Ref: 206/2024
Date: Nov 2024
Issue: A

Proposed Mixed-Use Project

43, 45 & 49 Warriewood Road, Warriewood

Construction Pedestrian & Traffic Management Plan

Transport and Traffic Planning Associates

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1.0 Introduction

A Development Application has been approved for the demolition and subdivision of land into 12 lots and the construction of 2 residential flat buildings. The site is located at 43, 45 & 49 Warriewood Road, Warriewood (Figure 1).

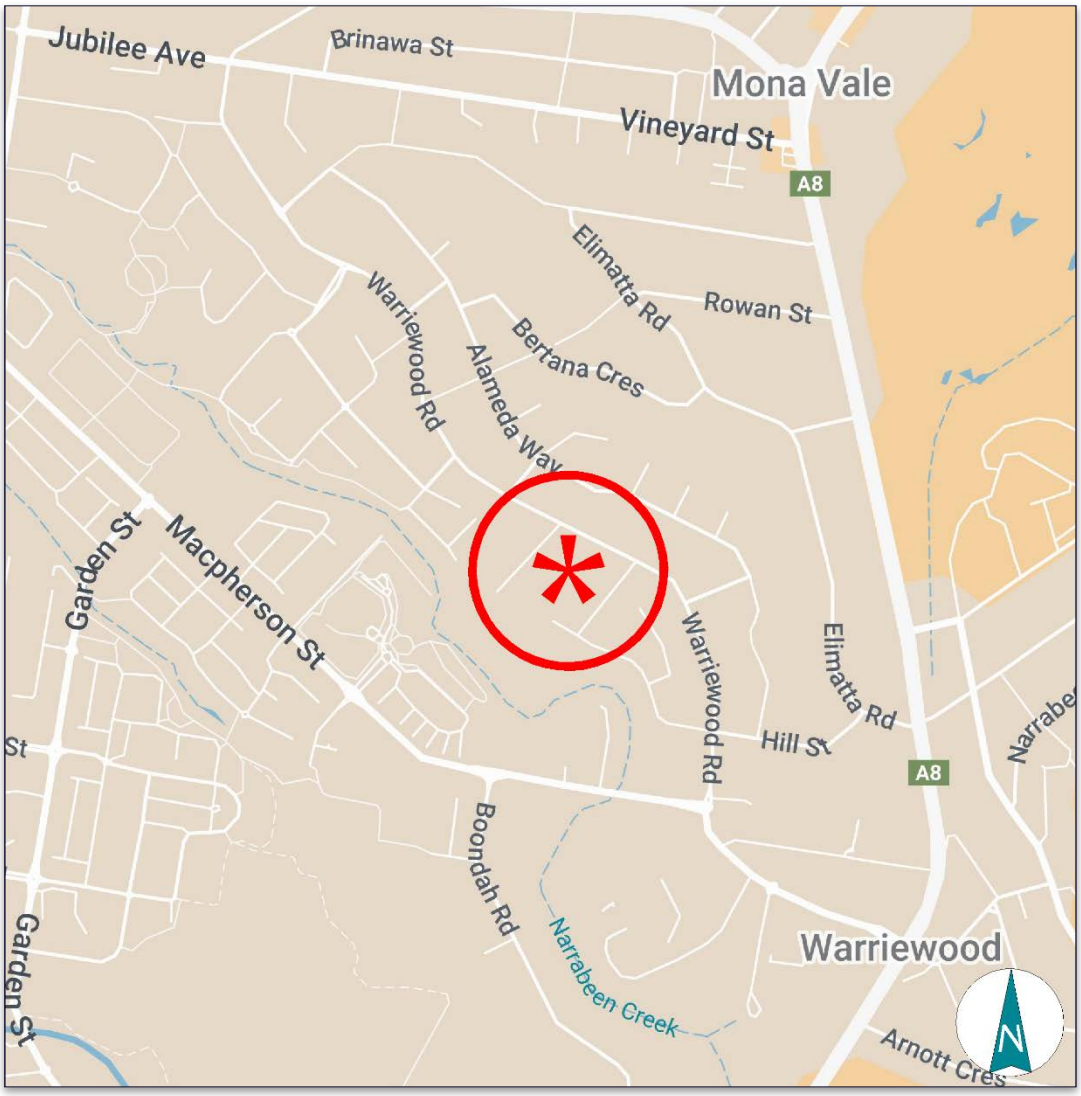


Figure 1 - Site Location

This report has been prepared by Transport and Traffic Planning Associates in satisfaction of the requirement for the submission of a Construction Pedestrian & Traffic Management Plan as part of the DA2021/2600 Consent Condition No. 24.

2.0 Proposed Development

2.1 Site, Context & Existin Circumstances

The development site (Figure 2) comprises of Lots 1 & 2 in DP349085. The site has a frontage of some 82m to the southern side of Warriewood Road and 84m to the northern side of Lorikeet Grove. The site comprises a generally rectangular shaped total area of 21,500m^2.

The surrounding uses comprise:

- Extensive Medium-High Density residential developments surrounding the area
- Warriewood Brook located directly the the south of the site
- Aglicare Warriewood Brook Retirement Community located some 390m to the west of the site
- Mona Vale Ambulance Station located some 650m to the east

Figure 2 - Site Boundary

2.2 Approved Development Scheme

Consent has been granted to demolish the existing building and excavate the site to provide for basement parking and a level building platform. The proposed residential buildings will comprise:

- 12 lots
- 2 residedntial flat buildings
- Basement parking with 81 car spaces

Vehicle access will be provided by a driveway on the Lorikeet Grove frontage.

Details of the approved development scheme are provided on the plans prepared by Archidrome which accompany the Development Application and are reproduced in part in Appendix A.

2.3 Construction Program

A process has been established for the completion of the various work with a maximum duration of 26 months. The various phases are as follows:

Phase	Duration
Demolition	2 months
Excavation	6 months
Construction & Fitout	18 months
Total	**26 months**

2.4 Construction Process

2.4.1 Demolition

This activity will involve the demolition of the existing buildings on the site. These processes are anticipated to take 4 weeks respectively to complete using up to an 18.1m Truck & Dog. The truck activity associated with this process will average 1 visitation per day and trucks will enter and depart the site under traffic controller supervision via the Warriewood Road frontage. The number of workers on-site will be some 4 persons.

There will be limited on-site parking provided for construction workers. All workers will be encouraged to use public transport to access the site given the site's proximity to public transport services or to carpool wherever possible.

A tool drop-off and storage facility will be provided on-site. This would allow tradespeople to drop off and store their tools and machinery, enabling them to use public transport to travel to/ from the site on a daily basis. Workers will also be informed of the appropriate tool/ equipment drop-off and storage arrangement within site sheds and amenities. Bus, Train and Ferry schedules will be provided to all workers during the site induction to promote alternative modes of transport.

2.4.2 Excavation

This activity will involve the excavation of the site. This process is anticipated to take 6 months to complete and the truck activity associated with this process will have a maximum of 4 trucks per day, with trucks entering and departing the site under traffic controller supervision via the Warriewood Road frontage. The maximum trucks size required during this process will be an 18.1m Truck & Dog. The maximum number of workers on-site will be some 4 persons per day.

There will be limited on-site parking provided for construction workers. All workers will be encouraged to use public transport to access the site given the site's proximity to public transport services or to carpool wherever possible.

2.4.3 Construction & Fitout

The construction and fitout phase will take approximately 18 months and at peak activity, involve a maximum of 30 people on the site at any one time.

Whilst the activity on the site will be more intense during this period, the movement of heavy vehicles will only average around 2 visitations per day. Trucks during these works will continue to be restricted to a 12.5m Heavy Rigid Vehicle (HRV). Workers will continue to be encouraged at all times to utilise the public transport system which exists in the vicinity of the site and alternatively to carpool wherever possible.

The provision for loading/unloading for this process will involve trucks standing in the loading area, with all materials being unloaded and stored within the site. Pedestrians walking past the development will continue to be protected by an A-Class Fence and under the supervision of TfNSW-certified traffic controllers.

3.0 Existing Road Network and Traffic Conditions

3.1 Road Network

The road network serving the site (Figure 3) comprises:

- *A8 Pittwater Road* - a State/Regional Road and Arterial route which connects Pittwater to the Sydney CBD
- *A3 Mona Vale Road* – a State Road and Arterial route which connects Pittwater to Gordon
- *Barrenjoey Road* – a State Road and Arterial route which connects Palm Beach to Mona Vale
- *Warriewood Road* – a collector route which connects Vinyeard Street to A8 Pittwater Road
- *Macpherson Street/Ponderosa Parade* – a collector route which connects Warriewood Road to A8 Pittwater Road
- *Vineyard Street/Jubilee Avenue* – a collector route which connects A8 Pittwater Road to Ponderosa Parade
- *Garden Street* – a collector route which connects Macpherson Street to A8 Pittwater Road

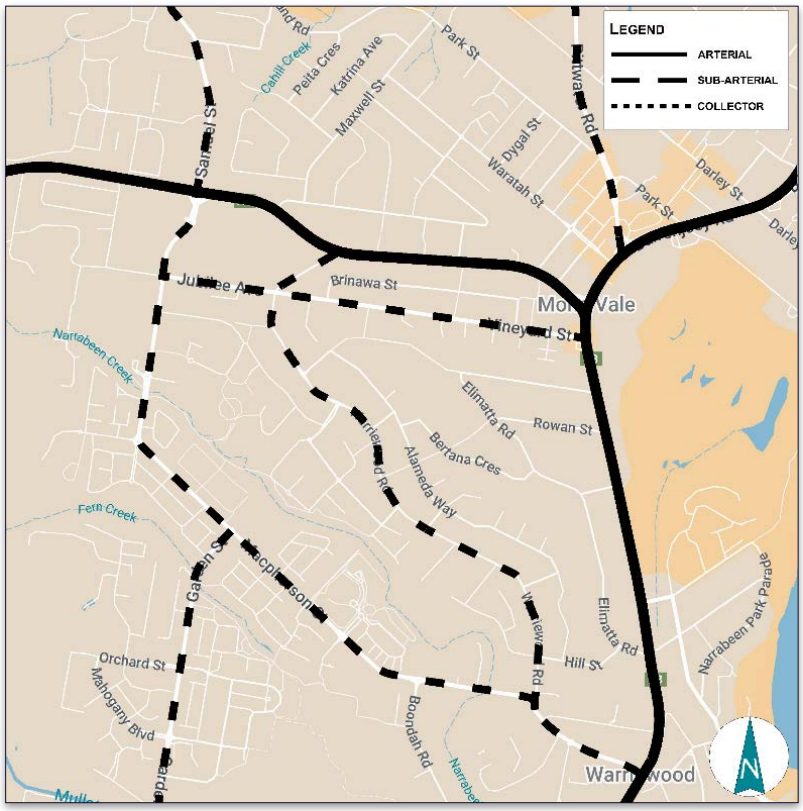


Figure 3 - Road Network

3.2 Traffic Controls

The existing traffic controls which have been applied to the road system in the vicinity of the site (Figure 4) include:

- The traffic control signals along Mona Vale Road and Pittwater Road
- The STOP signs on Julibee Avenue
- The STOP sign on Turimetta Street onto Pittwater Road
- The no right turn restriction from Vineyard Street nd Elimatta Road onto Pittwater Road
- The GIVE WAY signs on Brinawa Street onto Vineyard Street
- The Roundabout controls along Macpherson Street, Ponderosa Parade, Garden Street, Warriewod Road, Pittwater Road and Waratah Street

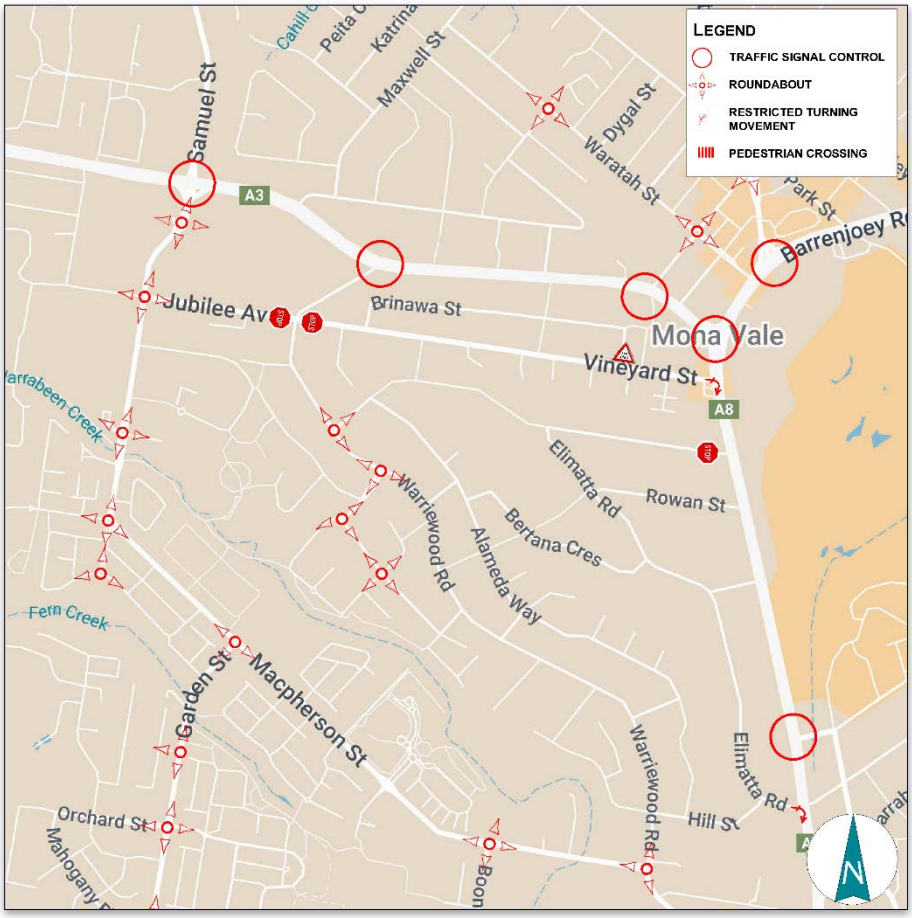


Figure 4 - Traffic Controls

3.3 Traffic Conditions

An indication of the prevailing traffic conditions on the road system serving the site is provided by data published by the TfNSW which is expressed in terms of Annual Average Daily Traffic (AADT) and flows in the vicinity include:

LOCATION	AADT
Barrenjoey Road, 20m East of Pittwater Road	39,811
Pittwater Road, 20m South of Mona Vale Road	47,310

Observations undertaken in the area during the morning and afternoon peak periods reveal that the prevailing peak traffic conditions at the intersections in the vicinity of the site are satisfactory.

3.4 Transport Services

The site is serviced by the 185 bus route located some 20m from the site which operates between Narrabeen and Mona Vale via Warriewood Valley.

The following routes are located some 600m east of the site:

- Bus route 199: Palm Beach and Manly
- Bus route 190X: North Avalon to City Wynyard

The following route is located some 800m west of the site:

- Bus route 182: Mona Vale and Narrabeen

Details of the available public transport services are provided in Appendix B.

4.0 Construction Traffic Management Plan

4.1 Construction Vehicle Route

Truck movements associated with the demolition and excavation process will approach and depart the site via the Warriewood Road frontage and truck movements assosciated with construction will enter and depart the site via the Lorikeet Grove frontage as displayed in Figure 5.

All trucks involved with the works will access the site using the classified State and Regional Road system. It is unlikely that works of this scale will result in concurrent truck arrivals/departures. Nevertheless, it is noted that any truck queuing or marshalling of construction vehicles will not be permitted on the road network, and call-up procedures will be in place to manage arrivals, if necessary, by the nominated contractor.

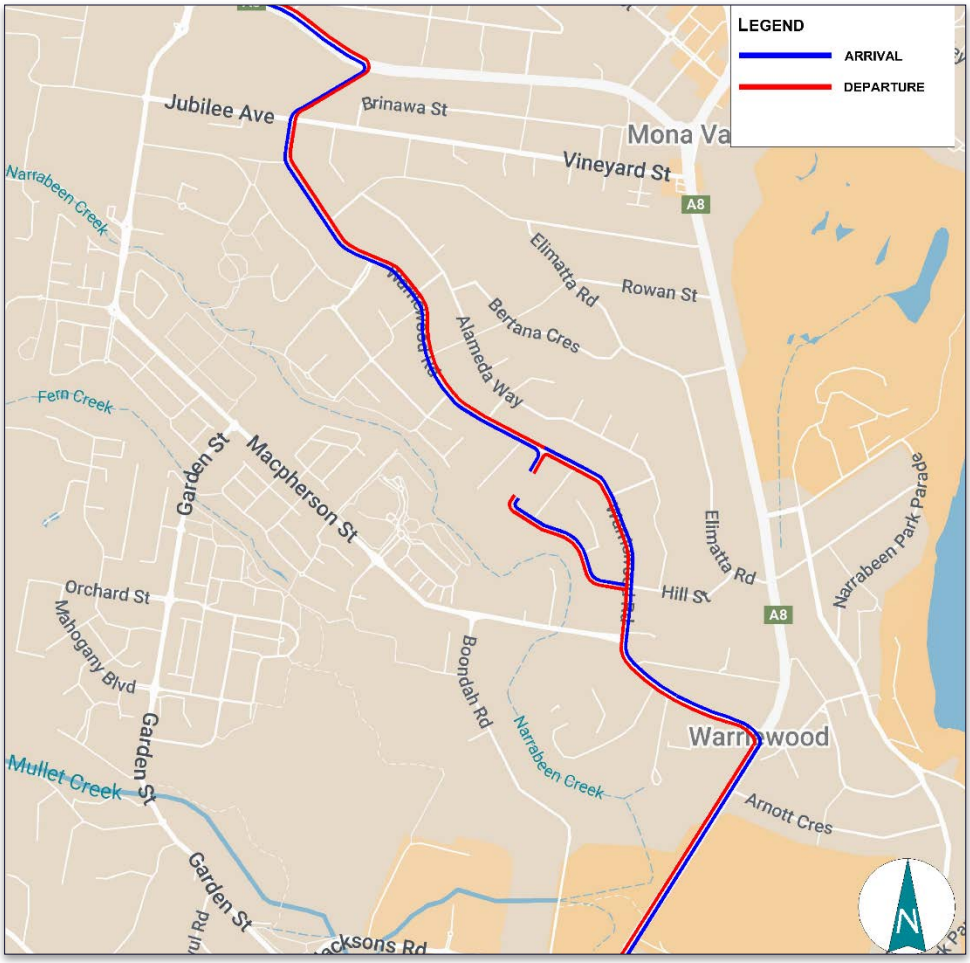


Figure 5 - Truck Routes

4.2 Truck Manoeuvres & Site Access

The largest truck generally requiring access to the site during the works per stage is as follows:

Phase	Truck
Demolition	18.1m Truck & Dog
Excavation	18.1m Truck & Dog
Construction & Fitout	12.5m Heavy Rigid Vehicle

The turning path assessment details are provided in Appendix C, indicating satisfactory truck manoeuvring in and out of the loading area.

4.3 Truck Movements

The envisaged truck movements per day throughout the works is as follows:

Phase	Trucks
Demolition	2
Excavation	4
Construction & Fitout	2

Trucks servicing the site are restricted to the approved construction hours only when accessing the streets in the vicinity of the site.

4.4 Construction Hours

The allowed hours of construction activity will be as per the Consent Conditions of the Application's Approval as follows:

Building construction and delivery of material hours are restricted to:

- 7.00 am to 5.00 pm inclusive Monday to Friday,
- 8.00 am to 1.00 pm inclusive on Saturday,
- No work on Sundays and Public Holidays.

Demolition and excavation works are restricted to:

- 8.00 am to 5.00 pm Monday to Friday only.

Noise from construction activities shall comply with the Protection of the Environmental Operations (Noise Control Regulation 2017).

4.5 Site Induction

All workers and visitors employed on the site by the appointed contractor (including sub-contractors) will be required to undergo a formal 'site induction' process, and all the inductions will be performed specifically to each trade according to Workcover OH & S requirements.

The induction will include details of approved access routes to and from the construction site for site staff and delivery vehicles, parking arrangements, as well as standard environmental, WHS, driver protocols and emergency procedures. The agreed work hours must be included as part of this induction.

4.6 Traffic Guidance Scheme

The TGS presents traffic management principles, with detailed information for work site operations contained in the Roads and Maritime Services Traffic Control at Work Sites Technical Manual Version 6.1 dated 28 February 2022. The control of traffic at work sites must be undertaken with reference to WorkCover requirements and RCC Workplace Health and Safety Manuals.

The TGS is prepared by a Certified Traffic Controller (under TfNSW regulations) in accordance with Australian Standards 1742.3. The TGS includes:

- The proposed works site
- Accredited site personnel at the site access
- Work area and traffic control signage

The TGSs for the construction processes are provided in Appendix D.

4.7 Pedestrian Management

Pedestrians walking along the site frontage will be protected by temporary construction fencing. A TfNSW accredited traffic controller shall always supervise all vehicle movements into and out of the site and ensure that the extendable pedestrian barriers are erected when truck movements are occurring into and out of the site.

4.8 Impact on Emergency Vehicle Access

The proposed works would not affect access to the site and neighbouring sites by emergency vehicles. Emergency protocols on the site would indicate a requirement for the traffic controller to assist with emergency access on the site. All truck movements to the site and the incident point would be suspended and cleared. Consequently, any potential impacts on emergency access would be effectively managed throughout the works.

The liaison would be maintained with the ambulance, fire services, police, and other emergency services agencies throughout the construction period, and a 24-hour contact would be made available for 'out-of-hours' emergencies and access.

As such, there would be no impacts on the provision of existing emergency vehicle access to the site or other neighbouring properties as a result of the proposed construction activities.

4.9 Road Serviceability

The contractor will ensure that the roads in the vicinity of the site remain in clean and serviceable states during the construction. Any damage to kerbs, signage, trees, footpaths etc. will be repaired or replaced to the satisfaction of Council.

4.10 Parking

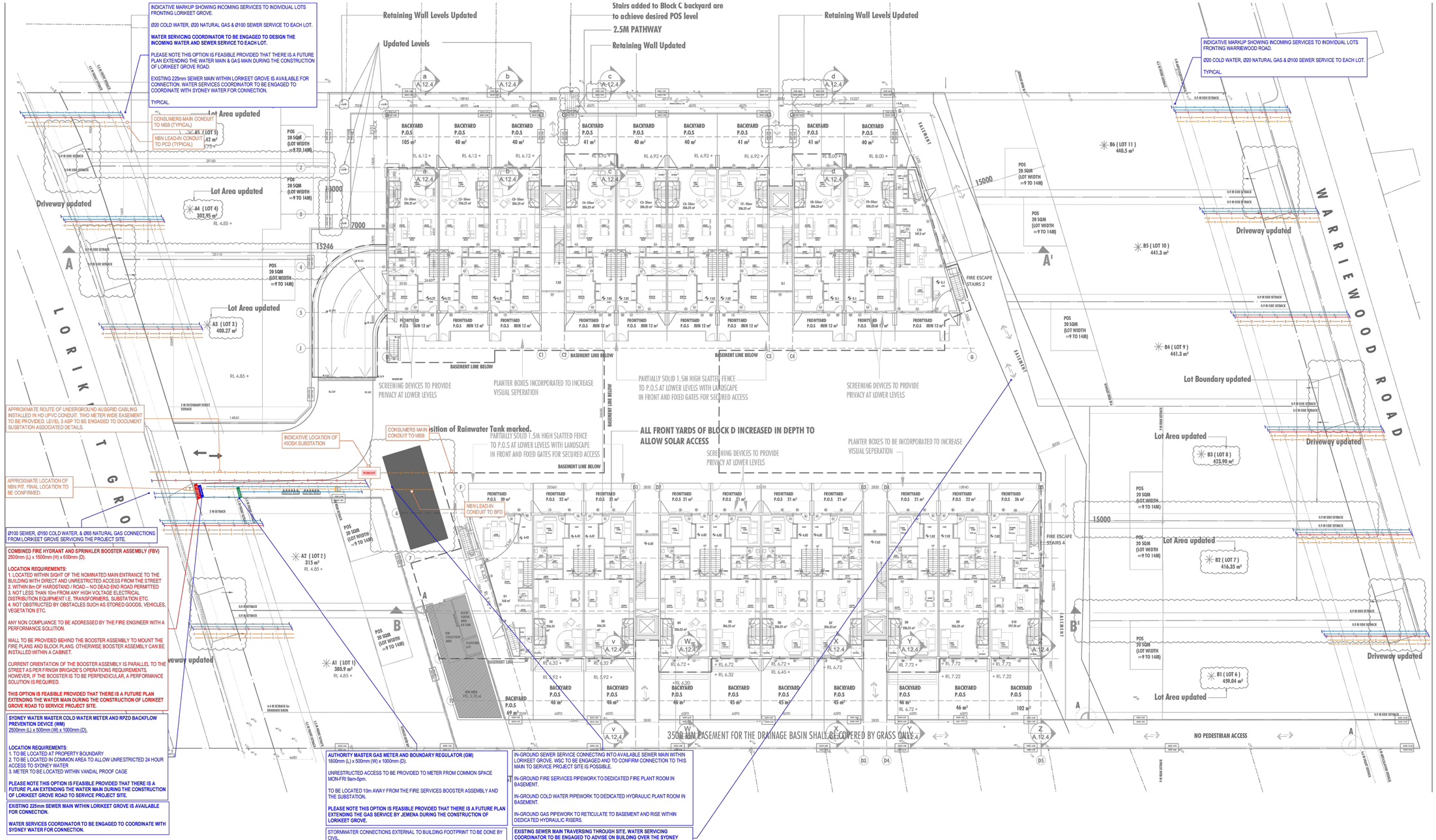
While there is sufficient on and off-street parking available for workers they will nevertheless be encouraged to use the highly accessible public transport in the vicinity.

4.11 Materials Handling

All materials are to be stored within the site boundary at all times. Loading/unloading of materials will occur from within the site by hand or with the assistance of trolleys/forklifts. No materials shall be placed dumped or left on any council road or footpath area at any time.

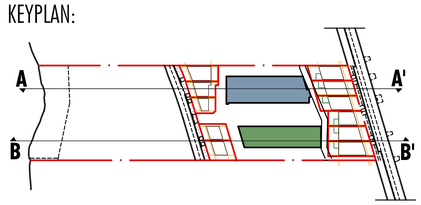
Appendix A
Approved Plan

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Established 1994



NOTES:
THE DEVELOPMENT IS CAPABLE OF BEING FULLY BY THE FOLLOWING -
RETICULATED WATER AND SEWER - REFER TO REVIEW BY SYDNEY WATER CO-ORDINATOR (KFW ORION GROUP).
THIS DRAWING IS AN EXTRACT FROM ENGINEERING DRAWINGS BY WALKERBAI - DOC NO. : CSK - 001 FOR ELECTRICITY, GAS AND COMMUNICATIONS

KEYPLAN:



SITE ANALYSIS - ESSENTIAL SERVICES PLAN - PART 2

PROJECT LOCATION : 43-45&49 WARRIEWOOD ROAD, WARRIEWOOD

ARCHIDROME
206, LEVEL 2, 8 HELP ST, CHATSWOOD, N.S.W 2067 TARUNCHADHA@ARCHIDROME.NET ARCHITECT'S REG. NO. 8777 NSW ARCHIDROME.COM.AU

DRWG. NO. A02.2

06/03/24
NTS @A1
R-12

2.5M PATHWAY

UNIT C10 GROUND FLOOR LAYOUT AND UNIT FOOTPRINT ADJUSTED IN ACCORDANCE TO THE EASEMENT LINE INTERNAL LAYOUT ADJUSTED

BUILDING PROFILE ADJUSTED, UNIT LAYOUT MODIFIED EASEMENT IS CLEAR OF ARTICULATION, BUILDING LINE AND LOT BOUNDARY

LOT BOUNDARY MODIFIED
BUILDING FOOTPRINT MODIFIED AS PER THE UPDATED LOT BOUNDARY

LOT AREA UPDATED

LORIKEET GROVE

WARRIEWOOD ROAD

A5 (LOT 5)
297.42 m²
RL 5.75 +

A4 (LOT 4)
302.95 m²
RL 4.85 +

A3 (LOT 3)
400.27 m²
RL 4.85 +

A2 (LOT 2)
315 m²
RL 4.85 +

A1 (LOT 1)
302.34 m²
RL 4.85 +

B6 (LOT 11)
440.5 m²

B5 (LOT 10)
435.34 m²

B4 (LOT 9)
414.21 m²

B3 (LOT 8)
423.90 m²

B2 (LOT 7)
416.35 m²

B1 (LOT 6)
453.15 m²

POS
20 SQM ACHIEVED
(LOT WIDTH
=9 TO 14M)

BACKYARD P.O.S 105 m² / 40 m² / 41 m² / 46 m²

FRONTYARD P.O.S MIN 12 m²

FIRE ESCAPE STAIRS 3

FIRE ESCAPE STAIRS 4
RL 8.35
LANDING 250MM ABOVE NATURAL GROUND LEVEL

EASEMENT

BASEMENT LINE BELOW

SCREENING DEVICES TO PROVIDE PRIVACY AT LOWER LEVELS

PLANTER BOXES INCORPORATED TO INCREASE VISUAL SEPERATION

PARTIALLY SOLID 1.5M HIGH SLATTED FENCE TO P.O.S AT LOWER LEVELS WITH LANDSCAPE IN FRONT AND FIXED GATES FOR SECURED ACCESS

Position of Rainwater Tank marked.

ALL FRONT YARDS OF BLOCK D INCREASED IN DEPTH TO ALLOW SOLAR ACCESS

PLANTER BOXES TO BE INCORPORATED TO INCREASE VISUAL SEPERATION

UNIT C10 GROUND FLOOR LAYOUT AND UNIT FOOTPRINT MODIFIED IN ACCORDANCE TO THE EASEMENT LINE INTERNAL LAYOUT ADJUSTED
FIRE STAIRCASE RELOCATION MODIFIED

FIRE STAIRCASE MODIFIED
NUMBER OF RISERS ADJUSTED

BASEMENT LINE

NO PEDESTRIAN ACCESS

LOT BOUNDARY MODIFIED

UNIT D10 GROUND FLOOR EXTERNAL WALL MODIFIED
INTERNAL LAYOUT ADJUSTED

BUILDING PROFILE ADJUSTED, LAYOUT MODIFIED
EASEMENT IS CLEAR OF ARTICULATION,
BUILDING LINE AND LOT BOUNDARY

3500 MM EASEMENT FOR THE DRAINAGE BASIN SHALL BE COVERED BY GRASS ONLY

NOTES

* BUILDING ENVELOPE PLANS ONLY
THE DESIGN OF THE INDIVIDUAL DWELLINGS WITHIN THE LOTS WILL BE SUBJECT TO A SEPARATE APPROVAL PROCESS

REFER TO SHEET A03.α FOR SITE PLAN WITH FENCING DETAILS
REFER TO LANDSCAPE SET PROVIDED BY CPS -SECTION-
LANDSCAPE CONCEPT : SOUTH
AND
DETAIL PLAN : SHARED PATHWAY

KEY

T.O.W +0.00
B.O.W +0.00
PROPOSED RETAINING WALL LEVELS

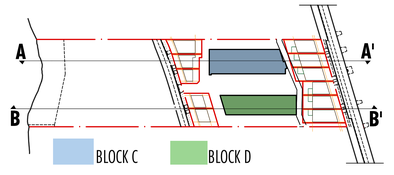
T.O.W - TOP OF WALL
B.O.W - BOTTOM OF WALL

PROPOSED SITE LEVELS ARE HIGHLIGHTED IN BLUE TEXT AS +X.XX (IN VALUES)

REVISION R12

- BUILDING PROFILE ADJUSTED AS PER THE EASEMENT ON THE EAST SIDE OF THE SITE.
- EASEMENT ON THE EAST IS CLEAR OF FENCE, ARTICULATION, BUILDING LINE OR LOT BOUNDARY.
- LOT BOUNDARY AND FENCE UPDATED FOR LOTS B1 (LOT 6), B4 (LOT 9) AND B5 (LOT 10). BUILDING FOOTPRINT MODIFIED AS PER THE UPDATED LOT BOUNDARY FOR LOT B4 AND B5
- FIRE ESCAPE STAIRCASE 4 UPDATED ON THE EAST SIDE OF THE BUILDING BLOCK D,
NUMBER OF RISERS INCREASED. LANDING IS NOW 250MM OVER THE NATURAL GROUND LEVEL
- GROUND FLOOR LAYOUT FOR UNIT D10 IN BLOCK D AND C10 IN BLOCK C UPDATED/MODIFIED IN ACCORDANCE TO THE EASEMENT LINE.
INTERNAL LAYOUT ADJUSTED AS PER THE MODIFIED UNIT PRINT.
- FENCE LAYOUT MODIFIED.
BASEMENT LINE BELOW ADJUSTED

KEY PLAN:



LEGEND:

- PROPOSED SITE
- LATEST REVISION
- LETTERBOX LOCATION FOR ALL UNITS ADJACENT TO THE DRIVEWAY
- A GATES PROVIDED FOR MAINTENANCE ACCESS ONLY
- FENCE LINE
- BASEMENT LINE BELOW

BASIX Energy Rating
Certificate Number I30GS7ISKL
single-dwelling rating 6.0av stars
multi-unit development (attach listing of ratings) heating 23.5av MJ/m²
If selected, data specified is the average across the entire development cooling 25.1av MJ/m²
Recessed downlights confirmation: Rated with Rated without
Assessor Name/Number Sowmya Sastry VIC/BDAV/10/1014
Assessor Signature Date 13/12/23

SITE PLAN

PROJECT LOCATION : 43-45&49 WARRIEWOOD ROAD, WARRIEWOOD

ARCHIDROME
206, LEVEL 2, 8 HELP ST, CHATSWOOD, N.S.W 2067 TARUNCHADHA@ARCHIDROME.NET ARCHITECT'S REG. NO. 8777 NSW ARCHIDROME.COM.AU

DRWG. NO. A03

06/03/2024
1:150 @ A0
R-12

LOT BOUNDARY MODIFIED
BUILDING FOOTPRINT MODIFIED AS PER THE UPDATED LOT BOUNDARY

LOT AREA UPDATED

FIRE STAIRCASE LOCATION MODIFIED

FIRE STAIRCASE MODIFIED
NUMBER OF RISERS ADDED

ACCESS UNITS ARE
REACHABLE USING THIS LIFT

ACCESS UNITS ARE
REACHABLE USING THIS LIFT

LOT BOUNDARY MODIFIED

A5 (LOT 5)
297.42 m²

A4 (LOT 4)
302.95 m²

A3 (LOT 3)
400.27 m²

A2 (LOT 2)
315 m²

A1 (LOT 1)
302.34 m²

B6 (LOT 11)
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B5 (LOT 10)
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B4 (LOT 9)
414.21 m²

B3 (LOT 8)
423.90 m²

B2 (LOT 7)
416.35 m²

B1 (LOT 6)
453.15 m²

POS
20 SQM ACHIEVED
(LOT WIDTH
=9 TO 14M)

SLOPE 1:60

BI-CYCLE PARKING

GARBAGE DROP OFF

CAR WASH BAY

PLANT ROOM

GARBAGE TRANSPORT ROOM

PLATFORM LIFT

SHADED ZONE

STORAGE

0.9 M SIDE SETBACK

2 M SECONDARY STREET SETBACK

2 M SETBACK

6.5 M FRONT SETBACK

9 M REAR SETBACK

EXISTING PUB IN

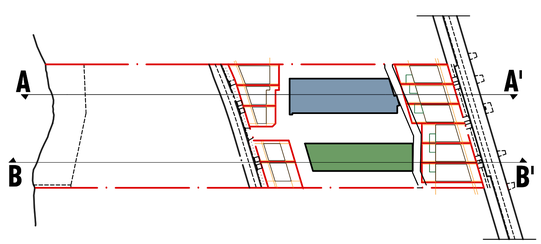
NOTES:

PARKING CALCULATIONS

PARKING FOR RESIDENTS	THE DUPLEX UNITS IN THE GROUND AND FIRST FLOOR ARE DESIGNED WITH STORAGE THAT EXCEEDS THE REQUIREMENTS THROUGH EXPANSIVELY DESIGNED STORAGE INSIDE THE UNITS AT LAUNDRY, KITCHEN, LIVING AND BEDROOM AREAS. IN ADDITION TO THESE, A STORAGE LOCKER HAS ALSO BEEN PROVIDED FOR EACH UNIT IN THE BOTTOM FLOOR BEHIND THE CAR PARK
REQUIRED - 68	
PROVIDED - 68	
PARKING FOR VISITORS	
REQUIRED - 12	
PROVIDED - 13	

REVISION R12

- BASEMENT PROFILE MODIFIED.
- NUMBER OF RISERS ADDED TO FIRE STAIRCASE 4 IN BLOCK D
- FIRE STAIRCASE 2 LOCATION MODIFIED AS PER THE UPDATED GROUND FLOOR FOOTPRINT



Energy Rating
Certificate Number I30GS7ISKL
single-dwelling rating 6.0av stars
multi-unit development (attach listing of ratings) heating 23.5av MJ/m²
If selected, data specified is the average across the entire development cooling 25.1av MJ/m²
Recessed downlights confirmation: Rated with Rated without
Assessor Name/Number Sowmya Sastry VIC/BDAV/10/1014
Assessor Signature Date 13/12/23

BASEMENT PLAN

PROJECT LOCATION : 43-45&49 WARRIEWOOD ROAD, WARRIEWOOD

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DRWG. NO. A04

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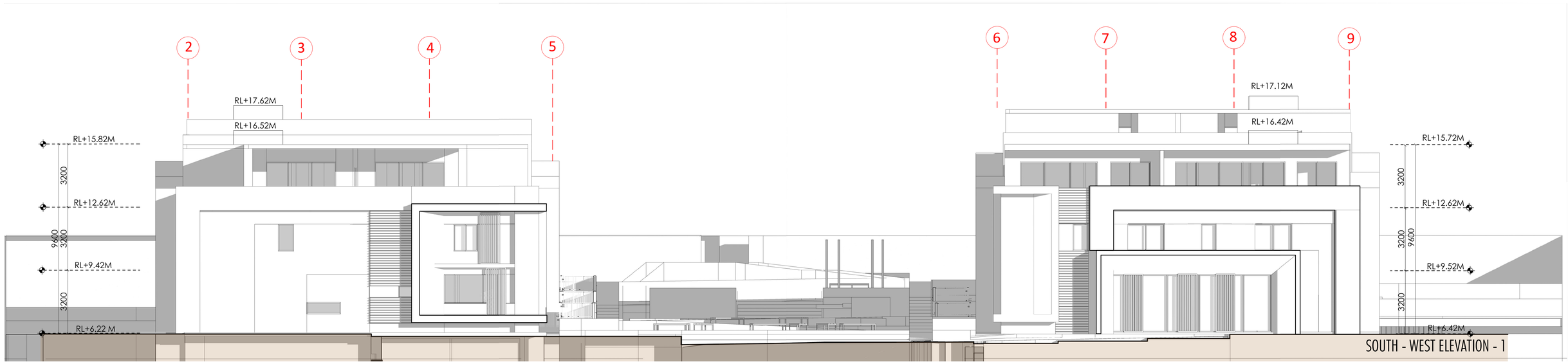
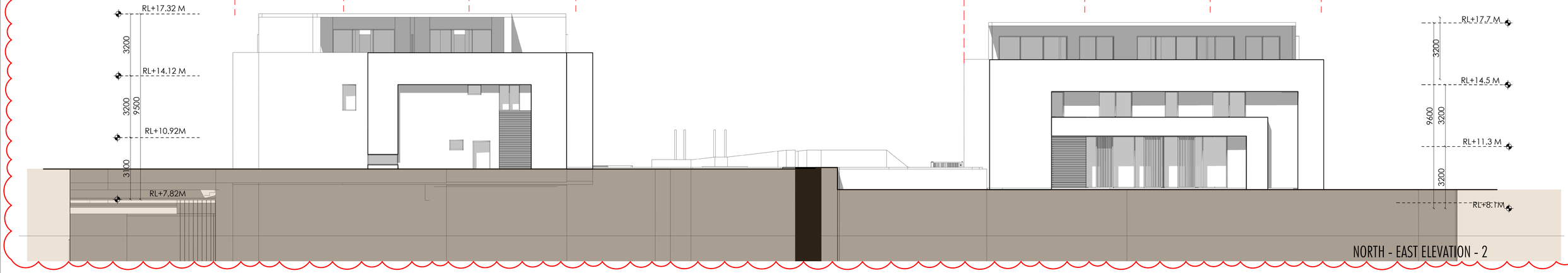
R-12



SOUTH - WEST ELEVATION - 1

Articulation modified
Elevations updated as per the amendments made to plans and articulation.

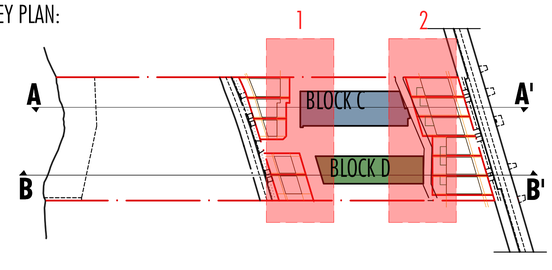


NORTH - EAST ELEVATION - 2

REVISION R12

- ARTICULATION MODIFIED ON NORTH EAST SIDE OF BLOCK C AND D.
- ELEVATIONS UPDATED AS PER THE AMENDMENTS MADE TO PLANS AND ARTICULATION.

KEY PLAN:



Energy Rating Certificate Number I30GS7ISKL

- ☐ single-dwelling rating — 6.0av stars
- ☑ multi-unit development (attach listing of ratings) — heating 23.5av MJ/m² — cooling 25.1av MJ/m²
  If selected, data specified is the average across the entire development

Recessed downlights confirmation: ☐ Rated with ☑ Rated without

Assessor Name/Number Sowmya Sastry VIC/BDAV/10/1014

Assessor Signature _____ Date 13/12/23

ELEVATIONS 03

PROJECT LOCATION : 43-45&49 WARRIEWOOD ROAD, WARRIEWOOD

ARCHIDROME
206, LEVEL 2, 8 HELP ST, CHATSWOOD, N.S.W 2067 TARUNCHADHA@ARCHIDROME.NET ARCHITECT'S REG. NO. 8777 NSW ARCHIDROME.COM.AU

DRWG. NO. **A11.3**

06/03/24
1:100 @A1
R-12

Appendix B
Transport Service Maps

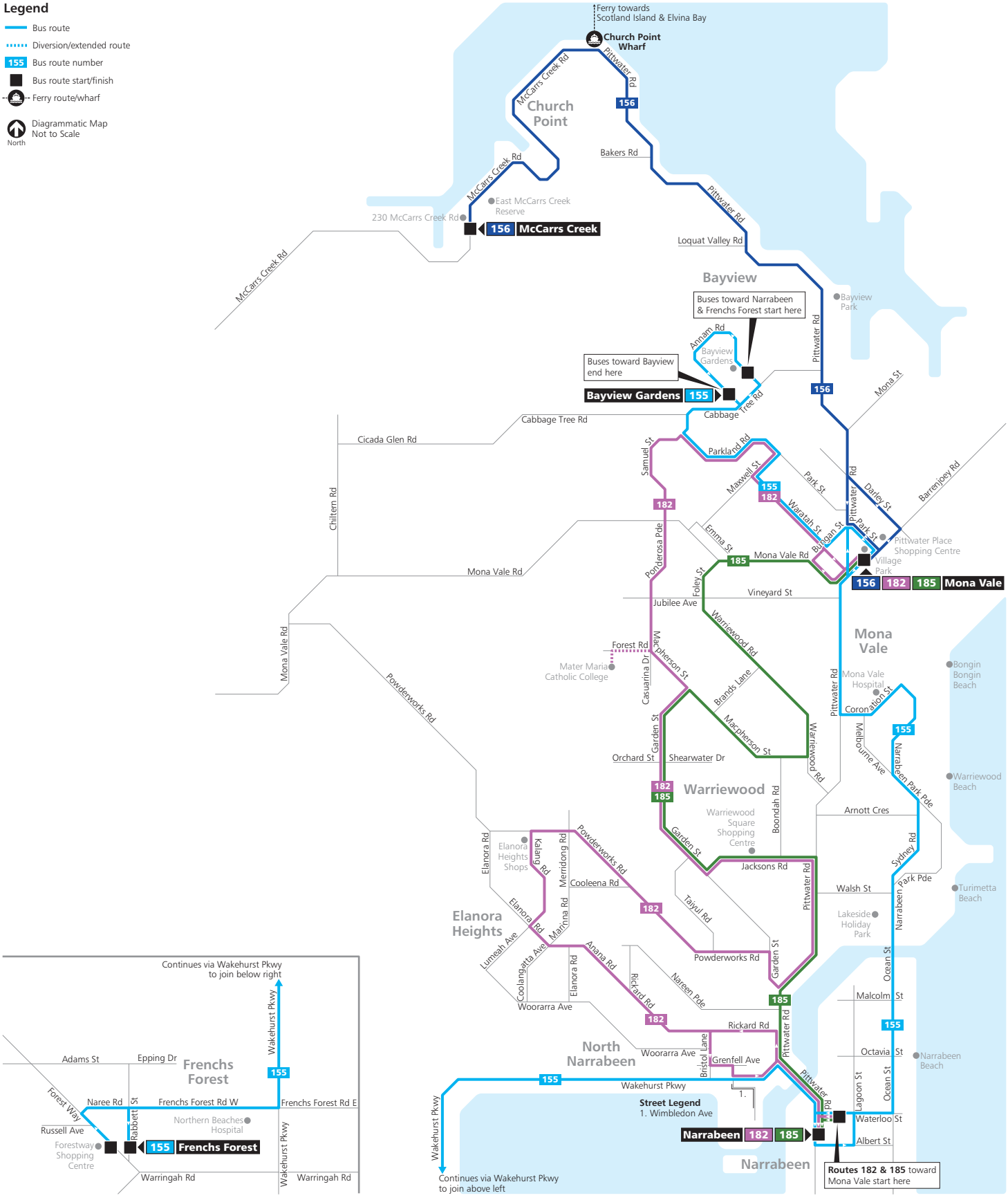
ttpa TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Established 1994

Routes 155, 156, 182, 185

B

Legend

- Bus route
- Diversion/extended route
- 155 Bus route number
- Bus route start/finish
- Ferry route/wharf
- Diagrammatic Map Not to Scale



NSW GOVERNMENT Transport

transportnsw.info

Routes B1, BN1, 154x, 181x, 190x, 199

Route B1 to City Wynyard
Picks up passengers only at Mona Vale B-Line, then picks up and sets down passengers at Warriewood B-Line, Narrabeen B-Line, Collaroy B-Line, Dee Why B-Line, Warringah Mall, Manly Vale B-Line, Spit Junction, Neutral Bay Junction, and Wynyard.

Route B1 to Mona Vale
Picks up passengers only at Wynyard, then picks up and sets down passengers at Neutral Bay Junction, Spit Junction, Manly Vale B-Line, Warringah Mall, Dee Why B-Line, Collaroy B-Line, Narrabeen B-Line, Warriewood B-Line, and Mona Vale B-Line.

Route BN1 to City QVB
Picks up passengers only at Mona Vale B-line, then picks up and sets down passengers at Warriewood B-Line, Narrabeen B-Line, Collaroy B-Line, Dee Why B-Line, Warringah Mall, Manly Vale B-Line, Spit Junction, Neutral Bay Junction, Wynyard and Queen Victoria Building.

Route BN1 to Mona Vale
Picks up passengers only at Queen Victoria Building, then picks up and sets down passengers at Wynyard, Neutral Bay Junction, Spit Junction, Manly Vale B-Line, Warringah Mall, Dee Why B-Line, Collaroy B-Line, Narrabeen B-Line, Warriewood B-Line, and Mona Vale B-Line.

Route 154x to Milsons Point
Picks up passengers only at Dee Why Shops, then picks up and sets down passengers at Warringah Mall, Kenneth Road Manly Vale, Spit Junction, Neutral Bay Junction, then all stops.

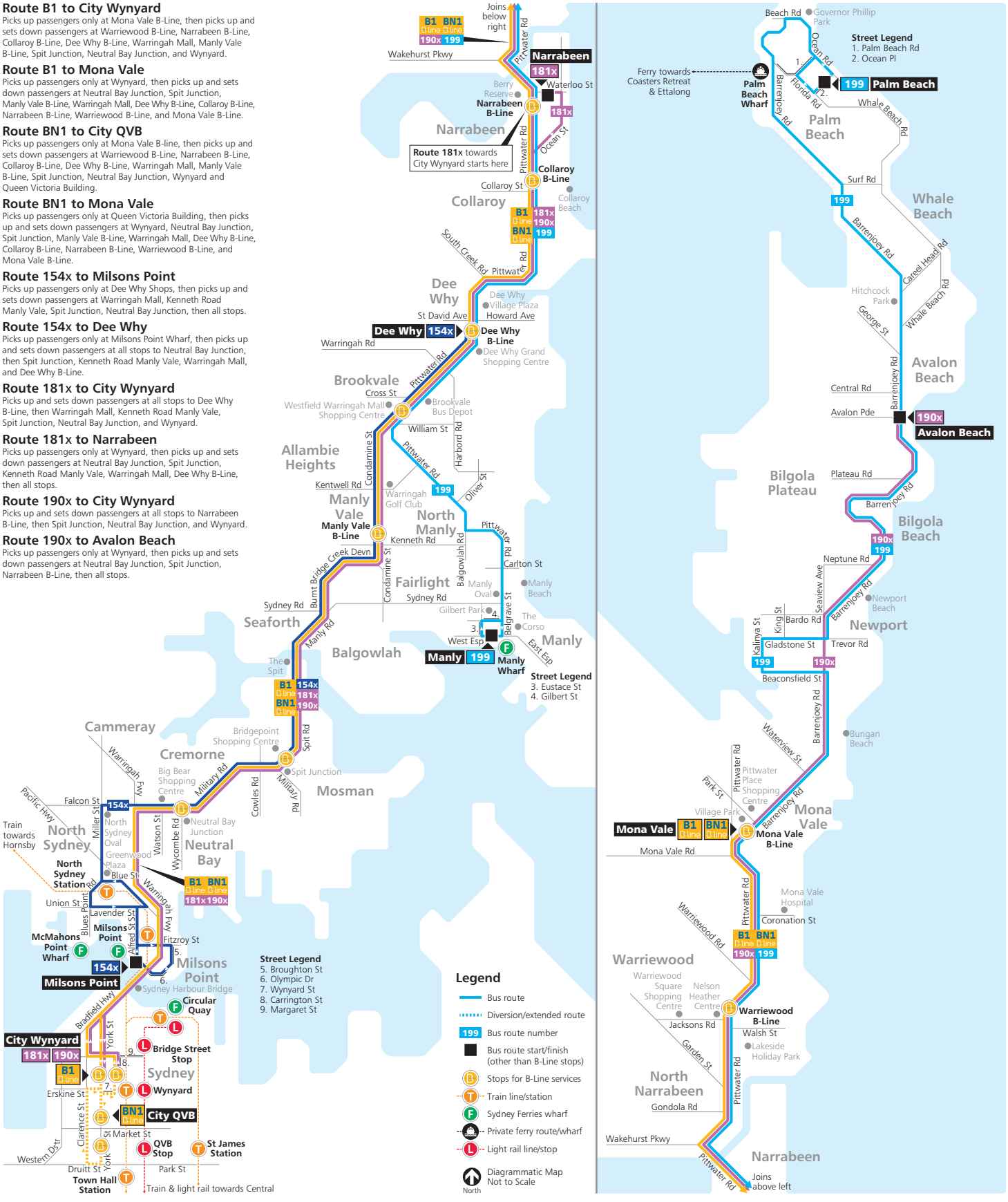
Route 154x to Dee Why
Picks up passengers only at Milsons Point Wharf, then picks up and sets down passengers at all stops to Neutral Bay Junction, then Spit Junction, Kenneth Road Manly Vale, Warringah Mall, and Dee Why B-Line.

Route 181x to City Wynyard
Picks up and sets down passengers at all stops to Dee Why B-Line, then Warringah Mall, Kenneth Road Manly Vale, Spit Junction, Neutral Bay Junction, and Wynyard.

Route 181x to Narrabeen
Picks up passengers only at Wynyard, then picks up and sets down passengers at Neutral Bay Junction, Spit Junction, Kenneth Road Manly Vale, Warringah Mall, Dee Why B-Line, then all stops.

Route 190x to City Wynyard
Picks up and sets down passengers at all stops to Narrabeen B-Line, then Spit Junction, Neutral Bay Junction, and Wynyard.

Route 190x to Avalon Beach
Picks up passengers only at Wynyard, then picks up and sets down passengers at Neutral Bay Junction, Spit Junction, Narrabeen B-Line, then all stops.

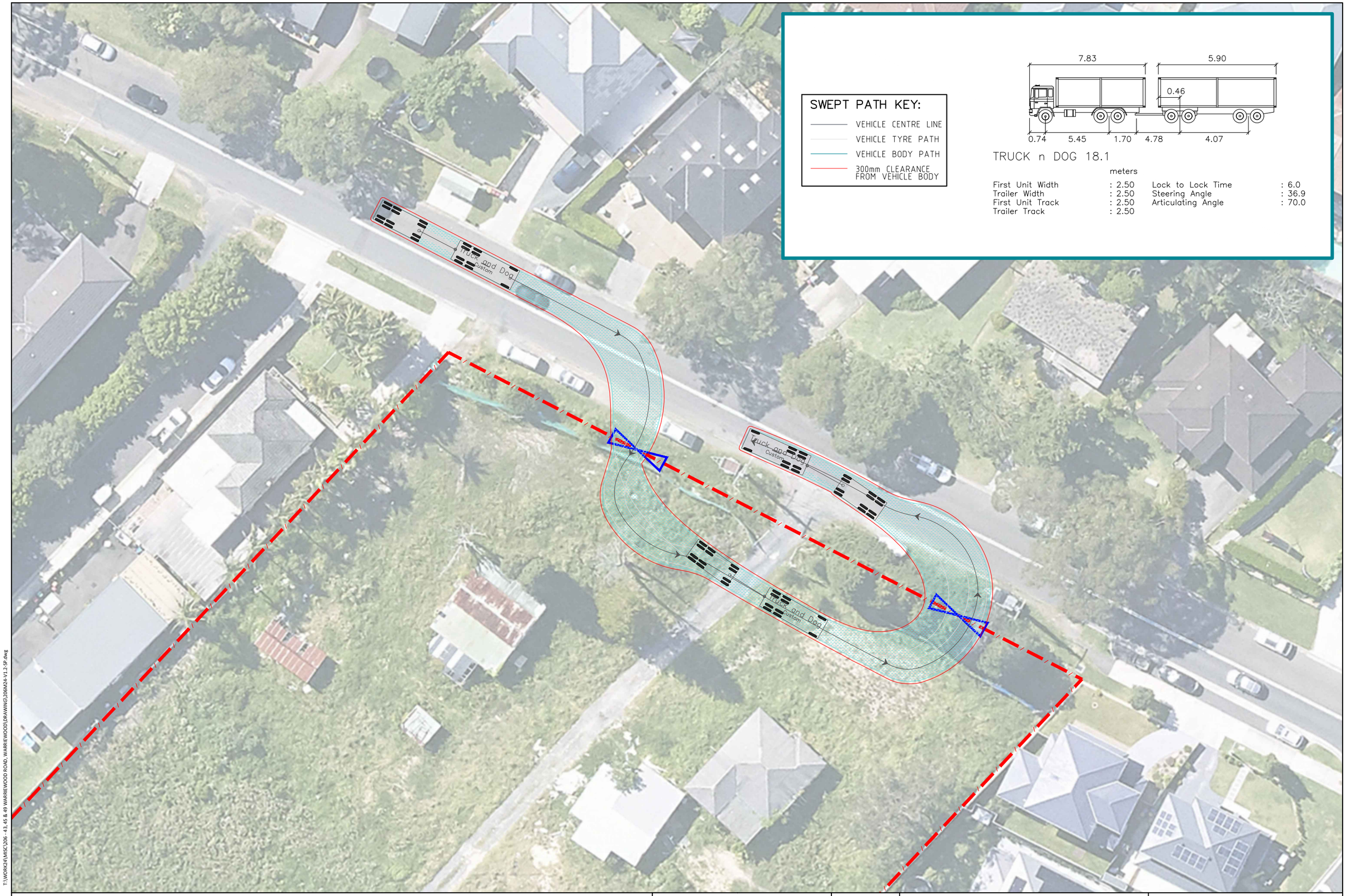


NSW GOVERNMENT Transport

transportnsw.info

Appendix C
Swept Path Assessment

ttpa TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Established 1994



T:\WORK2A\MISC\206 - 43,45 & 49 WARRIEWOOD ROAD, WARRIEWOOD\DRAWING\206M24-V1.2-SP.dwg

Plotted by Grace

43, 45 & 49 WARRIEWOOD ROAD, WARRIEWOOD
CIRCULATION OF AN 18.1m TRUCK & DOG
SWEPT PATH ASSESSMENT

DRAWING REF NO. 206M24-V1.2-SP

SHEET NO. 01 OF 04

ISSUE DATE 4 November 2024

DESIGNED BY G.HEYMAN

SCALE A3 0 4.0 8.0 1:400

N

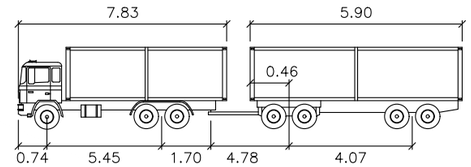
DISCLAIMER

This drawing has been prepared using vehicle modelling computer software AutoTurn Pro 2024 in conjunction with AutoCAD 2024. The vehicle used is based upon vehicle data provided by Austroads and incorporates a reasonable degree of tolerance. However, it is not possible to account for all vehicle types/characteristics and/or driver ability.

ttpa TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Established 1994
Address: Level 6, Suite 604, 10 Help Street, Chatswood NSW 2067
P: (02) 9411 5660 E: info@ttpa.com.au W: www.ttpa.com.au

SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



TRUCK n DOG 18.1

meters

First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 36.9
First Unit Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

43, 45 & 49 WARRIEWOOD ROAD, WARRIEWOOD
CIRCULATION OF AN 18.1m TRUCK & DOG
SWEPT PATH ASSESSMENT

DRAWING REF NO. 206M24-V1.2-SP

SHEET NO. 02 OF 04

ISSUE DATE 4 November 2024

DESIGNED BY G.HEYMAN

SCALE A3 — 0 4.0 8.0 — 1:400

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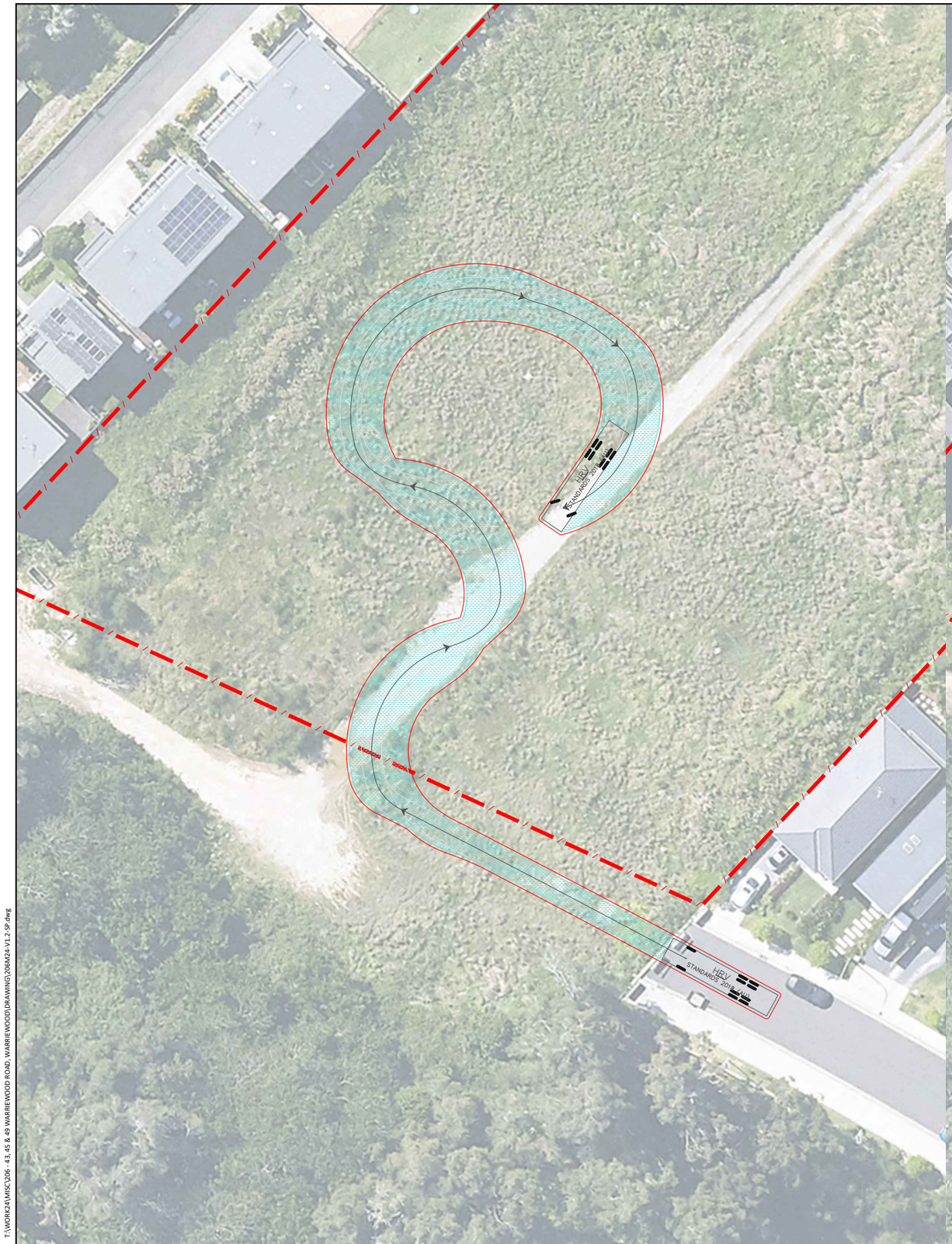

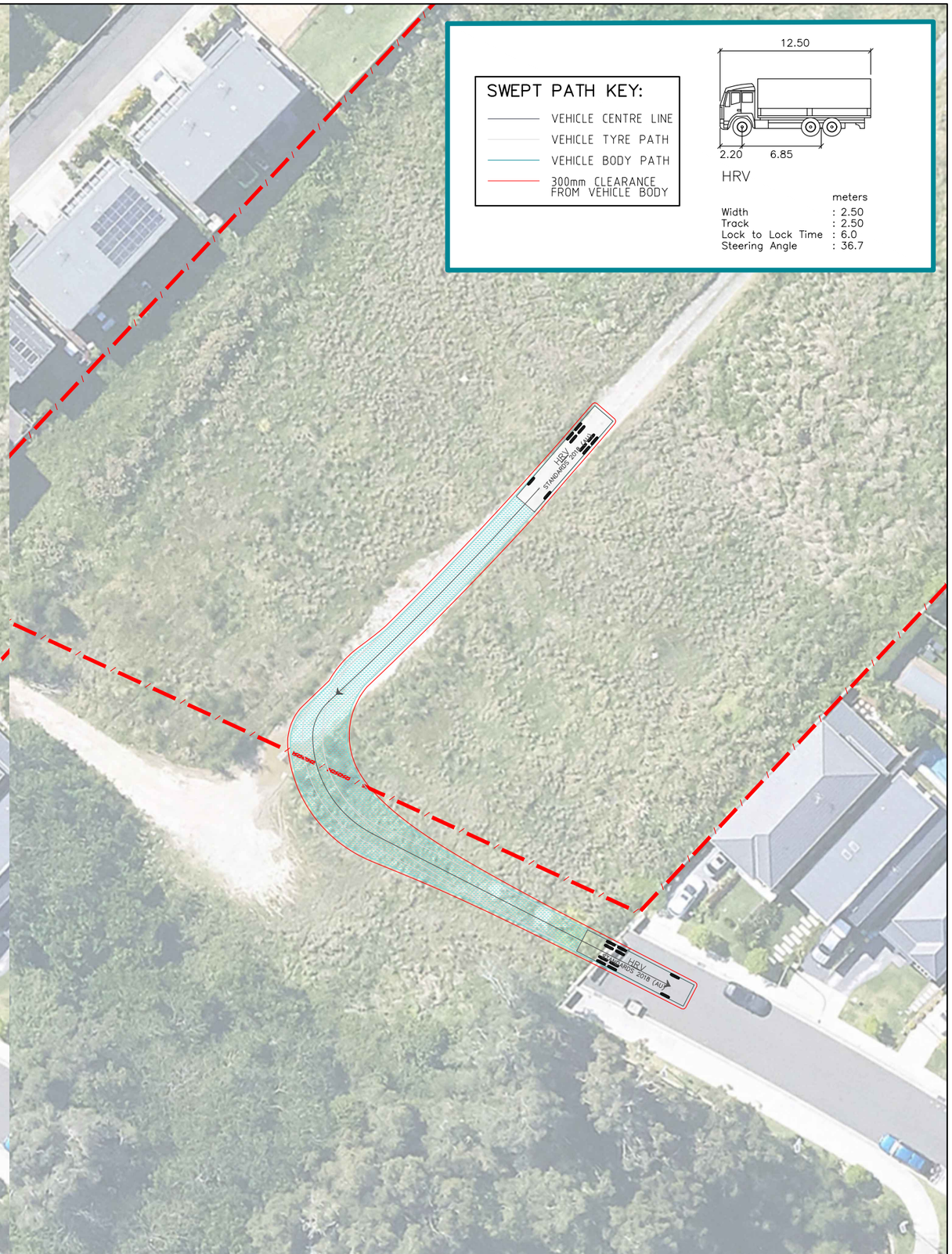

SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY

HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.7

T:\WORK2A\MISC\206 - 43, 45 & 49 WARRIEWOOD ROAD, WARRIEWOOD\DRAWING\206M24-V1.2-SP.dwg

Plotted by Grace

43, 45 & 49 WARRIEWOOD ROAD, WARRIEWOOD
INGRESS AND EGRESS OF A 12.5m HRV VIA LORIKEET GROVE
SWEPT PATH ASSESSMENT

DRAWING REF NO. 206M24-V1.2-SP

SHEET NO. 03 OF 04

ISSUE DATE 4 November 2024

DESIGNED BY G.HEYMAN

SCALE A3 — 0 5.0 10.0 — 1:500

N

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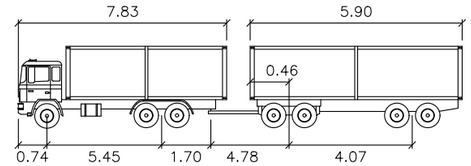
SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



TRUCK n DOG 18.1

meters

First Unit Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 36.9
First Unit Track	: 2.50	Articulating Angle	: 70.0
Trailer Track	: 2.50		

43, 45 & 49 WARRIEWOOD ROAD, WARRIEWOOD
CIRCULATION OF AN 18.1m TRUCK & DOG VIA LORIKEET GROVE
SWEPT PATH ASSESSMENT

DRAWING REF NO. 206M24-V1.2-SP

SHEET NO. 04 OF 04

ISSUE DATE 4 November 2024

DESIGNED BY G.HEYMAN

SCALE A3 — 0 5.0 10.0 — 1:500

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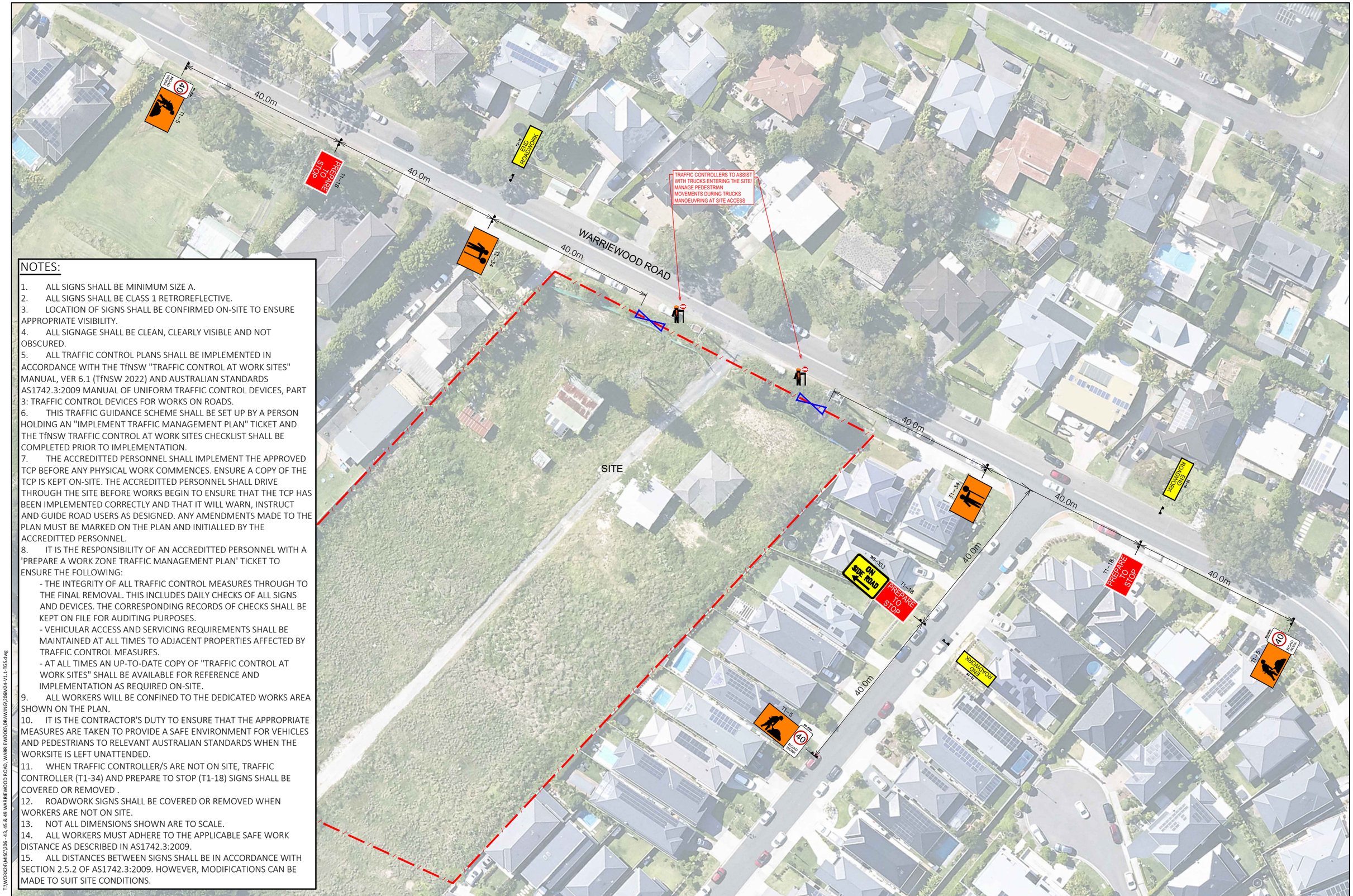
T:\WORK24\MISC\206 - 43, 45 & 49 WARRIEWOOD ROAD, WARRIEWOOD\DRAWING\206M24-V1.2-SP.dwg

Plotted by Grace

Appendix D
Traffic Guidance Scheme

TRANSPORT AND TRAFFIC PLANNING ASSOCIATES
Established 1994



NOTES:

1. ALL SIGNS SHALL BE MINIMUM SIZE A.
2. ALL SIGNS SHALL BE CLASS 1 RETROREFLECTIVE.
3. LOCATION OF SIGNS SHALL BE CONFIRMED ON-SITE TO ENSURE APPROPRIATE VISIBILITY.
4. ALL SIGNAGE SHALL BE CLEAN, CLEARLY VISIBLE AND NOT OBSCURED.
5. ALL TRAFFIC CONTROL PLANS SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE TfNSW "TRAFFIC CONTROL AT WORK SITES" MANUAL, VER 6.1 (TfNSW 2022) AND AUSTRALIAN STANDARDS AS1742.3:2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, PART 3: TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS.
6. THIS TRAFFIC GUIDANCE SCHEME SHALL BE SET UP BY A PERSON HOLDING AN "IMPLEMENT TRAFFIC MANAGEMENT PLAN" TICKET AND THE TfNSW TRAFFIC CONTROL AT WORK SITES CHECKLIST SHALL BE COMPLETED PRIOR TO IMPLEMENTATION.
7. THE ACCREDITTED PERSONNEL SHALL IMPLEMENT THE APPROVED TCP BEFORE ANY PHYSICAL WORK COMMENCES. ENSURE A COPY OF THE TCP IS KEPT ON-SITE. THE ACCREDITTED PERSONNEL SHALL DRIVE THROUGH THE SITE BEFORE WORKS BEGIN TO ENSURE THAT THE TCP HAS BEEN IMPLEMENTED CORRECTLY AND THAT IT WILL WARN, INSTRUCT AND GUIDE ROAD USERS AS DESIGNED. ANY AMENDMENTS MADE TO THE PLAN MUST BE MARKED ON THE PLAN AND INITIALLED BY THE ACCREDITTED PERSONNEL.
8. IT IS THE RESPONSIBILITY OF AN ACCREDITTED PERSONNEL WITH A 'PREPARE A WORK ZONE TRAFFIC MANAGEMENT PLAN' TICKET TO ENSURE THE FOLLOWING:
   - THE INTEGRITY OF ALL TRAFFIC CONTROL MEASURES THROUGH TO THE FINAL REMOVAL. THIS INCLUDES DAILY CHECKS OF ALL SIGNS AND DEVICES. THE CORRESPONDING RECORDS OF CHECKS SHALL BE KEPT ON FILE FOR AUDITING PURPOSES.
   - VEHICULAR ACCESS AND SERVICING REQUIREMENTS SHALL BE MAINTAINED AT ALL TIMES TO ADJACENT PROPERTIES AFFECTED BY TRAFFIC CONTROL MEASURES.
   - AT ALL TIMES AN UP-TO-DATE COPY OF "TRAFFIC CONTROL AT WORK SITES" SHALL BE AVAILABLE FOR REFERENCE AND IMPLEMENTATION AS REQUIRED ON-SITE.
9. ALL WORKERS WILL BE CONFINED TO THE DEDICATED WORKS AREA SHOWN ON THE PLAN.
10. IT IS THE CONTRACTOR'S DUTY TO ENSURE THAT THE APPROPRIATE MEASURES ARE TAKEN TO PROVIDE A SAFE ENVIRONMENT FOR VEHICLES AND PEDESTRIANS TO RELEVANT AUSTRALIAN STANDARDS WHEN THE WORKSITE IS LEFT UNATTENDED.
11. WHEN TRAFFIC CONTROLLER/S ARE NOT ON SITE, TRAFFIC CONTROLLER (T1-34) AND PREPARE TO STOP (T1-18) SIGNS SHALL BE COVERED OR REMOVED .
12. ROADWORK SIGNS SHALL BE COVERED OR REMOVED WHEN WORKERS ARE NOT ON SITE.
13. NOT ALL DIMENSIONS SHOWN ARE TO SCALE.
14. ALL WORKERS MUST ADHERE TO THE APPLICABLE SAFE WORK DISTANCE AS DESCRIBED IN AS1742.3:2009.
15. ALL DISTANCES BETWEEN SIGNS SHALL BE IN ACCORDANCE WITH SECTION 2.5.2 OF AS1742.3:2009. HOWEVER, MODIFICATIONS CAN BE MADE TO SUIT SITE CONDITIONS.

T:\WORK2A\MISC\206 - 43, 45 & 49 WARRIEWOOD ROAD, WARRIEWOOD\DRAWING\206M24-V1.1-TGS.dwg

Plotted by Grace

43, 45 & 49 WARRIEWOOD ROAD, WARRIEWOOD
SIGNAGE PLAN FOR DEMOLITION AND EXCAVATION PHASES
TRAFFIC GUIDANCE SCHEME

DRAWING REF NO. 206M24-V1.1-TGS SHEET NO. 01 OF 02 ISSUE DATE 4 November 2024

SCALE A3

0 8.0 16.0 1:800

CERTIFICATION

THE DESIGNER AND THE REVIEWER ARE CURRENT CARDHOLDER OF TRAFFIC CONTROL WORK: PREPARE WORKS ZONE

DESIGNER:
NAME: AIDAN GARDNER
CARD NO.: TCT1053356
CLASS: PREPARE WORK ZONE

REVIEWER:
NAME: LACHLAN ELLSON
CARD NO. TCT0041903
CLASS: PREPARE WORK ZONE

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T:\WORK24\MISC\206 - 43, 45 & 49 WARRIEWOOD ROAD, WARRIEWOOD\DRAWING\206M24-V1.1-TGS.dwg

Plotted by Grace

43, 45 & 49 WARRIEWOOD ROAD, WARRIEWOOD
SIGNAGE PLAN FOR CONSTRUCTION & FITOUT PHASE
TRAFFIC GUIDANCE SCHEME

DRAWING REF NO. 206M24-V1.1-TGS SHEET NO. 02 OF 02 ISSUE DATE 4 November 2024

SCALE A3

0 10.0 20.0 1:1000

CERTIFICATION

THE DESIGNER AND THE REVIEWER ARE CURRENT CARDHOLDER OF TRAFFIC CONTROL WORK: PREPARE WORKS ZONE

DESIGNER:
NAME: AIDAN GARDNER
CARD NO.: TCT1053356
CLASS: PREPARE WORK ZONE

REVIEWER:
NAME: LACHLAN ELLSON
CARD NO. TCT0041903
CLASS: PREPARE WORK ZONE

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