

The sites' location lends itself to low parking provision and reliance on active and public transport daily. In this regard, travel mode share targets have been developed for travel behaviour for the future population of the site. With a maximum 72 parking spaces proposed and up to about 670 bicycle spaces for staff and visitors in a quality end of trip facility, the proposal accords with City of Sydney LEP 2012 and the broader mode share targets. Based on the anticipated future building population and the realistic target mode share, the site could generate 2,507 people trips during the weekday peak hours, including 1,505 trips by train and 552 trips by bus.

The basement car park and expansive loading dock would be accessed via Sussex Street. The dock includes capacity for 28 service vehicles for a range of vehicles and is in accordance with DCP 2012. This includes 21 loading bays to service the development and seven as part of a shared loading dock strategy which aims to deliver loading facilities to the wider precinct, namely to those properties that are heritage constrained and do not have access to formal loading dock facilities.

With the existing 799-space Wilson car park (769 spaces being of public use) likely to generate up to about 320 vehicles per hour, the proposal could significantly reduce traffic volumes generated by the site and contribute towards reducing vehicle trips into Sydney CBD with the removal of a significant public car park and subsequent encouragement in further meaningful shifts in travel behaviour.

Overall, the proposal has the potential to effect positive change in this part of the CBD and effectively reintroduce a fine grain texture to the city by way of a new through-site link and retail activation at each ground floor interface to the public domain.

1 Introduction

1.1 Background

This Transport and Transport Assessment (TTA) report has been prepared by Stantec in support of a Planning Proposal to amend the Sydney Local Environmental Plan 2012 (Sydney LEP). This report has been prepared on behalf of Charter Hall Holdings Pty Ltd (Charter Hall) (the Proponent) and it relates to a single development lot identified as Lot 1 in DP 778342 or 383 Kent Street, Sydney (the site), as shown in Figure 1.

Figure 1: Aerial map

Source: Nearmap, edits by Ethos Urban

The purpose of this Planning Proposal is to amend the site's maximum Height of Building development standard and maximum FSR development standard to unlock additional floor space to be used exclusively for employment generating land uses, consistent with the vision and intent of the CSPS for tower cluster sites. This Planning Proposal will also seek to facilitate significant public benefits through additional site activation by way of a new pedestrian through-site link, shared loading dock facility and delivering on sustainable initiatives to contribute to the City of Sydney's vision to achieve net zero energy buildings.

The proposed Sydney LEP amendment is part of the broader redevelopment plan for the site to demolish the existing structure on the site (including the existing 10 storey car park) and construct a new 42 storey commercial office tower with a total maximum FSR of 20.3:1 (circa 73,191m^2 GFA).

1.2 Indicative Reference Scheme Overview

The reference scheme supporting the Planning Proposal and site specific DCP can be described as follows:

- Demolition of the existing building, including removal of the Wilson Car Park (comprises 799 spaces, including 769 spaces being of public use).
- Construction of the following:
    - New 42-storey office tower comprising a total FSR of 20.3:1, up to a height of RL 189.80 (approximately 170m above Kent Street and 180m above Sussex Street).
    - New premium-grade commercial floorspace with an approximate GFA of circa 70,872m^2.
    - New through-site link connecting Kent and Sussex Streets, including public art activation.
    - New ground floor activation opportunities, including an approximate retail GFA of circa 640m^2 and 609m^2 of wellness/ fitness GFA.
    - 2 levels of basement, comprising:
        - Basement Level 1 facilitating 72 car parking spaces; and
        - Sussex Street ground level shared loading dock facility including SRV and MRV short term stay bays to service retail tenancies within buildings along Kent Street (located between Market Street and King Street).
    - New end of trip facilities below the Kent Street ground level.

1.3 Purpose of this Report

This report sets out an assessment of the anticipated transport implications of the 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
- shared loading dock strategy
- trip generating characteristics of the proposal
- suitability of the proposed access arrangements for the site
- transport impact of the proposal on the surrounding road network.

1.4 References

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

- several inspections of the site and its surrounds

- Sydney Development Control Plan (DCP) 2012
- Sydney Local Environmental Plan (LEP) 2012
- Australian Standard/ New Zealand Standard, Parking Facilities, Parts 1, 2 and 6
- plans provided by fjmt Architects, December 2023
- other documents and data as referenced in this report.

2 Strategic Context

2.1 Overview

The following key strategies and plans have influenced development opportunities in the broader area, and together will have real effects on future travel demand and mode splits for workers, and visitors alike.

The introduction of Sydney Metro, Australia's biggest public transport project that will operate as a standalone metro covering more than 66 kilometres with 31 new metro stations in its initial stages, will generate real growth opportunities in the area. Sydney Metro City and Southwest is under construction linking Chatswood and Bankstown via new underground station precincts within the CBD and stretching through the existing line to Bankstown. With services due to commence in 2024, the Sydney Metro will improve travel time, capacity and reliability to key employment areas of which Sydney CBD is key.

2.2 Relevant Strategies and Plans

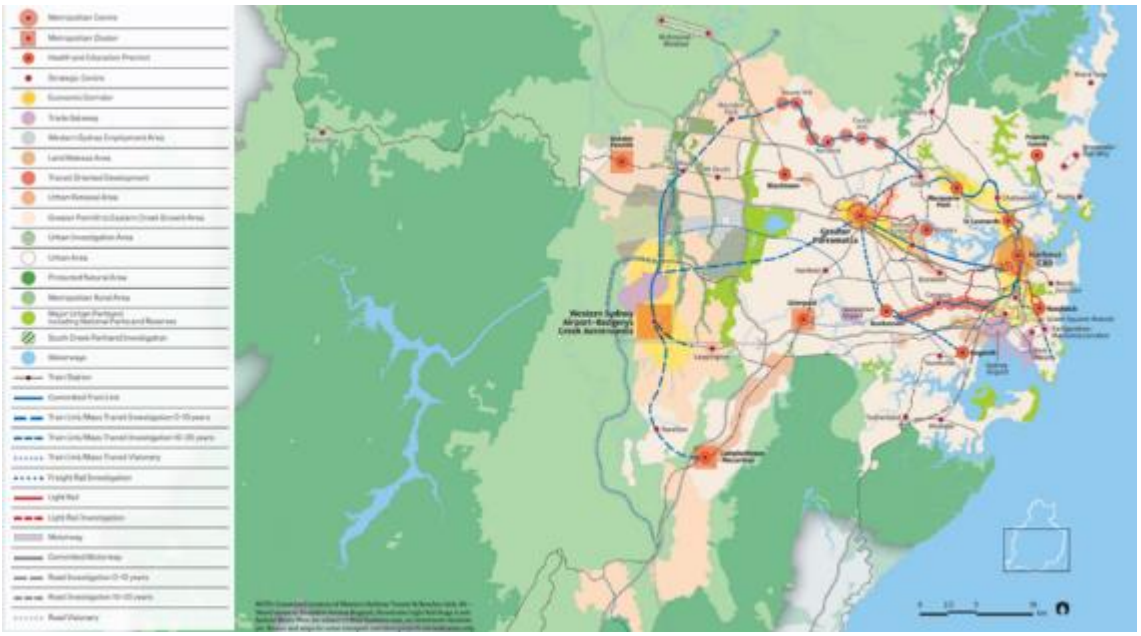
2.2.1 The Greater Sydney Region Plan 2018

The Greater Sydney Commission (GSC) is an independent organisation that leads metropolitan planning for Greater Sydney. It has prepared the Greater Sydney Region Plan which outlines how Greater Sydney will manage growth and guide infrastructure delivery. The plan has been prepared in conjunction with the NSW Government's Future Transport 2056 Strategy and informs Infrastructure NSW's State Infrastructure Strategy.

The GSC's vision is to create three connected cities; a Western Parkland City west of the M7, a Central River City with Greater Parramatta at its heart and an Eastern Harbour City. By integrating land use, transport links and infrastructure across the three cities, more people will have access within 30-minutes to jobs, schools, hospitals and services.

The Greater Sydney Region Plan is a 20-year plan with a 40-year vision and has four key focuses; infrastructure and collaboration, liveability, productivity and sustainability. The Greater Sydney Structure Plan 2056 is shown indicatively in Figure 2.

Figure 2: Greater Sydney Structure Plan 2056 – The Three Cities



Source: Greater Sydney Commission

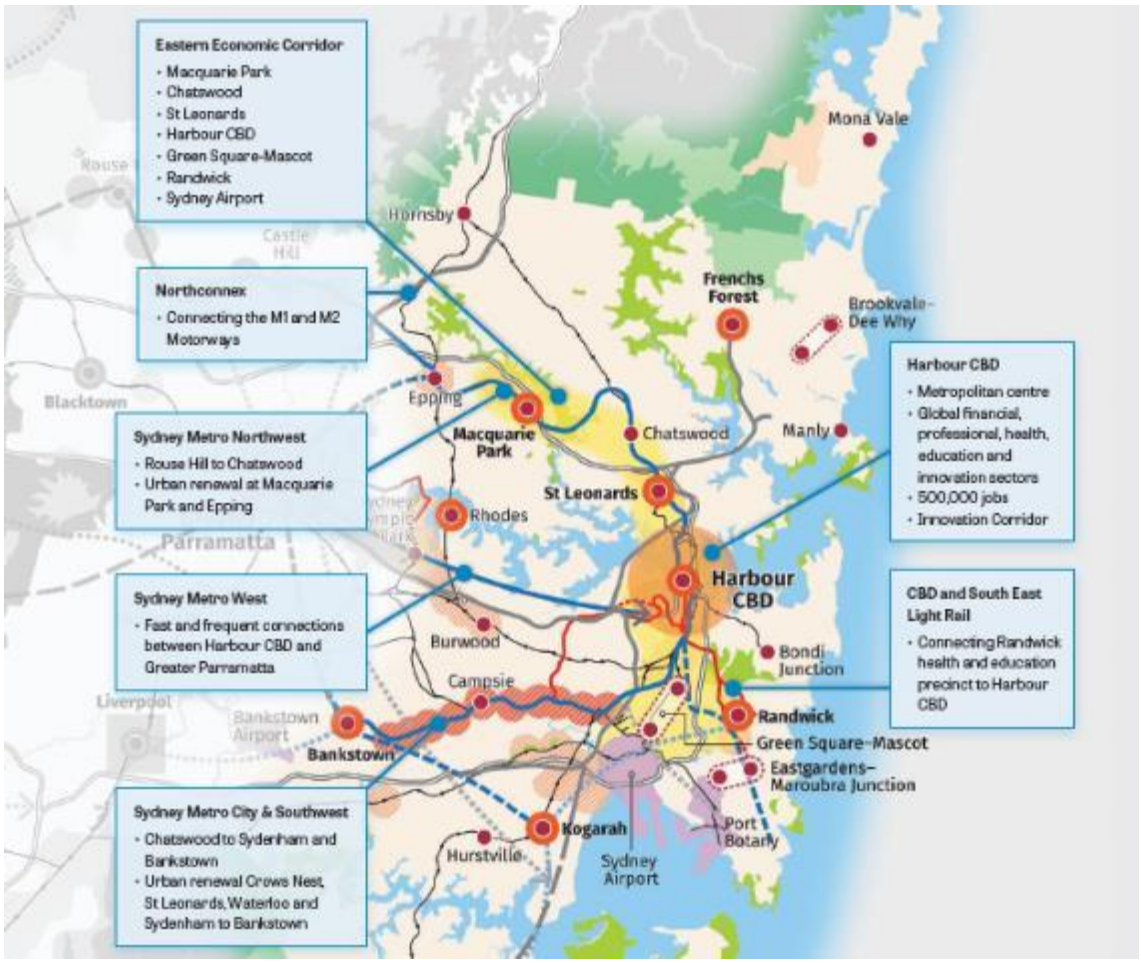
2.2.2 Eastern City District Plan

The Eastern City District is at the centre of the Eastern Harbour City. The metropolitan centre of the Eastern Harbour City, the Harbour CBD, is Australia's global gateway and financial capital, promoting growth to the District. The Eastern City District will grow substantially, due to its well-established, well-serviced and highly accessible Harbour CBD, generating half a million jobs and is the largest office market in the region. The new metro stations will improve access in the Harbour CBD.

The Plan puts emphasis on providing urban renewal around new and existing infrastructure. The focus of growth will be on well-connected walkable places that build on local strengths and deliver quality places. An integrated approach to the green infrastructure of the District – Waterways, bushland, urban tree canopy and open spaces – will improve sustainability. The Greater Sydney Green Grid will provide cool, green links to support walking, cycling and community access to open space.

The Eastern City District is shown in Figure 3.

Figure 3: The Eastern City District



Source: Greater Sydney Commission

2.2.3 Future Transport 2056

Future Transport 2056 provides a 40-year strategy for how transport will be planned, amended and forecasted within NSW, both regional and metropolitan, for the expected 12 million residents within the state. Future Transport 2056 follows from the 2012 Long Term Transport Master Plan which listed over 700 transport projects, the majority of which are completed or in progress. It also ties in with Greater Sydney Region Plan and the subsequent district plans to support the three cities metropolis vision.

Future Transport 2056 is supported by two key documents, Greater Sydney Services and Infrastructure Plan and Regional NSW Services and Infrastructure Plan, which provide guidance and planning for these areas.

From a metropolitan view, Future Transport 2056 and associated plans include the 30-minute city where jobs and services are within 30 minutes of residents with Greater Sydney. Strategic transport corridors to move people and goods are outlined between metropolitan and strategic centres, clusters and surrounds. The Movement and Place framework is also emphasised to support liveability, productivity and sustainability.

2.2.4 Central Sydney Planning Strategy 2016-2036

The Central Sydney Planning Strategy is a 20-year growth strategy that delivers on the City of Sydney's Sustainable Sydney 2030 program. The Strategy identifies 10 key moves to meet the demands of growing numbers of workers, residents and visitors and their changing needs, using a place-led and people-focused approach. One of the key moves is to provide employment growth in well located new tower clusters where taller buildings with higher floor space ratios are permitted for income-earning uses. To balance this, another key move is to enhance public parks, spaces and views within Central Sydney with adequate sunlight to attract visitors, high-value jobs, tourists and residents.

The Strategy acknowledges the development opportunity of space above and around Central Station, and it identifies a public domain spine through Central Sydney along George Street with new public squares at Circular Quay, Town Hall and Railway Square.

Furthermore, the Strategy seeks to rationalise bus routes within Central Sydney, including the removal of bus routes from Lee Street and consolidating them along Broadway-George Street to the south to facilitate future expansion of Railway Square.

The Strategy proposes to reduce car movements through Central Sydney, identifying that the majority of commuter trips originate from Inner Suburbs where public transport is most available. It seeks to provide more space on Central Sydney streets for pedestrians and public transport as they accommodate most internal and inbound journeys compared to cars.

2.2.5 City of Sydney Cycling Strategy and Action Plan 2018-2030

City of Sydney has issued a cycling strategy plan to meet the cycling needs of the Sydney CBD and surrounding suburbs, identifying active transport as the most accessible, equitable, sustainable, and reliable form of transport. The plan identifies an ambitious mode share target of 10 per cent within the city.

The plan builds on the 2007 to 2017 cycling strategy which preceded it. In retrospect, the plan has encouraged changing attitudes to cycling from government, developers and commuters, including TfNSW's partial subsidy of cycling projects since 2015, real estate evaluations placing value on end-of-trip facilities and the increased cycling mode share observed in school students since 2007.

The plan, in summary, looks to:

- continue connecting the network, including completing regional routes, adding wayfinding and improving intersection design
- support people to ride, ensuring programs are evidence-based and responsive to the needs of a diverse community
- support businesses, including a bicycle-friendly workplace accreditation scheme and to
- lead by example.

3 Site and Transport Context

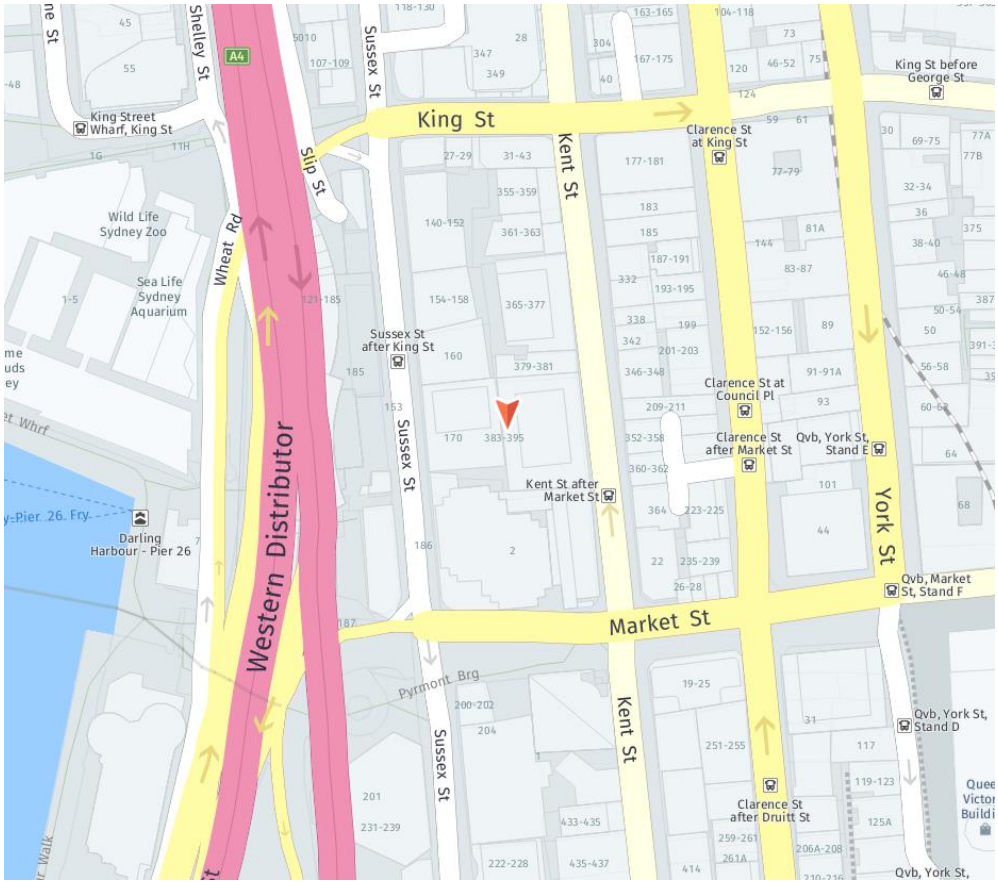
3.1 Site Context

3.1.1 Location

The site at 383 Kent Street, Sydney, is within the City of Sydney Local Government Area (LGA) and Sydney CBD. It is legally described as Lot 1 in Deposited Plan 778342 and has a frontage of 40 metres to Sussex Street to the west and 50 metres to Kent Street to the east. The land is currently zoned as SP5 - Metropolitan Centre.

The site currently comprises a multi-level commercial building with ground floor retail tenancies and a public car park operated by Wilson Parking with capacity for 799 cars (including 769 spaces being for public use). It covers an area of 3,606 square metres, with a 10 metre (3 level) height difference between the Kent Street upper ground and Sussex Street lower ground frontages. The location of the site and the surrounding environs are shown in Figure 4 and Figure 5.

Figure 4: Site location and surrounding environs



Source: Nearmap 2023

Figure 5: Aerial view

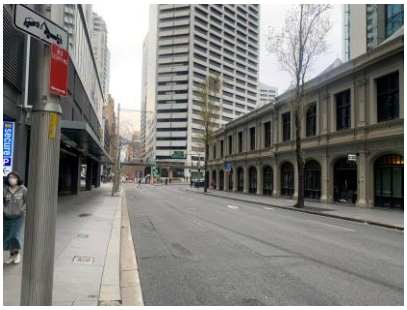
Base Image Source: Nearmap 2023

3.1.2 Surrounding Road Network

The key roads near the site include Kent Street, Sussex Street, King Street and Market Street. A summary of the characteristics of these key roads is provided in Table 1.

Table 1: Surrounding road network

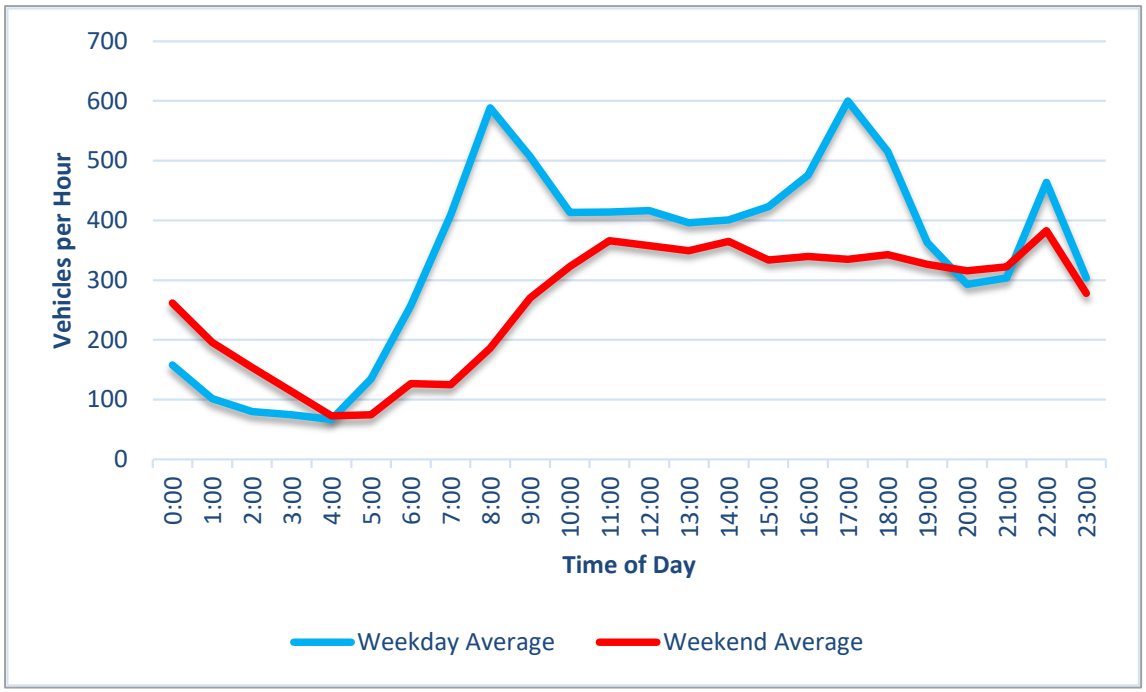
Road	Classification	Description	Photo
Kent Street	Local Road	• Functions as a local road providing connection to Sydney wharfs to the north and Liverpool Street to the south. • One-way northbound road in the area with two travel lanes plus turning lane at intersections. • Separated two-way cycleway on the eastern side. • Mid-block kerbside parking permitted on the western side, subject to time restrictions. • Approximate 9-metre-wide carriageway. • Posted high pedestrian activity 40km/h speed area.	 Image source: Google Maps

Road	Classification	Description	Photo
Sussex Street	Local Road	• Functions as a local road providing connection to Hickson Road to the north and Hay Street to the south. • One-way southbound road through the area with three to four travel lanes and one kerbside parking lane on the western side. • Kerbside parking permitted mid-block on the western side, subject to time restrictions. • Approximate 11-12-metre-wide carriageway. • Posted high pedestrian activity 40km/h speed area.	
King Street	Regional Road	• Functions as a collector road providing connection to A4 Western Distributor to the west and Macquarie Street to the east. • One-way eastbound road with three travel lanes. • Separated two-way cycleway on the northern side. • Approximate 9-metre-wide carriageway. • Posted high pedestrian activity 40km/h speed area.	 Image source: Google Maps
Market Street	Local Road	• Functions as a collector road providing connection to A4 Western Distributor to the west and Elizabeth Street to the East. • One-way westbound road east of Kent Street and two-way west of Kent Street. Bus only lane eastbound. • Approximate 9-metre-wide carriageway. • Mostly a posted high pedestrian activity 40km/h speed area.	 Image source: Google Maps

3.1.3 Traffic Volumes

Tube counts were completed on Kent Street over a 7-day period commencing 7 September 2022, with the weekday (blue) and weekend (red) daily profiles illustrated in Figure 6. The results show distinct peak hours commencing at 8:00am on weekday mornings and 5:00pm on weekday afternoons with around 600 vehicles per hour. During the interpeak period, the hourly volumes were around 400 to 500 vehicles. There was another identified peak at 10:00pm with around 460 vehicles per hour, suggesting either an event or construction detour was occurring on some of the days. The tube count data is included in Appendix A.

Figure 6: Kent Street weekday and weekend traffic volumes



3.1.4 Car Parking

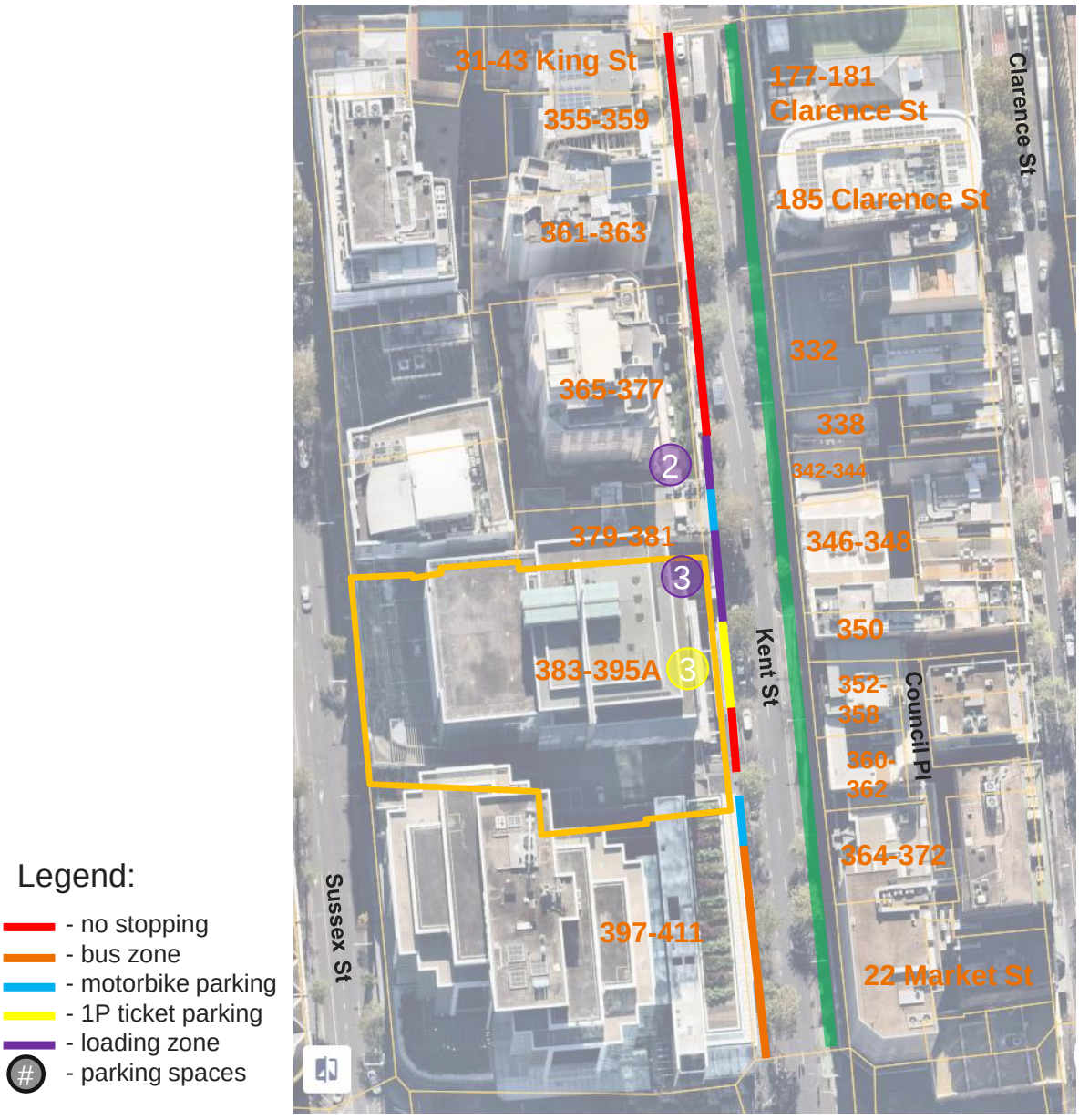
As discussed, the site currently includes a 799-space car park operated by Wilson Parking (with 769 spaces being of public use) and is open all day, seven days a week. Limited on-street parking exists near the site along Kent Street.

The existing on-street parking restrictions along Kent Street (between King Street and Market Street) are shown in Figure 7, with the west side of Kent Street including the following:

- two loading zones with capacity for up to five vehicles
- one-hour parking zone with capacity for three vehicles
- two separate motorcycle parking areas
- bus zone.

The loading zones are in place 6:00am to 6:00pm weekdays and 7:00am to 10:00am Saturdays, with maximum 30-minute duration of stay tickets to be displayed to encourage turnover. These spaces become four-hour ticket spaces on weekday evenings and across most the weekend. The one-hour ticketed spaces have applicable charges in place (with CBD permit holders excepted). There is no on-street parking permitted on the east side of Kent Street, with the Kent Street separated cycleway in place.

Figure 7: Kent Street parking restrictions



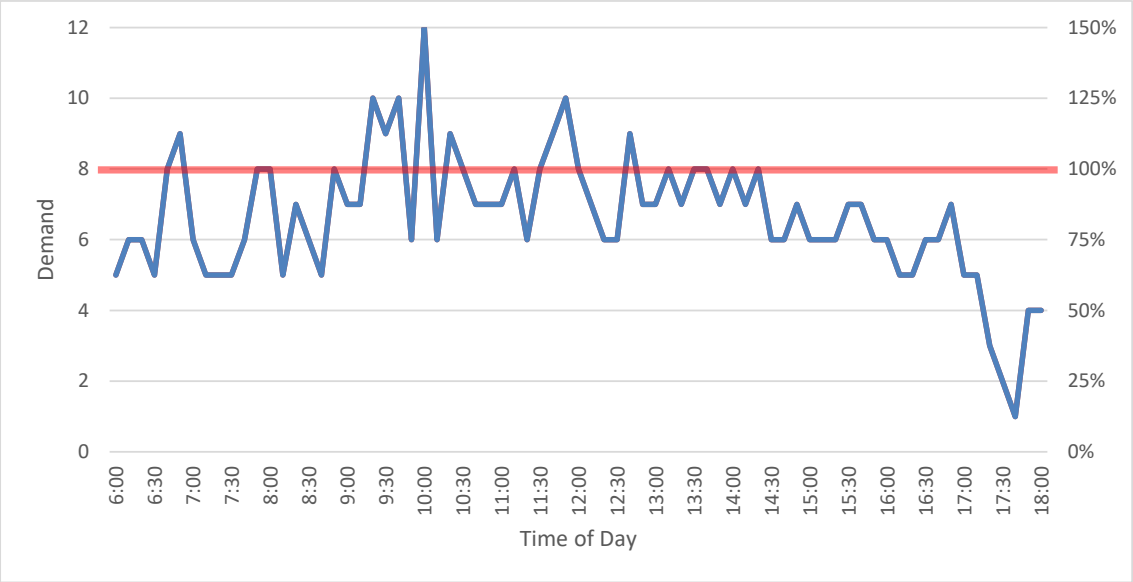
Parking occupancy and duration of stay surveys (shown in Appendix B) were completed on Thursday 8 September 2022 between 6:00am and 6:00pm to understand existing utilisation of the available on-street parking in the block between Market Street and King Street.

There were 136 vehicles recorded using the on-street parking and loading spaces over the duration of the survey. 76 of these vehicles (or 56 per cent) were either a van, ute or rigid truck, with only 43 actually parking in the loading zones. This indicates that loading demand likely exceeds capacity, with a shared loading dock scheme presenting the opportunity to remove a noticeable quantum of service vehicles from Kent Street on a typical weekday.

The following assessment considers the on-street parking demand profiles on the west side of Kent Street and combines both ticketed parking spaces and loading zones on account of demand exceeding the available loading zone supply.

As illustrated in Figure 8, the available eight on-street loading and parking spaces are generally in high demand across the day. There are frequent periods where more than eight vehicles (and up to 12 vehicles at 10:00am) are parked, with the overflow of vehicles observed to park in the bus zone or no stopping areas. Observations also confirm that about 80 per cent of drivers/ passengers visited properties on the west side of Kent Street, with the remainder crossing Kent Street to access properties on the east side.

Figure 8: Kent Street parking and loading zone demand



Analysis of the vehicles that used the on-street parking shown in Figure 9 suggests that 80 per cent parked for less than 30 minutes, nine per cent parked for 30 to 60 minutes and 11 per cent parked for more than 60 minutes. This confirms general high demand for short-stay parking and loading (and broad compliance with the loading zone 30-minute ticketed period), with some minor longer duration of stay demand.

Figure 9: Kent Street parking and loading zone duration of stay

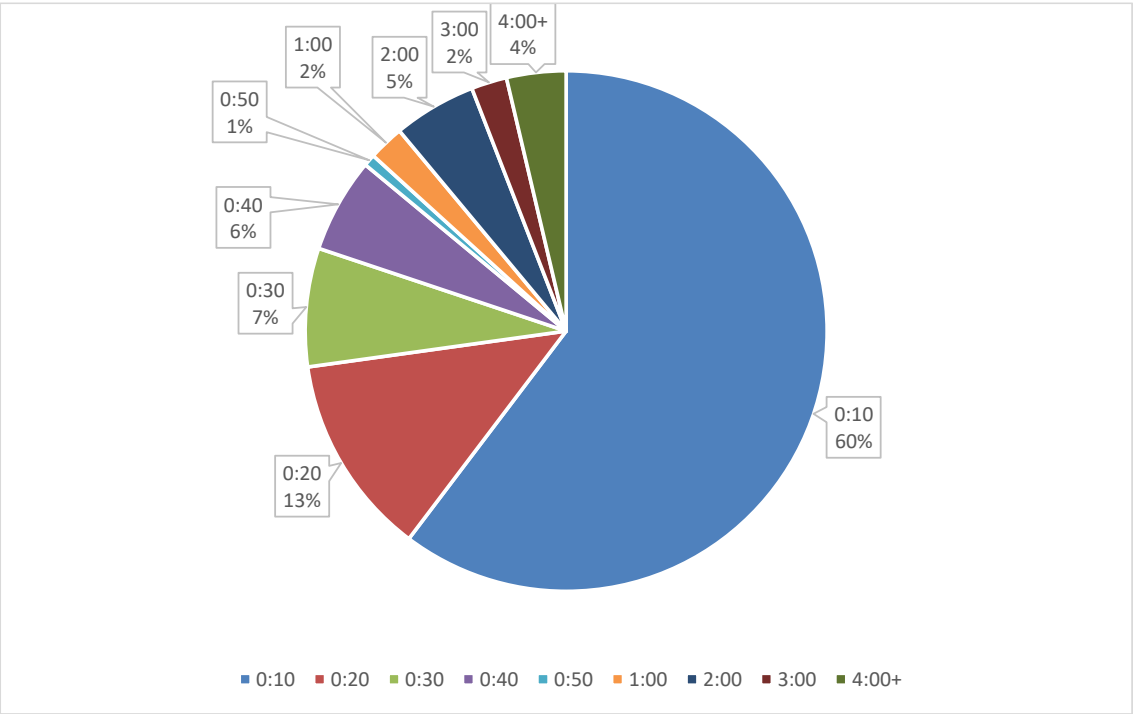
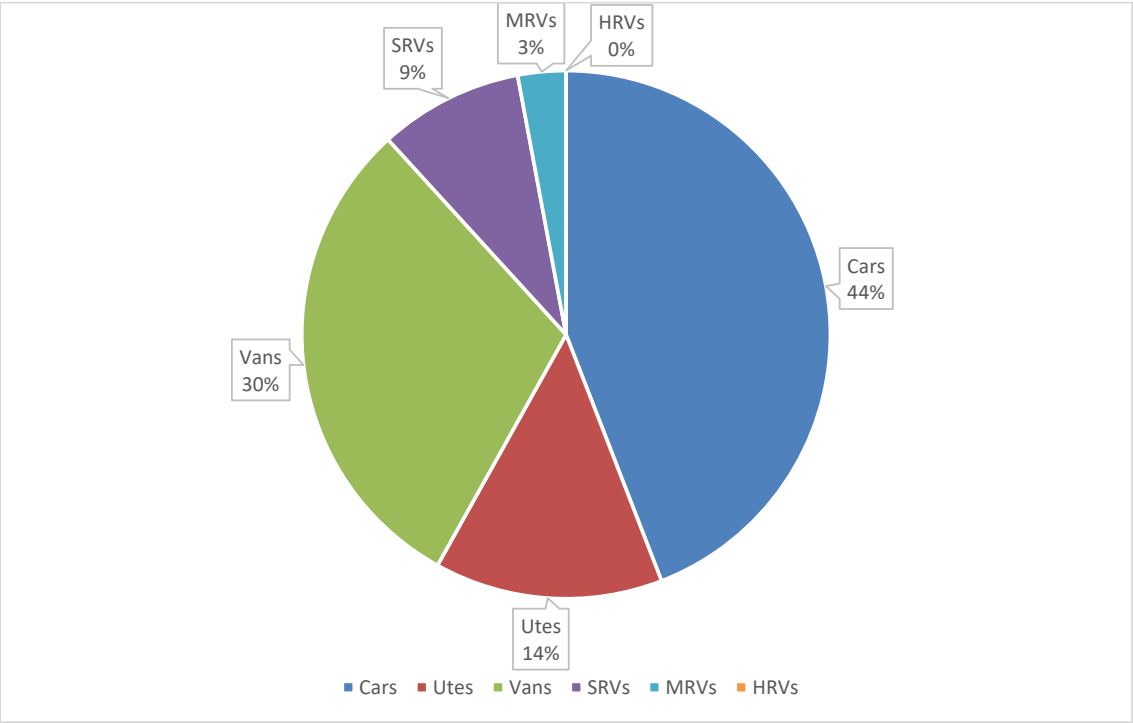


Figure 10 indicates that 44 per cent of all vehicles that park on the west side of Kent Street are cars. Vans and utes also accounted for 44 per cent of all vehicles, with small rigid vehicles and medium rigid vehicles accounting for nine per cent and three per cent, respectively.

Figure 10: Kent Street parking and loading zone demand by vehicle type



In summary, the parking demand survey indicates that vans, utes and rigid trucks account for 56 per cent of all on-street demand in the Kent Street Precinct (or 76 vehicles across the survey period).

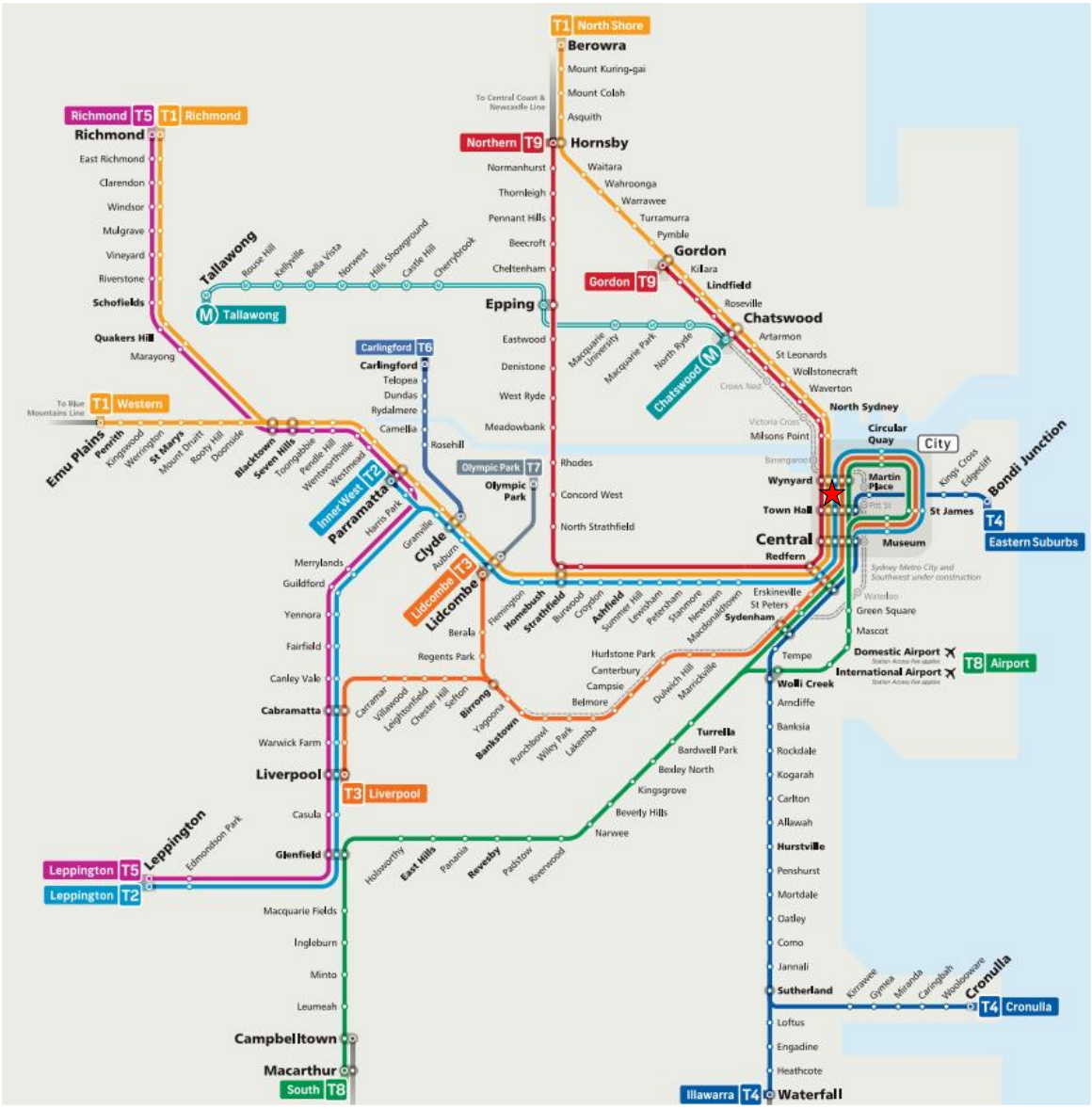
3.2 Public Transport

The site is well serviced by high frequency and highly accessible public transport with a bus stop right outside the site on Kent Street, and multiple train stations and bus stops in close proximity. The following sections consider the available public transport, both existing and future, located near the site.

3.2.1 Heavy Rail

Wynyard train station is an 800m walk to the north and Town Hall train station a 500m walk to the south of the site. Both stations are major stations within the Sydney rail network. Town Hall is one station north of Central Railway Station which services all train lines within the Sydney Trains and NSW TrainLink networks and is a major terminus for suburban as well as interstate rail services. The rail network context is shown in Figure 11.

Figure 11: Surrounding rail network



Source: Transport for NSW, accessed March 2023

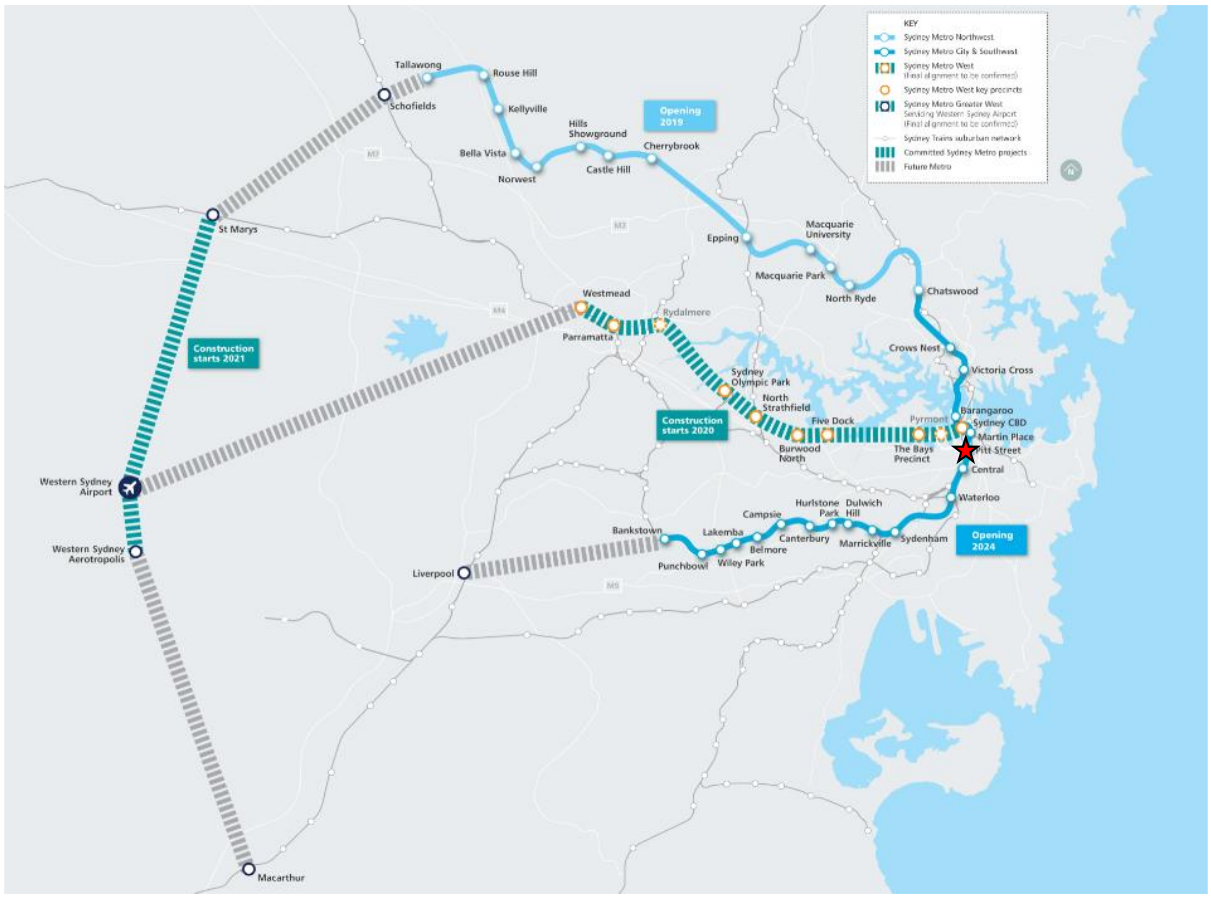
3.2.2 Sydney Metro

The NSW Government is delivering a new Sydney Metro City and Southwest line from Chatswood to Bankstown travelling under Sydney Harbour and through Sydney CBD. The Chatswood to Sydenham section will be operational in 2024 with seven new metro stations, including at Central Railway Station. The Sydenham to Bankstown section is currently delayed by 12 months with eleven upgraded stations. Trains will run at least every four minutes in the peaks, equating to 15 trains per hour.

The new metro station at Pitt Street will significantly increase capacity on the public transport network to/ from the area, further driving development and expansion in the area.

The metro network will be separated from the existing Sydney Trains network that continues beyond Bankstown. An overview of the future Sydney Metro network is shown in Figure 12

Figure 12: Sydney Metro route alignments



Source: Sydney Metro, accessed March 2023

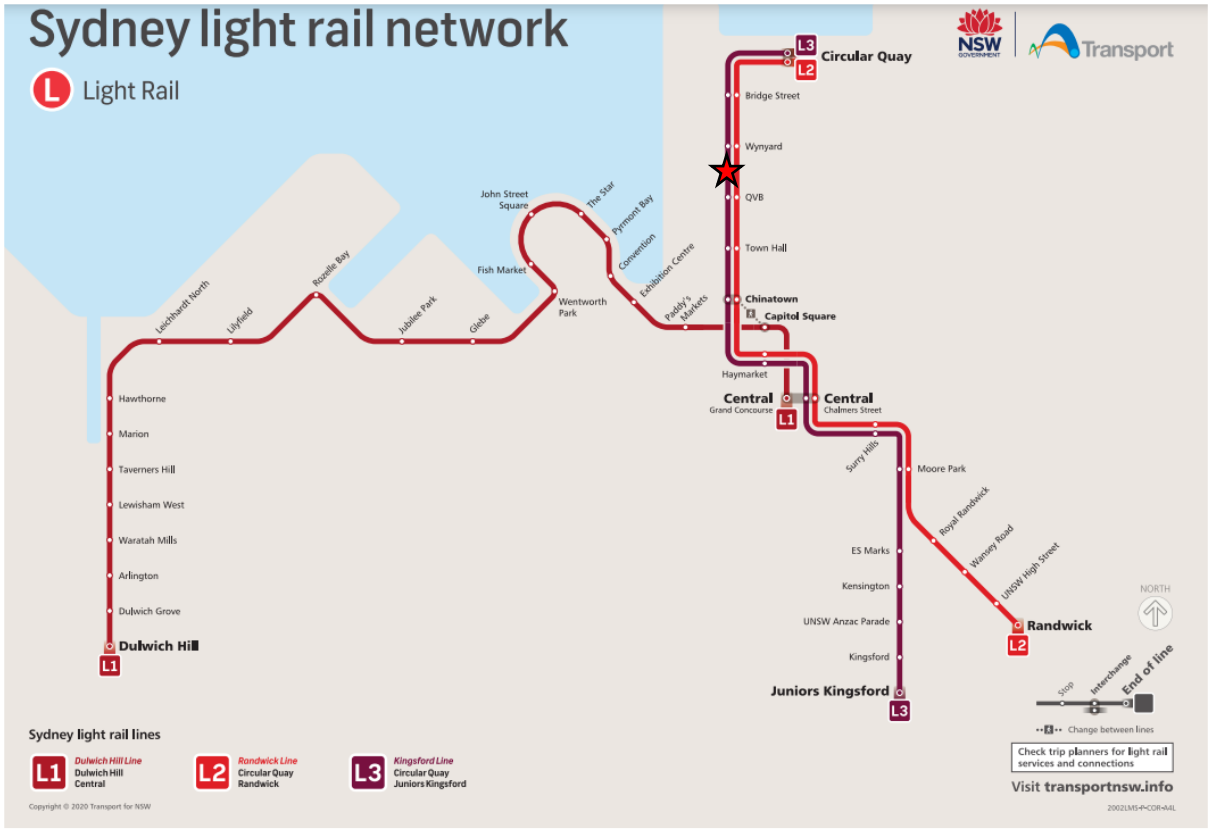
The NSW Government also announced planning for Sydney Metro West with construction in full progress. This further expansion of Sydney's Metro network will significantly increase passenger travel by rail right across Sydney, aggressively reducing travel times and altering the perception of public transport generally.

The intended future Sydney Metro network will improve accessibility and travel times for workers, particularly to/ from Sydney CBD and Parramatta while creating opportunities for real change in travel behaviour for all users.

3.2.3 Sydney Light Rail

The site is also within an easy walk of existing light rail stops at Town Hall and Wynyard. It has a frequency of 7.5 minutes during the day and 15 minutes at night. The L2 Randwick and L3 Kingsford lines connect Central and Sydney CBD with Randwick and Kingsford via Surry Hills and Moore Park with current frequency of 10 minutes during the day and 15 minutes at night. Running from Central, the L1 Dulwich Hill line connects the inner west with inner-city areas such as Darling Harbour and Ultimo. The existing light rail network is shown in Figure 13.

Figure 13: Sydney Light Rail network



Source: https://transportnsw.info/sydney-lightrail-network-map accessed March 2023

3.2.4 Buses

Being in the CBD, the site is well serviced by high frequency and highly accessible bus services, as summarised in Table 2.

Table 2: Surrounding Bus Network

Location of stop	Route number	Route description	Distance to nearest stop	Frequency on/ off-peak
Kent Street after Market Street	311, 324, 324X, 325, 620X, 642X, 652X	Multiple destinations in the city and surround suburbs	20m	1 mins / 20 mins
Sussex Street after King Street	437, 441, 442		290m	4 mins / 20 mins

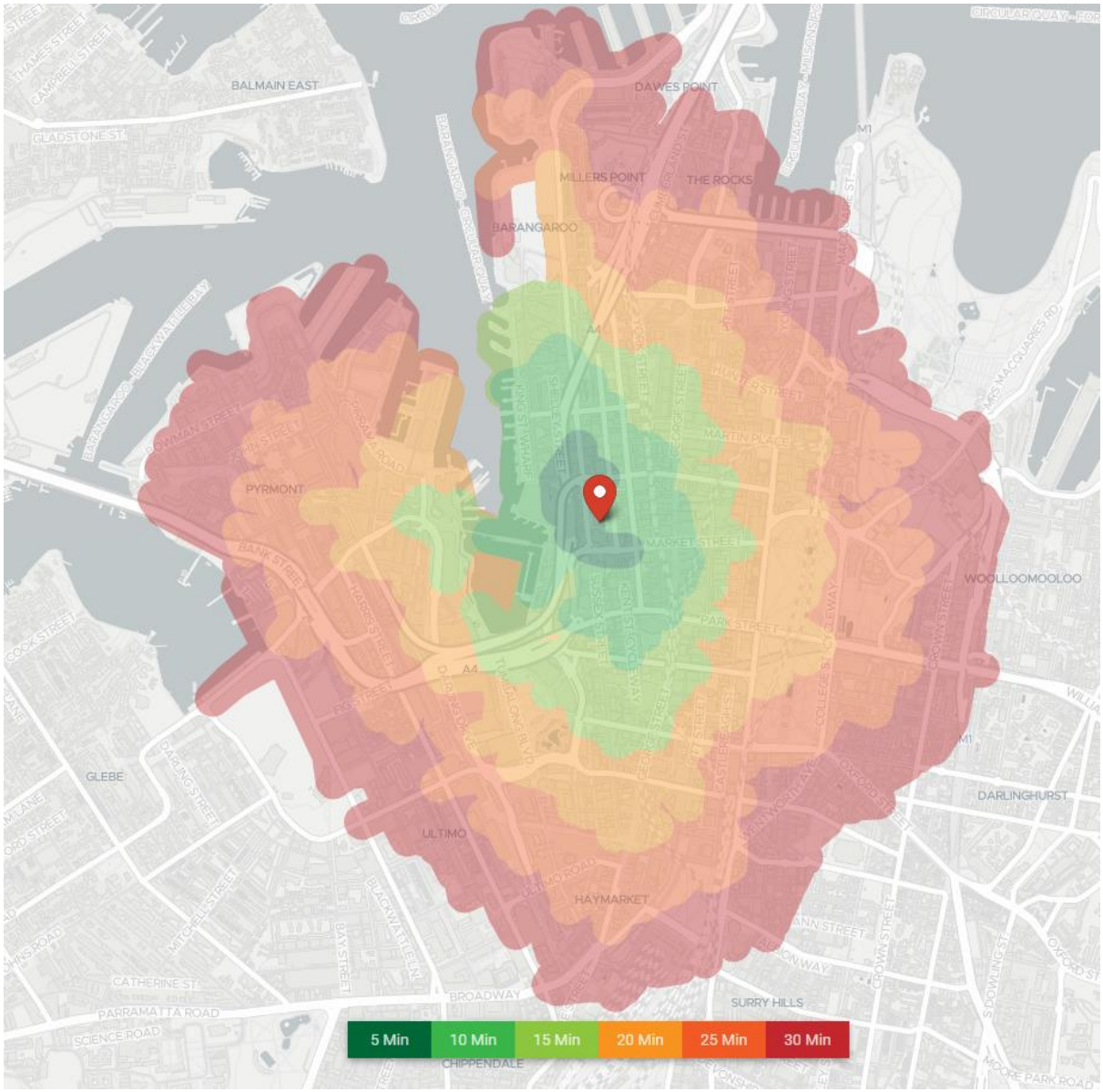
3.3 Active Transport

3.3.1 Pedestrian Accessibility

Walking is the primary local area travel mode with the city naturally providing a high level of pedestrian amenity having played the key role in Sydney's transport network for so long. Generous footpaths are common throughout, with safe crossing facilities at multiple locations including all nearby signalised intersections.

Figure 14 illustrates the walking catchment for the site and shows high level of connectivity throughout.

Figure 14: Existing walking catchment

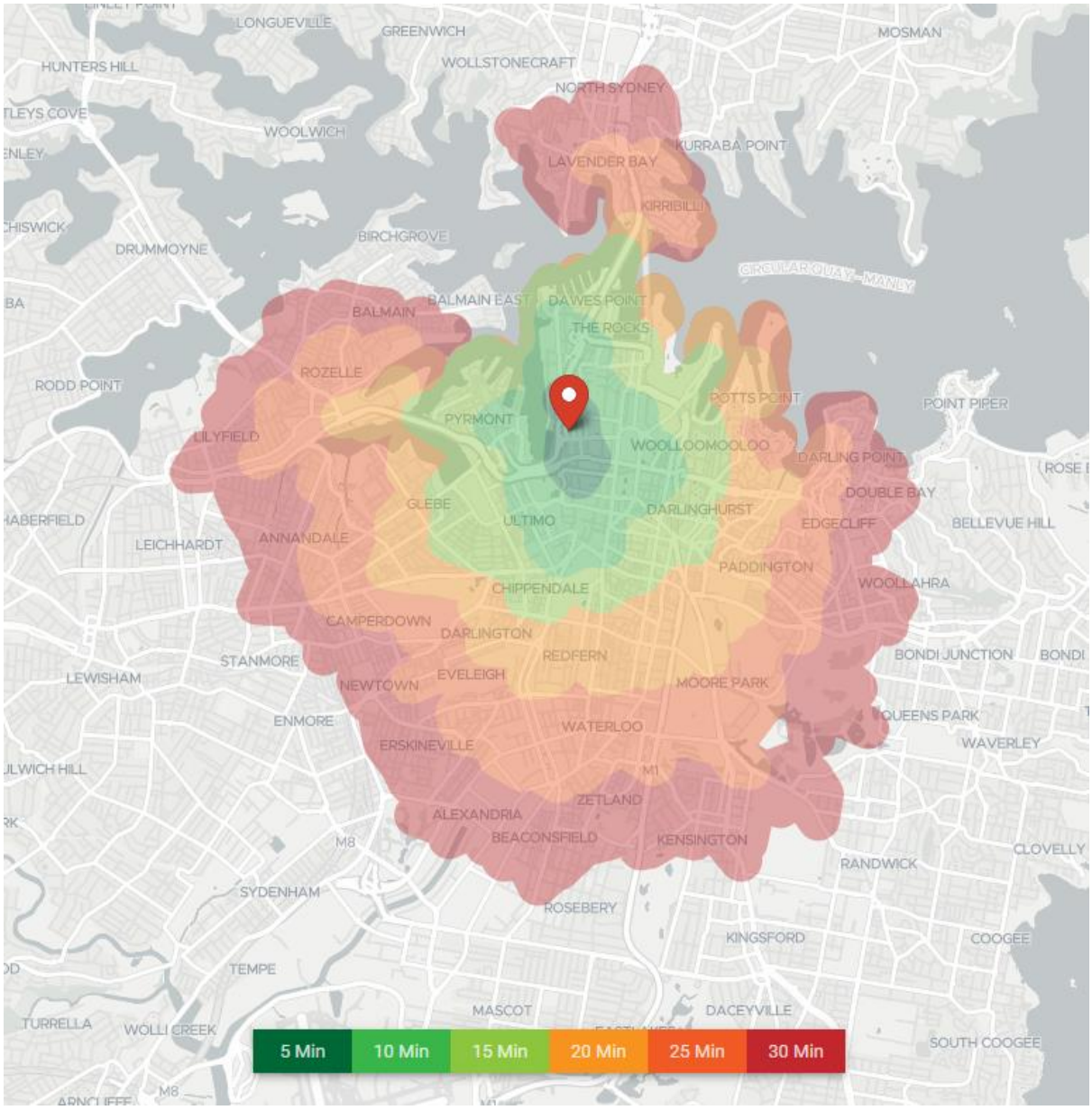


Source: app.targomo.com/

3.3.2 Cyclist Accessibility

Figure 15 highlights the catchment area for cyclists travelling to/ from the site and broader area. The streets near the site include a combination of shared zones and low traffic street with/ without bike lanes that are generally safe cycling routes as identified in Figure 16.

Figure 15: Existing Cycling Catchment



Source: app.targomo.com/

Figure 16: Cycling Map

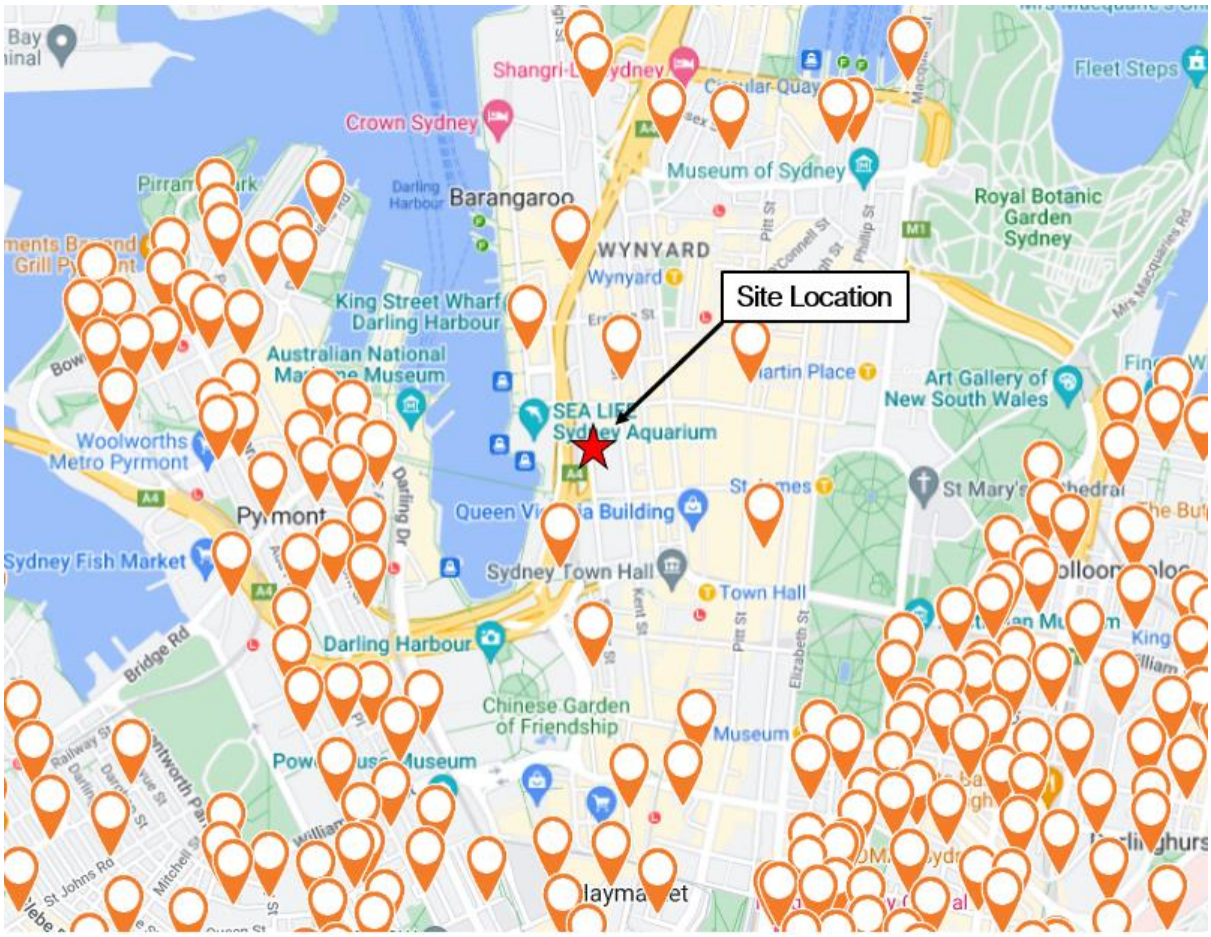
Base image source: Sydney Cycling Map May 2021, accessed March 2023

3.4 Car Share Initiatives

Car share schemes have become increasingly common throughout Sydney and are now recognised as a viable transport option for a range of trip purposes throughout Sydney, particularly shorter trips. Such facilities are likely to be of benefit to future commercial tenants at the site.

GoGet car share for example has a significant number of pods close to the site, as shown Figure 17, with opportunities to provide further facilities as part of the precinct redevelopment to further limit travel by private car. Other providers like Flexicar and Car Next Door also offer services in the area.

Figure 17: GoGet Car Share Pods



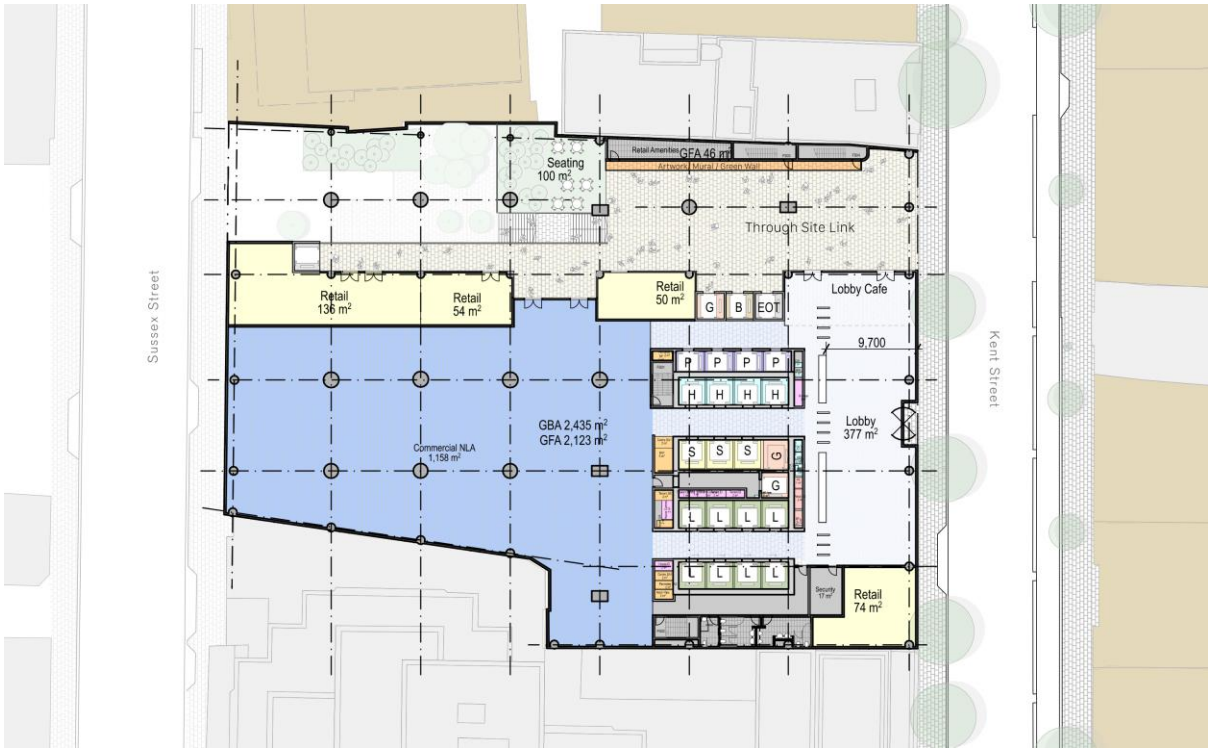
Source: GoGet website, accessed March 2023

4 Planning Proposal

The reference scheme supporting the Planning Proposal and site specific DCP can be described as having some 70,872 square metres of commercial GFA within a 42-storey office tower, 640 square metres GFA of ground floor retail space, and 609 square metres of wellness/ fitness spaces. The end of trip facilities covers 1,070 square metres.

The indicative Kent Street ground level plan is shown in Figure 18 and shows the proposed pedestrian through site link between Kent Street and Sussex Street, with retail frontage. The design works hard to incorporate convenient and quality pedestrian amenity and public domain through and around the site.

Figure 18: Kent Street ground level plan with through-site link



Source: 383 Kent St, Sydney, fjmt Architects, 1 December 2023

A single vehicle access is proposed on Sussex Street providing access to a shared loading dock, basement car park and end-of-trip facilities. The loading dock has been designed to accommodate a range of vehicles up to 8.8 metre medium rigid vehicles (MRV). Two MRV bays, five small rigid vehicle (SRV) bays and 14 light vehicle bays (for cars, vans and utes etc.) have been accommodated for the site. In additional, seven loading bays, including one bay for MRV, two bays for SRVs and four bays for light vehicles (those highlighted in yellow in Figure 19) are proposed to be shared with surrounding constrained developments that do not have adequate loading facilities. The loading dock layout is illustrated in Figure 19. A 72-space basement car park is located toward the eastern side of the site and part of the lower basement level. Motorbike parking is also provided, as shown in Figure 20.

Provision of shared dock arrangements has been a key consideration through site planning and stakeholder engagement. The shared loading dock strategy aims to deliver loading facilities to the

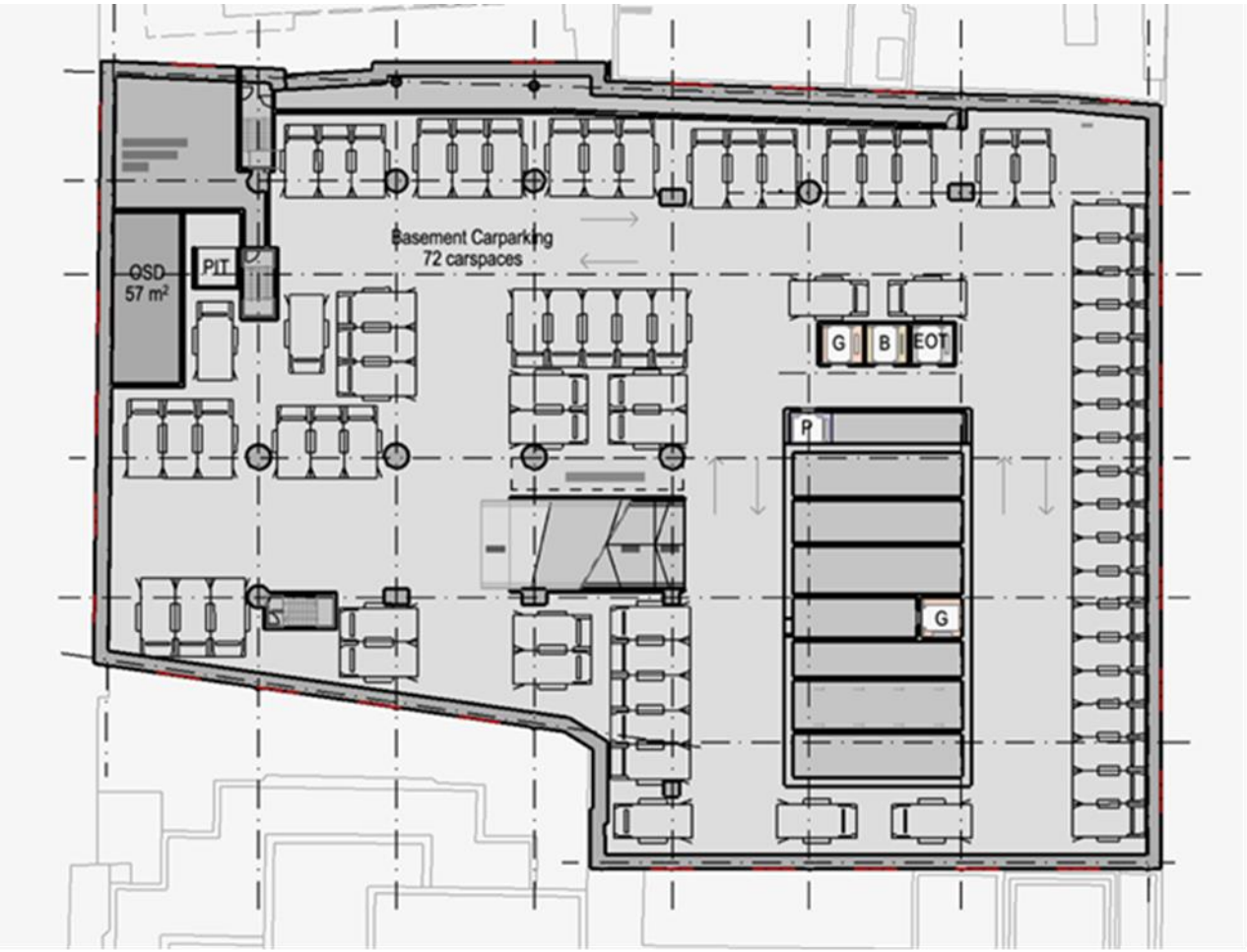
wider precinct, namely to those properties that are heritage constrained and do not have access to formal loading dock facilities.

The basement is well laid out and appropriate having regard for the size and type of vehicles and expected time of day demands. There is appropriate separation between service vehicles and light vehicles with the single driveway crossover ensuring minimum impact to the street frontage and façade. Larger service vehicles occupy most of the access driveway on entry and exit and is typical in constrained CBD environments and can be managed given the expected low frequency of large service vehicles. The indicative basement car park layout meets or exceeds Australian Standard requirements.

Figure 19: Sussex Street loading dock

Source: 383 Kent St, Sydney, fjmt Architects, 1 December 2023

Figure 20: Basement 1 parking



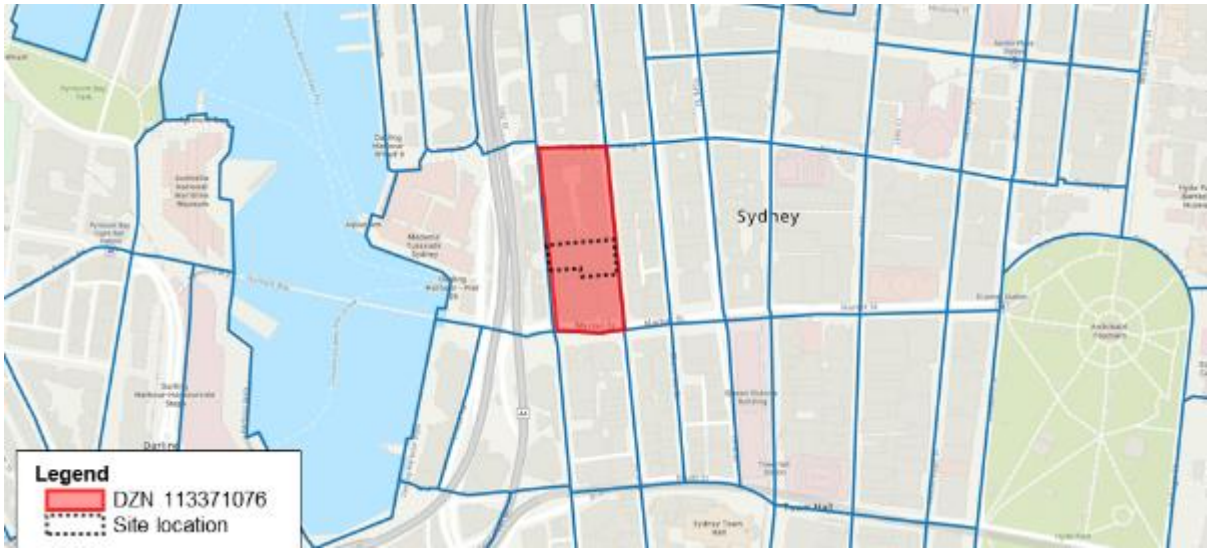
Source: 383 Kent St, Sydney, fjmt Architects, 13 December 2023

5 Transport Appraisal

5.1 Anticipated Travel Behaviour

To understand travel behaviour of existing CBD workers, Journey to Work (JTW) 2016 data from the Australian Bureau of Statistics (ABS) for the site and surrounds has been analysed. The site lies within Destination Zone (DZN) 113371076, which is shown graphically in Figure 21. Given the prime location of the site to high frequency public transport services (more recent and future upcoming services since 2016) and the low parking provisions, mode share targets have been developed for travel behaviour associated with the future population of the proposal.

Figure 21: DZN 113371076



Base image source: ABS

Table 3 shows worker mode share for the area that covers the site.

Table 3: 2016 travel mode share analysis

Mode of Travel	2016 ABS Mode Share	Targets
Train	55%	60%
Bus	22%	22%
Ferry	1%	1%
Light Rail	1%	2%
Vehicle (as driver)	11%	3%
Vehicle (as passenger)	2%	2%
Motorcycle	1%	1%
Bicycle	1%	3%
Walking	5%	5%
Other	1%	1%
Total	100%	100%

The 2016 ABS data suggests that only 13 per cent of workers travelled to the zone by car (as a driver or passenger). Public transport accounted for 79 per cent of all trips and active transport (walking and cycling) accounted for six per cent.

When factoring in the more recent and upcoming public transport availabilities and lower parking provisions proposed for the site, a target for at least 60 per cent of worker trips by train is realistic and achievable. Trips by other public and active transport modes, could also realistically increase (or as a minimum, remain constant). Trips by private car would similarly be expected to reduce on account of less immediate parking and improved train (metro) services.

5.2 Car and Motorcycle Parking Requirements

Parking rates relevant to the proposed land uses are detailed in City of Sydney LEP 2012 and DCP 2012. The rates outline the maximum allowable number of car parking spaces within the development, rounded to the nearest whole number. Minimum rates are not provided in either the City of Sydney LEP 2012 or DCP 2012.

The site is within the “Category A” (Land use and transport integration) and “Category D” (Public transport accessibility level) areas which has the lowest maximum allowances within the City of Sydney LGA. The maximum allowable car parking provisions for the proposed development are summarised in Table 4.

Table 4: Car parking provision

Land Use	Area	Rate	Max. Requirement
Office	70,872m^2	See below [1]	70
Retail	640m^2	See below [2]	1
Wellness/ Fitness	609m^2	See below [3]	1
Total			**72**
Accessible Parking		1 per 20 spaces	4
Motorcycle Parking		1 per 12 spaces	6
Car Share		1 per 30 spaces	3

[1] Max office parking = (Office GFA x Site Area)/ (50 x Total GFA of Site) = (70,872*3,606)/ (50*73,191) = 69.83 (rounded to 70)
[2] Max retail parking = (Retail GFA x Site Area)/ (50 x Total GFA of Site) = (640*3,606)/ (50*73,191) = 0.63 (rounded to 1)
[3] No applicable rate is detailed in the LEP for wellness/ fitness uses, as such the commercial (office) rate has been adopted. Max wellness parking = (Wellness GFA x Site Area)/ (50 x Total GFA of Site) = (609*3,606)/ (50*73,191) = 0.60 (rounded to 1)

Table 4 indicates that the proposal could provide the following:

- 72 car spaces (maximum requirement)
- four accessible car spaces (included within the maximum requirement)
- three car share spaces
- six motorcycle spaces.

The proposal generates a maximum parking requirement of 72 parking spaces (including four accessible spaces) plus three car share spaces (thereby bringing the total to 75 spaces). The proposal can accommodate this maximum number of car spaces across basement level 1 with the current plans indicating a provision of 72 spaces in the basement and as such complies with the

maximum LEP 2012 requirement. Final parking layout and provision will be subject to a future Development Application.

5.3 Bicycle parking and associated facilities

End-of-trip facilities are to be sufficient in scale and appropriately located for use by the end users, in this case, staff and visitors. DCP 2012 has been referenced as a guide to assess the adequacy of the proposed bicycle parking and end-of-trip facilities for the development, as outlined in Table 5.

Table 5: DCP 2012 bicycle provision

Land Use	Area	Rate	Requirement
Office	70,872m^2	Staff (1 per 150sqm) Visitor (1 per 400sqm)	472 177
Retail	640m^2	Staff (1 per 250sqm) Visitor (2 plus 1 per 100sqm over 100sqm)	3 7
Wellness/ Fitness	609m^2	Staff (1 per 150sqm) Visitor (1 per 400sqm) [1]	4 2
Total (Staff - Class 2)			**479**
Total (Visitor - Class 3)			**186**
Lockers		1 per bicycle space	**665**
Showers and change rooms		3 plus 2 per 20 bicycle spaces over 20 spaces	**68**

[1] No applicable rate is detailed in the LEP for wellness/ fitness uses, as such the commercial (office) rate has been adopted.

Table 5 indicates that the following bicycle parking requirements when based on DCP 2012 requirements:

- 479 bicycle spaces for staff in secure locations
- 186 bicycle spaces for visitors in publicly accessible locations
- 665 lockers and 68 showers and change room facilities (DCP 2012 outlines that lockers and change rooms should be provided for both staff and visitor bicycle spaces).

With about 79 per cent of most workers and visitors travelling by public transport and with current mode share confirming an approximate one per cent bicycle mode share (based on JTW data, discussed in Section 5.1) a theoretical building population of 7,174 people (as discussed further in Section 5.5.1) will generate a practical demand for 72 bicycle spaces. Assuming a tripling of staff bicycle use, demand could increase to just over 200 staff bicycle spaces. Such demand profiles are important when considering the provision of such facilities.

The through site link also establishes functional open space mid-block and aims to deliver genuine space for all users. In this regard, the total provision of visitor bicycle parking should be coordinated across the site to ensure equitable provision and use without detracting from the public domain.

Bicycle parking and end-of-trip facilities is planned to be provided within the basement with access via a dedicated lift or direct access via the Sussex Street driveway. Some visitor bicycle parking would be

possible in the public domain, or potentially as separated facilities as part of the staff end-of-trip facilities.

5.4 Loading and Servicing

5.4.1 City of Sydney DCP

DCP 2012 provides requirements for service vehicle parking for various land uses with Table 6 providing an assessment of the minimum requirements as they relate to the proposal.

Table 6: City of Sydney DCP loading requirements

Land use	Size	Rate	Loading requirement
Office space	70,872m^2	1 space per 3,300sqm or part thereof, for the first 50,000sqm; plus 1 space per 6,600sqm, or part thereof, for additional floor area over 50,000sqm and under 100,000sqm	18
Retail space	640m^2	1 space per 350sqm GFA, or part thereof, up to 2,000sqm	2
Wellness/ Fitness	609m^2	1 space per 3,300sqm or part thereof, for the first 50,000sqm; plus 1 space per 6,600sqm, or part thereof, for additional floor area over 50,000sqm and under 100,000sqm	1

[1] No applicable rate is detailed in the LEP for wellness/ fitness uses, as such the commercial (office) rate has been adopted.

Application of the City of Sydney DCP 2012 loading dock rates for the indicative floor areas suggests that about 21 bays are required to accommodate the loading demands associated with the redevelopment potential of 383 Kent Street.

The 21 loading bays can include a combination of vehicle sizes between 99th percentile cars up to 8.8 metre medium rigid vehicles. The split of vehicle types and sizes has been determined using evidence-based data contained in the Arup 2018 AITPM presentation, and would be as follows:

- two MRV bays
- five SRV bays
- 13 van, ute and car bays.

The indicative plans show provision of 28 bays including two for MRVs, five for SRVs and 14 for smaller delivery vehicles dedicated to the development. The remaining seven loading bays (one MRV, two SRV, and four small delivery vehicle loading bays) would be delivered as part of the potential shared loading dock strategy. Such provision exceeds the requirements of DCP 2012. The surplus provision is intended to cater for any such additional retail loading demand generated by Kent Street retail properties in the block between King Street and Market Street. This intends to form part of a broader proposed shared loading strategy.

5.4.2 TfNSW Urban Freight Forecasting

The TfNSW Urban Freight Forecasting Model (UFFM) is a useful planning tool which performs two main functions:

1. Provides daily profiles of the volume and types of freight and servicing activity that a building is likely to generate across a typical weekday, based on building information entered by the user.
2. Assesses the performance of loading dock parking spaces provided by a development to manage the freight demand generated by the building.

The objective of the model is to assist in understanding the facilities that will be appropriate for a development to be self-sufficient in managing its own freight and servicing activity.

By entering key inputs such as the number of loading bays, the model would determine the following:

- Estimated distribution of demand throughout the day.
- Efficiency of the loading dock (dock performance).
- Projected vehicle arrival profiles by loading spaces (i.e., HRV, MRV, SRV and cars, vans, utes etc.).

The inputs as shown in Table 7 generates the anticipated number of spaces, as shown in Table 8.

Table 7: TfNSW loading demand calculator inputs

Parameters	Input
Number of floors	42 floors
Commercial area (incl. wellness/ fitness GFA)	71,481m^2
Retail area	640m^2
Availability of a dedicated goods lift	Yes

Table 8: Parking spaces for commercial vehicles

Commercial Parking Space	Number of Spaces Suggested
Small (B99, vans, utes),	9
Medium (SRV, small truck)	4
Large (MRV, HRV, large trucks)	2

The UFFM tool suggests that the development should provide 15 loading bays, including nine small spaces (B99, vans, utes), four medium spaces (SRV, small truck) and two large spaces (MRV, HRV, large trucks).

The indicative plans show a supply of 18 small spaces, seven medium spaces and three large spaces (total 28 loading bays) can be accommodated within the shared loading dock, thus satisfying the TfNSW recommended requirements.

5.5 Transport Assessment

5.5.1 Trip Generation

To better understand the trip generation of the proposal, it is important to understand the potential future building population. The following assumptions have been adopted to determine a theoretical population:

- Commercial & wellness/ fitness – one person per 10 square metres GFA, equating to 7,148 people.
- Retail – one person per 25 square metres GFA, equating to 26 people.

As such, the proposal is anticipated to have a theoretical peak population of about 7,174 people across the day.

Based on this, the following assumptions have been adopted to understand the potential weekday peak hour trips generated by the development:

- 35 per cent of staff working in the commercial building would travel in the peak hour based on similar sites[1] surveyed for the updated office rates in the TfNSW Guide to Traffic Generating Developments (TDT 2013/04a).
- 25 per cent of retail staff would travel in the peak hour accounting for greater 'peak spreading' typical for such land uses.

On the basis of the above, the anticipated weekday peak hour trips by the theoretical peak population has been estimated adopting the target travel mode share for the area (discussed in Section 5.1), as shown in Table 9. The retail space is considered very much ancillary to all other uses and not considered to generate its own 'new' trips during peak periods.

[1] North Sydney, Parramatta, Sydney Olympic Park and Chatswood sites.

Table 9: Anticipated weekday peak hour trip generation by mode

Mode	Target Mode Share %	Person trips per hour
Train	60%	1,505
Bus	22%	552
Ferry	1%	25
Light Rail	2%	50
Vehicle (as driver)	3%	75
Vehicle (as passenger)	2%	50
Motorcycle	1%	25
Bicycle	3%	75
Walking	5%	125
Other	1%	25
Total	**100%**	**2,507**

Table 9 indicates that the proposal has the potential to generate up to 2,507person trips in any weekday peak hour. In practice, a range of factors contribute to less person trips on any given days and mostly associated with remote working practices, ill-health and further 'peak spreading' practices (where more people travel outside peak hours). In any case, the theoretical maximum person trips are broken down as follows:

- 2,132 trips by public transport
- 200 trips by active travel (bicycle or walking)
- 75 trips by car (as driver)
- 50 trips as a car passenger (private, taxi, rideshare).

Based on similar sites[2] surveyed as part of the TfNSW Technical Direction, a traffic generation rate of 0.4 vehicle trips per space has been conservatively adopted for any weekday peak hour. With about 72 on-site parking spaces, it is anticipated that 30 of the 75 estimated drivers would park in the basement car park, with other drivers using CBD public car parks.

There are several publicly accessible car parks within a short walk of the site. These include the Wilson Parking operated sites on Sussex Street and York Street to the north, south and east and within a 300 to 450 metre walk.

5.5.2 Traffic Distribution

As established in Section 5.1, most workers would use public transport to travel to and from the site. Many vehicle trips will be associated with delivery and service vehicles. Such service vehicle activity generated by the site and neighbouring properties will have origins right across the Sydney

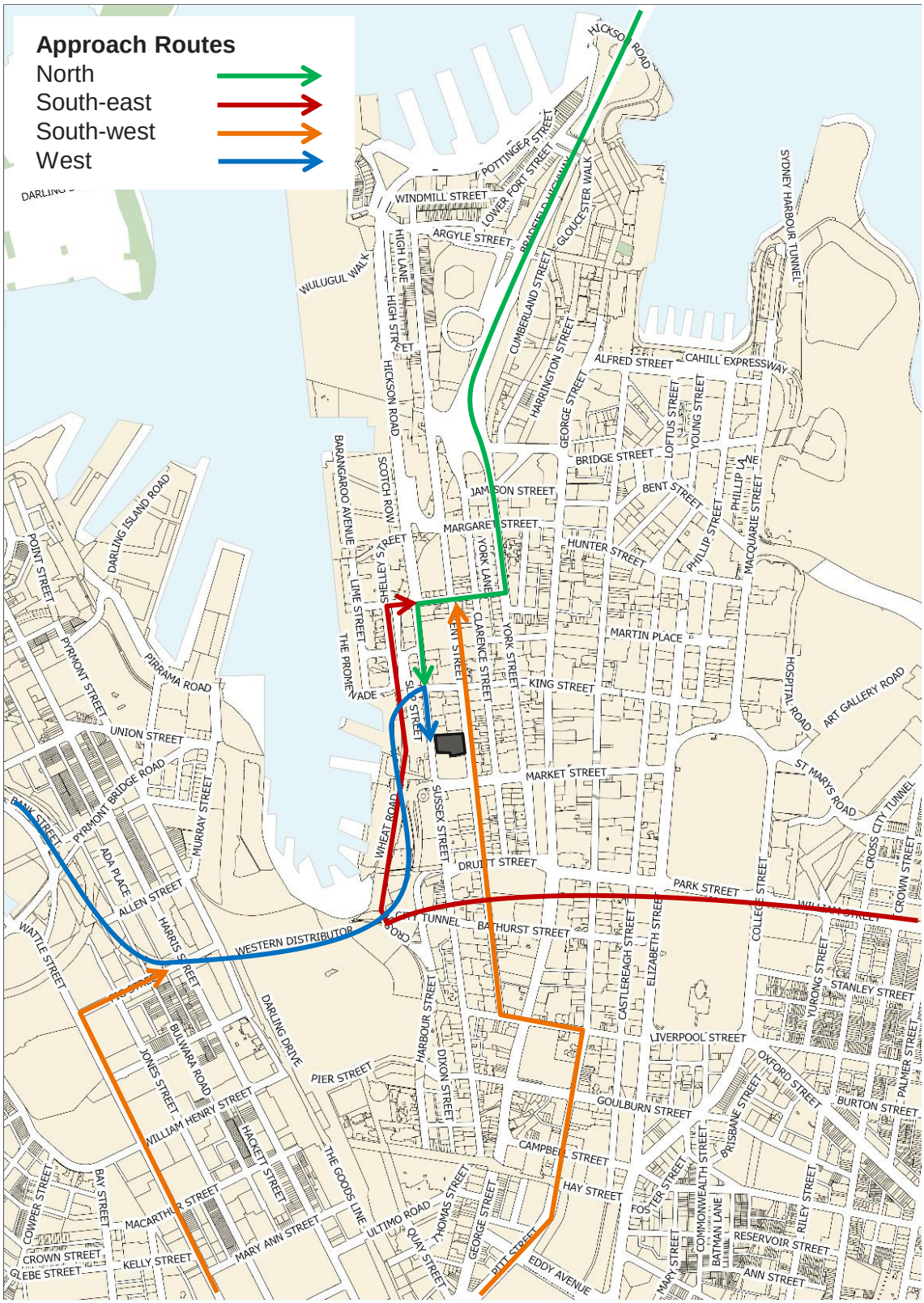
[2] North Sydney and Parramatta sites office premises.

Metropolitan area. The primary approach routes from the arterial road network are detailed below and shown in Figure 22:

- North – Sydney Harbour Bridge, York Street, Erskine Street and Sussex Street.
- South-east – Eastern Distributor, Cross City Tunnel, Harbour Street, Wheat Road, Shelley Street, Erskine Street and Sussex Street.
- South-west – Great Western Highway, Broadway, George Street, Pitt Street, Liverpool Street, Kent Street, Erskine Street and Sussex Street or Great Western Highway, Broadway, Wattle Street, Fig Street, Western Distributor, King Street off ramp and Sussex Street.
- West - Anzac Bridge, Western Distributor, King Street off ramp and Sussex Street.

The approach routes suggest that for most directions, a loading dock access on Sussex Street would be most convenient when compared to a dock access on Kent Street. Only vehicles approaching from the south on Kent Street would need to use Erskine Street to circulate west to access a loading dock on Sussex Steet. The approach routes suggest that a loading dock with access via Sussex Street has the opportunity to reduce traffic using Kent Street, with vehicles mostly able to remain on the periphery of the CBD.

Figure 22: Approach routes



5.5.3 Transport Impacts

The proposal is expected to generate up to 125 car trips (as driver or passenger) in peak hours. When considering the proposed car park alone, the proposal could generate 30 vehicles per hour to/ from the site, accessed via Sussex Street only on the periphery of the CBD.

The site currently includes a 799-space Wilson car park (with 769 spaces being of public use) that can be accessed via both Kent Street and Sussex Street. Applying the same traffic generation rate of 0.4 vehicle trips per space suggests that the public car park could generate up to 320 vehicles trips per hour.

On this basis, the proposal has the ability to significantly reduce traffic volumes generated by the site and contribute towards reducing vehicle trips into Sydney CBD with the removal of a significant public car park thus further encouraging a meaningful shift in travel behaviour.

6 Overview Loading Dock Management

6.1 Shared Loading Arrangement

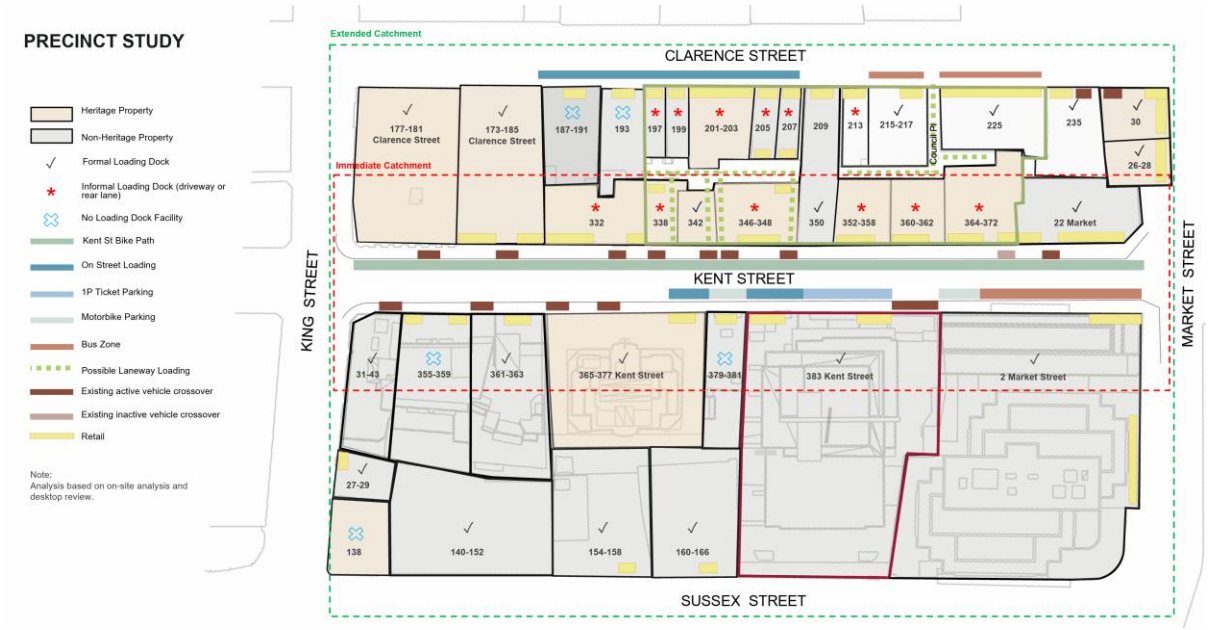
Charter Hall, in consultation with Council, is investigating opportunities for a shared loading dock as part of the redevelopment of the site.

To be read in conjunction with Proponent reports, the aim of a shared loading dock is to deliver practical loading facilities to properties within the precinct, largely those properties that are heritage constrained and may not have practical access to adequate loading facilities. The provision of a shared loading dock will further benefit the study area by:

- supporting the future viability of retail offerings
- minimising on-street loading activities
- reducing driveway crossovers
- improving pedestrian safety and amenity
- improving heritage streetscape.

Any such shared loading dock arrangement is not intended to facilitate waste collection for the study area with such activity expected to continue on-street and after-hours.

Figure 23: Kent Street Shared Loading Study Area



A further assessment of loading dock management and shared loading dock strategies has been discussed in '383 Kent Street, Sydney – Loading Dock Assessment' (prepared by Stantec, dated: 22 November 2023), which is attached at Appendix C.

6.2 Loading Details

6.2.1 Available Loading Facilities

The loading dock is planned to be located on the Sussex Street ground level and designed to accommodate vehicles up to 8.8 metre MRVs. The indicative plans show provision of 28 bays including two for MRVs, five for SRVs and 14 for smaller delivery vehicles dedicated to the development. The remaining loading bays (one MRV, two SRV, and four small delivery vehicle loading bays) would be delivered as part of the potential shared loading dock strategy, as shown in Figure 19.

A single vehicle access is proposed on Sussex Street providing access to the shared loading dock, car parking and end-of-trip facilities. There is good separation between service vehicles and light vehicles with the single driveway crossover ensuring minimum impact to the street frontage and façade. The larger service vehicles do take up much of the access driveway on entry and exit, which is typical in constrained CBD environments and can be managed given the expected low frequency of such larger vehicles.

Figure 24: Indicative Shared Loading Arrangement

Source: 383 Kent St, Sydney, fjmt Architects, December 2023

6.2.2 Hours of Operation

The loading dock will be available for service vehicle access during standard building operating hours, with arrangements for after hours and weekend access.

6.2.3 Demand

As discussed in Section 5.4, loading requirements have been determined with reference to DCP 2012 and TfNSW UFFM too, being 21 and 15 loading bays, respectively.

The typical available operating hours of a loading dock are 10 to 12 hours per day resulting in opportunity to spread deliveries across the day and to manage via a booking system.

Based on an average stay of 20 to 30 minutes, the potential 28 loading bays could accommodate 56 to 84 service vehicles per hour across the day. Most service vehicles travel outside peaks. This is expected to be adequate in meeting the anticipated loading demand generated by the site and surrounding properties as part of a potential shared dock strategy.

6.3 Loading Management

6.3.1 Demand Management

It is recommended that loading dock users be required to book a timeslot prior to arrival. Such arrangements are typically done through an online booking system such as https://www.buildingmanager.com, https://bestrane.com.au or similar. Access to the dock would be granted only to those who have booked via the selected booking system. Unauthorised vehicles would be instructed to leave the site with signage in place to inform all delivery couriers of such arrangements. All booking requests generally need to be logged in advance though provision for short-term requirements can also be factored into the system.

Bookings through the online system will collect the following details:

- delivery type/ reason
- day/ date, timeslot (one timeslot or more)
- carrier/ vehicle type/ size
- vehicle number plate
- company (name, ABN, address, phone/ mobile, email, etc.)
- receiver (tenant/ owner)
- loading space reference number
- additional comments.

The booking system will allow one of the loading bays to be booked and will clearly outline the maximum vehicle size able to be accommodated by the specific bay. It is the responsibility of the dock manager and retail tenants/ owners to ensure that all vehicles permitted access to the site through the online booking system remain strictly within the allowable dimensions (length, height etc.).

Where practical, the building manager should minimise loading activity during the road network peak periods for the site and road network, typically the weekday morning and afternoon peaks.

It will be the responsibility of the building manager to advise approaching loading dock users of any delays or extended loading/ unloading activities as early as practical to avoid inconvenience to the approaching driver. Bookings would be limited to 20-to-30-minute periods. The building manager must contact the relevant receiver should a loading vehicle exceed their booking timeslot by more than five

or 10 minutes. Vehicles would be permitted to enter the loading dock once the booked loading bay has been vacated, or other bay able to be used.

The building manager and/ or retail tenancy personnel will also monitor use of the loading dock to ensure the loading spaces are used for site deliveries and waste collection only, and trade vehicles as required, with no other unauthorised use permitted. They will also be responsible for ensuring materials are not stored in the loading bays or associated loading/ unloading areas at any time.

Considering the above, it is expected that with a booking system and demand management, the loading dock can operate acceptably with minimal impact to site or road network traffic.

6.3.2 Traffic and Pedestrian Management

All loading and unloading activities are to be always conducted within the site. The designated loading dock area is to remain available for always loading and unloading purposes. No storage of goods or parking is to be carried out in these areas.

6.3.3 Operational Review

A detailed loading dock management plan prepared prior to operation should be reviewed regularly (at least once a year) to ensure that the details outlined remain relevant for site operations and activities which are required to occur through the dock.

7 Overview Green Travel Initiatives

7.1 Introduction

7.1.1 Travel Plan Framework

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 green travel plan (GTP) will ensure that the transport infrastructure, services and policies both within and external to the site are tailored to the users and coordinated to achieve the most sustainable outcome possible.

7.1.2 What is a Green Travel Plan?

A Green Travel Plan (GTP) 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' however it 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 staff to travel to and from 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.

Given the developments aim to reduce private travel to the site, the implementation of a GTP would be beneficial.

7.2 Key Objectives

The aim of the GTP is to bring about better transport arrangements for visiting and working at 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 public and active travel 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.

7.3 Site Specific Measures

The location of the site, in terms of its proximity to a wide range of sustainable transport including bus, train, light rail and future metros services is a key consideration for development in the area. A GTP will put in place measures to raise awareness and further influence the travel patterns of people travelling to/ from the site with a view to encouraging modal shift away from cars.

The following potential measures and initiatives could be implemented to encourage more sustainable travel modes:

- Limiting on-site parking provision.
- Providing a Travel Access Guide (TAG) which would be provided to all staff and publicly available to all visitors. The document would be based on facilities available at the site and include detail on the surrounding public transport services and active transport initiatives. The TAG would be updated as the surrounding transport environment changes.
- Providing public transport information boards/ apps to inform staff and visitors of alternative transport options (the format of such information boards would be based upon the TAG).
- Providing a car sharing pod(s) on-site or nearby and promoting the availability of car sharing pods for trips that require the use of private vehicles.
- Providing bicycle facilities including secure bicycle parking for staff, bicycle racks/ rails for visitors and shower and change room facilities.
- Encouraging staff that drive to work and park on surrounding roads to carpool through creation of a carpooling club or registry/ forum.
- Regularly promoting ride/ walk to work days.
- Providing a regular newsletter to all staff bringing the latest news on sustainable travel initiatives in the area.

7.3.1 Travel Access Guide (TAG)

A TAG provides information to staff 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 (or app) showing the site location and nearby transport modes highlighting available pedestrian and cycle routes. The information is usually presented as a brochure (or app) to be included in a welcome pack or on the back of company stationery and business cards.

7.3.2 Information and Communication

Several opportunities exist to provide staff and visitors with information about nearby transport options. Connecting them with information would help to facilitate journey planning and increase their awareness of convenient and inexpensive transport options which support change in travel behaviour. These include:

- Transport for NSW provides bus, train and ferry routes, timetables and journey planning through their Transport Info website: http://www.transportnsw.info.
- Council provides a number of services and a range of information and events to encourage people of all levels of experience to travel by bicycle: https://www.cityofsydney.nsw.gov.au/lists-maps-inventories/sydney-cycling-map

In addition, connecting staff and visitors via social media may provide a platform to informally pilot new programs or create travel-buddy networks and communication.

7.3.3 Monitoring of the GTP

There is no standard methodology for monitoring the GTP, but it is suggested that it be monitored to ensure that it is achieving the desired benefits and modify it if required. It will not be possible at this stage to state what additional modifications might be made as this will be dependent upon the particular circumstances prevailing at that time.

The GTP should be monitored on a regular basis, e.g., yearly, by carrying out travel surveys. Travel surveys will allow the most effective initiatives of the GTP to be identified, and conversely less effective initiatives can be modified or replaced to ensure the best outcomes are achieved. It will clearly be important to understand people's reasons for travelling the way they do: - any barriers to changing their behaviour, and their propensity to change.

To ensure the successful implementation of the GTP, a Travel Plan Coordinator should be appointed to ensure the successful implementation of the GTP. This could be the building manager or a member of the body corporate.

7.4 Summary

The proposed development would be able to develop and utilise a travel plan to actively promote increased use of sustainable transport modes. Although it is difficult to predict what measures might be achievable, the above measures provide a framework for the site and implementation of a future travel plan.

8 Overview Construction Transport Management

8.1 Introduction

This section seeks to provide an overview of the construction pedestrian and traffic management initiatives that could be implemented as part of the construction works associated with the proposed development.

Specifically, the following area considered in this overview:

- construction site access arrangements
- anticipated truck volumes during construction stages
- truck routes to/ from the site
- requirements for works zones
- pedestrian and cyclist access
- site personnel parking
- traffic control measures
- overview of CPTMP requirements.

8.2 Principles of Traffic Management

The general principles of traffic management during construction activities are as follows:

- minimise the impact on pedestrian and cyclist movements
- maintain appropriate public transport access
- minimise the loss of on-street parking
- minimise the impact on adjacent and surrounding buildings
- maintain access to/ from adjacent buildings
- restrict construction vehicle movements to designated routes to/ from the site
- manage and control construction vehicle activity near the site
- carry out construction activity in accordance with approved hours of works.

8.3 Work Hours

The works will be carried out during the approved work hours. Indicative work hours are as follows:

- Weekdays: 7:30am – 5:30pm
- Saturdays: 7:30am – 3:00pm
- Sundays and public holidays: no work permitted.

Workers would be advised of the approved work hours during induction. Any works outside of the approved work hours would be subject to specific prior approval from the appropriate authorities. Such works may include delivery of cranes, large plant or equipment required on the site that require oversize vehicle access.

8.4 Site Access and Loading

The construction methodology is not confirmed at this early planning stage. There is opportunity to provide vehicle accesses via both Kent Street and Sussex Street, given existing vehicular crossovers are provided on both frontages of the site. Sussex Street is particularly advantageous considering it is a periphery road that experiences less pedestrian activity than Kent Street. Where practical, loading and unloading would take place within the bounds of the site. That said, there is opportunity to provide on-street works zones. If required, a works zone application(s) will be made to the relevant authorities prior to commencement of works.

As part of the detailed CPTMP, Traffic Guidance Schemes (previously referred to as Traffic Control Plans) will be prepared in accordance with the principles of the Traffic Control at Work Sites manual (TfNSW, 2020). The Traffic Guidance Schemes primarily show where construction signs will be located at specific locations (such as uncontrolled intersections) along the approved truck routes to warn other road users of the increase in construction vehicle movements.

Access to the neighbouring sites by emergency vehicles would not be affected by the works as the road and footpath frontages would be unaffected. Emergency protocols on the site would include a requirement for site personnel to assist with emergency access from the street. All truck movements to the site and/or incident point would be suspended and cleared.

8.5 Construction Staff Parking

It is anticipated that there will be some 300 to 400 workers on-site at any given time during peak activities.

No construction worker parking will be provided. Given the site's proximity to a range of high frequency public transport services, workers will be encouraged to use public transport to access the site. During site induction, workers will be informed of the existing bus network servicing the site. Appropriate arrangements will be made for any equipment/ tool storage and drop-off requirements.

8.6 Heavy Vehicle Traffic Generation

Construction vehicles generated by the site would generally include vehicles up to 12.5 metre heavy rigid vehicles, with permits required for one-off deliveries using 19 metre articulated vehicles. There is expected to be up to 60 vehicles per day during main structure works. At other phase this is likely to be less at approximately 30 to 40 vehicles per day.

Construction vehicle movements will be minimised/ avoided during peak hours where possible to ensure that the works would not materially impact the surrounding road network. Any future detailed CTMP will document and consider the cumulative impact of all other nearby construction sites that are occurring concurrently.

8.7 Heavy Vehicle Access Routes

Heavy vehicle movements would be restricted to designated routes and confined to the arterial road network wherever feasible. Truck routes to/ from the site have been identified with the aim of providing the most direct routes to/ from the site as well as minimising the impact of heavy vehicles on local roads.

Figure 25 and Figure 26 provides a summary of the anticipated construction vehicle routes to/ from the site. Truck drivers will be advised of the designated truck routes to/ from the site.

Figure 25: Construction vehicle routes – Kent Street

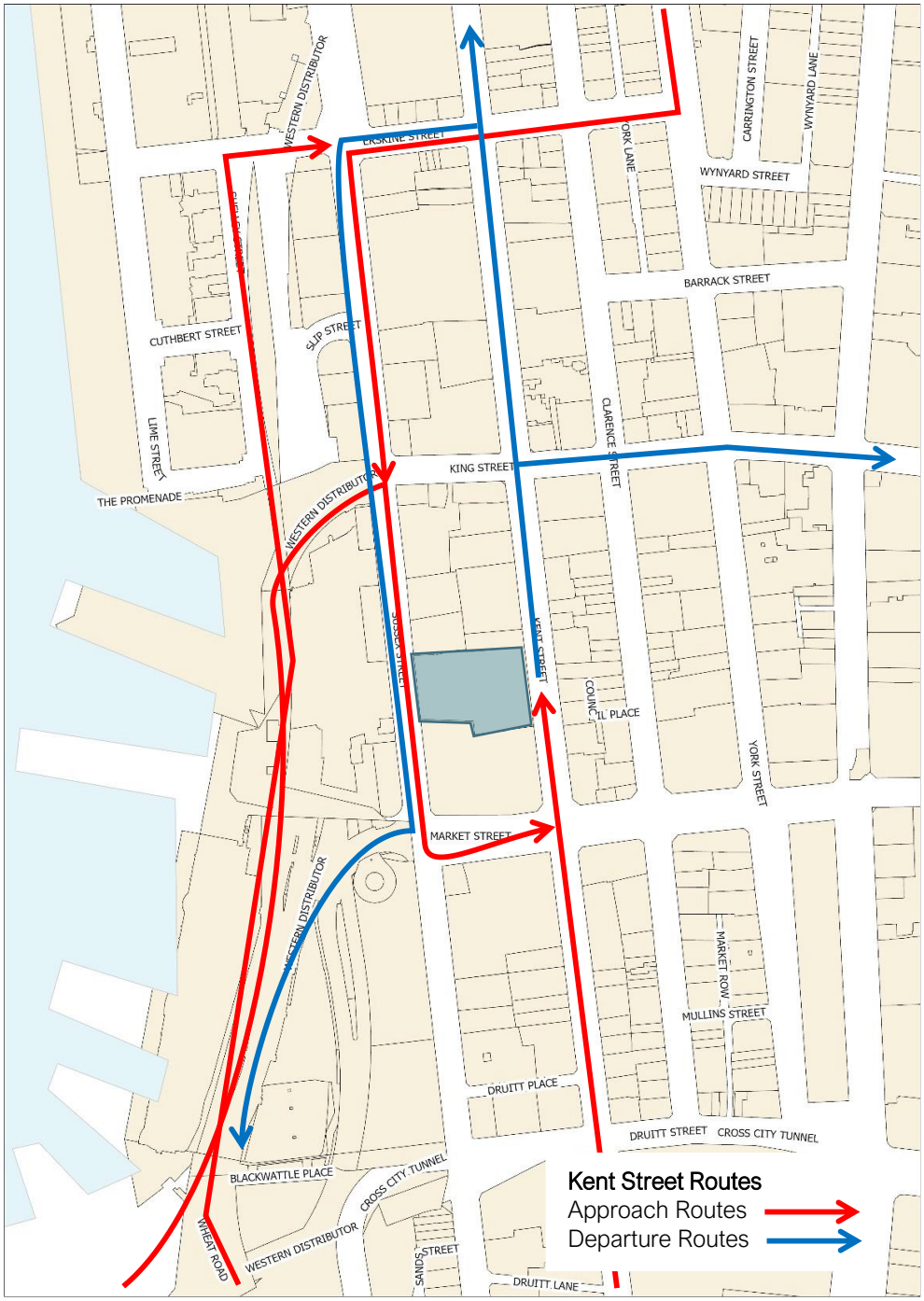
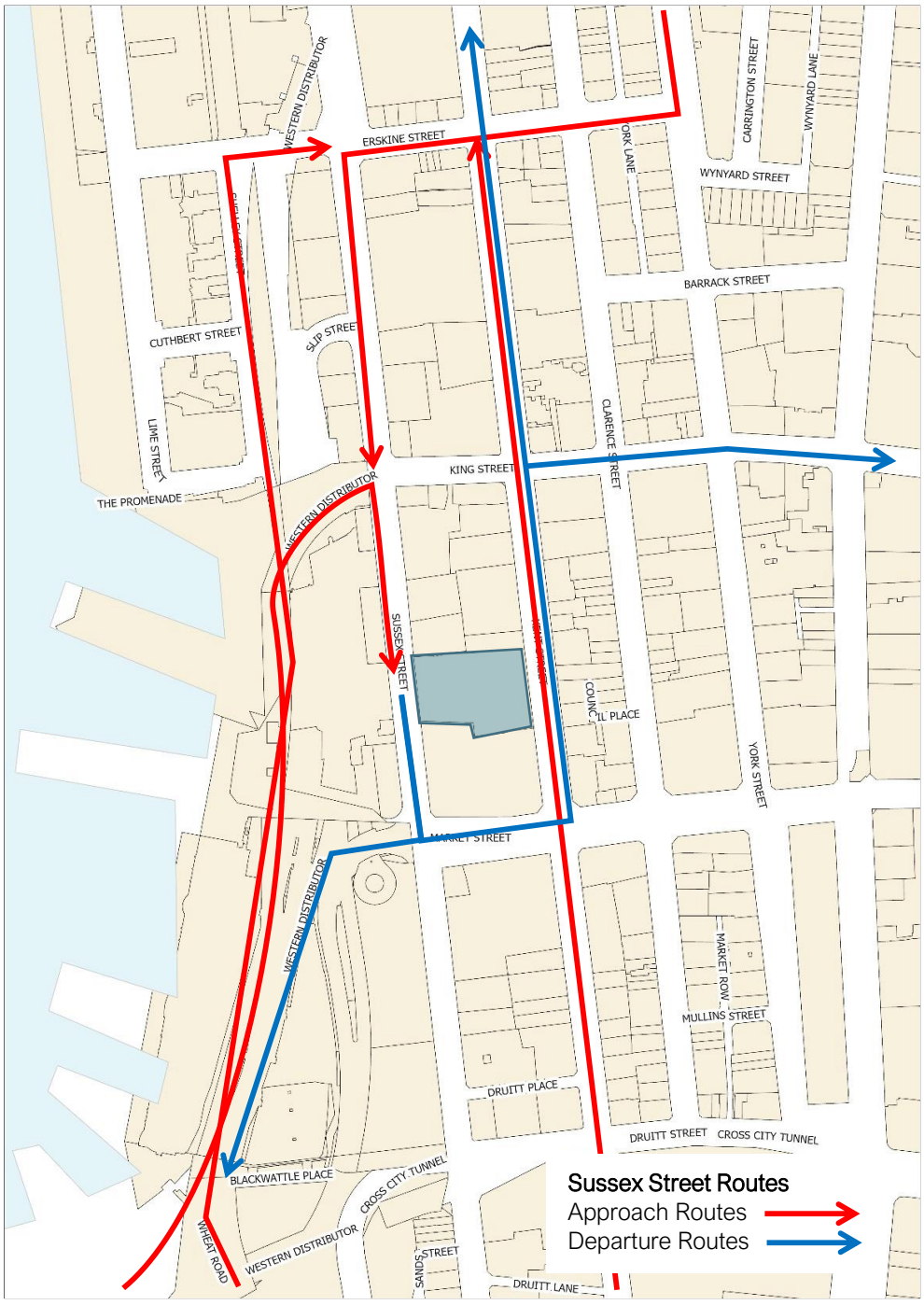


Figure 26: Construction vehicle routes – Sussex Street



8.8 Pedestrian and Cyclist Access

Pedestrian access will generally be maintained along Kent Street and Sussex. B-Class hoardings will be installed along the frontages of the site to maintain and ensure safe pedestrian and cyclist passage adjacent to the site. The corresponding traffic management plans will assist in minimising the impacts to pedestrian and cyclist movements from construction related traffic.

Truck movements will be avoided during peak hours where possible to minimise the impact on pedestrians and cyclists.

8.9 Overview of CPTMP Requirements

This chapter provides an overview of the Construction Pedestrian and Traffic Management Plan (CPTMP) initiatives that would be implemented for the demolition and construction of the commercial building at 383 Kent Street, Sydney. A detailed CPTMP would cover the following additional information:

- Description of construction activities and duration.
- Construction work hours.
- Detailed assessment of construction traffic impacts including any cumulative impacts.
- Details regarding any one-off activities for installation of cranes and other equipment.
- Swept path analysis of heavy vehicle access to the site and Works Zone.
- Detailed assessment of on-street parking impacts.
- Emergency vehicle access.
- Impacts to public transport services.
- Traffic Guidance Scheme(s).
- Contact details of key project personnel.

9 Conclusion

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

- 383 Kent Street is located within Sydney CBD as part of the Eastern City District that is in a prime location providing staff and visitors quality access to a vast public transport network whether by bus, light rail or train (metro, suburban or interstate heavy rail). This establishes significant opportunities for development whilst keeping private vehicle trip reliance to a minimum.
- The site is currently occupied by a mixed-use commercial/ retail building with retail stores fronting Kent Street, in addition to a 799-space car park (with 769 spaces being of public use) operated by Wilson Parking.
- This planning proposal seeks amendments to planning controls, specifically the site's maximum Height of Building development standard and maximum Floor Space Ratio (FSR) development standard, to facilitate a new 42 storey commercial office tower with a total gross floor area (GFA) of 73,191 square metres (including approximately 640 square metres of retail GFA and 609 square metres of wellness/ fitness GFA).
- On-site car parking, shared loading dock and end-of-trip facilities are envisaged for the proposal, along with a new pedestrian through-site link connecting Kent Street and Sussex Street to increase activation opportunities, through public art and retail.
- This proposal is aligned with one of City of Sydney Council's key moves to provide employment growth in well located new tower clusters where taller building with higher floor space ratios is permitted for income-earning uses.
- Given the sites location proximate to several high frequency and high-capacity public transport services (existing and future) and the low parking provision anticipated for the site (about 72 spaces), travel mode share targets have been developed for travel behaviour for the future population of the site.
- The targets include approximately 60 per cent of worker trips to the development to be by train and 22 per cent by bus with trips by car (as driver) are targeted to account for three per cent. These targets are generally consistent with the JTW data for the area, except for a targeted higher portion of train trips and corresponding decrease in vehicle trips.
- The proposal generates a maximum City of Sydney LEP 2012 parking requirement of 72parking spaces (including four accessible spaces), six motorcycle spaces and three car share spaces. The proposal can achieve the maximum parking requirement within the basement level, with other end-of-trip facilities equally important to catering for future demands, all within the maximum City of Sydney LEP 2012 requirements.
- The proposed generates a Sydney DCP 2012 requirement for up to 665 bicycle spaces, including 479 for staff and 186 for visitors.
- A proposed on-site loading dock can accommodate up to 28 service vehicles (including seven shared loading bays) at any one time including two MRVs, five SRVs and 14 small spaces for use by vans/ utes dedicated to the subject site. An additional one MRV, two SRV and four small spaces would be shared with surrounding constrained heritage site that do not have formal loading facilities. This satisfies the requirements of DCP 2012.
- A shared loading dock strategy aims to deliver loading facilities to the wider precinct, namely to those properties that are heritage constrained and do not have access to formal loading dock facilities. This can be facilitated with the implementation of adequate loading dock management plans.

- Based on the anticipated future building population and the realistic target mode share, the site could generate 2,507 people trips during the weekday peak hours, including 1,505 trips by train and 552 trips by bus.
- With the existing 799-space Wilson car park likely to generate up to about 320 vehicles per hour, the proposal could significantly reduce traffic volumes generated by the site and contribute towards reducing vehicle trips into Sydney CBD with the removal of a significant public car park and subsequent encouragement in further meaningful shifts in travel behaviour.
- Furthermore, the anticipated public transport, cyclist and pedestrian trips are not expected to result in any adverse effects to the public and active network infrastructure when considering that staff residences are located across the Greater Sydney Metropolitan region and would therefore disperse the trips across the broader network.
- The implementation of a Green Travel Plan (GTP) will ensure that the transport infrastructure, services and policies both within and external to the site are tailored to the users and coordinated to achieve the most sustainable outcome possible.
- The implementation of a Construction Traffic Management Plan (CTMP) will ensure that the construction process of the site minimises impacts to pedestrians and the general transport network in a safe and efficient manner.

APPENDICES

Appendix A Tube Count Data

Job No	AUNSW4820
Client	Stantec
Site	Kent St, Sydney
Location	North of Market St
Site No	ATC 1
Start Date	7-Sep-22
Description	Volume Summary
Direction	NB

MATRIX Traffic and Transport Data

Hour Starting	Day of Week							W'Day Ave	7 Day Ave
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
	12-Sep	13-Sep	7-Sep	8-Sep	9-Sep	10-Sep	11-Sep		
AM Peak	546	622	627	642	506	381	351		
PM Peak	529	615	607	643	605	458	361	**8160**	**7633**
0:00	118	110	120	167	276	247	277	158	188
1:00	70	94	88	115	141	183	208	102	128
2:00	72	66	71	82	110	126	181	80	101
3:00	56	64	77	72	103	90	137	74	86
4:00	52	82	61	69	70	76	70	67	69
5:00	117	126	144	141	146	84	65	135	118
6:00	303	237	245	258	246	151	102	258	220
7:00	412	435	401	432	366	156	94	409	328
8:00	546	622	627	642	506	199	173	589	474
9:00	442	490	517	590	497	291	249	507	439
10:00	365	426	447	406	424	301	345	414	388
11:00	350	375	437	437	471	381	351	414	400
12:00	371	428	392	436	455	354	361	416	400
13:00	337	396	383	434	431	364	334	396	383
14:00	332	408	386	445	432	386	344	401	390
15:00	367	439	427	423	459	363	304	423	397
16:00	389	501	483	531	474	363	316	476	437
17:00	529	615	607	643	605	409	261	600	524
18:00	415	516	556	546	543	458	227	515	466
19:00	262	361	361	360	471	440	213	363	353
20:00	203	272	318	305	367	440	191	293	299
21:00	226	278	312	350	351	434	211	303	309
22:00	301	461	526	624	408	413	353	464	441
23:00	217	264	310	410	318	346	210	304	296
Total	6852	8066	8296	8918	8670	7055	5577	8160	7633

7-19	4855	5651	5663	5965	5663	4025	3359	5559	5026
6-22	5849	6799	6899	7238	7098	5490	4076	6777	6207
6-24	6367	7524	7735	8272	7824	6249	4639	7544	6944
0-24	6852	8066	8296	8918	8670	7055	5577	8160	7633

Appendix B Parking Survey

Client	Stantec
Date	Thursday, 8 September 2022
Description	Parking Survey

Street Name	Side of Street	Between	Restriction	Applicable Hours	Supply	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
Kent St	West	Market St & King St	No Stopping		-	0	0	0	0	0	0	0	0	0	0	0	0
			Bus Zone		-	0	0	0	1	0	1	0	0	0	0	0	1
			No Stopping		-	0	0	0	0	0	0	0	0	0	0	0	0
			1P	C.B.C Permit holders excepted	**3**	3	3	3	0	3	3	2	2	1	2	3	3
			Loading Zone + 4P	LZ - 6am-6pm(Mon-Fri) & 7am-10am(Sat) / 4P - 6pm-10pm(Mon-Fri) & 10am-10pm(Sun) & Public holidays	**3**	2	3	3	3	3	3	3	3	3	3	3	3
			Loading Zone + 4P	LZ - 6am-6pm(Mon-Fri) & 7am-10am(Sat) / 4P - 6pm-10pm(Mon-Fri) & 10am-10pm(Sun) & Public holidays	**2**	0	0	0	0	1	2	1	0	1	0	0	1
			No Stopping		-	0	0	0	1	1	0	0	0	0	0	0	0
			No Stopping		-	0	0	0	0	0	0	0	0	0	0	0	0
			No Stopping		-	0	0	0	0	0	0	0	0	0	0	0	0
Total					**8**	**5**	**6**	**6**	**5**	**8**	**9**	**6**	**5**	**5**	**5**	**6**	**8**
% Capacity						**63%**	**75%**	**75%**	**63%**	**100%**	**113%**	**75%**	**63%**	**63%**	**63%**	**75%**	**100%**

8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00	12:10	12:20	12:30	12:40	12:50
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	2	1	0	1	0	1	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	2	3	3	3	3	3	3	2	3	3	3	3
3	0	3	2	2	3	3	3	3	3	3	2	3	3	2	2	3	3	3	3	3	3	3	3	3	2	2	2	3	3
1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	2	1	1	1	1	1	1	1	1
0	1	0	0	0	1	0	0	3	0	2	0	4	0	2	1	0	0	0	0	0	0	1	2	1	2	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	**5**	**7**	**6**	**5**	**8**	**7**	**7**	**10**	**9**	**10**	**6**	**12**	**6**	**9**	**8**	**7**	**7**	**7**	**8**	**6**	**8**	**9**	**10**	**8**	**7**	**6**	**6**	**9**	**7**
100%	**63%**	**88%**	**75%**	**63%**	**100%**	**88%**	**88%**	**125%**	**113%**	**125%**	**75%**	**150%**	**75%**	**113%**	**100%**	**88%**	**88%**	**88%**	**100%**	**75%**	**100%**	**113%**	**125%**	**100%**	**88%**	**75%**	**75%**	**113%**	**88%**

13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	3	3	3	2	2	0	0	0	2	2	
3	3	3	3	3	3	2	2	3	2	2	3	2	2	2	3	2	1	2	2	2	2	2	2	2	2	2	1	1	2	2
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0
0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	**8**	**7**	**8**	**8**	**7**	**8**	**7**	**8**	**6**	**6**	**7**	**6**	**6**	**6**	**7**	**7**	**6**	**6**	**5**	**5**	**6**	**6**	**7**	**5**	**5**	**3**	**2**	**1**	**4**	**4**
88%	**100%**	**88%**	**100%**	**100%**	**88%**	**100%**	**88%**	**100%**	**75%**	**75%**	**88%**	**75%**	**75%**	**75%**	**88%**	**88%**	**75%**	**75%**	**63%**	**63%**	**75%**	**75%**	**88%**	**63%**	**63%**	**38%**	**25%**	**13%**	**50%**	**50%**

Appendix C Loading Dock Assessment Memo

Stantec

Memo

To:	Charter Hall	From:	Bayzid Khan
Project/File:	300304103	Date:	22 November 2023

REFERENCE: 383 KENT STREET, SYDNEY – LOADING DOCK ASSESSMENT

Stantec has been providing transport engineering services to Charter Hall for the potential redevelopment of 383 Kent Street, Sydney (the Site). A Planning Proposal has been lodged to amend the Sydney Local Environmental Plan 2012 (Sydney LEP) for the Site to support the redevelopment that would remove the existing 10 storey car park and commercial office tower and construct a new 42 storey commercial office tower with some 73,000 square metres of commercial and retail GFA based on a maximum achievable floor space ratio of 20:1 (this includes approximately 700 square metres GFA of retail space).

Charter Hall, in consultation with City of Sydney Council, has been investigating opportunities for a shared loading dock as part of the redevelopment of the Site. The aim of a shared loading dock is to deliver loading facilities to existing tenancies within the local precinct that are heritage constrained and do not have practical access to adequate or formal loading facilities.

The benefits from delivery of a shared loading dock scheme in the precinct include:

- supporting the future viability of retail offerings
- minimising on-street loading activities
- reducing driveway crossovers
- improving pedestrian safety and amenity

The shared loading dock is not intended to facilitate waste collection for the study area with such activity expected to continue on-street and after-hours.

The memorandum has been prepared to assess the potential for a shared loading dock scheme as part of any such redevelopment of the Site and has considered the following:

- potential loading dock provisions
- suitability against statutory (and other) requirements
- consideration of potential catchment area for a shared scheme
- high level review of indicative layout.

In summary, the proposal seeks to provide seven additional loading bays within the reference design loading dock that can be dedicated to a shared loading dock catchment. A summary of the potential catchment floor areas that these seven loading bays can accommodate is detailed in this memorandum and summarised in Table 1.

Table 1: Potential Shared Loading Dock Catchment

Scenario	Catchment Area	
	Retail Only (GFA)	Retail and Commercial (GFA)
Based on DCP 2012 (7 bays only)	Approx. 2,500sqm	Approx. 1,500sqm retail and 11,500sqm commercial
Based on TfNSW UFFM [1] (7 bays only)	Approx. 7,500sqm	Approx. 4,000sqm retail and 15,000sqm commercial

[1] Transport for NSW's Urban Freight Forecaster Model

BASE REQUIREMENT (TOWER ONLY)

City of Sydney DCP 2012 provides requirements for service vehicle parking for various land uses with Table 2 providing an assessment of the minimum requirements as they relate to the redevelopment proposal.

Table 2: City of Sydney DCP loading requirements

Land use	Size (GFA)	Rate	Loading requirement
Office space	72,300m^2	1 space per 3,300sqm or part thereof, for the first 50,000sqm; plus 1 space per 6,600sqm, or part thereof, for additional floor area over 50,000sqm and under 100,000sqm	19
Retail space	700m^2	1 space per 350sqm GFA, or part thereof, up to 2,000sqm	2

Application of the City of Sydney DCP 2012 loading dock rates to the indicative floor areas suggests that about 21 bays are required to accommodate the loading demands associated with the redevelopment potential of 383 Kent Street.

The 21 loading bays can include a combination of vehicle sizes between 99th percentile cars up to 8.8 metre medium rigid vehicles. The split of vehicle types and sizes has been determined using evidence-based data contained in the Arup 2018 AITPM presentation, and would be as follows:

- two MRV bays
- five SRV bays
- 13 van, ute and car bays.

SHARED LOADING DOCK (ADDITIONAL BAYS)

An additional 7 bays (one MRV, two SRVs and four vans) can be spatially accommodated within the Site's basement as illustrated in Figure 1 (highlighted in orange).

This additional provision is intended to cater for any such additional retail and commercial loading demand generated by the precinct as part of a broader proposed shared loading strategy.

Figure 1: Reference Loading Dock Arrangement

Source: 383 Kent Street - additional loading bay study, ftmt dated 21 November 2023

POTENTIAL SHARED LOADING DOCK CATCHMENT

When accounting for DCP 2012 loading requirements of 21 loading bays to service 383 Kent Street, there are seven additional loading bays that can be dedicated to a shared loading dock catchment.

The seven loading bays could technically service around 2,500 square metres retail GFA within a precinct or say combination of 1,500 square metres retail GFA and 11,500 square metres commercial GFA based on DCP 2012 requirement.

The TfNSW Urban Freight Forecasting Model (UFFM) is a useful planning tool which performs two main functions:

1. Provides daily profiles of the volume and types of freight and servicing activity that a building is likely to generate across a typical weekday, based on building information entered by the user.
2. Assesses the performance of loading dock parking spaces provided by a development to manage the freight demand generated by the building.

The objective of the model is to assist in understanding the facilities that will be appropriate for a development to be self-sufficient in managing its own freight and servicing activity.

By entering key inputs such as the number of loading bays, the model would determine the following:

- Estimated distribution of demand throughout the day.
- Efficiency of the loading dock (dock performance).
- Projected vehicle arrival profiles by loading spaces (i.e., HRV, MRV, SRV and cars, vans, utes etc.).

The TfNSW UFFM is based on a comprehensive data collection effort conducted of 44 buildings of varying sizes, locations, land use sizes and types. The buildings included commercial, residential, retail and hotels with retail being up to 3,000 square metres. It is considered an acceptable tool to understand loading dock requirements for a development and an alternative method to statutory documents such as the Sydney DCP 2012. Based on the TfNSW Urban Freight Forecasting Model, the seven loading bays could technically accommodate an increased requirement being:

- around 7,500 square metres retail GFA within a precinct or
- say combination of 4,000 square metres retail GFA and 15,000 square metres commercial GFA.

Table 3 summarises the potential catchment floor areas.

Table 3: Potential Shared Loading Dock Catchment

Scenario	Catchment Area	
	Retail Only (GFA)	Retail and Commercial (GFA)
Based on DCP 2012 (7 bays only)	Approx. 2,500sqm	Approx. 1,500sqm retail and 11,500sqm commercial
Based on TfNSW UFFM (7 bays only)	Approx. 7,500sqm	Approx. 4,000sqm retail and 15,000sqm commercial

The implementation of an electronic booking system for loading dock operation can readily and efficiently manage demand across the day. Such a booking system would have the potential to allow all 28 loading bays to be used for all demand whether it be from the development or the shared scheme precinct. In such scenario, the loading dock could technically accommodate say a combination of 15,000 square metres retail GFA and 95,000 square metres commercial GFA based on the TfNSW UFFM (or some additional 14,500 square metres retail GFA and 22,500 square metres commercial GFA from the surrounding buildings with limited loading facilities, including servicing development at 383 Kent Street).

CATCHMENT STUDY

An analysis of the surrounding catchment has been undertaken to determine the catchment which would benefit from the proposed shared loading dock, as shown in Figure 2.

The catchment would incorporate sites along Kent Street (between King and Market Streets), and sites on the western side of Clarence Street and eastern side of Sussex Street (also between King and Market Streets).

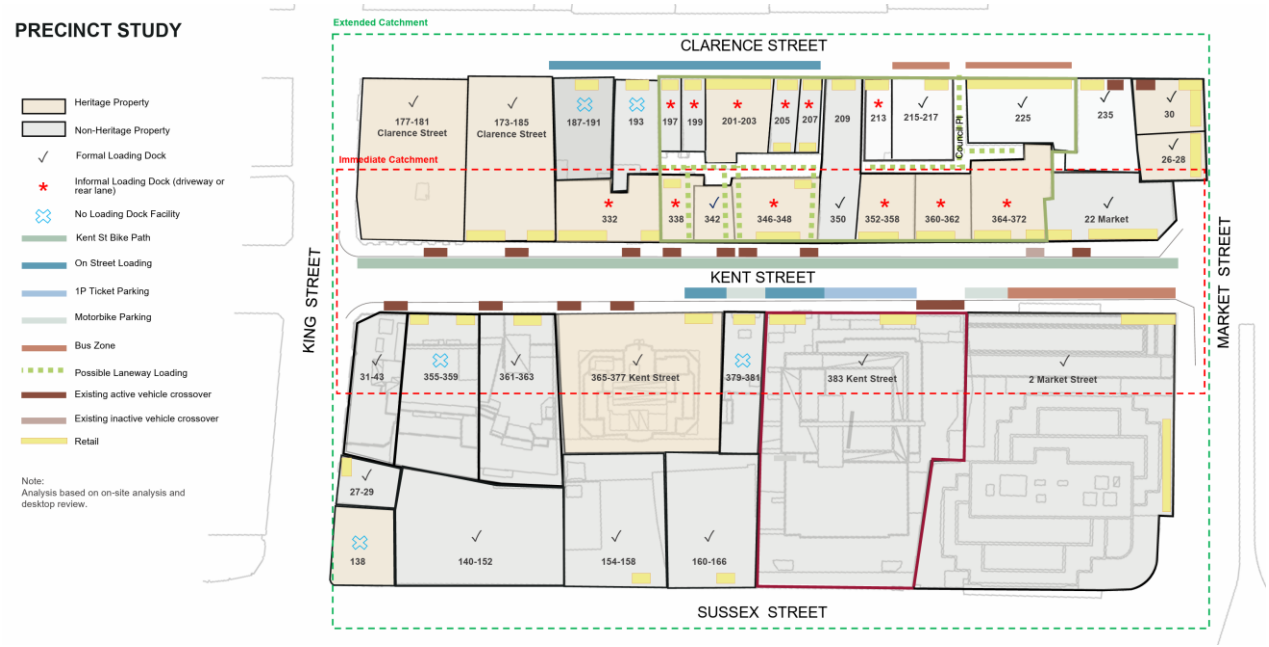
As shown in the analysis, at least five sites within this catchment do not benefit from any existing loading dock provision, and at least 12 sites are serviced by informal docks which likely do not meet the demand required by those buildings (many of which are heritage sites with an inability to accommodate further dock space).

We note from the analysis, the shared loading dock can support (using UFFM):

- 100% of the buildings with no loading dock provision or
- 66% of the buildings with no formal loading dock facility (100% retail, 60% commercial)

Reference: 383 Kent Street, Sydney – Shared Loading Dock Assessment

Figure 2: Immediate and extended loading catchment



Source: Charter Hall Preliminary Desktop Study

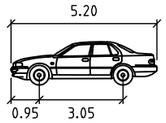
HIGH-LEVEL SWEPT PATH ANALYSIS

Swept path analysis has been completed for the reference vehicular access and shared loading dock and design. The swept paths considered design vehicles including 99th percentile cars, Small Rigid Vehicles and Medium Rigid Vehicles. The swept paths are attached to this memorandum and illustrate that the design vehicles can enter and exit the site in a forward direction and that there is adequate manoeuvring area within the reference loading dock design for the vehicles to enter and exit loading bays.

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h



B99

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9

28 Loading Bays (7 shared)
Shared spaces shown shaded
Retail20 m²
Retail30 m²
Retail88 m²
7337
Rollershutter
Waste 75 m²
EOT276 m²
Storage
Core
Water Meter Room72 m²
Fiire Pump Room54 m²
Storage100 m²
7003
Turning Bay
Sussex Street
CBD Rail Link - Type
B99
SRV
MRV
STANDARDS 2004 (AU_NZ)
STANDARDS 2018 (AU)

Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED M.RIMAC	DESIGN CHECK B.KHAN
APPROVED BY B.KHAN	DATE ISSUED 22 NOVEMBER 2023

SCALE A3 0 1.25 2.5 5 1:250

CAD FILE NO. 300304103-01-P5.DWG

383 KENT STREET, SYDNEY
SUSSEX STREET - GROUND LEVEL

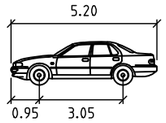
VEHICLE SWEPT PATH ASSESSMENT

DRAWING NO. 300304103-01-02 SHEET 02 OF 08 ISSUE P5

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h



B99

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9

VEHICLE ENTERING

VEHICLE EXITING

Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED	M.RIMAC
DESIGN CHECK	B.KHAN
APPROVED BY	B.KHAN
DATE ISSUED	22 NOVEMBER 2023
SCALE	A3 0 1.25 2.5 5 1:250
CAD FILE NO.	300304103-01-P5.DWG

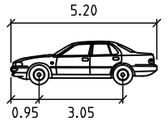
383 KENT STREET, SYDNEY
SUSSEX STREET - GROUND LEVEL
LOADING DOCK - TURNING BAY
VEHICLE SWEPT PATH ASSESSMENT

DRAWING NO. 300304103-01-03 SHEET 03 OF 08 ISSUE P5

SWEPT PATH KEY

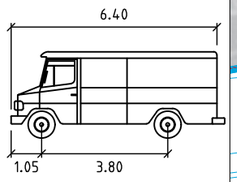
- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h



B99

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9



SRV

	meters
Width	: 2.30
Track	: 2.30
Lock to Lock Time	: 6.0
Steering Angle	: 38.0

SRV STRADDLES TRAFFIC LANES ON ENTRY TO ACHIEVE PASSING OF B99 VEHICLE AT SITE ACCESS

SRV PASSING B99

B99 PASSING SRV

Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED	M.RIMAC
DESIGN CHECK	B.KHAN
APPROVED BY	B.KHAN
DATE ISSUED	22 NOVEMBER 2023
CAD FILE NO.	300304103-01-P5.DWG

SCALE A3 0 1.25 2.5 5 1:250

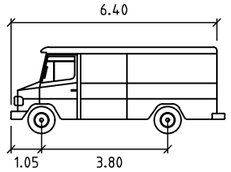
383 KENT STREET, SYDNEY
SUSSEX STREET - GROUND LEVEL
SITE ACCESS
VEHICLE SWEPT PATH ASSESSMENT

DRAWING NO. 300304103-01-04 SHEET 04 OF 08 ISSUE P5

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h



SRV

	meters
Width	: 2.30
Track	: 2.30
Lock to Lock Time	: 6.0
Steering Angle	: 38.0

VEHICLE ENTERING

VEHICLE EXITING

Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED	M.RIMAC
DESIGN CHECK	B.KHAN
APPROVED BY	B.KHAN
DATE ISSUED	22 NOVEMBER 2023
CAD FILE NO.	300304103-01-P5.DWG

SCALE A3 — 0 2.5 5 10 — 1:500

383 KENT STREET, SYDNEY
SUSSEX STREET - GROUND LEVEL
LOADING DOCK
VEHICLE SWEPT PATH ASSESSMENT

DRAWING NO. 300304103-01-05 SHEET 05 OF 08 ISSUE P5

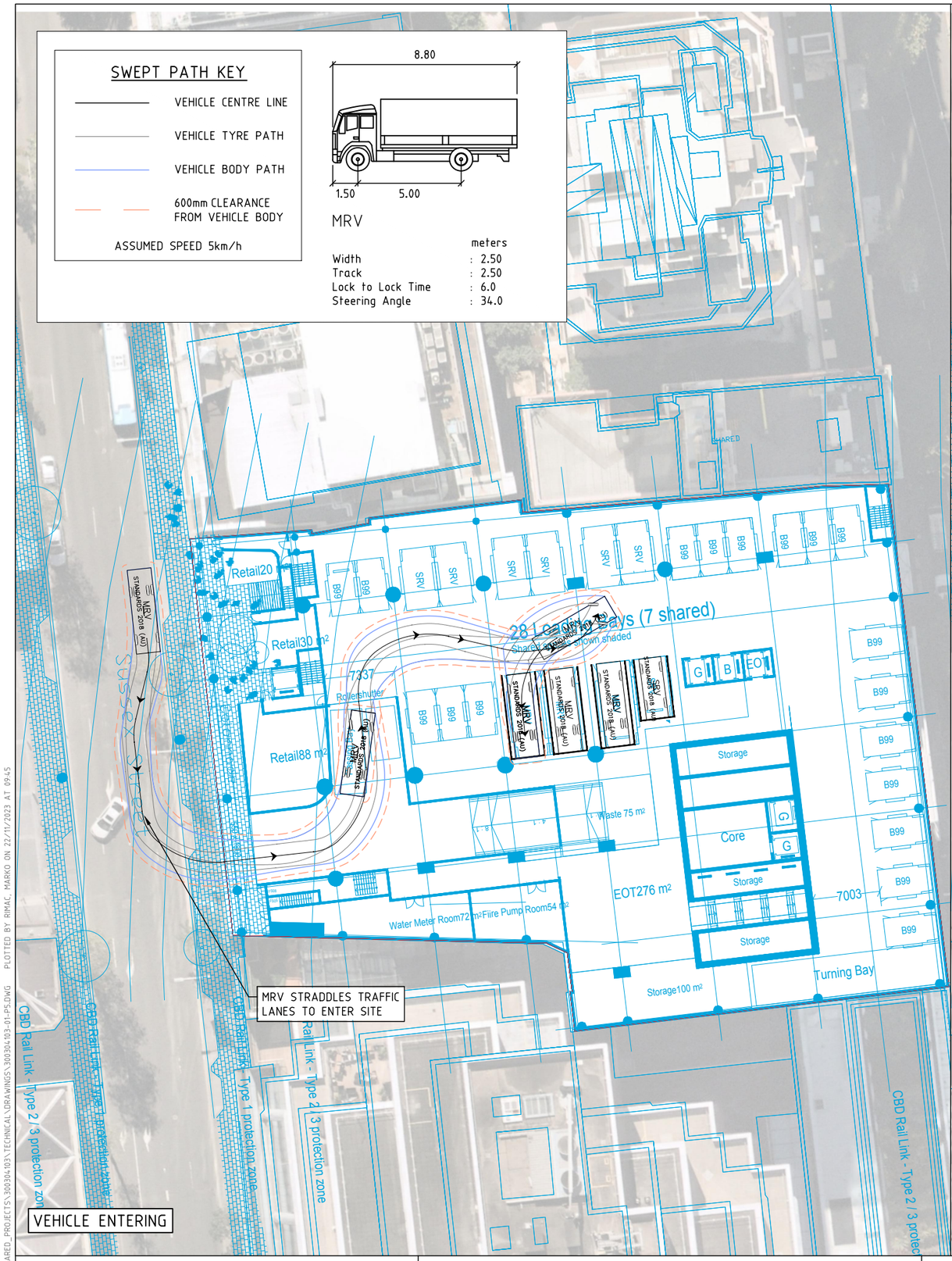
SWEPT PATH KEY

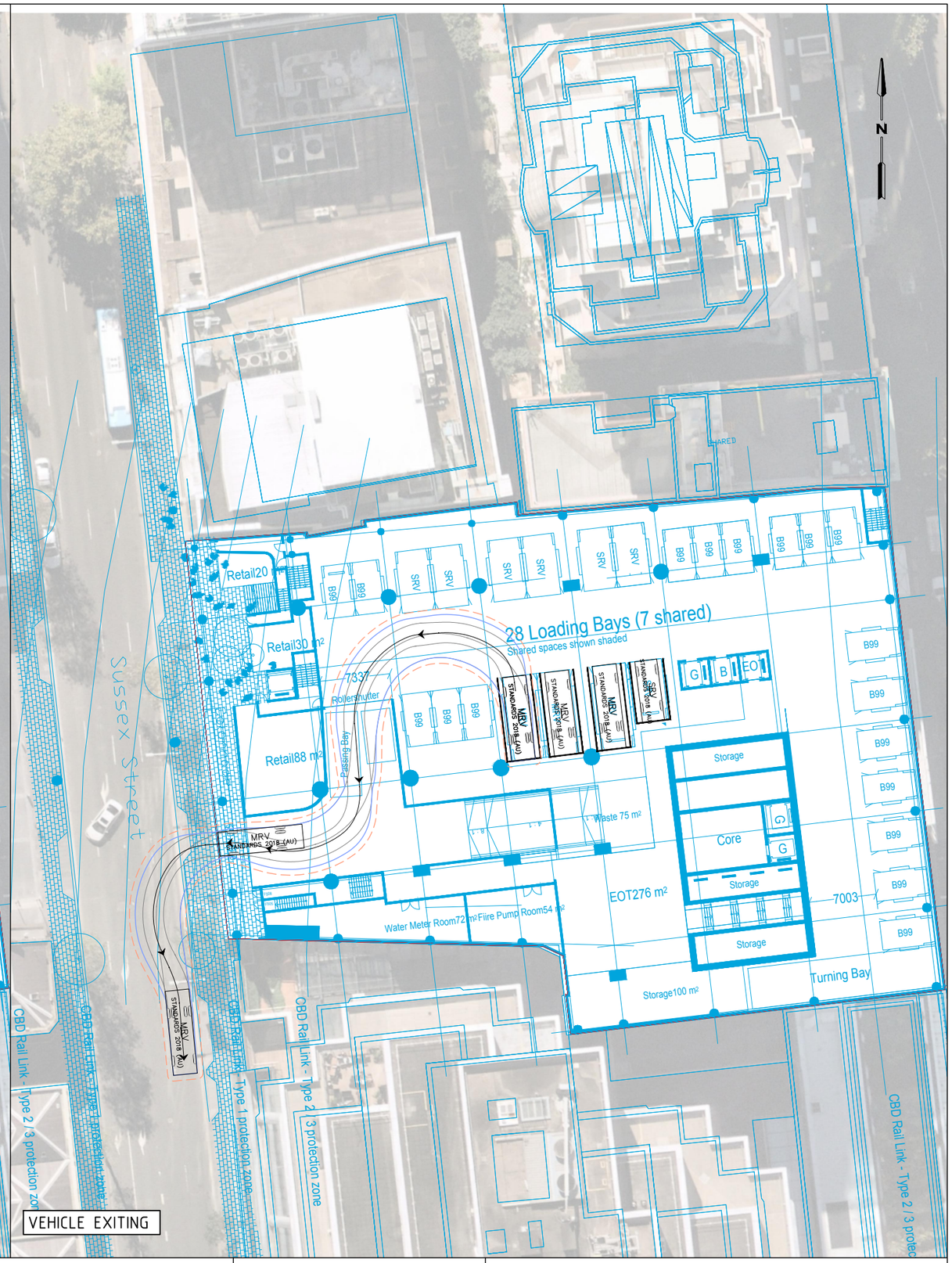
- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 600mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

MRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 34.0





Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED	M.RIMAC
DESIGN CHECK	B.KHAN
APPROVED BY	B.KHAN
DATE ISSUED	22 NOVEMBER 2023
CAD FILE NO.	300304103-01-P5.DWG

SCALE A3 0 2.5 5 10 1:500

383 KENT STREET, SYDNEY
SUSSEX STREET - GROUND LEVEL
LOADING DOCK
VEHICLE SWEPT PATH ASSESSMENT

DRAWING NO. 300304103-01-06 SHEET 06 OF 08 ISSUE P5

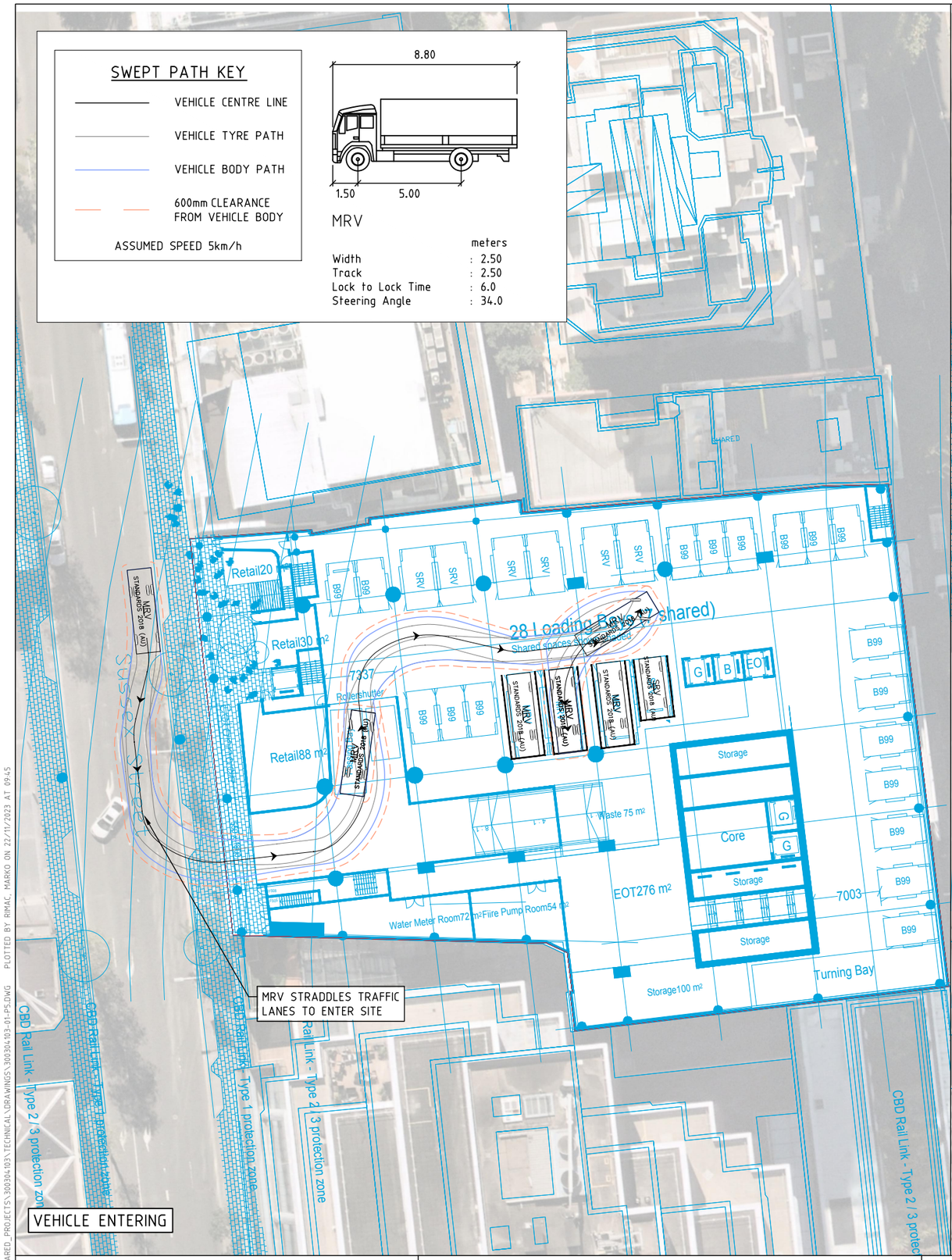
SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 600mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

MRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 34.0



Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED M.RIMAC	DESIGN CHECK B.KHAN
APPROVED BY B.KHAN	DATE ISSUED 22 NOVEMBER 2023

SCALE A3 0 2.5 5 10 1:500

CAD FILE NO. 300304103-01-P5.DWG

383 KENT STREET, SYDNEY
SUSSEX STREET - GROUND LEVEL
LOADING DOCK
VEHICLE SWEPT PATH ASSESSMENT

DRAWING NO. 300304103-01-07 SHEET 07 OF 08 ISSUE P5

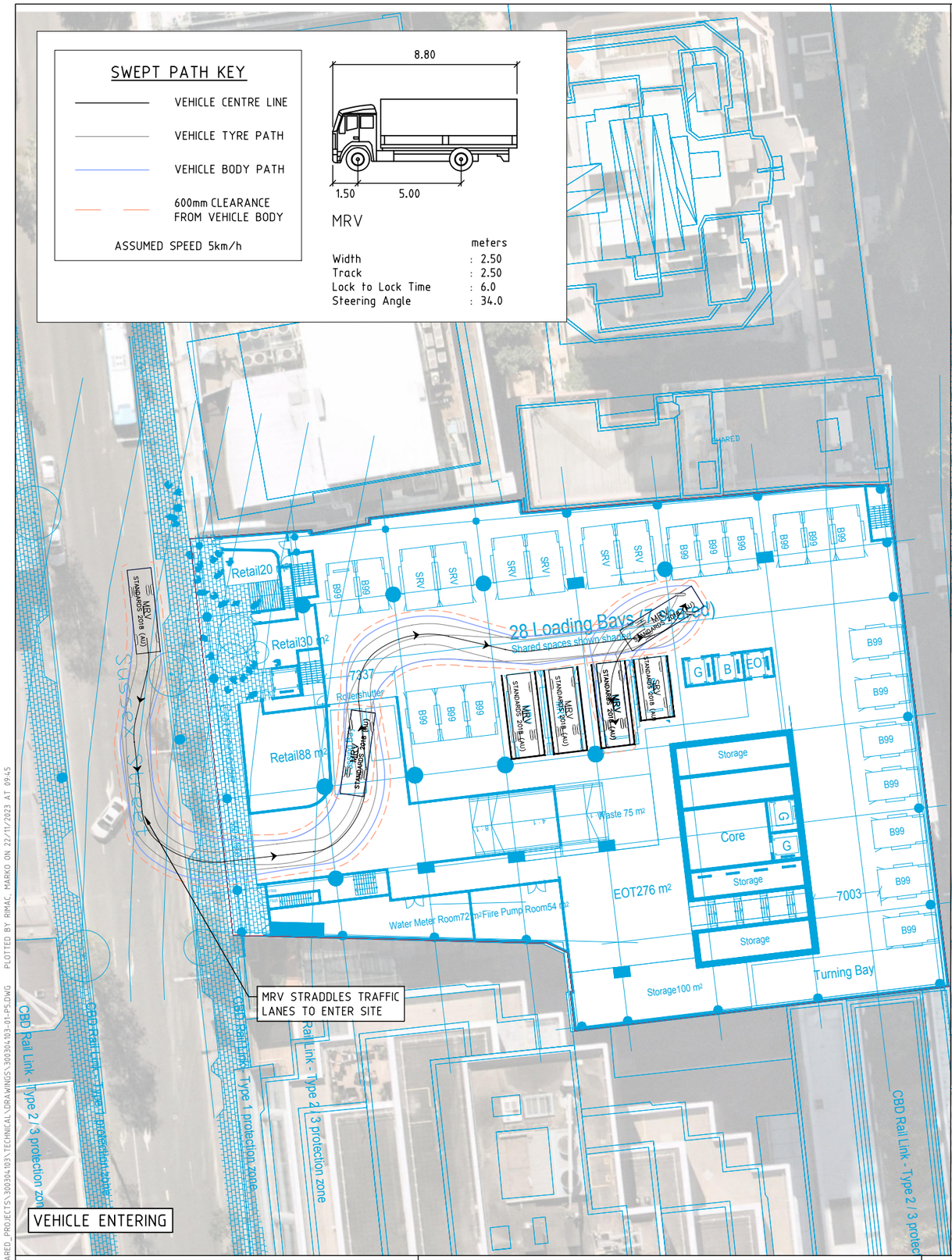
SWEPT PATH KEY

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 600mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

MRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 34.0



Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED	M.RIMAC
DESIGN CHECK	B.KHAN
APPROVED BY	B.KHAN
DATE ISSUED	22 NOVEMBER 2023
CAD FILE NO.	300304103-01-P5.DWG

SCALE A3 0 2.5 5 10 1:500

383 KENT STREET, SYDNEY
SUSSEX STREET - GROUND LEVEL
LOADING DOCK
VEHICLE SWEPT PATH ASSESSMENT

DRAWING NO. 300304103-01-08 SHEET 08 OF 08 ISSUE P5