



**CENTRAL BARANGAROO EARLY WORKS
STAGE 1 DA (SSD-39587022)**
Traffic, Transport and Accessibility
Assessment

27 March 2023

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Central Barangaroo Early Works Stage 1 DA (SSD-39587022)

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Central Barangaroo Early Works Stage 1 DA (SSD-39587022)

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1 Introduction

1.1 Background

This traffic, transport and accessibility assessment report has been prepared by Stantec to accompany a State Significant Development Application (SSDA) for the proposed Hickson Road interface Stage 1 Early Works located in the eastern portion of the Central Barangaroo site (site).

This report has been prepared to assess the traffic and transport impacts associated with the proposed development.

1.2 Scope of this Assessment

This report sets out an assessment of the anticipated transport implications of the Stage 1 Early Works SSDA on the surrounding road network.

This report addresses the NSW Department of Planning and Environment (DPE) requirements for transport and accessibility impacts included in Secretary's Environmental Assessment Requirements (SEARs) – Schedule 2 of the Environmental Planning and Assessment Regulation 2021, as referenced in Table 1.

Table 1: Secretary's Environmental Assessment Requirements (SSD-39587022)

SEARS Requirement	Relevant Report Section
Central Barangaroo Early Works	
<i>Traffic, Transport and Accessibility</i>	
The EIS must include:	Section 2
<ul style="list-style-type: none"> • an analysis of the existing transport network, including the road hierarchy and any pedestrian, bicycle or public transport infrastructure, current daily and peak hour vehicle movements. 	
<ul style="list-style-type: none"> • a Construction Pedestrian and Traffic Management Plan that includes: <ul style="list-style-type: none"> ○ an assessment of cumulative impacts associated with other construction activities (if any). 	Section 5.5
<ul style="list-style-type: none"> ○ details of the predicted construction vehicle movements, routes, access and parking arrangements, coordination with other construction occurring in the area and measures to prevent queuing. 	Section 4
<ul style="list-style-type: none"> ○ an assessment of road safety at key intersections and locations and measures to manage conflicts between construction vehicles, existing traffic, public transport, pedestrians and cyclists. 	Section 5
<ul style="list-style-type: none"> ○ details of anticipated peak hour and daily construction vehicle movements to and from the site. 	Section 4.5
<ul style="list-style-type: none"> ○ details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process. 	Section 3
<ul style="list-style-type: none"> ○ details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site. 	Section 4.2
<ul style="list-style-type: none"> ○ details of temporary cycling and pedestrian access during construction. 	Section 5.2



SEARS Requirement	Relevant Report Section
<ul style="list-style-type: none">○ emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times).	Section 5.4
<ul style="list-style-type: none">○ measures to reduce reliance on private vehicle travel for construction workers.	Section 4.2
<ul style="list-style-type: none">○ management and mitigation measures to address, and ensure the safety of existing traffic, public transport, pedestrians and cyclists.	Section 5.2

1.3 References

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

- an inspection of the site and its surrounds
- Sydney Local Environmental Plan (LEP) 2012
- Sydney Development Control Plan (DCP) 2012
- Australian Standard/ New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS/NZS 2890.1:2004
- Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS 2890.2:2018
- Australian Standard / New Zealand Standard, Parking Facilities, Part 6: Off-Street Parking for People with Disabilities AS/NZS 2890.6:2009
- plans for the proposed development prepared by Webber Executive Architecture, Project No. 20200, Revision I, dated 22 March 2022
- other documents and data as referenced in this report.



2 Existing Conditions

2.1 Location

The site is located at Central Barangaroo, within the broader Barangaroo Precinct. The Barangaroo precinct comprises a total land holding of approximately 22 hectares and is located on the north-western edge of the Sydney CBD within the City of Sydney Local Government Area (LGA). Barangaroo runs north-south between Hickson Road and the western foreshore of Sydney Harbour, connecting the north-west edge of the city's business centre with the historic and cultural precincts of Millers Point and Walsh Bay.

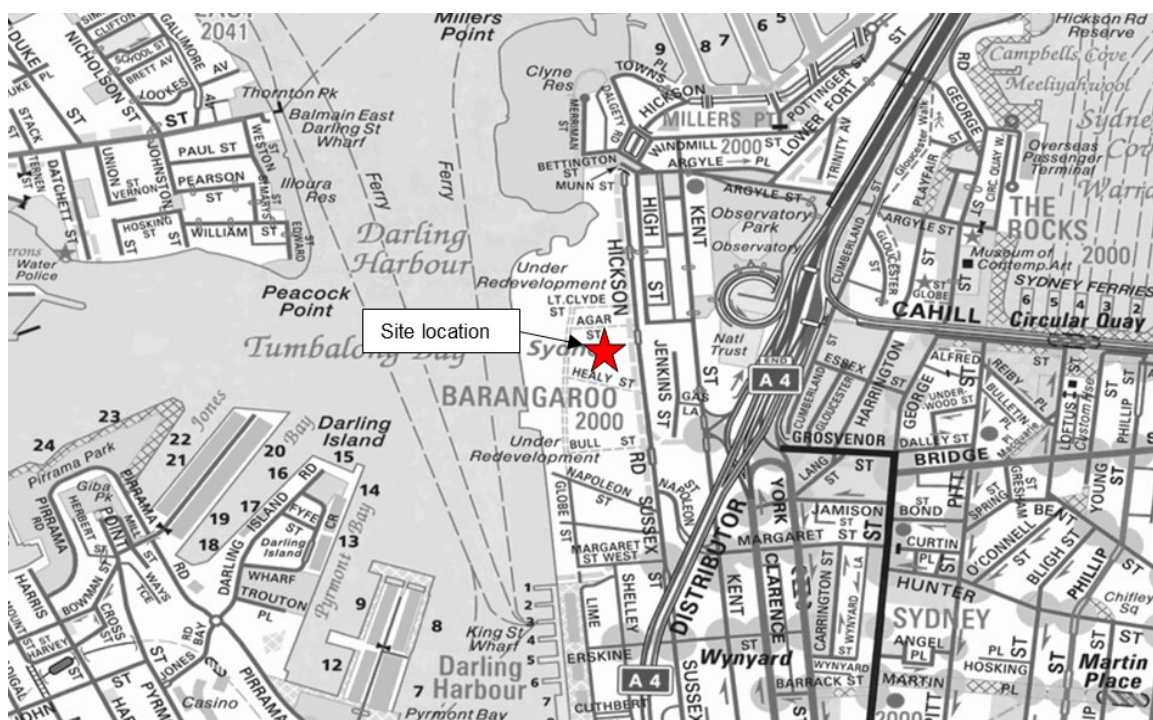
This SSDA relates exclusively to works on the Central Barangaroo site, which is legally described as Lot 52 DP 1213772. Specifically, the proposed early works relate to a portion of the site along the eastern property boundary adjacent Hickson Road.

The Central Barangaroo site comprises approximately 5.2 hectares of land within the Barangaroo Precinct. The site forms an irregular shaped land parcel in between Barangaroo South and Barangaroo Reserve.

The site is currently occupied by temporary structures for water treatment during the construction of Barangaroo South, and more generally, as a vehicle storage and construction site. It features a large concrete hardstand area/ construction site that is occupied by temporary structures for site preparation works, machinery, materials and vehicle parking for site workers. Hoarding is currently erected around the Central Barangaroo site.

The location of the site in the surrounding context is illustrated in Figure 1 and Figure 2.

Figure 1: Subject site and its environs



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



Figure 2: Aerial view



Source: Urbis



2.2 Surrounding 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 SURROUNDING ROAD NETWORK

The surrounding road network includes Hickson Road to the east, and Barton Street and Barangaroo Avenue to the south with characteristics of each summarised in Table 2.

Table 2: Surrounding road network

Road	Classification	Description
Hickson Road	Sub-Arterial Road	<ul style="list-style-type: none"> • Orientated in a north-south direction • One travel lane in each direction set within an 8- to 19-metre-wide carriageway • Kerbside parking is generally not permitted • Posted speed limit of 40 kilometres per hour
Sussex Street	Sub-Arterial Road	<ul style="list-style-type: none"> • Orientated in a north-south direction, becoming Hickson Road north of Napoleon Street • One or two travel lanes in each direction set within a 11-metre-wide carriageway • Kerbside parking generally not permitted • Posted speed limit of 40 kilometres per hour



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Road	Classification	Description
Napoleon Street/ Margaret Street	Local Road	<ul style="list-style-type: none"> • Generally orientated in an east-west direction intersecting with Hickson Road/ Sussex Street to the west • One or two travel lanes in each direction set within a 9- to 10-metre-wide carriageway • Kerbside parking not permitted • Posted speed limit of 40 kilometres per hour
Kent Street	Local Road	<ul style="list-style-type: none"> • Orientated in a north-south direction intersecting with Margaret Street and provides northbound access to Sydney Harbour Bridge • One or two travel lanes in each direction set within a 9- to 10-metre-wide carriageway • Kerbside parking is permitted north of Napoleon Street/ Margaret Street • Posted speed limit of 40 kilometres per hour
York Street	Local Road	<ul style="list-style-type: none"> • Orientated in a north-south direction intersecting with Margaret Street and a key southbound exit into the CBD from Sydney Harbour Bridge • Up to five travel lanes in the southbound direction only set within a up to 18- metre-wide carriageway • Kerbside parking not permitted • Posted speed limit of 40 kilometres per hour
Barton Street	Local Road	<ul style="list-style-type: none"> • Orientated in an east-west direction intersecting with Hickson Road to the east and Barangaroo Avenue to the west • One travel lane in each direction set within a 6.5-metre-wide carriageway • Kerbside parking not permitted • Posted speed limit of 40 kilometres per hour
Barangaroo Avenue	Local Road	<ul style="list-style-type: none"> • Orientated in a north-south direction intersecting with Barton Street to the north • One travel lane in each direction set within a 6.5-metre-wide carriageway • Kerbside parking not permitted • Posted speed limit of 40 kilometres per hour

Based on a review of publicly available documentation for other developments near the site, the most recent traffic volume information available was collected in 2015 and detailed in the *Chatswood to Sydenham Environmental Impact Statement* (2016, Sydney Metro). An extract of the peak hour volumes is provided in Figure 3, which suggests there has historically been around 610 vehicles per hour (two-way) and 840 vehicles per hour along Hickson Road (north of Napoleon Street) in the weekday AM and PM peak hours, respectively.



Figure 3: 2015 peak hour traffic volumes (extracted from Metro EIS)

Road	Location	AM peak volume (vehicles per hour)	PM peak volume (vehicles per hour)
Hickson Road	North of Napoleon Street (southbound)	190	430
	North of Napoleon Street (northbound)	420	410
Kent Street	Between Clarence Street and Margaret Street (southbound)	230	270
	Between Clarence Street and Margaret Street (northbound)	610	820
Sussex Street	Between Napoleon Street and Erskine Street (southbound)	400	500
	Between Napoleon Street and Erskine Street (northbound)	570	480
Sussex Street	Between Eskine Street and King Street (southbound)	810	1,020
	Between Eskine Street and King Street (northbound)	380	320
Sussex Street	Between King Street and Market Street (southbound)	840	1,200

Source: Sydney Metro, Chatswood to Sydenham Environmental Impact Statement, 2016

2.3 Public Transport

2.3.1 EXISTING PUBLIC TRANSPORT

The site is extremely well-positioned with access to a variety of existing public transport services including ferry, train, light rail and bus services.

The surrounding public transport network is summarised in Table 3 and shown in Figure 4.

Table 3: Surrounding public transport services

Service	Route (s)	Stops	Frequency
Train	<ul style="list-style-type: none"> T1 – North Shore and Western Line T2 – Inner West and Leppington Line T3 – Bankstown Line T4 – Eastern Suburbs and Illawarra Line T8 – Airport Line T9 – Northern Line CCN – Central Coast and Newcastle Line SCO – South Coast Line 	Greater Sydney, Inner West, Northern Sydney, Western Sydney, North Shore, South West Sydney, Eastern Suburbs, Central Sydney, Central Coast, Newcastle, South Coast	Frequent services
Bus	100, 120, 194, 243, 246, 249, 251, 252, 253, 261, 270, 271, 273, 274, 285, 288, 290, 292, 293, 294, 297, 311, 320, 324, 325, 594, 165X, 168X, 170X, 171X, 172X, 173X, 174X, 176X, 177X, 180X, 181X, 190X, 194X, 270X, 607X, 610X, 613X, 614X, 615X, 616X, 620X, 642X, 652X, B1, BN1, N90, N91, N92, 12T1, 15T1, 16T1, 20T1, 21T1, 22T1, 23T1, 75T1, 78T1	Greater Sydney, Inner West, Northern Sydney, Western Sydney, North Shore, South West Sydney, Eastern Suburbs, Central Sydney	Frequent services
Ferry	<ul style="list-style-type: none"> F3 – Parramatta River F4 – Pyrmont Bay 	Parramatta, Meadowbank, Drummoyne, Circular Quay,	30 minutes



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	<ul style="list-style-type: none"> F10 – Blackwattle Bay 	Balmain East, Milsons Point, Black Wattle Bay	
Light Rail	<ul style="list-style-type: none"> L2 – Randwick Line L3 – Kingsford Line 	Randwick, Circular Quay, QBV, Town Hall, Surry Hills, Moore Park, UNSW, Kingsford, Chinatown	8-15 minutes

Figure 4: Surrounding public network map



Base image source: Nearmap

2.3.2 FUTURE PUBLIC TRANSPORT

The Sydney Metro City and Southwest Line will provide a 30-kilometre extension to the Metro North West Line from Chatswood through Sydney CBD to Bankstown. It is expected to open in 2024 with seven new stations, including Barangaroo, and 11 upgraded stations.

The Barangaroo Metro Station will be located beneath the site, with access via Hickson Road, Central Barangaroo and Barangaroo Reserve, providing high frequency services across the day. It is estimated it will take around six minutes to reach Central Metro Station and three minutes to Victoria Cross Metro Station (North Sydney).

The station will include:

- kiss and ride, and taxi facilities
- bus stops located in immediate vicinity to the station
- bicycle parking

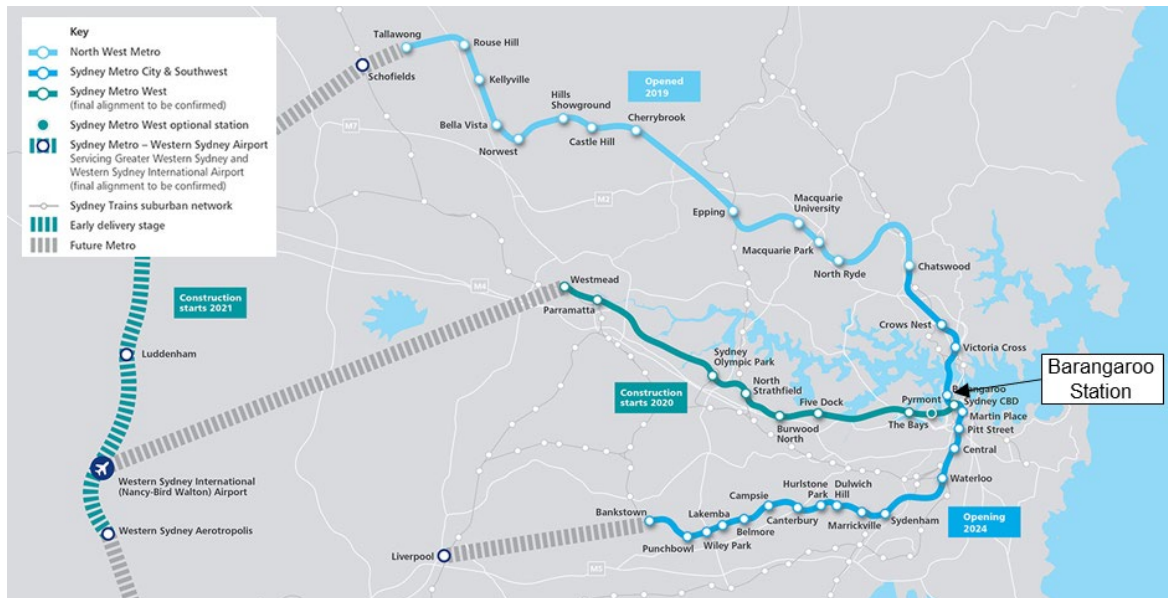


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- additional transport and access arrangements that are being developed in consultation with Infrastructure NSW.

The future Sydney Metro City and Southwest Line is shown in Figure 5.

Figure 5: Existing and future Sydney Metro lines



Base image source: NSW Department of Planning – NSW Government

2.4 Walking and Cycling Infrastructure

The site is well-connected in terms of active transport infrastructure. Pedestrian footpaths are located on both sides of Barangaroo Avenue, Barton Street and all surrounding roads. In addition there is a continuous foreshore path between Barangaroo Reserve and Darling Harbour. Due to Central Barangaroo and Barangaroo Metro Station construction works, all footpaths on Hickson Road from about 130 metres north of Barton Street onwards have been temporarily closed. Wayfinding advises pedestrians to use either the boardwalk along the Darling Harbour foreshore or High Street, the latter requiring use of stairs. There are several midblock and signalised crossing points near the site.

Off-road shared paths exist adjacent to the site along the Darling Harbour foreshore. Other separated off-road paths are provided near the site as shown in Figure 6.



Figure 6: Surrounding bicycle network map



Base image source: City of Sydney Council



4 Overview of Construction Activities

4.1 Work Hours

It is expected that the early works will be carried out between the following hours:

- Monday to Friday 7:00am and 6:00pm
- Saturday 7:00am and 5:00pm
- Sunday/ public holiday no work.

The appointed contractor will be responsible for instructing and controlling all subcontractors regarding the hours of work. Any work outside the approved construction hours would be subject to specific prior approvals.

4.2 Construction Worker Parking

It is anticipated that there will be up to 30 workers on-site at any given time during these construction activities, with appropriate on-site offices/ facilities to be provided and capable of accommodating up to 50 workers.

There will be limited on-site temporary parking provided, however this will not be available to construction workers for long-term parking. Workers will also not be permitted to park on the surrounding roads. Given the site's proximity to high frequency and wide-ranging public transport services, workers will be encouraged to use public transport to access the site where practical. During site induction, workers will be informed of the available public transport services. Appropriate arrangements will be made for any equipment/ tool storage and drop-off requirements.

4.3 Construction Site Access

Two site entry/ exit points will be used; the existing Gate H4 and Street 'D' gate along Hickson Road. An additional gate will be provided on Barton Street for emergency entry/ exit only. The site access and internal Stage 1 work area access locations are shown in Figure 8. The access points are specific to these Stage 1 Early Works and are subject to change for future subsequent on-site construction activities.



Figure 8: Construction site access arrangements



Image source: Aqualand (drawing no. AQL-S00-S00-SK00001 dated 18 August 2022)

Site access will primarily be from Gate H4 until such time as the new secant pile retention wall is required to be constructed through the access. During this period when Gate H4 will be temporarily closed, the Street 'D' gate will be used.

All loading would occur either on-site or via a loading/ unloading compound proposed adjacent to Hickson Road, in its current alignment. A one-way circulation is proposed through both the compound and Stage 1 work area to reduce conflicting truck movements.

Accredited traffic controllers will be positioned at all active site accesses to manage traffic and pedestrian movements when construction vehicles are entering/ exiting the site. The traffic controller will avoid stopping through traffic the adjacent public roads where practical.

Queuing or marshalling of construction vehicles will not be permitted on the CBD road network, noting there is expected to be sufficient marshalling area within the site or Hickson Road compound to accommodate any such demand. A booking and call-up procedure would also be put in place to manage arrivals.

4.4 On-Street Works Zone

At this stage it is not expected that any on-street works zone will be required as part of the Stage 1 Early Works, noting that the Hickson Road compound is located directly adjacent to Hickson Road carriageway. Should a works zone be required by the appointed contractor, consultation and approval would be requested from the City of Sydney.

4.5 Construction Vehicle Volumes

The site will have various types of construction vehicles accessing the site including up to 12.5 metre heavy rigid vehicles and 19 metre semi-trailers (with the appropriate permits).

It is expected that the typical construction vehicle activity will result in about six trucks per hour (60 trucks per day), with a maximum of eight trucks per hour during concrete pours of the secant piles. The additional two trucks would only be required at certain times of the day, most likely in the morning, which is a typical time for concrete pours on any construction site. Where possible, spoil removal and other non-time-critical deliveries will occur outside morning and afternoon road network peak periods.

4.6 Construction Vehicle Routes

Generally, construction vehicles will have origins and destinations from a wide variety of locations throughout Sydney. It is anticipated that concrete would be delivered from batching plants located in Artarmon (north of the site) and/or Blackwattle Bay (west of the site). All construction vehicles will be restricted to the State and Regional Road network where practicable.

Any vehicles over 12.5 metre heavy rigid vehicles will be restricted to using Hickson Road/ Sussex Street to/ from the western distributor on and off ramps at Market Street and King Street respectively. Permits must be sought from the City of Sydney for any one-off deliveries with these larger vehicles if the use of any other roads in the CBD area is required.

The construction vehicle routes are detailed below and shown in Figure 9 and Figure 10. These are proven routes used for all other construction activities in the Barangaroo precinct to-date.

Approach Routes

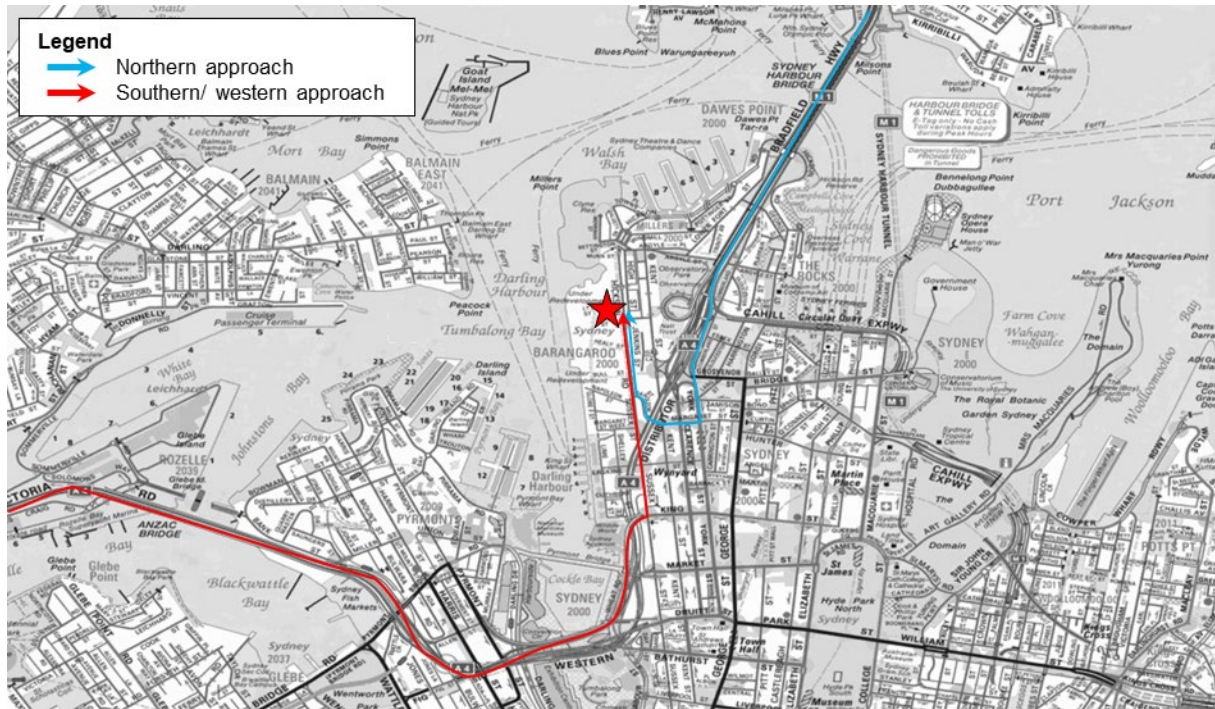
- North: Harbour Bridge, Western Distributor, York Street, Margaret Street, Napoleon Street, Sussex Street, Hickson Road.
- South/ West: Victoria Road, Western Distributor, Sussex Street, Hickson Road.

Departure Routes

- North: Hickson Road, Napoleon Street, Kent Street, Western Distributor, Harbour Bridge.
- South/ West: Hickson Road, Sussex Street, Western Distributor, Victoria Road.

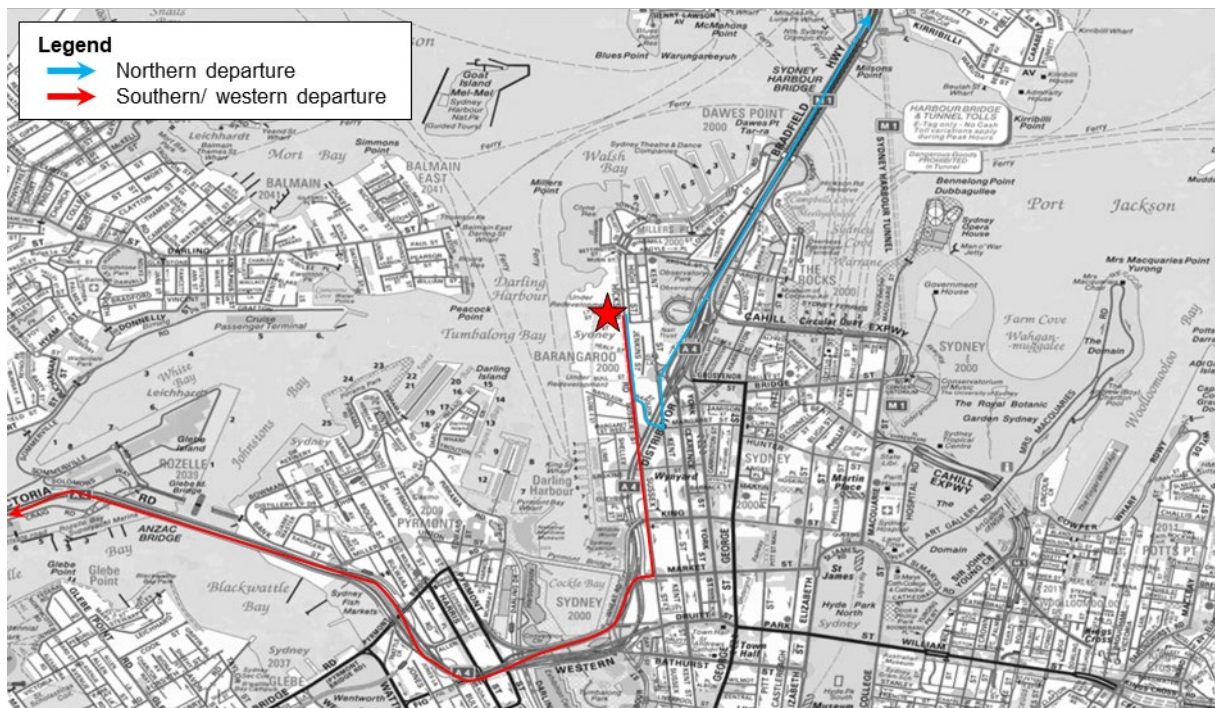


Figure 9: Construction vehicle approach routes



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

Figure 10: Construction vehicle departure routes



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



5 Construction Traffic Management

5.1 Traffic Guidance Scheme

Detailed information for work site operations is contained in the Traffic Control at Work Sites Technical Manual (TfNSW, 2022). The control of traffic at work sites must be undertaken with reference to SafeWork requirements and any other relevant Workplace Health and Safety manuals.

A Traffic Guidance Scheme (formerly known as a Traffic Control Plan) will be prepared post DA approval for the detailed Construction Pedestrian and Traffic Management Plan and will include the following considerations:

- Construction vehicle activity, including the loading/ unloading of trucks to be conducted within the work site
- Accredited traffic controllers positioned at all active site access points
- Pedestrians and all passing vehicles will maintain priority
- Clear definition of the work site boundary to be provided by erection of A Class hoardings around the site boundaries, as is already in place
- All signage will be clean, clearly visible and not obscured
- All construction vehicle activity will be minimised during peak periods, where possible.

From a road safety perspective, it is expected that 'Trucks', 'Workers', 'Prepare to Stop' and Traffic Controller signs will be installed on approach to the active access points along Hickson Road. Given all construction movements will be along Hickson Road near the site and other intersections leading up to the arterial road network are signalised, warning signs are not necessary at these locations, consistent with historical conditions as Barangaroo has been developed.

5.2 Pedestrian Management

Existing pedestrian and cyclist arrangements for the Barangaroo Metro Station construction will govern where access can be maintained, specifically along Hickson Road.

As a result of the ongoing Barangaroo Metro and associated Hickson Road works, there is currently no pedestrian access on the west side of Hickson Road adjacent to the existing gates to be used.

Cyclist movements will be maintained in a mixed-traffic arrangement along Hickson Road, with the accredited traffic controllers to manage interaction with construction vehicles if necessary.

The construction vehicle activities will not have any direct interaction with pedestrians and cyclists along Barton Street, unless the proposed emergency entry/ exit gate on Barton Street is used. In this situation, accredited traffic controllers would manage pedestrian and cyclist movements at this location.



5.3 Public Transport

The construction activities are not expected to impact existing public transport services near the site. All works will be contained within the site boundary or Hickson Road compound. There are existing bus routes that service Hickson Road. However, construction vehicles turning to/ from Hickson Road from Gate H4 or the Hickson Road compound will do so under normal road rules, giving way to through traffic (including buses) and cyclists.

5.4 Emergency Vehicle Access

All construction vehicle access will be via Hickson Road, whilst all works will be contained within the site boundary or adjacent Hickson Road compound. A gate is proposed on Barton Street that will only be used for emergency situations.

Given the confined extent of these works, it is unlikely that the construction activities will have any impact on access to the wider precinct/ buildings. Therefore, access to the subject site and adjacent buildings by emergency vehicles would not be affected by the works as road frontages would not be constrained or delayed. Emergency protocols on the site would include a requirement for suitably accredited site personnel to assist with emergency access from the street.

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

Liaison would be maintained with the police and emergency services agencies throughout the construction period and a 24-hour contact would be made available for 'out-of-hours' emergencies and access.

5.5 Existing and Future Developments

Active construction sites near the subject site include the following projects, with key sites detailed further below:

- Barangaroo Metro Station
- One Sydney Harbour
- Hickson Road Restoration and Renewal
- Walsh Bay Arts Precinct
- Cutaway fit-out for an art venue.

Barangaroo Metro Station

As mentioned, the Barangaroo Metro Station forms part of a 30-kilometre extension to the Metro North West Line from Chatswood through Sydney CBD to Bankstown. The station is located beneath the subject site with access via Hickson Road, Central Barangaroo and Barangaroo Reserve.

Construction of Barangaroo Station commenced in 2017 with expected physical completion in 2023 and testing/ commissioning to follow. It will open to the public in 2024. The remaining works involve the station and public domain construction.



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The *Construction Traffic Management Plan 2021* prepared by BESIX Watpac has updated the estimated heavy and light vehicle movements in the initial *Chatswood to Sydenham EIS*. A comparison of the EIS and BESIX Watpac construction vehicle movements for the project is summarised in Figure 11.

Figure 11: Anticipated light and heavy construction vehicles per hour (average)

Time	EIS Light Vehicles	BESIX Watpac Light Vehicles	EIS Heavy Vehicles	BESIX Watpac Heavy Vehicles
6:00am-10:00am	2-10	3	2	2
10:00am-3:00pm	10	5	24	9
3:00pm-7:00pm	2-10	5	2	2
7:00pm-6:00am	2	2	6	6

Source: BESIX Watpac, Construction Traffic Management Plan 2021

Figure 11 outlines that the Barangaroo Metro Station works are estimated to generate the following light and heavy vehicle movements:

- three light vehicles per hour and two heavy vehicles per hour between 6:00am to 10:00am
- five light vehicles per hour and nine heavy vehicles per hour between 10:00am to 3:00pm
- five light vehicles per hour and two heavy vehicles per hour between 3:00pm to 7:00pm
- two light vehicles per hour and six heavy vehicles per hour between 7:00pm to 6:00am.

One Sydney Harbour

One Sydney Harbour will provide three residential towers (R4A, R4B and R5) within the Barangaroo South Precinct located immediately south of the subject site. More than 1,400 workers are involved in the project, with anticipated completion of the first two towers by 2024 and the third in 2025, coinciding roughly with completion of the Barangaroo Metro Station.

The One Sydney Harbour Building R4A *Transport Management and Accessibility Plan (TMAP)* prepared by ARUP in 2016 outlined anticipated construction traffic vehicle volumes for the three towers between 2018 and 2022. Estimates indicate that approximately 16 construction trucks per day per tower were expected between 2019 and 2022. No information is provided post 2022, therefore for the purposes of this assessment, it is assumed that these volumes would continue until completion.

The location of each development relative to the subject site is shown in Figure 12, along with the construction vehicle access points for each site to illustrate the limited interaction of construction vehicles expected, except along Hickson Road, which is a sub-arterial road capable of accommodating the additional construction traffic as it has been doing for the past 10 years.



Figure 12: Location of surrounding construction works



Base image source: Nearmap

As discussed above, Barangaroo Metro Station (and associated Hickson Road works) and One Sydney Harbour works, are the key projects interfacing with the Stage 1 Early Works. It will be critical that the Stage 1 Early Works are coordinated with the Barangaroo Metro Station works, noting the proximity. The cumulative impacts of the Stage 1 Early Works and the surrounding developments would be managed to ensure that the additional six trucks per hour or up to eight trucks per hour (during concrete pours for secant piles) generated by the early works would not materially impact the surrounding road network. It is noted that the timeline of peak truck movements generated by the Stage 1 Early Works does not coincide with peak movements generated by the Metro works. It is also noted that the Metro EIS forecasted and assessed higher construction traffic volumes than currently required as outlined above, thus having a lower reducing the cumulative impact during the Stage 1 Early Works.

The relevant cumulative impacts are discussed at the Hickson Road Coordination Forum facilitated by Infrastructure NSW and attended by Sydney Metro (and its contractors), Lendlease (developer of Barangaroo South) and the Central Barangaroo developer. The purpose of the forum is to manage key interfaces regarding road occupancy, use of and proposed upgrades to Hickson Road. This forum will continue throughout the delivery of the relevant developments and ensure the safe and coordinated use of Hickson Road during construction delivery.

5.6 Traffic Movements in Adjoining Council Areas

No adverse effects are expected from the movement of heavy vehicles through adjacent council areas.



5.7 Site Inspections and Record Keeping

The construction work would be monitored to ensure that it proceeds as set out in the Construction Management Plan prepared by the appointed contractor. A daily inspection before the start of the construction activity should take place to ensure that conditions accord with those stipulated in the plan and there are no potential hazards. Any possible adverse impacts would be recorded and dealt with if they arise.

5.8 Site Induction

All staff employed on the site by the appointed contractor (including sub-contractors) would be required to undergo a site induction.

The induction would include permitted access routes to and from the construction site for site staff and delivery vehicles, limited parking arrangements, as well as standard environmental, workplace health and safety, driver protocols and emergency procedures. The approved work hours must be included as part of this induction.



6 Conclusion

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

- The Central Barangaroo Stage 1 Early Works includes construction of a portion of secant pile retention wall along the Hickson Road and Barton Street site frontages.
- It is anticipated that there will be on average up to 30 workers on-site at any given time during the construction activities, although site offices/ facilities will accommodate up to 50 workers.
- There will be limited temporary on-site parking provided, however this will not be available to construction workers for long-term parking and workers will not be permitted to park on the surrounding roads.
- Given the site's proximity to high frequency and wide-ranging public transport services, workers will be encouraged to use public transport to access the site where practical.
- Construction vehicle access will utilise the existing Gate H4 and Street 'D' gate along Hickson Road, as appropriate for the specific retention wall section being constructed and coordination with the adjacent Barangaroo Metro Station construction activities. The access points are specific to these Stage 1 Early Works and are subject to change for future subsequent on-site construction activities.
- Accredited traffic controllers will be positioned at all site accesses to maintain safe movement of general traffic (including buses), cyclists and any pedestrian movements when construction vehicles are entering/ exiting the site.
- Queuing or marshalling of construction vehicles will not be permitted on the CBD road network, noting there is expected to be sufficient marshalling area within the site or the Hickson Road compound to accommodate any such demand.
- At this stage it is not expected that any on-street works zone will be required as part of the Early Works Stage 1 DA.
- It is expected that typical construction vehicle activity will result in about six trucks per hour (60 trucks per day), with a maximum of eight trucks per hour during concrete pours for the secant piles.
- Construction vehicle routes to be used by the project are proven routes used for all other construction activities in the Barangaroo precinct.
- Pedestrian and cyclist movements will be maintained adjacent to the site where it is not impacted by the Barangaroo Metro Station construction activities.
- The cumulative impacts of the Stage 1 Early Works and the surrounding developments (Barangaroo Metro Station and One Sydney Harbour) would be managed and coordinated to ensure that the additional six trucks per hour or up to eight trucks per hour (during concrete pours for secant piles) generated by the early works would not materially impact the surrounding road network.



