Sydney Harbour Federation Trust Sub Base Platypus – Torpedo Factory Renewal Project Transport Impact Assessment

Final | 10 November 2020

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

Job number 248023

Arup Arup Pty Ltd ABN 18 000 966 165 **Arup** Level 10 201 Kent Street PO Box 76 Millers Point Sydney 2000 Australia www.arup.com





Contents

			Page		
1	Introduction				
	1.1	Background	1		
	1.2	Transport and Access Management Plan 2019	2		
	1.3	Site location	3		
2	Existing conditions				
	2.1	Pedestrian access	5		
	2.2	Cycling	10		
	2.3	Public transport	11		
	2.4	Water Access	14		
	2.5	Vehicle access	14		
	2.6	Existing traffic volumes/speeds/composition	18		
	2.7	On-street parking	19		
3	Proposed Torpedo Factory Renewal				
4	Impact Assessment				
	4.1	Trip Generation	25		
	4.2	Traffic and parking impacts	26		
	4.3	Ballast Point Park comparison	26		
5	Public Access to Stage 2				
	5.1	Access and Wayfinding	28		
	5.2	New Car park within the Torpedo Factory	29		
6	Concl	usion	31		

1 Introduction

Sydney Harbour Federation Trust has commissioned Arup to undertake a transport assessment for Torpedo Factory Renewal Project which is Stage 2 of the Harbour Trust's renewal of the former HMAS Platypus site in North Sydney (Sub Base Platypus). The Torpedo Factory Renewal Project includes the demolition of the multi-level harbour facing portion of the Torpedo Factory and adaptation of the remnant building to create additional public open space at the foreshore and provide public car parking. Stage 2 includes works associated with the adaptive re-use of the Torpedo Factory, including public open space and a new car park.

In late 2019, Arup updated the Transport and Access Management Plan (TAMP) as the main supporting study for the Sub Base Platypus Management Plan to guide the future development and reuse of the site. This TAMP examined ways to avoid, mitigate and manage potential transport-related impacts and issues, once the site is opened to the public and buildings are reoccupied for new uses.

This transport assessment focuses on the Stage 2 works relating to the renewal project. It provides a review of the existing site and locality conditions, as well as an assessment of the potential impacts and issues associated with the Torpedo Factory Renewal Project.

1.1 Background

Sub Base Platypus is a waterfront site located on the foreshore of Neutral Bay. Operating as a gasworks from 1876 to the mid 1930s, the North Shore Gas Company supplied gas to local authorities for street lighting and to the residents and businesses of the North Shore of Sydney for home and business use. In 1967 the site was named 'HMAS Platypus' when it was commissioned as the eastern seaboard base for the Australian Navy's six Oberon Class submarines. This facility was closed in 1998. Since then, the site has been redeveloped by the Sydney Harbour Trust into a public park with buildings and facilities adapted for a range of cultural, recreational, community and commercial uses, with car parking.

The Harbour Trust's approach is to utilise and build on the existing efficient public transport around the site, to facilitate travel by modes other than cars. Part of the strategy is to find a balanced mix of uses that fits within the constraints of the site and locality. The Torpedo Factory Renewal Project, includes, a foreshore park, entry forecourt, new pedestrian connections, public car parking, revealing of the existing sandstone cliff beneath the existing building and heritage interpretation.. An artist's impression of the proposed works to the Torpedo Factory, is shown, is shown in Figure 1.



Figure 1: Artist's Impression showing the proposed foreshore park

1.2 Transport and Access Management Plan 2019

In late 2019, Arup updated Transport and Access Management Plan (TAMP) to guide development and reuse of the Sub Base Platypus site as a whole. The elements of the TAMP that are relevant to the Torpedo Factory Renewal Project are as follows:

- Parking initiatives have been identified that would increase the number of onsite parking spaces to approximately 40 car spaces whilst the interim Torpedo Factory car park is implemented;
- It is important that a balance is achieved between catering for an appropriate level of car parking for the site uses whilst promoting active and public transport. Approximately 90 car parking spaces may be provided on the site after completion of the Torpedo Factory revitalisation works. This would include approximately 40 public car parking spaces at the Torpedo Factory site and approximately 48 private spaces used by the tenants and authorised users at the Kiara Carpark;
- It is proposed that a form of paid/timed parking be implemented within the public car park to manage the activity and promote turnover;
- Trip generation (for uses across all of Sub Base Platypus):
 - Work day: This will consider the peak hour trip generation for all uses on a standard work day;
 - Event: This will consider the trips generated by an event within the site of up to 300 people;
- A diverse range of uses have been identified for the site. This will allow a staggered arrival of visitors to the site, reducing the traffic impacts to the

surrounding road network. For example, offices (day use) and dining, cultural activities (evening use) would have different arrival and departure profiles;

- The site is highly accessible through walking. Walking would be the major component, and a sustainable means of transportation to the site; and
- The North Sydney Wharf is currently not accessible for the mobility impaired. RMS is currently exhibiting plans for the upgrade of this wharf.

1.3 Site location

The former Sub Base Platypus site in North Sydney (the site), is 1km from North Sydney CBD and 4km from Sydney CBD. It is located within the vicinity of two Train Stations, a ferry wharf and several bus stops. The location is illustrated in Figure 2. The Torpedo Factory Renewal Project focusses on the renewal of the Torpedo Factory and the location of this, in reference to the larger site, is shown in Figure 3.



Figure 2: Former Sub Base Platypus site location



Figure 3: Torpedo Factory location

2 Existing conditions

This chapter summarises the existing conditions surrounding the site.

2.1 Pedestrian access

2.1.1 Pedestrian access points

There are three pedestrian accesses to the site:

- Platypus Lane via High Street which is a shared zone;
- Kiara Close from which stairs can be used to access the lower levels; and
- The Kesterton Park boardwalk which provides a direct link to the North Sydney Ferry Wharf; and
- High Street Square.

Pedestrian access to the site is illustrated in Figure 4.

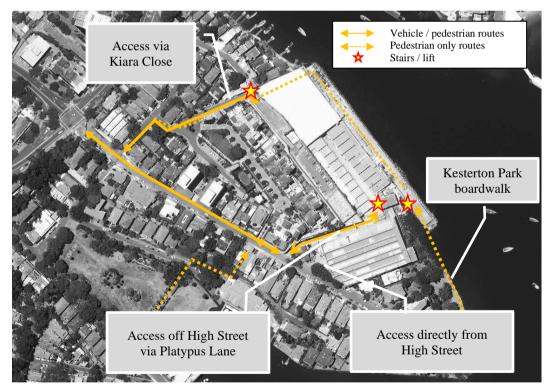


Figure 4: Existing pedestrian accesses



Platypus Lane access point is shown in Photograph 1.

Photograph 1: Platypus Lane Pedestrian Access / Shared Zone

The Kesterton Park boardwalk improves the convenience of taking the ferry as a means of transport to the site. The link is accessible via wheelchairs and prams and provides a direct and unique path from North Sydney wharf. TfNSW is currently exhibiting plans to upgrade the wharf to make it accessible for less mobile individuals. The new boardwalk is shown in Photograph 2.



Photograph 2: Kesterton Park boardwalk

The Kiara Close access road has narrow pedestrian footpaths which do not extend through to the site access point. Kiara Close is a private road, however, there is a public right of way to the site which also enables North Sydney Council to manage and maintain the street. A stairway link provides pedestrian access from Kiara Close to the lower levels. The location of the stairs is marked on Figure 5.

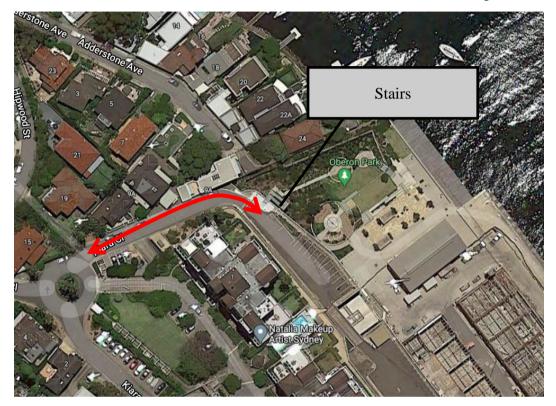


Figure 5: Stairs to Kiara Close

A lift is also provided near the Coal Stores and links the Kiara car park to the Platypus Lane level, and then to an existing tunnel, providing access to the foreshore. At the Kiara car park level, the lift is accessed via a cantilevered, cliffedge walkway, and a pedestrian bridge over the Platypus Lane, connecting to the Torpedo Factory. The lift, tunnel and walkway locations are shown in Figure 6 and Photograph 3.

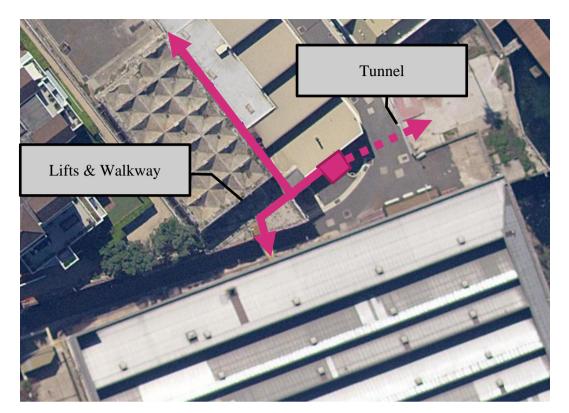
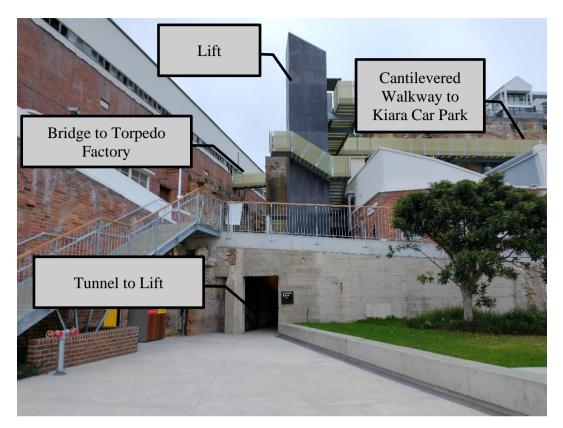
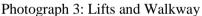


Figure 6: Lifts and Walkway Location





The internal street network at the lower level is closed to general vehicular access. Access is allowed for authorised vehicles (deliveries, waste collection, maintenance etc.) and is controlled via boom gates at the High Street entrance to Platypus Lane. These roads are designated shared zones, with several measures, such as a speed limit of 10km/hr and convex mirrors at bends, implemented to ensure that vehicles do not compromise pedestrian safety and amenity. The existing accessibility and permeability of the site is presented in Figure 7.

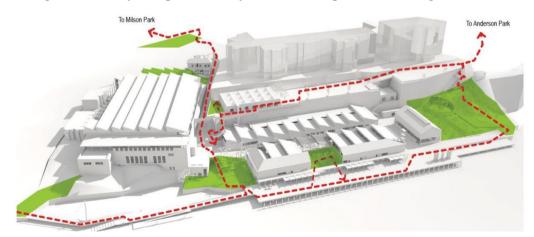


Figure 7: Accessibility Through the Site

2.1.2 Wayfinding

A number of signs help direct pedestrians to the site from key locations, as shown in Photograph 4.





Wayfinding signage at North Sydney Wharf

Wayfinding signage on Kiara Close



Wayfinding signage at the Kiara Close roundabout

Wayfinding at the High Street / Clark Road intersection

Photograph 4: Wayfinding signage at North Sydney Wharf

2.2 Cycling

An upgraded cycle route along Clarke Road and Broughton Street is in the planning and concept development stage with North Sydney Council. Council is currently working with the NSW State Government to deliver this new cycleway connection between Sydney Harbour Bridge and Neutral Bay (Route 2), as shown in Figure 8. These sections of the cycle route are yet to be approved for construction.

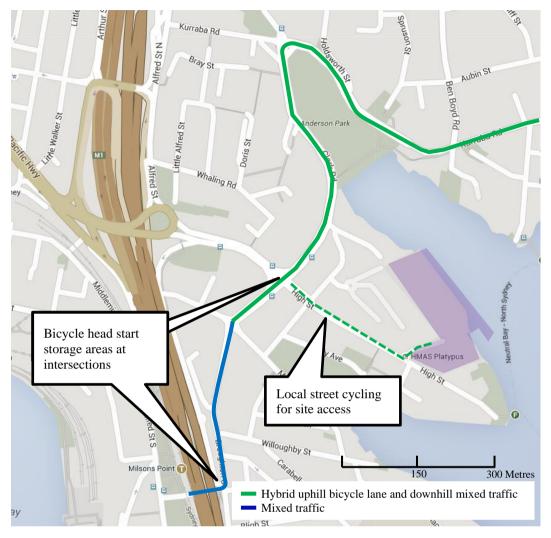


Figure 8: Route 2 - Sydney Harbour Bridge to Neutral Bay

2.3 Public transport

Platypus is located in close proximity to a range of public transport services, including bus, train and ferry.



Figure 9: Existing public transport around the site

2.3.1 Train services

The site is located less than 1km (walk) from North Sydney Train Station or 850 metres (walk) from Milsons Point Station. Both train stations serve the T1 North Shore line, which has high service frequencies during peak hours. Trains operate approximately every 4 minutes during both morning and evening peak periods.

It is noted that the Sydney Metro Victoria Cross station, which is currently under construction, will also be located within a 15 to 20 minute walk from the site. This will provide a high quality, fast and frequent rail connection to the Sydney CBD, Chatswood, Epping, North-Western Sydney and Inner South-Western Sydney.

2.3.2 Bus services

Existing bus routes to the site operate with an average frequency of 20 minutes. Bus stops along Clark Road, near High Street, are located some 350 metres from the site. Route 263 runs between Circular Quay and Crows Nest via Neutral Bay every day. Route 269 runs a loop service between Kirribilli and McMahons Point on weekdays. Photograph 5 shows the bus stop on Clark Road with buses travelling towards the city.



Photograph 5: Existing bus stop towards the city, along Clark Road

Source: Google Streetview

2.3.3 Ferry services

North Sydney Wharf, located adjacent to Kesterton Park, provides ferry services to Circular Quay. The wharf is located less than 250 metres from the existing site entrance and can be easily accessed along the boardwalk.

Travel times to and from Circular Quay are approximately 15 minutes. The frequencies of ferry services are outlined in Table 1.

Route	Weekdays 6am to 7.30pm	Weekdays 7.30pm to 11.30pm	Weekends 6.30am to 11.30pm	Operating hours
To Circular Quay	2 per hour	1 per hour	1 per hour	Weekdays: 6am to 11.25pm Saturday: 6.25am to 11.25pm Sunday: 8.25am to 8.25pm

Table 1: Ferry timetable	Table	1:	Ferry	timetable	
--------------------------	-------	----	-------	-----------	--

Transport for NSW are proposing to upgrade North Sydney Wharf as part of the Transport Access Program to improve the accessibility of the wharf for customers. This upgrade would include a new floating pontoon, improving the efficiency and safety of the wharf for ferries, as well as a number of associated smaller upgrades. An artist's impression of the proposed North Sydney Wharf is shown in Figure 10. The upgrade would make the ferry more easily accessible for disabled or less able customers.



Figure 10: North Sydney Wharf Upgrade

2.4 Water Access

The Platypus Management Plan outlines for future provision of a pontoon and kayak steps which were approved as part of Stage 1. When funds become available the Harbour Trust will implement these plans to provide another access option to Sub Base Platypus.

2.5 Vehicle access

Vehicle access to the site is relatively direct from the wider road network with High Street connecting to the Sydney Harbour Bridge entry and exit ramps. The Pacific Highway is also easily accessible through North Sydney. Vehicle access and egress routes are presented in Figure 11.



Figure 11: Vehicle access and egress to site

There are three vehicle accesses to the site:

1. Kiara Close Car Park

This area is for tenants and authorised users at the site only and access is controlled by a key pad at the entry.

2. Platypus Lane

This is managed access for deliveries, service vehicle or emergency vehicle access and is controlled by a boom gate along High Street. It is noted that this area is designed as a shared zone where vehicles must yield to pedestrians and travel at low speeds.

3. Access to temporary carpark within the Torpedo Factory car park from High Street

The current temporary car park in the Torpedo Factory is accessible from High Street via a single lane ramp. The ramp access onto High Street is shown in Photograph 6.



Photograph 6: Access to the existing temporary carpark within the Torpedo Factory

2.5.1 On Site Car Parks

Car parking is available on site in two locations:

- Kiara Car Park: Approximately 48 spaces, available for tenants of uses within the site and authorised users, restricted access through keypad entry.
- Temporary carpark in the Torpedo Factory: Approximately 40 spaces, available to the public for up to 3 hours, with the first 2 hours free parking and additional 1 hour of paid parking. The car park is open from 7am to 9pm.

The locations of on site parking are shown in Figure 12.

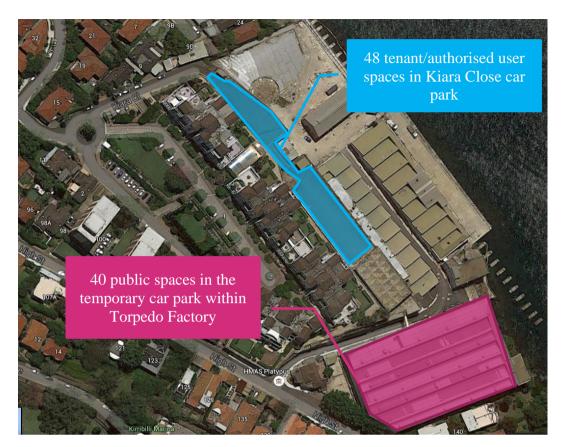


Figure 12: Existing on-site car parking

2.6 Existing traffic volumes/speeds/composition

Arup commissioned Matrix to carry out seven day tube counts to assess the traffic volumes, speeds and composition near the site, with the locations of the survey shown in Figure 13.



Figure 13: Seven day tube count locations

Key findings of the survey included:

- Peak hourly volumes were found to be on weekdays from 8am 9am and 5pm 6pm. Peaks in the morning and afternoon had the similar amounts of traffic, indicating the roads are mainly used by residents or commuters.
- Kiara Close had a peak traffic volume of 45 vehicles per hour, 85% speed of 19 km/hr and no medium sized trucks
- High Street had a peak traffic volume of 60 vehicles per hour, 85% speed of 38 km/hr and 7% medium sized trucks
- Hipwood Street had a peak traffic volume of 53 vehicles per hour and 85% speed of 22 km/hr and 5% medium sized trucks

From on site observations the streets have low traffic volumes, low vehicle speeds, no large trucks and operate efficiently with minimal or no delay.

The environmental capacity of streets is determined by a number of factors; the traffic volume, vehicle speed and proportion of heavy vehicles. The Roads and Maritime Services Guide to Traffic Generating Developments provides the criteria to be used to determine the environmental capacity performance. For local streets, a maximum vehicle speed of 40km/hr and a maximum peak hour volume of 300. On this basis, all access roads currently operate within the capacity of the local street classification.

2.7 On-street parking

There is a range of Timed and Unrestricted on street parking in the vicinity of the site. The various parking restrictions on the surrounding streets are outlined on Figure 14.

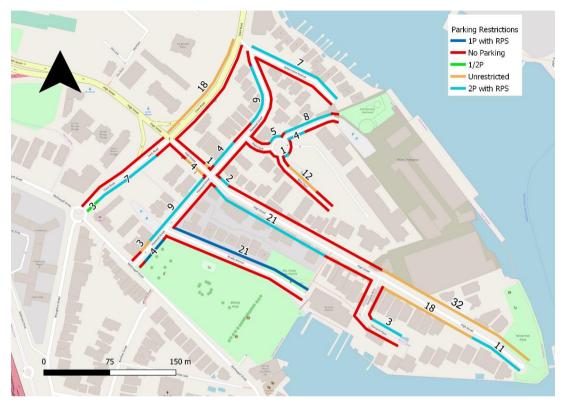


Figure 14: Parking restrictions and capacity

2.7.1 Parking Surveys

In September 2019, Arup conducted parking occupancy surveys of the surrounding streets within the study area to ensure the parking occupancy and capacity remained unchanged. The area surveyed was bounded by Adderstone Avenue, Clark Road and McDougall Street containing approximately 220 parking spaces. Occupancy rates were calculated every 15 minutes over the hour. The surveys were undertaken on the following days:

- Friday 6th September 13:00-14:00
- Friday 6th September 18:00-19:00
- Saturday 7th September 14:00:15:00

The surrounding streets in the study area had the following parking restrictions:

- 1P, 8.30am to 10pm, Monday to Friday, Permit Holders Excepted
- 2P, 8.30am to 10pm, Monday to Friday, Permit Holders Excepted
- 1/2P
- Unrestricted parking

2.7.2 Occupancy

The on-street parking surrounding the site is utilised to varying levels of occupancy depending on the type of control in place. On the weekday, the unrestricted spaces are the most heavily utilised with over 95% occupancy between 13:00 and 14:00 and over 80% occupancy in between 18:00-19:00. Timed restriction car spaces have higher levels of availability. This suggests that residents or commuters are using the spaces for long term parking. On the weekend, the occupancy lowers to 75-80%.

The data indicates that existing on-street parking can offer some overflow parking for the site on weekday evening and weekend peaks. There were between 11 to 15 (15% to 20%) unoccupied spaces in the area on the surveyed weekday evening and between 41 to 53 (20-25%) on the surveyed weekend peak. This available capacity is not present around midday on weekdays with less than 5% of spaces available. Occupancy results of the parking surveys are presented on Figure 15.



Figure 15 Parking restriction and occupancy survey results 2019

The levels of occupancy for Friday midday, Friday evening and Saturday are shown in Figure 16, Figure 17 and Figure 18 respectively.

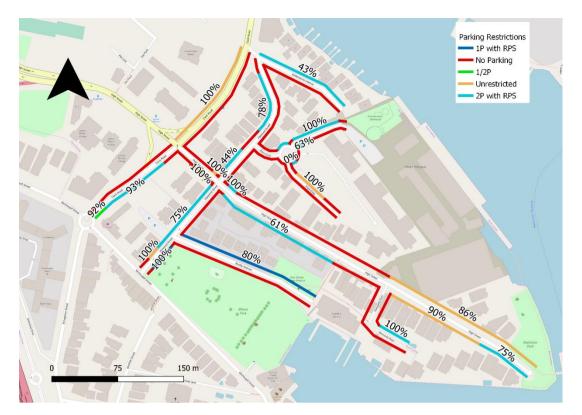


Figure 16: Parking occupancy on Friday 6 September 1pm to 2pm

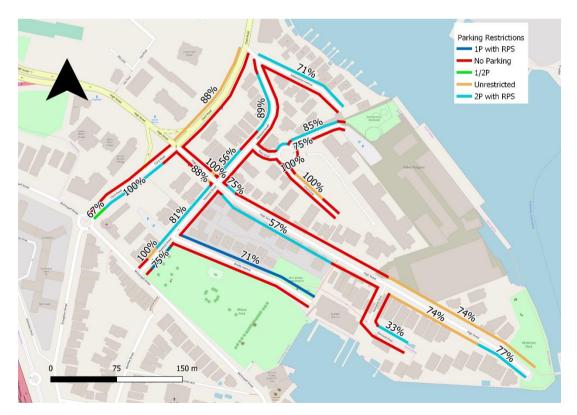


Figure 17: Parking occupancy on Friday 6 September 6pm to 7pm

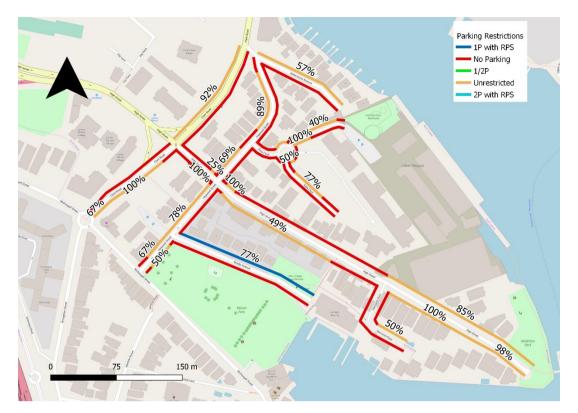


Figure 18: Parking occupancy on Saturday 7 September 2pm to 3pm

2.7.3 **Resident Parking Scheme**

Within the area of parking assessed there are two resident parking schemes, North Sydney Area 1 and North Sydney Area 2

The number of spaces occupied by resident permit holders was recorded. This data indicated approximately 30% of spaces were occupied by cars with Resident Parking Scheme permits in all three survey periods.

3 Proposed Torpedo Factory Renewal

The Harbour Trust's proposed Torpedo Factory Renewal Project includes the following:

- **Foreshore Park** Create a new foreshore park, through a series of landscaped terraces replacing the multi-level, harbour-facing portion of the Torpedo Factory.
- Entry Forecourt facing High Street Create an enlarged entry forecourt through the demolition of a portion of the Torpedo Factory facing High Street.
- **Torpedo Factory Walkway** Provide public walkways and viewing areas along the northern and eastern sides of the Torpedo Factory, offering elevated views towards Neutral Bay.
- New Pedestrian Connections Investigate opportunities to connect the upper level and the new foreshore park, and a potential new path to Kesterton Park
- **Sandstone Cliff** Reveal the large sandstone cliff face that divides the upper and lower levels of the site. The excision of the building at this point will allow for expansive views and an opportunity to better integrate Sub Base Platypus' lower foreshore level with adjoining public land (Kesterton Park).
- **Heritage** Retain key significant heritage elements of the building, including the majority of the factory floor level, and the characteristic saw-tooth roof.
- **Visitor Access** Retained portion of Torpedo Factory to include a public car park to support visitors accessing the site.
- Interpretation- Interpret the site's multi-layered history natural, First Nations and defence heritage, with a focus on the ongoing connection to Country. Interpretation will be guided by the *Australian Indigenous Design Charter* launched in 2018, and *Designing with Country*, by the Government Architect NSW March 2020.

The new public domain will also present the story and history of the place's industrial and military heritage, specifically related to torpedo manufacturing and maintenance.

- **Improved Visual outcomes** The removal of the multi-storey, harbour-facing section of the building, and the peeling away of walls on three of its sides, will substantially reduce the visual bulk and scale of the building, and open up views to and through the site.
- Environmentally Sustainable Design Explore opportunities to use the roof to capture solar power and rainwater
- Amenity Protect local amenity by minimising potential impacts such as noise and light
- **Possible future uses** The covered space of the remnant Torpedo Factory provides the opportunity for a future pop-up café at the harbour-end, or a space for occasional community uses (such as a small market). Any such proposals would be subject to separate assessment and approval.

Artist's impressions for the proposal are shown in Figure 19.

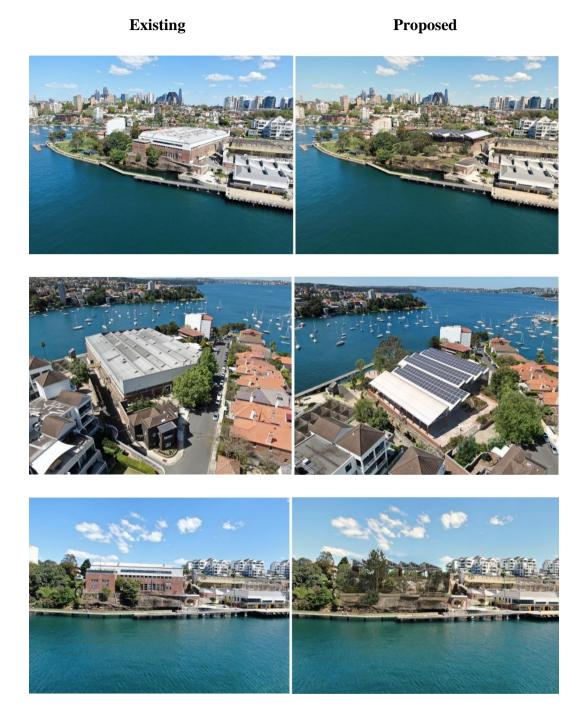


Figure 19: Artist's Impressions of the proposal

4 Impact Assessment

This section examines trips that may be generated by the proposed Torpedo Factory Renewal Project. Only the public park and potential pop-up café components of the proposal are expected to generate additional trips as the car park is ancillary to Sub Base Platypus and currently in operation.

4.1 Trip Generation

The proposed works will create a new open space, approximately the same size as Oberon Park which is situated in the northern portion of the Sub Base Platypus site. In the future, a pop-up café may also be provided at the harbour-end of the Torpedo Factory. It is expected that once opened the site would attract local residents as well as visitors from a wider catchment.

It could be expected that the grassed area will attract visitors to stop and dwell, with typical visitor activities including dog walking, walking through the site as part of a longer walk, picnics or gatherings on the grass, children playing, etc. The potential pop-up café would also attract visitors to dine in the space.

The estimated maximum number of visitors on a busy weekend could be up to 50 people at any one time. It should be noted that this estimate relates to the TAMP, which assumed 100 people in total. Given Oberon Park will also draw visitors we have assumed approximately 50 would be attracted to The Torpedo Factory development.

4.1.1 Mode share of visitors

With a peak visitor number of 50 people, the estimated mode share is presented in Figure 20. The majority of the visitors will be local residents who will walk or cycle. With improved accessibility from the ferry wharf via Kesterton Park boardwalk, a proportion of the visitors would use the ferry. Private vehicle users are expected to comprise 20% of the mode share. These mode shares are consistent with those presented in the TAMP.

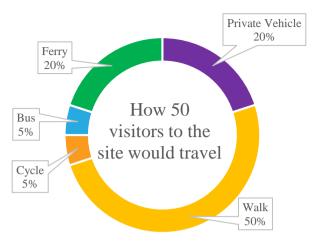


Figure 20: Estimated mode share of visitors to the site

4.2 Traffic and parking impacts

Using the vehicle mode share of 20% suggests the maximum number of cars visiting the park at any one time would be 10. In practice we expect this number to be lower as people visiting the park are less likely to visit alone increasing the vehicle occupancy and therefore reducing parking demand.

The TAMP prepared by Arup in 2019 assessed traffic volumes for 50 to 100 vehicles entering and leaving the site within the same hour. The findings of the study concluded that while the increase in traffic will be noticeable, local streets will be well within the environmental capacity of a local street of 200-300 vehicles per hour. It is expected that the additional 10 vehicles as a result of the subject proposal will not detrimentally affect the operation of the surrounding road network.

The required 10 car spaces can be accommodated on-site within the proposed car park in the Torpedo Factory, discussed later in Section 5.3. As such, existing onstreet parking is unlikely to be affected by the subject proposal.

4.3 Ballast Point Park comparison

Ballast Point Park, Birchgrove offers some insights into visitation levels at a park on the harbour and makes for a suitable comparison to the Sub Base Platypus site for the purposes of this assessment.

While the historical and geographical aspects of both parks are similar, Ballast Point Park has a much lower public transport accessibility level when compared to the Sub Base Platypus Site. There are no train stations within walking distance, with the primary mode of transport being private vehicles. As such it is expected that Ballast Point Park would attract local residents and visitors arriving predominantly by private vehicles. Google maps provides an indication of the number of visits to facilities based on GPS data. This has been examined for Ballast Point Park, with the daily profiles shown in Table 2. The busiest periods are Saturday between 3pm and 5pm and Sunday between 1pm and 3pm. It should be noted that the below data is based on an estimated arrival profile and it does not provide the number of visitors to the area.

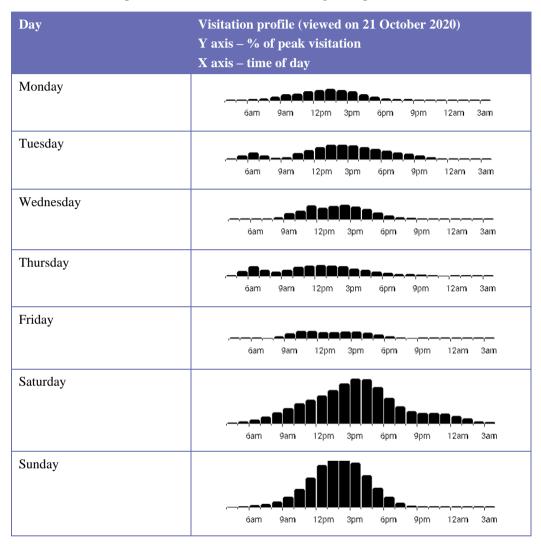


Table 2: Visitation profile of Ballast Point Park, Google Maps 2020

This indicates the new stepped public park is likely to experience peak visitation on the weekends. The park therefore has a different peak usage time to a number of uses within the site. As discussed in the TAMP, due to the varying uses within Sub Base Platypus the impact on the surrounding transport network is reduced.

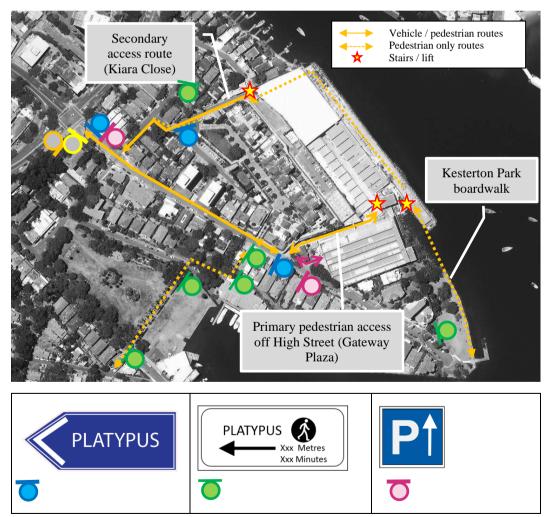
5 Public Access to Stage 2

5.1 Access and Wayfinding

As described in Section 2, the site is in close proximity to buses, trains and ferries connecting to key locations such as the Sydney CBD. Vehicles are also able to access the site at several different locations.

Key pedestrian and vehicular routes along with the proposed wayfinding signage are shown in Figure 21. Signage will direct visitors to the new car park within the Torpedo Factory =. Signs will also highlight distance (metres) and estimated walking times (minutes) to key landmarks.

It is understood that the Harbour Trust have implemented wayfinding signage around the site on Kiara Close and at North Sydney Wharf to aid pedestrian access. The remaining wayfinding options should be implemented to aid access to the site for both vehicles and pedestrians.



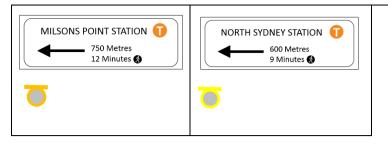


Figure 21: Key vehicle and pedestrian routes and proposed wayfinding signage nodes

5.2 New Car park within the Torpedo Factory

The new car park within the Torpedo Factory will have approximately 40 spaces and will be constructed within the existing boundary of the building. It will be accessed via High Street.

Aligning with the current operations the car park is expected to operate from 7am to 9pm every day. Visitors will be able to park for free for 2 hours or can pay for an additional hour of parking. This would be enforced using a Pay and Display system with ticket machines provided within the car park. Operating hours and conditions of the carpark will be reviewed periodically.

These parking restrictions have been implemented to align with restrictions on surrounding streets. They provide suitable dwell times for Sub Base Platypus visitors but inhibit use of the car park for other users such as commuters accessing North Sydney Wharf.

Access to the car park would look to comply with AS2890.1 (Parking Facilities, Part 1: Off-Street Carparking).

An artist's impression of the new car park within the Torpedo Factory is shown in Figure 22.



Figure 22: New car park in the remnant portion of the Torpedo Factory Carpark

High Street currently functions as a two way street with sufficient passing width and parking on both sides of the street. If there are any changes to the vehicular access on High Street, this would be subject to agreement by North Sydney Council.

6 Conclusion

This assessment regarding the transport impacts of the Torpedo Factory Renewal Project at Sub Base Platypus has concluded the following:

- Only the public foreshore park proposed as part of the development will generate additional trips
- The new car park will replace an existing temporary car park within the Torpedo Factory, thereby not generating any additional trips;
- The site is well connected to a range of existing public transport services encouraging people to use sustainable modes to access the site. Improvements such as the upgrade to the North Sydney Wharf and Victoria Cross Station will further enhance accessibility via public transport;
- It is estimated given the size of the proposed foreshore park and potential popup café they may attract up to 50 visitors at any one time with 10 of these arriving via private vehicle; and
- The public car park proposed within the Torpedo Factory can accommodate the associated parking demand meaning minimal impact is expected to on street parking on surrounding streets.