IMHC Early Works

Construction Traffic Management Plan

Prepared for: RobertsCo

Ref: 301400181 | Date: 28 August 2023

Revision

Revision	Date	Comment	Prepared By	Approved By
A	28 August 2023	For Stakeholder Approval		

Brett Maynard

For and on behalf of

Stantec Australia Pty Ltd

Level 9, 203 Pacific Highway, St Leonards NSW 2065

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.

Limitations

CONTENTS

CONSTRUCTION TRAFFIC MANAGEMENT PLAN

IMHC Early Works

Appendices

1. Introduction

1.1 Background

Roberts Co has been commissioned to carry out Early Works at Westmead Health Campus comprising a series of infrastructure improvements to accommodate the future development of the Integrated Mental Health Complex (IMHC).

The proposed works include:

- Demolition of the existing Brain Injury Rehabilitation Unit building, Casuarina Lodge and office buildings
- Diversion of existing in-ground sewer and water services
- Construction of a new access way to the staff Car Park 14
- Install boom gate plaza to existing Health Share parking area
- Flood mitigation works
- Bulk earthworks and tree removal to accommodate the carrying out of the above works.

Stantec has prepared this Construction Traffic Management Plan (CTMP) on behalf of Roberts Co as part of the IMHC Early Works package.

The CTMP builds on the previous CTMPs prepared for construction of the Central Acute Services Building (CASB) as part of the Westmead Hospital redevelopment, completed in 2019, and Stage 2 Children's Hospital Redevelopment, with works currently under construction and developed in consultation with Transport for NSW and City of Paramatta Council (Council).

This CTMP has been prepared by engineers who hold the Transport for NSW Prepare a Works Zone Traffic Management Plan certification. Details of the accredited engineers are provided below:

-
-

1.2 Purpose of this Report

This report examines the transport related impacts associated with the IMHC early works construction on the surrounding road network. This includes vehicles, cyclists and pedestrians and details the mitigation measures necessary to address specific construction related impacts.

It aims to maintain the safety of all workers and road users in the vicinity of the construction site, with the following objectives:

- identify the need for adequate and compliant traffic management requirements in the vicinity of the Westmead Health Campus
- provide continuous, safe and efficient movement of traffic for both the general public and construction workers
- establish a safe pedestrian environment in the vicinity of the site
- inform all contractors and set the ground rules for managing traffic associated with the construction site.

1.3 References

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

- several inspections of the site and its surrounds
- Traffic Control at Work Sites Technical Manual, Transport for NSW, 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. Site Context

2.1 Overview

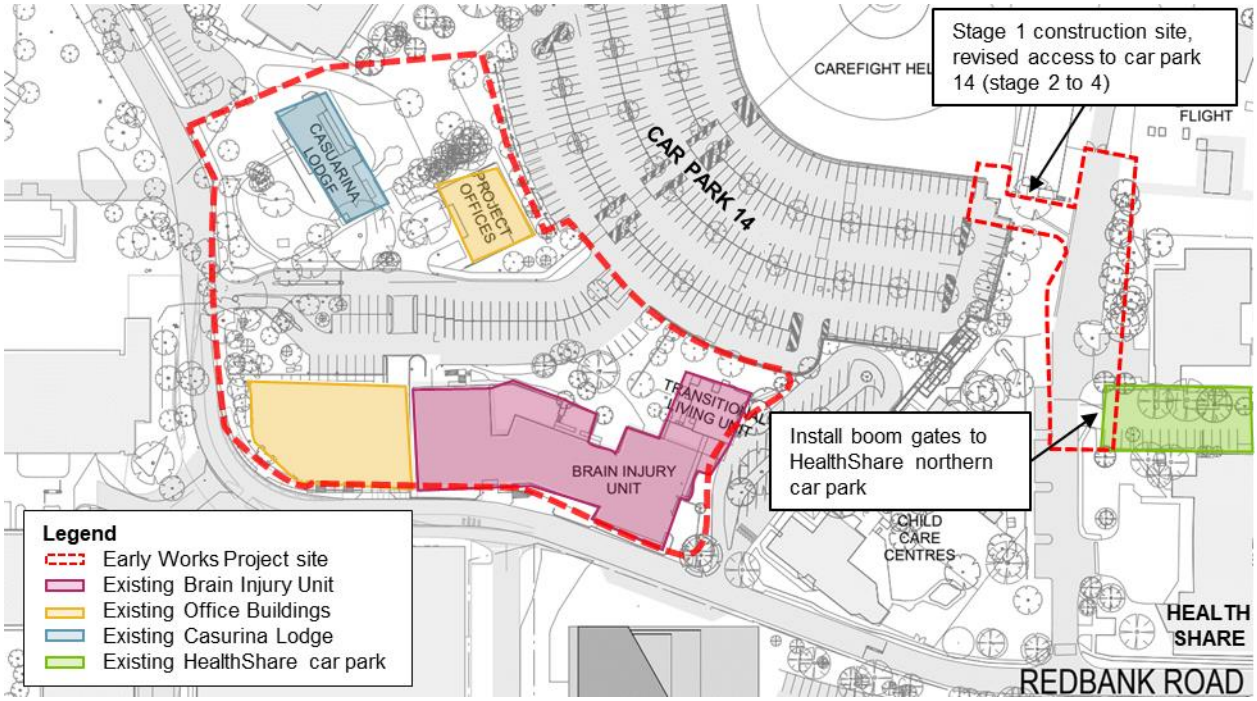
In May 2022, the NSW Government announced the investment of $460 million into the development of a new IMHC at Westmead, that will transform the delivery of mental health services across Western Sydney and deliver improved care for patients in line with state and national mental health reforms. The IMHC will replace the existing mental health facilities at Cumberland Hospital.

The Early Works Project proposes a series of infrastructure improvements to accommodate the future development of the IMHC. Proposed works include:

- Demolition of the existing Brain Injury Rehabilitation Unit building, Casuarina Lodge and office buildings
- Diversion of existing in-ground sewer and water services
- Construction of a new access way to staff Car Park 14
- Install boom gate plaza to existing Health Share parking area
- Flood mitigation works
- Bulk earthworks and tree removal to accommodate the carrying out of the above works.

Figure 2.1 illustrates the Early Works Project site.

Figure 2.1: Early Works Project site overview



Source: Site Plan – Proposed – Infrastructure, CHW-AR-DG-PSB-SSD009, Rev B prepared by Billard Leece Partnership, August 2021.

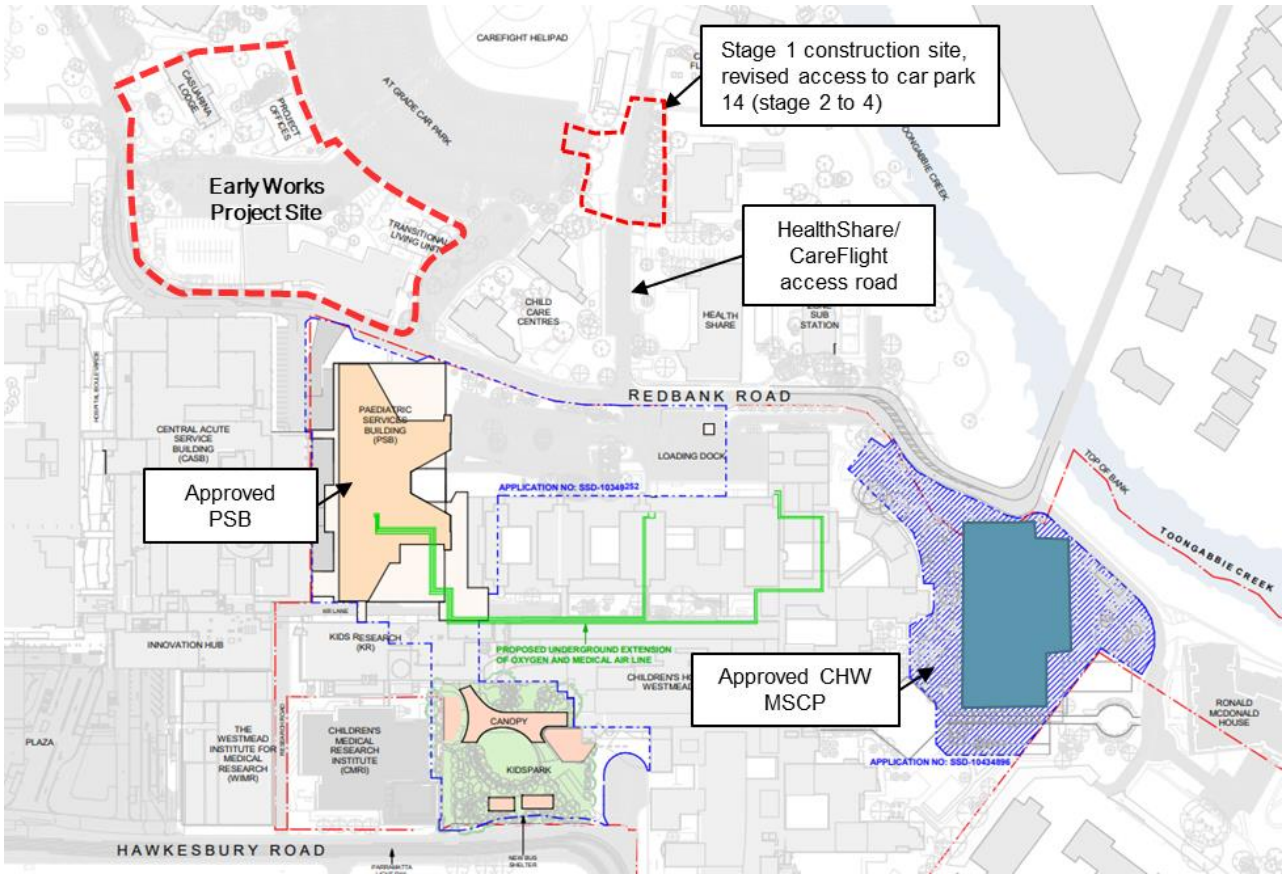
2.2 Other Precinct Construction Activities

Other nearby construction works include the Children's Hospital at Westmead (CHW) Stage 2 redevelopment, primarily comprising two works packages:

- construction of the new Paediatric Services Building (PSB)
- construction of the new Multi-Storey Car Park (MSCP) on the corner of Redbank Road, at the eastern edge of Westmead Health Precinct.

Figure 2.2 illustrates the CHW stage 2 redevelopment works in relation to the proposed Early Works Project site. The PSB construction works will extend through to the end of 2024 and overlap with the Early Works Project.

Figure 2.2: Early Works Project and CHW Stage 2 redevelopment site plan overview



Source: Site Plan – Proposed – Infrastructure, CHW-AR-DG-PSB-SSD009, Rev B prepared by Billard Leece Partnership, August 2021.

3. Existing Conditions

3.1 Overview

The proposed works will be carried out within the boundaries of the Westmead Health Precinct, which is located approximately 1.5km north-west of the Parramatta Central Business District (the primary metropolitan centre of Western Sydney). The proposed works are located in the north, central part of the Westmead Health Precinct. The site is legally described as Lot 1 in DP1194390 and Lot 4 in DP 1077852.

3.2 Surrounding Road Network

3.2.1 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 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, most recently amended on 29 July 2022.

Transport for NSW 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 Transport for NSW, typically no limit in flow and designed to carry vehicles long distance between regional centres.

Sub-Arterial Roads – Managed by either Council or Transport for NSW 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.

3.2.2 Road Network

The Westmead Health Precinct is accessed via several key traffic routes, with key access points located along Mons Road, Hawkesbury Road and Redbank Road.

Table 3.1 provides a summary of the characteristics of the surrounding key roads.

Table 3.1: Surrounding roads network

Road	Classification	Authority	Characteristics
Hainsworth Street	Local Road	Council	Two-way, two lane road with kerbside parking. Connecting between Hawkesbury Road and Park Avenue.
Hawkesbury Road	Sub-Arterial/ Regional Road	Council TfNSW west of Darcy Road	Two-way, two lane road with kerbside parking. At intersections, parking is removed to allow additional traffic lanes and bus only lanes. It connects to the Great Western Highway to the south and is an RMS Regional Road west of Darcy Road.
Redbank Road	Local Road/ Private Access Road	Council, LHD	Two-way, 2-lane road with kerbside parking. It connects to Briens Road, located north of the Hospital. Redbank Road is a private access road within the the Precinct.
Darcy Road	Sub-Arterial/ Regional Road	TfNSW	Two-way, 4-lane road with an additional Transit Way (T-Way) running through the median. It connects to Hawkesbury Road to the south.

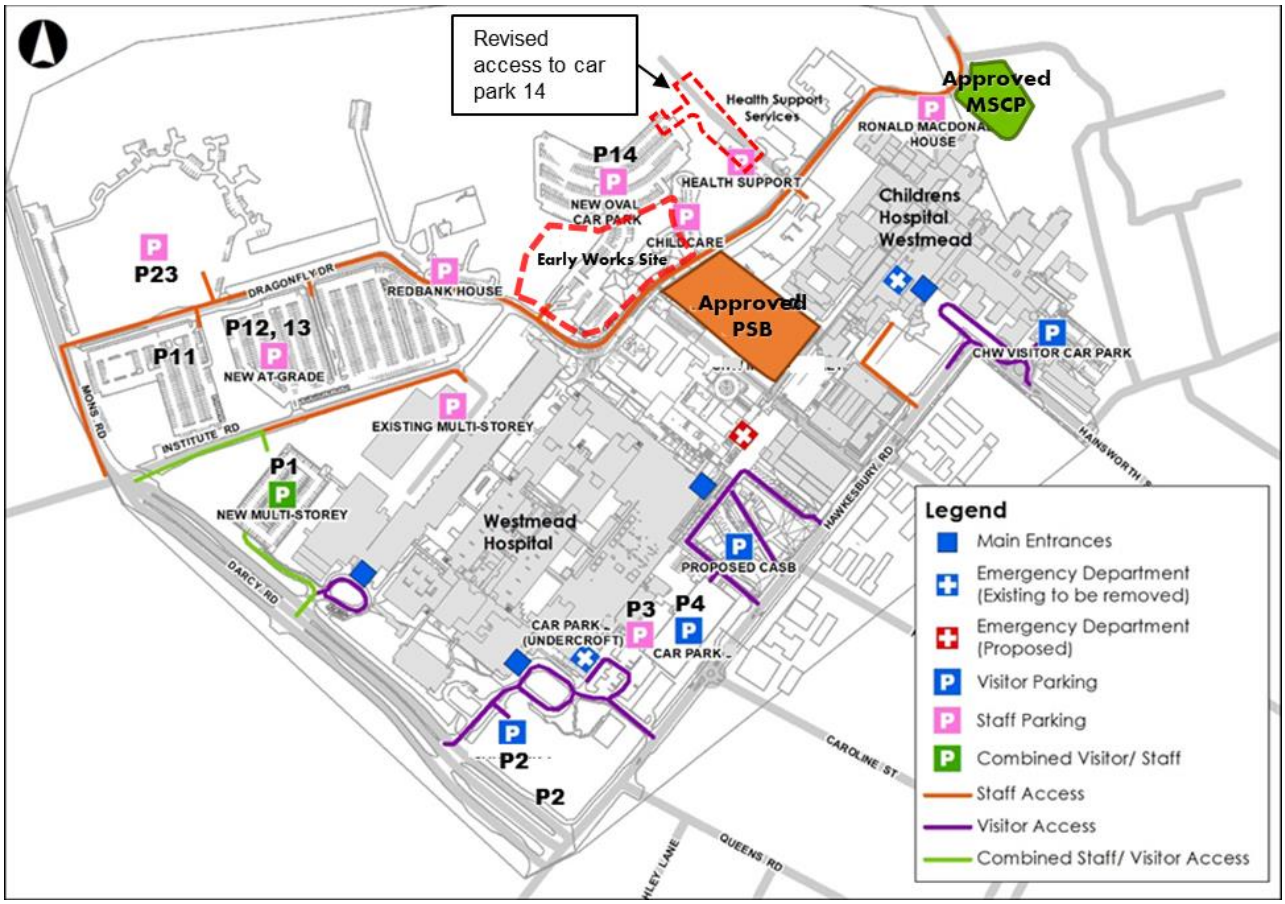
Road	Classification	Authority	Characteristics
Institute Road	Local Road	LHD	Provides local access into a Hospital staff car park with boom gates limiting access.
Mons Road	Collector Road	Council TfNSW - T-Way and Bus Lanes	Two-way, 2-lane road with marked kerbside parking for the southern portion and is an exclusive T-Way for the northern portion. Mons Road connects to Briens Road to the north and Institute Road and Darcy Road to the south.
Briens Road	Collector Road	Council TfNSW - Bus Lanes	Generally a 4-lane road with bus lanes between Mons Road to the west and Cumberland Highway to the east. Arterial road further to the east (also known as Cumberland Highway) with 3-lanes in each direction.

The surrounding local road network connects with the broader arterial network, including connections to the Cumberland Highway (Hart Drive), Great Western Highway, M4 Western Motorway (M4), Old Windsor Road and Pennant Hills Road.

The Great Western Highway and the M4 both provide east-west access to greater Sydney including Sydney CBD, Parramatta, Blacktown and key regional centres. The Cumberland Highway provides a north-south arterial road link to south-west Sydney areas including Liverpool and extending to the M5 South-West Motorway to allow access to Campbelltown, Canberra and southern regional centres. The M2 Hills Motorway and Westlink M7 also combine more broadly to provide a convenient north-south link.

Visitors to Westmead Hospital and CHW use Hawkesbury Road, however staff access is generally limited to Institute Road, Redbank Road and Dragonfly Drive. The location of the Westmead Health Precinct key access locations and typical access routes per user type to the Hospital are shown in Figure 3.1.

Figure 3.1: Staff and visitor key vehicular access routes



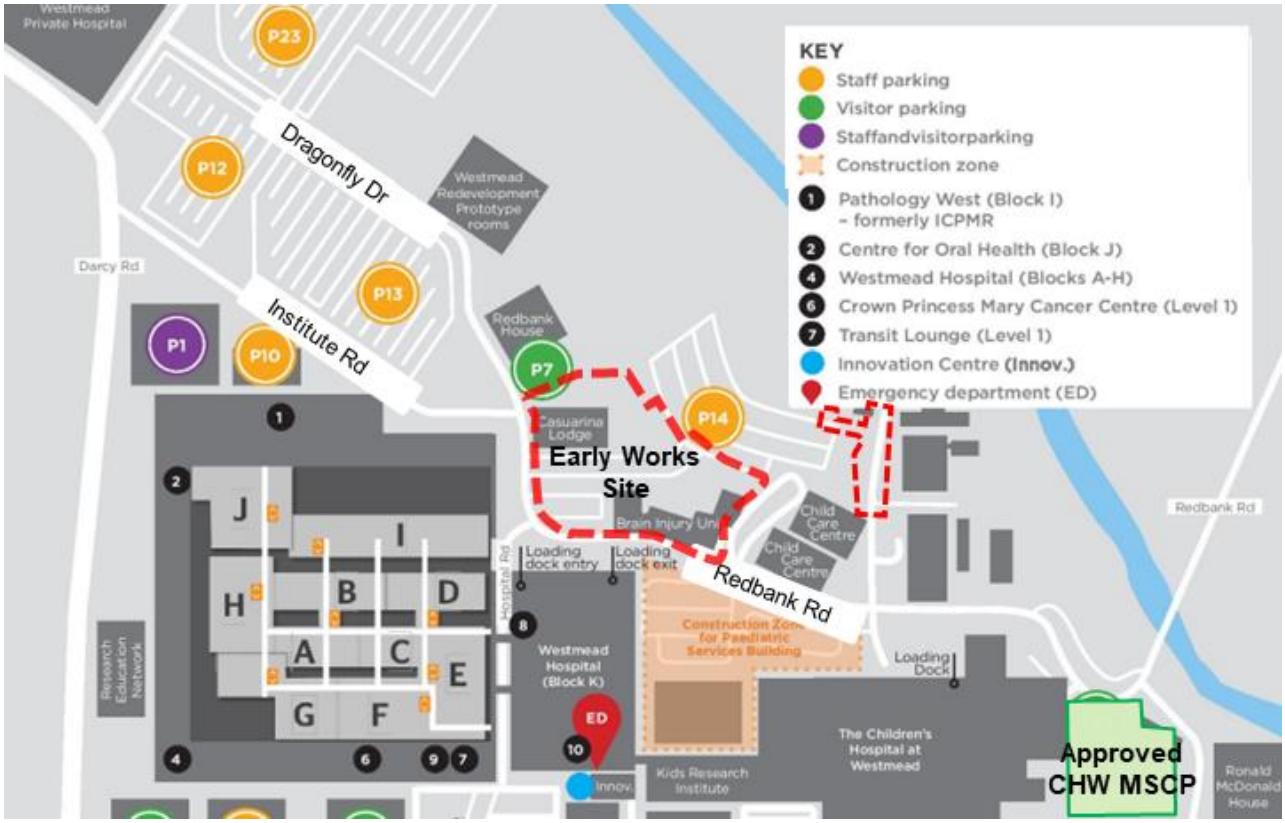
3.3 Car Parking

It is noted that the available on- and off-site parking supply is changing periodically as a result of redevelopment works within the Westmead Health Precinct, most recently comprising CHW Redevelopment Stage 2.

3.3.1 On-Site Parking

Significant car parking facilities are provided on site, servicing the various components of the Westmead Health Precinct. Car parking is distributed across the Precinct to support separate access arrangements for staff and visitors, as shown in Figure 3.2.

Figure 3.2: Westmead Health Precinct car parking facilities



Car Parks 14 is an at-grade staff parking facility, with access derived from Dragonfly Drive Road. A total of 422 spaces are located in Car Park 14. A further four spaces associated with Casuarina Lodge gain access through the Car Park 14 boom gates.

3.3.2 On-Street Parking

Stantec completed a review of all on-street car parking in the vicinity of the site in 2015 and subsequently completed a review of car parking changes in 2019 due to development works in the local area, including the Westmead Hospital redevelopment and Parramatta Light Rail works. The parking supply for key areas identified as being most likely used by staff and visitors to the Westmead Health Precinct has been summarised in Table 3.2 and illustrated in Figure 3.3.

Overall, there are approximately 1,770 publicly available spaces in the surrounding area including approximately 960 unrestricted spaces. Demand for on-street parking is shared between Westmead Precinct staff and visitors, in addition to local residents and business owners. Parking demand is generally high across a typical weekday, with limited spare capacity.

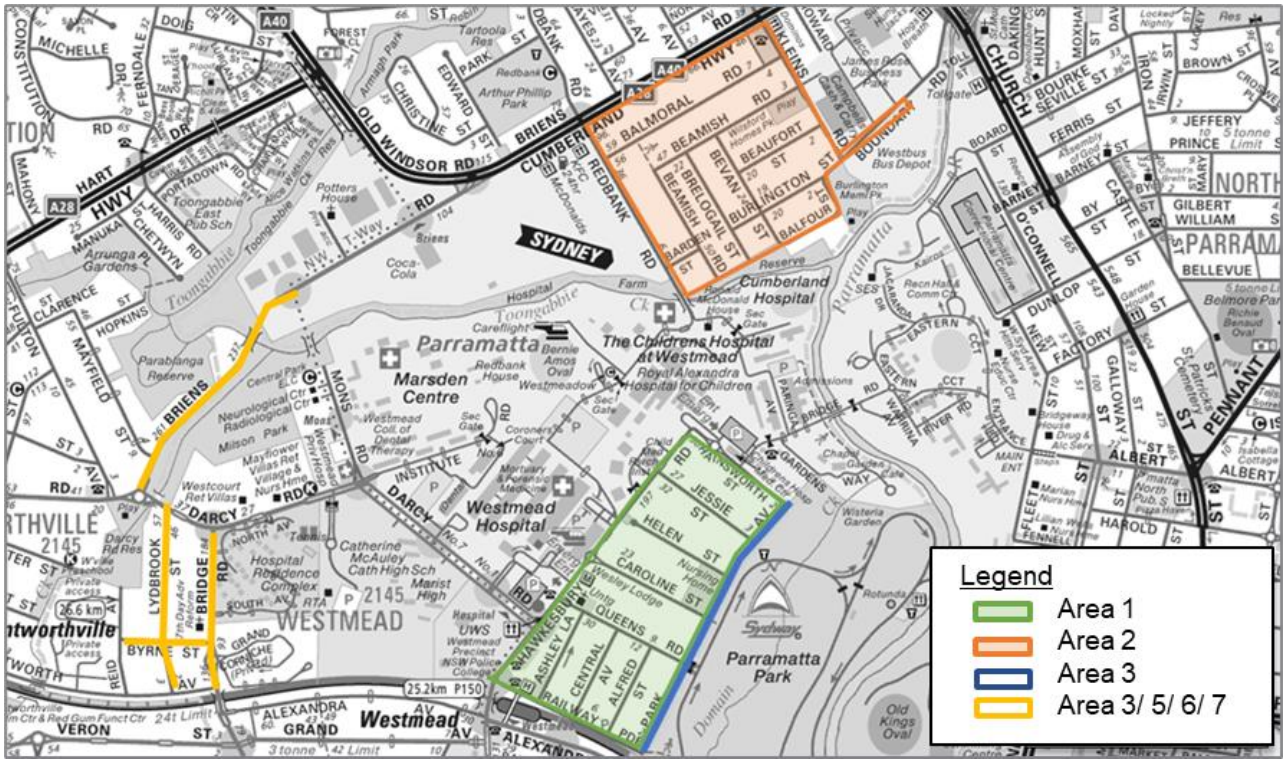
Table 3.2: Relevant on-street parking supply

Area #	Location	Unrestricted Spaces	1P/ 2P	Disabled	Total Estimated Parking Supply
1	Hawkesbury Road and south to Parramatta Park [1]	263	414	11	**688**
2	South of Cumberland Highway to Toongabbie Creek	329	242	1	**572**
3	Park Avenue along western side of Parramatta Park	0	140	0	**140**
4	Briens Road between Mons Road and Darcy Road	146	0	0	**146**
5	Bridge Road	76	0	0	**76**

Area #	Location	Unrestricted Spaces	1P/ 2P	Disabled	Total Estimated Parking Supply
6	Lydbrook Street	119	0	0	**119**
7	Byrne Street	28	0	0	**28**
Total		**961**	**796**	**12**	**1,769**

[1] Approximately five 2 hour on-street parking spaces were removed from the CASB construction site frontage during construction. Furthermore, from the commencement of Parramatta Light Rail Hawkesbury Road widening works, 57 on-street parking spaces were removed from Hawkesbury Road. 11 disabled and 16 2 hour spaces were relocated to Caroline, Helen and Jessie Street.

Figure 3.3: Relevant on-street parking areas



Basemap source: Sydway

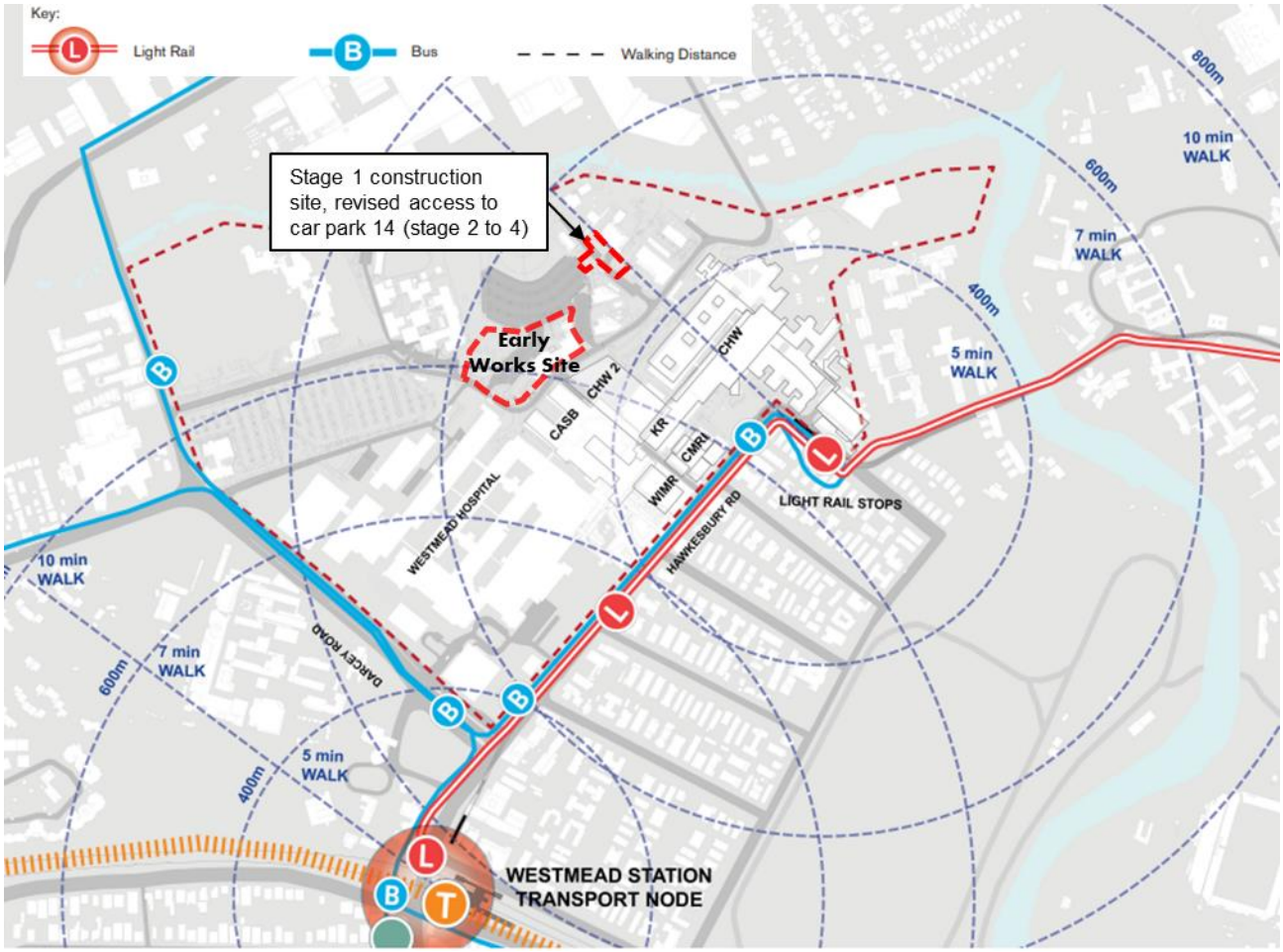
3.4 Public Transport

3.4.1 Overview

Given the strategic context of Westmead in the growth of Parramatta as Sydney's second CBD, there is significant growth and development anticipated for the area, including provision of additional public transport services.

The site is therefore well connected and near several existing and future public transport services, including existing high frequency bus corridors and heavy rail, and future Parramatta Light Rail and Sydney Metro West services. The sites accessibility with regards to the various services is illustrated in Figure 3.4.

Figure 3.4: Public transport accessibility overview



Source: Figure 12, Westmead Health Core Master Plan Design Report Revision D, Billard Leece Partnership, July 2020.

3.4.2 Existing Services

The site is located within 900 metres (10 minutes walk) of Westmead Railway Station. The station is serviced by the Western Line (T1) providing frequent services to the Sydney CBD and the Cumberland Line (T5) which provides a north-south link between Campbelltown and Schofields.

Parramatta Railway Station is located one stop to the east of Westmead, providing a number of additional NSW TrainLink services extending to the Blue Mountains, and less regular services to Central West NSW including Orange, Bathurst and Dubbo.

Westmead Health Precinct is also well-served by the North-West T-Way which opened in 2007 and provides regular bus services with significantly increased reliability and good travel times, improving the level of service offered to passengers.

All bus services that pass the Westmead Health Precinct originate or terminate at Parramatta Railway Station with the exception of the 818 Merrylands to Westmead service. The majority of bus services operate as part of the T-Way, which provides direct services to/ from the north-west Sydney growth area that includes Rouse Hill, Glenwood and Bella Vista. There are also limited services which provide local links to Blacktown and Constitution Hill.

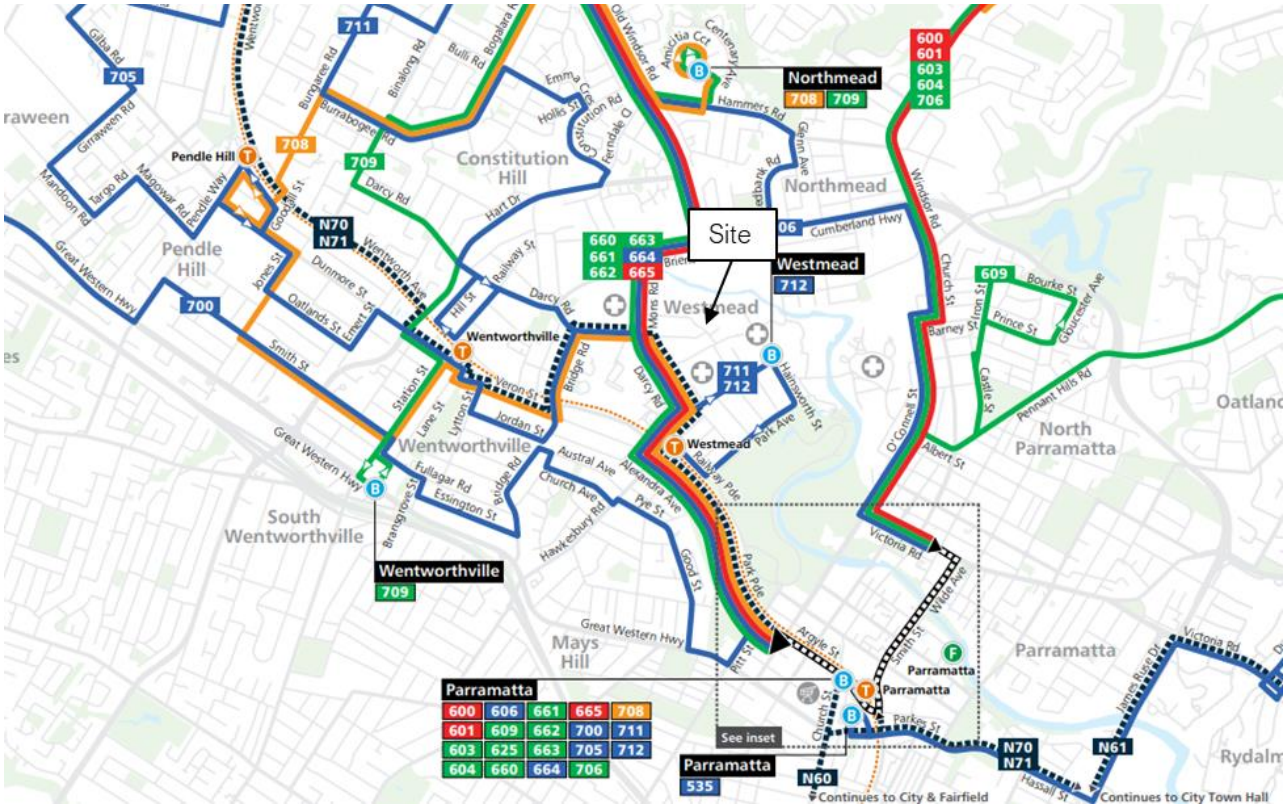
The existing public transport services in the vicinity of the Westmead Health Precinct are summarised in Table 3.3 and illustrated in Figure 3.5.

Table 3.3: Existing public transport services

Mode	Route	Location of Stop	Distance	Route	Peak Hour Frequency
Train	T1	Westmead	900m	Penrith/Richmond to Epping/Hornsby	5-10 mins
	T5			Schofields to Campbelltown	30 mins
	Blue Mountains	Parramatta	2.5km	Sydney to Lithgow	Twice Daily

Mode	Route	Location of Stop	Distance	Route	Peak Hour Frequency
	Regional			Sydney to Dubbo	Daily
Bus	711	Hawkesbury Road	50m	Parramatta to Blacktown	30 min
	712			Westmead Children's Hospital to Parramatta	30 min
	818			Westmead to Merrylands	Hourly
	660, 662	Darcy Road/ Mons Road T-Way	550m	Castlewood to Paramatta Castle Hill to Parramatta	5-15 mins
	661			Blacktown to Parramatta	
	663, 664, 665			Rouse Hill Station to Parramatta	
	708			Constitution Hill to Parramatta	2 services per day (1 during AM peak)
	705			Blacktown to Parramatta	30 min

Figure 3.5: Bus network map



Source: Hills District Bus Guide – Network Map effective from 30 May 2022

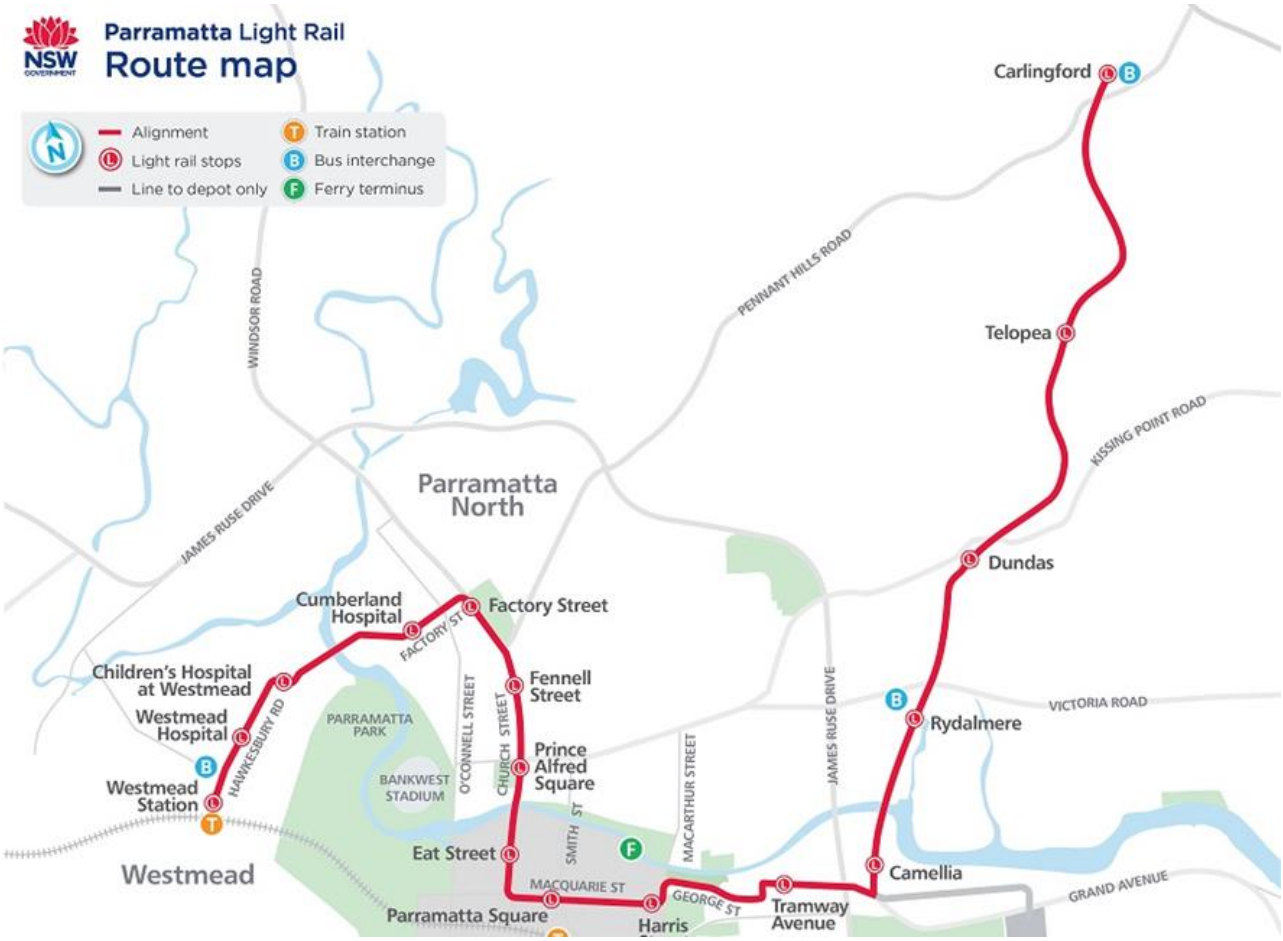
3.4.3 Future Services

The Parramatta Light Rail Stage 1 route will connect Westmead with Carlingford via the Parramatta CBD. The route will provide a high frequency transport service to support existing residential catchments as well as several priority urban renewal precincts in the greater Parramatta to Olympic Peninsula Priority Urban Renewal Area, including Parramatta North, Camellia, Rydalmere and the Carlingford Corridor (including Telopea and Dundas).

The route includes two stops along the Hawkesbury Road frontage of the Westmead Health Precinct, as shown in Figure 3.6. This would increase public transport accessibility for the whole Precinct, providing a convenient connection to the existing Westmead Train Station and future Metro Station.

The service is expected to commence in 2024 and therefore may be available for the latter stages of the Early Works Project.

Figure 3.6: Parramatta Light Rail route map



Source: https://www.parramattalightrail.nsw.gov.au/maps, accessed August 2022

3.5 Active Travel

3.5.1 Walking

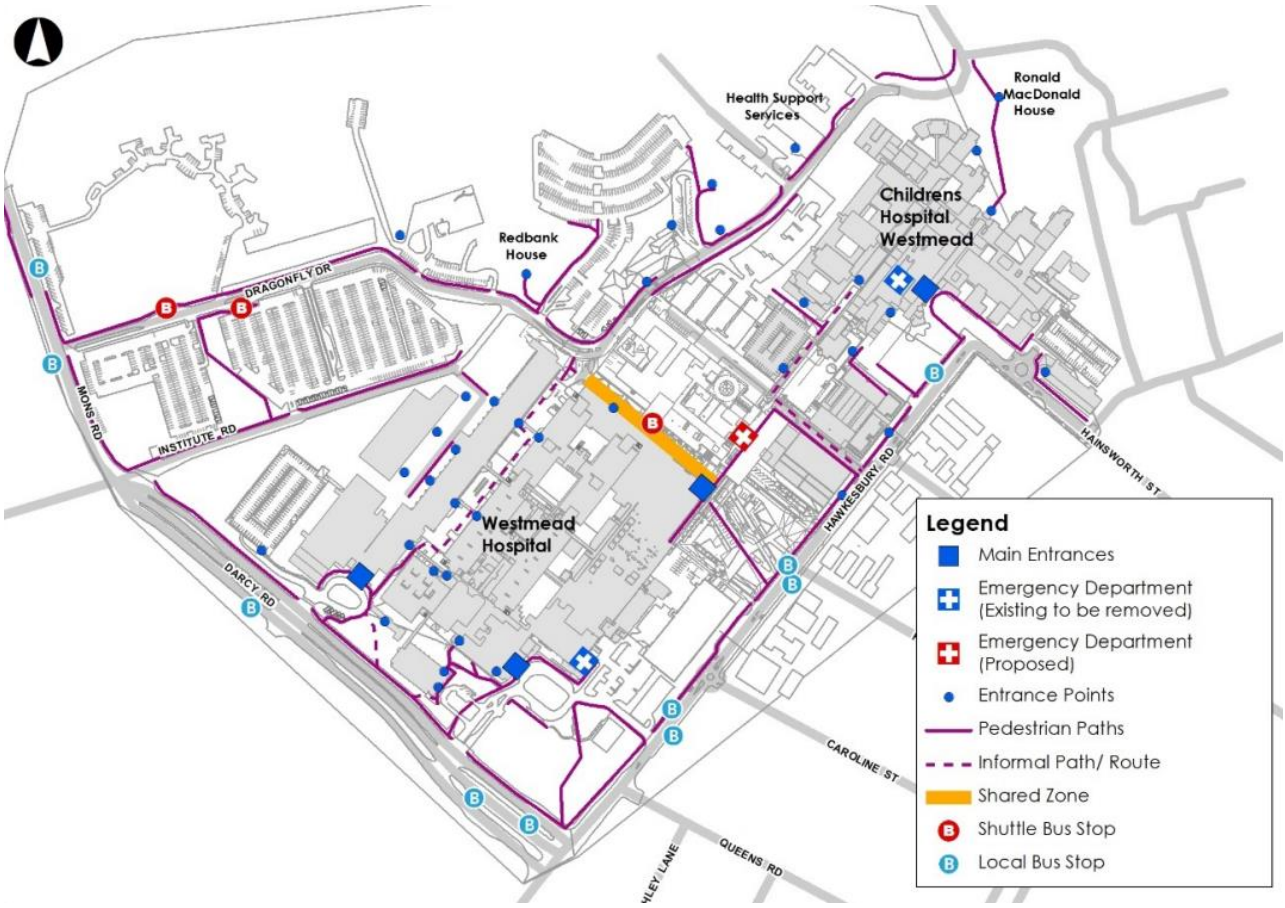
In general, pedestrians in Sydney experience a low level of priority on the transport network. Pedestrian spaces regularly conflict with driveways and loading zones, and signalised intersections cause lengthy delays in pedestrian journeys.

Such conditions were also common across the Westmead Health Precinct and the broader area however have somewhat improved following Westmead Redevelopment Stage 1 with provision of high-quality public domain, including:

- a Shared Zone along the north-south Hospital Road along the western boundary of the CASB, linking Redbank Road (and the proposed IMHC site) with Hawkesbury Road
- a pedestrian forecourt immediately south of the CASB, highlighting the main Precinct identity.

The location of the Westmead Health Precinct key access locations and pedestrian facilities are shown in Figure 3.7.

Figure 3.7: Westmead Health Precinct pedestrian facilities



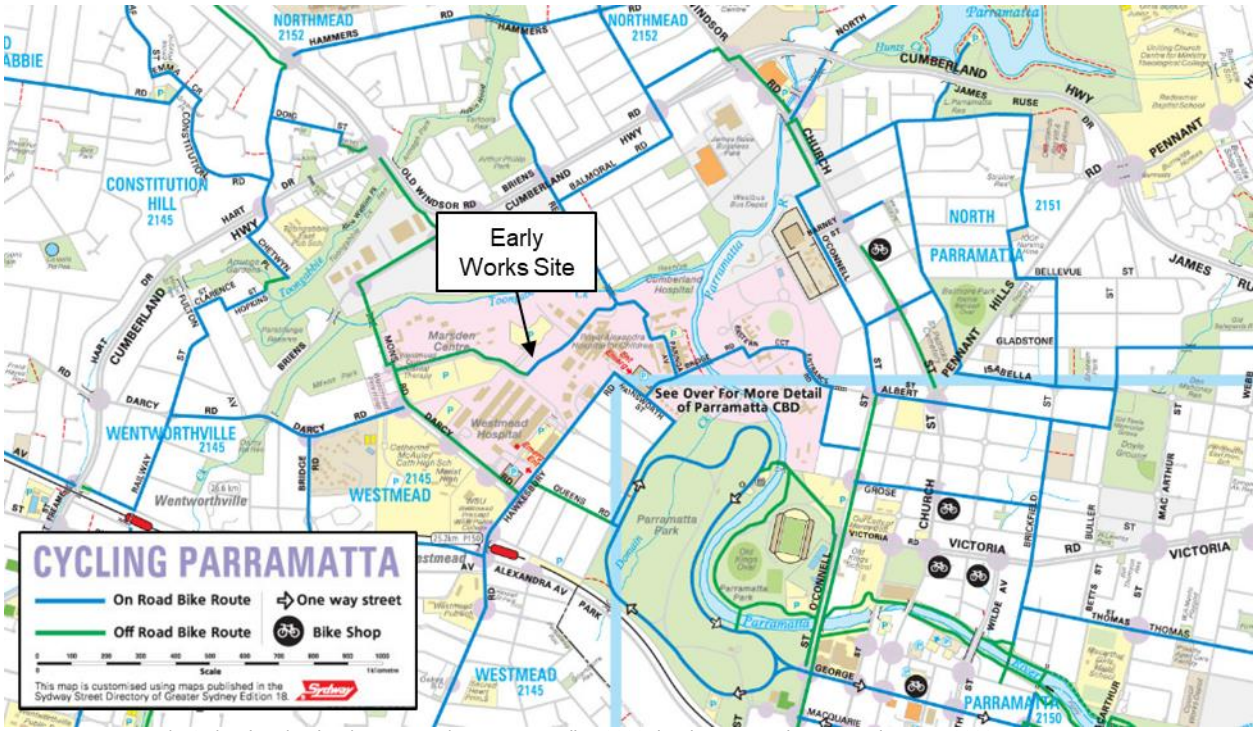
The Parramatta Light Rail will also result in significant improvements to the pedestrian domain along Hawkesbury Road to Westmead Railway Station. Signalised pedestrian crossings will be available at the intersections of Hawkesbury Road with Darcy Road, Caroline Street and the CASB forecourt egress near Helen Street.

3.5.2 Cycling

A high-quality shared path is provided across the Mons Road T-Way bridge, linking with a separated cycleway along the Darcy Road frontage of the Precinct. A shared path is also provided along the Hawkesbury Road frontage, with all other cycling routes in the vicinity of the Precinct, as identified by City of Parramatta Council, classified as on-road routes with limited infrastructure provided.

Council's cycling map is shown in Figure 3.8. An existing cycling route is available through the centre of the Precinct via an off-road three-metre-wide shared path along Dragonfly Drive, terminating at Redbank Road and Hospital Boulevarde, and on-road route along Redbank Road.

Figure 3.8: City of Parramatta Bicycle Network



Basemap source: L:\DGN\projects\sydney\Parramatta\Parramatta_Bike_2020.dgn (nsw.gov.au), accessed August 2023

4. Overview of Construction Activities

4.1 Description of Construction Activities

The expected duration of Early Works is around 14 months. The key milestones for the project are shown in Table 4.1, with details of the duration for each stage/ works package.

Table 4.1: Existing public transport services

Works	Stage	Description	Start Date	End Date	Duration
Early Works	1	Staff Car Park 14 access ramp	August 2023	November 2023	Three months
	2	Diversion of Sydney Water portable water mains	October 2023	September 2024	11 months
	3	Demolition Brain Injury Rehabilitation Unit/ Westmead Redevelopment Project Office and Casuarina Lodge	December 2023	February 2024	Three months
	4	Bulk excavation, earthworks and piling	February 2024	October 2024	Eight months

4.2 Concurrent Construction Activities

The timing of early works construction will overlap with other construction works, including CHW Stage 2 Redevelopment, scheduled to occur between October 2022 and November 2024.

4.3 Work Hours

Work associated with the Early Works Project will be carried out between the following hours:

- Weekdays: 7:00am – 6:00pm
- Saturdays: 8:00am – 1:00pm
- Sundays and public holidays: no work permitted.

Roberts Co will be responsible for instructing and controlling all subcontractors regarding the hours of work. Workers would be advised of the approved work hours during induction. Any works outside of the approved work hours would be subject to specific prior approval from the relevant authorities. Such works may include delivery of cranes, large plant or equipment required on the site that require oversize vehicle access.

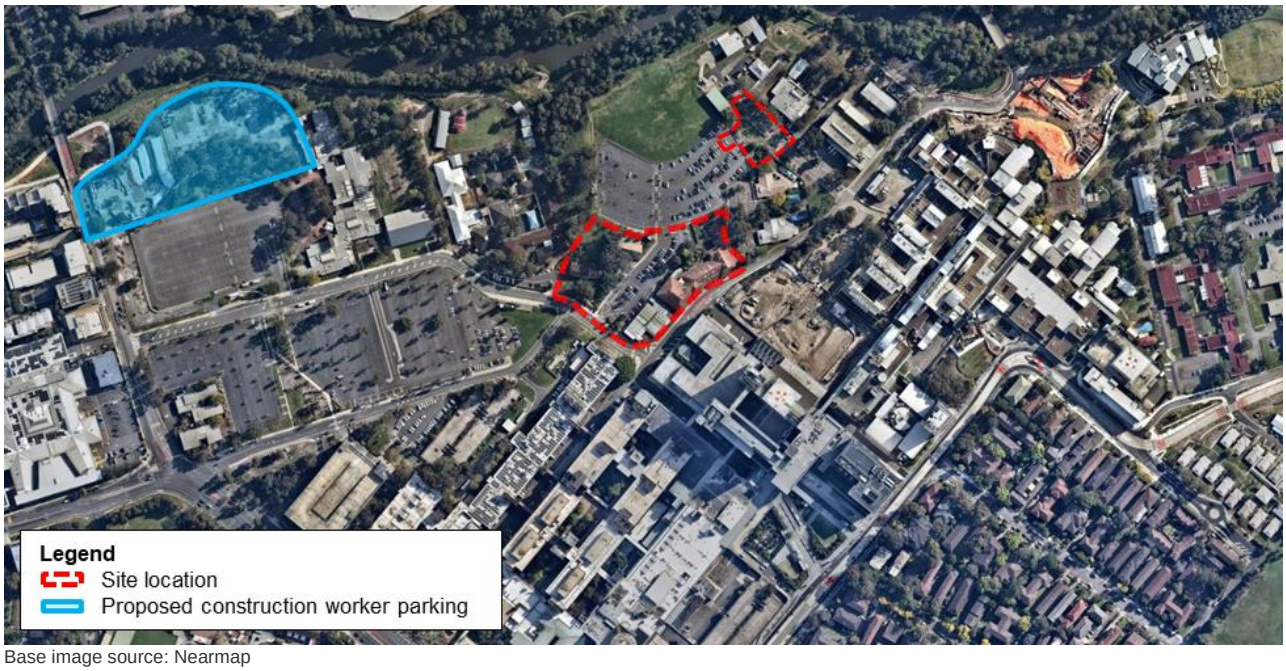
4.4 Construction Worker Parking

It is anticipated that there will be an average and maximum of approximately 12 and 36 workers on-site at any given time during the early works construction activities.

Given the site's proximity to high frequency public transport services, all workers will be encouraged to use public transport to access the work site, with appropriate tool/ equipment drop-off arrangements made. Any tool drop-off activity would occur outside road network peak hours. This will be incorporated into the site induction program. Roberts Co would be responsible for encouraging public transport use and car-pooling therefore minimising the number of workers travelling to the site by private vehicles.

Given the known high demand for parking within the Campus associated with Hospital staff and visitors, a dedicated construction worker parking area has been provided within the contractors staging area, as illustrated in Figure 4.1.

Figure 4.1: Proposed construction worker parking area



Base image source: Nearmap

Construction workers who are allocated parking will be encouraged to arrive on-site early, to avoid any significant overlap with peak AM peak Campus staff arrivals (7:00am-8:00am). Likewise, overlap with peak PM staff activity (4:00pm-5:00pm) should be avoided.

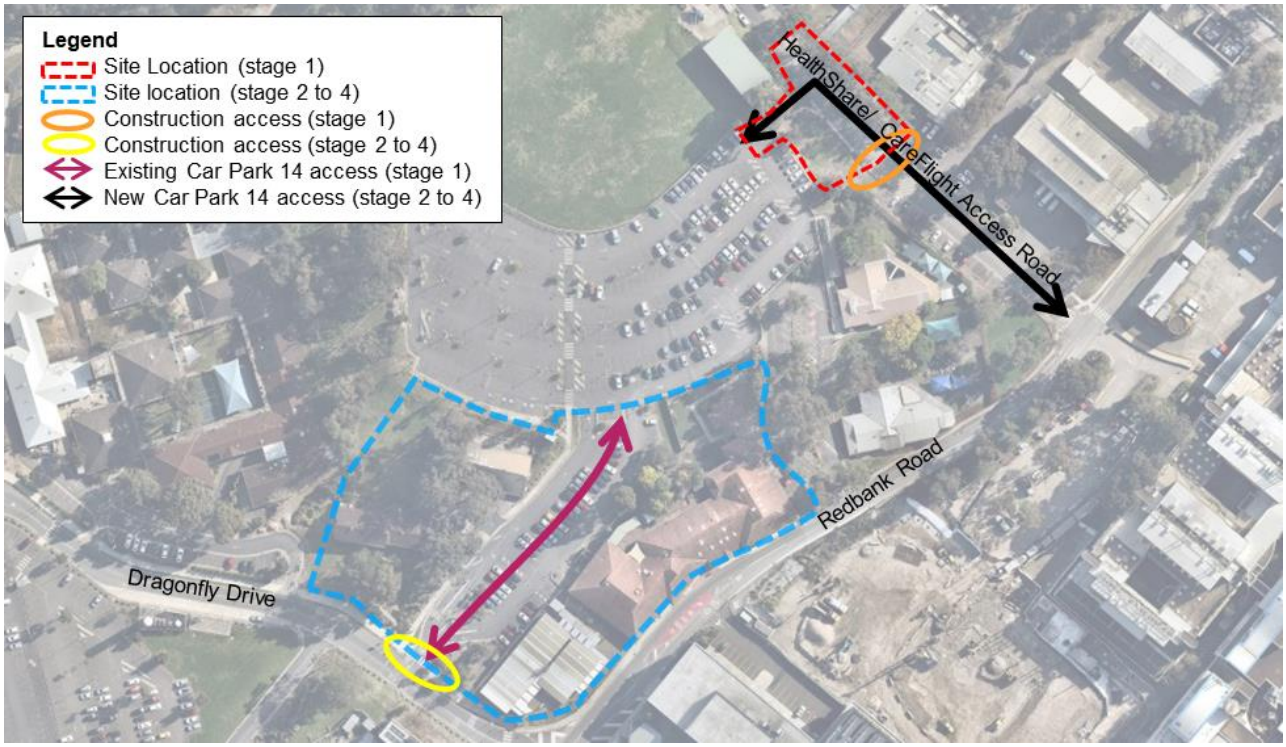
Roberts Co will be responsible for monitoring compliance with the above requirements. Compliance would result in limited impact to the surrounding road network during peak periods. Furthermore, the above strategy would limit the potential impact to Campus parking availability and/ or on-street parking availability, which would remain available for existing users (staff, visitors and residents).

4.5 Construction Site Access

The first stage of construction involves construction of the Car Park 14 access ramp along the HealthShare/ CareFlight access road. At this time, all construction vehicle access will be via the HealthShare/ CareFlight access road.

Following completion of the new Car Park 14 access, the existing access road from Dragonfly Drive to Car Park 14 will be closed, with modified access provided at the HealthShare/ CareFlight access road as shown in Figure 4.2. As such, for Stages 2 to 4, construction vehicle access will primarily be via the existing Car Park 14 access road from Dragonfly Drive.

Figure 4.2: Staged construction vehicle access and car park 14 general vehicle access



Base image source: Nearmap

4.6 On-street Works Zone

It is not anticipated that an on-street Works Zone (within a public road) would be required during early works. Should one be required, Roberts Co would need to obtain approval from relevant authority (Council).

4.7 Construction Vehicle Volumes

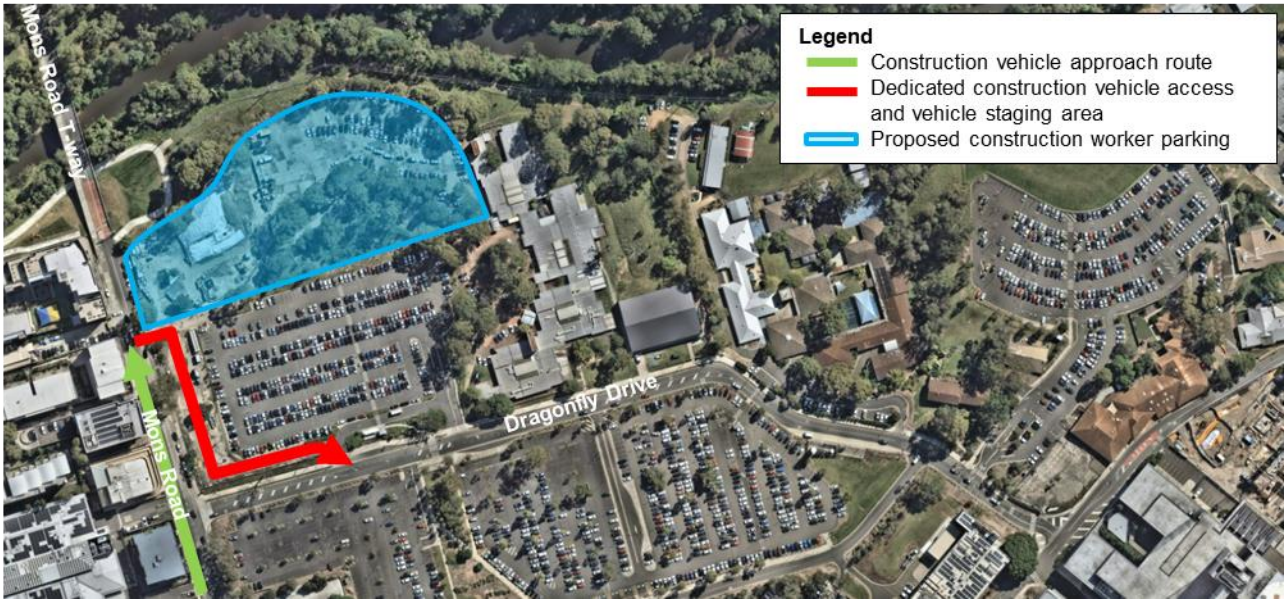
Traffic generated by the construction works include light vehicles (vans, utes etc.) associated with construction workers and smaller deliveries, together with heavy vehicles for the periodic delivery and removal of materials, including plant and equipment. Light vehicle traffic generation will vary with worker numbers and the transport strategy implemented by the contractor.

Construction (heavy) vehicles generated by the site would generally include vehicles up to 20m semi-trailers and truck and dog combinations. During Stage 1, there is expected to be up to 20 trucks per day, or three trucks per hour, accessing the site during peak activities, with maximum vehicle size of 12.5m Heavy Rigid Vehicles expected. During Stages 2 to 4, there is expected to be up to 150 trucks per day, or 15 to 20 trucks per hour, accessing the site during peak activities. The peak hourly volumes are anticipated to be associated with bulk excavation. All construction vehicles will be contained wholly within the site and vehicles will enter the work site before stopping. Construction vehicle movements will be minimised/ avoided during road network peak hours where possible.

4.8 Construction Vehicle Staging Area

A construction vehicle staging area has been proposed for the Early Works inside the contractor's compound, parallel to Mons Road. To limit interaction with the surrounding road network, construction vehicle access to the staging area is from Mons Road via an additional access to the contractor's carpark near the Mons Road T-Way bridge, as shown in Figure 4.3. All construction vehicles will enter and exit the staging area in a forward direction and use the existing Mons Road crossover to travel east towards the site.

Figure 4.3: Dedicated Construction Vehicle Access and Vehicle Staging Area



Base image source: Nearmap

It is understood that the use of the contractor's compound staging area will be managed by a materials handling coordinator who will instruct vehicles whether to use the staging area or proceed through to the work site. This will be dependent on internal hospital traffic conditions and/ or activity at the works site. Vehicles entering from Mons Road would generally be afforded clear access given the low traffic volumes at the northern end of Mons Road and be able to enter the site prior to any checkpoint/ screening point. Truck turning movements would have a minor impact on the Mons Road T-Way.

The use of this dedicated access route and staging area has four key benefits:

- Facilitates the staging of construction vehicle entry and exit movements, as required.
- Manages impacts on Dragonfly Drive across the day and considers staff shift times and associated movements.
- Mitigates construction vehicle use of the Mons Road/ Dragonfly Drive intersection, particularly during peak periods.
- Minimises light vehicles associated with the contractor parking and their interaction on Mons Road (appropriate controls will be in place to effectively manage).

The use of this staging area is consistent with the construction staging area used for the CASB construction, and is currently being used by construction activities associated with CHW Stage 2 Redevelopment.

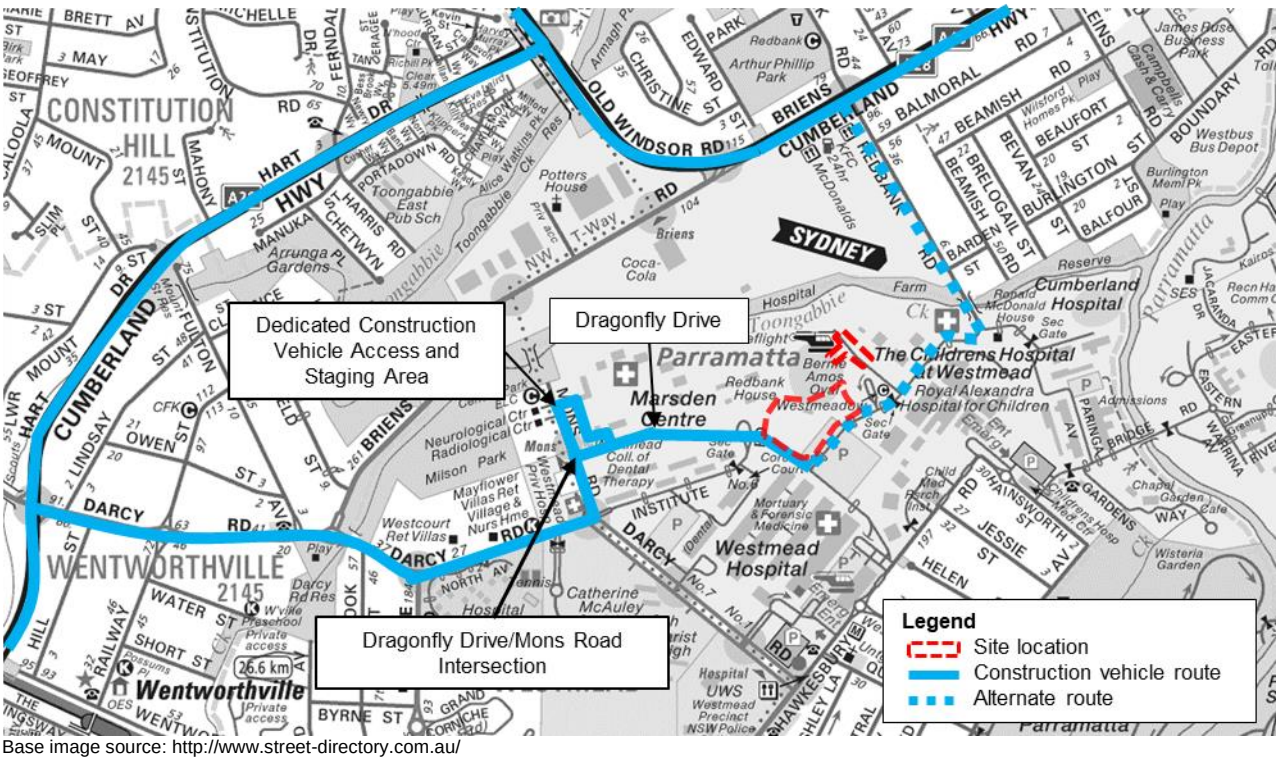
4.9 Construction Vehicle Routes

Generally, construction vehicles will have origins and destinations from a wide variety of locations throughout Sydney. However, dedicated construction vehicle routes have been developed with the aim to provide the shortest distances to/ from the arterial road network and therefore minimising the impact of construction traffic on surrounding local roads.

Alternative construction vehicle routes would not be used without specific prior approval from stakeholders. On this basis, it is proposed to use Dragonfly Drive (via Mons Road/ Darcy Road) as the primary construction vehicle access to the site.

The proposed construction vehicle access routes are shown in Figure 4.4 and includes an alternate access route from Briens Road to Redbank Road. These are consistent with the construction vehicle routes used for the CASB construction, and those currently being used by construction activities associated with CHW Stage 2 Redevelopment.

Figure 4.4: Construction vehicle 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.

Overview Traffic Guidance Schemes (formerly known as Traffic Control Plans), provided in Appendix A, include the following considerations:

- Construction vehicle activity
- 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
- All signage will be clean, clearly visible and not obscured
- All construction vehicle activity will be minimised during peak periods, where possible.

Some specific works, namely including works relating to the access of launch sites during diversion of Sydney Water potable water mains during Stage 2, will require site-specific TGSs to be developed by Roberts Co (or the responsible subcontractor) prior to those works occurring, once confirmation of the required extent of work area is known.

5.2 General Requirements

In accordance with Transport for NSW requirements, all vehicles transporting loose materials will be required to have the entire load covered and/ or secured to prevent any large items, excess dust or debris being deposited onto the roadway during travel to and from the site.

All subcontractors and suppliers must be inducted by the contractor to ensure that the procedures are met for all vehicles entering and exiting the construction sites. The contractor should monitor the roads leading to and from the site and take all necessary steps to clean any debris deposited by construction vehicles.

Vehicles operating to, from and within the site shall do so in a manner which does not create unreasonable or unnecessary noise or vibration.

5.3 Site Access Management

5.3.1 Overview

At least one traffic controller will typically be provided during key periods at each site access point (when in use) along Redbank Road, Dragonfly Drive and the HealthShare/ CareFlight access road to manage construction vehicle movements, general traffic (including Campus staff and loading/ service vehicles) and pedestrian movements. It is noted that traffic controllers may not be required outside core construction related activities and key peak traffic and pedestrian periods. These include the staff shift changeover periods and road network peak periods. Overall, it is recognised that the provision of traffic controllers outside the key periods may be reduced and focused at critical locations.

5.3.2 CareFlight – Stage 1

During construction of the new Car Park 14 access along the HealthShare/ CareFlight access road, critical vehicular access to/ from CareFlight will be maintained through the works site. This includes vehicles required within the facility for servicing/ operation.

5.3.3 Car Park 14 Access

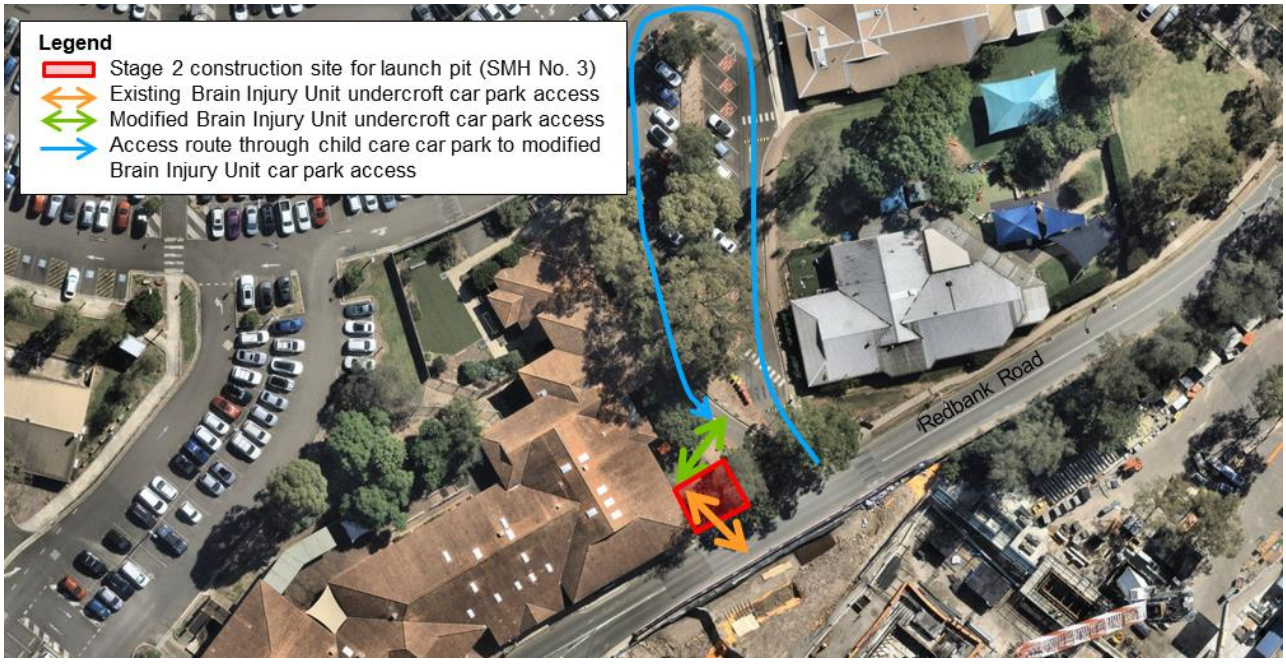
The first stage of construction involves construction of the Car Park 14 access ramp along the HealthShare/ CareFlight access road. At this time, all general vehicle access to Car Park 14 will be via the existing access road from Dragonfly Drive.

Following completion of the new Car Park 14 access (Stages 2 to 4), the existing access road from Dragonfly Drive to Car Park 14 will be closed with modified general vehicle access provided at the HealthShare/ CareFlight access road as shown in Figure 4.2. Temporary signage should be installed when the new Car Park 14 access is opened to traffic, in order to direct vehicles from the existing access to the new access. Traffic controllers should also be positioned initially (for indicatively one week after the changeover) at both the existing access and the new access to guide vehicles and pedestrians into Car Park 14.

5.3.4 Brain Injury Unit – Stage 2

During Stage 2, a launch site for relocation of Sydney Water mains is located proximate to the existing vehicle access from Redbank Road to the existing Brain Injury Rehabilitation Unit undercroft car park. A modified vehicular access is therefore proposed connecting to the existing childcare car park loop as shown in Figure 5.1.

Figure 5.1: Stage 2 launch site (SMH No. 3) – modified access to Brain Injury Unit car park



Base image source: Nearmap

5.4 Pedestrian Management

5.4.1 Overview

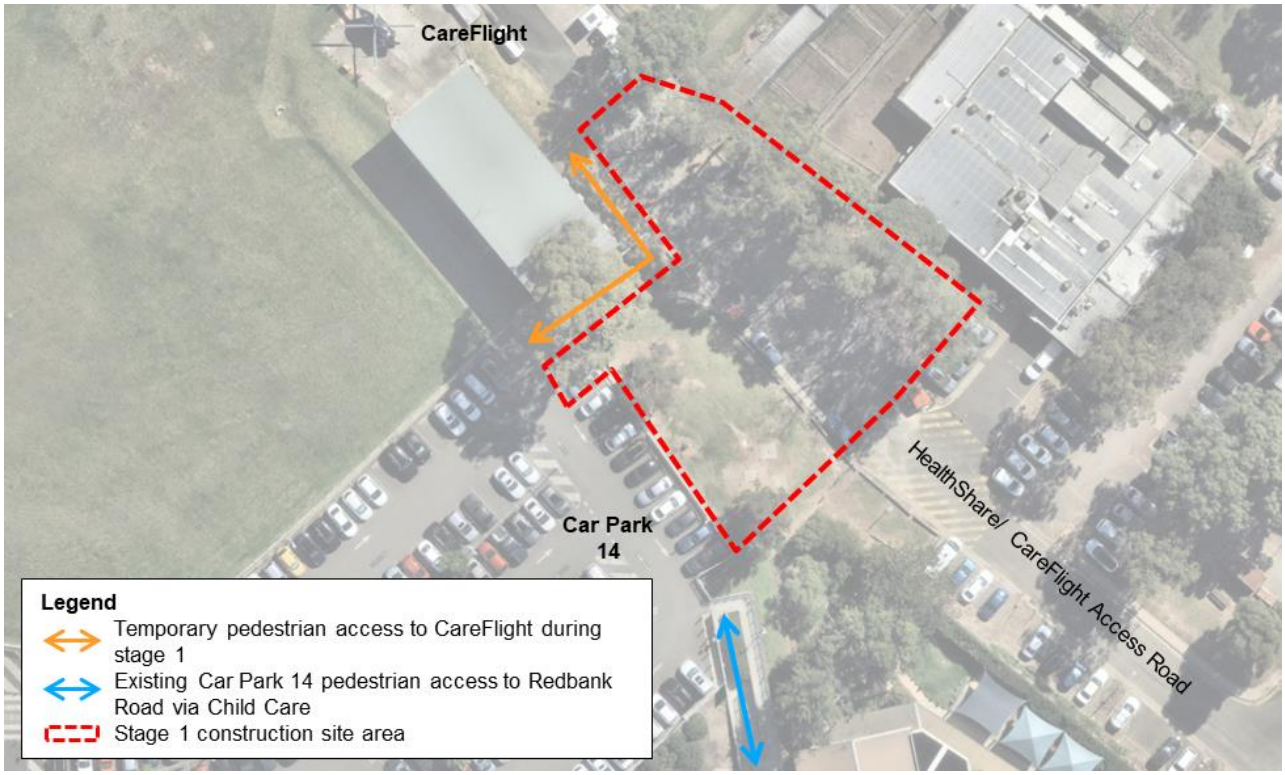
Pedestrian movements throughout the Campus will be maintained as much as possible during the construction period. Where works require the closure of an existing pedestrian route, a suitable alternative will be provided and signposted with directional signage. Hoarding will be provided around the work site at all times to ensure separation of pedestrians from the work site. Traffic controller(s) will generally be present at each site access on Redbank Road, Dragonfly Drive and HealthShare/ CareFlight access road when in use.

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

5.4.2 CareFlight – Stage 1

During Stage 1, the existing pedestrian access to CareFlight along the CareFlight/ HealthShare access road will be closed. A temporary pedestrian access will be provided at the north-eastern corner of Car Park 14, with connection back to Redbank Road provided via the existing DDA compliant path from Car Park 14 via the childcare car park as shown in Figure 5.2.

Figure 5.2: Stage 1 temporary pedestrian access to CareFlight



Base image source: Nearmap

5.4.3 Car Park 14 – Stage 2 onwards

The existing access road (including pedestrian path) from Dragonfly Drive to Car Park 14 is proposed to be closed after Stage 1, following opening of the new Car Park 14 access via the HealthShare/ CareFlight access road.

During Stages 2 to 4, a new permanent pedestrian path is proposed along the northern and eastern edge of the revised access to Car Park 14, connecting into the existing pedestrian footpath on the eastern side of the HealthShare/ CareFlight access road. The current DDA compliant path from Car Park 14 to Redbank Road via the childcare car park will be retained and remains the primary footpath connection in this regard.

Further, during Stages 2 to 4, a temporary pedestrian path is also proposed at the western edge of site between Car Park 14 and Dragonfly Drive.

Revised pedestrian access into Car Park 14 from Redbank Road and Dragonfly Drive is shown respectively in Figure 5.3 and Figure 5.4.

Temporary signage should be installed when the new Car Park 14 access is opened to traffic, in order to direct pedestrians to/from Car Park 14. Traffic controllers should also be provided, as discussed in Section 5.3.3 to manage pedestrian movements.

Figure 5.3: Car park 14 pedestrian access to Redbank Road – Stages 2 to 4

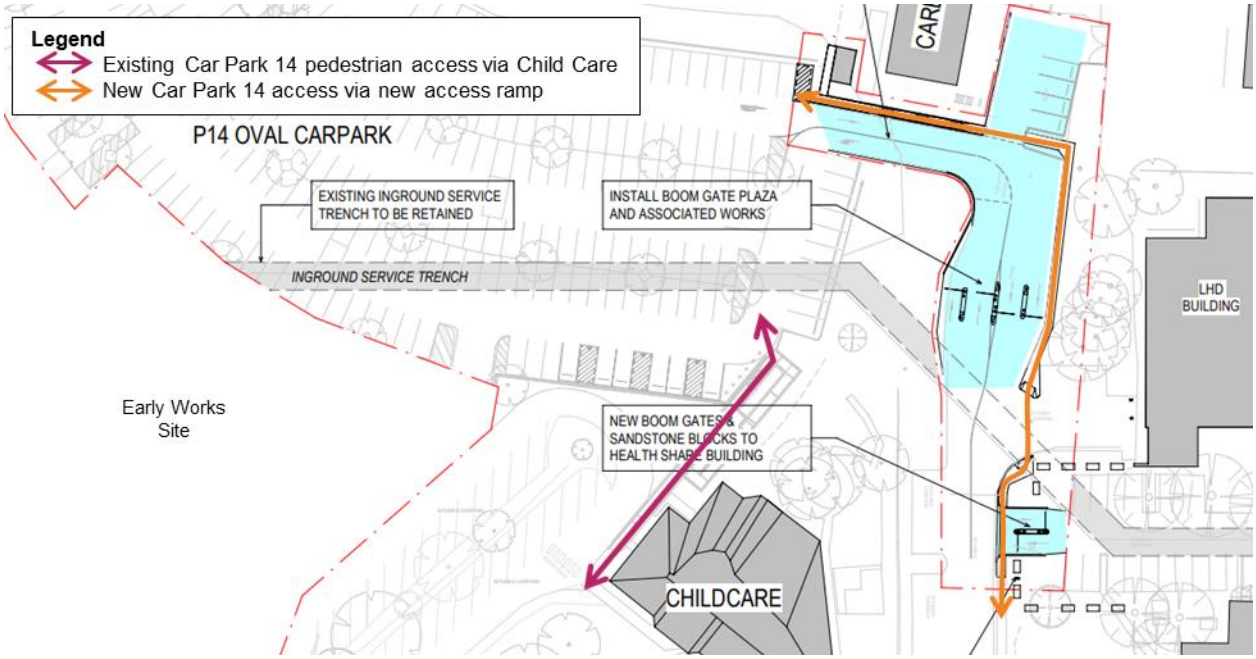


Figure 5.4: Car park 14 temporary pedestrian access to Dragonfly Drive – Stages 2 to 4

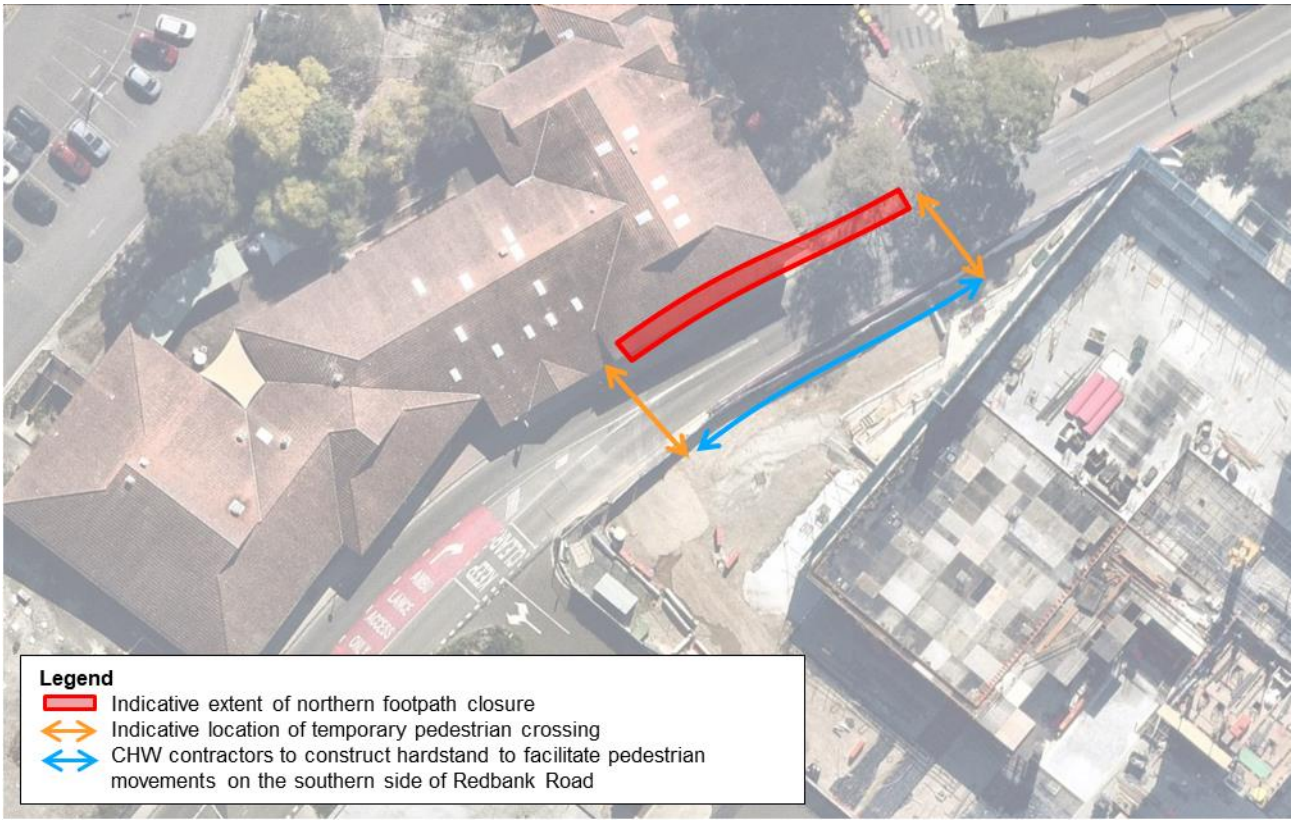
Base image source: Nearmap

5.4.4 Redbank Road

During Stage 2, a launch site for the relocation of Sydney Water mains is located along the existing pedestrian footpath on the northern side of Redbank Road. Further, during demolition of the Brain Injury Rehabilitation Unit during Stage 3, the footpath on the northern edge of Redbank Road along the extent of the Brain Injury Rehabilitation Unit will be closed.

A temporary pedestrian path of travel is therefore proposed during these respective works as indicatively shown in Figure 5.5, noting the exact extent of footpath closure and pedestrian crossing location will be finalised by Roberts Co once confirmation of the required extent of works is available.

Figure 5.5: Redbank Road temporary pedestrian access during northern footpath closure



Base image source: Nearmap

5.5 Car Parking Impacts

The HealthShare tenancy is proposed to be vacated prior to the commencement of the Early Works Project, with their parking supply along the HealthShare/ CareFlight access road to be transferred back to Western Sydney Local Health District/ Sydney Children's Hospital Network. As such, these parking spaces will be available for use by CHW staff displaced from Car Park 14. Following opening of the CHW MSCP, this parking demand will be transferred to the MSCP in-line with the broader IMHC car parking strategy and hence there will be no net loss of parking on site. As such, any minor temporary loss of CHW staff parking spaces is expected to occur for up to a period of around three months and during this time, this loss of parking could be accommodated within spare capacity in existing parking facilities, noting this is within a reasonable tolerance of day to day fluctuations of parking demand on site.

5.6 Public Transport

The construction activity is not expected to impact existing public transport services near the site.

5.7 Emergency Vehicle Access

Access to the site and adjacent buildings by emergency vehicles would not be affected by the works as road and footpath frontages would be mostly unaffected. Emergency protocols on the site should include a requirement for any traffic controllers to assist with emergency access from the surrounding road network. All truck movements to the site and/ or incident point would be suspended and cleared.

Consequently, any potential impacts on emergency access would be effectively 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. Thus, there would be no adverse impacts on the provision of existing emergency vehicle access to the Campus or other neighbouring properties as a result of construction activities.

5.8 Traffic Impact

The use of the dedicated construction vehicle access and staging area during peak times, with access via Mons Road would allow for internal user segregation between construction and staff vehicles.

It is recommended that construction vehicle activity be either minimised or closely managed during typical weekday AM and PM peak hours and staff peak shift changeover periods.

5.9 Existing and Future Developments

Roberts Co will coordinate with the adjacent construction site contractors (particularly with CHW PSB works) to ensure that impact to the surrounding roads, as well as internal road network, is minimised. It is recommended that construction vehicle activity be efficiently managed within each staging area during typical weekday peak hours and staff peak shift changeover times, such that the overall construction vehicle activity would not be expected to significantly impact road network operations.

All works within the site and associated vehicle movements will be restricted to the approved hours of work, noting that it is beneficial for construction workers to arrive to designated parking areas within the Westmead Health Campus early and avoid overlap with the broader road network peaks and peak staff arrivals/ departures.

5.10 Traffic Movements in Adjoining Council Areas

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

5.11 Site Inspections and Record Keeping

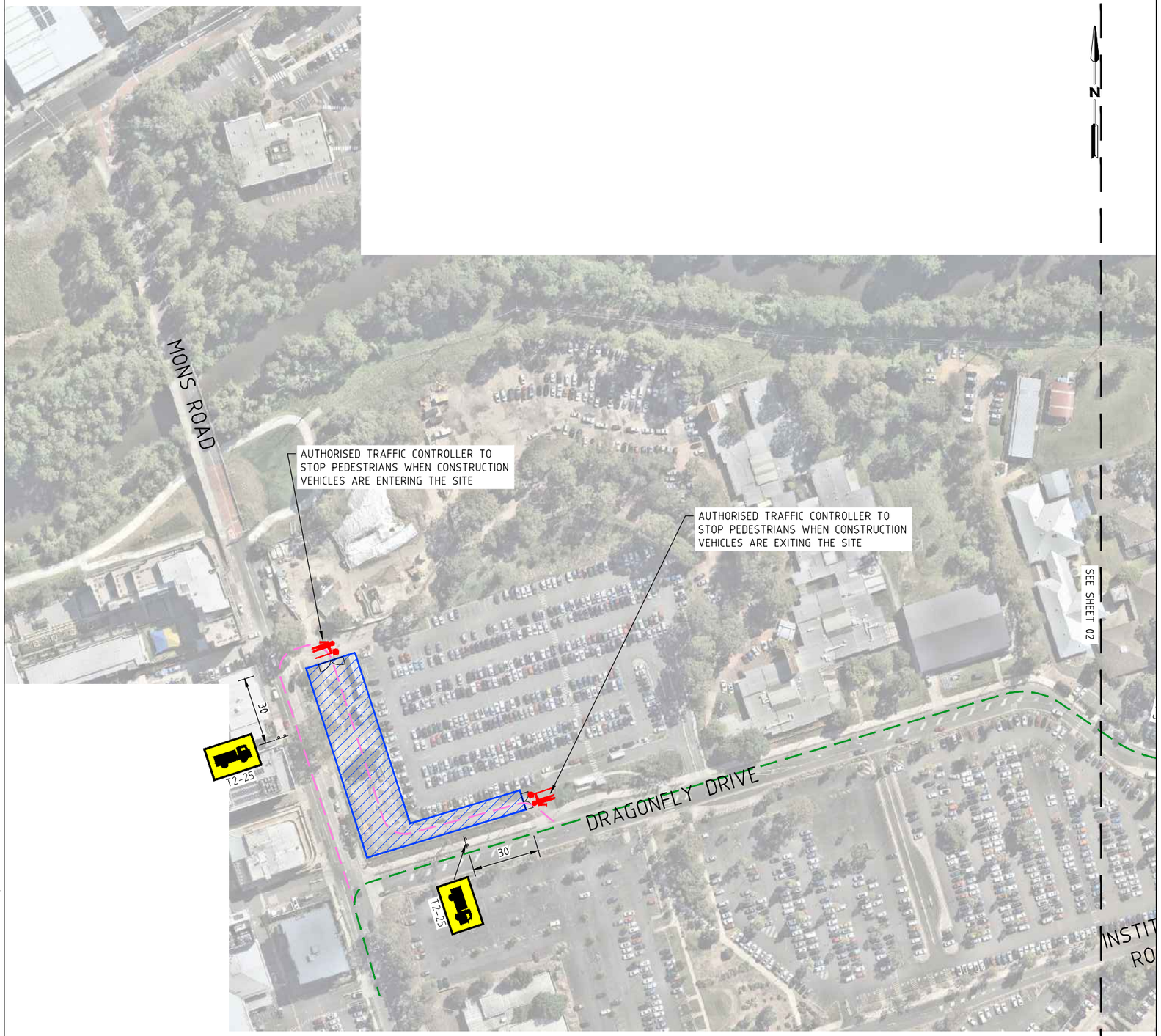
The construction work would be monitored to ensure that it proceeds as set out in the Construction Management Plan provided by Roberts Co. A daily inspection before the start of the construction activity should take place to ensure that conditions accord with those stipulated in the plan and there are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

5.12 Site Induction

All staff employed on the site by Roberts Co (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.

Appendix A. Traffic Guidance Schemes



NOTES:

1. NOT ALL DIMENSIONS SHOWN ARE TO SCALE.
2. LOCATION OF SIGNS ARE TO BE CONFIRMED ON-SITE TO ENSURE APPROPRIATE VISIBILITY.
3. ALL SIGNS TO BE MINIMUM SIZE A.
4. ALL SIGNS TO BE CLASS 1 RETROREFLECTIVE.
5. ALL TRAFFIC GUIDANCE SCHEMES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE TfNSW "TRAFFIC CONTROL AT WORK SITES" MANUAL, VER 6.1 (TfNSW 2022) AND AUSTRALIAN STANDARDS AS1742.3:2019 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PART 3: TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS.
6. THIS TRAFFIC GUIDANCE SCHEME MUST BE SET UP BY A PERSON HOLDING AN "IMPLEMENT TRAFFIC MANAGEMENT PLANS" TICKET AND THE TfNSW TRAFFIC CONTROL AT WORK SITES CHECKLIST SHALL BE COMPLETED PRIOR TO IMPLEMENTATION.
7. THE ACCREDITED PERSONNEL SHALL IMPLEMENT THE APPROVED TGS BEFORE ANY PHYSICAL WORK COMMENCES AND ENSURE A COPY OF THE TGS IS KEPT ON-SITE. THE ACCREDITED PERSONNEL SHALL ALSO DRIVE THROUGH THE SITE BEFORE WORKS BEGIN TO ENSURE THAT THE TGS HAS BEEN IMPLEMENTED CORRECTLY AND THAT IT WILL WARN, INSTRUCT AND GUIDE ROAD USERS AS DESIGNED. ANY VARIATIONS MADE TO THE PLAN MUST BE MARKED ON THE PLAN AND INITIALLED BY THE ACCREDITED PERSONNEL.
8. IT IS THE RESPONSIBILITY OF AN ACCREDITED PERSON WITH A 'PREPARE WORK ZONE TRAFFIC MANAGEMENT PLAN' TICKET TO ENSURE THE FOLLOWING:
   - THE INTEGRITY OF ALL TRAFFIC CONTROL MEASURES THROUGH TO THE FINAL REMOVAL. THIS INCLUDES DAILY CHECKS OF ALL SIGNS AND DEVICES. THE CORRESPONDING RECORDS OF CHECKS SHALL BE KEPT ON FILE FOR AUDITING PURPOSES.
   - VEHICULAR ACCESS AND SERVICING REQUIREMENTS ARE TO BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES AFFECTED BY TRAFFIC CONTROL MEASURES.
   - AT ALL TIMES AN UP-TO-DATE COPY OF "TRAFFIC CONTROL AT WORK SITES" SHOULD BE AVAILABLE FOR REFERENCE AND IMPLEMENTATION AS REQUIRED ON-SITE.
9. ALL WORKERS WILL BE CONFINED TO THE DEDICATED WORKS AREA SHOWN ON THE PLAN.
10. IF THE WORKSITE IS LEFT UNATTENDED IT IS THE CONTRACTOR'S DUTY TO ENSURE THAT THE APPROPRIATE MEASURES ARE TAKEN TO PROVIDE A SAFE ENVIRONMENT FOR VEHICLES AND PEDESTRIANS TO RELEVANT AUSTRALIAN STANDARDS.
11. ALL SIGNAGE IS TO BE CLEAN, CLEARLY VISIBLE AND NOT OBSCURED.
12. ROADWORK SIGNS TO BE COVERED OR REMOVED WHEN WORKERS ARE NOT ON SITE.
13. TRAFFIC CONTROLLER (T1-34) AND PREPARE TO STOP (T1-18) SIGNS TO BE COVERED OR REMOVED WHEN TRAFFIC CONTROLLER/S ARE NOT ON SITE
14. ALL WORKERS MUST ADHERE TO THE APPLICABLE SAFE WORK DISTANCE AS DESCRIBED IN AS1742.3:2019.
15. ALL DISTANCES BETWEEN SIGNS ARE TO BE IN ACCORDANCE WITH SECTION 4.3.2 OF AS1742.3:2019. HOWEVER, MODIFICATIONS CAN BE MADE TO SUIT SITE CONDITIONS.

LEGEND

- WORK SITE
- WORK ZONE
- SIGN POST
- TRAFFIC CONTROLLER
- CONSTRUCTION ACCESS GATE
- CONSTRUCTION STAGING ACCESS ROUTE
- CONSTRUCTION ACCESS ROUTE

AERIAL IMAGERY FROM NEARMAP
DATED 15.06.2023

CERTIFICATION

THE UNDERSIGNED HAS COMPLETED AND OBTAINED:
- PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN

AND IS SUITABLY EXPERIENCED TO DESIGN, SELECT AND MODIFY TRAFFIC CONTROL PLANS

CERTIFICATE NO: TCT0010575
PREPARE A WORK ZONE TMP CARD
BRETT MAYNARD

Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

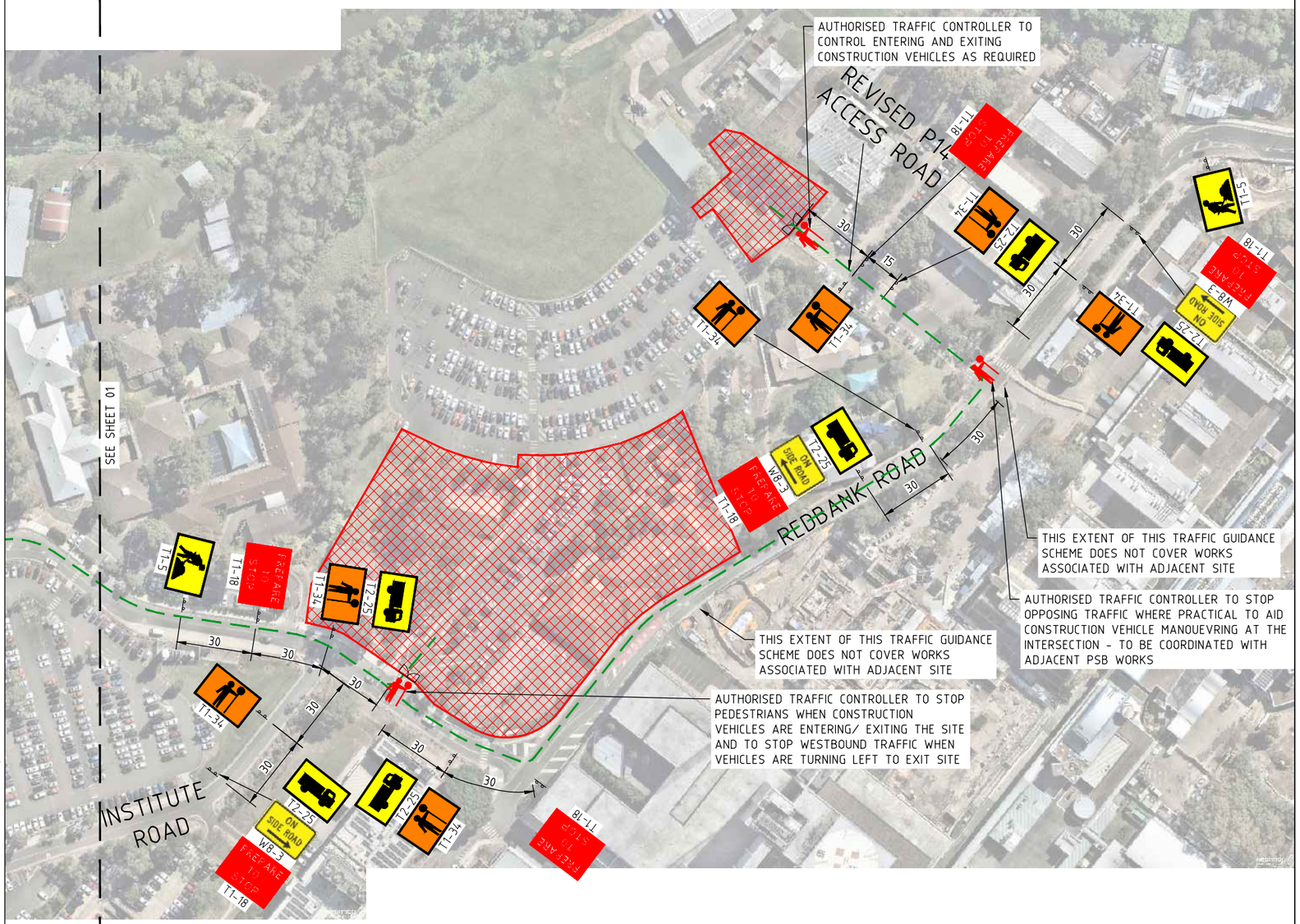
WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED W.XIE	DESIGN CHECK B.MAYNARD
APPROVED BY B.MAYNARD	DATE ISSUED 18 AUGUST 2023
SCALE A3	0 10 20 40 1:2000
CAD FILE NO. 301400181-11-P1.DWG	

CUMBERLAND WEST MENTAL HEALTH SERVICES

TRAFFIC GUIDANCE SCHEME

DRAWING NO. 301400181-11-01 SHEET 01 OF 02 ISSUE P1



NOTES:

1. NOT ALL DIMENSIONS SHOWN ARE TO SCALE.
2. LOCATION OF SIGNS ARE TO BE CONFIRMED ON-SITE TO ENSURE APPROPRIATE VISIBILITY.
3. ALL SIGNS TO BE MINIMUM SIZE A.
4. ALL SIGNS TO BE CLASS 1 RETROREFLECTIVE.
5. ALL TRAFFIC GUIDANCE SCHEMES ARE TO BE IMPLEMENTED IN ACCORDANCE WITH THE TfNSW "TRAFFIC CONTROL AT WORK SITES" MANUAL, VER 6.1 (TfNSW 2022) AND AUSTRALIAN STANDARDS AS1742.3:2019 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PART 3: TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS.
6. THIS TRAFFIC GUIDANCE SCHEME MUST BE SET UP BY A PERSON HOLDING AN "IMPLEMENT TRAFFIC MANAGEMENT PLANS" TICKET AND THE TfNSW TRAFFIC CONTROL AT WORK SITES CHECKLIST SHALL BE COMPLETED PRIOR TO IMPLEMENTATION.
7. THE ACCREDITED PERSONNEL SHALL IMPLEMENT THE APPROVED TGS BEFORE ANY PHYSICAL WORK COMMENCES AND ENSURE A COPY OF THE TGS IS KEPT ON-SITE. THE ACCREDITED PERSONNEL SHALL ALSO DRIVE THROUGH THE SITE BEFORE WORKS BEGIN TO ENSURE THAT THE TGS HAS BEEN IMPLEMENTED CORRECTLY AND THAT IT WILL WARN, INSTRUCT AND GUIDE ROAD USERS AS DESIGNED. ANY VARIATIONS MADE TO THE PLAN MUST BE MARKED ON THE PLAN AND INITIALLED BY THE ACCREDITED PERSONNEL.
8. IT IS THE RESPONSIBILITY OF AN ACCREDITED PERSON WITH A 'PREPARE WORK ZONE TRAFFIC MANAGEMENT PLAN' TICKET TO ENSURE THE FOLLOWING:
   - THE INTEGRITY OF ALL TRAFFIC CONTROL MEASURES THROUGH TO THE FINAL REMOVAL. THIS INCLUDES DAILY CHECKS OF ALL SIGNS AND DEVICES. THE CORRESPONDING RECORDS OF CHECKS SHALL BE KEPT ON FILE FOR AUDITING PURPOSES.
   - VEHICULAR ACCESS AND SERVICING REQUIREMENTS ARE TO BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES AFFECTED BY TRAFFIC CONTROL MEASURES.
   - AT ALL TIMES AN UP-TO-DATE COPY OF "TRAFFIC CONTROL AT WORK SITES" SHOULD BE AVAILABLE FOR REFERENCE AND IMPLEMENTATION AS REQUIRED ON-SITE.
9. ALL WORKERS WILL BE CONFINED TO THE DEDICATED WORKS AREA SHOWN ON THE PLAN.
10. IF THE WORKSITE IS LEFT UNATTENDED IT IS THE CONTRACTOR'S DUTY TO ENSURE THAT THE APPROPRIATE MEASURES ARE TAKEN TO PROVIDE A SAFE ENVIRONMENT FOR VEHICLES AND PEDESTRIANS TO RELEVANT AUSTRALIAN STANDARDS.
11. ALL SIGNAGE IS TO BE CLEAN, CLEARLY VISIBLE AND NOT OBSCURED.
12. ROADWORK SIGNS TO BE COVERED OR REMOVED WHEN WORKERS ARE NOT ON SITE.
13. TRAFFIC CONTROLLER (T1-34) AND PREPARE TO STOP (T1-18) SIGNS TO BE COVERED OR REMOVED WHEN TRAFFIC CONTROLLER/S ARE NOT ON SITE
14. ALL WORKERS MUST ADHERE TO THE APPLICABLE SAFE WORK DISTANCE AS DESCRIBED IN AS1742.3:2019.
15. ALL DISTANCES BETWEEN SIGNS ARE TO BE IN ACCORDANCE WITH SECTION 4.3.2 OF AS1742.3:2019. HOWEVER, MODIFICATIONS CAN BE MADE TO SUIT SITE CONDITIONS.

LEGEND

- WORK SITE
- WORK ZONE
- SIGN POST
- TRAFFIC CONTROLLER
- CONSTRUCTION ACCESS GATE
- CONSTRUCTION STAGING ACCESS ROUTE
- CONSTRUCTION ACCESS ROUTE

AERIAL IMAGERY FROM NEARMAP
DATED 15.06.2023

CERTIFICATION

THE UNDERSIGNED HAS COMPLETED AND OBTAINED:
- PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN

AND IS SUITABLY EXPERIENCED TO DESIGN, SELECT AND MODIFY TRAFFIC CONTROL PLANS

CERTIFICATE NO: TCT0010575
PREPARE A WORK ZONE TMP CARD
BRETT MAYNARD

Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

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

DESIGNED W.XIE	DESIGN CHECK B.MAYNARD
APPROVED BY B.MAYNARD	DATE ISSUED 18 AUGUST 2023

SCALE A3 0 10 20 40 1:2000
CAD FILE NO. 301400181-11-P1.DWG

CUMBERLAND WEST MENTAL HEALTH SERVICES

TRAFFIC GUIDANCE SCHEME

DRAWING NO. 301400181-11-02 SHEET 02 OF 02 ISSUE P1

Appendix B. Swept Path Assessment

\\AU2019-PPFS01\SHARED_PROJECTS\301400181\CAD\301400181-12-P1.DWG PLOTTED BY XIE, WILLIAM ON 17/08/2023 AT 11:15

Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

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

DESIGNED	W.XIE
DESIGN CHECK	B.MAYNARD
APPROVED BY	B.MAYNARD
DATE ISSUED	17 AUGUST 2023
SCALE	A3 0 2.5 5 10 1:500
CAD FILE NO.	301400181-12-P1.DWG

CUMBERLAND WEST MENTAL HEALTH SERVICES
STAGE 1
12.5m HRV - VEHICLE ENTRY
VEHCLE SWEPT PATH ASSESSMENT

DRAWING NO. 301400181-12-01 SHEET 01 OF 04 ISSUE P1

USE OF ADJACENT HARDSTAND AREA REQUIRED FOR VEHICLE EXIT

REVISED P14 ACCESS ROAD

REDBANK ROAD

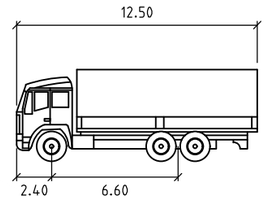
VEHICLE TO CROSS CENTRELINE OF ROAD

HRV STANDARDS 2018 (AU)

SWEPT PATH KEY

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

ASSUMED SPEED 5km/h



HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 35.2

N

LEGEND

- WORK SITE
- CONSTRUCTION ACCESS GATE

AERIAL IMAGERY FROM NEARMAP DATED 15.06.2023

Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

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

DESIGNED W.XIE	DESIGN CHECK B.MAYNARD
APPROVED BY B.MAYNARD	DATE ISSUED 17 AUGUST 2023

SCALE A3 0 2.5 5 10 1:500

CAD FILE NO. 301400181-12-P1.DWG

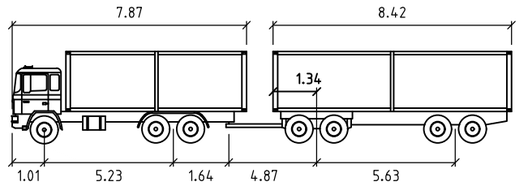
CUMBERLAND WEST MENTAL HEALTH SERVICES
STAGE 1
12.5m HRV - VEHICLE EXIT
VEHCLE SWEPT PATH ASSESSMENT

DRAWING NO. 301400181-12-02 SHEET 02 OF 04 ISSUE P1

SWEPT PATH KEY

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

ASSUMED SPEED 5km/h



Truck Dog#4Axle

meters

First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 32.0
First Unit Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

N

DRAGONFLY DRIVE

VEHICLE TO STRADDLE TWO LANES FOR ENTRY

LEGEND

- WORK SITE
- CONSTRUCTION ACCESS GATE

AERIAL IMAGERY FROM NEARMAP DATED 15.06.2023

\\AU2019-PPFSS01\SHARED_PROJECTS\301400181\CAD\301400181-12-P1.DWG PLOTTED BY XIE, WILLIAM ON 17/08/2023 AT 11:15

Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

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

DESIGNED W.XIE	DESIGN CHECK B.MAYNARD
APPROVED BY B.MAYNARD	DATE ISSUED 17 AUGUST 2023
SCALE A3 - 1:750	
CAD FILE NO. 301400181-12-P1.DWG	

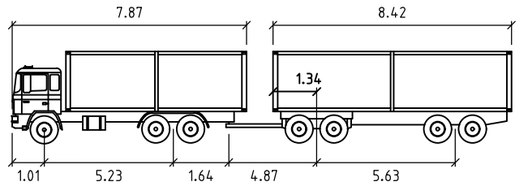
CUMBERLAND WEST MENTAL HEALTH SERVICES
STAGES 2-4
20m TRUCK & DOG - VEHICLE ENTRY
VEHCLE SWEPT PATH ASSESSMENT

DRAWING NO. 301400181-12-03 SHEET 03 OF 04 ISSUE P1

SWEPT PATH KEY

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

ASSUMED SPEED 5km/h



Truck Dog#4Axle

meters

First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 32.0
First Unit Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

DRAGONFLY DRIVE

VEHICLE TO CROSS CENTRELINE OF ROAD

N

LEGEND

- WORK SITE
- CONSTRUCTION ACCESS GATE

AERIAL IMAGERY FROM NEARMAP
DATED 15.06.2023

Stantec

nearmap.com

PRELIMINARY PLAN
FOR DISCUSSION PURPOSES ONLY
SUBJECT TO CHANGE WITHOUT NOTIFICATION

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

DESIGNED	W.XIE
DESIGN CHECK	B.MAYNARD
APPROVED BY	B.MAYNARD
DATE ISSUED	17 AUGUST 2023
SCALE	A3 - 1:750
CAD FILE NO.	301400181-12-P1.DWG

CUMBERLAND WEST MENTAL HEALTH SERVICES
STAGES 2-4
20m TRUCK & DOG - VEHICLE EXIT
VEHCLE SWEPT PATH ASSESSMENT

DRAWING NO. 301400181-12-04 SHEET 04 OF 04 ISSUE P1

\\AU2019-PPFSS01\SHARED_PROJECTS\301400181\CAD\301400181-12-P1.DWG PLOTTED BY XIE, WILLIAM ON 17/08/2023 AT 11:15

w

Stantec

Connect with us

stantec.com/australia