

# ADDITIONAL ADVICE



## Transport Engineering

**Project Code:** 301401108 (301401391)

**Date:** 10 March 2022

**Version No.** C

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**SUBJECT:** 122-130 Pyrmont Bridge Road and 206 Parramatta Road, Annandale – Site Assessment

**Page 1 of** 6 (plus attachments)

## Background

A Planning Proposal for the site at 122-130 Pyrmont Bridge Road and 206 Parramatta Road, Annandale has previously been submitted. Subsequently, additional work has been completed and MHA PBR Annandale Pty Ltd (MHA PBR) engaged Stantec to complete a feasibility study to identify key transport related matters associated with the site and surrounding road network to accommodate the proposed development.

A pre-lodgement consultation meeting was held with TfNSW on 14 September 2021, and we have undertaken further works to update and provide additional information regarding the site's traffic generation and parking rates to inform the access arrangements and ground level design strategy. Additionally, further design development has been undertaken for the proposed building including basement access and design, loading dock, set-down/ pick-up facilities and ambulance parking.

The proposal envisages a 10,300m<sup>2</sup> health care building, including a private hospital supported by radiology, pathology, dental/ GP clinic, pharmacy, consulting suites and a café.

The technical note provides update to the traffic and parking assessment as they relate to the TfNSW **feedback and revised** architectural plans. It should be read in conjunction with the Transport Assessment Report<sup>1</sup> prepared by MLA Transport Planning that accompanied the previous planning proposal application on the site.

This technical note is set out in the following sections:

- changes from previous submission
- site layout and design
- intersection operation.

The site at 122-130 Pyrmont Bridge Road and 206 Parramatta Road Annandale, covers an approximate area of 2,570m<sup>2</sup> with frontages to Pyrmont Bridge Road, Parramatta Road, Mathieson Street and Cahill Street. The location of the site and its surrounding environs are shown in Figure 1 with the key site frontages shown in Figure 2 to Figure 4.

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<sup>1</sup> 122-130 Pyrmont Bridge Rd & 206 Parramatta Rd, Annandale Proposed Health Facility Planning Proposal – Transport Assessment Report, prepared by MLA Transport Planning dated 25 June 2021

Figure 1: Site Location and surrounding environs



Source: PWD Corporation Pty Ltd

Figure 2: Site extent looking north from Parramatta Road



Figure 3: Pyrmont Bridge Road frontage and existing driveway

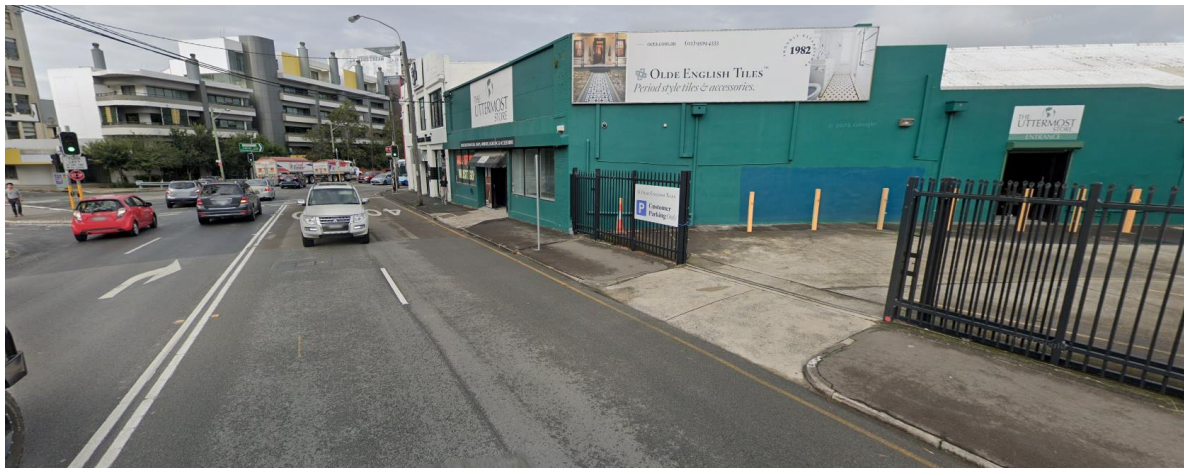




Figure 4: Mathieson Street at Parramatta Road



Source: Google streetview

## Changes from Previous Submission

MHA PBR has provided additional details as it relates to the proposed development. The potential development incorporates a 10,280m<sup>2</sup> health care building with an anticipated net leasable area of 9,816m<sup>2</sup>. The building would comprise of a private hospital supported by radiology, pathology, dental/ GP clinic, pharmacy, consulting suites and a café. The previous assessment considered a development comprising of 120 hospital beds, 27 consulting rooms and a maximum of 170 staff on site during the main day shift.

The key change from the previous development scheme is the ground floor design and site access arrangements following consultation with TfNSW. The updated current development scheme adopts Pyrmont Bridge Road as the main site access point with an internal roundabout provided on site.

The current proposed breakdown of net leasable area and additional information for each proposed use is shown in Table 1.

Table 1: Proposed Net Leasable Area (6 October 2021)

Use	Description	Operating Hours	Net Leasable Area (m <sup>2</sup> )
Hospital	90 beds, 30 healthcare staff and 5 administration staff	7 days a week	4,700
Surgery	4 operating theatres, 24 healthcare staff and 4 administration staff	Monday – Saturday	1,440
Post-Surgery	25 beds, 6 healthcare staff and 4 administration staff	Monday – Saturday	1,300
Radiology	Machines: 2 general x-ray, 1 MRI, 2 CT, 3 Ultra-Sound, 12 healthcare staff and 5 administration staff	Monday to Saturday 8:30am to 6:00pm	534
Pathology	5 rooms, 5 healthcare staff and 2 administration staff	Monday to Saturday 8:30am to 6:00pm	243
Dental/ GP Clinic	5 rooms, 5 healthcare staff and 2 administration staff	Monday to Friday 8:30am to 6:00pm	319
Consulting Suites	35 suites, 35 healthcare staff and 5 administration staff	Monday to Friday 8:30am to 6:00pm	860

Use	Description	Operating Hours	Net Leasable Area (m <sup>2</sup> )
Pharmacy	4 staff	Monday to Friday 8:30am to 6:00pm	210
Café	3 staff	Monday to Friday 8:30am to 3:00pm	210
Cleaning / Maintenance	5 staff	7 days a week	N/A
<b>Total</b>	<b>115 beds, 117 healthcare staff, 39 administration / ancillary staff</b>	<b>-</b>	<b>9,816</b>

## Site Layout and Design

The site access arrangements and how they relate to the overall ground floor set-out is critical to understanding how the proposed development will function and to assess the potential impacts on the surrounding road network. Key to this is basement car park access and location of the set-down and pick-up area relative to the access locations. Given the day surgery and private hospital regularly rely on patients being dropped off and picked up, these facilities need to be practically accommodated on-site and without risk of queuing beyond the property boundary. This is particularly relevant for any future Pymont Bridge Road access.

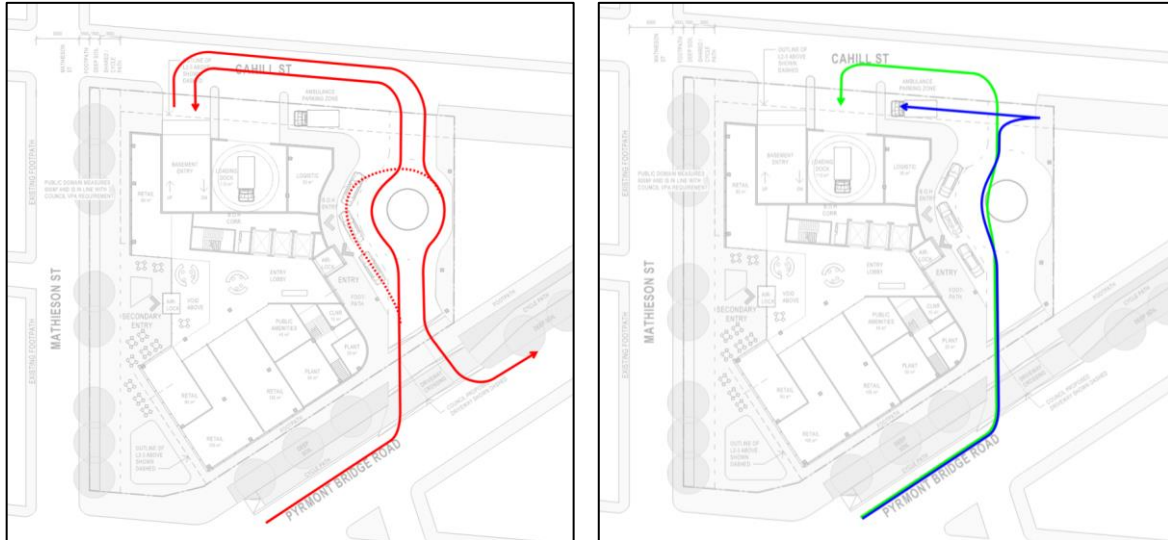
Early TfNSW engagement has indicated broad support for left-in/ left-out access on Pymont Bridge Road. Such an access would retain the existing driveway crossover in the south-east corner of the site and is critical for the site functionality, mostly on account of the narrow local laneways surrounding the site to the north and west, and difficult interface of Mathieson Street at Parramatta Road. In addition, it affords the site a logical front entrance and public address so critical to ease of access for unfamiliar users.

Use of the laneways to the north and west could support a primary Pymont Bridge Road access and allow movement between a set-down/ pick-up area and basement car park. Vehicles will however mostly approach from the west and depart to the east.

It is also noted that planning is ongoing for a cycleway to be constructed along the northern side of Pymont Bridge Road past the frontage of the site.

The potential site access strategy is shown in Figure 5. General vehicle access to and from the basement is shown in red, with the set-down/ pick-up access path shown as a dashed line. Service vehicle access to the loading dock is shown in green, and emergency access to the ambulance parking bay in blue.

Figure 5: Potential site access arrangements



Entry via Pyrmont Bridge Road allows for easy and direct access to a dedicated set-down/ pick-up area towards the eastern site boundary with a thru site link also facilitating basement car park access via Cahill Street. The set-down/ pick-up area has been designed to allow cars to complete a U-turn and exit the site via Pyrmont Bridge Road. Those exiting the basement to Cahill Street could also use this link to exit via Pyrmont Bridge Road.

Vehicle swept paths have been completed for a range of vehicle types expected to access the key areas internal to the site, and on approach and departure. The analysis is included in Attachment 1.

The site layout has been designed to accommodate independent access by vehicles up to an 8.8 metre medium rigid vehicle (MRV) with swept paths confirming appropriate site layout. The design of the proposed cycleway will likely trigger some minor modifications to ensure all vehicles can enter and exit the site via Pyrmont Bridge Road as necessary.

The design also allows for ambulances to use the set-down and pick-up area or alternatively, access a dedicated ambulance bay to the rear of the site. The orientation of the ambulance bay intends to deliver an appropriate design that can accommodate the necessary patient transfer protocols, thereby also avoiding the need to use the main entrance.

On this basis, a Pyrmont Bridge Road access could be expected to accommodate about 80 per cent of site traffic (about 75 inbound and 45 outbound in the AM peak) and the local laneways about 20 per cent (about 25 trips) during any peak hour. This is appropriate having regard to the road hierarchy and approach and departure routes.

With the set-down/ pick-up area accommodating about 25 per cent of all entering vehicles, this would equate to about 20 arrivals in any peak hour (or one vehicle every three minutes). Based on an average stay of five minutes, there would be no more than two to three vehicles in the set-down/ pick-up area at any one time. With practical capacity for three to four vehicles, this would be a manageable daily operational outcome. On-site management practices and visitor information (plus signage and linemarking) would enforce use of the area. Additional set-down and pick-up spaces could also be provided in the basement car park to alleviate any such congestion.

## Intersection Operation

The Transport Assessment Report prepared by MLA indicated the site could generate 144 and 106 vehicles trips in the AM and PM peak periods respectively. Intersection modelling at the intersections of Parramatta Road at Mathieson Street and Pyrmont Bridge Road indicated these intersections currently operate satisfactorily at Level of Service A and B respectively. The addition of the development traffic had no material effects on the intersection operation, with most development traffic accessing and exiting the site via Mathieson Street.

The latest plans for the development include the main access and egress via Pyrmont Bridge Road. Traffic using Mathieson Street will be significantly reduced with an associated increase in traffic using the Pyrmont Bridge Road / Parramatta Road intersection. The redistribution of traffic through the intersections as a result of the updated access arrangements are anticipated to have a nominal impact on the intersection operation.

# ATTACHMENT 1

## Swept Path Analysis



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SWEPT PATH KEY

—

VEHICLE CENTRE LINE

—

VEHICLE TYRE PATH

—

VEHICLE BODY PATH

—

300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

5.20

0.95

3.05

B99

Width : 1.94

Track : 1.84

Lock to Lock Time : 6.0

Steering Angle : 33.9

5.20

0.95

3.05

B99

Width : 1.94

Track : 1.84

Lock to Lock Time : 6.0

Steering Angle : 33.9

MODIFY TURNING HEAD  
LINEMARKING TO ACCOMMODATE  
B99 VEHICLE SWEEP PATHS

ARCHITECTURAL BASE IN BLUE  
DRAWING AR-B-10-00  
REVISION N/A  
BY BVN  
RECEIVED 25.02.2022  
  
NEARMAP AERIAL IMAGE  
DATED 4.10.2021

**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.

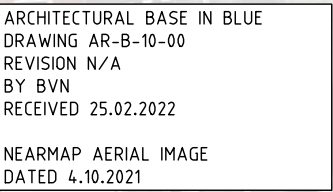
DESIGNED  
M.RIMAC  
  
APPROVED BY  
R.HAZELL

DESIGN CHECK  
R.HAZELL  
  
DATE ISSUED  
4 MARCH 2022

SCALE  
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CAD FILE NO.  
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122-130 PYRMONT ROAD AND  
206 PARRAMATTA ROAD, ANNANDALE, NSW 2038  
LEVEL 00  
VEHICLE SWEEP PATH ASSESSMENT  
DRAWING NO. 301401108-01-01 SHEET 01 OF 11 ISSUE P4







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**SWEPT PATH KEY**

VEHICLE CENTRE LINE

VEHICLE TYRE PATH

VEHICLE BODY PATH

300mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

6.40

1.05

3.80

SRV

Width : 2.30

Track : 2.30

Lock to Lock Time : 6.0

Steering Angle : 38.0

ARCHITECTURAL BASE IN BLUE  
DRAWING AR-B-10-00  
REVISION N/A  
BY BVN  
RECEIVED 25.02.2022  
NEARMAP AERIAL IMAGE  
DATED 4.10.2021

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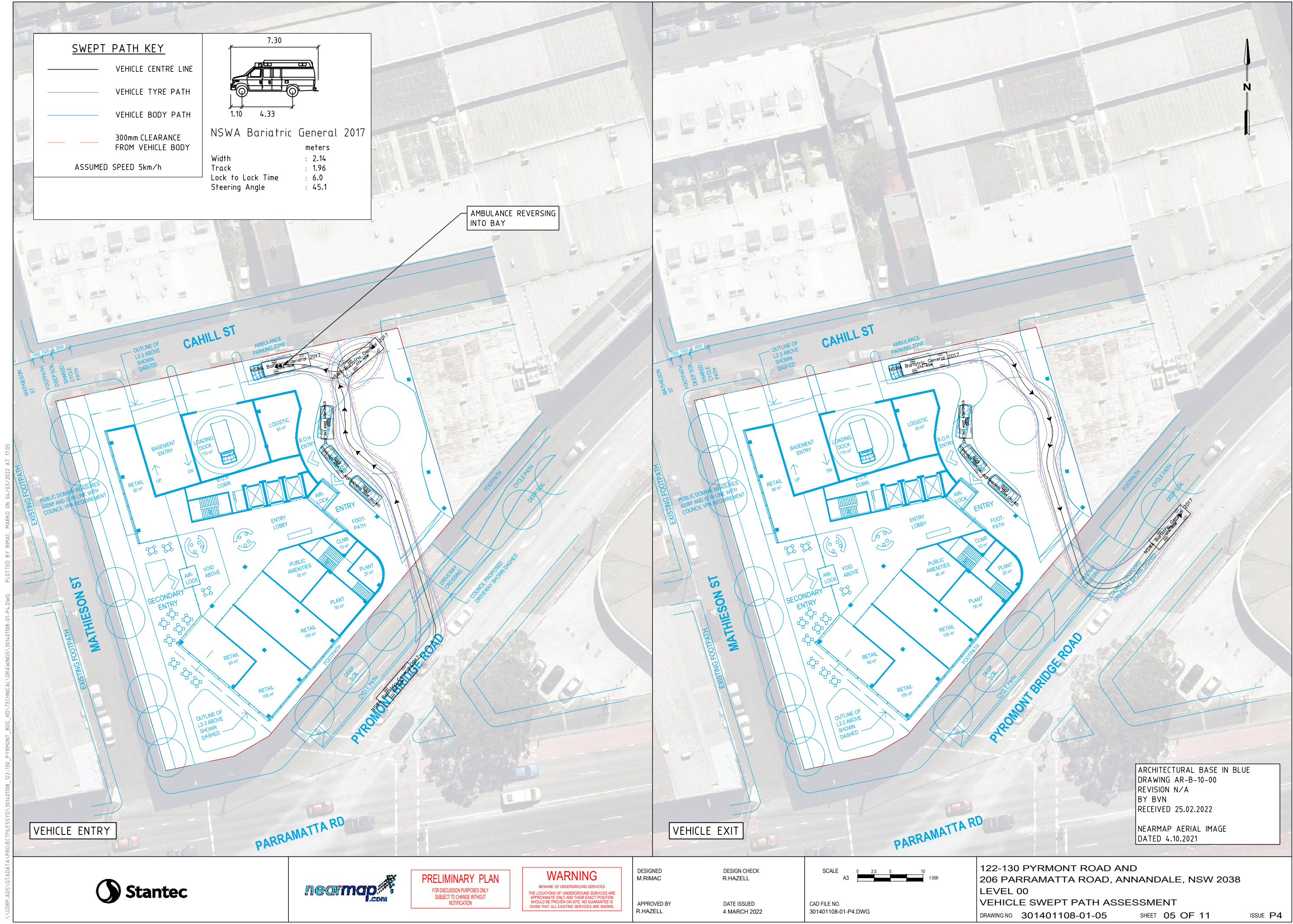
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CAD FILE NO.  
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122-130 PYRMONT ROAD AND  
206 PARRAMATTA ROAD, ANNANDALE, NSW 2038  
LEVEL 00  
VEHICLE SWEPT PATH ASSESSMENT  
DRAWING NO. 301401108-01-03 SHEET 03 OF 11 ISSUE P4





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122-130 PYRMONT ROAD AND  
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VEHICLE SWEEP PATH ASSESSMENT  
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