



ptc.

20th December 2023

**Royal Prince Alfred
Hospital
CPB Contractors
Construction Traffic
Management Plan**

Site Address: **50 Missenden Rd, Camperdown
NSW 2050**

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1. Introduction

1.1. Project Summary

ptc. has been engaged by CPB Contractors to provide a Construction Traffic Management Plan (CTMP) for submission as part of a State Significant Development (SSD-47662959). The Development type in accordance with the Major Projects portal project details is hospital, medical centre and health facilities.

1.2. Site Context

The site is located within the Royal Prince Alfred Hospital (RPAH) precinct, with access granted from Missenden Road onto private hospital roads including John Hopkins Drive, Lambie Dew Drive and Gloucester House Drive. Additional, work is to be undertaken along Grose Street, Camperdown, for installation of a temporary Helipad Landing Site (THLS).

1.3. Development Proposal

The Royal Prince Alfred Hospital (RPA) Redevelopment project in Camperdown NSW, seeks to expand the existing surgical and medical facilities of the RPA Hospital to maintain and enhance RPA's broad clinical, research and education capabilities, and meet the future needs of the immediate area and Greater Sydney. The new facility will increase theatre capacity, improve efficiencies and access to services and enable implementation of new models of care and surgical clinical pathways. The RPA Redevelopment will provide the Hospital with the opportunity to meet increased surgical demand due to numerous factors including population growth and ageing population as well as providing additional medical services and an upgrade to the existing infrastructure.

The RPA Redevelopment was approved by the Minister for Planning (State Significant Development (SSD-47662959)) and involves a new 15 storey hospital building; 3 storey extension to the east of the existing clinical services building; 2 storey vertical expansion of RPA Building 89; refurbishment works; demolition; temporary helipad.

CPB Contractors has been appointed by RPA to redevelop the hospital in accordance with SSD-47662959 and GC21. Specifically, the project development for alterations and additions to the existing RPA Hospital campus includes the following:

- Alterations and additions to the RPA Hospital East Campus, comprising: Eastern wing: A new fifteen (15) storey building with clinical space for Inpatient Units (IPU's), Medical Imaging, Delivery, Neonatal and Women's Health Services, and a helicopter landing site is proposed on the roof of this building.
- Eastern extension: A three (3) storey extension to the east the existing clinical services building to accommodate new operating theatres and associated plant areas.

- Northern expansion: A two (2) storey vertical expansion over RPA Building 89 accommodating a new Intensive Care Unit and connected with the Eastern Wing.
- Internal refurbishment: Major internal refurbishment to existing services including Emergency Department and Imaging, circulation and support spaces.
- Enhanced Northern Entry/ Arrival including improved pedestrian access and public amenity.
- Reconfiguration of Emergency Department forecourt at the Missenden Road frontage for ambulance access and parking, and replacement of canopy to the Albert Pavilion.
- Demolition of affected buildings, structures and trees.
- Changes to internal road alignments and paving treatments.
- Works within Missenden Road reserve including kerb realignment, addition of new "keep clear zone", and an additional four drop-off parking bays.
- Landscaping works, including tree removal, tree pruning, and compensatory tree planting including off-site on University of Sydney land.

Ancillary works to the RPA Hospital West Campus, comprising:

- Temporary helicopter landing site above existing multi storey carpark.
- Re-routing of existing services.
- Associated tree removal along Grose Street
- Medgas compound
- CPB office compound

1.4. Relevant Conditions

Under the SSD-47662959, the following relevant conditions have been presented and responded to within this report:

Table 1: SEARs Conditions

Condition	Detail	Reference
B28	<p>The Construction Traffic and Pedestrian Management Sub-Plan (CTPMSP) must be prepared to achieve the objective of ensuring safety and efficiency of the road network and address, but not be limited to, the following:</p> <ul style="list-style-type: none"> a) be prepared by a suitably qualified and experienced person(s); b) be prepared in consultation with Council and TfNSW; c) detail: <ul style="list-style-type: none"> i. measures to ensure road safety and network efficiency during construction in consideration of potential impacts on general traffic, cyclists and pedestrians and bus services; 	Detailed throughout the CTMP

	<ul style="list-style-type: none"> ii. measures to ensure the safety of vehicles and pedestrians accessing adjoining properties where shared vehicle and pedestrian access occurs; iii. heavy vehicle routes, access and parking arrangements; iv. the swept path of the longest construction vehicle entering and exiting the site in association with the new work, as well as manoeuvrability through the site, in accordance with the latest version of AS 2890.2; and v. arrangements to ensure that construction vehicles enter and leave the site in a forward direction unless in specific exceptional circumstances under the supervision of accredited traffic controller(s). 	<p>Refer Section 3.19, 0</p> <p>Refer Section 3.18, 3.19, 3.28, 6</p> <p>Refer Section 3.19, Appendix 2</p> <p>Refer Section 3.19</p>
B34	<p>A Driver Code of Conduct must be prepared and communicated by the Applicant to heavy vehicle drivers and must address the following:</p> <ul style="list-style-type: none"> a) minimise the impacts of earthworks and construction on the local and regional road network; b) minimise conflicts with other road users; 	Refer Section 3.29
B35	<p>Prior to the commencement of any construction, the Applicant must provide sufficient parking facilities on-site, including for heavy vehicles, to ensure that construction traffic associated with the development does not utilise public and residential streets or public parking facilities.</p>	Refer Section 3.27, 6
B36	<p>Prior to the commencement of any construction, the Applicant must submit a Construction Worker Transportation Strategy to the Certifier. The Strategy must detail the provision of sufficient parking facilities or other travel arrangements for construction workers in order to minimise demand for parking in nearby public and residential streets or public parking facilities. A copy of the strategy must be published on the Applicant’s website in accordance with condition A34. This condition cannot be staged.</p>	Refer Section 6

1.5. Purpose of this Report

This CTMP addresses the potential construction activity associated with the construction of the development, including generally:

- Location of any proposed Work Zones, site boundary, and any site office, crane locations, material and waste storage area and other components as necessary;
- Haulage routes (both to and from the site);
- Construction vehicle access arrangements;
- A heavy vehicle swept path assessment, demonstrating feasibility of any proposed Work Zones or site access;

- Proposed construction hours;
- Estimated number of construction vehicle movements and vehicle types;
- Construction program;
- Any potential impacts to general traffic, cyclists, pedestrians and bus services within the vicinity of the site from construction vehicle during the construction of the proposed works; and
- Measures proposed to mitigate any associated general traffic, public transport, pedestrian, and cyclist impact.

2. Existing Transport Environment

2.1. Road Hierarchy

The road hierarchy in the surrounding area can be seen in Figure 1.

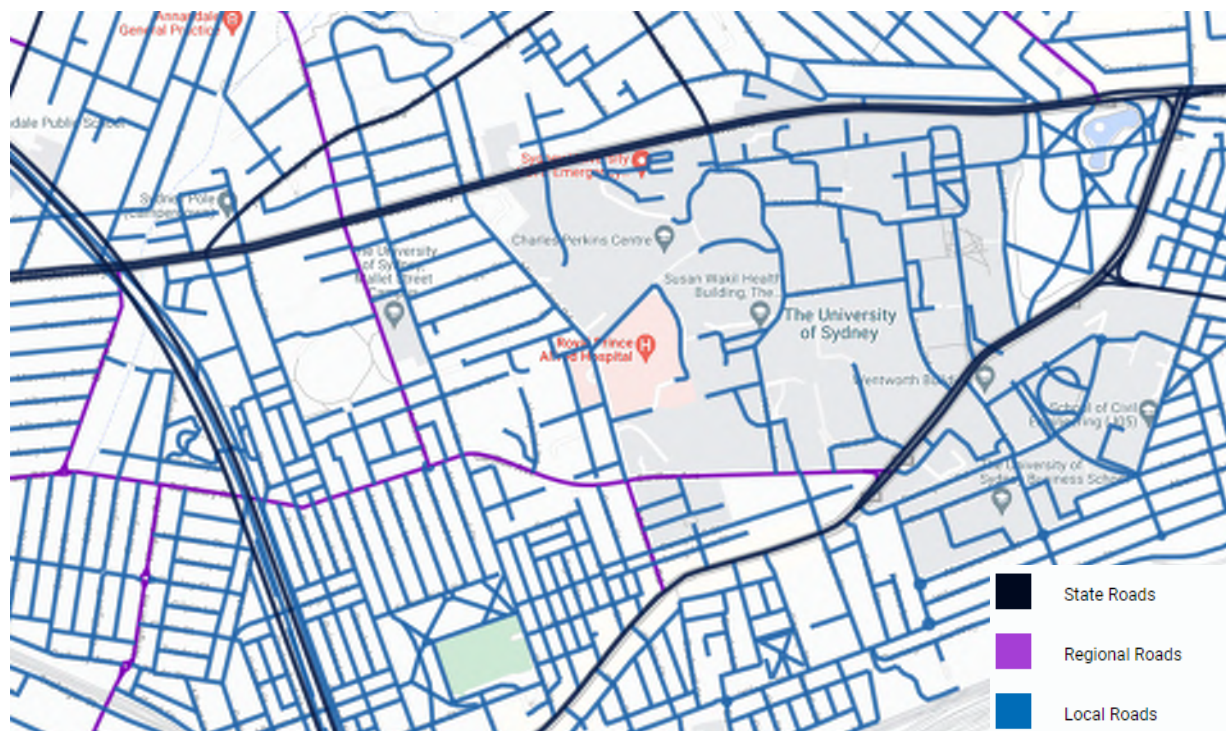


Figure 1: Surrounding Road Network Classifications

The NSW administrative road hierarchy comprises the following road classifications, which align with the generic road hierarchy as follows:

State Roads	Freeways and Primary Arterials (TfNSW managed)
Regional Roads	Secondary / sub arterial (Council managed, partly funded by the State)
Local Roads	Collector and local access roads (Council managed)

It should be noted that the site also includes several private roads which are detailed in 2.2.1.

2.2. Key Intersections

Missenden Road (Southbound before John Hopkins Drive)	
Road Classification	Local Road
Alignment	Typically North - South
Number of Lanes	1 each way
Carriageway Type	Undivided
Carriageway Width	6.5m
Speed Limit	40km/hr
School Zone	No
Parking Controls	No parking, metered parking
Forms Site Frontage	Yes



Parramatta Road (Westbound before Missenden Road)	
Road Classification	State Road
Alignment	Typically East – West
Number of Lanes	2 each way plus bus lane each way
Carriageway Type	Divided
Carriageway Width	20m
Speed Limit	60km/hr
School Zone	No
Parking Controls	No parking
Forms Site Frontage	No



Missenden Road (Southbound before Carillon Avenue)	
Road Classification	Local Road
Alignment	Typically North – South
Number of Lanes	1 each way plus turning lanes
Carriageway Type	Undivided
Carriageway Width	13m
Speed Limit	40km/hr
School Zone	No
Parking Controls	Metered parking
Forms Site Frontage	No



2.2.1. Internal Private (Hospital) Roadways

The internal site roads which are privatised at RPAH include;

- John Hopkins Drive
- Lambie Dew Drive
- Gloucester House Drive
- Hospital Road
- Grose Street

• Hospital Road (Northbound from Carillon Avenue)	
Road Classification	Private Road
Alignment	Typically North – South
Number of Lanes	1 each way
Carriageway Type	Undivided
Carriageway Width	8m
Speed Limit	10km/hr
School Zone	No
Parking Controls	Parking not permitted
Forms Site Frontage	Yes



Grose Street (Westbound from Hospital Road)	
Road Classification	Private Road
Alignment	Typically East - West (one-way)
Number of Lanes	1
Carriageway Type	Undivided
Carriageway Width	8m
Speed Limit	10km/hr
School Zone	No
Parking Controls	Private fleet parking
Forms Site Frontage	Yes



2.3. Public Transport

This section outlines public transport accessibility to the site, which may be utilised by construction staff over the project duration. Staff inductions will include information on the available travel options that staff may take to access the site.

The subject site has been assessed for its potential accessibility via modes of existing public transport likely to be utilised by staff for the construction of the proposed development. When defining accessibility, the NSW Guidelines to Walking & Cycling (2004) suggest that 400m-800m is a comfortable walking distance. This catchment is shown in Figure 2.

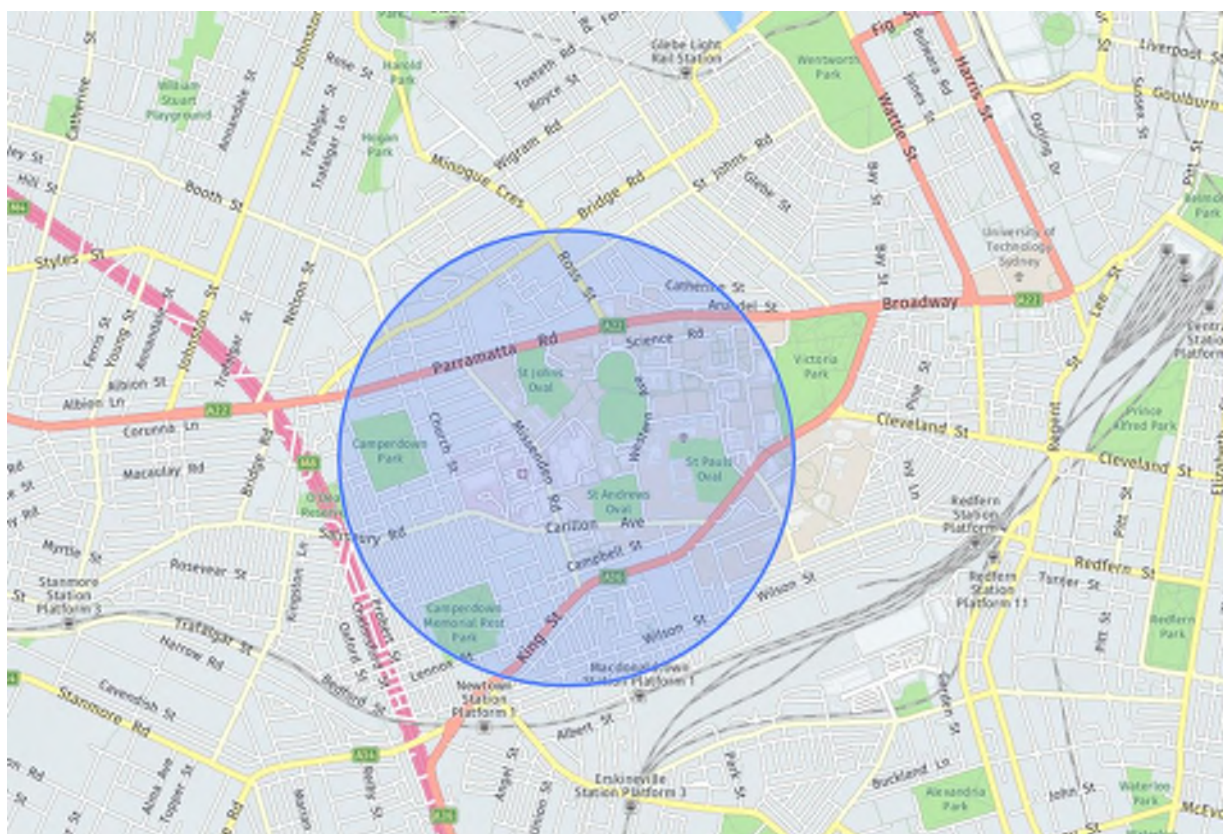


Figure 2: 800m Walking Catchment from Site

Both Macdonaldtown and Newtown Train Stations lay at the edge of the 800m walking radius, and thus are deemed to be relatively suitable for use when accessing the site via public transport. Additionally, the use of bus services, both in combination with rail services, and as a standalone, provide suitably connectivity to the site from train stations and wider Sydney.

2.3.1. Train Services

The following train services are available from both Newtown and Macdonaldtown stations:

Table 2: Train Services

Service	From/To	Frequency (mon-fri)
T2	Inner West & Leppington Line	Every 5 minutes from Newtown Every 15 minutes from Macdonaldtown

2.4. Active Travel

Walking is a viable transport option for distances under 800m and is often quicker for short trips door to door. Walking is also the most space efficient mode of transport for short trips and presents the highest benefits. Co-benefits where walking replaces a motorised trip include improved health for the individual, reduced congestion on the road network and reduced noise and emission pollution. Pedestrian facilities including signalised and pedestrian crossings, footpaths and walkways are more than adequately provided in the vicinity of the site.

2.4.1. Cyclist Facilities

Like walking, cycling is only likely to be an attractive mode share for those who live within relatively close distance to the site, or can utilise cycling in combination with the train network.

The site is surrounded by local and state/regional roads where on-road or cycle lane riding is possible. Further afield from the site, the City of Sydney Council has an extensive network of cycleways and shared paths shown in Figure 3.

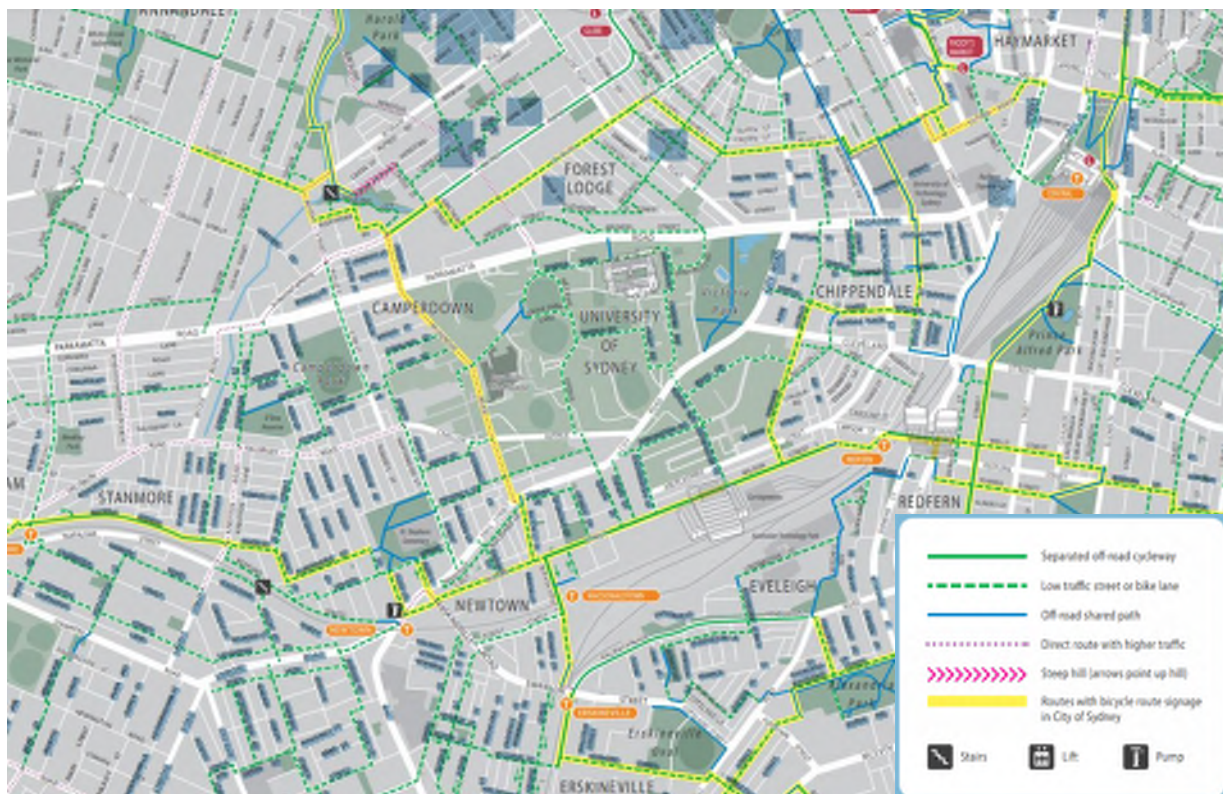


Figure 3: City of Sydney Cycleways

As an integral part of the worker inductions and code of conduct, the above information regarding surrounding public and active transport links shall be provided to contractors. There is to be no parking provided on site for contractors, and parking on surrounding local streets is not supported. This shall be instilled in contractors during staff inductions. Refer Section 3.28.

3. Construction Traffic Management Plan

This CTMP has been prepared to outline the construction traffic measures to assist in providing a safe work environment while maintaining a safe and efficient journey for all road users.

3.1. Objectives

The traffic management plan associated with the construction activity aims to ensure the safety of all workers and road users within the vicinity of the construction site and the following are the primary objectives:

- To minimise the impact of the construction vehicle traffic on the overall operation of the road network;
- To ensure continuous, safe and efficient movement of traffic for both the general public and construction workers. One movement is defined as a single vehicle performing either entry or exit to site in a single direction, not both.
- Installation of appropriate advance warning signs to inform users of the changed traffic conditions;
- To provide a description of the construction vehicles and the volume of these construction vehicles accessing the construction site;
- To provide information regarding the changed access arrangement and also a description of the proposed external routes for vehicles including the construction vehicles accessing the site; and
- Establishment of a safe pedestrian environment in the vicinity of the site.

3.2. Traffic Management Planning Process

Temporary Traffic Management (TTM) for the project has been planned in accordance with Transport for NSW, Traffic control at work sites – Technical Manual, Issue No.6.1, March 2022 (TCAWS). The process is shown in Figure 4.

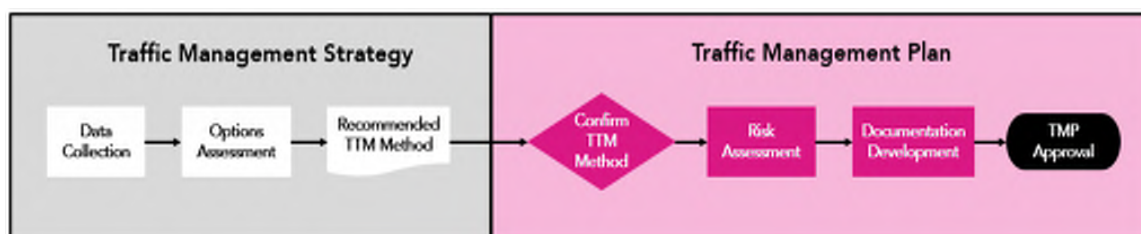


Figure 4: TTM Methodology

An iterative process is being adopted in collaboration with relevant stakeholders to adopt the most appropriate traffic management approach and develop the associated documents for the work.

3.3. Traffic Management Strategy

A traffic management strategy has been chosen to support the appropriate allocation of time, funds and resources for the project, and allow for consultation in determining the safest and most efficient way for road users to interact with the work site. The following have been considered in determining the TTM method:

Detour Options

No closure of any public roadways is expected. During various stages of construction, access to the wider hospital site will vary. Appropriate disruption notices and advance warning is to be provided to the hospital to manage their delivery and service vehicles for the ongoing operation of the hospital.

Site Location

The site of the works does not contain existing parking and infrastructure that may obstruct signs and devices needed for certain strategies.

Work Area

The area needed to safely perform the work does not require the full closure of sections of public access road. All work is contained to Hospital land. Site access to and from Missenden Road (Gloucester House Drive and John Hopkins Drive) will be maintained throughout the works.

Vulnerable Road Users

Desire lines of pedestrians, cyclists, motorcyclists have limited impact on works. Consideration has been taken to minimise impact on the daily ongoing operations of the site and its users while works are undertaken.

Community Facilities and Needs

Access to all public facilities will remain during these works. Signage or directions for any internal hospital detours or changes are to be implemented where necessary in combination with disruption notices submitted to the hospital.

3.4. Decision of TTM Method

Based on the above traffic management strategy, and the general site location and site arrangement, the proposed TTM Method shall be Around (Elimination) in accordance with TCAWS v6.1:

“An around method is where traffic is completely separated from the work area. An around method is the preferred TTM method where achievable, as a majority of risks associated with TTM are eliminated and it generally provides the lowest overall net risk option.”

3.5. General Requirements

In accordance with TfNSW requirements, all vehicles transporting loose materials will have the entire load covered and/or secured to prevent any large items, dust or dirt particles depositing onto the roadway during travel to and from the site. All subcontractors must be inducted by the lead contractor to ensure that the procedures are met for all vehicles entering and exiting the construction site. The lead contractors will monitor the roads leading to and from the site and take all necessary steps to rectify any road deposits caused by site vehicles. Vehicles operating to and from and within the site shall do so in a manner, which does not create unnecessary noise or vibration.

No tracked vehicles will be permitted or required on any paved roads. Public roads and access points will not be obstructed by any materials, vehicles, refuse skips or the like, under any circumstances. No construction vehicles are permitted to double park, park on the public road, or use public parking facilities.

No building, demolition, excavation or material of any nature and no hoist, plant and machinery (crane, concrete pump or lift) shall be placed on Council’s footpaths, roadways, parks or grass verges without Council approval.

No trees or native shrubs or understorey vegetation on public property (footpaths, roads, reserves, etc.) or on the land to be developed shall be removed or damaged during construction unless specifically approved in this consent including for the erection of any fences, hoardings or other temporary works.

3.6. Hours of Work

All works associated with any demolition, excavation and construction, and activities in the vicinity of the site generating noise associated with the preparation for the commencement of work (e.g. loading/unloading of goods, transferring of tools etc.) in connection with the proposed development will be In addition to the ICNG [3] recommended standard construction hours, approval is being sought to extend Saturday construction hours in line with “Category 1” working hours as per the City of Sydney Construction Code:

Monday to Friday:	7am to 6pm.
Saturday:	8am to 1pm.
Saturday:	1pm to 7pm – excluding “high” impact noise works (demolition, excavation and piling) and excluding Temporary HLS works.
Sunday & public holidays:	No work permitted.

The additional Out of Hours Works are sought for the following works to be conducted 24/7 within the following defined areas during specified periods as necessary:

- L01 Superstructure east extension (RPAH Loading dock);
- John Hopkins Drive, Lambie Dew Drive and Gloucester House;
- Grose Street (high noise works to only occur 7am – 10pm weekdays and 8am – 7pm on Saturdays / Sundays / Public holidays); and
- Internal fit-out and refurbishment works.

Additional ad hoc out of hours works will be sought on a case-by-case basis where necessary to minimize impacts to the hospital.

Notwithstanding the above, the use of a crane for special operations including the delivery of materials, hoisting of plant and equipment and erection and dismantling of onsite tower cranes which warrant the on-street use of mobile cranes outside of the above hours can occur, subject to a separate application being submitted to and approved by Council under Section 68 of the Local Government Act 1993 and Sections 138/139 of the Roads Act 1993.

Construction vehicles shall be scheduled outside of the peak commuter hours at all times where possible.

3.7. Construction Staging Overview

The following stages of construction are expected to occur. Note that all staging below is contained within hospital land, and is located along private roadways and accesses. No direct impact to the public road network is expected to occur during the various stages outlined below.

Table 3: Early Works Staging (dates shown indicatively and subject to change)

Stage	Details	Start	End
Stage 1	<ul style="list-style-type: none"> • One lane of traffic to be maintained along Lambie Dew Drive to Level 02 ramp during works. If not possible, works to be completed out of hours to minimise impacts • All diversion works in front of Level 01 ramp to be complete at this stage • During Part C work where a full carriageway closure is expected, all loading dock access is via the south, and all mortuary access through level 02 car park 		
Part A	Services work along John Hopkins Drive	10/11/23	07/02/24
Part B	Site establishment and demolition commencement	12/10/23	08/04/24
Part C	Stage 1 HV and sewer along Lambie Dew Drive	19/10/23	16/01/24
Stage 2	<ul style="list-style-type: none"> • Level 02 car park ramp to be demolished • All mortuary access via level 01 ramp • 3 northern loading dock spaces occupied for duration of Part D work • Remaining loading dock spaces shall be access from the south via Gloucester House Drive • Susan Wakil road access blocked for stormwater work. Temporary access to be created off Lambie Dew Drive prior 		
Part A	Level 02 car park ramp demolition and Lambie Dew Drive HV work	06/12/23	29/02/24

Part B	Demolition and tree removal ongoing	12/01/24	08/04/24
Part C	Stormwater diversion underway	23/11/23	16/05/24
Part D	Stage 2 HV work along Lambie Dew Drive	17/01/24	29/02/24
Stage 3	<ul style="list-style-type: none"> • 01/01/2024 – 14/05/2024 • Stage 3 HV along Lambie Dew Drive • 3 northern loading dock spaces occupied for duration of Part D work • Remaining loading dock spaces to be accessed via Lambie Dew Drive from the south 		
Stage 4	<ul style="list-style-type: none"> • Lambie Dew Drive to be closed from south of centenary ramp to north of level 01 ramp for construction of main core, and temporary haul road • All loading dock access and level 01 ramp access is via Gloucester House Drive from the south 		
Part A	Construction of temporary haul road	02/05/24	16/05/24
Part B	Core establishment and construction to Level 03	16/05/24	23/07/24
Stage 5	<ul style="list-style-type: none"> • Lambie Dew Drive to be closed from south of centenary ramp access to north of level 01 ramp for construction of Level 03 slab over road • Road lowering underway from Gloucester House Drive around to Lambie Dew Drive • All loading dock and level 01 access from temporary haul road 		
Part A	Road lowering and service diversions	15/05/24	25/07/24
Part B	East extension piling and road lowering	26/07/24	19/11/24
Part C	Road lowering and service diversions	19/11/24	18/12/24
THLS	Temporary Helicopter Landing Site <ul style="list-style-type: none"> • Hoarding established on Grose Street for construction of lift core, canopy, and ambulance bay • Vehicle access to eastern end of Grose street to be blocked for duration of works to enable works • Footpath to remain open • Emergency egress to remain open from MSCP exits • Occasional impacts to northern footpath and Grose Street west of the main work area, coordinated with the hospital and university 		

As more details are made available related to the proposed main works stages, this document shall be updated and refined. All document changes and revisions are to be resubmitted to authorities for approval. Nonetheless, the details known at the time of writing related to the main works are provided in Appendix 1.

Sections 3.9 through to 3.14 provide a more detailed breakdown of the staging proposed, and any impacts to the ongoing operation of the hospital that shall need to be considered.

This proposed staging and work has minimal impact to the public road network, considering that work is generally constrained to the RPAH site and private roadways. The interface with the public road network and the site is along Missended Road for the main site work area, and along Carillion Avenue and Church Street for the THLS work.

Throughout all the proposed stages, construction vehicle access to the main site shall be via either John Hopkins Drive or Gloucester House Drive, at CPBs discretion depending on requirements of the task at hand.

3.8. Wayfinding and Advance Warning Signage

Throughout various stages of construction, hospital access along Lambie Dew Drive is disrupted, to various levels of extent ranging from partial lane closures to full closures.

Whilst these works are fully contained within the hospital land and work site, it is recommended that advance warning signage or wayfinding signage is implemented at the intersections of Missenden Road/John Hopkins Drive and Gloucester House Drive to advise motorists of the changed road conditions.

Below are examples of wayfinding signage:



Figure 5: Example Wayfinding Signage

3.9. Stage 1

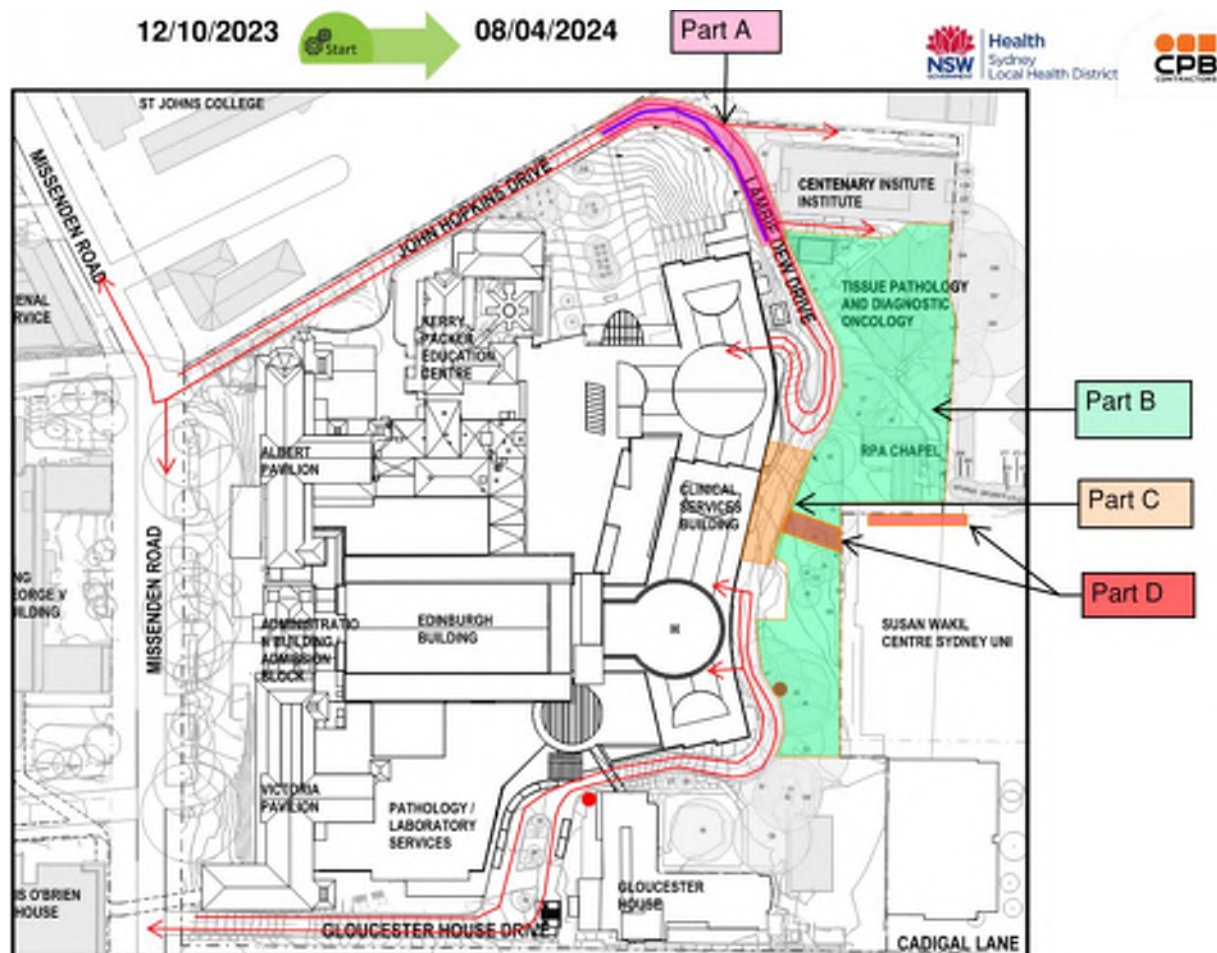


Figure 6: Stage 1 Early Works Vehicle Movements

Part A:

Work along Lambie Dew Drive (LDD). Closure of half of the road proposed to enable services work, in which instance through traffic will be maintained via a single lane, with a Portable Traffic Control Device (PTCD) in place to manage the flow of traffic. A Traffic Controller (TC) shall also be in place during work hours to better manage the higher volumes of pedestrians/vehicles to be controlled during the day.

In instances where the entirety of LDD is blocked, a disruption notice shall be given to the hospital in advance, to enable the redirection of loading dock and other hospital related traffic to use Gloucester House Drive (GHD). It is expected that these instances are rare occurrences, and where possible shall be scheduled to occur outside of the peak hours, potentially at night if permitted to minimise impacts.

Pedestrians shall make use of the existing footpath along the northern side of LDD, and where any impact to the through passage of pedestrians is incurred, wayfinding signage and TCs shall be in place to provide safe passage.

Access to Grose Farm Ln and maintenance road immediately south of the Centenary Institute shall be maintained throughout.

Part B:

Work contained to off-road area. Minimal impact to traffic expected as a result of Part B.

Part C:

In-ground work along Lambie Dew Drive (LDD) outside the clinical services building. Given the full road closure, a disruption notice is to be submitted to the hospital in advance warning to ensure that delivery vehicles are directed to the dock via GHD.

Subject to final design development, these works may be able to be staged with a single lane closure, maintaining access past the work and to the Level 01 ramp. A disruption notice will still be required and, if this is feasible, through traffic would be guided with a PTCD, with traffic controller in place where required to manage the flow of traffic.

Portable Traffic Control Device such as signalised boom gates are required along GHD to manage the two way flow of vehicles around the corner to the south of the loading dock as this section has reduced width and limited visibility.

3.10. Stage 2

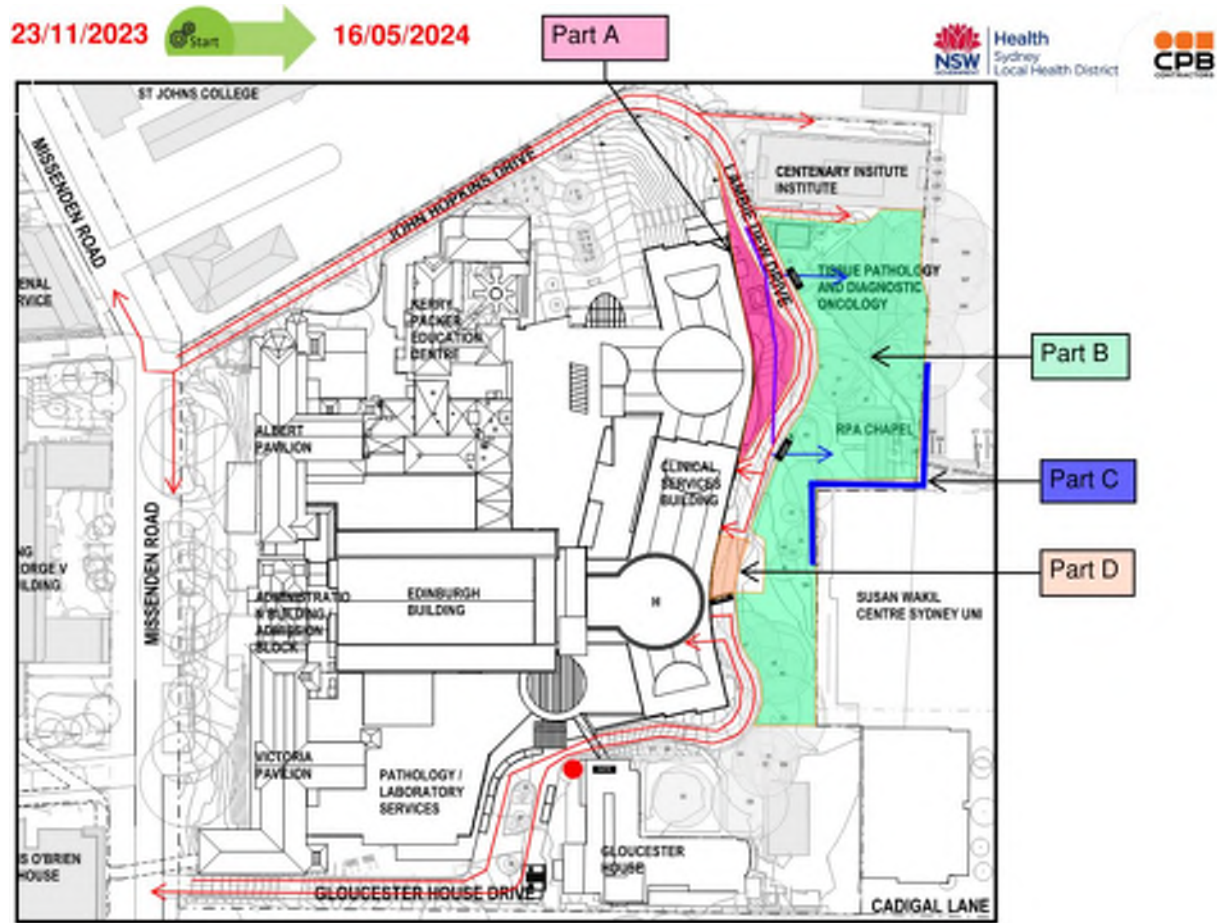


Figure 7: Stage 2 Early Works Vehicle Movements

Part A:

Access along LDD to be maintained, with at one lane to be kept open during road work (either one lane closure or no lane closures required). Traffic management, such as PTC and TCs to be in place to control the flow of vehicles through the one way section of roadway.

In instances where full closure of LDD is required, work is to be undertaken out of hours to minimise impacts to hospital operations. Wayfinding signage to be in place on Missenden Road to advise road users (hospital vehicles) of the upcoming closure. Refer Section 3.8 for signage information.

Part B:

Minimal impact to road operations along LDD. Gate access to site area provided from LDD, gate sizing to be appropriate for the largest anticipated vehicles (12.5m HRV).

Part C:

Minimal impact to road operations along LDD. Temporary access way to be constructed from LDD to substation.

Part D:

Closure of LDD directly in front of 3x southern loading dock bays. Access to northern loading dock bays and bin truck dock and level 01 ramp will be provided from JHD to the north. Appropriate disruption notices and wayfinding signage to be in place to guide vehicles to their appropriate locations.

3.11. Stage 3

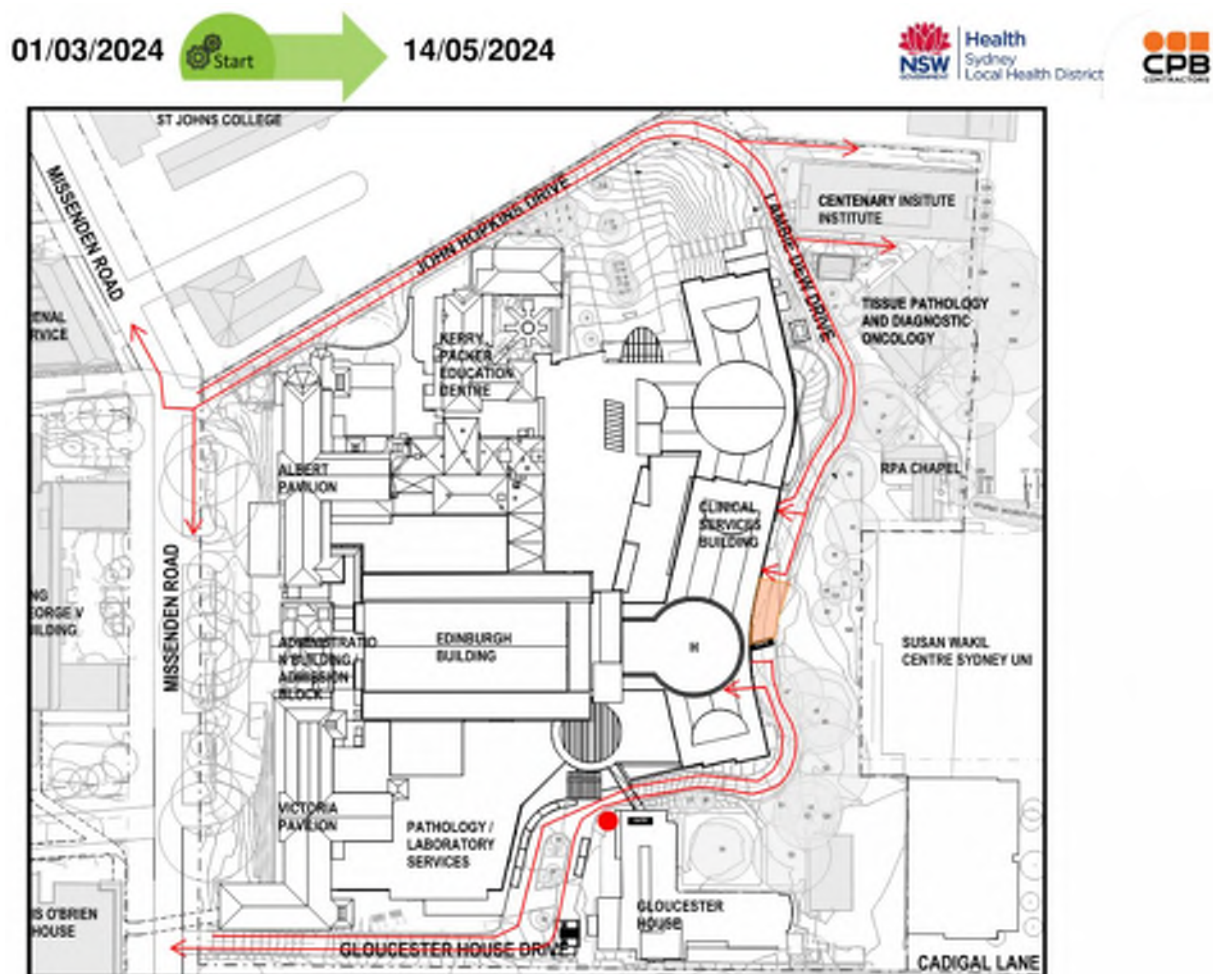


Figure 8: Stage 3 Early Works Vehicle Movements

Three northern loading dock spaces to be blocked for duration of stage. Southern three loading dock spaces to be accessed from GHD to the south. Bin truck access and level 01 ramp will be opened for access from the north via JHD.

3.12. Stage 4

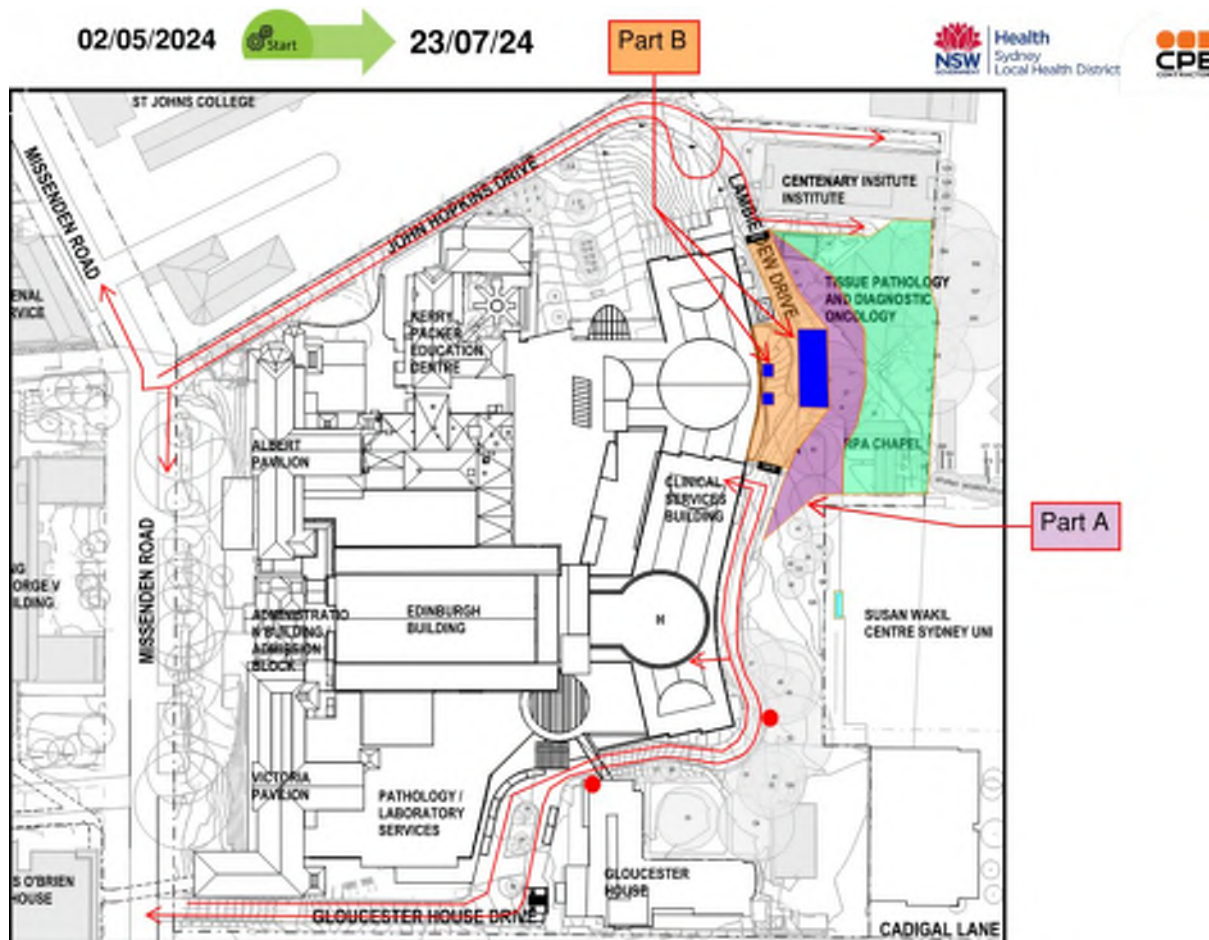


Figure 9: Stage 4 Early Works Vehicle Movements

Part A:

Temporary hail road to be constructed or access to loading dock, Susan Wakil, and east extension construction zone for use during the next stages of construction.

Construction area of Part A already lies within stage 3 construction zone, minimal additional impact to road and traffic.

PTCD or TCs are to be in place as identified in Figure 9 to manage the flow of vehicles around the southern corner of LDD given the reduced width and visibility.

Part B:

Core establishment and construction of level 03. Partial closure of LDD to construct main core and level 03.

Access to level 01 ramp to remain open. All loading dock access to be from the south via GHD. LDD closed at the end of JHD.

3.13. Stage 5

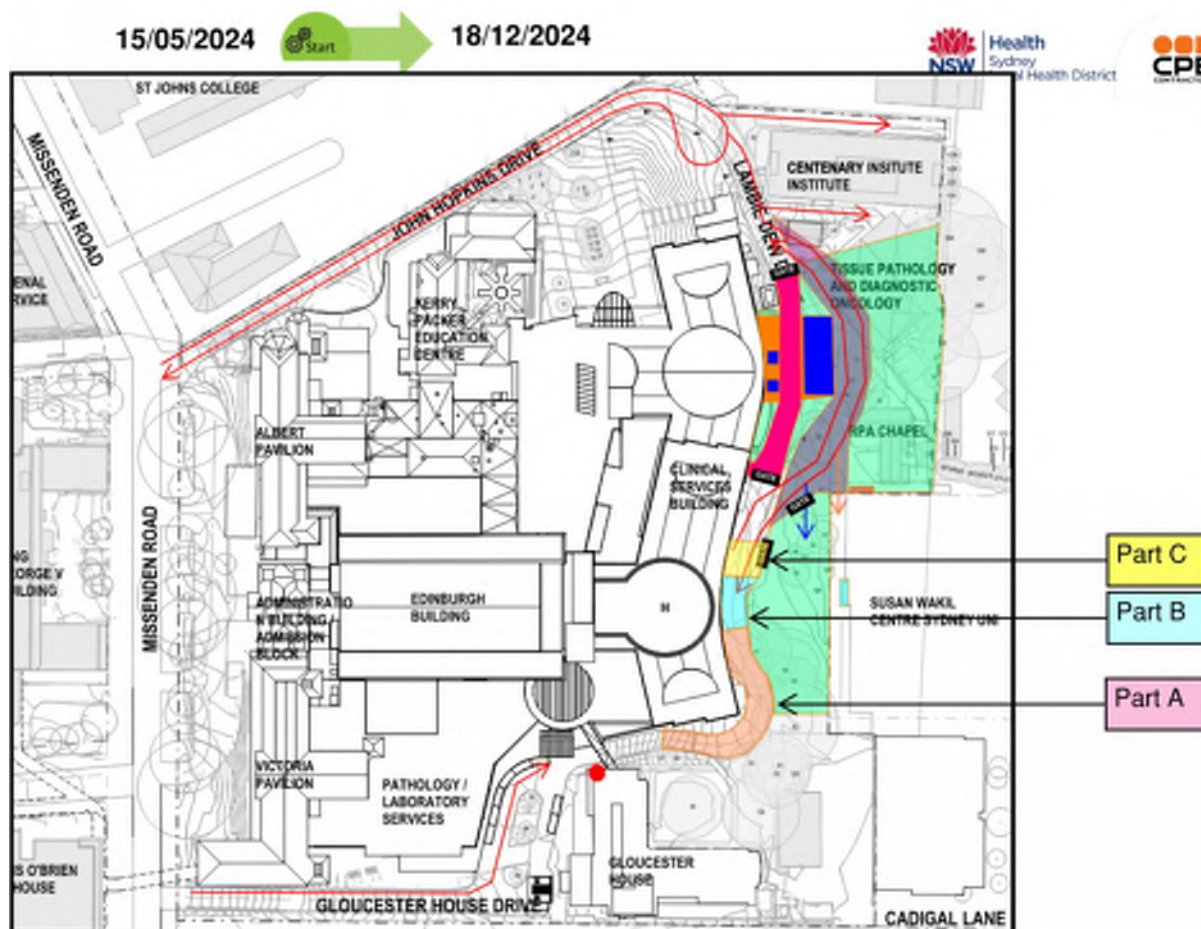


Figure 10: Stage 5 Early Works Vehicle Movements

Part A:

Three southern loading dock spaces to be closed off.

Temporary haul road to be used for all loading dock access from the north via JHD. Vehicular access from GHD is not permitted during Part A, and as such a closure with appropriate signage and barriers shall be in place after the drop off foyer area of GHD to prevent vehicles from travelling into a dead end. Appropriate disruption notices and wayfinding to be in place to direct loading dock and service vehicles.

Part B:

Road lowering, air plenum and east extension piling to occur. Three northern loading dock spaces to be closed. Access to three southern loading dock spaces to be provided from the south via GHD. Access to Level 01 ramp and bin room to be provided via temporary haul road.

Part C:

No access to loading dock from the north via JHD. All loading dock access to be from the south via GHD. Temporary blockage of the bin loading space along LDD. Coordination between the hospital and CPB to take place throughout this stage to ensure that access can be granted where needed.

Appropriate disruption notices and wayfinding to be in place to direct loading dock and service vehicles.

PTCD or TCs to be in place along the southern corner of LDD to manage the flow of vehicles around the southern corner of LDD given the reduced width and visibility.

3.14. Temporary Helipad Landing Site

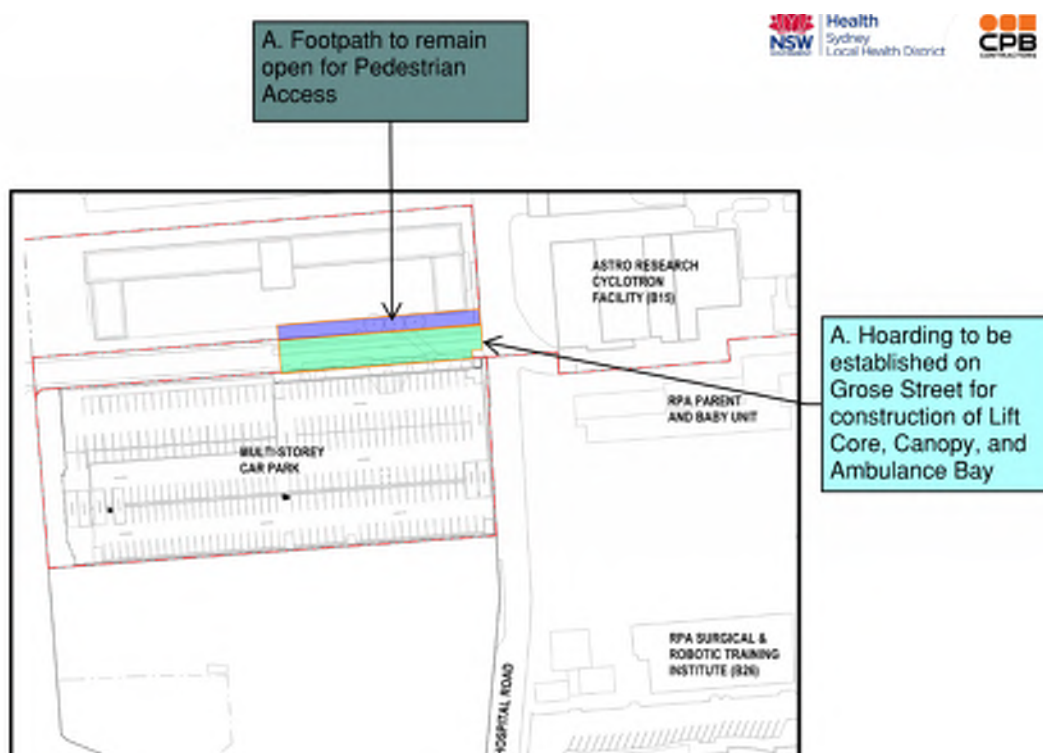


Figure 11: THLS Early Works Vehicle Movements

Work area in roadway of Grose Street. Footpath to be retained and through access for pedestrians is to remain generally unimpeded. Any occasions in which the pedestrian path of travel is impeded shall be covered under a disruption notice, with appropriate wayfinding signage and alternate routes for pedestrians to be provided.

Work area gates to both the east and west of the work area. It is intended that construction vehicles shall typically approach the site from the east, travel through the work area, and leave to the west onto Church Street. Refer to swept path assessment undertaken and attached in Appendix 2.

In some instances, construction vehicles may be required to reverse into the eastern site gate, or depart back to the east. A Traffic Controller shall be in place at the eastern site gate when construction vehicles are in use to ensure that vehicles enter and exit the site safely, and a gate controller shall be in place at

the western site gate to ensure exit from the site is suitably managed. At other times when no construction vehicles are scheduled, a TC/gate controller is not required.

Grose Street to the west of the construction area shall be converted to two-way public access, with a turning bay provided outside the western hoarding extent. The TC stationed at this western gate shall ensure that the construction vehicles departing the work area do so when safe and no public vehicles are making use of the turning area. Refer to Figure 12 for details of the proposed plan.



Figure 12: Grose Street Work Area and Proposed Turning Area for Public Vehicles

3.15. Main Works Stage

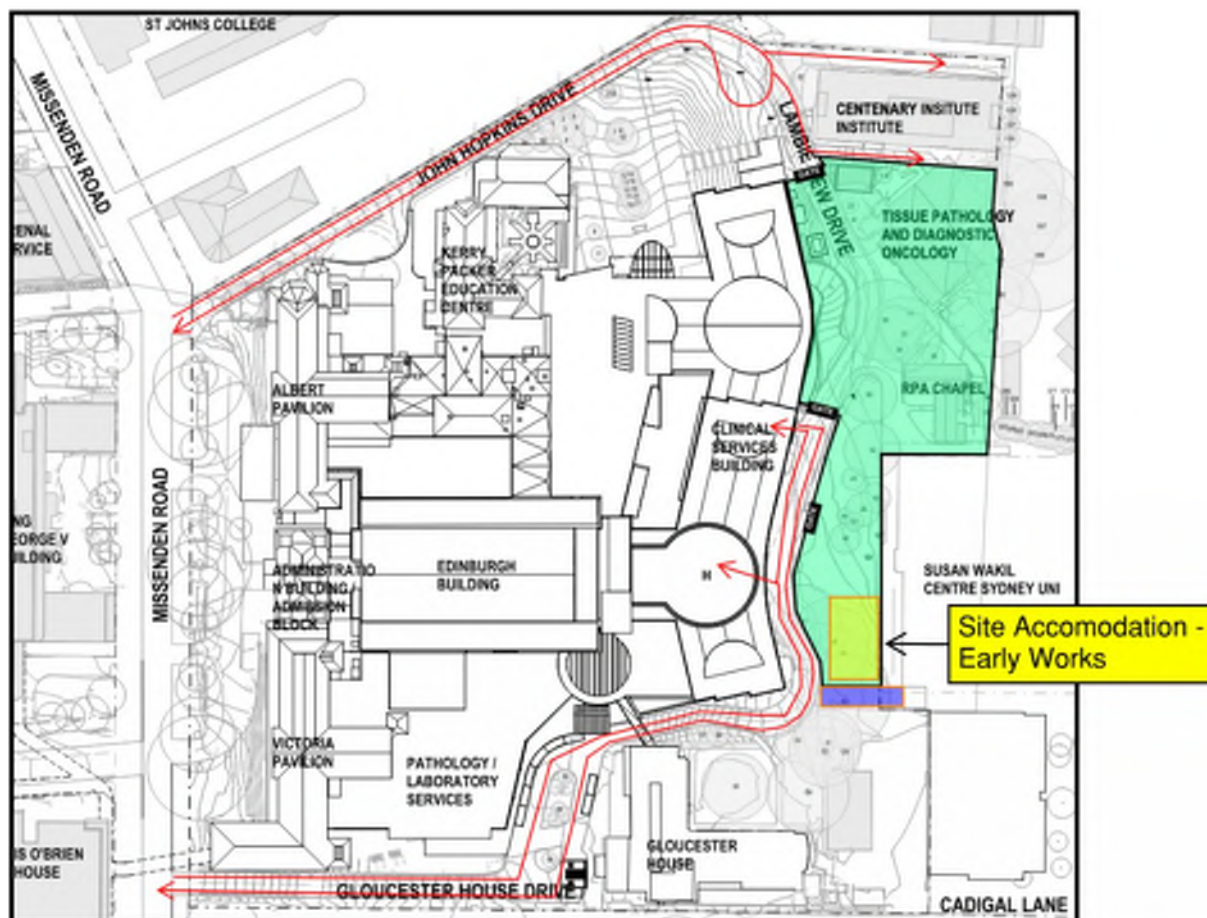


Figure 13: Main Works Staging Diagram

The main works staging is expected to be developed further in time once the early works stages have progressed and more details are known. However, an overview of the work area and hospital vehicle access routes proposed is provided in Figure 13.

As the main works involves the construction of the new structure, the closure of LDD is expected to remain for quite some time. Appropriate disruption notice and coordination between CPB and the hospital shall take place to ensure that service/delivery vehicles are aware that loading dock access is provided from the south only, via GHD. PTC or TCs are required along the southern section of LDD to control the two way flow of vehicles around the southern corner of LDD where visibility and road width is reduced.

3.16. Construction Vehicle Types

The following vehicles are expected to be in use for the duration of the early works:

- Heavy Rigid Vehicles (up to 12.5m)
- Medium Rigid Vehicles (8.8m)

Any oversized vehicle (including the use of mobile cranes) that is required to travel to the project into the vicinity of the site will be dealt with separately, with the submission of required permits to and subsequent approval from Council and TfNSW prior to any delivery being undertaken.

3.17. Construction Vehicle Volumes

The following estimated construction vehicle volumes have been proposed by CPB:

- The peak construction traffic associated with the early works involving the bulk excavation and retention piling is anticipated to comprise approximately 120 visits per day (equating to 11 trucks per hour for an 11-hour weekday), occurring within the hours of works
- During the main works and refurbishment stages, it is anticipated that the peak construction traffic movements will reach approximately 70 visits per day (equating to 6-7 trucks per hour for an 11-hour weekday), occurring within the hours of works

It is noted that these volumes are the peak or maximums expected. A typical work day would receive fewer vehicle movements and will thus have a lessened impact on the surrounding road network. Nevertheless, the peak volumes expected of approximately one truck every 5.5 minutes can be accommodated and is expected to be managed efficiently with Traffic Guidance Schemes and Traffic Controllers where appropriate.

3.18. Construction Vehicle Routes

3.18.1. Main Work Area (Off Missenden Road)

All construction vehicles are expected to access the main site area from Missenden Road, via Paramatta Road or King Street. Refer Figure 14.

Paramatta Road and King Street are State Roads, and are therefore capable of accommodating the vehicles required for construction. A dedicated right turn lane is provided along paramatta Road for Eastbound approach vehicles, and left turns are permitted for Westbound approach vehicles. Both left and right turns into Missenden Road are permitted from King Street.

Refer to Appendix 2 for detailed swept path assessment of the proposed vehicle routes at the key intersections.

Following turning onto Missenden Road, all vehicles will access the site via John Hopkins Road or Gloucester House Drive, depending on the stage of work and the area of site where the vehicle is required.

All vehicles will return to Paramatta Road via Missenden Road, or travel to King Street (Princes Highway) via Missenden Road.

All construction vehicle routes make use of the State Road network and are designed to minimise travel on the Local Road network.

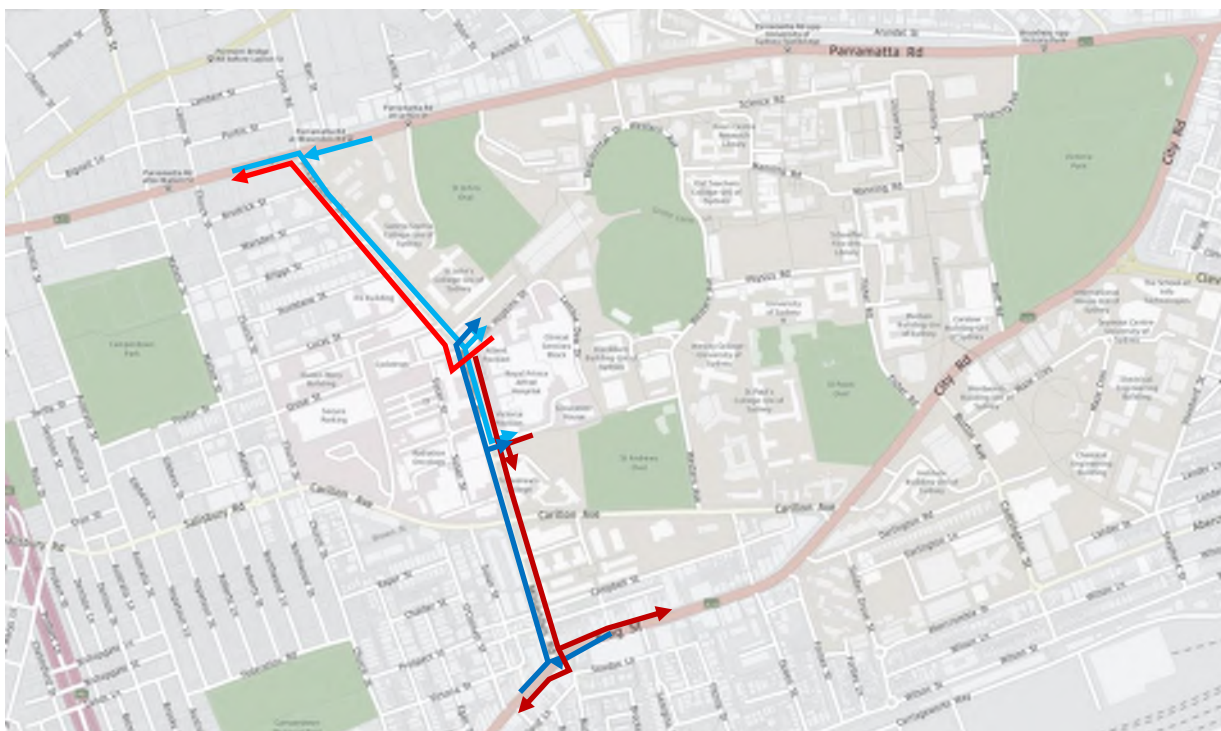


Figure 14: Construction Vehicle Prescribed Routes (Missenden Rd)

3.18.2. THLS Work Area (Grose Street)

All construction vehicle routes make use of the State Road network and are designed to minimise travel on the Local Road network. Figure 15 indicates the prescribed truck routes for the Grose Street work area.

All construction vehicles accessing the Grose Street work area shall do so via Missenden Road into Carillon Ave, from Paramatta Road or King Street.

From Carillon Avenue, access to Grose Street is granted via a right turn into Hospital Road.

Egress from the Grose Street work area is to be a right turn into Church Street from Grose Street, followed by a left turn onto Parramatta Road. An alternative egress route for vehicles up to 8.8m MRV is permitted, which includes a left turn from Grose Street into Church Street, before returning to Carillon Avenue.

In some instances, egress from the Grose Street work area may require vehicles to return to Hospital Road, before making a left or right turn onto Carillon Avenue. Refer to Section 3.19.2 for further detail of this egress arrangement.

Refer to Appendix 2 for detailed swept path assessment of the proposed vehicle movements at the intersection of Grose Street with Hospital Road and Church Street.

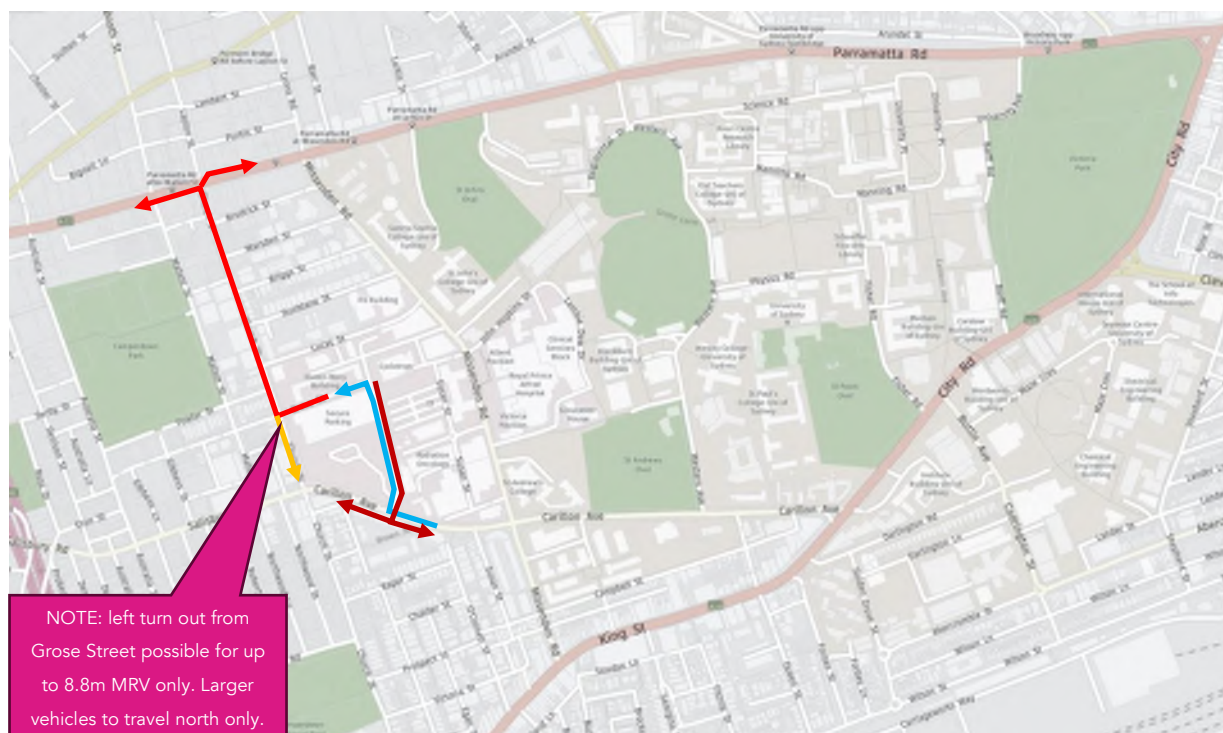


Figure 15: Construction Vehicle Prescribed Routes (Grose St)

3.19. Construction Vehicle Site Access and Egress

All construction vehicles are to enter and leave work areas in a forward direction unless in specific and exceptional circumstances, and under appropriate supervision from accredited traffic controller(s). Approval must be sought from City of Sydney CRU for approval for any reversing to/from public roads.

3.19.1. Main Work Area (RPAH Site)

After turning onto Missended Road, all vehicles will access the site via John Hopkins Road or Gloucester House Drive, depending on the stage of work and the area of site where the vehicle is required. The interface of the RPAH site with the public road network is along Missended Road.

An assessment of the turning movements proposed into and out from John Hopkins Drive and Gloucester House Drive are provided in Appendix 2. Given the restrictive width along Missenden Road, Traffic Controllers (TC) are required to manage the access and egress of construction vehicles into and out from John Hopkins Drive and Gloucester House Drive. Refer to Section 3.23 and Appendix 3.

3.19.2. THLS Work Area (Grose Street)

Construction vehicle access to the Grose Street work area shall be via Hospital Road, which is accessed from Carillon Avenue. Hospital Road, as well as Grose Street, are private hospital owned roadways.

Egress from the site will predominantly be from Grose Street onto Church Street. However, in instances where necessary, egress can also be permitted back onto Hospital Road from Grose Street. Vehicles will then continue south to Carillon Ave and rejoin the public road network.

Public vehicles are permitted to make use of the 5 minute drop off zone on the northern side of Grose Street and undertake a 3-point turn to exit back onto Church Street as indicated in Figure 16.



Figure 16: Grose Street Work Area

Access from/through the University of Sydney will be managed as required through disruption notices.

3.20. Work Zones

No Work Zones are proposed as part of the works. All work and vehicle unloading is to take place within Hospital land.

3.21. Road and Lane Closures

No road or lane closures are proposed on the public road network. All proposed road / lane closures proposed are within Hospital land and thus have no impact to the public road network. Disruption notices shall be provided to the hospital in advance warning of any alterations to vehicle circulation that may be brought about by construction staging. At all times, hospital vehicle access shall be maintained.

Subject to detailed design development, high voltage works may be required along Missenden Road. In the event that these works are required, appropriate updates to this CTMP shall be included, and relevant Traffic Guidance Schemes (TGS) are to be developed. All work on public roadways and Council land is subject to prior notification, consultation and approval from City of Sydney Council.

3.22. Emergency Vehicle Access

All emergency vehicle access, both to the site itself and through all roads in the vicinity, shall be permitted and accommodated throughout the duration of works.

Access to the Emergency Department (ED) drop off porte-cochere from Missenden Road shall be maintained at all times.

Access to various hydrant boosters and fire control rooms are to be maintained throughout the duration of work.

3.23. Traffic Control Measures

Given that all work is to be contained to Hospital land, it is expected that minimal influence on the public road network is generated.

Where required, Portable Traffic Control Devices (PTCDs) and Traffic Controllers (TCs) shall be put in place within the hospital property bounds to manage the construction vehicle movements and for the safety of other road users and vulnerable pedestrians and cyclists.

Traffic Controllers are required on Missenden Road at the intersection with John Hopkins Drive to facilitate the movement of heavy vehicles in and out of the site.

Refer to Appendix 3 for indicative Traffic Guidance Schemes (TGS) and Sections 3.7 through to 3.14 for details of staging impacts to internal site roads and associated mitigation measures.

3.24. Pedestrian Access

The contractor shall provide dedicated traffic and pedestrian management team at all site interfaces with the public road. This will ensure truck movements and deliveries are undertaken efficiently and safely. The nature of this team will include contractors who shall verify that the vehicle arriving is scheduled and on time, and provide gate access / control of any hoardings where required to permit access. This team can be situated within the site boundaries and is not required to provide traffic control, and as such does not necessarily need to be an accredited Traffic Controller.

It should be noted that Traffic Controllers are NOT to stop traffic on the public street(s), pedestrians and cyclists to allow trucks to enter or leave the site. They MUST wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site – the vehicles already on the road and pedestrians on the footpath have right of-way.

Pedestrians may be held only for very short periods to ensure safety when trucks are leaving or entering BUT you must NOT stop pedestrians in anticipation i.e. at all times the pedestrians have right-of-way on the footpath not the trucks.

The Applicant must apply to Council to organise appropriate approvals for fencing / hoarding prior to commencement of works at any interfaces with Council land.

Pedestrian movements around the site boundaries are to be considered, given the high pedestrian activity associated with the wider RPAH site. Appropriate signage and wayfinding is to be installed should desire lines or paths of travel become unavailable throughout the work.

It is deemed appropriate that pedestrians should be intercepted and diverted around the work areas for their own safety. Thus, adequate signage and wayfinding shall be in place to direct pedestrians along safe paths of travel within the hospital grounds.

3.25. Special Deliveries

It is understood that oversize and over-mass vehicles are generally not allowed to travel on Local Roads unless approval for a one-off occasion is obtained from the National Heavy Vehicle Regulator (NHVR) and Council. Requests to use these vehicles must be submitted to the NHVR 28 days prior to the vehicle's scheduled travel date. For more information, please contact the NHVR on 1300 696 487 or www.nhvr.gov.au.

Should the contractor require a partial road closure on State, Regional and/or Local Roads, or carry out work within 100m of traffic signals, an application will be made to the relevant authority to obtain their approval.

3.26. Work Site Security

To provide security to the work site and protection to the general public, it is proposed that the site perimeter boundaries consist of temporary fencing or hoardings. These boundaries will be established immediately following site possession and fitted with appropriate signage where required.

All gates are securely locked outside of working hours and may be regularly patrolled by security staff. This security network shall continue to work closely with the contractor to ensure that security is being maintained throughout construction.

The contractor shall maintain a site entry register requiring all visitors to sign in upon entry. All visitors are required to wear an identification "visitor" badge and wear appropriate PPE at all times while on site.

3.27. Plant/Equipment Management

At the commencement of construction, plant and equipment, including construction hoarding/scaffolding material, site sheds, mobile cranes and machinery will be required to be delivered to the site. The delivery and removal of plant and equipment to and from the site will be undertaken from the on-site materials handling/loading area, via the use of machine floats.

The delivery and removal of plant and equipment that requires a wide or long load vehicle will be subject to a separate application/permit and separate prior approval from Council and other relevant authorities. In order to minimise traffic disruption during the delivery of the plant and equipment, it is proposed to undertake this work during the evening/early morning period. All plant and equipment deliveries will be carried out in accordance with Council/TfNSW requirements and the NSW Police regulations.

All sediment and loose material shall be removed from construction vehicles before returning to public roads.

3.28. Staff Induction

All contractor staff and subcontractors are required to undergo a site-specific induction which outlines the construction procedures and management framework specific to the project. The induction is aimed at instilling in each person a common-sense approach to safety, to ensure they employ the responsible environmental practices and awareness needed to deliver the project in accordance with the relevant regulations and standards. The induction shall also cover topics such as worker transport to site, worker parking, and general worksite protocol.

3.29. Driver Code of Conduct

All construction vehicle drivers engaged as part of the work are required to follow the code of conduct. General principles of the code are detailed below, and all construction vehicle drivers travelling to and from the site must:

- hold a current appropriate licence for the vehicle they are operating,
- strictly comply with all traffic regulations,
- comply with all maximum gazetted speed limits on all roads, or a lesser speed as dictated by the site specific signage,
- drive in a manner at all times that is in accordance with road conditions,
- yield "right of way" whenever appropriate to ensure safe passage of other road users,
- at all times leave adequate distance between vehicles to allow safe passing by other road users, as required,
- decrease vehicle speeds to minimise dust and noise around private dwellings, road works and stationary vehicles,
- not use engine braking where noise is likely to adversely impact on residents,
- remain calm and courteous when in contact with other road users, members of the public, landowners,
- not use obscene language on radio or intercom communication,
- if required, accurately complete required paperwork prior to departure and follow specified routes.,
- maintain vehicles in a clean and tidy condition,
- ensure that there is no littering,
- avoid any other noise emitting activities for example loud music or raised voices. Raised voices should be avoided. No shouting or yelling permitted. Radio volume to be turned down,
- reverse movements to be minimised,
- truck engines to be turned off during deliveries,
- minimise the impacts of construction on the local and regional road network.

3.30. Access to Adjoining Properties

Access to all adjoining properties will be maintained throughout the works. The adjacent landowners will be notified of works and road signage shall be in place to advise of anticipated truck movements in operation with access to adjoining properties being maintained at all times.

Ongoing access to the University of Sydney adjacent to the site shall be maintained. Any closure of pedestrian or vehicle throughfares to the university shall be done in consultation with the university, and in advance warning.

CPB has obtained a construction licence in consultation with the University of Sydney to grant construction access on University land. The details of this licence area is shown in Figure 17.

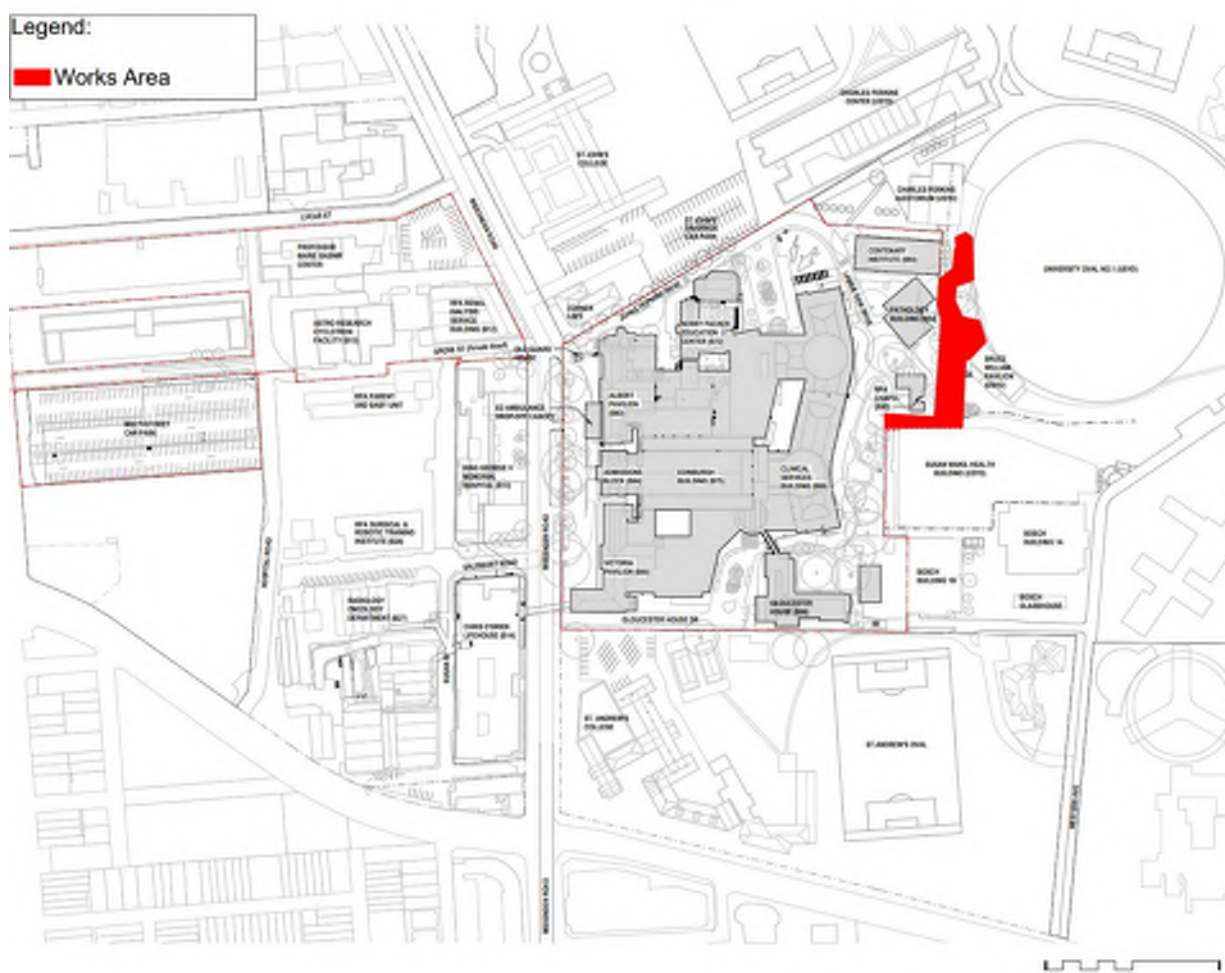


Figure 17: Licence Area in Consultation with USYD

Access to this area will be off Western Avenue from either Parramatta Road or Carillon Avenue.

3.31. Impacts to Surrounding Public Transport Services

No impacts to the nearby public transport services are expected to occur.

3.32. Cumulative Construction Traffic Activity

It is not expected that any construction activity in the area will bring about cumulative traffic impacts to the road network. All construction vehicles to the site are to be coordinated and managed by the site manager, and be predominantly scheduled to occur outside of the commuter peak periods.

Construction vehicles are to make use of the proposed truck route which minimises travel time on the Local Road network.

3.33. Occupational Health and Safety

Any workers required to undertake works or traffic control within the public domain shall be suitably trained and will be covered by adequate and appropriate insurances. All traffic control personnel will be required to hold SafeWork NSW accreditation in accordance with Section 8 of Traffic Control at Worksites.

A comprehensive Work Health and Safety management plan will be implemented by the contractor and available upon request by council or residents and shall be constantly reviewed as the design and construction methodology progress.

3.34. Consultation and Method of Communicating Traffic Changes

Traffic Guidance Schemes in accordance with Australian Standards (AS 1742.3 – Traffic Control Devices for Works on Roads) and TfNSW Traffic Control at Worksites will advise motorists of upcoming changes in the road network.

During site operation the contractor shall, each morning, prior to work commencing, ensure all signage is erected in accordance with the TGS and clearly visible. Each evening, upon completion of work, the contractor is to ensure signage is either covered or removed as required. Sign size is to be size "A".

Any variation to the layout of the TGS on site is to be recorded and certified by authorised SafeWork NSW accredited personnel. The associated TGS road signage will inform drivers of works activities in the area including truck movements in operation.

3.35. Hazard and Risk Identification

All construction projects entail a set of risks—from a transport perspective—that may need to be mitigated. Some of these hazards and risks are related to:

- Moving traffic;
- Queued traffic;
- Site vehicle access and egress points;
- Highly vulnerable road user activity;

- Other construction activity or roadworks in close proximity to the proposed work site; and
- Reduced lane and shoulder widths.

This is appropriate for the construction of the development because of the following:

- **Risk Matrix Reference R1:** Conflict between vulnerable road users and high pedestrian activity around the hospital campus and roads
- **Risk Matrix Reference R2:** Potential impact to road capacity and traffic due to increased heavy vehicle movements associated with the construction

A risk matrix has been prepared to assist with rating the risk of deviation to the procedures described in this report. The risk matrix is shown in Table 4 using the following definitions:

Risk Rating

- Very High (VH)
- High (H)
- Medium (M)
- Low (L)

Consequence

- Insignificant: Illness, first aid or injury not requiring medical treatment. No lost time.
- Minor: Minor injury or illness requiring medical treatment. No lost time post medical treatment.
- Moderate: Minor injuries or illnesses resulting in lost time.
- Major: 1 to 10 serious injuries or illnesses resulting in lost time or potential permanent impairment.
- Severe: single fatality and/or 11 to 20 serious injuries or illnesses resulting in lost time or potential permanent impairment.
- Catastrophic: multiple fatalities and/or more than 20 serious injuries or illnesses resulting in lost time or potential permanent impairment.

Likelihood

- Almost certain: expected to occur multiple times (10 or more times) during any given year.
- Very likely: expected to occur occasionally (1 to 10 times) during any given year.
- Likely: expected to occur once during any given year.
- Unlikely: expected to occur once every 1 to 10 years.
- Very unlikely: expected to occur once every 10 to 100 years.
- Almost unprecedented: not expected to occur in the next 100 years.





-  Extreme: Must be corrected.
-  High: Should be corrected or the risk significantly reduced, even if the treatment costs is high.
-  Medium: Should be corrected or the risk significantly reduced, if the treatment cost is moderate, but not high.
-  Low: Should be corrected or the risk reduced if the treatment cost is low.

Table 4: Risk Matrix

Likelihood	Consequence					
	Insignificant	Minor	Moderate	Major	Severe	Catastrophic
Almost certain	Yellow	Orange	Orange	Red	Red	Red
Very likely	Yellow	Yellow	Orange	Orange	Red	Red
Likely	Green	Yellow	Yellow	Orange	Orange	Red
Unlikely	Green	R1, R2	Yellow	Yellow	Orange	Orange
Very unlikely	Green	Green	Green	Yellow	Yellow	Orange
Almost unprecedented	Green	Green	Green	Green	Yellow	Yellow

Some recommended risk mitigation measures include:

- Appropriately installed and well maintained site hoardings, pedestrian wayfinding
- Schedule truck movements outside the peak commuter periods where possible
- Implementation of traffic control where required

The mitigation measures listed result in a reduced factor of risk for the identified matrix items.

3.36. Contact Details for On-Site Enquiries and Site Access

Zach Foster

Project Engineer

Mobile: 0430 135 555

3.37. Maintenance of Roads and Footpaths

The roads and footpaths along the route of travel will be kept in a serviceable state at all times. Any damage arising as a result of the proposed truck movements will be treated / repaired by the principal contractor at no cost to Council.

4. CTMP Approval, Monitoring and Review

This CTMP has been reviewed and endorsed by the designer’s one-up manager who holds a current Prepare Works Zone Traffic Management Plan qualification. This approved CTMP has been used to inform the development of all TGSs for the work. Regular monitoring and review are to be conducted throughout the life of the project to ensure that the CTMP remains current and addresses all risks at the work site for the duration of the project or activity. To ensure that this CTMP is kept up to date, the activities identified in Table 5 will be undertaken to facilitate review and continuous improvement.

Table 5: Monitoring Activities

Stage	Activity	Purpose	Qualification	Tools and checklists
Planning	TGS verification	To ensure that the TGS selected or designed is suitable for the works and location.	ITCP or PWZTMP	TCAWS Appendix E.2 TGS verification checklist
During TTM	Weekly TTM inspections (includes preopening inspection)	To ensure that the CTMP and relevant TGS are appropriate and operating safely, effectively and efficiently	PWZTMP	TCAWS Appendix E.3 Weekly TTM inspection checklist
	Shift TTM inspections	To ensure that the TGS is implemented as designed. This includes at a minimum, twice per shift and when: A TGS is installed, changed or updated. At regular frequency afterwork commences, recommended every 2 hours; and Once after care arrangements have been installed if required	ITCP or PWZTMP	TCAWS Appendix E.4 Shift / Daily TTM inspection checklist
	CTMP review	To ensure that CTMP controls are achieving the required outcomes.	PWZTMP	Not provided
	Client inspections	Verification of TTM through the Transport Traffic Engineering Services, Work Health and Safety Branch, Surveillance Officers or other client representatives.	Divisionally determined	Not provided
Post Completion	Post-completion inspection	To ensure that the site has been demobilised as planned and is safe for opening to traffic	ITCP or PWZTMP	Appendix E.5 Post completion inspection checklist

All relevant changes must be considered and recorded in the CTMP with any changes made by an appropriately qualified person. A copy of all documentation relating to the endorsement of the changes must be available to be accessed, either electronically or in hard copy, by the person responsible for the works.

5. TGS Confirmation and Approval

The Traffic Guidance Schemes (TGSs) shown in Appendix 3 outline the proposed traffic management to inform road users of the changed traffic conditions in the vicinity of the works site. The TGSs must be set out in accordance with Issue 6.1 of the Traffic Control at Work Sites Technical Manual, 2022 (TCAWS).

TGSs are to be implemented throughout the project to warn road users that trucks will be turning into and out of the site, in accordance with TCAWS TGS D.4.7. A TGS in accordance with TCAWS TGS D.4.18 is to also be implemented to warn road users of the presence of traffic controllers managing traffic, in addition to advance warning of any lane closures.

It is noted that any changes to the existing parking restrictions will require a minimum fourteen (14) days notification to adjoining property owners prior to the implementation of any temporary traffic control measures.

Any revisions or additional TGSs ones must be prepared by a SafeWork NSW qualified person upon engagement of the traffic management contractor and prior to commence of works on site.

5.1. TGS Verification

Site confirmation must be undertaken via the completion of the TGS verification. A TGS verification must be undertaken to confirm the selected or designed TGS is fit for purpose. A TGS verification must be completed in accordance with TCAWS Section 8.1.2 TGS verification by an ITCP or PWZTMP qualified person. TGS verification must include an inspection of the work site where the TGS will be implemented, often conducted upon implementation or set-up of a TGS.

5.2. TGS Approval

The SafeWork NSW qualified person who has designed or modified the relevant TGS has approved the TGS for use. Approval of the TGS includes:

- Review of the relevant TMP, risk assessment and associated TTM specific documentation;
- Design, redesign or modification of the TGS must be in accordance with the requirements of TCAWS;
- Confirmation that the TGS provides the relevant information for the ITCP person to safely implement on-site.

The one up manager of the SafeWork NSW qualified person has approved the TGS, including:

- Any non-standard or unaccepted signs or devices;
- Any departures from the requirements of TCAWS;
- If a manual traffic controller is proposed for use.

5.3. The Role of Traffic Controllers

It should be noted that Traffic Controllers are NOT to stop traffic on the public street(s), pedestrians and cyclists to allow trucks to enter or leave the site. They MUST wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site – the vehicles already on the road and pedestrians on the footpath have right of-way.

In circumstances where road geometry limits the physical access for construction vehicles, TCs are implemented to reduce the likelihood of conflict arising between public road traffic and construction vehicles.

TCs are in place to minimise or reduce the risk of conflict between road users, pedestrians and the general public with the increased construction vehicle traffic expected due to the site work.

6. Construction Worker Transport Strategy

The purpose of this section of the CPTMP is to outline the transport options and arrangements associated with the construction workforce, which seek to reduce the use of vehicles travelling to and from the site.

This strategy demonstrates that public transport for construction workers is encouraged and details the measures in place to monitor and manage the uptake of sustainable travel options. It is envisaged that this plan will be reviewed and amended accordingly to address any comments raised by relevant authorities.

Workers who require a vehicle to transport tools and equipment will also be managed and detailed in this section.

6.1. Staff Induction

All contractor staff and subcontractors are required to undergo a site-specific induction which outlines the construction procedures and management framework specific to the project. The induction is aimed at instilling in each person a common-sense approach to safety, to ensure they employ the responsible environmental practices and awareness needed to deliver the project in accordance with the relevant regulations and standards. The induction shall also cover topics such as worker transport to site, worker parking, and general worksite protocol.

6.2. Public Transport

This section outlines public transport accessibility to the site, which may be utilised by construction staff over the project duration. Staff inductions (see above) will include information on the available travel options that staff may take to access the site.

The locality has been assessed in relation to the available public transport options that may serve the various users of the development site. This assessment considered the NSW Planning Guidelines for Walking and Cycling (2004), which suggests that a distance of 400-800m is a walkable catchment and 1,500m is a cycling catchment when the development is within proximity to public transport.

The various public transport options include:

- Bus services – Along Missenden Road, Parramatta Road and King Street
- Train Services – Stations located approximately 800m from the site
- Cycling – Existing on-road and segregated cycleways in the site vicinity

6.2.1. Bus

A number of bus routes operate in the vicinity of the site. Bus stops are located along Missenden Road, Parramatta Road, Carillon Avenue and King Street. Services available include:

- 352 – Marrickville Metro to Bondi Junction
- 370 – Coogee to Glebe Point
- 412 – Campsie to City
- 413 – Campsie to Central Pitt Street
- 422 – Kogarah to Central Pitt Street
- 426 – Dulwich Hill to City
- 430 – Sydenham to City
- 438X – Abbotsford to City (express)
- 440 – Bondi Junction to Rozelle
- 461X – Burwood to City
- 480 – Strathfield to Central Pitt Street
- 483 – Strathfield to Central Pitt Street

6.2.2. Trains

The site is located approximately 800m (10min walk) from Macdonaldtown station located to the south of the site. The following services available from this railway station are:

- T2 – Inner West & Leppington Line

Refer to Section 2.3 for further details.

6.2.3. Cycling and Walking

Existing cycling infrastructure in the development site vicinity is predominantly in the form of on-road environments (shared with other users) with some surrounding cycle lanes.

Pedestrian facilities providing amenity is available in the vicinity of the development site including:

- Pedestrian crossings located along Missenden Road between Parramatta Road and Carillon Avenue.
- Signalised pedestrian crossings on all approaches of the intersection of Parramatta Road / Missenden Road
- Signalised pedestrian crossings on all approaches of the intersection of Missenden Road / Carillon Avenue
- Signalised pedestrian crossings on all approaches of the intersection of Missenden Road / King Street
- Refer to Section 2.3 for further details.

6.2.4. Staff Parking

Contractor staff and on site employees are expected to make suitable arrangements to travel to and from the site without the use of private vehicles. No on-site parking shall be made available.

As part of the induction program, contractor staff shall be made aware of the numerous public transport options and cycling opportunities (see Section 3.28) and encouraged to only use alternative means of transport such as carpooling where no other options are available, to limit parking on the surrounding local roads. City of Sydney conditions dictate that no construction or contractor vehicles are to park on public roads. Public transport shall be the primary mode of transport for construction workers and contractors. This will minimise demand for parking in nearby residential streets and public parking facilities.

The public transport options surrounding the construction site are presented in full in Section 2.3. The staff volumes are expected to be up to 500 workers on-site per day for the duration of works.

Appendix 1. Staging Plans (CPB)



Health
Infrastructure

Royal Prince Alfred Hospital Redevelopment

Construction Staging Impacts

A MEMBER OF THE CIMIC GROUP



Constructing our future together



Acknowledgement of Country

CPB Contractors acknowledges traditional custodians of the lands on which we work and live. We recognise their continuing connection to land, sea, and water. We acknowledge and celebrate the inherent strengths of Aboriginal and Torres Strait Islander peoples and communities. We are committed to a positive future as we move forward together on our journey of Reconciliation.



Agenda

01 Early Works Construction Staging

02 Main Works Site Establishment

An architectural rendering of a modern building courtyard. The building features a curved facade with a grid of rectangular windows. In the foreground, there are several tall palm trees and a large purple patio umbrella. People are seen walking and sitting on a bench in the courtyard. The sky is blue with some clouds.

01

Early Works Construction Staging

Stage 1

12/10/2023



08/04/2024

Part A

Works Summary:

Part A - Services Works along John Hopkins Drive

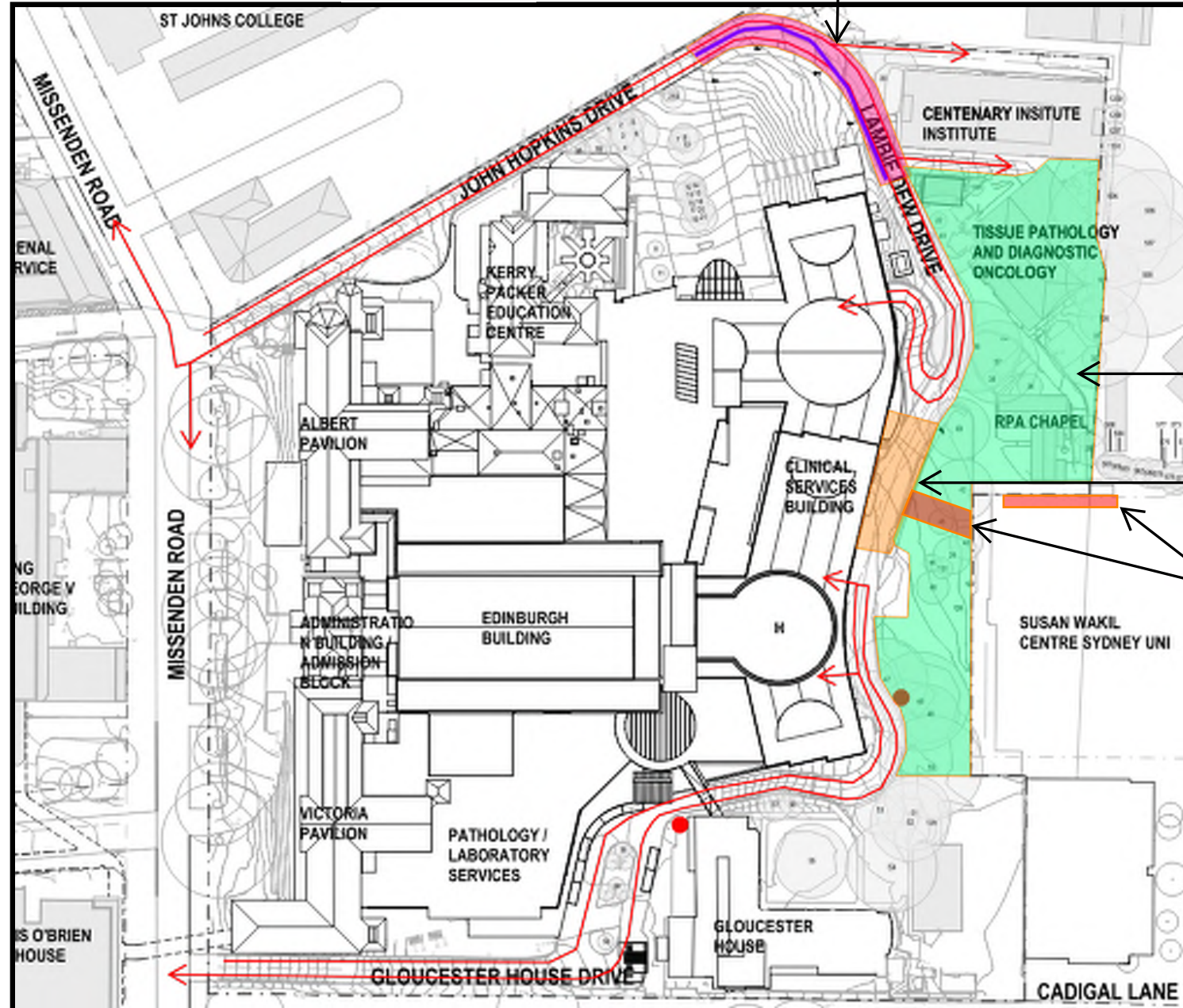
Part B - Site Establishment and Demolition Commencement

Part C - Stage 1 HV and Sewer along Lambie Dew Drive

Part D - Bike Rack relocate and Susan Wakil access road construction

Overall Traffic Management Strategy

- One Lane of traffic to be maintained along Lambie Dew Drive during Part A works
- Where not possible, works to be completed out of hours to minimise impact
- All diversion works in front of Level 01 ramp to be completed at this stage
- During Part C Works (19/10/2023 to 16/01/2023)
- All loading dock access from the South
- All mortuary access through Level 02 carpark during this time.



Part B

Part C

Part D

Part A

10/11/2023



07/02/2024

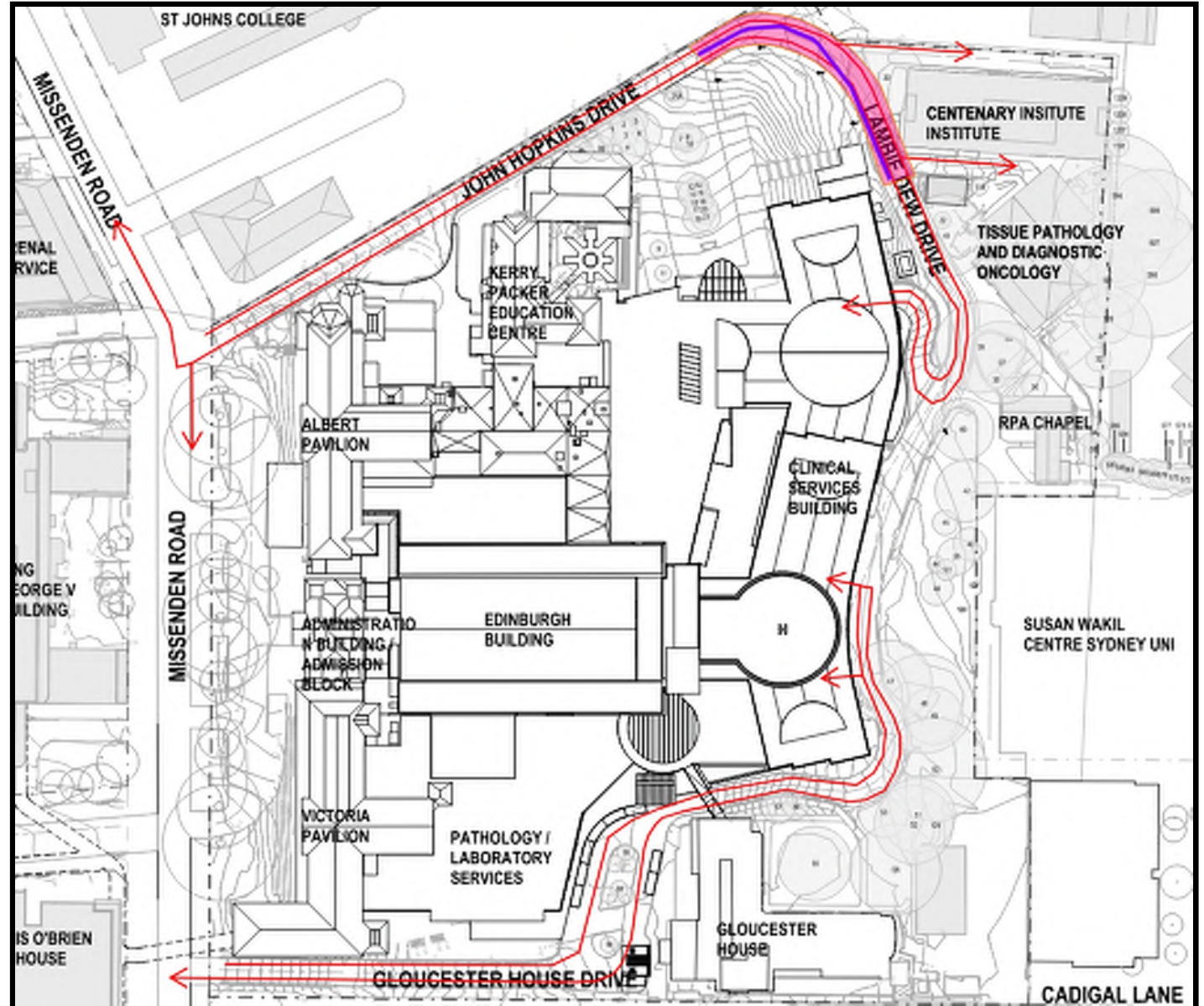
Impact Summary:

HV Works along John Hopkins Drive

- In ground works along John Hopkins Drive and Lambie Dew Drive
- Medical Gas lines for Med Gas vessel North of Centenary
- No works to go beyond Women and Babies entrance until relocated to South

Traffic Management and Hoarding Strategy

- Water filled barriers with fence panels to be installed locally around work area
- 1 Lane closure where possible to maintain traffic flow along Lambie Dew Drive
- Where not possible works are to be completed out of hours





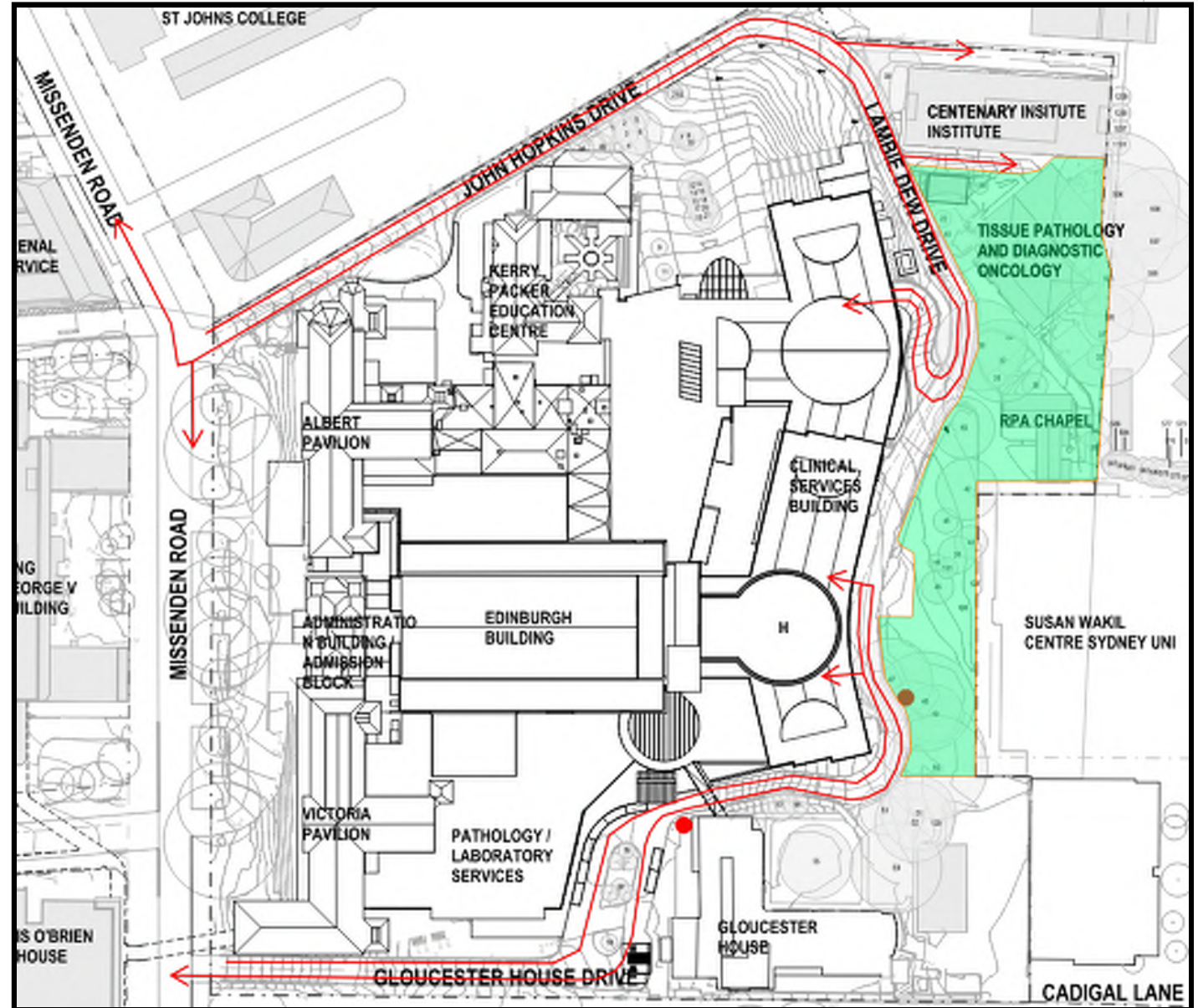
Impact Summary:

Site Establishment and Demolition Commencement

- Establish Site Fencing and any necessary controls
- Commence tree removal
- Demolition of Chapel to enable Stormwater commencement
- Demolition of Sydney Uni Shed

Traffic Management and Hoarding Strategy

- Minimal impact to traffic as a result of Part B
- Concrete Jersey kerb with Timber Hoarding and banner mesh to be installed to perimeter of site.
- Temporary ATF fencing may be used in locations where alterations may be required



Part C

19/10/2023



16/01/2024

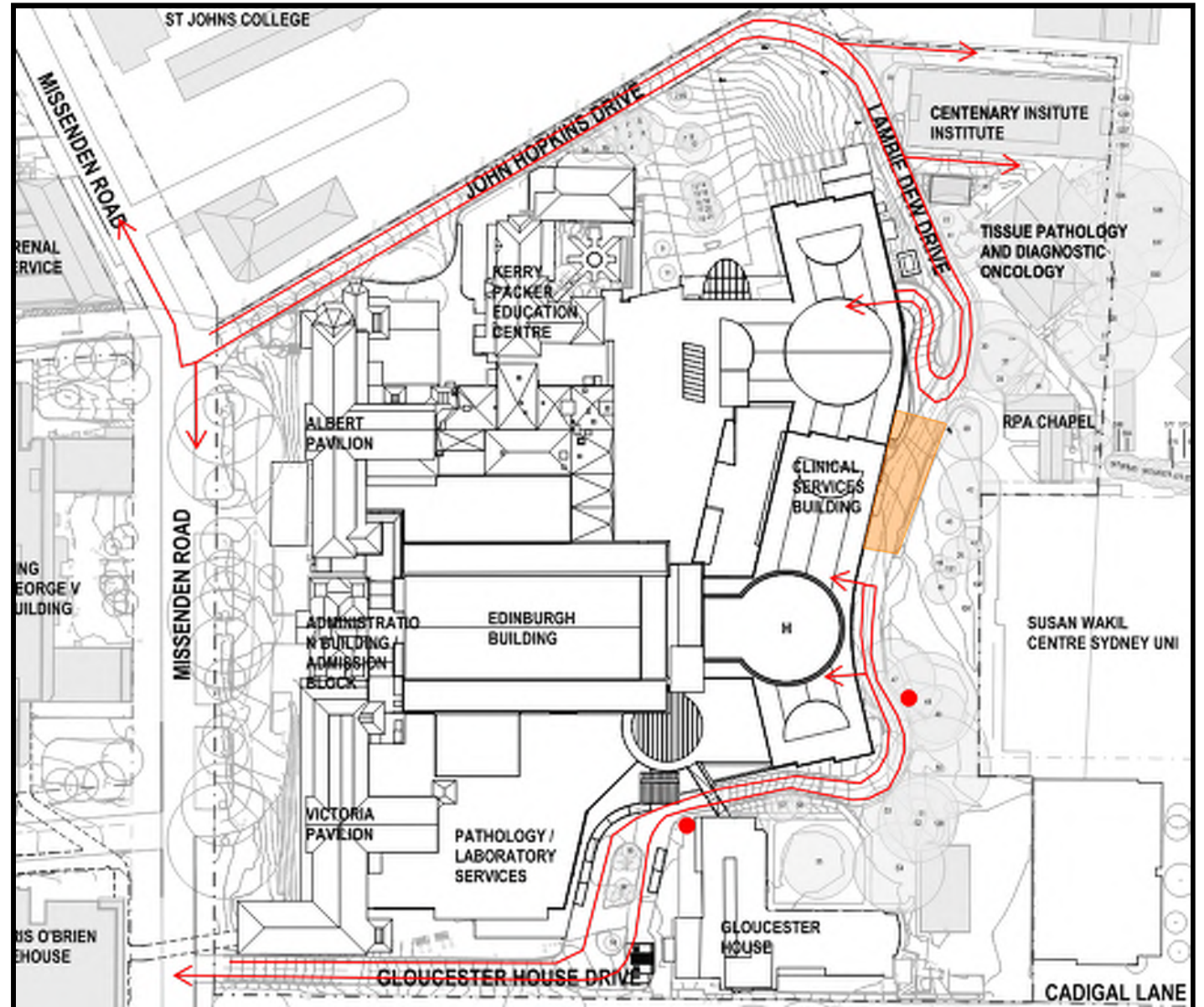
Impact Summary:

Stage 1 HV and Sewer along Lambie Dew Drive

- In ground HV works commencement
- Sewer shoring and Installation in front of Level 01 Ramp
- HV Jointing Bay in LDD
- Block Level 01 Mortuary access
 - Level 02 Carpark access to remain open
- Bin Truck parking space will be blocked
 - Access to be coordinated with CPB where required, or temporary alternative solution required

Traffic Management and Hoarding Strategy

- Level 01 Ramp and Bin space to be blocked (temporary access to bin dock to be arranged if required)
- All loading dock access from Gloucester House Drive
- Water filled barriers with fencing to be installed locally to perimeter of work area



Stage 2

23/11/2023



16/05/2024

Part A

Works Summary:

Part A - Level 02 Carpark Ramp Demolition and Lambie Dew Drive HV

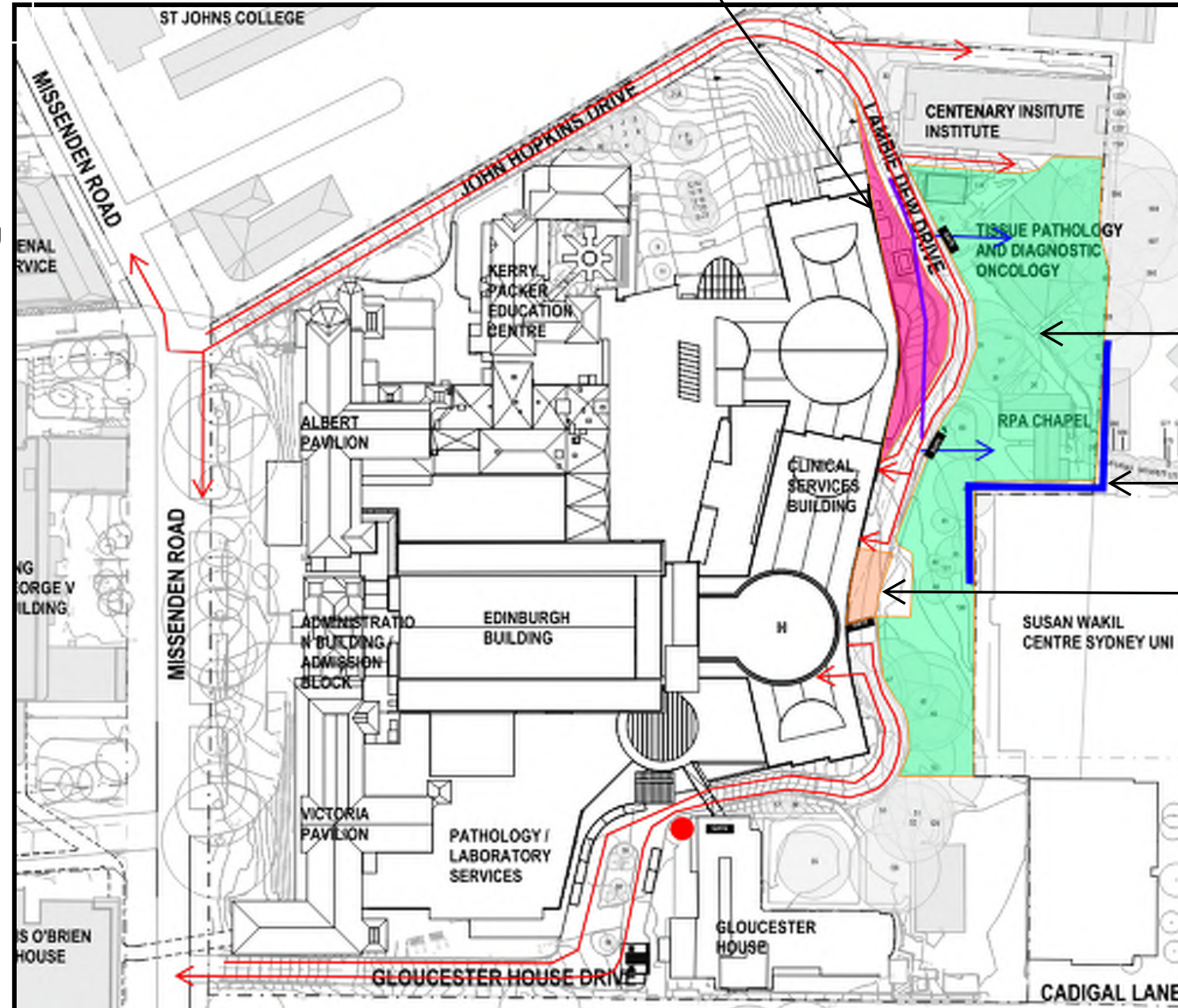
Part B - Demolition and Tree Removal ongoing

Part C - Stormwater Diversion Underway

Part D - Stage 2 HV Along Lambie Dew Drive

Overall Traffic Management Strategy

- Level 02 Carpark ramp to be demolished.
- All mortuary access via level 01 ramp (from 17/01/2023)
- 3 off Northern Loading dock spaces will be occupied for duration of Part D Works.
- Remaining loading dock spaces to be access from Gloucester House Drive (17/01/2024 to 08/02/2024)
- Susan Wakil road access blocked for Stormwater works
 - Temporary access to be created off Lambie Dew Drive



Part B

Part C

Part D

Part A

06/12/2023



29/02/2024

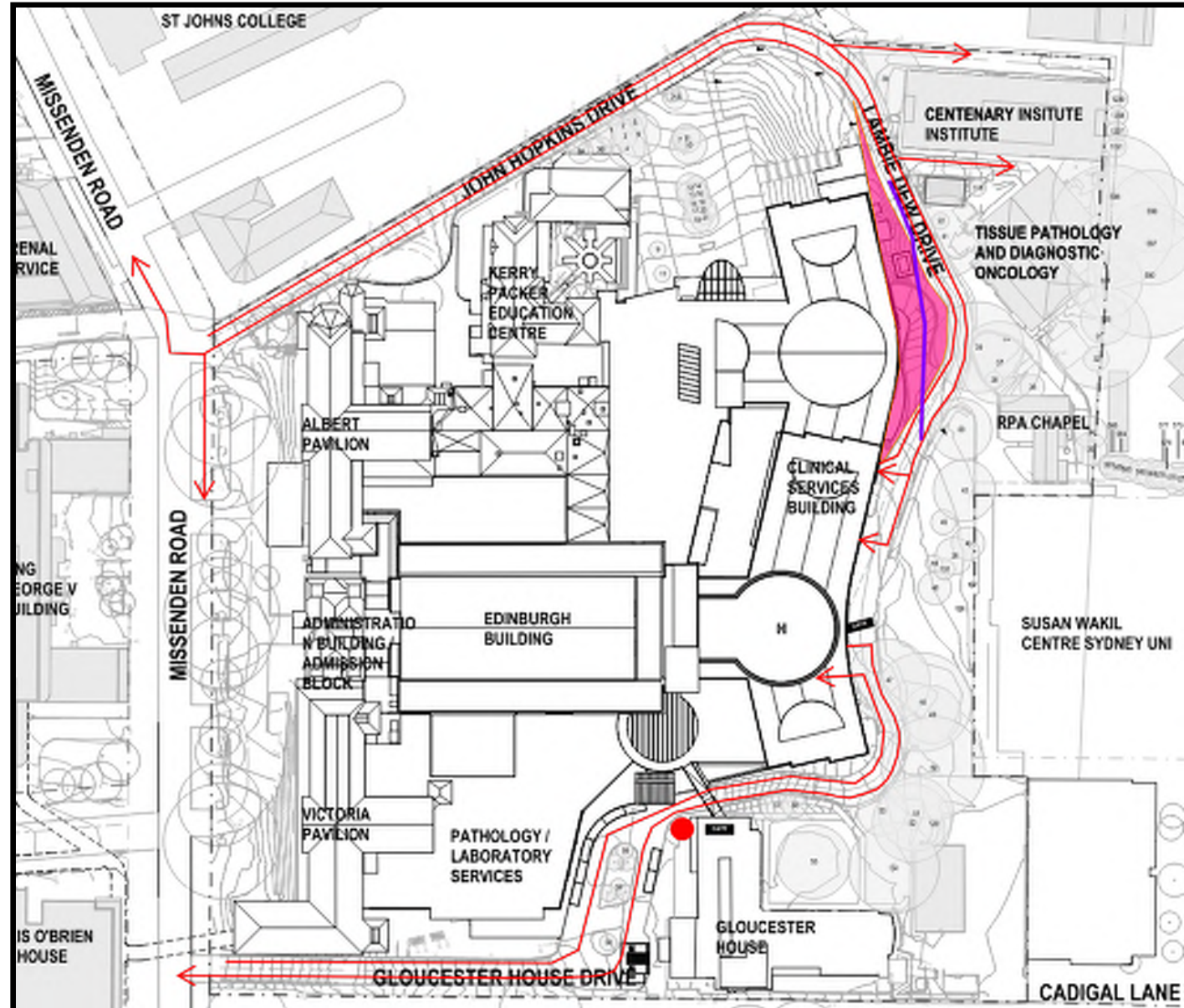
Impact Summary:

Part A - Level 02 Carpark Ramp Demolition and Lambie Dew Drive HV

- Level 02 Ramp to be demolished
- Stage 1 HV Must be completed first to maintain access to Mortuary
- 1 Lane closure where possible. Where not possible works are to be completed out of hours

Traffic Management and Hoarding Strategy

- Water filled barriers with fence panels to be installed locally around work area
- 1 Lane closure where possible to maintain traffic flow along Lambie Dew Drive. Where not possible works are to be completed out of hours



Part B

12/01/2024



08/04/2024

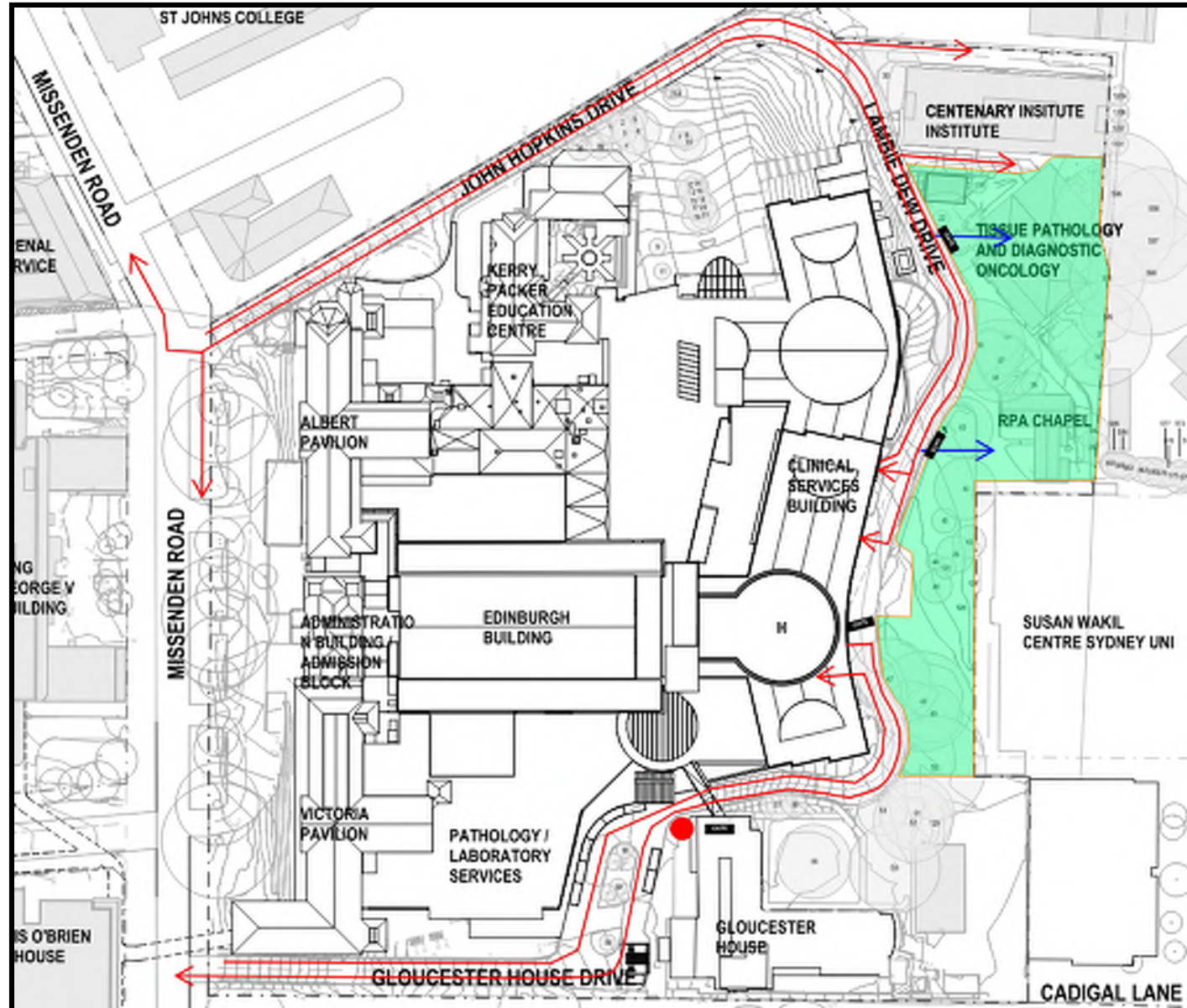
Impact Summary:

Part B - Demolition and Tree Removal ongoing

- Completion of Pathology demolition
- Removal of any remain trees to commence site preparation works

Traffic Management and Hoarding Strategy

- Minimal impact to traffic as a result of Part B
- Concrete Jersey kerb with Timber Hoarding and banner mesh to be installed to perimeter of site
- Temporary ATF fencing may be used in locations where alterations may be required



Part C

23/11/2023



16/05/2024

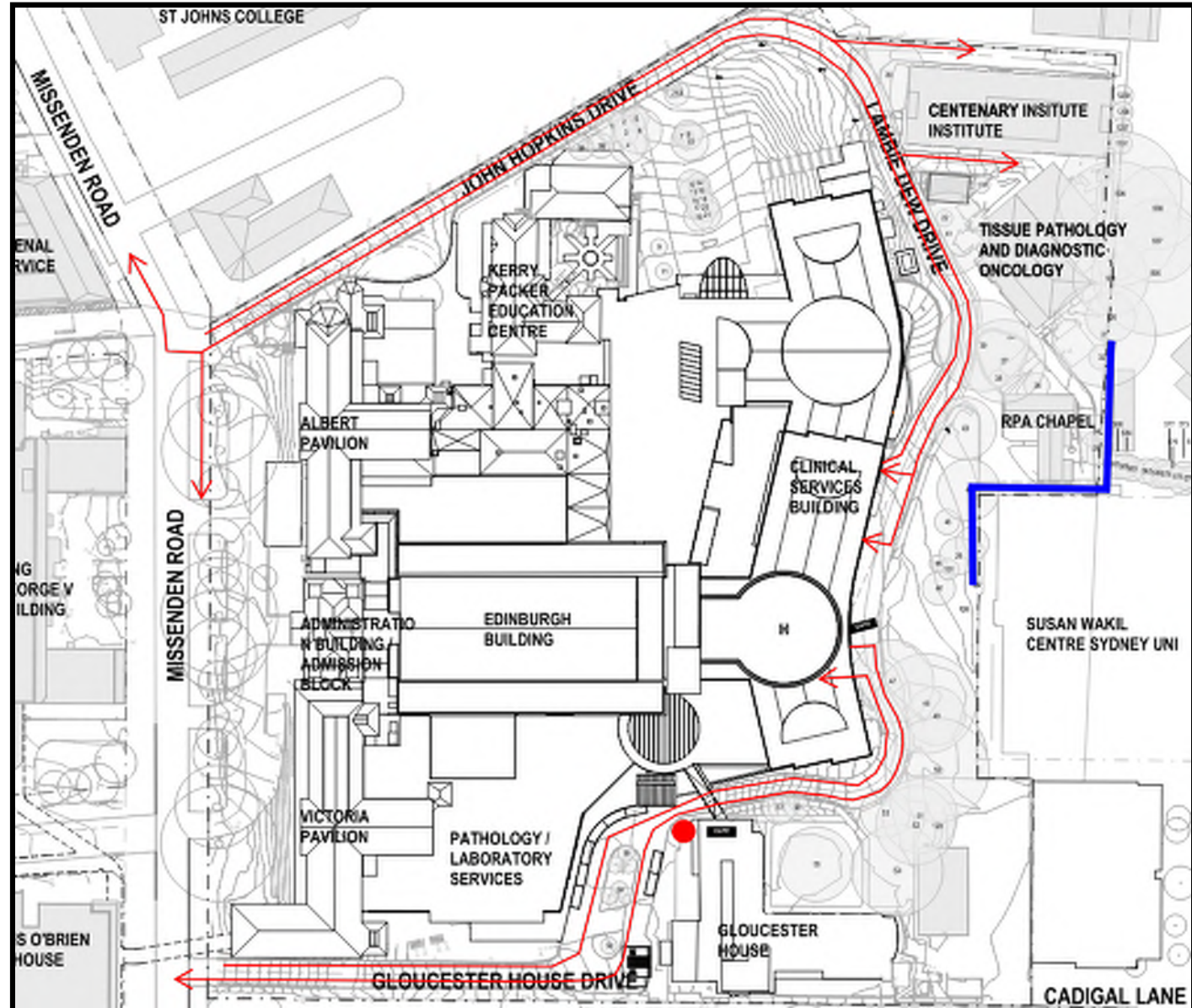
Impact Summary:

Part C - Stormwater Diversion Underway

- Access to Susan Wakil blocked
- Temporary access way to be constructed from Lambie Dew Drive

Traffic Management and Hoarding Strategy

- Access to Susan Wakil road closed for duration of Stormwater works
- Temporary Access to be created from Lambie Dew drive for access to Substation
- Sydney Uni shed to be demolished during this stage
- Temporary storage to be established to facilitate existing amenities
- Water filled barriers and fencing will be established to perimeter of work zone



Part D

17/01/2024



29/02/2024

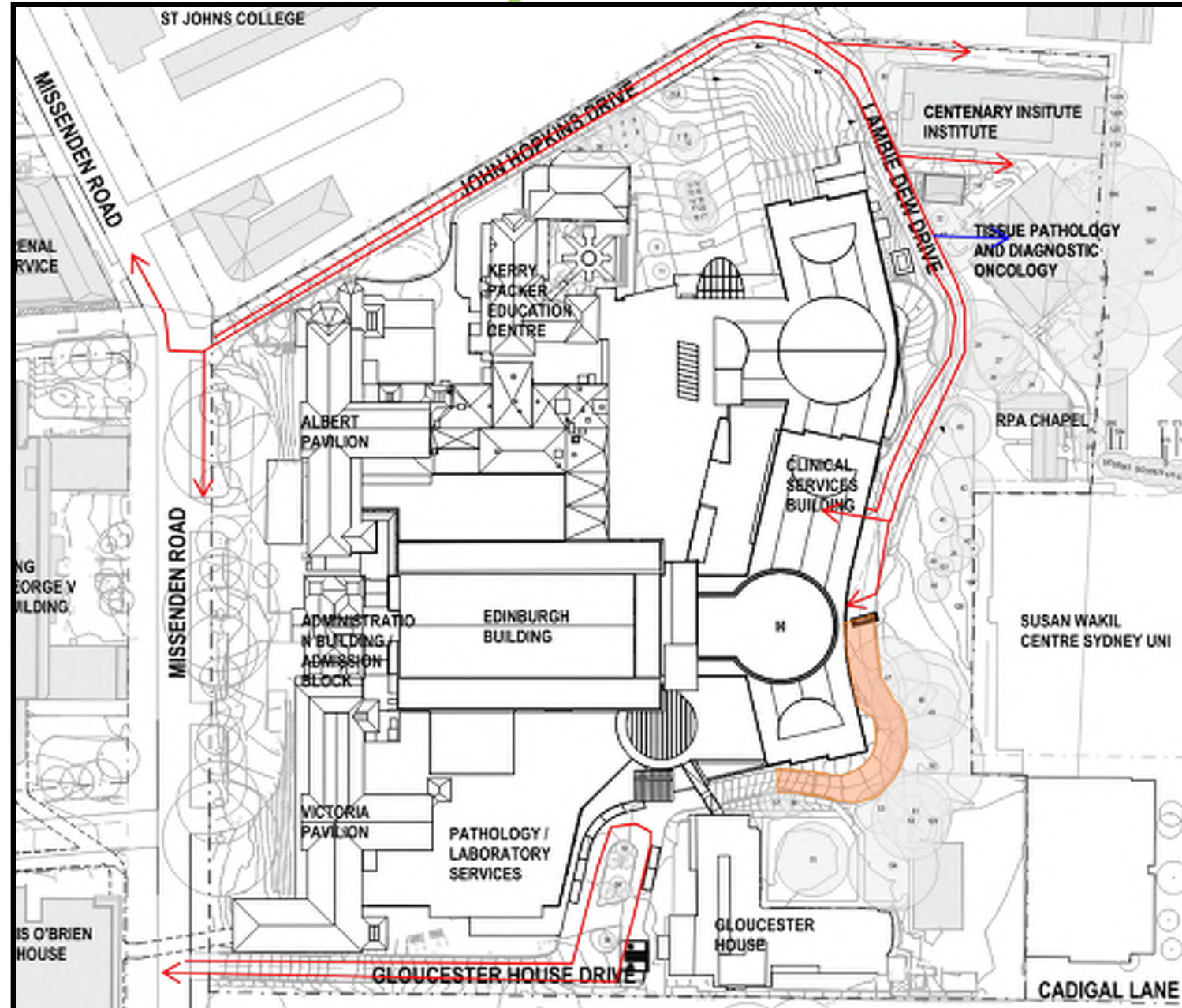
Impact Summary:

Part D HV Along Lambie Dew Drive

- 3 off Loading dock spaces to be blocked for duration of works
- Northern Loading dock spaces to be accessed from Lambie Dew Drive

Traffic Management and Hoarding Strategy

- 3 off Southern loading dock spaces to be blocked for duration of works
- 3 off Northern spaces to be accessed from Lambie Dew Drive
- Water filled barriers with fencing to be installed locally to perimeter of work area



Stage 3

01/03/2024



14/05/2024

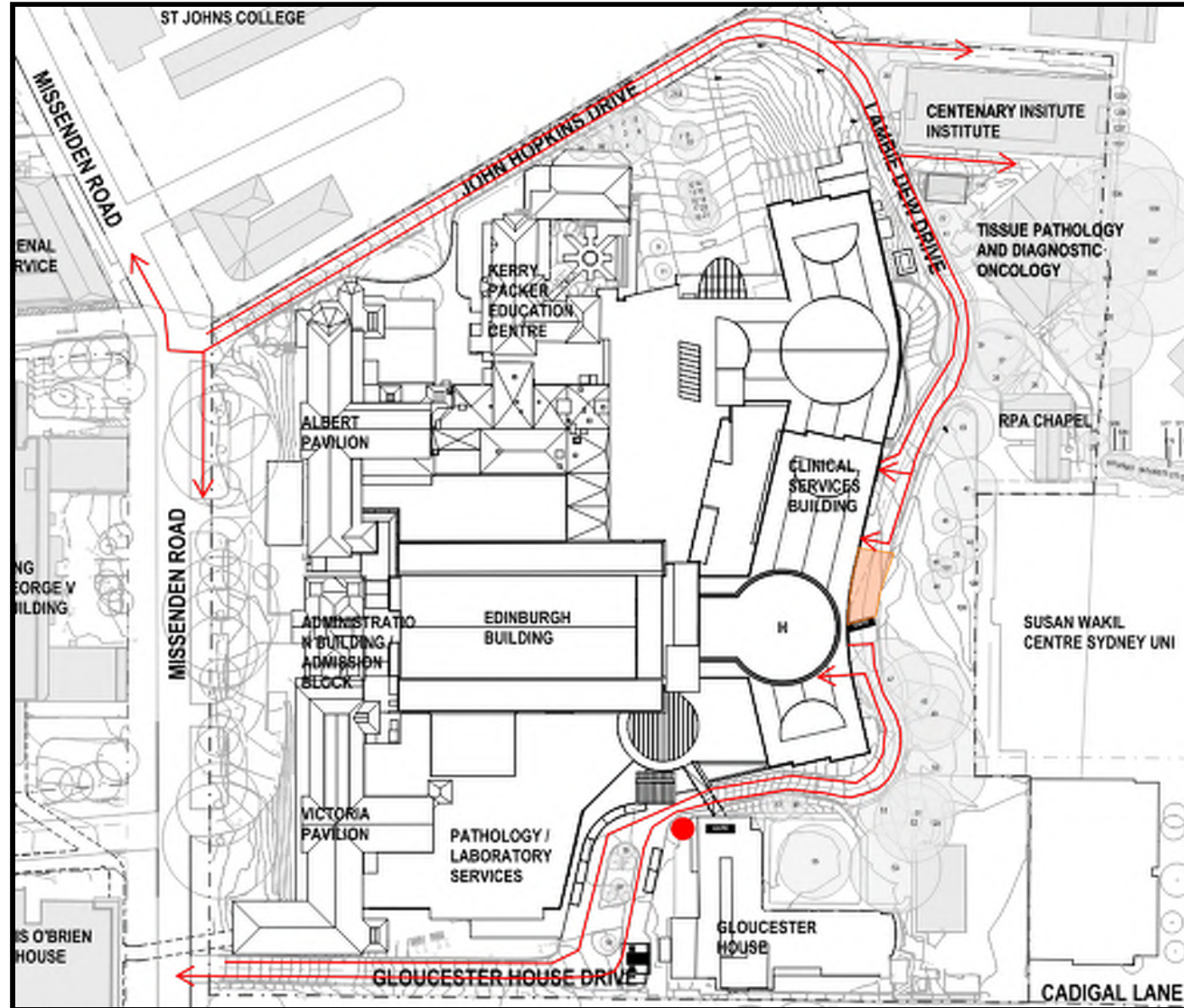
Impact Summary:

Stage 3 HV Along Lambie Dew Drive

- 3 off Loading dock spaces to be blocked for duration of works
- Bin truck access and Level 01 ramp will be opened
- Southern Loading dock spaces to be accessed from Gloucester House Drive

Overall Traffic Management Strategy

- 3 off Northern loading dock spaces to be blocked for duration of works
- 3 off Southern spaces to be accessed from Gloucester House Drive
- Water filled barriers with fencing to be installed locally to perimeter of work area



Stage 4

02/05/2024



23/07/24

Part B

Works Summary:

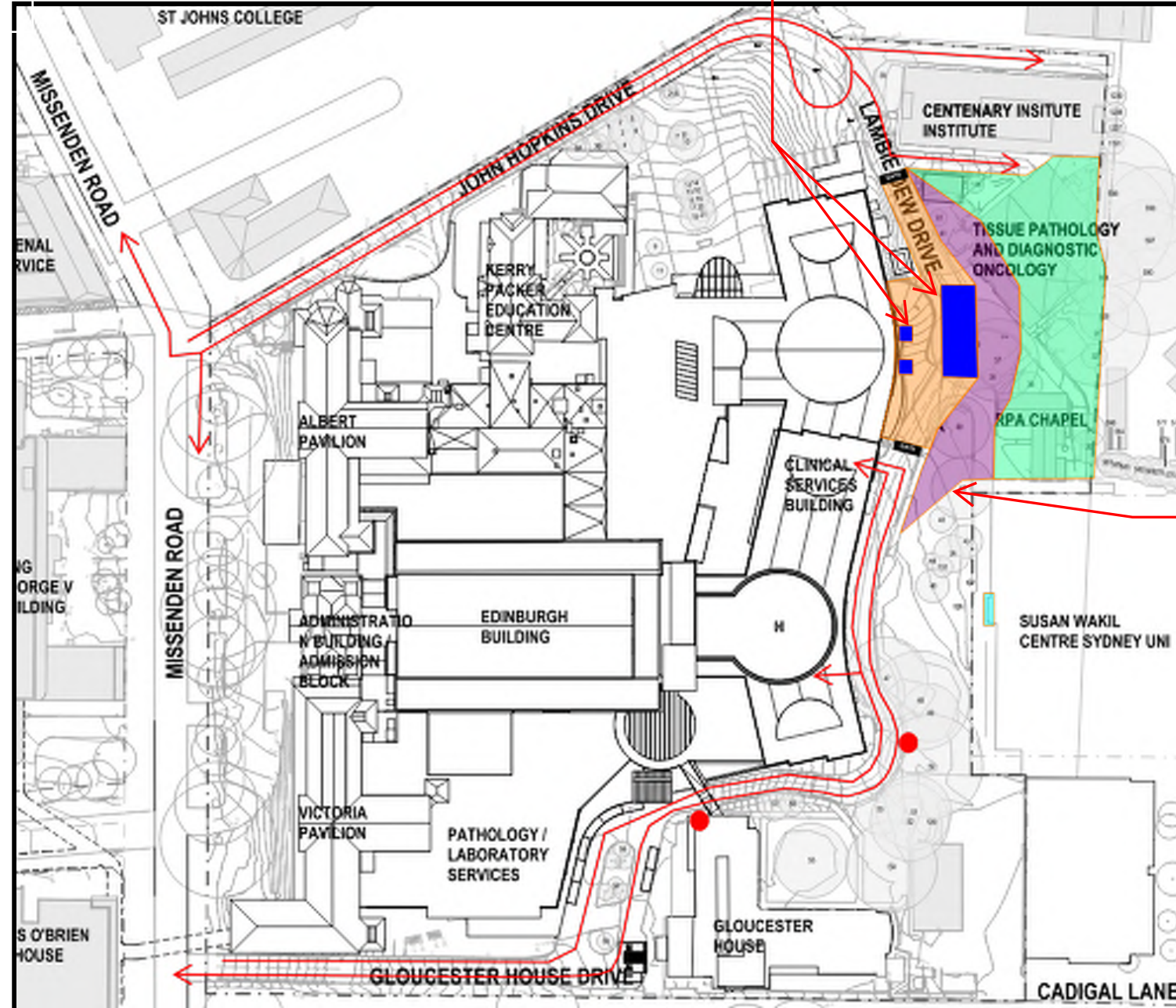
Part A - Construction of Temporary Haul Road

Part B - Core establishment and construction to Level 03

Overall Traffic Management Strategy

- Lambie Dew Drive to be closed from South of Centenary Ramp access to North of Level 01 ramp for construction of main core, and temporary Haul road

- All loading Dock access and Level 01 Ramp access from Gloucester House Drive



Part A

Part A

02/05/2024



16/05/2024

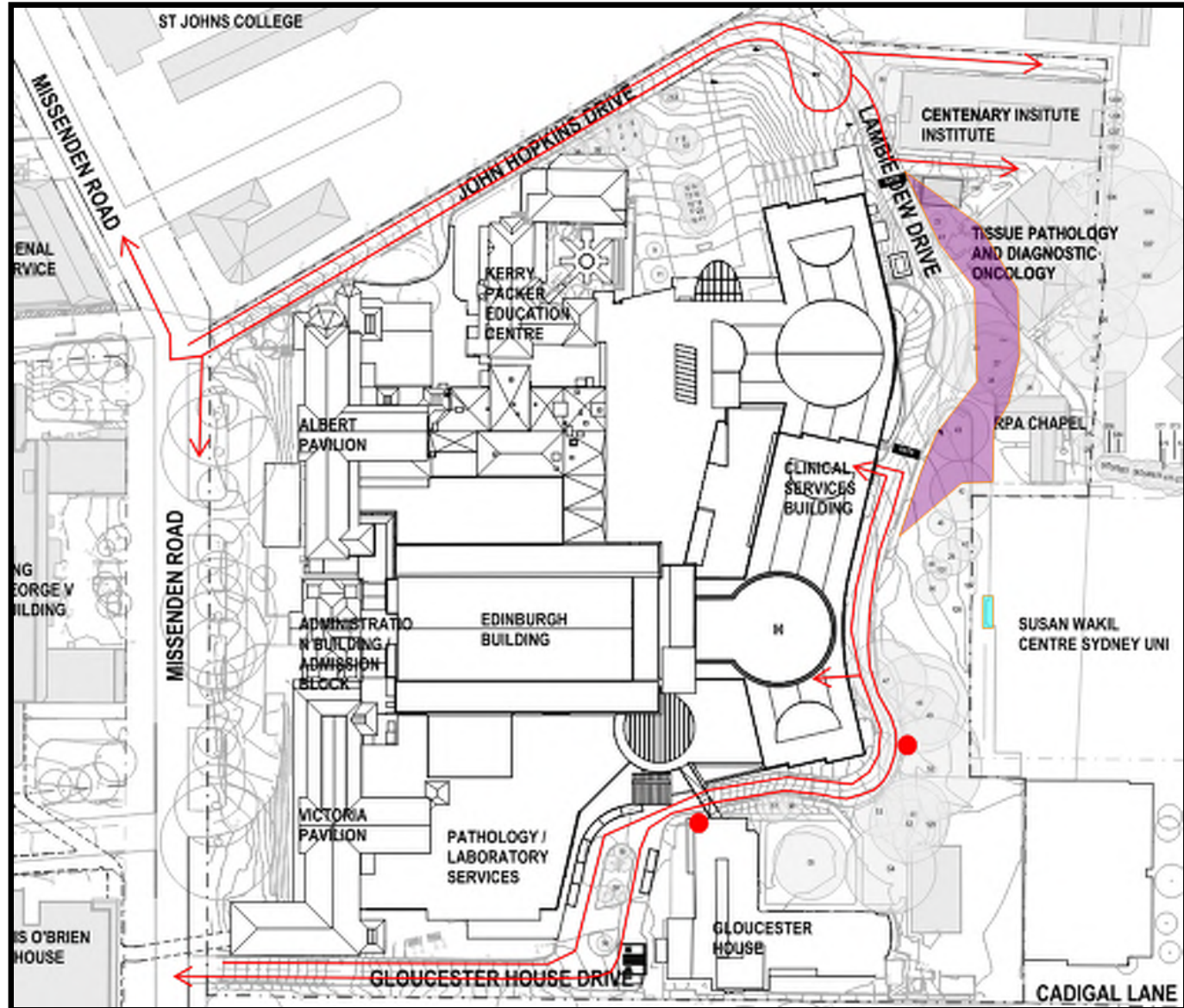
Impact Summary:

Part A - Construction of Temporary Haul Road

- Temporary Haul Road to be constructed for access to Loading Dock, Susan Wakil, and East Extension construction zone
 - To be used during Level 03 Slab works over Lambie Dew Drive (next stage)

Traffic Management and Hoarding Strategy

- Water Filled Barriers with Fencing to be established to road alignment, to remain in place for when haul road is in use
- Minimal impact on traffic - Area already within stage 3 construction zone



Part B

16/05/24



23/07/24

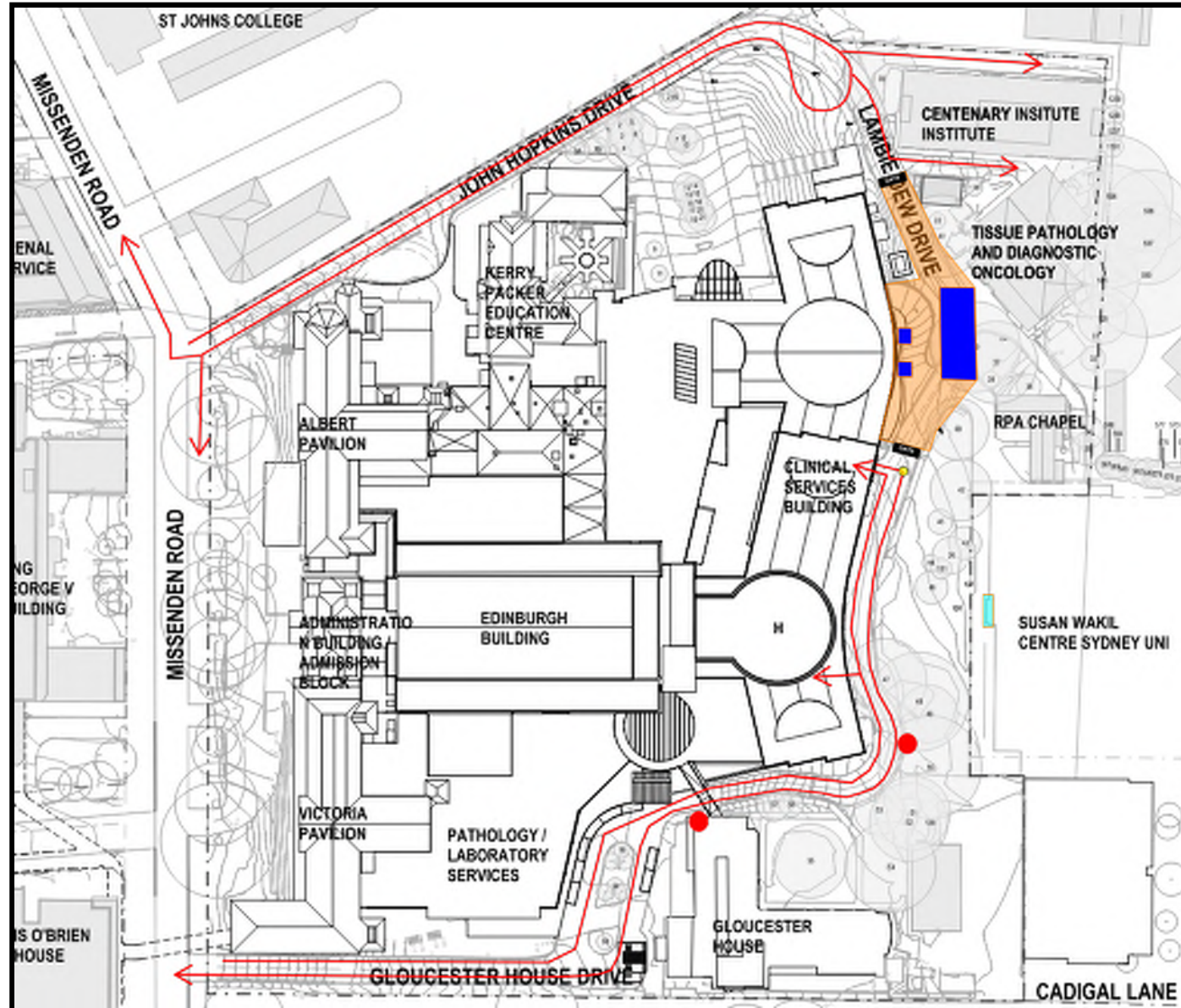
Impact Summary:

Part B - Core establishment and construction of Level 03

- Partial road closure on Lambie Dew Drive to construct Main core and Level 03
- Level 01 ramp to remain open
- All loading dock access from Gloucester House Drive

Traffic Management and Hoarding Strategy

- All loading dock access and Level 01 ramp access to be from Gloucester House drive
- No vehicle access from North side of site
- Mixture of Water Filled barrier with fence, concrete jersey kerb with timber hoarding, and gates to be installed for access as per main works alignment



Stage 5

15/05/2024



18/12/2024

Impact Summary:

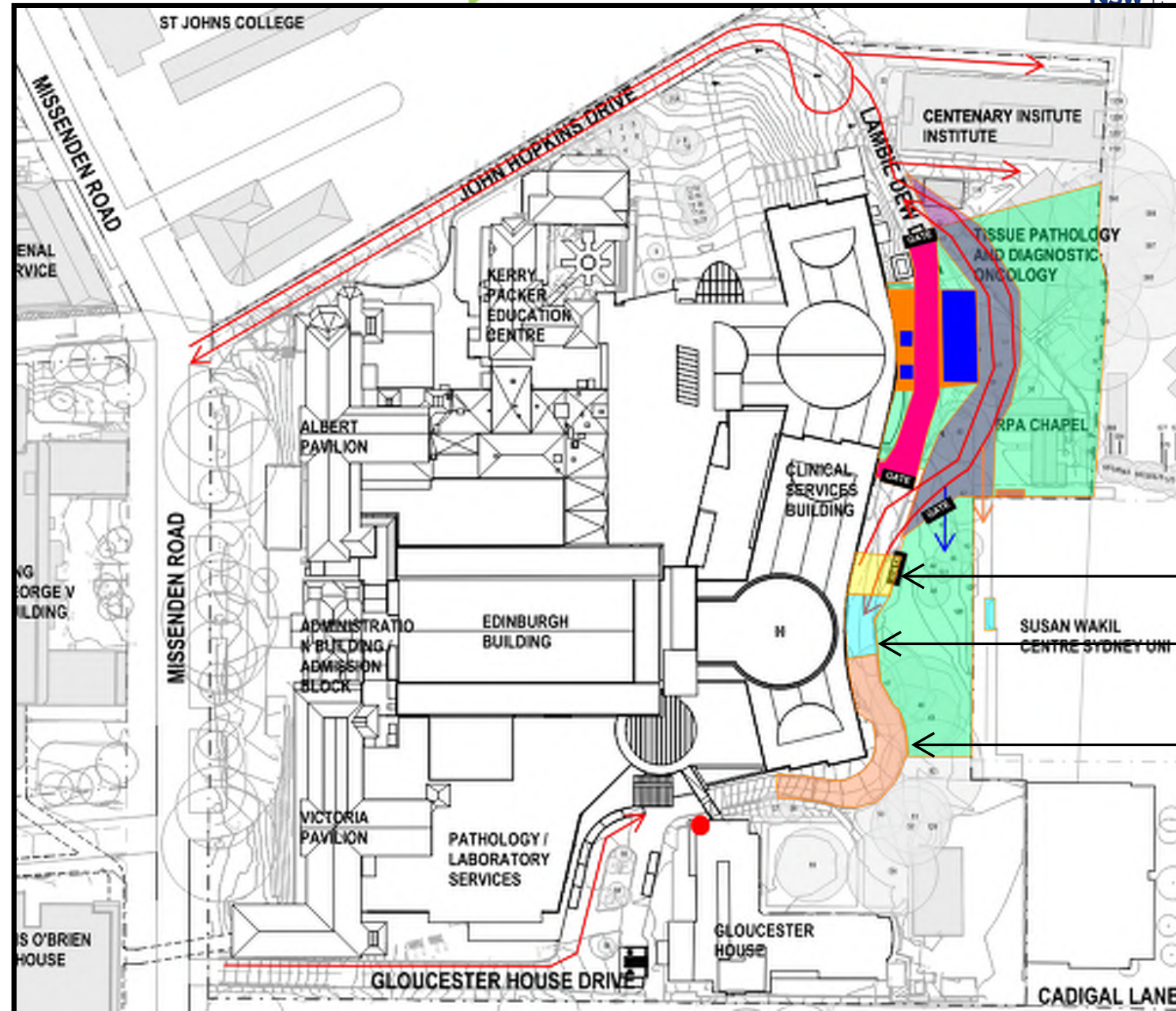
Part A - Road Lowering and Service Diversions to Gloucester House Drive incl site Establishment, Piling, and Excavation Works for East Extension

Part B - Road Lowering, Air Plenum and East Extension Piling

Part C - Road Lowering and Service Diversions to Lambie Dew Drive

Overall Traffic Management Strategy

- Road lowering underway from Gloucester House Drive around to Lambie Dew Drive
- All Loading Dock and Level 01 ramp access from temporary Haul Road



Part C

Part B

Part A

Part A

15/05/2024



25/07/2024

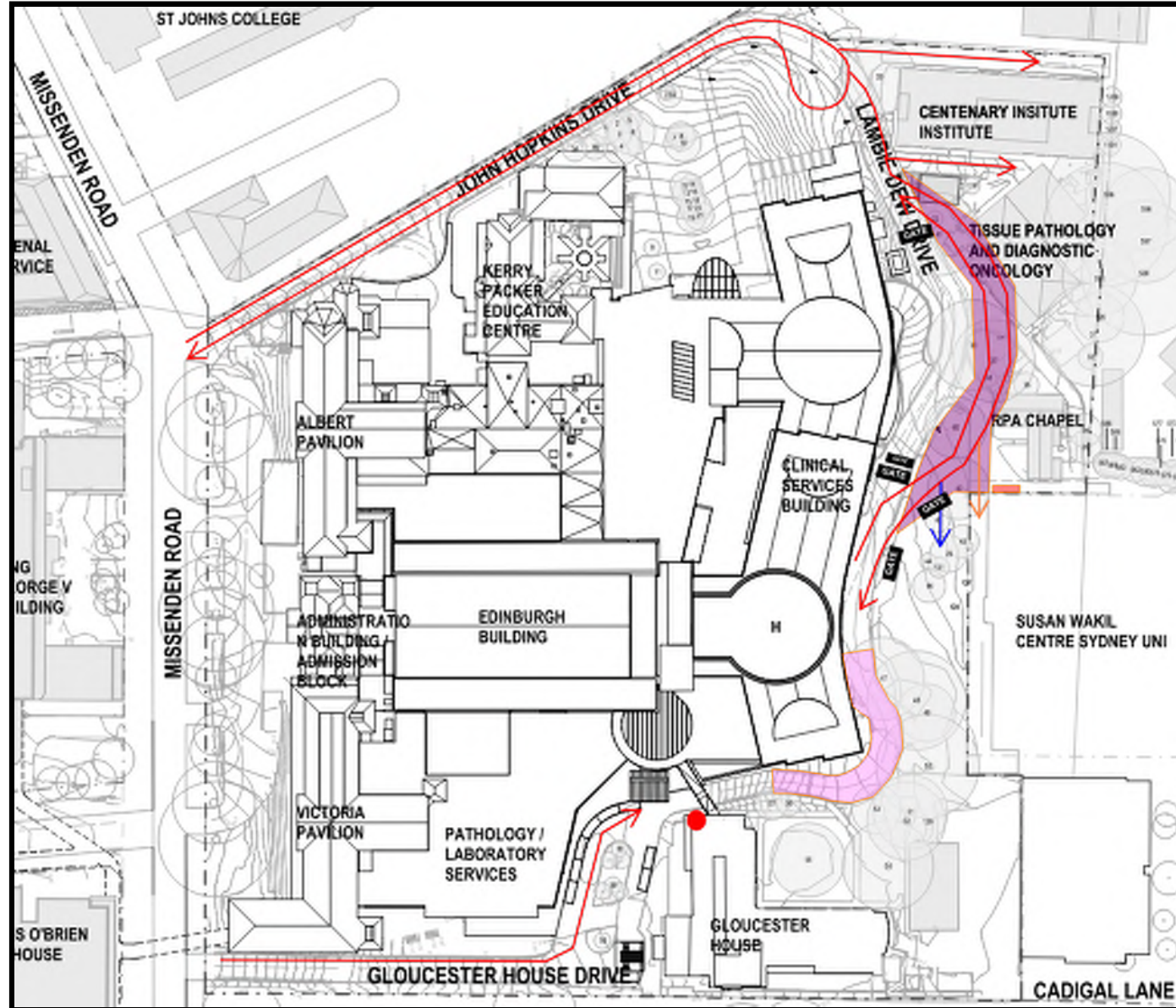
Impact Summary:

Part A - Road Lowering and Service Diversions to Gloucester House Drive incl Site Establishment, Piling, and any Excavation works to East Extension

- No access to loading dock from Gloucester House Drive
- Access to loading dock will be via John Hopkins Drive and the temporary Haul Road

Traffic Management and Hoarding Strategy

- 3 off Southern loading dock spaces to be blocked for duration of works
- 3 off Northern spaces to be accessed from Temporary Haul Road
- Water filled barriers with fencing to be installed locally to perimeter of work area



Part B

26/07/2024



19/11/2024

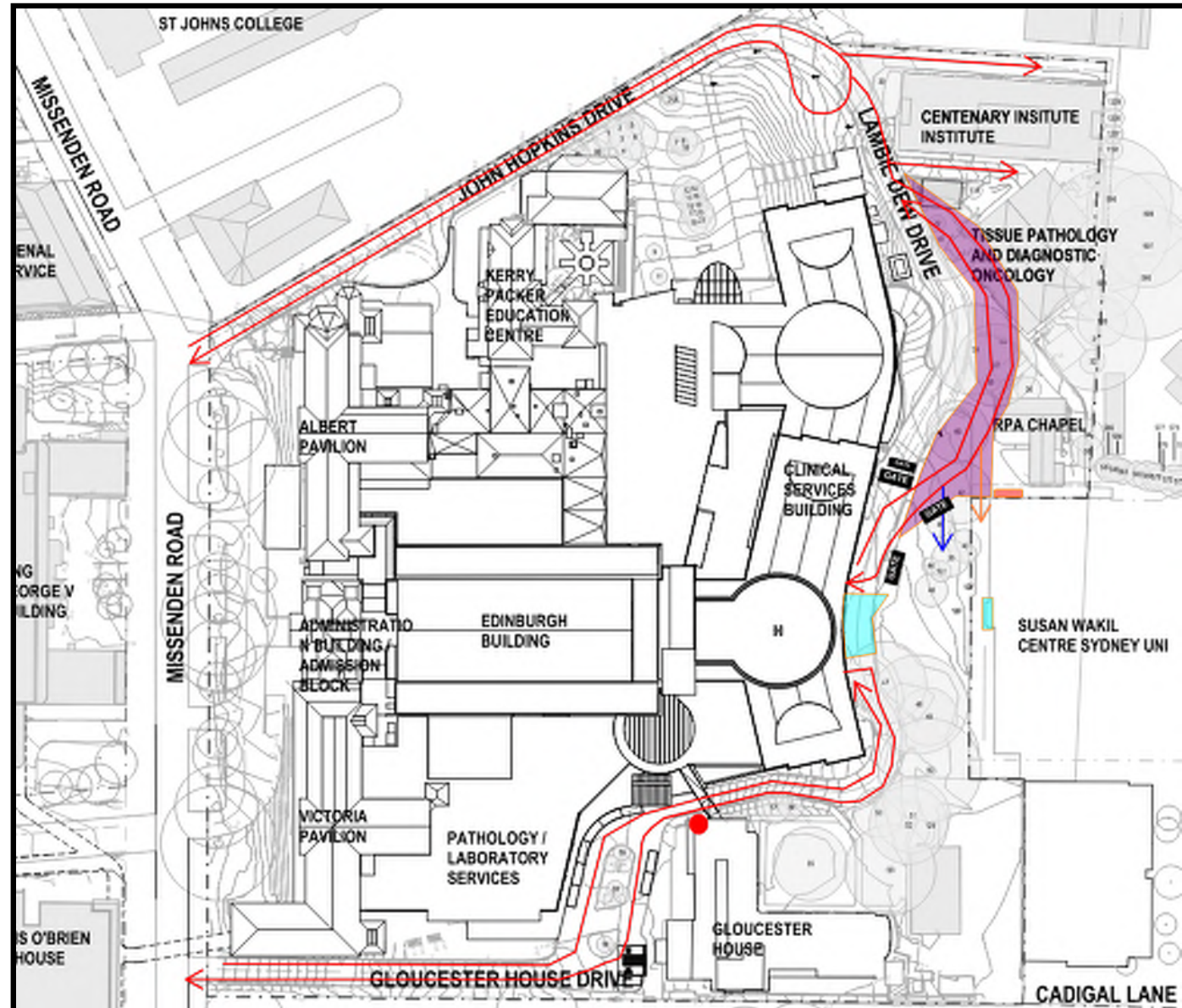
Impact Summary:

Part B - Road Lowering, Air Plenum and East Extension Piling

- 3 off northern loading dock spaces to be closed for Duration of works
- Access to Southern loading dock spaces from Gloucester House Drive
- Access to Level 01 Ramp and Loading Dock Bin Space from Temporary Haul Road

Traffic Management and Hoarding Strategy

- 3 off Northern loading dock spaces to be blocked for duration of works
- 3 off Southern spaces to be accessed from Gloucester House Drive
- Water filled barriers with fencing to be installed locally to perimeter of work area



Part C

19/11/2024



18/12/2024

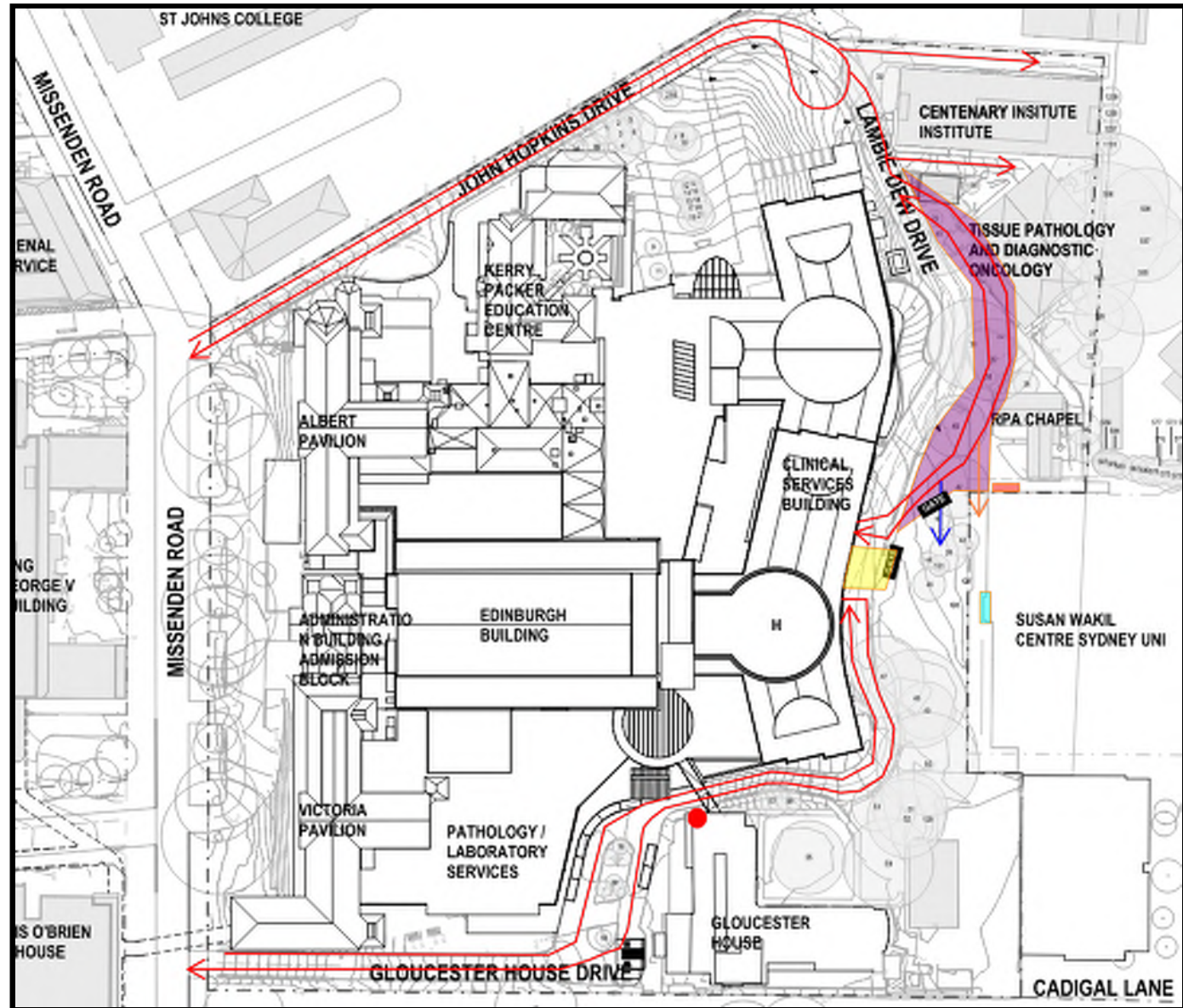
Impact Summary:

Part C - Road Lowering and Service Diversions to Lambie Dew Drive

- No access to loading dock from Lambie Dew Drive. Northern bin space will be blocked for duration of works. Access to be coordinated with CPB where required, or temporary alternative solution proposed
- Level 01 ramp to be accessed from Temporary Haul Road
- Access to loading dock will be via Gloucester House Drive

Traffic Management and Hoarding Strategy

- 1 off bin space to be blocked for duration of works
- 6 off loading dock spaces to be accessed via Gloucester House Drive
- Water filled barriers with fencing to be installed locally to perimeter of work area



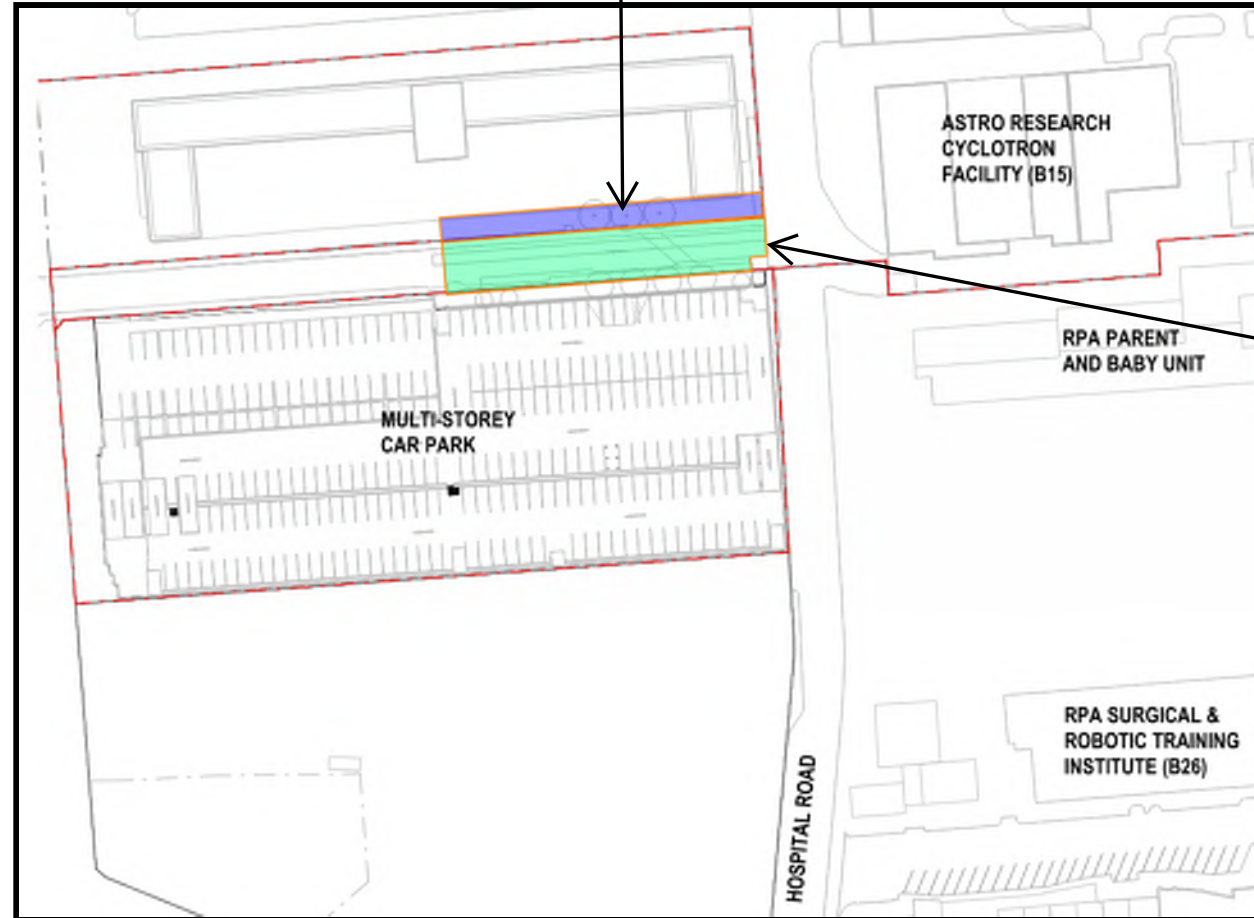
Temporary Helicopter Landing Site (THLS)

Impact Summary:

Hoarding to be established on Grose Street for construction of Lift Core, Canopy, and Ambulance Bay

- Vehicle access to Grose Street to be blocked for duration of works to enable construction of Lift Core, Canopy and Ambulance Dropoff
- Footpath to remain open
- Emergency egress to remain open from existing MSCP exits

A. Footpath to remain open for Pedestrian Access



A. Hoarding to be established on Grose Street for construction of Lift Core, Canopy, and Ambulance Bay

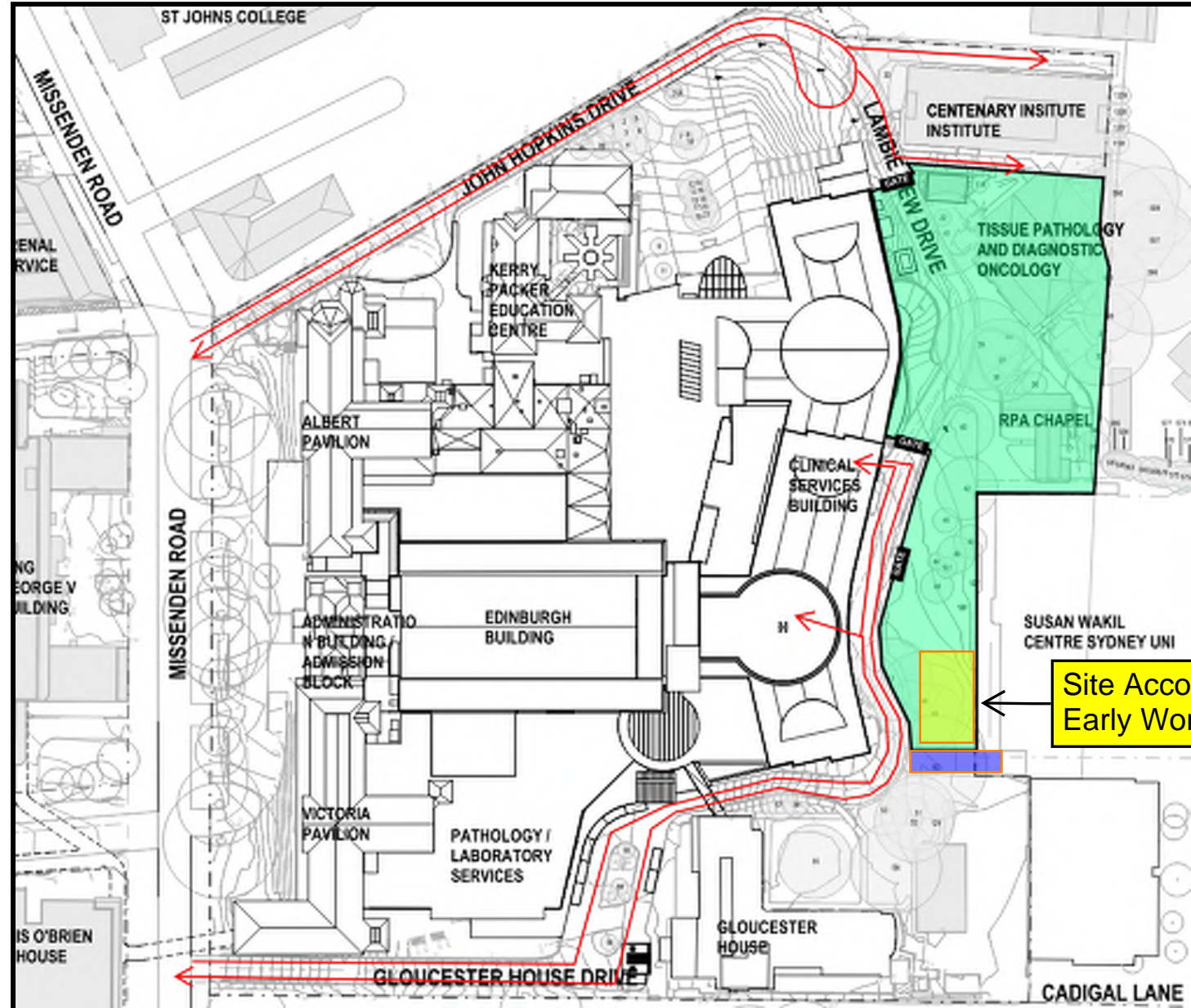
02

Main Works Site Establishment

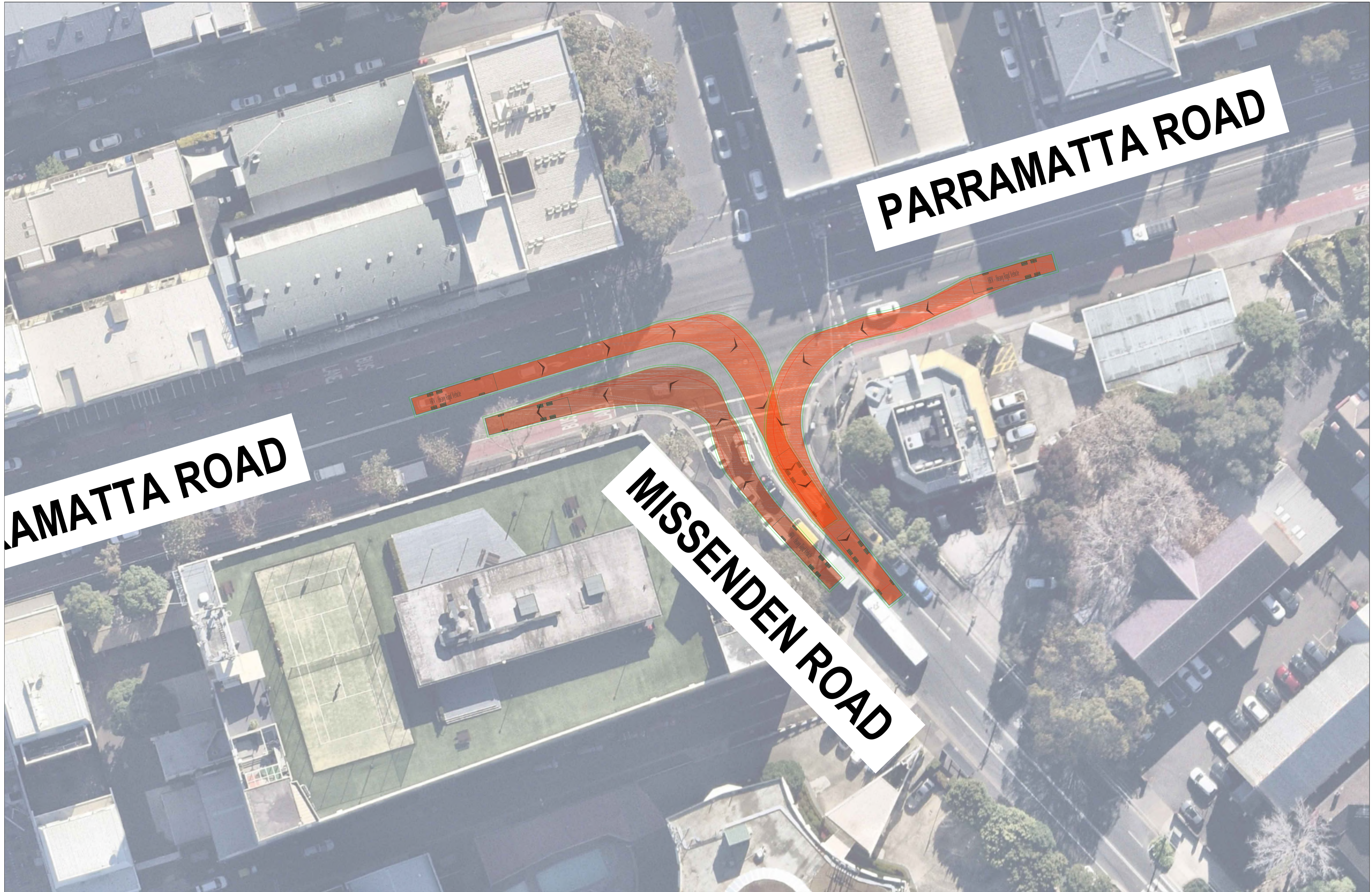
Site Establishment Drawing

Impact Summary:

- Hoarding to be established to perimeter of site
 - Concrete Jersey Kerb with Timber Hoarding and approved banner mesh design
- Lockable gates to be installed on Lambie Dew Drive at Northern and Southern ends of site
 - No access through site on Lambie Dew Drive
- All loading dock and Level 01 ramp access from Gloucester House Drive
- Turning circle to be installed during Early works for Centenary access and turning for any public vehicles who proceed through to gate
- If required for larger vehicles travelling to Centenary (ie to refill gas tanks), access can be coordinated through site, with consultation with CPB prior to access
- Traffic Control to both gates and access/exit points from site to manage all deliveries, and any interface with public vehicles



Appendix 2. Swept Path Assessment



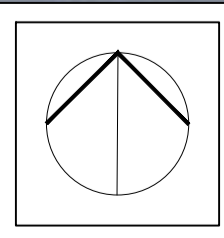
PARRAMATTA ROAD

AMATTA ROAD

MISSENDEN ROAD

ptc.
 Suite 502, 1 James Place
 North Sydney NSW 2060
 t +61 2 8920 0800
 ptcconsultants.co

X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
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REV	DATE	DESCRIPTION	DRAWN	REVIEWED	



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 RPAH CTMP

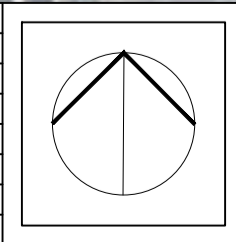
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 Swept Path Assessment

CLIENT CPB
 DRAWING # ptc-001
 PROJECT # 22-0523
 SCALE 1 : 250

PRELIMINARY
REV P1



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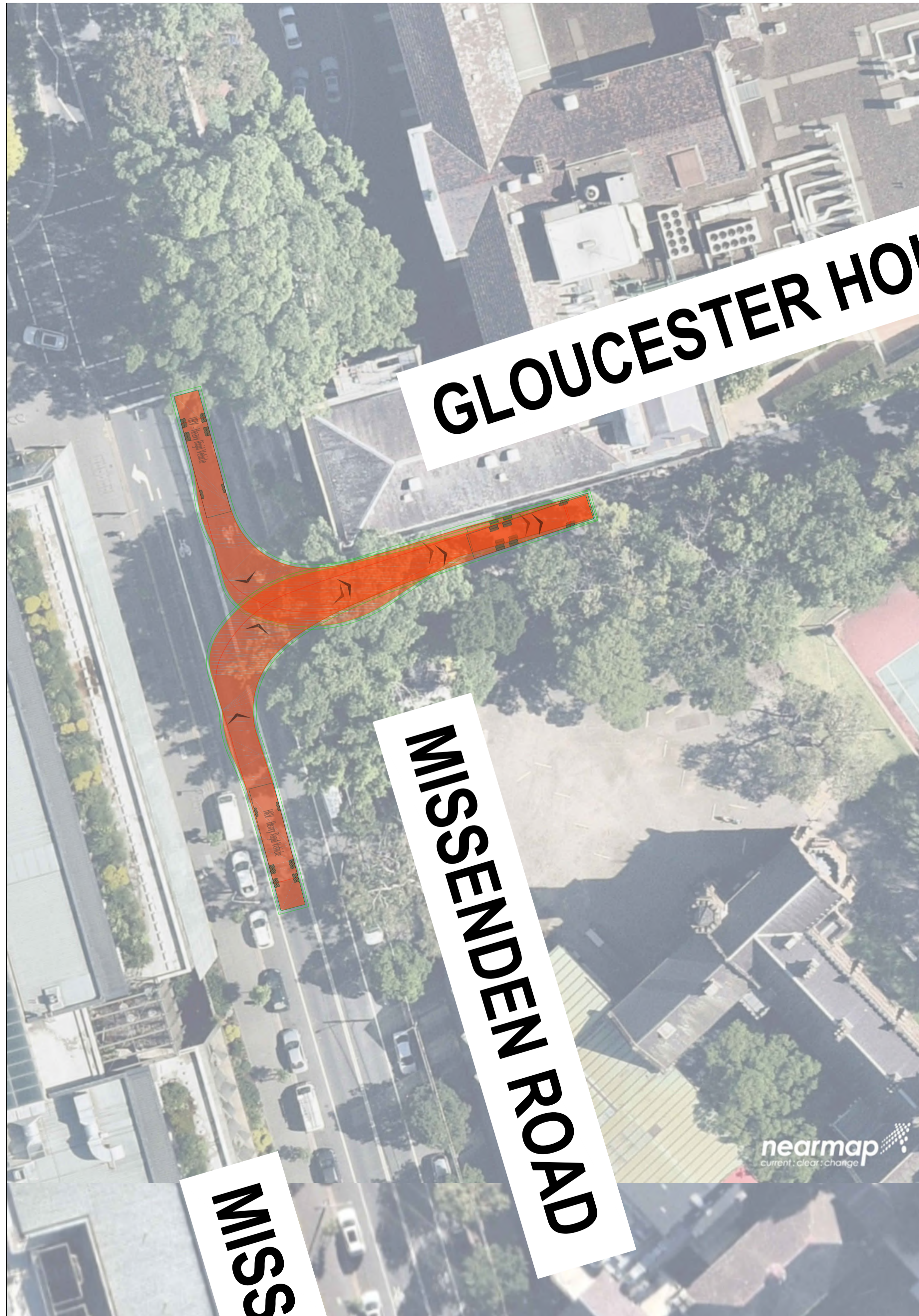
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DRAWING TITLE
Swept Path Assessment

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PROJECT #	22-0523	
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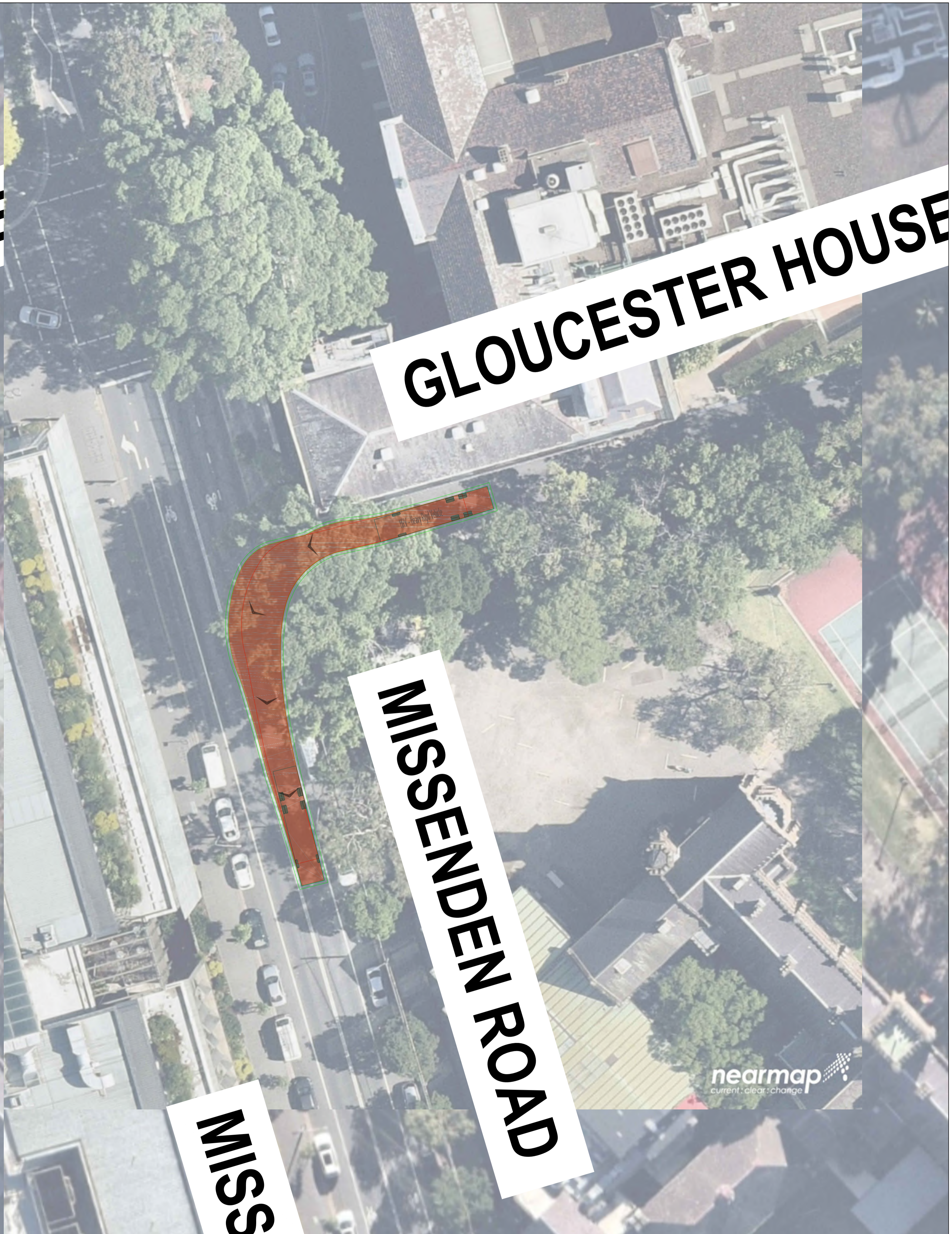


GLOUCESTER HOUSE

MISSENDEN ROAD

MISS

nearmap
current: clear: change



GLOUCESTER HOUSE

MISSENDEN ROAD

MISS

nearmap
current: clear: change

ptc.	Suite 502, 1 James Place North Sydney NSW 2060 t +61 2 8920 0800 ptcconsultants.co			DRAWING KEY		
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REV	DATE	DESCRIPTION	DRAWN	REVIEWED		

PROJECT	RPAH CTMP
DRAWING TITLE	Swept Path Assessment

CLIENT	CPB	PRELIMINARY
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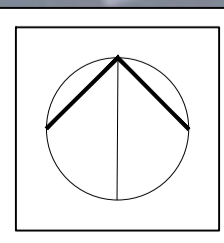
MISSENDEN ROAD

ROAD

CARILLON AVE

nearmap
current · clear · change

X	X	X		x	x
X	X	X		x	x
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REV	DATE	DESCRIPTION	DRAWN	REVIEWED	



DRAWING KEY

PROJECT
RPAH CTMP

DRAWING TITLE
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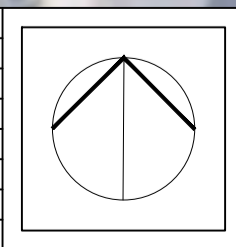
REV P1



HOSPITAL ROAD

CARILLON AVE

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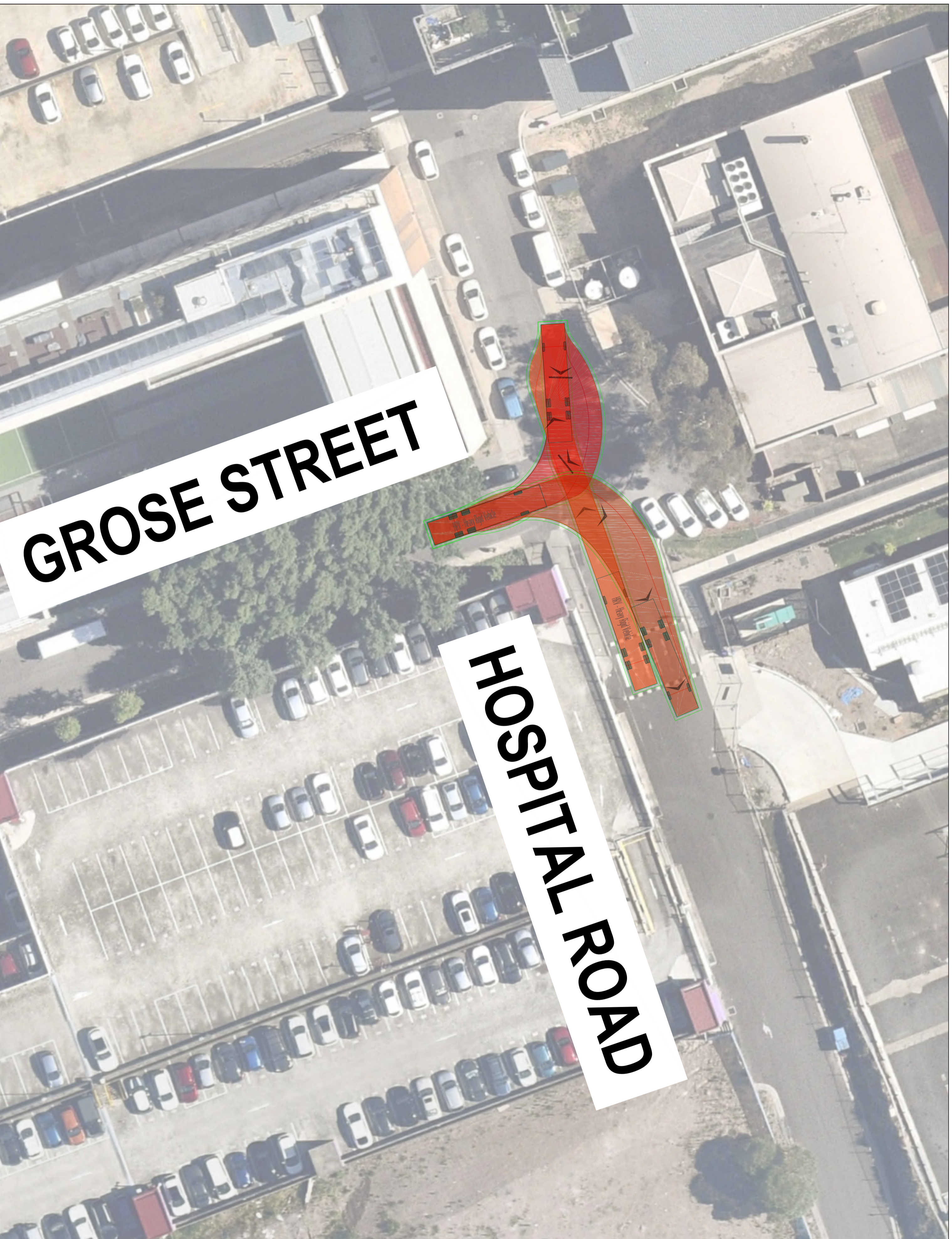
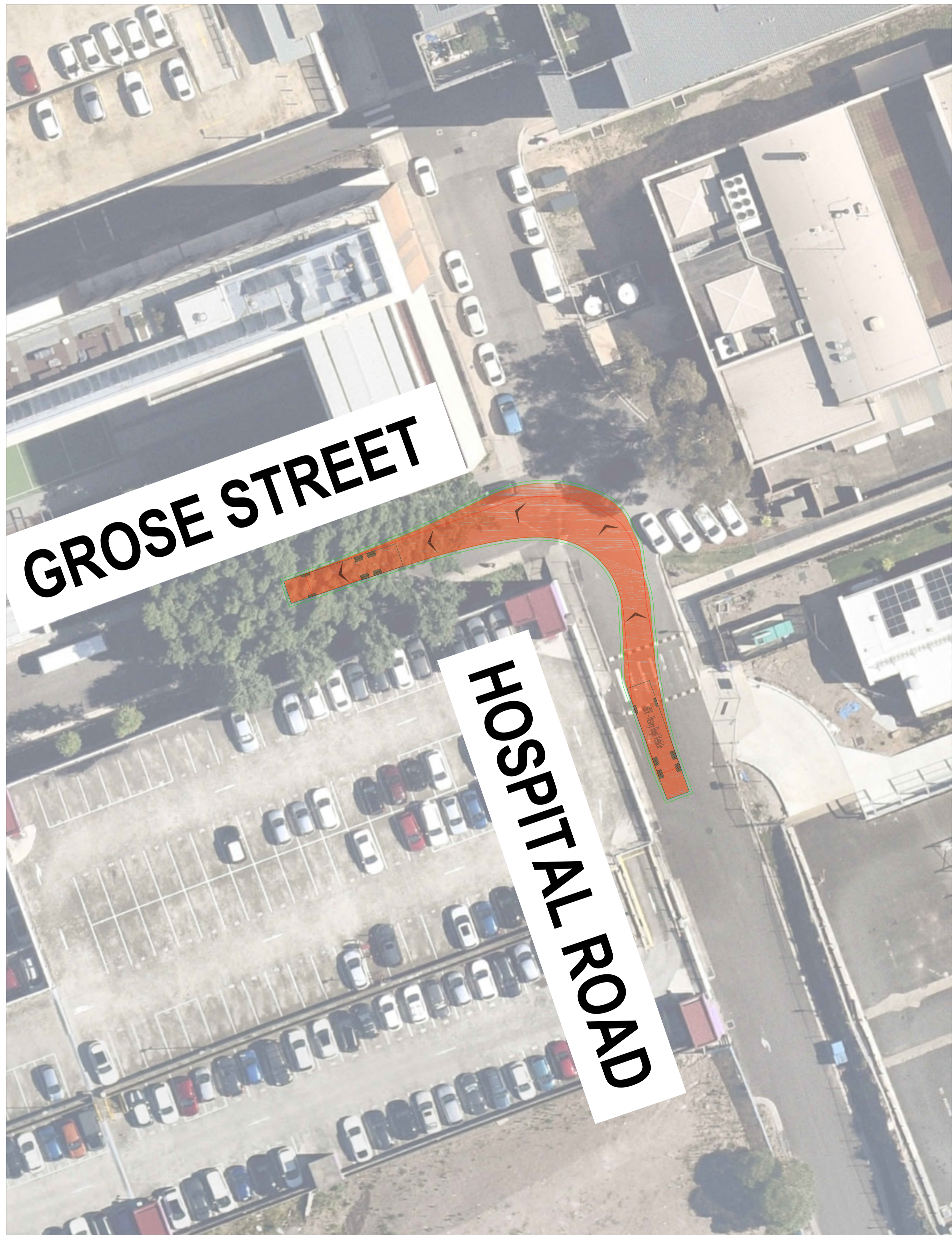
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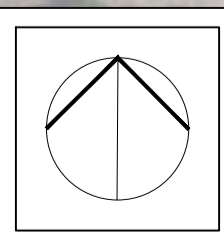
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CLIENT CPB
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PRELIMINARY
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REV	DATE	DESCRIPTION	DRAWN	REVIEWED	



DRAWING KEY

PROJECT
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DRAWING TITLE
 Swept Path Assessment

CLIENT
 CPB

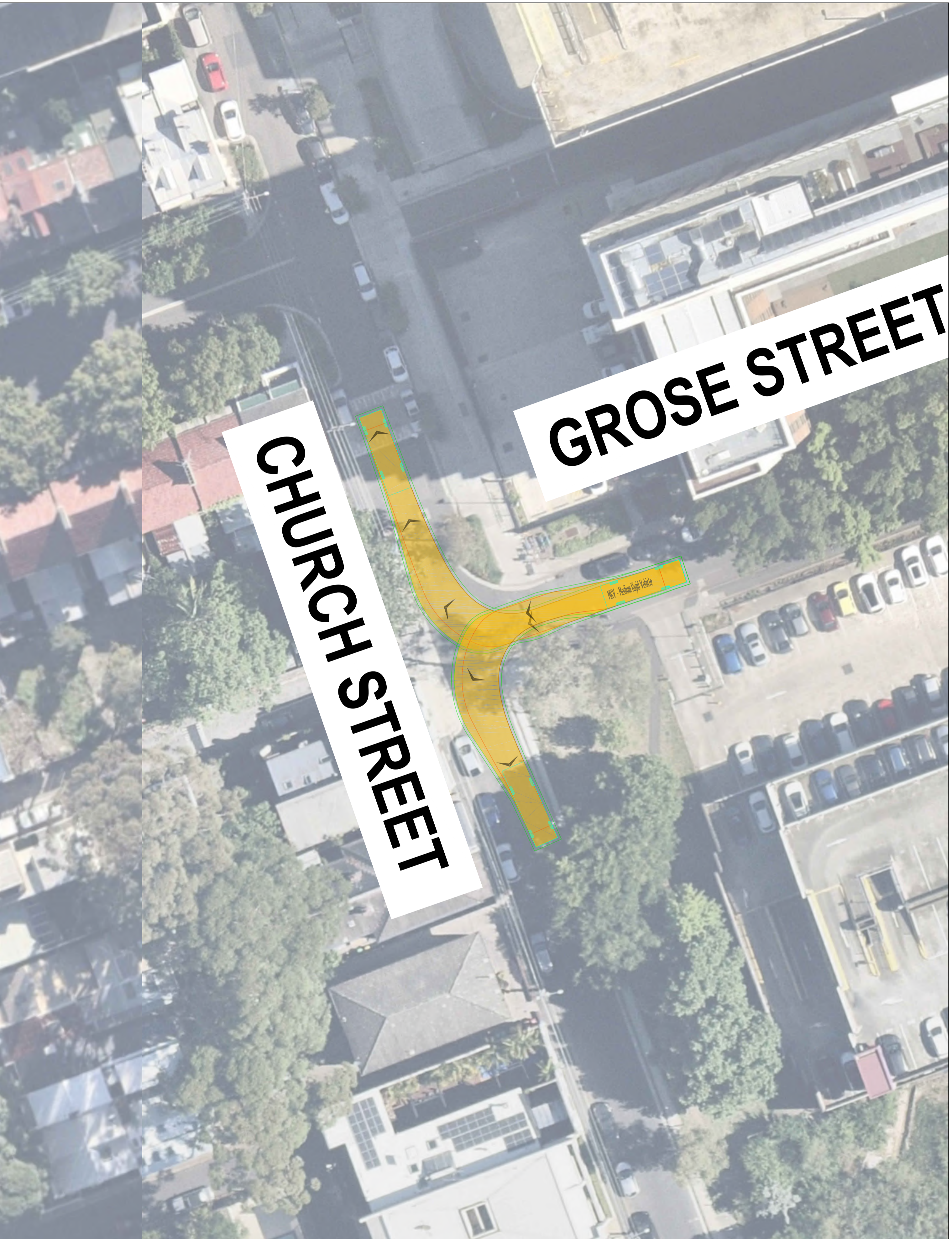
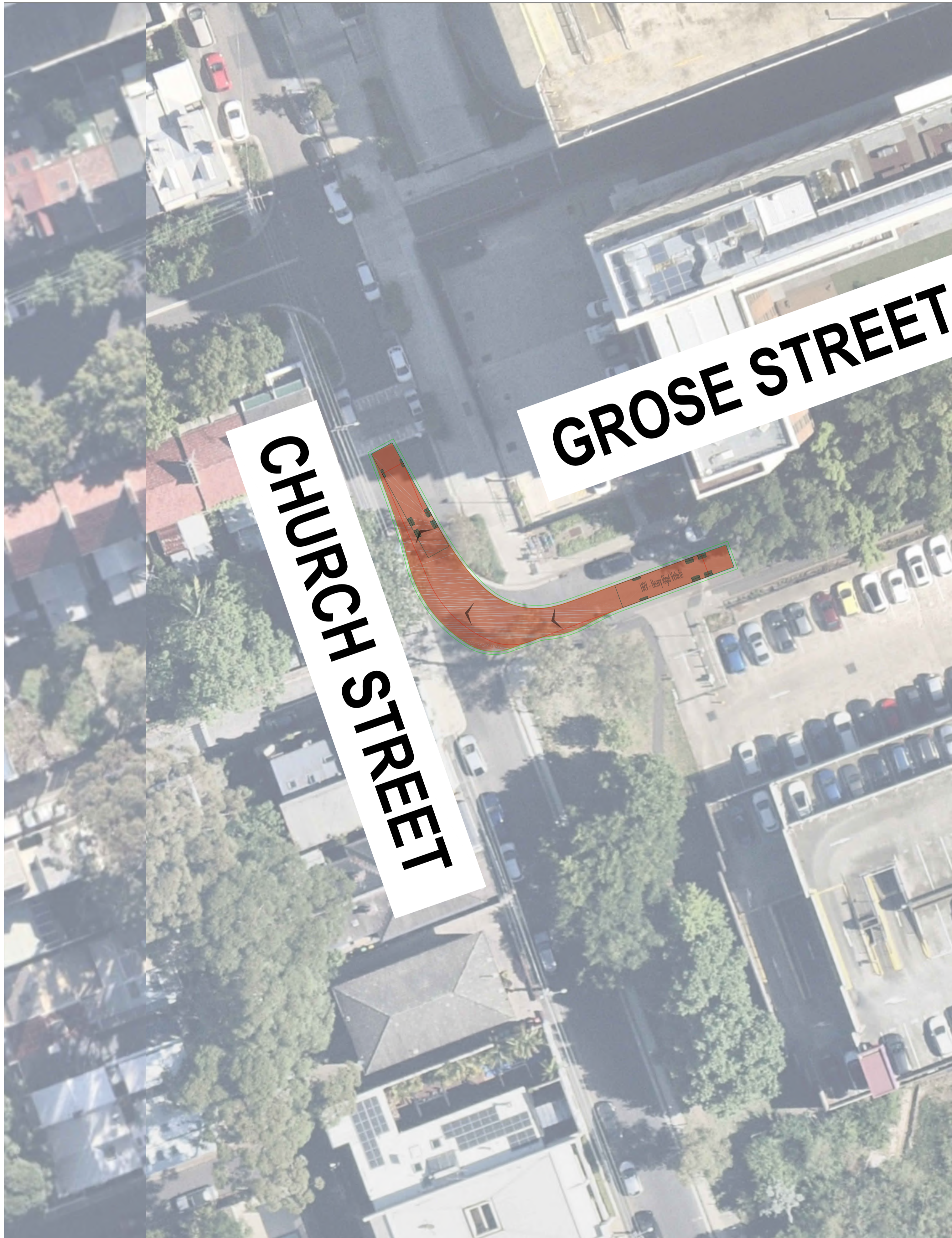
DRAWING #
 ptc-006

PROJECT #
 22-0523

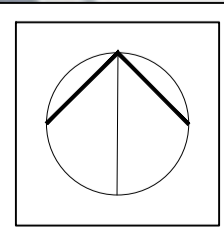
SCALE
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PRELIMINARY

REV P1



X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
P1	15.09.23	FOR INFORMATION	J.Jansen	S.Wellman	
REV	DATE	DESCRIPTION	DRAWN	REVIEWED	



DRAWING KEY

PROJECT
RPAH CTMP

DRAWING TITLE
Swept Path Assessment

CLIENT CPB
 DRAWING # ptc-007
 PROJECT # 22-0523
 SCALE 1 : 250

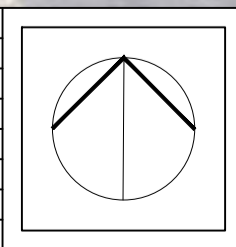
PRELIMINARY
 REV P1



PARRAMATTA ROAD

CHURCH STREET

X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
P1	15.09.23	FOR INFORMATION	J.Jansen	S.Wellman	
REV	DATE	DESCRIPTION	DRAWN	REVIEWED	



DRAWING KEY

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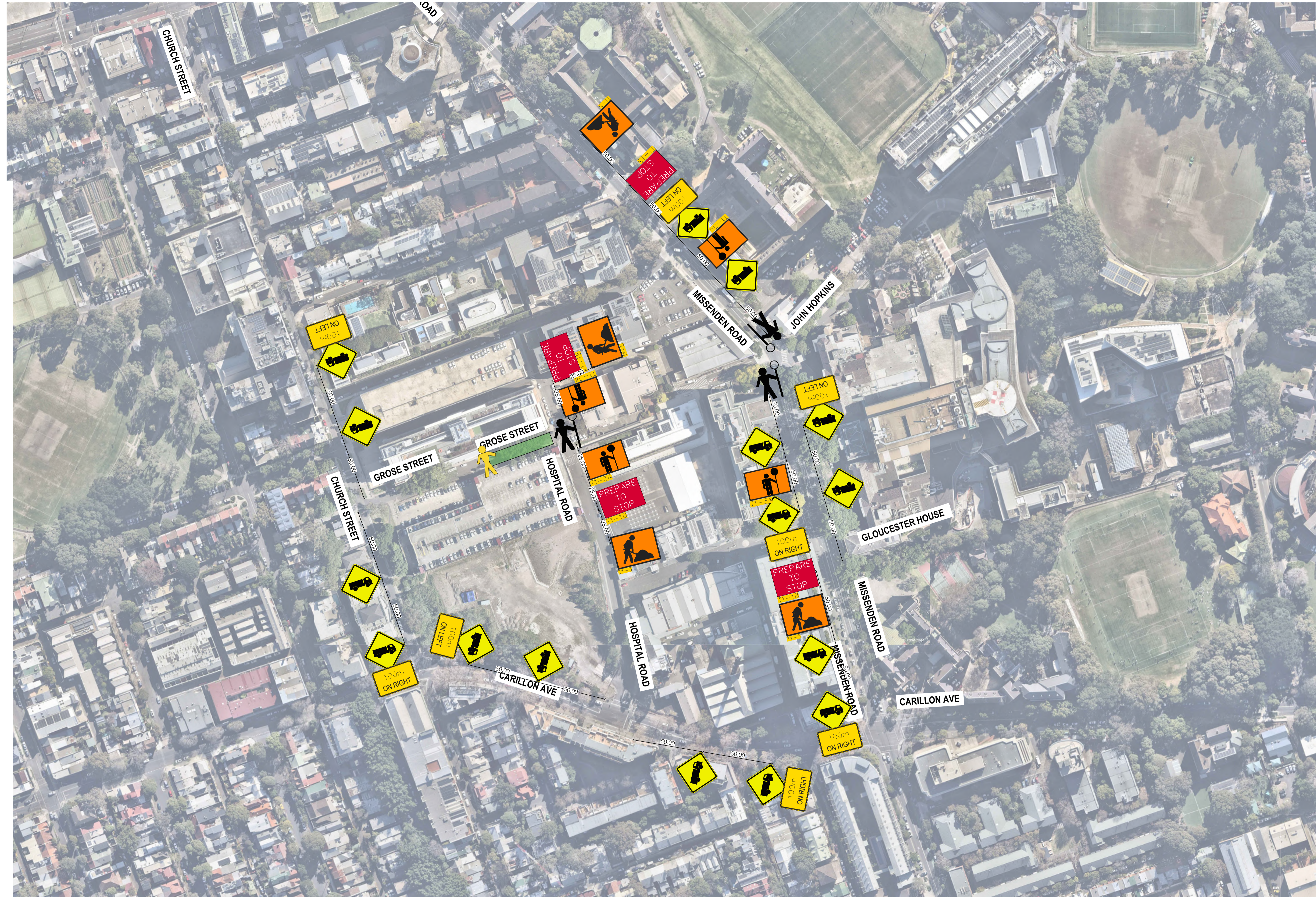
PROJECT
RPAH CTMP

DRAWING TITLE
Swept Path Assessment

CLIENT	CPB	PRELIMINARY
DRAWING #	ptc-008	
PROJECT #	22-0523	
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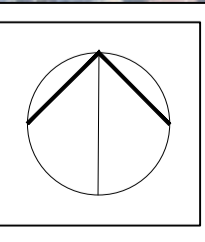
REV P1

Appendix 3. Traffic Guidance Scheme



Suite 502, 1 James Place
North Sydney NSW 2060
t +61 2 8920 0800
ptcconsultants.co

X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
X	X	X		x	x
P1	15.09.23	FOR INFORMATION	J.Jansen	S.Wellman	
REV	DATE	DESCRIPTION	DRAWN	REVIEWED	



DRAWING KEY

PROJECT
RPAH CTMP

DRAWING TITLE
Swept Path Assessment

CLIENT CPB
DRAWING # ptc-008
PROJECT # 22-0523
SCALE not to scale

PRELIMINARY

REV P1