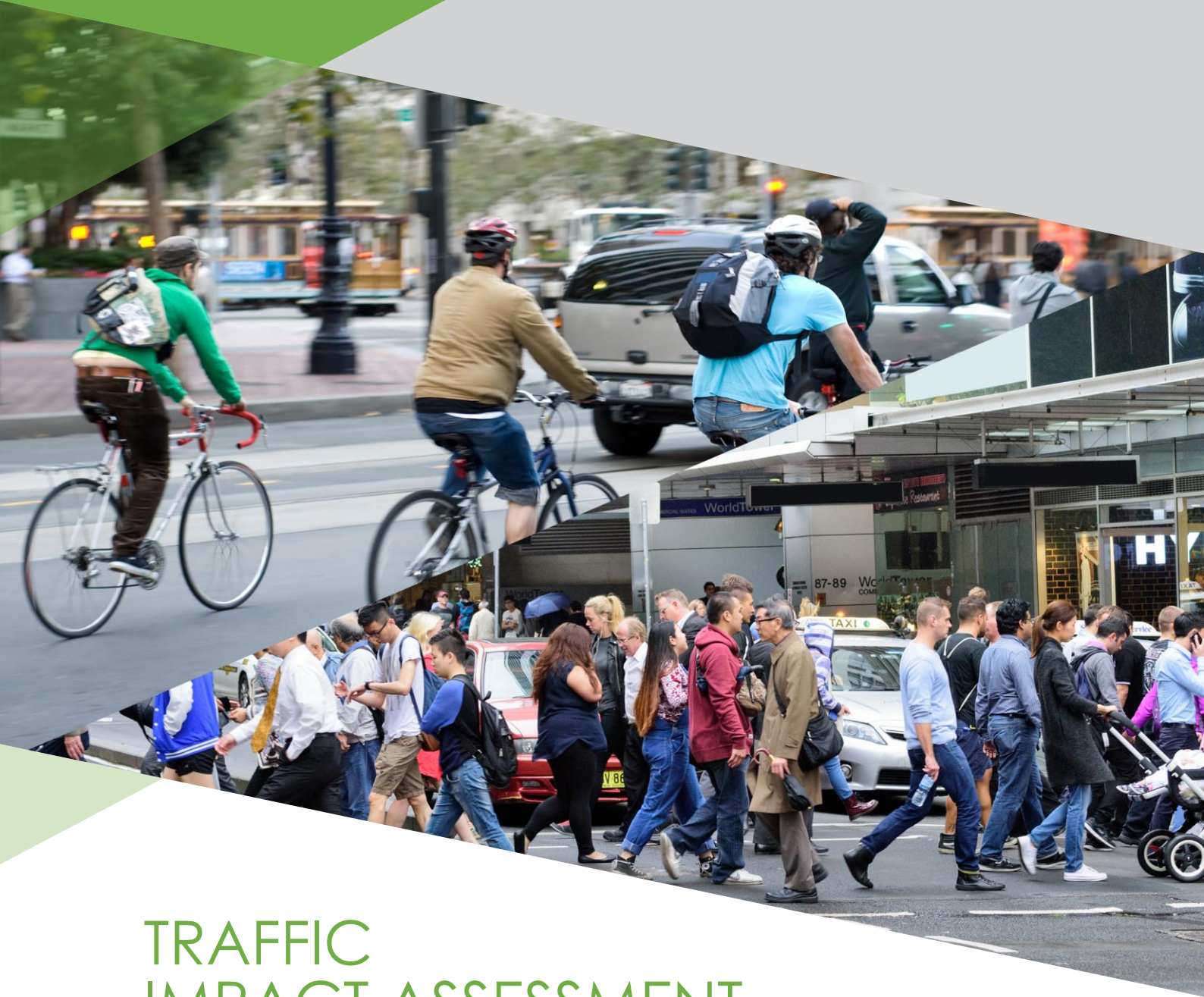




TRAFFIC IMPACT ASSESSMENT

**Leichhardt Community Boat Shed
Maliyawul Street, Leichhardt**

Reference: 23.362r01v02
Date: October 2023

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DOCUMENT VERIFICATION

Job Number	23.362			
Project	Leichhardt Community Boat Shed			
Client	Community Rowing Club			
Revision	Date	Prepared By	Checked By	Signed
v02	03/10/2023	Neil Caga	Vince Doan	

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1. INTRODUCTION

TRAFFIX has been commissioned by Community Rowing Club to undertake a traffic impact assessment (TIA) in support of a development application (DA) relating to the proposed Leichhardt Community Boat Shed. The development is located within the Inner West Council Local Government Area (LGA) and has been assessed under that Council's controls.

This report documents the findings of our investigations and should be read in the context of the Statement of Environmental Effects (SEE), prepared separately. The development is considered minor and as such, does not require referral to the TfNSW under the provisions of SEPP (Transport and Infrastructure) 2021.

The report is structured as follows:

- Section 2: Describes the site and its location
- Section 3: Documents existing traffic conditions
- Section 4: Describes the proposed development
- Section 5: Assesses the parking requirements
- Section 6: Assesses traffic impacts
- Section 7: Presents the overall study conclusions

2. LOCATION AND SITE

The subject site known as the Leichhardt Community Boat Shed is located approximately 5.3 kilometres west of Sydney CBD and is 840 metres north of the Leichhardt North Light Rail Station. More specifically, it is adjacent Leichhardt Park (Crown land) and approximately 80 metres north of Maliyawul Street. The site has no existing vehicular access and on-site parking, with pedestrian access proposed along the southeast frontage of the site.

A Location Plan is presented in **Figure 1**, with a Site Plan presented in **Figure 2**.

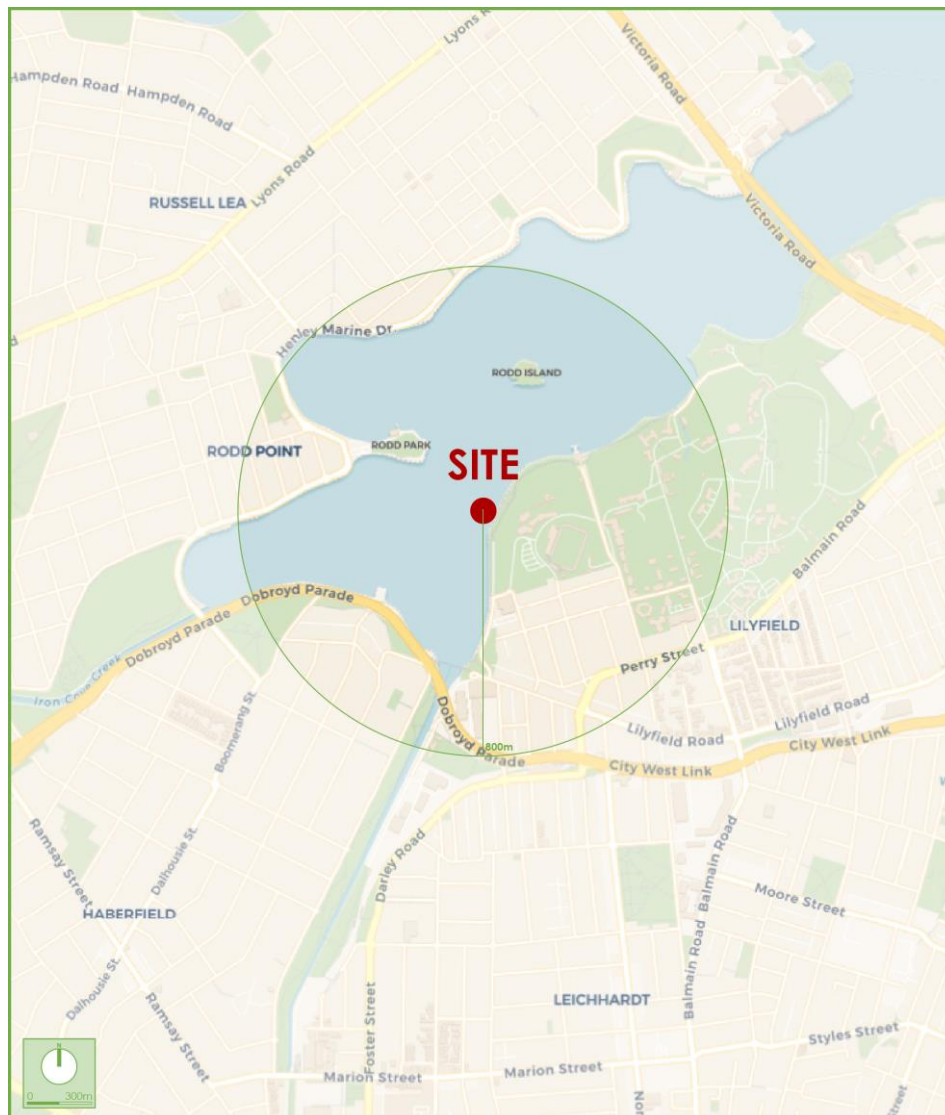


Figure 1: Location Plan

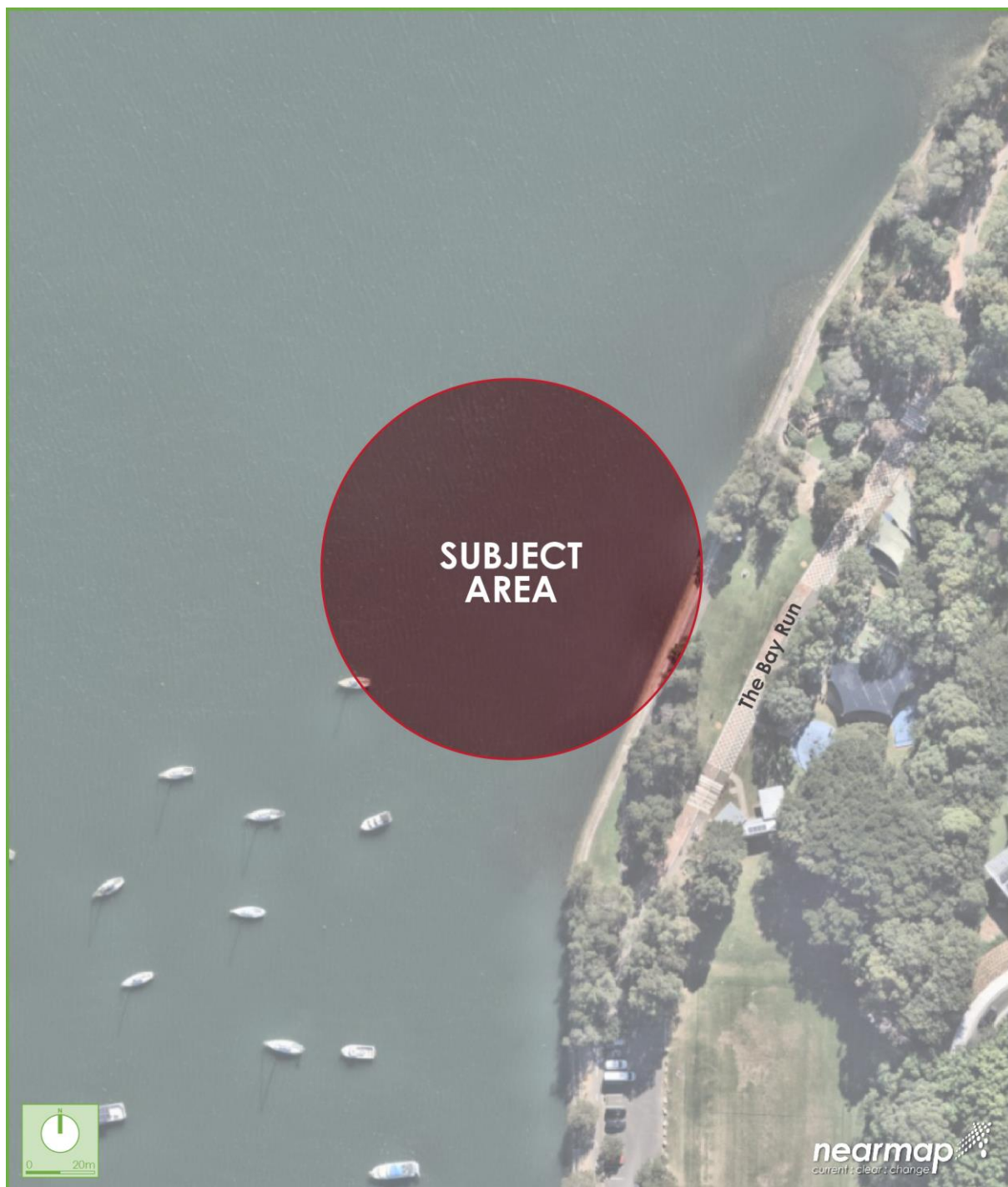


Figure 2: Site Plan

3. EXISTING TRAFFIC CONDITIONS

3.1 Road Network

The road hierarchy in the vicinity of the site is shown in **Figure 3** with the following roads of particular interest:

- **City West Link:** forms part of a TfNSW Main Road (MR 650) that traverses east-west between Victoria Road in the east and Dobroyd Parade in the west. Within the vicinity of the site, it is subject to 60-70km/h speed zoning and accommodates 2-3 lanes of traffic in each direction. The City West Link does not permit on-street parking on either side of the road.
- **Lilyfield Road:** a local road that traverses east-west between Victoria Road in the east and Canal Road in the west. Within the vicinity of the site, it is subject to 50km/h speed zoning and accommodates a single lane of traffic in each direction. Lilyfield Road permits unrestricted on-street parking along both sides of the road.
- **Mary Street:** a local road that traverses north-south between the Leichhardt Park carpark in the north and Lilyfield Road in the south. It is subject to 50km/h speed zoning and accommodates a single lane of traffic in each direction. Mary Street permits unrestricted on-street parking along both sides of the road.
- **Frazer Street:** a local road that traverses north-south between Mary Street in the north and a dead-end pas Perry Street in the south. It is subject to 50km/h speed zoning and accommodates as single lane of traffic in each direction. Frazer Street permits unrestricted on-street parking along both sides of the road.
- **Maliyawul Street:** a local road that traverses north-south between Leichhardt Oval in the north and Lilyfield Road in the south. The majority of Maliyawul Street provides public parking spaces along the western side of the road.

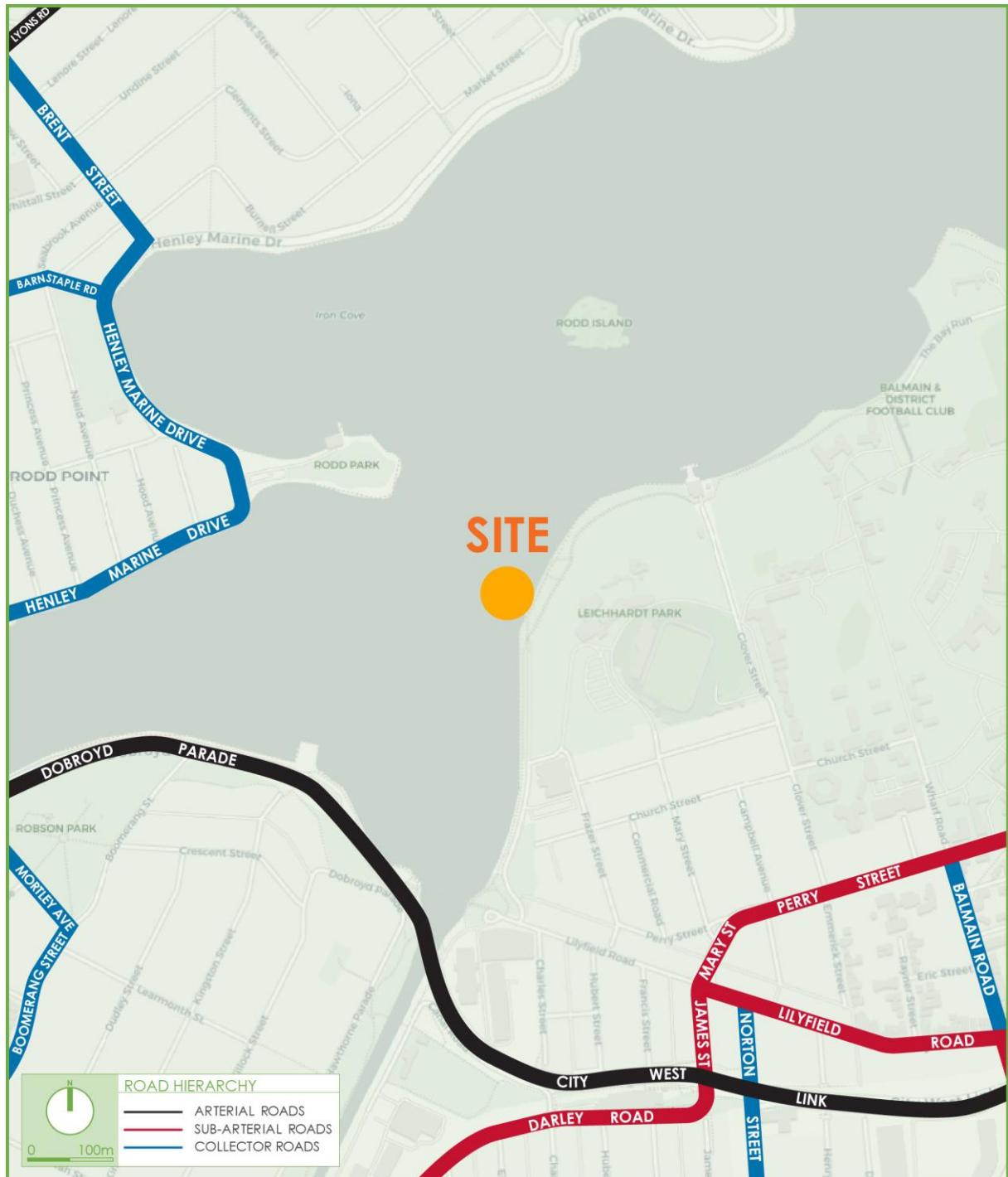


Figure 3: Road Hierarchy

4. DESCRIPTION OF PROPOSED DEVELOPMENT

A detailed description of the proposed development is provided in the Statement of Environmental Effects prepared separately. In summary, the development for which approval is now sought comprises the following components:

- Construction of a boat shed development with a total capacity for 200 members;
- Construction of ancillary components, including a kiosk, indoor rowing room, multi-purpose community room (only for members) and coach's room;
- Construction of a ground floor boat storage area that is able to accommodate a total of 52 passive watercraft, including:
 - 24 x single sculls;
 - 8 x double sculls;
 - 6 x PR1 single sculls;
 - 4 x coxed eights;
 - 4 x coxed quadruple sculls;
 - 4 x coxless quadruple sculls; and
 - 2 x PR2 double sculls.
- Provision of pedestrian access to the existing footpath along the eastern side of the site.

The parking and traffic impacts arising from the development are discussed in **Section 5** and **Section 6**. Reference should be made to the plans submitted separately to Council which are presented at reduced scale in **Appendix A**.

5. PARKING REQUIREMENTS

5.1 Council Car Parking Requirements

The Leichhardt Development Control Plan 2013 (DCP) and TfNSW Guide to Traffic Generating Developments 2002 (TfNSW Guide) do not provide car parking rates for boat shed developments. It should be noted that the kiosk and other components of the development are considered ancillary.

As such, the car parking requirements of the development are based on the rowing component and have been conservatively assessed with a 'first principals' approach as summarised below. It is noted that the proposed development does not provide any off-street car parking and is relying on the available on-street parking nearby. As a result, car parking surveys within the vicinity of the site and travel mode surveys of a similar development have been conducted and discussed below.

5.2 Public On-Street Parking Surveys

The subject site is located within walking distance of Maliyawul Street Waterfront public carpark and Leichhardt Park public carpark. In order to determine the existing car parking demand for these carpark areas, parking surveys were conducted during the critical peak parking demand times for the proposed development (as advised by the client) for the following days/times:

- 6:00am-9:00am on Saturday, 26 August 2023;
- 6:00am-9:00am on Sunday, 27 August 2023; and
- 5:30am-9:30am and 3:00pm-7:00pm on Tuesday, 29 August 2023.

5.2.1 Maliyawul Street Carpark

This carpark area and sections of Frazer Street was identified to have a total car parking capacity for 187 spaces, with the results outlined below. This carpark would be the primary carpark used by staff/customers of the proposed development.

Chart 1: Saturday Parking Demand

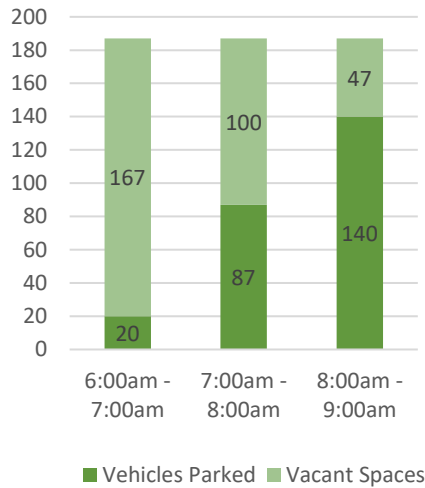
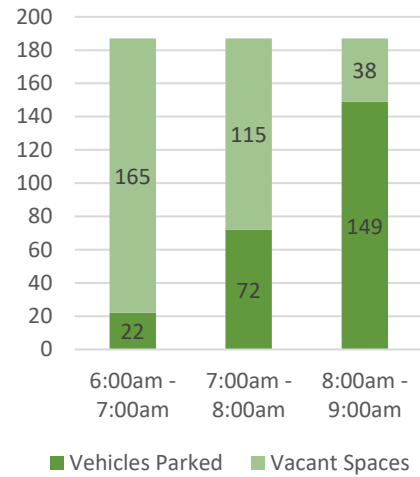


Chart 2: Sunday Parking Demand



It can be seen from **Chart 1** and **Chart 2** that the peak parking demand for the Maliyawul Street Waterfront Carpark on weekends was identified at 8:00am-9:00am with 140 parked vehicles (47 vacant spaces) and 149 parked vehicles (38 vacant spaces) on Saturday and Sunday, respectively.

Chart 3: Tuesday Car Parking Demand (AM)

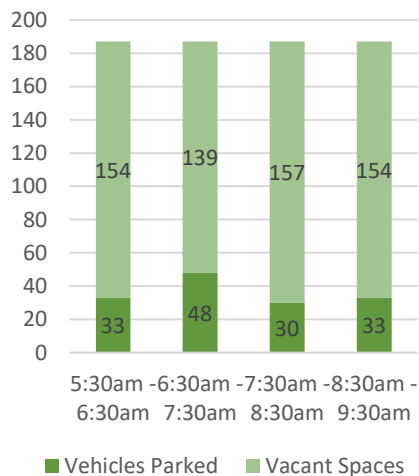
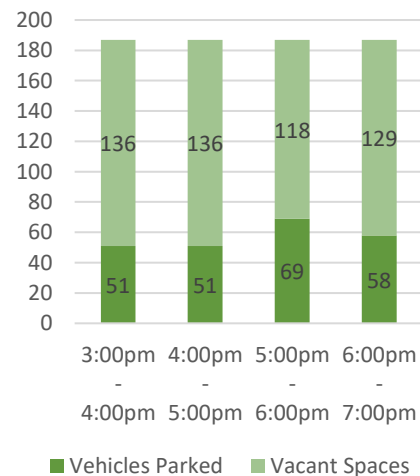


Chart 4: Tuesday Car Parking Demand (PM)



It can be seen from **Chart 3** and **Chart 4** that the peak parking demand for the Maliyawul Street Waterfront Carpark on a weekday was identified at 6:30am-7:30am with 48 parked vehicles (139 vacant spaces) during the morning peak period and at 5:00pm-6:00pm with 69 parked vehicles (118 vacant spaces) during the evening peak period.

5.2.2 Leichhardt Park Carpark

This carpark area and adjacent streets (sections of Frazer Street and Mary Street) was identified to have a total car parking capacity for 233 spaces, with the results outlined below. This carpark would generally be used as overflow carparking area by staff/customers of the proposed development, if required.

Chart 5: Saturday Parking Demand

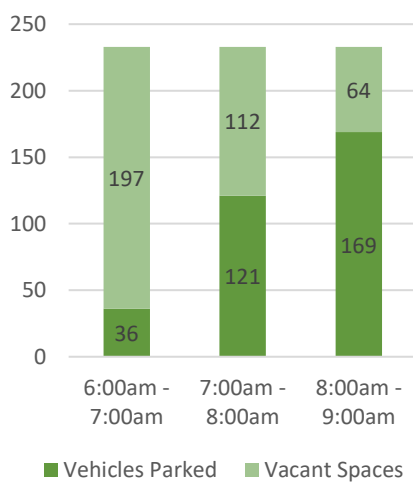
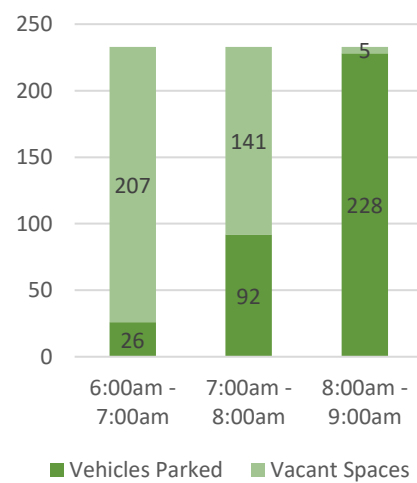


Chart 6: Sunday Parking Demand



It can be seen from **Chart 5** and **Chart 6** that the peak parking demand for the Leichhardt Park Carpark on weekends was identified at 8:00am-9:00am with 169 parked vehicles (64 vacant spaces) and 228 parked vehicles (5 vacant spaces) on Saturday and Sunday, respectively.

Chart 7: Tuesday Car Parking Demand (AM)

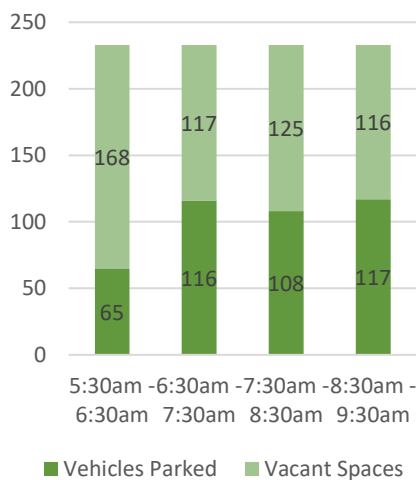
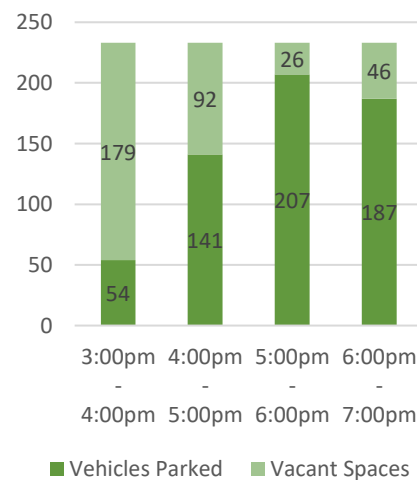


Chart 8: Tuesday Car Parking Demand (PM)

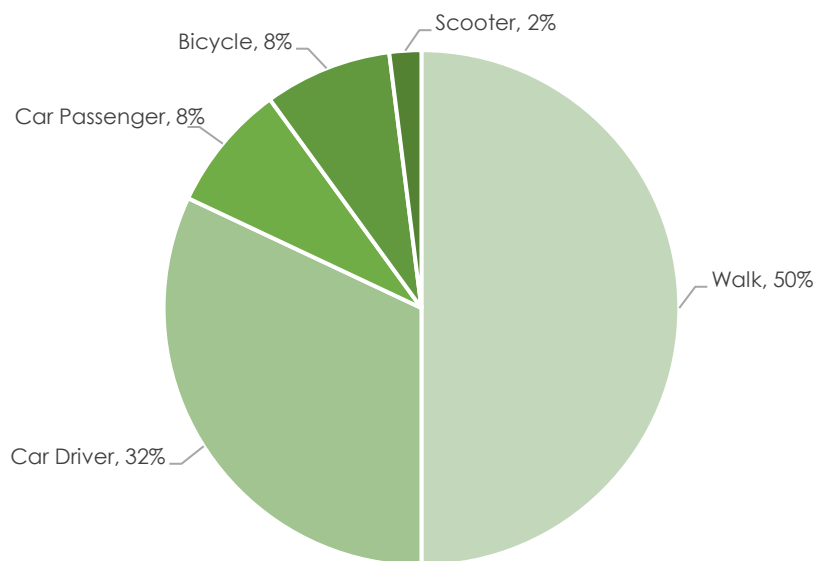


It can be seen from **Chart 7** and **Chart 8** that the peak parking demand for the Leichhardt Park Carpark on a weekday was identified at 8:30am-9:30am with 117 parked vehicles (116 vacant spaces) during the morning peak period and at 5:00pm-6:00pm with 207 parked vehicles (26 vacant spaces) during the evening peak period.

5.3 Comparable Travel Mode Survey

TRAFFIX has previously undertaken a travel mode survey of a comparable boat shed development within the Northern Beaches Council LGA. This travel mode survey was conducted over a 10-day period and resulted in a vehicle occupancy of 1.1, with the key travel mode proportions outlined in **Chart 9** below.

Chart 9: Travel Modes of Comparable Boat Shed Development



5.4 Peak Parking Demand

The car parking assessment has been based on the critical weekend peak period, which potentially could have a maximum total of 59 people, comprising nine (9) staff and 50 rowers on site at any one time. With the above travel mode surveys in mind, 20 rowers (32% car driver plus 8% car passenger) would utilise a private vehicle, which in turn with a vehicle occupancy of 1.1, would result in a car parking demand for 18 spaces for rowers.

Accordingly, the maximum car parking demand for the proposed development is anticipated to be a total of 27 car parking spaces, comprising nine (9) staff and 18 rowers. It is emphasised that this is considered a conservative assessment, with the car parking demand during the weekdays envisaged to be significantly lower than that of the weekend peak period.

5.5 Car Parking Capacity

In response to the envisaged peak car parking demand for 27 car parking spaces, the development proposes to primarily utilise the existing Maliyawul Street Waterfront Carpark, which has a total parking capacity for 187 car parking spaces. In reference to the parking survey results in **Section 5.2.1**, the adjacent carpark provides the following available spaces:

- 47 available parking spaces on Saturday;
- 38 available parking spaces on Sunday; and
- 139 available spaces (AM) and 118 available spaces (PM) on a weekday.

It can be seen from the above, that the Maliyawul Street Waterfront Carpark is readily able to accommodate the potential car parking demand for 27 car parking spaces. It should be noted that the nearby Leichhardt Park Carpark also provides additional available car parking spaces as identified in **Section 5.2.2**, should there be an increased demand for additional parking.

In summary, all standard car parking demands for the proposed development will be catered within the public carparking. As a result, car parking arrangement is therefore considered appropriate, given the nature of the proposed development.

5.6 Other Parking Requirements

5.6.1 Accessible Parking

The development does not include an off-street car parking provision and as such, no accessible parking spaces are required. Nevertheless, the Maliyawul Street Waterfront Carpark and the Leichhardt Park Carpark provides a total of 13 existing accessible parking spaces that can be utilised, should there be a demonstrated demand.

5.6.2 Bicycle Parking

The Leichhardt DCP 2013 does not provide any bicycle parking rates for boat shed developments and as such, no bicycle parking spaces are required or proposed. It should be noted that the development proposes EOT facilities due to the nature of the proposed development, with the subject site providing sufficient area to accommodate bicycle parking spaces, should there be a demonstrated demand.

5.6.3 Refuse Collection and Servicing

The development proposes to utilise the northern end of the Maliyawul Street Waterfront Carpark for loading / unloading activities of boats and trailers, with trailers stored off-site. It is emphasised that all loading and unloading activities are proposed to occur outside peak parking demands, noting that the parking surveys identified a considerable number of available parking spaces during the early morning on weekends and weekdays.

Reference should be made to the Plan of Management, prepared separately by the Community Rowing Club for additional information regarding the service arrangements of the development.

6. TRAFFIC AND TRANSPORT IMPACTS

The development is anticipated to generate a maximum of 27 vehicle trips during the weekend peak period, with the traffic generation of the development anticipated to be significantly reduced during the weekday peak periods.

This traffic generation equates to a single additional vehicle every 2-minutes, which is considered acceptable, given that the envisaged morning peak period of the development would not coincide with the surrounding road network. As such, the traffic generation of the proposed development is considered supportable from a traffic planning perspective, with no external changes required to facilitate the development.

7. CONCLUSIONS

In summary:

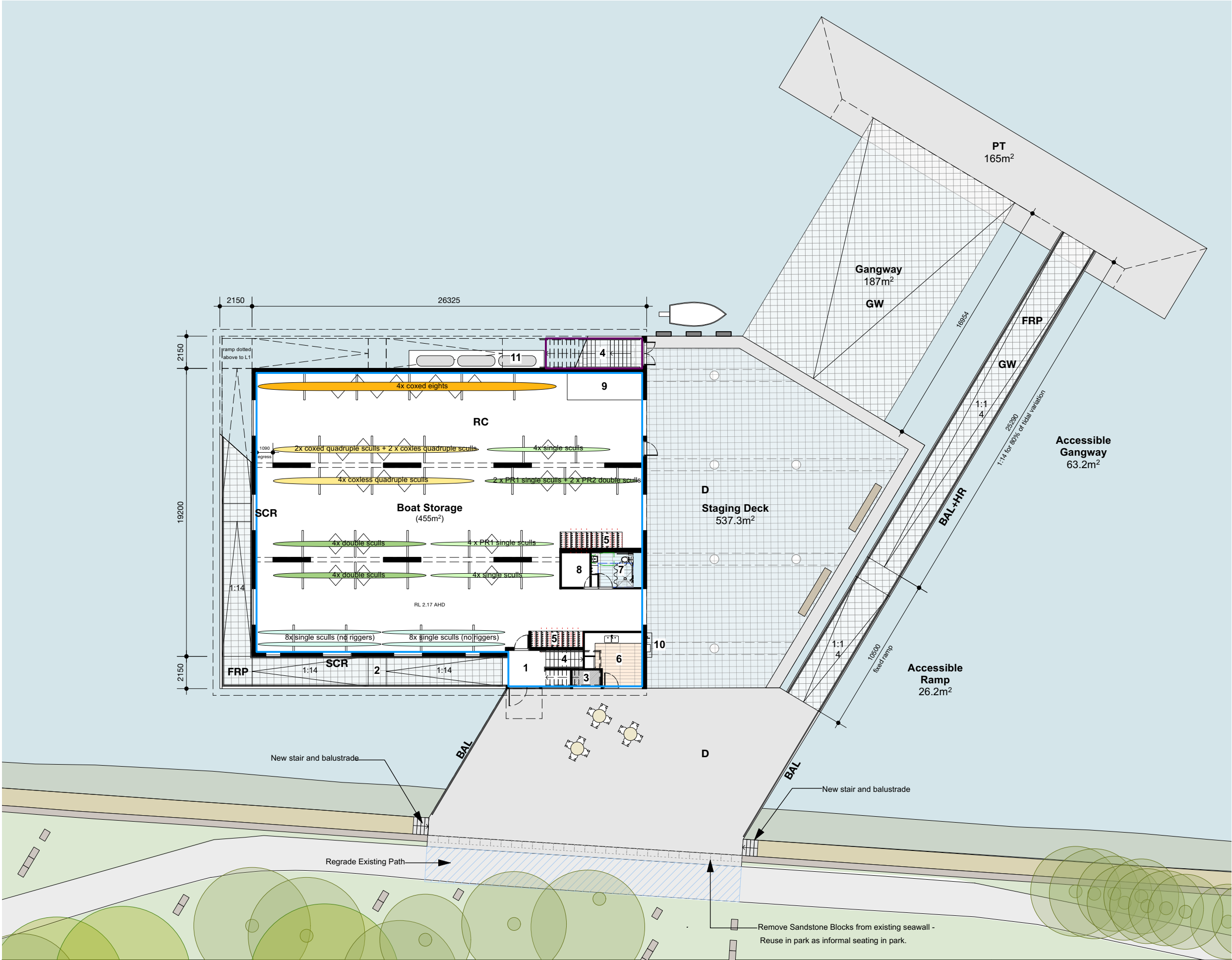
- The proposal seeks approval to construct a community boat shed development with a total capacity for 200 members. This boat shed is proposed to include an ancillary kiosk, indoor rowing room, multi-purpose community room and boat storage;
- The car parking requirements of the development have been conservatively assessed with a 'first principals' approach, resulting in an anticipated maximum parking demand for 27 car parking spaces, comprising nine (9) staff and 18 rowers during the critical weekend peak period.
- Parking surveys were conducted at the existing Maliyawul Street Waterfront Carpark that identified a minimum of 38 vacant parking spaces during the weekend peak period. As such, the adjacent carpark is readily able to accommodate the anticipated car parking demand for 27 car parking spaces. It should be noted that the nearby Leichhardt Park Carpark also provides additional available car parking spaces, should there be an increased demand for additional parking.
- The development is anticipated to potentially generate a maximum of 27 vehicle trips during the weekend peak period, with the traffic generation of the development anticipated to be significantly reduced during the weekday peak periods. This traffic generation is therefore considered acceptable, given that the envisaged morning peak period of the development would not coincide with the surrounding road network.

As such, the traffic generation of the proposed development is considered supportable from a traffic planning perspective, with no external changes required to facilitate the development.

This traffic impact assessment therefore demonstrates that the subject application is supportable on traffic planning grounds. TRAFFIX anticipates an ongoing involvement during the development approval process.

APPENDIX A

Reduced Plans



- Plan Legend**
- 1 Entry foyer
 - 2 Undercover entry/exit ramp
 - 3 Waste storage
 - 4 Exit stairs
 - 5 Oar storage
 - 6 Kiosk
 - 7 All gender accessible change room
 - 8 Storage cupboard
 - 9 Work bench
 - 10 Wash down area
 - 11 Rain water re use tank

Area Breakdown:

External Areas	
Staging Deck	537.3m ²
Gangway	187m ²
Accessible Gangway	89.4m ²
Pontoon	165m ²

Semi Enclosed Area

Egress Stair	12.8m ²
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Total Internal Area	499m ²
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Kiosk	12.3m ²
Accessible Amenities	6.4m ²

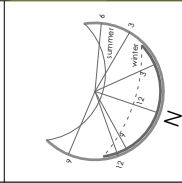
ARCHITECTS:

hill thalis

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Nominated Architects: Philip Thalis #6780 Sarah Hill #5285

- Use figured dimensions only
- Do not scale
- Comply with the Building Code of Australia
- Comply with the relevant Australian Standards
- Comply with relevant Authorised requirements

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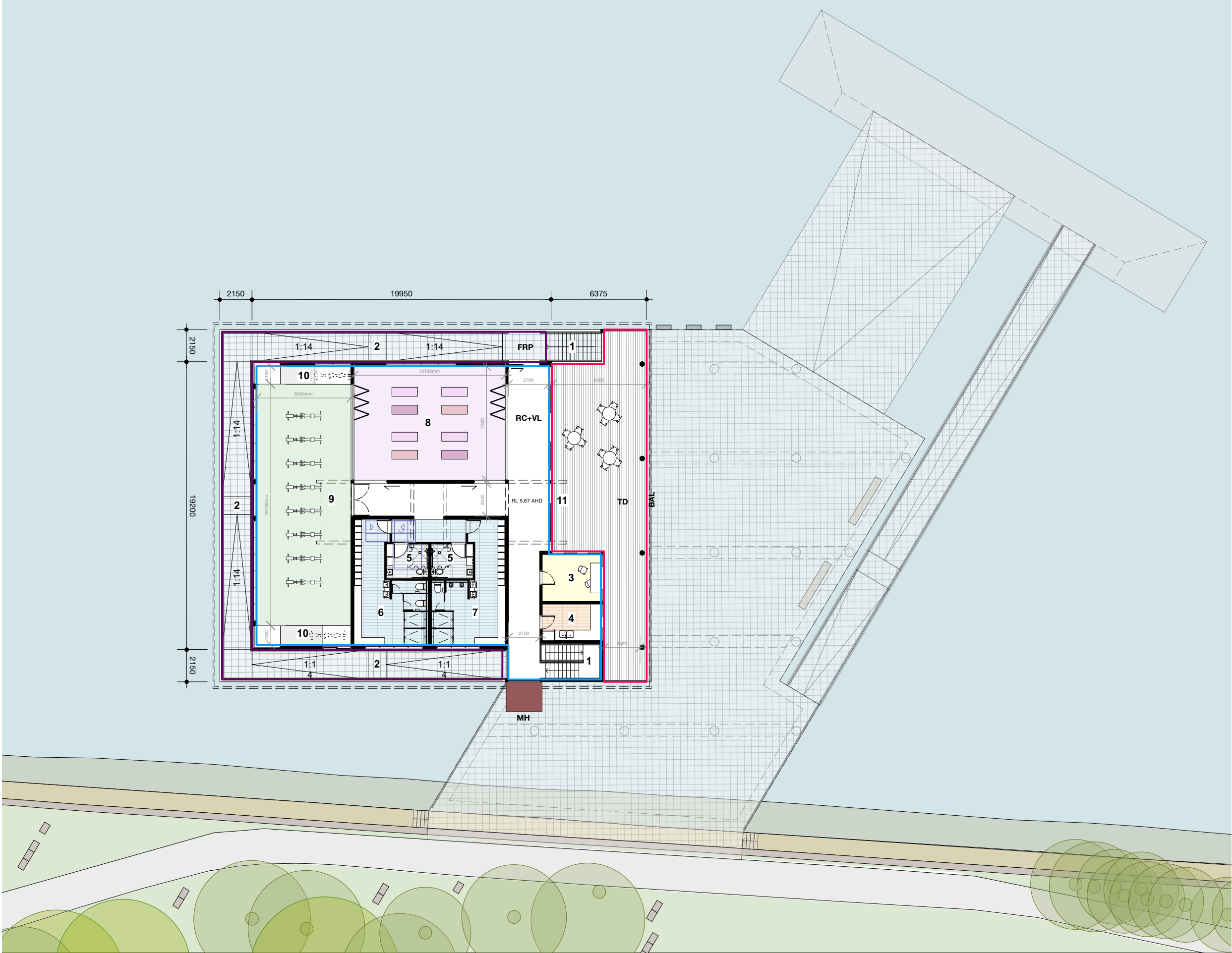


REV	DATE	AMENDMENT
P1	10/8/23	PRELIMINARY ISSUE
P2	14/8/23	PRELIMINARY ISSUE
P3	12/9/23	ISSUE TO QS
P4	15/9/23	PRELIMINARY ISSUE

AFD - Aluminium Framed Glazed Door	MD - Perforated Metal Door
AFG - Aluminium Framed Glazing	MH - Metal Hood
BAL - Metal Balustrade for compliance with NCC/BCA + AS 1428.1	MRS - Metal Roof Sheeting
D - Deck, Concrete/Reinforced Fibreglass Floor Grate	PT - Pontoon to Marine Engineers Detail
DP - Downpipe	PV - Photovoltaic panels
FC1 - Facade - Metal Cladding	RC - Reinforced Concrete Floor
FC2 - Facade - Coloured Panel Cladding	RMP - Ramp
FRP - Reinforced Fibreglass Floor Grate	RWT - Rain Water Tank
GU - Gutter	SCR - Steel Framed Metal Screening
GW - Gangway to Marine Engineer's Detail	ST - Painted steel
HR - Metal handrail for compliance with NCC/BCA + AS 1428.1	TD - Timber Deck
	VL - Vinyl Flooring Finish

PROJECT	Leichhardt Park Community Boat Shed
Address	
CLIENT	Balmain Para-rowing Program Inc

DRAWING TITLE			
Ground Floor Plan			
JOB NO	DRAWN	SCALE	DRAWING NO.
21.66	VK	1:250	DA2.10
DATE	CHECKED	PLOT DATE	REVISION
17/8/22	PT	15/9/23	P4



- Plan Legend**
- 1 Exit Stairs
 - 2 Undercover entry/exit ramp
 - 3 Coaches room
 - 4 Kitchenette /Storage
 - 5 All gender accessible change room
 - 6 Female changroom
 - 7 Male change room
 - 8 Multipurpose community room
 - 9 Indoor rowing room
 - 10 Storage Cupboards (half height)
 - 11 Deck

Area Breakdown:

Semi Enclosed Area	
Access Ramp to L1	119.2m ²
Viewing Deck	110.4m ²
Total Internal Area 398m²	
Toilets/Changerooms	84.7m ²
Multipurpose Room	76.8m ²
Training Room (inc storage)	117.2m ²
Kitchenette	9.6m ²
Coaches Room	12.4m ²

ARCHITECTS:

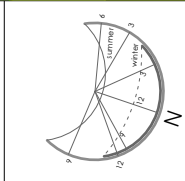
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REV	DATE	AMENDMENT
P1	10/8/23	PRELIMINARY ISSUE
P2	14/8/23	PRELIMINARY ISSUE
P3	12/9/23	ISSUE TO QS
P3	15/9/23	PRELIMINARY ISSUE

AFD - Aluminium Framed Glazed Door AFG - Aluminium Framed Glazing BAL - Metal Balustrade for compliance with NCC/BCA + AS 1428.1 D - Deck - Concrete/Reinforced Fibreglass Floor Grate DP - Downpipe FC1 - Facade - Metal Cladding FC2 - Facade - Coloured Panel Cladding FRP - Reinforced Fibreglass Floor Grate GU - Gutter GW - Gangway to Marine Engineer's Detail HR - Metal handrail for compliance with NCC/BCA + AS 1428.1	MD - Perforated Metal Door MH - Metal Hood MRS - Metal Roof Sheeting PT - Pontoon to Marine Engineers Detail PV - Photovoltaic panels RC - Reinforced Concrete Floor RMP - Ramp RWT - Rain Water Tank SCR - Steel Framed Metal Screening ST - Painted steel TD - Timber Deck VL - Vinyl Flooring Finish
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PROJECT	Leichhardt Park Community Boat Shed
Address	
CLIENT	Balmain Para-rowing Program Inc

DRAWING TITLE			
First Floor Plan			
JOB NO	DRAWN	SCALE	DRAWING NO.
21.66	VK	1:250	DA2.11
DATE	CHECKED	PLOT DATE	REVISION
17/8/22	PT	15/9/23	P3