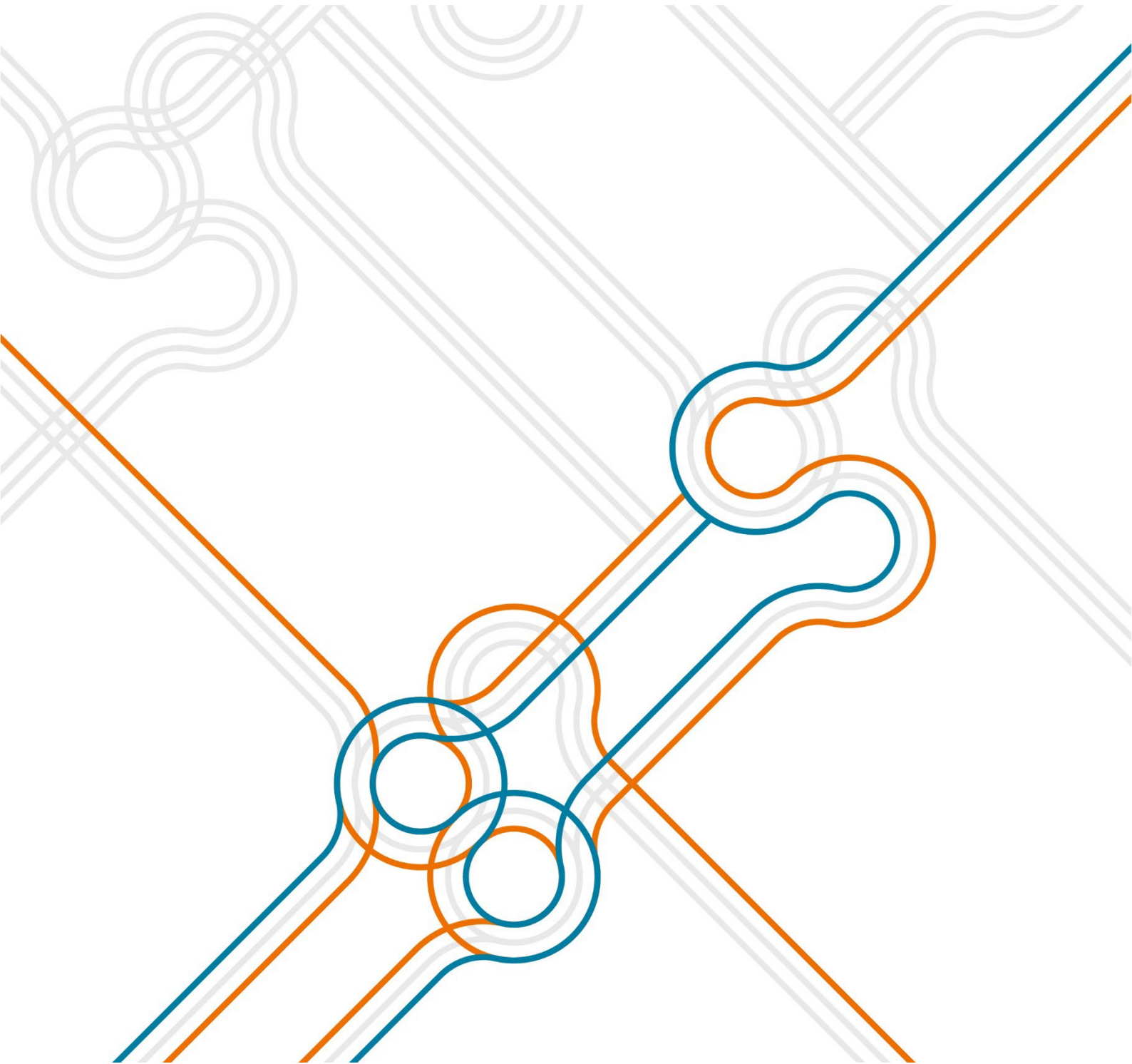

Crows Nest Over Station Development – Site B

Preliminary Construction Traffic Management Plan

Prepared for: Thirdi Crows Nest Commercial Developments Pty Ltd

Ref: 301351270 | Date: 5 September 2024



Revision

Revision	Date	Comment	Prepared By	Approved By
A	5 September 2024	Final for Submission	D. Cheng & S. Hong	D.Salangsang

Dave Salangsang

For and on behalf of

Stantec Australia Pty Ltd

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Acknowledgment of Country

In the spirit of reconciliation, Stantec acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea, and community. We pay our respect to their Elders past and present, and extend that respect to all Aboriginal and Torres Strait Islander peoples.

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1. Introduction

1.1 Background

It is understood that a State Significant Development Application (SSDA) is to be lodged with the Department of Planning, Housing and Infrastructure (DPHI) for a mixed use development (predominantly residential) above the Crows Nest Metro Station, otherwise known as Crows Nest Over Station Development (OSD) Site B. The subject site will be one of three OSD sites (identified as sites A, B and C).

A concept SSDA was lodged with the DPHI (SSD-9579) for all three sites and was approved in 2020.

Stantec was commissioned by Thirdi Group to prepare a Preliminary Construction Traffic Management Plan (CTMP) to support the proposed SSDA for Site B.

This preliminary CTMP examines the impacts of construction works on the surrounding transport network and details the proposed construction traffic management measures to ensure all works stages can be accommodated by the surrounding road network.

In this regard, the following overarching principles of traffic management during the construction activity have been considered:

- providing an appropriate and convenient environment for pedestrians / workers
- maintaining appropriate public transport access
- minimising the loss of parking
- maintaining access to/ from adjacent buildings
- restricting construction vehicle movements to designated routes to/ from the site
- managing and control construction vehicle activity near the site
- carrying out construction activity in accordance with Council's approved hours of works.

1.2 Secretary's Environmental Assessment Requirements

This Preliminary CTMP has been prepared to address issue 10 of the Secretary's Environmental Assessment Requirements (SEARs) for SSD-61400212 issued on 25 August 2023.

Provide a transport and accessibility impact assessment which includes:

- *Analysis of the impacts of the proposed development during construction and operation (including justification for the methodology used), including predicted modal split, a forecast of additional daily and peak hour multimodal network flows as a result of the development (using industry standard modelling), identification of potential traffic impacts on road capacity, intersection performance and road safety (including pedestrian and cyclist conflict) and any cumulative impact from surrounding approved developments.*
- *Provide a Construction Traffic Management Plan detailing predicted construction vehicle routes, access and parking arrangements, coordination with other construction occurring in the area, and how impacts on existing traffic, pedestrian and bicycle networks would be managed and mitigated.*

1.3 Purpose of this Report

The purpose of this report is to assess the impacts that the construction works will have on the existing traffic and transport conditions and describe how these impacts will be managed.

The primary objective of this report is to ensure that the construction impacts on the existing traffic and transport network is minimised. To achieve this objective, this preliminary CTMP will:

- Provide a summary of the size of construction vehicles to be used during the different stages of construction and estimate the volume of construction vehicle trips during the construction period.
- Identify the safest and most efficient construction vehicle routes.
- Identify and outline appropriate controls to minimise construction impact to the existing conditions of the road network and overall safety of all road users.



1.4 References

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

- Traffic Control at Work Sites Technical Manual, TfNSW, February 2022
- Australian Standard AS1742.3:2019 'Manual of Uniform Traffic Control Devices – Traffic control for works on roads
- Austroads Guide to Temporary Traffic Management series (2021)
- other documents and data as referenced in this report.



2. Existing Conditions

2.1 Land Zoning

The subject site is located on the south-eastern corner of the intersection between Pacific Highway and Hume Street, and comprises of the following properties:

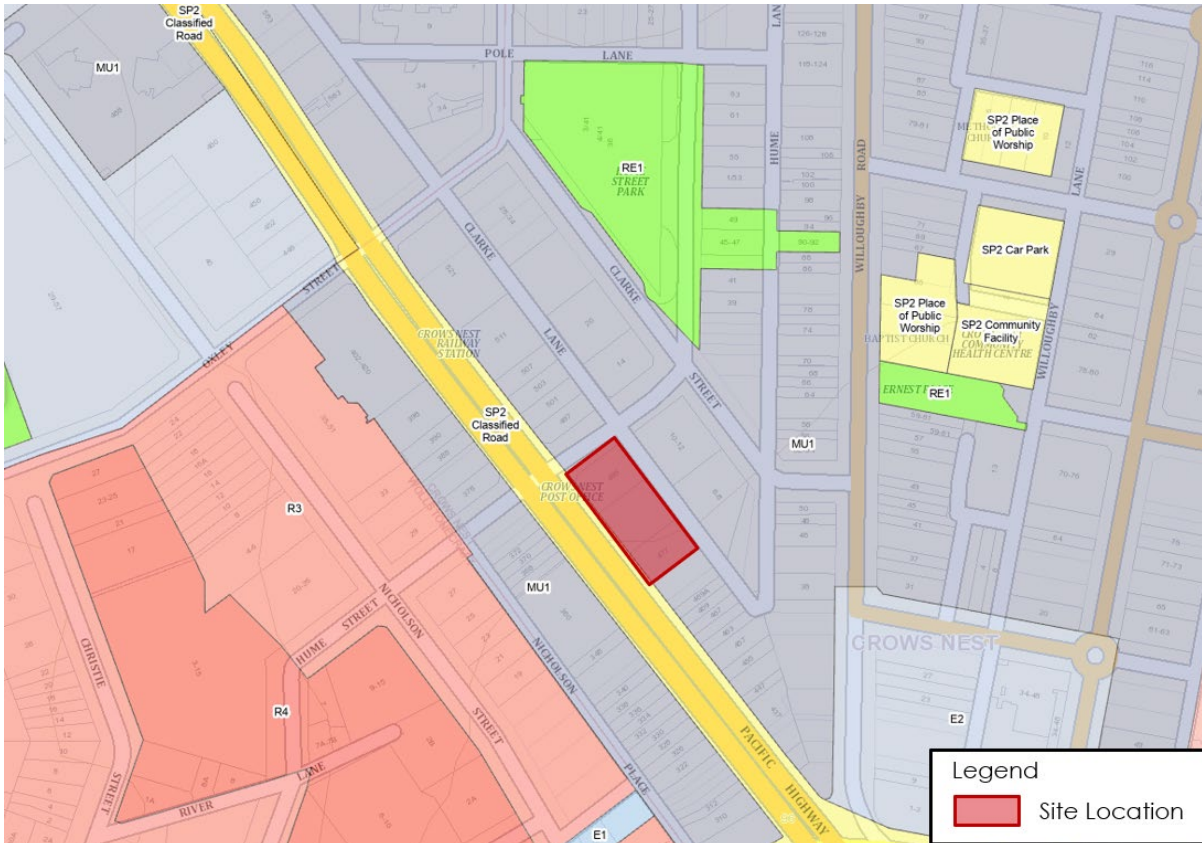
- 477 Pacific Highway (Lot 100, DP 747672)
- 479 Pacific Highway (Lot 101, DP 747672)
- 491-495 Pacific Highway (Lot 100, DP 442804)

The site currently has a land use classification as MU1 – Mixed Use and was historically occupied by a commercial building which has been demolished to make way for the Crows Nest Metro Station.

The site is located on the eastern side of Pacific Highway and is approximately 800 metre walking distance from St Leonards Station. The surrounding land uses predominantly comprise of mixed use and high-density residential developments.

The site and surrounding land uses is shown in Figure 1.

Figure 1: Local land use map



Base image source: ePlanning Spatial Viewer



2.2 Road Network

2.2.1 Road Hierarchy

Roads are classified according to the functions they perform. The main purpose of defining a road's functional class is to provide a basis for establishing the policies which guide the management of the road according to their intended service or qualities.

In terms of functional road classification, State roads are strategically important as they form the primary network used for the movement of people and goods between regions, and throughout the State. Transport for NSW (TfNSW) is responsible for funding, prioritising, and carrying out works on State roads. State roads generally include roads classified as freeways, state highways, and main roads under the Roads Act 1993, and the regulation to manage the road system is stated in the Australian Road Rules.

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

- Arterial Roads – Controlled by TfNSW, typically no limit in flow and designed to carry vehicles long distance between regional centres.
- Sub-Arterial Roads – Managed by either Council or TfNSW under a joint agreement. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day, and their aim is to carry through traffic between specific areas in a sub region or provide connectivity from arterial road routes (regional links).
- Collector Roads – Provide connectivity between local sites and the sub-arterial road network, and typically carry between 2,000 and 10,000 vehicles per day.
- Local Roads – Provide direct access to properties and the collector road system and typically carry between 500 and 4,000 vehicles per day.

2.2.2 Adjoining Roads

The configuration of the roads in the immediate vicinity of the site have changed due to the construction works associated with the Crows Nest Metro Station, particularly Clarke Lane and Hume Street. This section summarises the characteristics of the surrounding roads before the Crows Nest Metro Station construction works.

The roads surrounding the site are classified according to the functional hierarchy described in Table 1 and shown in Figure 2.

Table 1: Adjoining Roads

Street	Hierarchy	Description
Pacific Highway	Arterial	Two-way road with three lanes of traffic in each direction. Parking is generally permitted in the kerbside lane outside of peak hours. The sign posted speed limit varies along Pacific Highway but is 60 kilometres per hour along the site frontage.
Oxley Street	Local Road	Two-way road with one lane of traffic in each direction. Parking is generally permitted in kerbside areas. The speed limit along Oxley Street is 50 kilometres per hour.
Hume Street	Local Road	Two-way road with one lane of traffic in each direction. Parking is generally permitted in kerbside areas. The speed limit along Hume Street is 50 kilometres per hour
Hume Lane	Local Road	One way laneway, with traffic permitted northbound north of Clarke Street and southbound south of Clarke Street. Kerbside parking is not permitted along Hume Lane. The speed limit along Hume Lane is 50 kilometres per hour, however considering the narrow width of the laneway the average speed is expected to be lower.



Street	Hierarchy	Description
Clarke Street	Local Road	Two-way road with one lane of traffic in each direction. Parking is generally permitted in kerbside areas. Classified as an on-road cycle route, with some on road and some segregated cycle lanes installed. The speed limit along Clarke Street is 50 kilometres per hour.
Clarke Lane	Local Road	One way laneway, with traffic permitted northbound only. Kerbside parking is not permitted along Clarke Lane. The speed limit along Clarke Lane is 50 kilometres per hour, however considering the narrow width of the laneway the average speed is expected to be lower.
Willoughby Road	Collector Road	Two way road with one lane of traffic in each direction and kerbside parking. Frequent traffic calming measures have been installed. Partly classified as an on-road cycle route, with on-road pavement markers installed. The posted speed limit along Willoughby Road is 40 kilometres per hour through the main retail/ commercial precinct and 50 kilometres per hour in other areas.

Figure 2: Road hierarchy surrounding the site



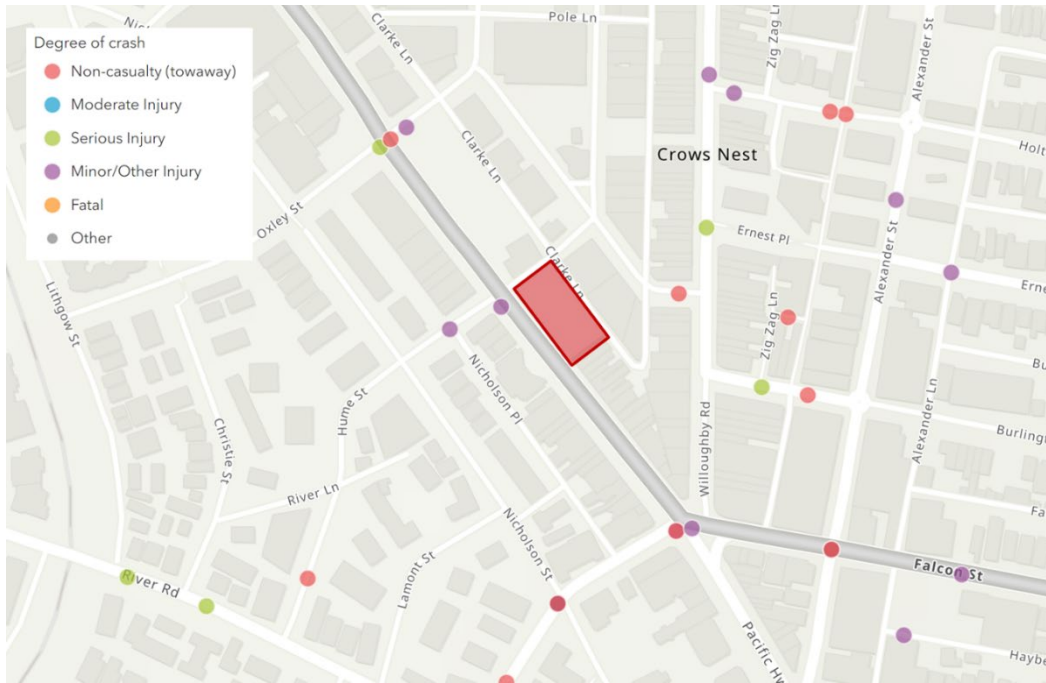
Base image source: TfNSW Road Network Classifications



2.3 Crash History

Analysis of the most recent five-year period of available crash data (2017-2021) has been undertaken based on crash data obtained from the TfNSW Centre for Road Safety for the roads surrounding the site. The locations and severity of the crash data for the five-year period is shown in Figure 3 and detailed in Table 2.

Figure 3: Crash Map from 2017 to 2021



Base image source: Transport for NSW LGA View Crashes Map (2023)

Table 2: Crash History from 2017 to 2021

Road	Number of Crashes	People Injured	Number of Fatalities
Pacific Highway	7	5	0
Falcon Street	5	5	0
Oxley Street	1	1	0
Hume Street	2	1	0
Shirley Road	10	6	0
Albany Street	3	3	0
Willoughby Road	3	4	0
Burlington Street	2	0	0
Holtermann Street	3	1	0
Alexander Street	2	2	0
Total	38	28	0

The following key statistics can be drawn from the crash data:

- Approximately 74 per cent of crashes resulted in an injury.
- Approximately 84 per cent of crashes occurred during daylight hours.
- No fatalities were recorded during the five-year period.

A review of the crash data indicates that incidents occurring on Shirley Road account for 26 per cent of recorded crashes, where most of these crashes are located at the Shirley Road / Nicholson Street / Sinclair Street roundabout. Crashes at this intersection mainly comprise of right through and cross traffic crashes. Pacific Highway also accounts for 18 per cent of crashes that occurred within the vicinity of the site.

2.4 Car Parking

2.4.1 Public off-street parking

Several off-street publicly accessible car parks are near the site. Four of these car parks are operated by North Sydney Council and offer free parking for up to 2 hours, while the remaining three are privately operated and charge by the hour, up to a daily maximum. These parking stations are summarised in Table 3.

Table 3: Off-street public car parking in the vicinity of the site

Car Park	Location	Cost
North Sydney Council Nicholson Street car park	Nicholson Street, Crows Nest	Monday – Saturday: Free parking up to 2 hours, fees apply thereafter up to \$42.00 each day (applies for hours 7am to 11pm only) Sunday: Free
North Sydney Council Hume Street car park	Hume Street, Crows Nest	Monday – Saturday: Free parking up to 2 hours, fees apply thereafter up to \$49.00 each day (applies for hours 7am to 6pm only). Flat rate of \$9 after 6pm. Sunday: Free
North Sydney Council Holtermann Street car park	Holtermann Street, Crows Nest	Monday – Saturday: Free parking up to 2 hours, fees apply thereafter up to \$58.00 each day (applies for hours 7am to 11pm only) Sunday: Free
North Sydney Council Alexander Street car park	Alexander Street, Crows Nest	Monday – Saturday: Free parking up to 2 hours, fees apply thereafter up to \$58.00 each day (applies for hours 7am to 11pm only) Sunday: Free
Wilson Parking Oxley Street	40 Oxley Street, Crows Nest	Monday – Friday: Up to \$39.00 per day (Open 6:00am – 7:00pm) Saturday – Sunday: \$5.00 flat rate (Open 6:00am – 6:00pm)
Charter Grove Car Park	29-57 Christie Street, St Leonards	Monday – Friday: Flat rate of \$12.00 (Open 6:00am – 7:00pm) Closed weekends
Norths Rugby Club Car Park	80 Christie Street, St Leonards	Monday – Friday: Up to \$39.00 per day Saturday – Sunday: \$8.00 flat rate

The limited supply and cost of parking in public car parks, including those privately owned, is likely to discourage employees travelling to Crows Nest for work via car, and contributes to the higher-than-average use of public transport for workers commuting to Crows Nest.

2.4.2 On-street parking

This section summarises the varying available on-street parking surrounding the site, before the Crows Nest Metro Station construction works.

On-street car parking near the site is typically time restricted and/or ticketed during weekday business hours and during some time periods at the weekend, as shown in Figure 4. Areas in the immediate vicinity of the site also do not permit



parking, except for residential parking permit holders. The limited number of on-street all day parking spaces in Crows Nest limits current workers from travelling to Crows Nest by vehicle as part of their daily commute, encouraging high public transport mode share.

Figure 4: Existing on-street parking restrictions in the immediate vicinity of the site.



Source: Sydney Metro City & South-West Crows Nest OSD Transport, Traffic & Pedestrian Assessment Report (2018)

2.5 Public Transport

2.5.1 Sydney Metro

The completion of the Sydney Metro City & South-West project in 2024, is expected to increase public transport accessibility in the surrounding area and increase public transport options. The new line will connect with the North West Metro line at Chatswood and provide direct connection between Chatswood to Sydenham and onto Bankstown via the Sydney's CBD. The project will involve the delivery of six new metro stations, including Crows Nest and will significantly increase capacity on the public transport network to/ from the area, further driving development and expansion in the area.

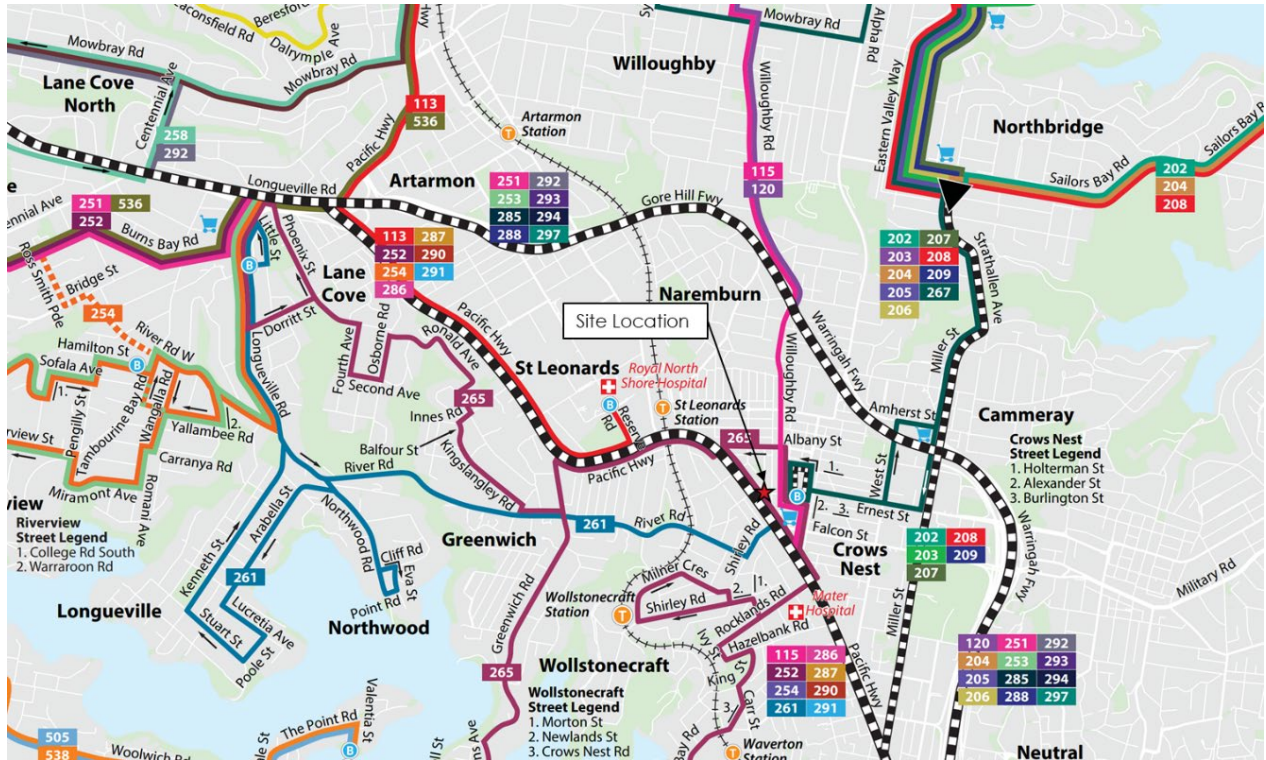
Future projects are also in the pipeline to further improve the Sydney Metro network and improve accessibility and travel times for workers, particularly to/ from Sydney CBD and Parramatta.

An overview of the future Sydney Metro network is shown in Figure 5.

2.5.3 Buses

Numerous bus stops are located close to the site, with buses serving a variety of destinations across the North Shore, Northern Beaches, Northern Suburbs and Inner City. A summary of where bus routes operate in the greater area are shown in Figure 7.

Figure 7: Bus network map



Source: Transport for NSW (2023)

A number of bus routes operate along Pacific Highway and Willoughby Road. These routes primarily serve the northern suburbs. The primary bus stops near the site are:

- Pacific Highway – one stop, northbound, south of Oxley Street (relocated from south of Hume Street).
- Pacific Highway – one stop, southbound, north of Hume Street.
- Willoughby Road – one stop, northbound, south of Holtermann Street.
- Willoughby Road – one stop, southbound, south of Holtermann Street.

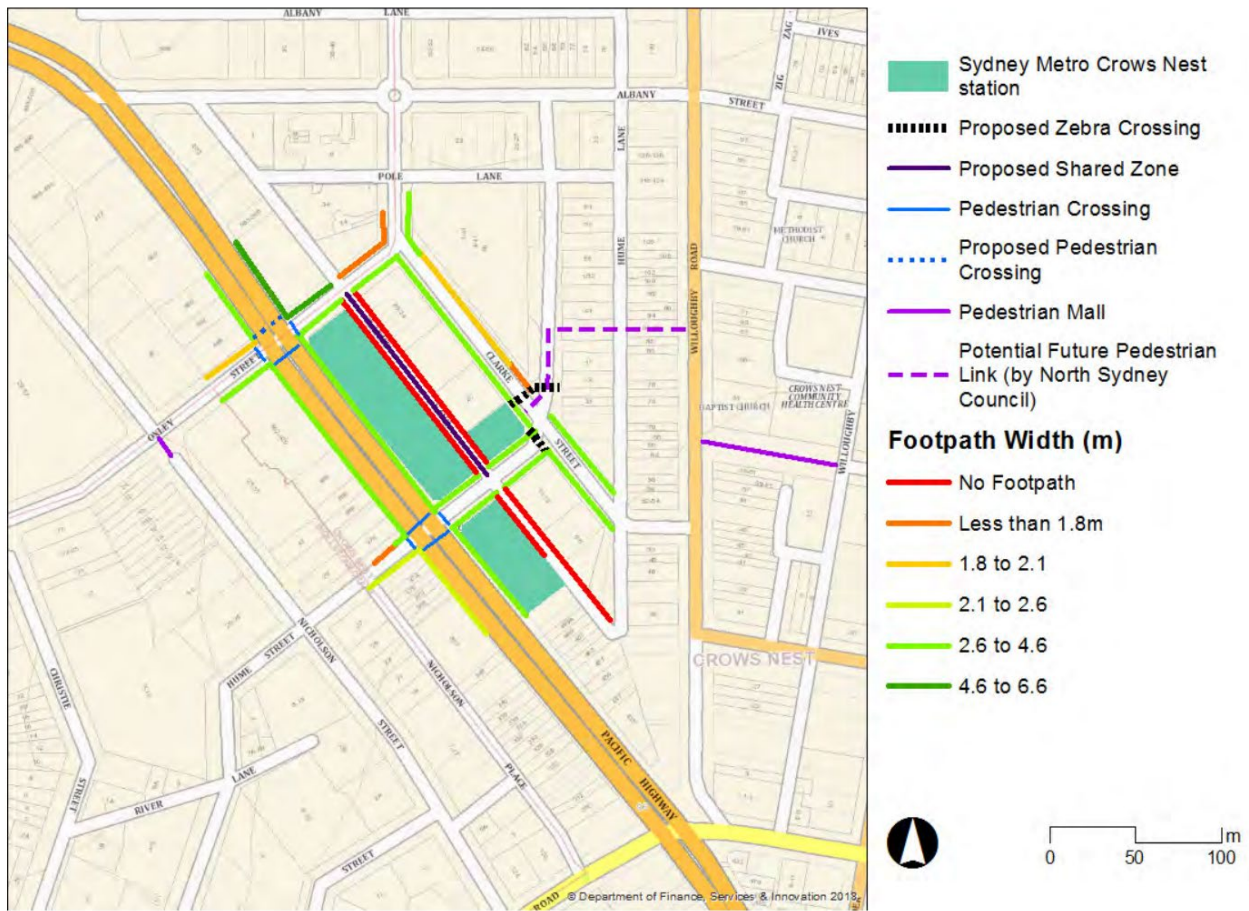
Bus services to most destinations are focused heavily on providing weekday peak direction services, with some bus services to destinations not provided in the non-peak direction on weekdays (for example outbound in AM peak) or at weekends. Service frequencies at weekends are also generally lower than during weekdays, however trunk routes to major destinations such as the Sydney CBD, North Sydney, Chatswood, Lane Cove, Neutral Bay and Green Square maintain a reasonably high frequency through the weekend, across various services.

Existing bus stops throughout Crows Nest are generally of good quality and provide a combination of shelter, covered seating and service information at all stops, with most containing all four.

2.6 Pedestrian Infrastructure

Improvements to the existing pedestrian infrastructure will be made as part of the delivery of the Crows Nest Metro Station. The proposed improvements are shown in Figure 8.

Figure 8: Proposed improvements to the surrounding pedestrian infrastructure



Source: Sydney Metro City & South-West Crows Nest OSD Transport, Traffic & Pedestrian Assessment Report (2018)

The key features of the pedestrian network around the site include:

- predominantly covered footpaths along the Pacific Highway
- frequent signalised pedestrian crossings along the Pacific Highway provide appropriate crossing facilities near the site
- signalised crossings on the Pacific Highway at Oxley Street and Hume Street
 - no pedestrian leg on the north-west side of the Oxley Street / Pacific Highway intersection
- widened footpaths on the western frontage and part of the eastern frontage of Clarke Street, including covered sections at the south eastern ends. This is a result of new developments along the Pacific Highway being required to have a three metre public domain set back, and is expected to produce a wider footpath along this section of the Pacific Highway over time.
- partly widened footpaths on Oxley Street with partly sheltered sections of footpath
- sporadic placement of trees for shade along footpaths without awnings
- inconsistent and narrowing sections of footpath on Clarke Street at Hume Street park
- a lack of pedestrian crossings within the blocks bound by the Pacific Highway, Albany Street and Willoughby Road (excluding the crossing at Clarke Street / Willoughby Road)
- no pedestrian footpaths or amenity provided along Hume Lane or Clarke Lane (south of Oxley Street).

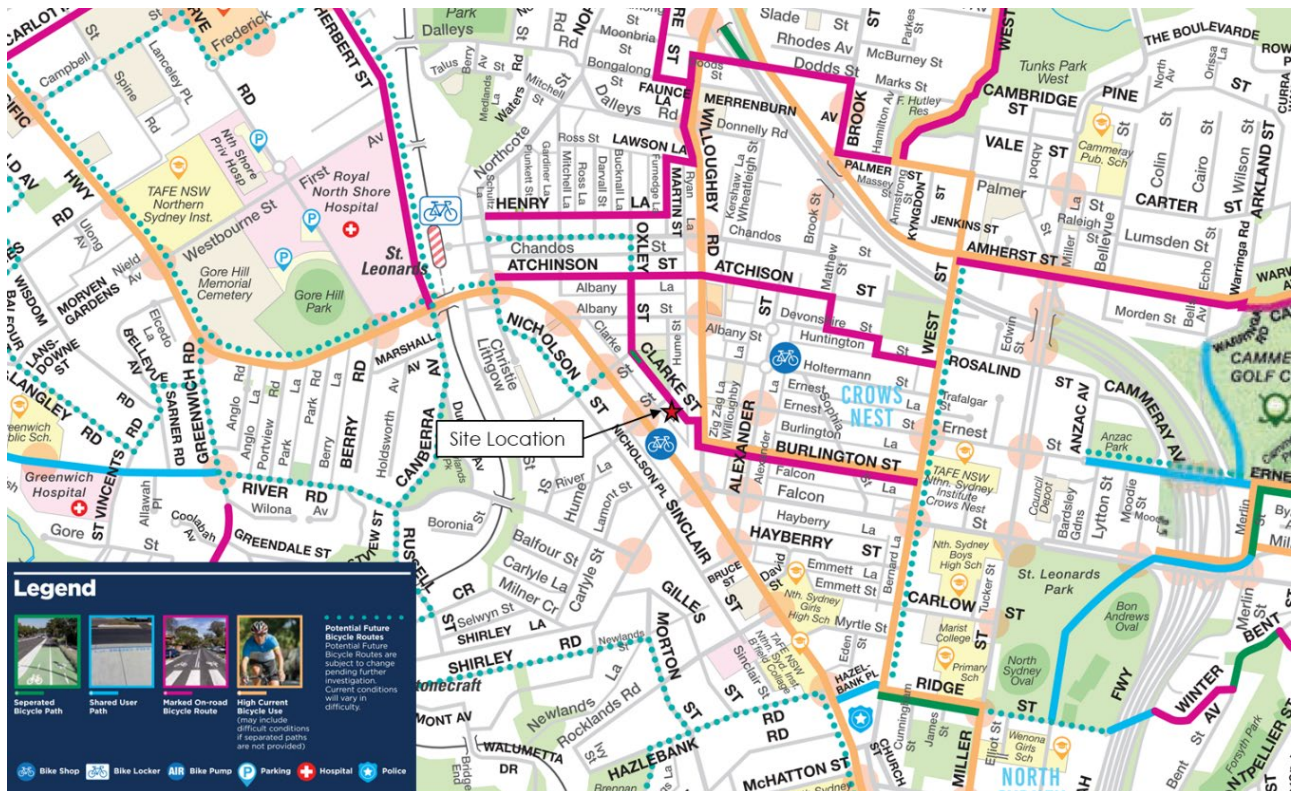
It should also be noted that North Sydney Council is in the process of implementing its proposed upgrades for Hume Street Park, which will provide new pedestrian connections from Hume Street and Clarke Street through to Willoughby Road, including the pedestrianisation of Hume Street north of Clarke Street, and a new mid-block pedestrian link from Hume Street to Willoughby Road. The first stage of the Hume St Park expansion project was completed in 2022, adding more than 1,200 square metres of new open space in Crows Nest.

As part of the Crows Nest Metro Station works, pedestrian movements and access will be improved by the development of new crossing points on nearby streets and the widening of footpaths along the OSD site through increased ground floor setbacks.

2.7 Cycle Infrastructure

There is a limited cycling network through the Crows Nest town centre, which provides a partial connection to the site. The existing cycling network is shown in Figure 9.

Figure 9: Crows Nest cycling network and infrastructure.



Source: North Sydney Cycling Guide and Map, accessed June 2023

The cycling network along these routes is incomplete and of moderate difficulty, with some gaps, circuitous routes and steep grades. The cycle network provides a connection through Crows Nest, connecting to St Leonards Station and North Sydney CBD via a series of mixed traffic roads, marked lanes and small sections of separated cycleways and shared paths.

Some public bike racks are installed along Willoughby Road for cyclists accessing Crows Nest town centre, however these do not feature weather protection and there are none currently installed in the immediate vicinity of the proposed Crows Nest OSD site.

It is noted that as part of the broader Crows Nest Station development, a separated cycleway will be installed on Hume Street, connecting the cycle route on Clarke Street to the cycle route on Nicholson Street.

The North Sydney Council DCP requires new development to make provision for secure bicycle facilities and end of trip facilities which is expected to address deficiencies in secure cycle parking facilities over time.

3. Overview of Construction Activities

3.1 Project Overview and Stages

This provides an overview of the expected construction for the purpose of a preliminary CTMP. A detailed CTMP will be prepared once the contractor is appointed.

The project involves the construction of a residential apartment development on top of Crows Nest Metro Station.

The construction works are proposed to be separated into three stages over a period of approximately 100 weeks. The estimated duration for each stage is detailed in Table 4.

Table 4: Proposed construction stages for Site B

Stage	Activities	Duration
Stage 1: Site Establishment	Set up site amenities, establish A class and B class hoardings, environmental controls, erect tower crane, install builders hoist, establish scaffold.	4 weeks
Stage 2: Structure	Form, reo, pour of lift and stair cores and slabs.	30 weeks
Stage 3: Façade	Install Curtin wall façade and Balustrades and exterior finishes.	35 weeks
Stage 4: Finish Interiors	Complete wet areas, install kitchens, complete floor finishes, painting install all FFE.	35 weeks

3.2 Site Contact Details

Details of the nominated site contact would be included in the future detailed CTMP prior to the commencement of construction.

3.3 Work Hours

All demolition, excavation and construction works associated with the development will be carried during standard construction hours:

- Monday to Friday: 7:30am to 5:30pm
- Saturdays: 7:30am to 3:30pm
- Sundays and Public Holidays: No works to be carried out

In the event that work needs to be undertaken outside the standard hours, written approval will be obtained from North Sydney Council prior to commencing works.

3.4 Site Plans

Detailed construction site plans, showing site fencing, hoarding locations, tower crane location, vehicle access points, site offices, amenities, tool and material storage areas and on-street Works Zones will be included in the detailed CTMP post DA approval, once a contractor is appointed.

3.5 Site Access and Loading

It is expected that majority of the heavy construction vehicles will park along the proposed Works Zone along Pacific Highway with goods being unloaded/ loaded via the cranes.

Vehicle access into the site will be via Clarke Lane. No vehicle access into the site will be provided along Pacific Highway.

The largest design vehicle approaching and departing the site will be a 19 metre articulated vehicle.

All vehicles will enter and exit the Works Zone and site in a forward direction.

A spotter will be stationed at the site access and Works Zone to manage construction vehicle arrivals and departures. Construction vehicles will be required to radio the spotter on approach.



Queuing or marshalling of construction vehicles will not be permitted on public roads, with call-up procedures to be put in place to manage arrivals.

3.6 Number of Construction Workers

The peak number of construction workers on site is expected to be up to 250 people. This will occur during the middle of the construction period when the structure, façade and finishing works occur concurrently. The average number of construction workers outside the peak periods are expected to be less.

3.7 Construction Traffic Volumes

3.7.1 Construction Heavy Vehicle Volumes

Construction heavy vehicles will range from AVs, HRVs and MRVs which are limited to a maximum of 19 metres.

The estimated heavy vehicle volume for each of the stages is summarised in Table 5.

Table 5: Heavy vehicle volumes

Stage	Description of vehicle type and size	Average no. of vehicles/ day
Site Establishment	19 metre articulated vehicles, 12 metre rigid trucks, 6 metre flatbed trucks, small vehicles for deliveries	15
Structure	19 metre articulated vehicles, 12 metre rigid trucks, 6 metre flatbed trucks, small vehicles for deliveries, Concrete trucks, and rubbish removal trucks	15
Façade	12 metre rigid trucks and 19 metre articulated vehicles	8
Finishes	12 metre rigid trucks and 19 metre articulated and rubbish removal trucks	12

During peak construction period (when the structure, façade and finishes run concurrently), there may be up to 35 heavy vehicle movements (in and out) daily. Across a day, this is considered to be minor and is not expected to have any adverse impact on the surrounding road network. Construction vehicle movements will generally be outside of commuter peak periods and any movements required during the peak periods will be limited.

3.7.2 Construction Contractor Vehicle Volumes

The traffic generated by construction workers (light vehicles) is expected to be minimal and will be managed appropriately by the lead contractor.

Construction workers will be encouraged to use public transport where possible, noting that there is a high level of public transport services and accessibility available to/ from the site, as outlined in Section 2.5. The site is surrounded by high frequency bus services, St Leonards Train Station and the Crows Nest Metro Station, which is expected to be operational in 2024.

A tool storage area will be provided on-site for workers to store their tools and equipment over night and travel to and from the site via public transport.

3.8 Construction Vehicle Routes

Truck movements will be restricted to designated routes and confined to the State and Regional roads where possible. Truck routes to/ from the site have been identified with the aim of minimising the impact of construction traffic on local residential roads near the site. Truck drivers will be advised of the designated routes during the site induction.

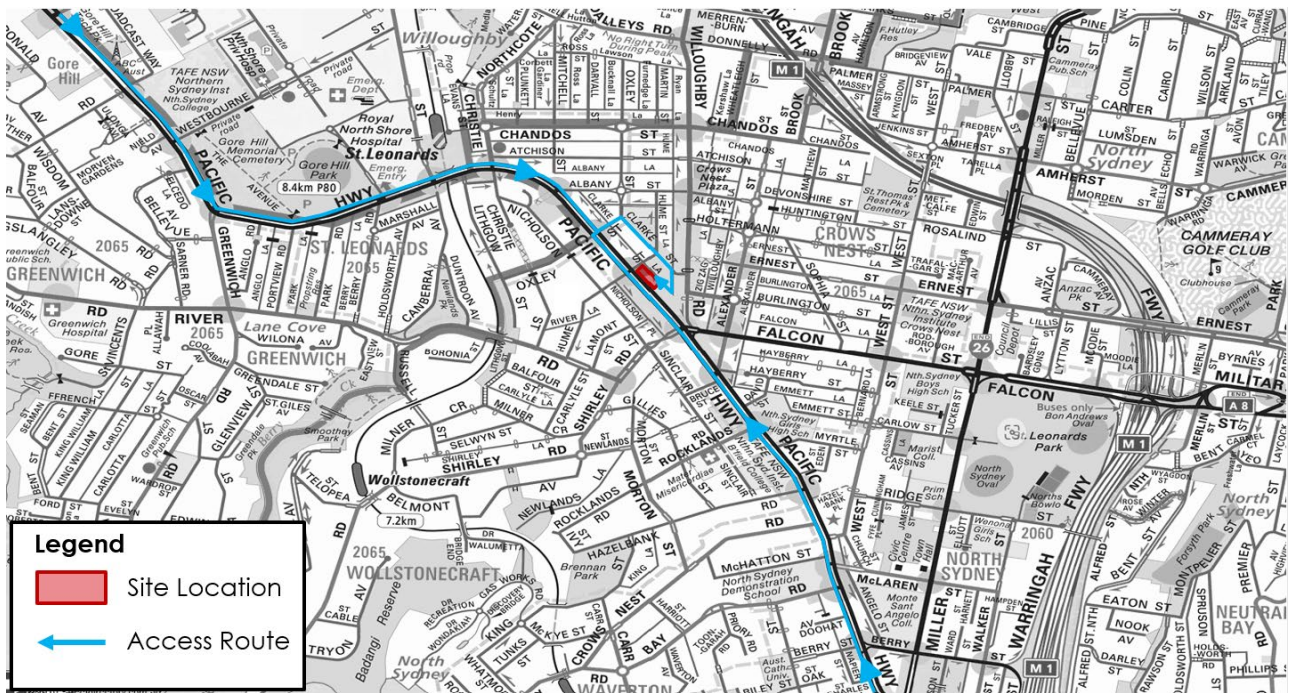
The directional distribution and assignment of traffic generated by the construction works will be influenced by several factors, particularly the origin/ destination of materials, configuration of access points to the site and the surrounding arterial road network.



The directional distribution of construction vehicles is illustrated in Figure 10, Figure 11, and Figure 12:

1. Site access routes (Figure 10):
 - Southbound: Vehicles accessing the site from northwest via Pacific Highway can turn left onto Oxley Street, turn right onto Clarke Street, turn right onto Hume Lane, turn right onto Clarke Lane and arrive on site.
 - Northbound: Vehicles accessing the site from southeast via Pacific Highway can turn right onto Oxley Street, turn right onto Clarke Street, turn right onto Hume Lane, turn right onto Clarke Lane and arrive on site.
2. Site egress routes (Figure 11):
 - Southbound: Vehicles egressing the site from start from Clarke Lane, turn left onto Hume Street, and turn left onto Pacific Highway.
 - Northbound: Vehicles egressing the site from start from Clarke Lane, turn left onto Hume Street, and turn right onto Pacific Highway.
 - It is noted that access and egress routes 1 and 2 are anticipated to accommodate only the smaller construction vehicles, i.e. MRV and smaller. Larger vehicles such as HRV, Semi trailers, etc. are anticipated to utilise the proposed works zone at the site frontage on Pacific Highway.
3. Site access and egress for heavy vehicles (Figure 12):
 - An on-street works zone is proposed on the Pacific Highway frontage of the site, which is discussed in Section 3.9.1 of this report. This works zone is anticipated to accommodate larger construction vehicles such as HRVs and semi trailers.
 - Due to the constraint, all vehicles using the works zone is required to approach from the north via Pacific Highway. Vehicles will approach the site, park within the extent of the work zone.
 - Vehicles will exit the work zone and continue to drive southbound along Pacific Highway.

Figure 10: Construction vehicle approach route



Base image source: <http://www.street-directory.com.au/>

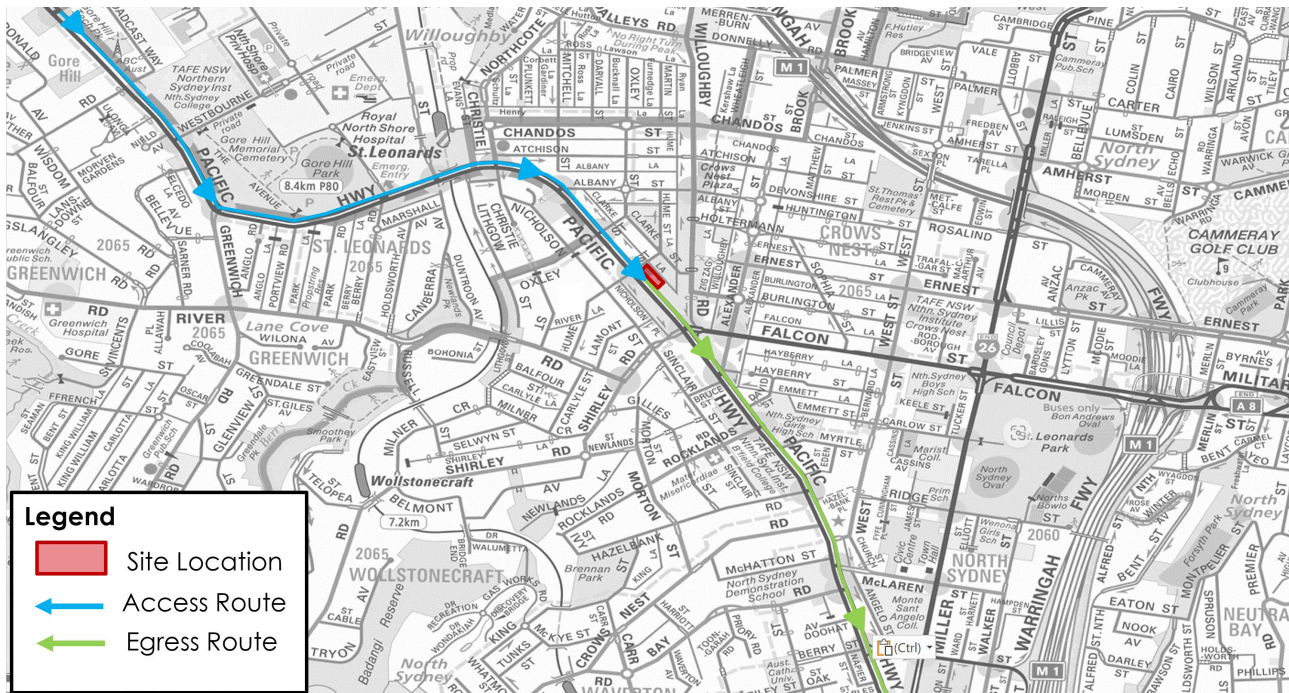


Figure 11: Construction vehicle departure route



Base image source: <http://www.street-directory.com.au/>

Figure 12: Heavy Vehicle Access and Egress Route



Swept path assessments at key intersections and the site access, using the largest design vehicle, will need to be completed and included in the detailed CTMP, post DA approval.



3.9 Construction Work Permits

3.9.1 On-street Works Zone

An on-street Works Zone, along the Pacific Highway frontage, is expected to be required during the construction period. It is noted that this area (approximately 50 metres in length) is currently being used as a Works Zone for the Crows Nest Metro Station works, and as such, it is anticipated that there will be no major issues with continuing to use this area as a Works Zone for the OSD works.

The Works Zone will be implemented during the approved hours. It is noted and acknowledged that the travel lane directly in front of the site is a transit lane during the morning peak hours (6am-10m Mon-Fri), and as such the Works Zone hours will need be cognisant of the transit lane hours. Outside the Works Zone period, the existing time restricted parking conditions will be reinstated.

A Works Zone application will be submitted, separate to this preliminary CTMP, by the applicant/ contractor prior to commencement of construction and will need to be reviewed and approved by the Works Zone Coordinator.

<https://www.northsydney.nsw.gov.au/getting-construction-underway/apply-construction-permit> .

3.9.2 Road Occupancy Licence

A Road Occupancy Licence will be required for this project as the works will be within 100 metres of traffic signals. A Road Occupancy License will be submitted, separate to this preliminary CTMP, by the applicant/ contractor prior to commencement of construction and will need to be reviewed and approved by TfNSW.

<https://www.transport.nsw.gov.au/operations/roads-and-waterways/business-and-industry/road-occupancy-licences>



4. Construction Traffic Management

4.1 Parking Impact

As outlined in Section 2.4.2, the kerbside restrictions within the surrounding road network are generally 'No Parking' or short-term time restricted parking. As such, majority of the workers are expected to use alternative modes of transport to travel to/ from the site with a too storage area to be provided on-site to allow workers to travel with ease via public transport. During the site induction, workers will be notified not to travel to site via private vehicles. When on-site parking becomes available.

As such, the impact on on-street parking is expected to be minimal.

4.2 Pedestrian and Cyclist Impact

Class B hoarding is expected to be installed along the Pacific Highway frontage and pedestrian access will be maintained during the construction works.

Pedestrian volumes along Clarke Lane are expected to be minor throughout the day and the impact can be managed appropriately by the spotter who will be stationed at the site access. Pedestrians may be held for very short periods to ensure safety when trucks are entering or leaving the site but will not be stopped in anticipation or for extended periods. Pedestrians will have right-of-way on the footpath at all times.

The construction activities are not expected to have any adverse impact on the surrounding bicycle network.

4.3 Public Transport Impact

The construction activities are not expected to impact existing public transport services near the site.

4.4 Emergency Vehicle Access

Any emergency vehicles requiring access into the site will do so via Clarke Lane. In the event that an emergency vehicle is required to access the site, all construction work will be stopped.

Traffic controllers shall not, under any circumstances, stop emergency vehicles to allow trucks to enter or leave the site.

4.5 Other Considerations

4.5.1 General Requirements

All construction heavy vehicle drivers will be made are of the following rules:

- All drivers are to follow NSW road rules at all times.
- All loose materials are to be covered entirely and secured.
- Any emergencies (i.e. road deposits caused by site vehicles) shall be communicated to the lead contractors.
- Any road deposits caused by site vehicles shall be removed at the expense of the contractor.
- Drivers are to follow the proposed haulage routes.
- Drivers must ensure that the vehicles do not create unreasonable noise or vibration.

4.5.2 Site Induction

All workers will be required to undertake a site induction before commencing work. The induction will include, but not limited to:

- General policies and procedures
- Emergency procedures
- OH&S policies and requirements
- Driver protocols
- Permitted construction vehicle routes
- Key personnel contact details
- Travel options



4.5.3 Workplace Health and Safety

Any workers required to undertake works or traffic control within the public domain shall be suitably trained and covered by adequate and appropriate insurances. All traffic control personnel will be required to hold SafeWork NSW accreditation in accordance with the 'Traffic Control at Work Sites' manual.

4.5.4 Site Inspections and Record Keeping

The construction work would be monitored to ensure that it proceeds as set out in the projects' Construction Management Plan. Inspections would be completed on a regular basis to ensure that conditions accord with those stipulated in the plan with no potential hazards. Any possible adverse impacts would be recorded and dealt with should they arise.



