Housing Development

Homes NSW

June 2025

SECAsolution

Residential Development
Tweed Heads, NSW

Traffic Impact Assessment

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Client: Homes NSW

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Quality Review and Document History

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Ver03	1/11/2024	Inc swept paths	C.Thomas	F.Iacono
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1 Introduction

Background

Seca Solution Pty Ltd has been commissioned by CKDS on behalf of Homes NSW to prepare a traffic, access and parking assessment for the proposed affordable housing development at 25-27 Boyd Street, Tweed Heads. The plans allow for a multi-level residential development.

Parking is provided on site with all vehicle access directly onto Brett Street. The access will allow for all entry and exit movements.

As part of the project, Seca Solution has collected traffic data at the key location of Boyd Street and Brett Street and have observed the traffic operations in the locality of the site during both morning and afternoon peak periods.

1.1 Scope of Report

The scope of this report is to review and assess the external traffic arrangements for the proposed development and consider the impacts on the local road network. Also, to consider the parking and access arrangements and confirm they are consistent with AS2890, SEPP (Housing) 2021 and the Tweed Heads DCP 2008.

1.2 Issues and Objectives of the study

The issues relative to the proposal are:

- Assess impact on the local road network due to the additional traffic flows;
- Assess the impact of the parking generated by the proposed development;
- Review the access arrangements for the development;
- Review the service arrangement for the development; and
- Assess any other transport impacts associated with the development.
- Consider the construction traffic demands associated with the development
- Consider opportunities for Sustainable Transport and to promote Active Travel a Green Travel Plan has been prepared for the site

The objective of the report is to document the impacts of the proposed development, confirm the suitability of the local road network to accommodate the project demands and provide advice on any infrastructure work required as part of the development.

1.3 Planning Context

In preparing this document, the following guides and publications were used:

- Guide to Transport Impact Assessments (GTIA), November 2024 published by Transport for NSW;
- State Environmental Planning Policy (Housing) 2021 (Housing SEPP)
- Tweed Heads Development Control Plan 2008
- Australian / New Zealand Standard – Parking Facilities Part 1 : off-street car parking (AS2890.1:2004);

2 Existing Situation

2.1 Site Description and Proposed Activity

The subject site is located within the Tweed Shire Local Government Area being part of the township of Tweed Heads.

The site has been cleared however previously housed eight medium density residential dwellings.

The plan for the proposed development allows for a 13-storey development which includes in the order of 80 residential units as well as parking on site for 66 vehicles and storage for 36 bicycles.

2.2 Site Location

The site is located on the corner of Boyd Street and Brett Street, Tweed Heads within the commercial precinct of Tweed Heads.

The location of the site is shown below in Figure 2-1.

Source:Googlemaps

■ *Figure 2-1 - Site Location*

2.2.1 Zoning and Adjacent Land Use

Zoning for the land and surrounds is R3.

To the south east of the site the land is zoned MU1.

2.3 Site Access

All vehicle access to the site will be from Brett Street with a single driveway providing two-way movements to the basement carpark. This access will cater for all turning movements.

2.4 Existing Traffic Conditions

2.4.1 Road Hierarchy

Boyd Street and Brett Street are local roads within the Tweed Heads town centre. In the vicinity of the site they have widths in the order of 12.5 metres which allows a single lane of travel in each direction and parking on each side. They have a posted speed limit of 50km/h. They have kerb and guttering, footpaths and street lighting consistent with their function as town roads.

Parking is permitted along both sides of the streets with some parking timed to provide a turn over of parking for local businesses. As well there are normal restrictions at intersections and driveways.

Boyd Street and Brett Street intersect at a single lane roundabout.

To the east of the site **Wharf Street** provides a collector road with a north-south orientation which connect with the Pacific Highway to the south providing for local and regional traffic along the eastern seaboard.

Brett Street intersects with Wharf Street at a 4-way intersection which allows for left turn only into and out of Brett Street with Wharf Street having priority.

Photo 1 View west along Brett Street through the intersection with Boyd Street. Subject site to far right hand side of the photo.

2.4.2 Roadworks, Traffic Management and Bikeways

At the time of the site visit there were no roadworks occurring in the immediate locality of the site.

No traffic management works or cycleways are noted.

During site work in August 2024 the site to the west was under construction with temporary construction management in place.

2.5 Traffic Flows

2.5.1 Peak Hour Flows

Traffic counts were undertaken on Thursday 8th August between 3.45PM and 5.30PM and Friday 9th August between 7.30AM-9.15AM at the intersection of Boyd Street and Brett Street to determine demands at this intersection as well as two-way movements along the site frontages.

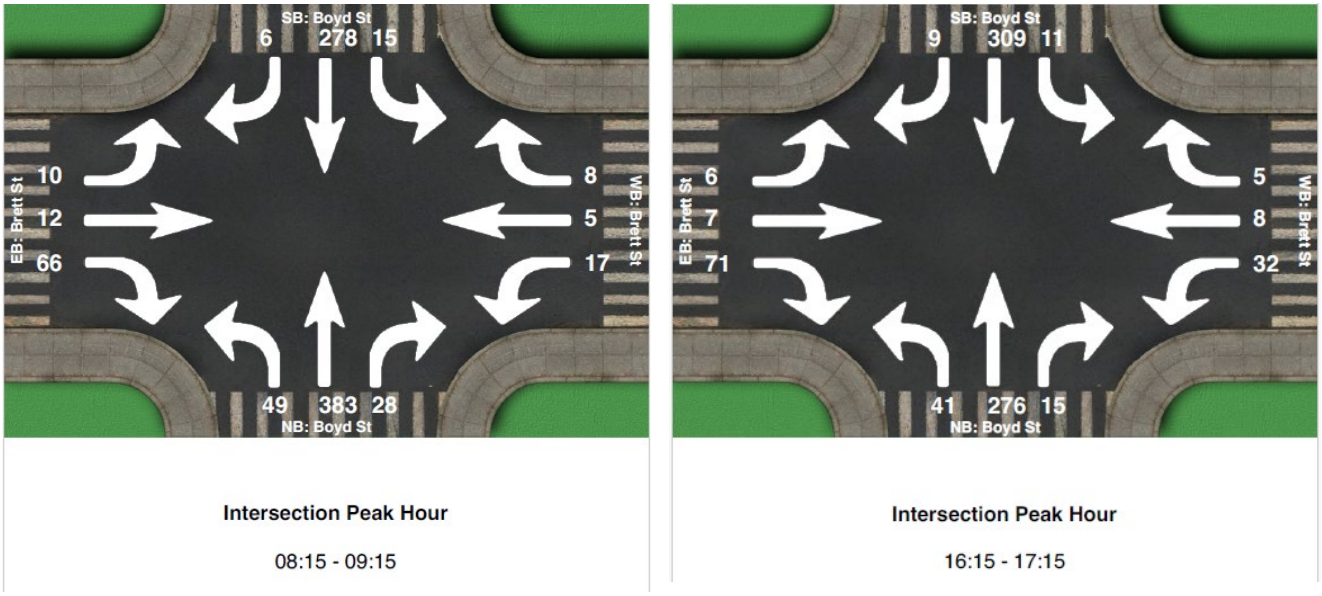


Figure 2-2 AM and PM peak hour traffic demands

The counts determined that the two-way flows on Brett Street west of Boyd Street in the morning peak (8.15AM-9.15AM) are 148 vehicles per hour (vph), 60% eastbound (88vph) and 40% westbound (60vph). In the afternoon peak (4.15PM-5.15PM) they are 142 vehicles per hour (vph), 60% eastbound (84vph) and 40% westbound (58vph).

Flows on Boyd Street south of Brett Street are much higher, being 821 vph two way (460 northbound, 361 southbound) and 744 vph two way (332 northbound, 412 southbound) reflecting both through demands and demands to the south of the site.

2.5.2 Daily Traffic Flows

There is no recent traffic data published in the vicinity of the site.

Typically peak hour flows represent 10% of the daily flows; this would therefore be approximately 7,825 vehicles per day on Boyd Street with flows on Brett Street past the site being around 1,450 vehicles per day.

2.5.3 Daily Traffic Flow Distribution

The daily traffic volumes in this area would be reasonably balanced in both directions, with the above data indicating a bias in movements southbound from Brett Street whilst flows on Boyd Street see a bias northbound in the AM and southbound in the PM.

2.5.4 Vehicle Speeds

No speed surveys were completed as part of the study work. The roundabout at the intersection of Boyd Street and Brett Street coupled with the grid nature of the town centre and the side friction of parked cars and driveways see vehicles travelling at the posted speed limit.

2.5.5 Existing Site Flows

The site is currently vacant however in the recent past had eight residential town houses that generated traffic. Applying standard rates this would equate to 4 trips in the peak hour and 40 trips per day.

2.5.6 Heavy Vehicle Flows

Heavy vehicles flows are low being surveyed as being 1.1% during the morning peak period and minimal in the afternoon. These included buses and trucks associated with local deliveries and site servicing.

2.5.7 Current Road Network Operation

Observations on site indicate that the local roads operate well with minimal delays and congestion.

The roundabout intersection of Boyd Street and Brett Street operated without delay and with minimal queues.

Based on the GtTGD urban roads have a mid-block capacity of 900 vehicles per hour (vph) per direction. From the traffic surveys it is evident that both Boyd Street and Brett Street operate well within their capacity.

2.5.8 Traffic Safety and Accident History

A review of crash data published online by TfNSW during the 5 year period between 2018-2022, indicates there have been no accidents within the vicinity of the site nor at the intersection of Boyd Street and Brett Street. North of the site on Boyd Street there was a crash in 2021 involving a pedestrian on the carriageway in darkness resulting in a serious injury.

A review of the local road network shows that the roads are well laid out and visibility at the various intersections meets Austroads requirements. It is considered that there are no specific road safety concerns in the locality of the subject site.

2.6 Parking Supply and Demand

2.6.1 On-street Parking Provision

Parking is permitted on both sides of the local roads in the vicinity of the site. Timed parking (2P) on Boyd Street in the vicinity of the site and on Brett Street east of Boyd Street supports local businesses by ensuring a turn over of parking. There are no parking controls on Brett Street west of Boyd Street.

2.6.2 Off-Street Parking Provision

Individual lots typically provide for off-street parking.

2.6.3 Parking Demand and Utilisation

Observations indicate that on Brett Street west of the Boyd Street, where there are no time limits this parking is often associated with workers associated with the various commercial and retail establishments. Timed parking controls on Boyd Street in the vicinity of the site allow for the turn over of parking during the working week.

2.6.4 Short term Set down or pick up areas

There are no set down or pick up areas in the locality of the site.

2.7 Pedestrians and Cyclists

Pedestrian Facilities – There are footpaths within the immediate vicinity of the site providing connection throughout the town centre. Pedestrian splitter islands at the roundabout intersection of Boyd Street and Brett Street assist in pedestrians crossing in this location.

Cycling Pathways – some local streets are quiet offering suitable routes for cyclists. Cycling paths are available to the east of the site along the foreshore.

Local schools are within walking distance of the site.

Pedestrian movements were observed in the locality during the survey period being some local residents and workers walking between their parked cars and work.

2.8 Public Transport

Train Services – None locally, Casino (NSW StateRail) is some two hours to the west while Varsity Lake, the most southern rail station in the Queensland network is 30 minutes north of the site.

Bus Services – Numerous local and regional bus services operate from Tweed Heads. Further details are included in the Green Travel Plan, Chapter 5.

There are bus stops on Wharf Street 238 metres to the south east of the subject site.

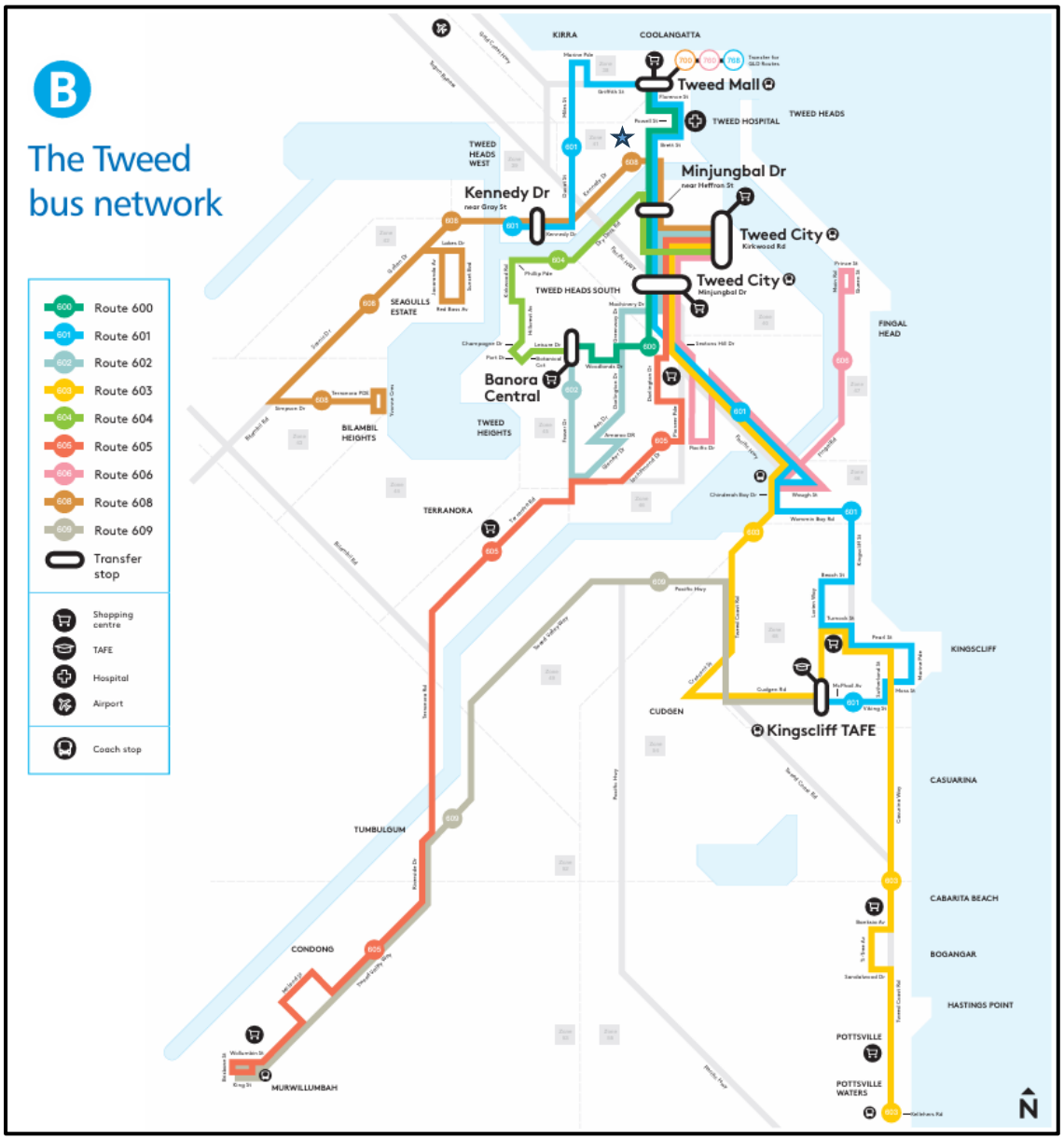


Figure 2-2 Local bus services (Subject site ★)

2.9 Other Proposed Developments

The residential development adjacent to the subject site (1 Brett Street) is under construction providing a multi storey residential development.

A review of the Tweed Shire Council development tracker indicates a 55 unit development has also been approved at 41 Boyd Street to the south of the site.

3 Proposed Development

3.1 The Development

3.1.1 Proposed Development

The concept plans allow for the construction of a multi-dwelling housing development on behalf of Homes NSW providing:

80 units being a mix of 46 x 1 bedroom units and 34 x 2 bedrooms.

66 parking spaces, eight being accessible and storage for 36 bicycles (28 residential and 8 visitor) is provided on site.

The carpark is accessed from a new driveway off Brett Street with a width of approximately 6000mm.

The site plan is shown below in Figure 3.1 and in Attachment A.

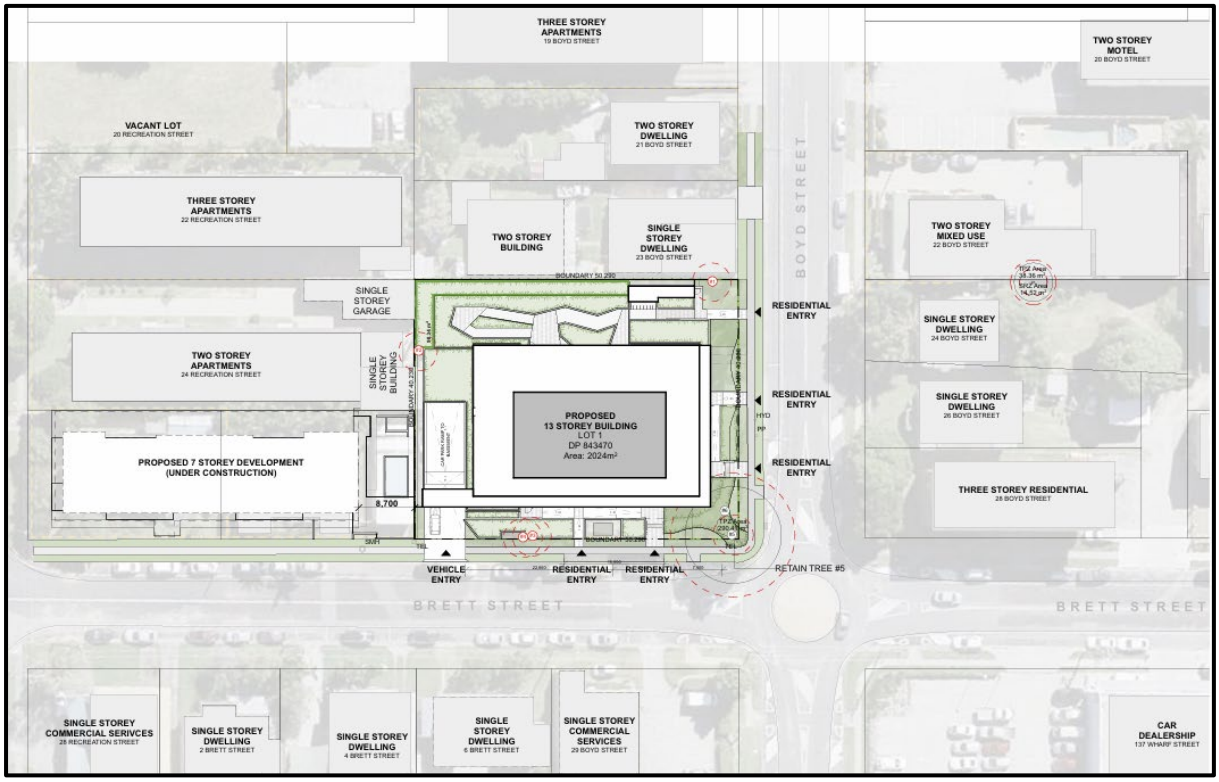


Figure 3-1 Site Plan

3.2 Access

3.2.1 Driveway Location

All vehicle access to the subject site will be via a new access point on Brett Street which shall allow for two-way movement.

The kerb and gutter on Boyd Street shall be reinstated to replace the redundant driveway.

3.2.2 Sight Distances

Brett Street provides a straight and level alignment. There is typically good visibility for all drivers entering and exiting the site however parking along the site frontage can impact visibility for exiting drivers.

Allowing for a frontage speed limit of 50 km/h on Brett Street AS2890.1 requires a desirable sight distance of 69 metres and a minimum distance of 45 metres.

Visibility to the right (west) is available to the intersection of Brett Street with Recreation Street, some 72 metres which exceeds the desirable sight distance. To the left (east) visibility is available through the roundabout with Boyd Street. The distance to the roundabout is 45 metres. This meets the minimum requirement and it is also acknowledged that vehicles approaching the site having turned onto Brett Street from Boyd Street would be travelling at less than 50km/h.

Photo 2 View to left (east) for drivers exiting the proposed site access onto Brett Street

Photo 3 View to right (west) for drivers exiting the proposed n site access onto Brett Street

3.2.3 Service Vehicle Access

Site servicing demands are expected to be low being occasional deliveries and bi-weekly waste collection.

Waste collection shall be by Council kerb-side collection.

Occasional deliveries are typically by van which can park on street. Similarly rare deliveries from larger trucks can be on street per the existing situation for these lots and other houses in the street.

3.2.4 Queuing at entrances

The basement carpark is accessed via a two-way ramp with one way circulation through the carpark allowing free flow into the site.

Based on the passing traffic demands access to the site could be from either the east or west and see both left and right turns into the site. Similarly outbound demands could be in either direction depending upon the required trip destination.

Traffic flows on Brett Street will see minimal queuing at the site frontage associated with vehicles turning right into the subject site. Similarly any queuing associated with vehicles exiting the site would be minimal given the low overall traffic generation and would be contained within the site.

3.2.5 Access to Public Transport

Bus services along Wharf Street to the east of the site can be accessed via the footpaths on Brett Street as well as on Wharf Street.

3.3 Review of Car Parking

In accordance with the Housing SEPP 2021, 19(2)(e)

> (e) the following number of parking spaces for dwellings used for affordable housing—
> (i) for each dwelling containing 1 bedroom—at least 0.4 parking spaces,
> (ii) for each dwelling containing 2 bedrooms—at least 0.5 parking spaces,
> (iii) for each dwelling containing at least 3 bedrooms— at least 1 parking space

The Housing SEPP does not nominate a rate for bicycle storage for affordable housing.

3.3.1 Council code and local parking policies and plans

Tweed DCP does not nominate a parking rate for affordable housing.

Rate for residential flat buildings: 1 per 1 bedroom unit, plus 1.5 per 2 bedroom unit, plus 2 per 3 bedroom unit, plus 1 per 4 units visitor parking.

The TDCP rate for bicycle storage for residential flat buildings is: Residents: 1/unit (2). Visitors: 1/8units (3)

3.3.2 Parking Assessment

Applying the Housing SEPP parking rates to the proposal will provide:

	No of Units	Parking Rate	Parking Demand
1 bedroom	46	0.4	18.4
2 bedroom	34	0.5	17
TOTAL	80		35.4 (36) spaces

Allowing for 80 units the parking requirement is 36 spaces. There is no visitor parking required per the Housing SEPP.

The provision of 66 parking spaces therefore exceeds the requirements of the Housing SEPP.

3.3.3 Parking Layout

Driveways and parking area to be designed and constructed in accordance with Council requirements and AS2890.

Swept paths have been prepared (**Attachment B**) to demonstrate vehicle circulation and access to parking including testing a B99 to access disabled spaces.

Hold lines and convex mirrors shall facilitate the entry of vehicles into and through the carpark. Given the low traffic demands with peak movements occurring with minimal opposing flows (80/20) the carpark can function in an appropriate manner.

3.3.4 Service Vehicle Parking

No dedicated service bay is required.

Waste collection will be kerb side.

3.3.5 Pedestrian and Bicycle Facilities

Pedestrian access is provided to both Boyd Street and Brett Street.

Bike storage for 28 resident bikes is provided on site with a secure storage unit on the ground floor. Visitor bike parking is also provided for 8 bikes along the external path on the northern boundary.

This level of parking is considered adequate given it represents a rate of 1 space per 3 units.

As a residential development there is no requirement for end of trip facilities given each unit has access showers and storage.

4 Transportation Analysis

4.1 Traffic Generation

Standard traffic generation rates for regional High density residential development, provided by the Guide to Traffic Impact Assessments published by Transport for NSW shall be applied to the development.

The guide provides weekday rates for low public transport accessibility:

Table 5.8. **Car based high density residential sample summary (weekday)**

Weekday rates	Person trips	Vehicle trips
Metropolitan		
AM Peak	0.2P + 4.67 (where P>92)	0.134P + 4.9 (where P>147)
PM Peak	0.26P	0.20P
Daily	Not available	1.37P
Sub-Metropolitan		
AM Peak	Not available	0.19P + 1.79
PM Peak	0.35P + 3.65 (where P>43)	Not available
Daily	5.09U	1.62P
Regional		
AM Peak	Not available	0.14B + 1.92 (where B>55) or 0.39U – 3.06 (where U>47)
PM Peak	Not available	0.17B or 0.475U-6.66 (where U>85)
Daily	Not available	1.41B-12.44 (where B>53)

Variables

- (P): number of off-street parking spaces
- (U): number of units
- (B): number of bedrooms.

And High public transport accessibility:

Table 5.11. **High density residential sample summary**

	Sydney	Regional
Weekday rates	**Average**	**Average**
Person trips (person trips/dwelling)		
AM peak hour	0.66	0.71
PM peak hour	0.56	0.88
Daily	4.49	7.35
Vehicle trips (vehicle trips/dwelling)		
AM peak hour	0.19	0.53
PM peak hour	0.15	0.32
Daily	1.52	4.57

The low public transport accessibility provides outcomes for this particular bedroom and unit mix lower than those for the high public transport accessibility. To provide a robust assessment the rates shown in Table 5.11 have been applied.

- 4.57 trips per unit per day and
- 0.53 (AM) trips per unit in the morning peak period.
- 0.32 (PM) trips per unit in the afternoon peak period.

Allowing for 80 units this would indicate some

- 366 movements per day evenly split between 183 inbound and 183 outbound trips daily.

During the peak periods, the flows would be in the order of

- 43 vehicles per hour in the morning peak
- 26 vehicles per hour in the afternoon peak

Allowing for the previous eight townhouses on the site the site would have generated 5 trips in the AM and 3 trips in the PM. Daily trips would have been 37 trips per day.

- 340 movements per day evenly split between 170 inbound and 170 outbound trips daily.

During the peak periods, the net increase in flows would therefore be:

- **38 vehicles per hour in the morning peak**
- **23 vehicles per hour in the afternoon peak**

Typically, these will be split 80% outbound/20% inbound in the morning and the reverse in the afternoon.

Table 4-1 Trip Generation

Use	Inbound	Outbound	Total
AM Peak	8	30	38
PM Peak	18	5	23
Daily	170	170	230

4.1.1 Daily and Seasonal Factors

There will be limited daily and seasonal variation in traffic movements. Weekday trips are typically higher than weekend demands.

4.1.2 Pedestrian Movements

Pedestrian movements associated with residents shall be accommodated along existing footpaths within the vicinity of the site.

4.2 Traffic Distribution and Assignment

4.2.1 Origin / destinations assignment

Traffic will approach the site from all directions connecting with Brett Street to enter the site. Outbound demands would be similar with local roads allowing for the distribution and disbursement of traffic across various routes.

On the basis that traffic is split equally to the east and west of the site, trips to the east, at the intersection of Boyd Street and Brett Street, would then typically be distributed 75% to the south, with the balance split equally north and east. The reverse would occur for returning trips.

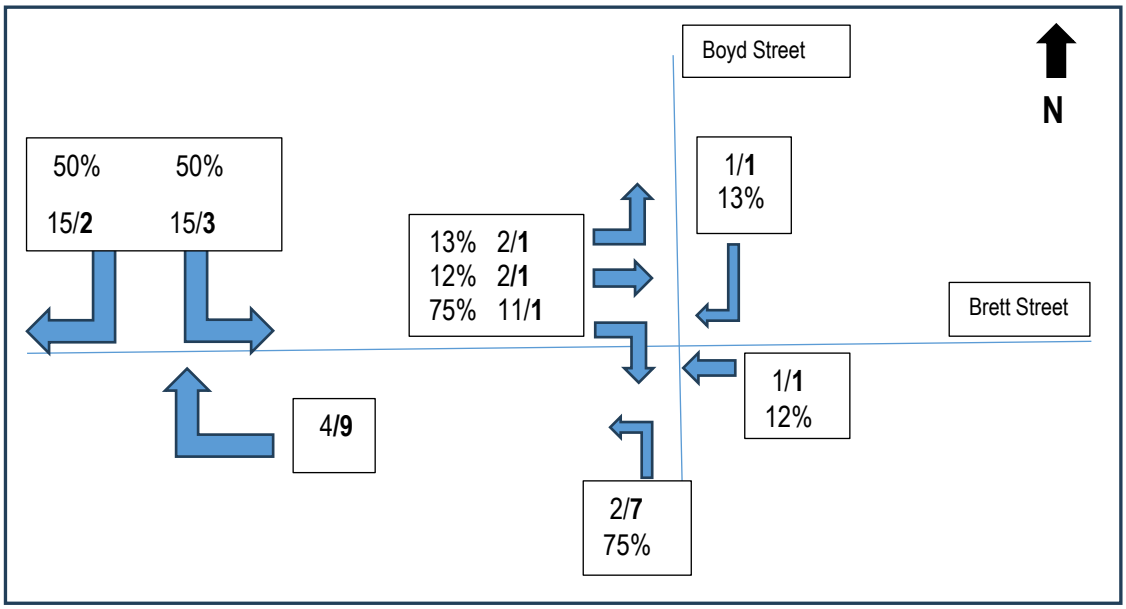


*Figure 4-1 Diagram of future development traffic flows (AM/**PM**)*

4.3 Impact on Road Safety

The additional traffic flows associated with the development of the subject site will have a minimal and acceptable impact upon traffic safety. The provision of a roundabout at the intersection allows for the safe movement of traffic reflected in the crash data for the area.

Sight lines on Brett Street meet the requirements of AS2890 with the access able to be provided in a safe manner.

4.4 Impact of Generated Traffic

4.4.1 Impact on daily Traffic Flows

The existing daily traffic flows are well within acceptable limits for their classifications and the project will generate low additional traffic demands.

The impact of an extra 19 vph on Brett Street to either the east or west of the site will have minimal impact with Brett Street flows remaining below 200 vehicles per hour two way, within the environmental capacity as per TfNSW guidelines for a local road ensuring the amenity of this road is maintained.

Flows on Boyd Street will also remain within the capacity of this urban road with southbound flows in the AM increasing to 372 (361+11) vph remaining within the current Level of Service B (less than 380 vph per direction)

This provides capacity for the development of this site and other infill development allowing for background growth over time.

4.4.2 Peak Hour Impacts on Intersections

The main intersection impacted by the proposed development is the roundabout intersection of Boyd Street and Brett Street which currently operates with minimal delay. The impact of the additional 19 vph in the AM peak, less in the afternoon, will have a negligible impact to the operation of this intersection.

Other intersections shall be impacted less as trips disburse. The impact of the proposed development is therefore considered acceptable with no requirement for intersection modelling nor upgrades to accommodate these demands.

4.4.3 Options for improving services

There is no requirement for improved bus services. Whilst the site may generate some demands for local bus services these are expected to be within the capacity of existing services.

5 Green Travel Plan

A Green Travel Plan is seen as a way of supporting active travel, making it easier for residents to get to and from the workplace, services and facilities and to reduce dependence on private vehicles and parking space.

> "A travel plan typically includes support for walking, cycling, public transport and car sharing
>
> reinforced with promotion and incentive and the management of (workplace) parking."
>
> Premier's Council for Active Living New South Wales (PCAL)

5.1 Spheres of Influence

The areas which may be influenced by the implementation of this travel plan include:

- Reduction in private motor vehicle travel by individuals, the impact on the road network and associated environmental costs and costs to residents
- Increased walking, cycling and public transport use and its resulting increase in physical exercise and health benefits
- Parking policy, covering parking pricing and supply
- Reduction in parking demand, its associated cost of provision and in turn the cost for parking usage

5.2 Site Location and access to Transport Services and Facilities

The site is well located and benefits from access to various active travel opportunities including public transport connections within New South Wales and Queensland.

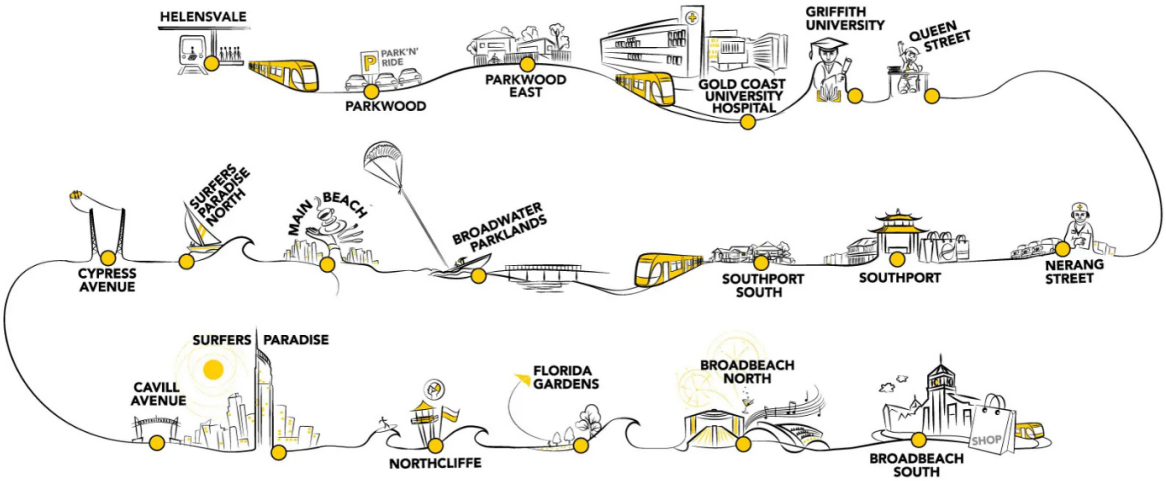
Up to date details are available on the Tweed Shire web site [Public transport and bus shelters | Tweed Shire Council (nsw.gov.au)]

5.2.1 Train Travel

There are no local train services in Tweed Heads with the closest station being Varsity Lakes, 30 minutes drive north of Tweed Heads which provides access to the Queensland rail network. The closest NSW railway station is Casino some 2 hours west of Tweed Heads.

The Gold Coast light rail network (G:Link) is accessed at Broadbeach South, 40 minute drive north of the site.

Both the light rail service (Broadbeach South) and heavy rail (Varsity Lakes) can be accessed by bus services from Tweed Heads as can Casino.



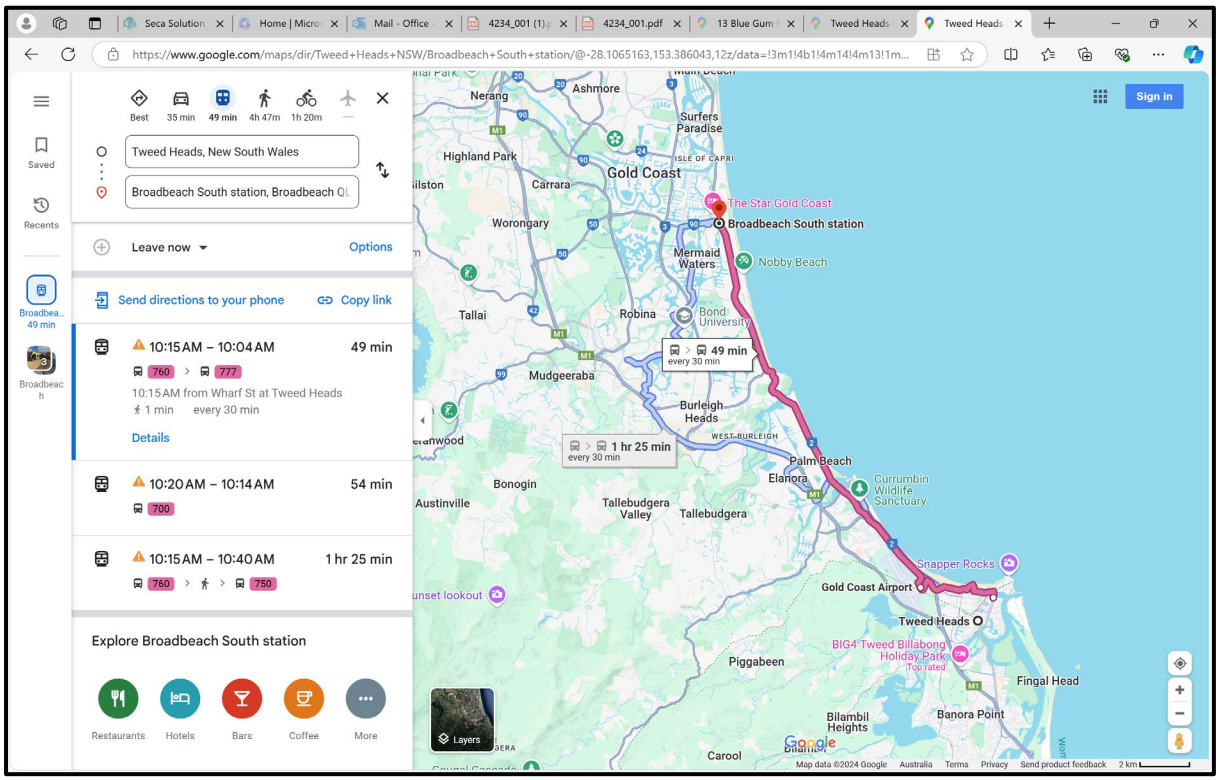


Figure 5-1 Bus travel to Broadbeach South Glink Stop (source:Googlemaps)

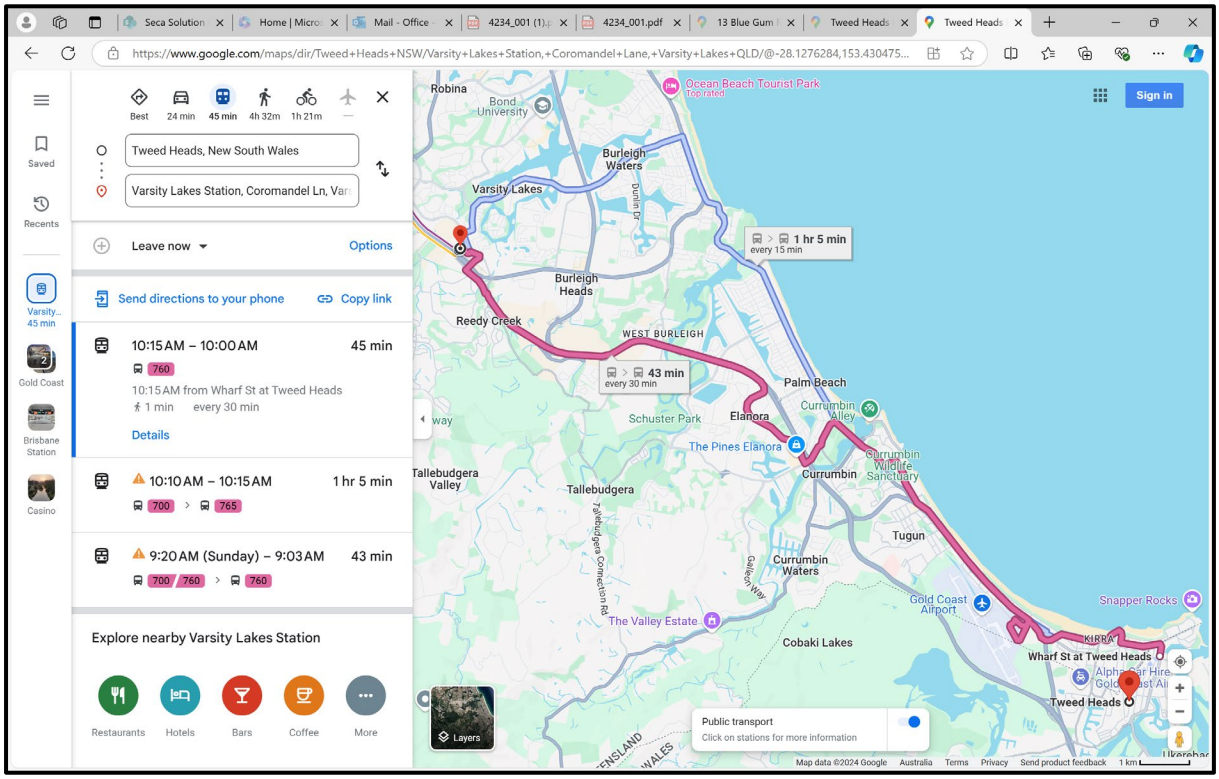


Figure 5-2 Bus travel to Varsity Lakes Railway Station (source:Googlemaps)

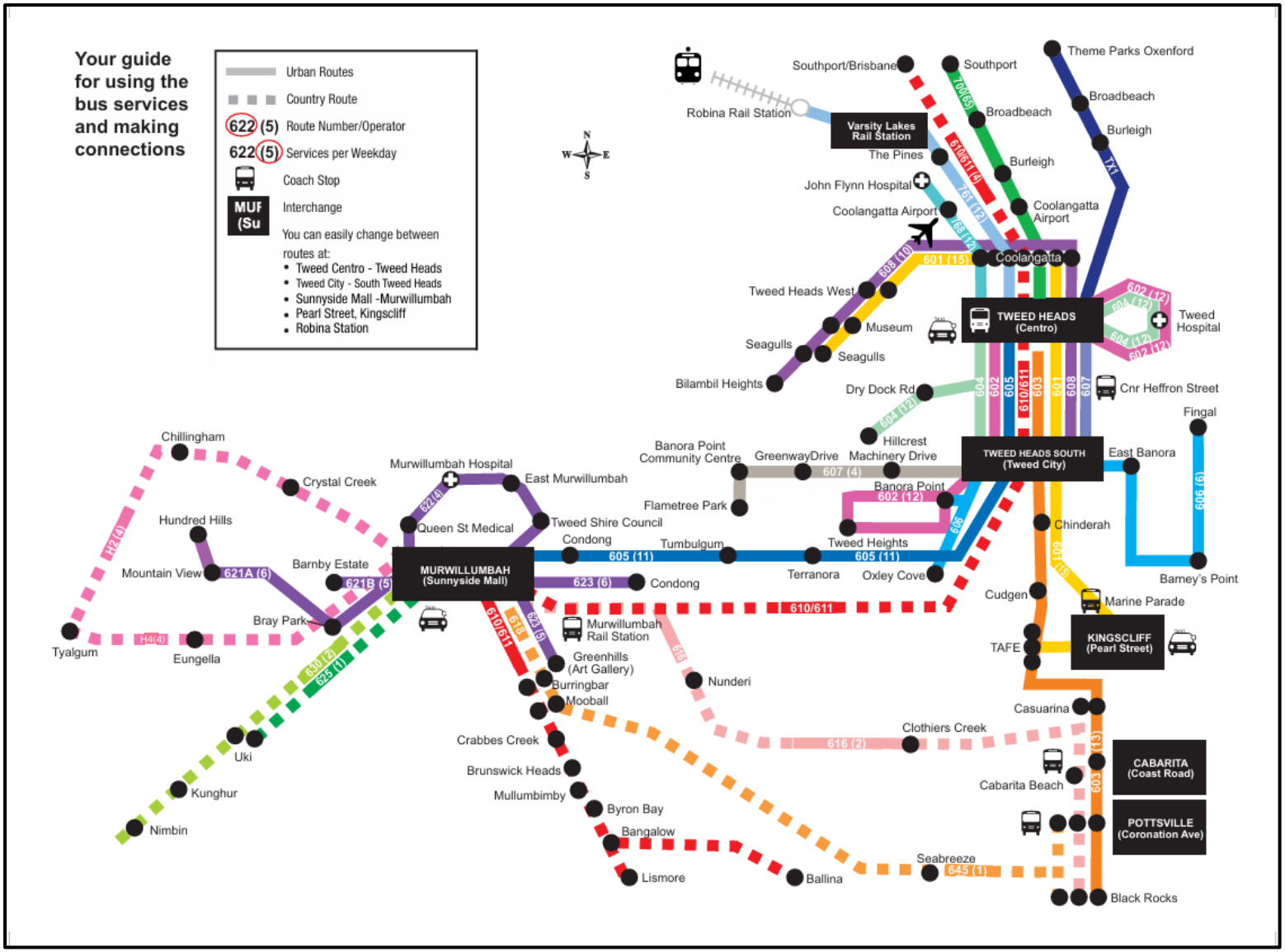


Figure 5-3 Tweed Shire Public Transport Network (source: Tweed Shire Council

5.2.2 Bus Services

Bus services operate to provide access to shopping centres, clubs, pools, hospitals, colleges and other local destinations.

Bus routes 600,601,603 and 605 operate along Wharf Street 130m to the east of the site.

MAJOR DESTINATIONS	ROUTE NO. (See Map)
Shopping Centres	
Tweed Centro, Tweed Heads	601-605, 607, 608, 610, 700, 768,760, 761
Tweed City, South Tweed Heads	601-607, 610
Banora Point	602, 606
Sunnyside, Murwillumbah	605, 616, 618, 621A, 621B, 622, 623, 625, 630
Bunnings, Greenway Drive	607
Kingscliff Shopping Centre	601,603
Learning Institutions	
Southern Cross University	601-605, 607,608
Kingscliff TAFE	601, 603
Murwillumbah TAFE	605, 616, 618, 621A, 621B, 622, 623, 625, 645, 630
Hospitals	
Tweed District Hospital	602, 604
Murwillumbah Hospital	622
John Flynn Hospital	768
Gold Coast Hospital	700
Civic Centres / Galleries	
Tweed Regional Gallery & Margaret Olley Art Centre	623
Murwillumbah Civic Centre	622, 623, 605
Tweed Heads Civic Centre	601- 605, 607, 608
Tweed Regional Aquatic Centres (TRAC)	
South Tweed Swimming Pool	601-605, 608
Kingscliff Swimming Pool	601,603
Murwillumbah Swimming Centre	605, 622, 623
Clubs	
Twin Towns	601-605, 608, 610, 700, 768, 760, 761
Club Banora	602,606
Tweed Heads Bowls Club	601-605, 607, 608
South Tweed Sports Club	601-605, 607, 608
Seagulls Club	601, 608
Kingscliff Bowls Club	601, 603
Cabarita and Pottsville Bowls Club	603, 616, 618
Airports	
Coolangatta	610/611, 700, 761, 768, 760
Brisbane	761

Figure 5-4 Bus services throughout the area

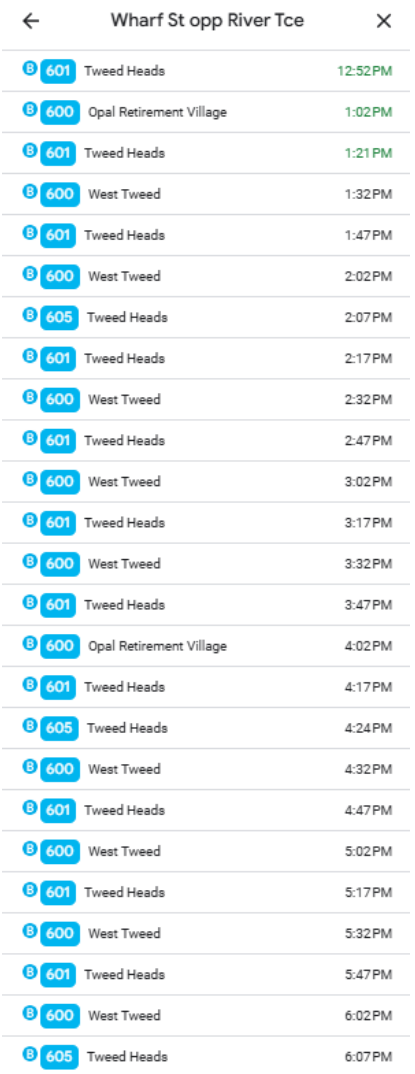


Figure 5-5 Bus departures from Wharf St, north

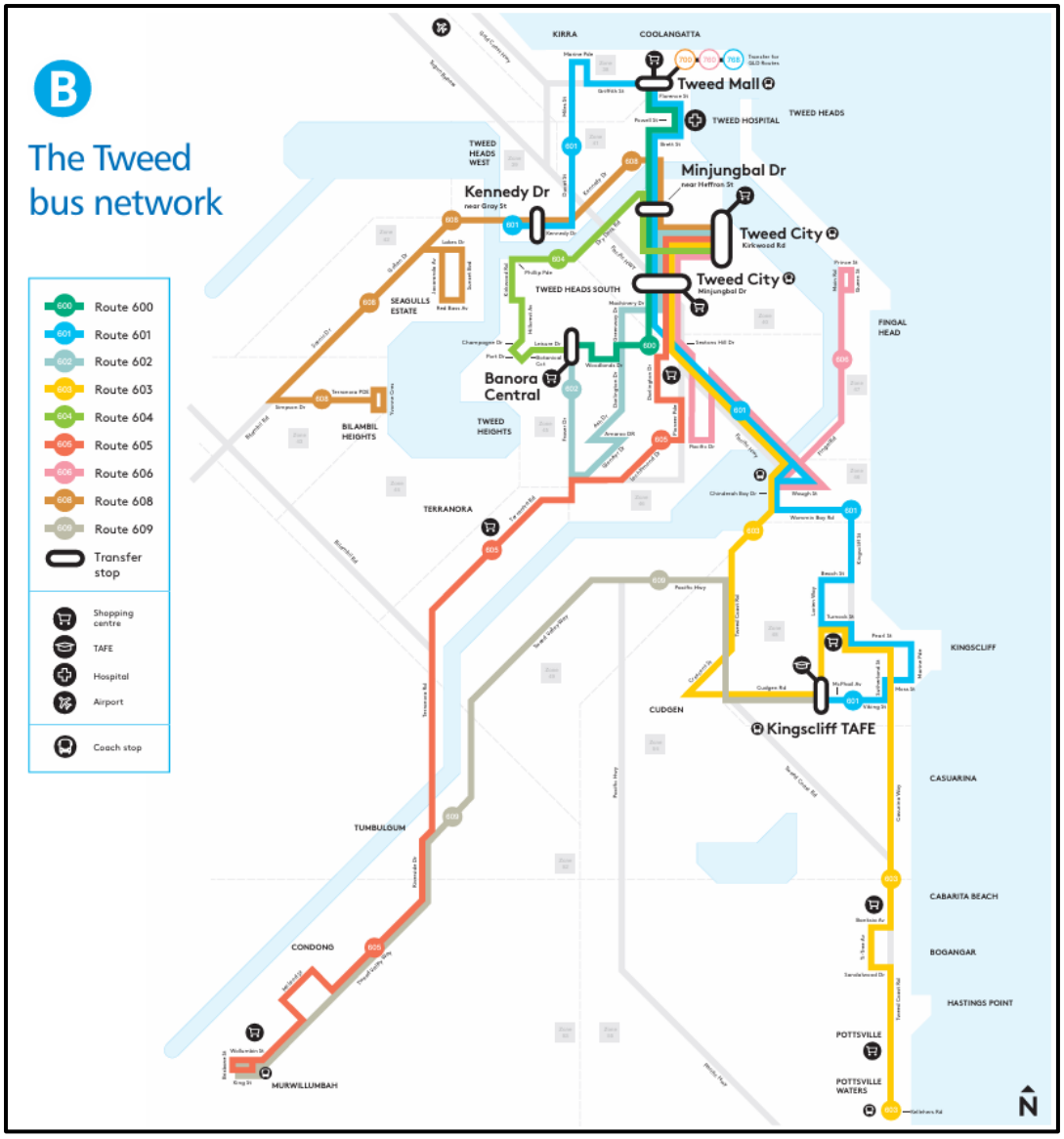


Figure 5-6 Tweed bus network

Photo 4 Bus shelter on Wharf Street (north and southbound) south of Brett Street

Numerous services, including regional bus services, operate from Tweed Mall a 12 minute (850m) walk north from the subject site.

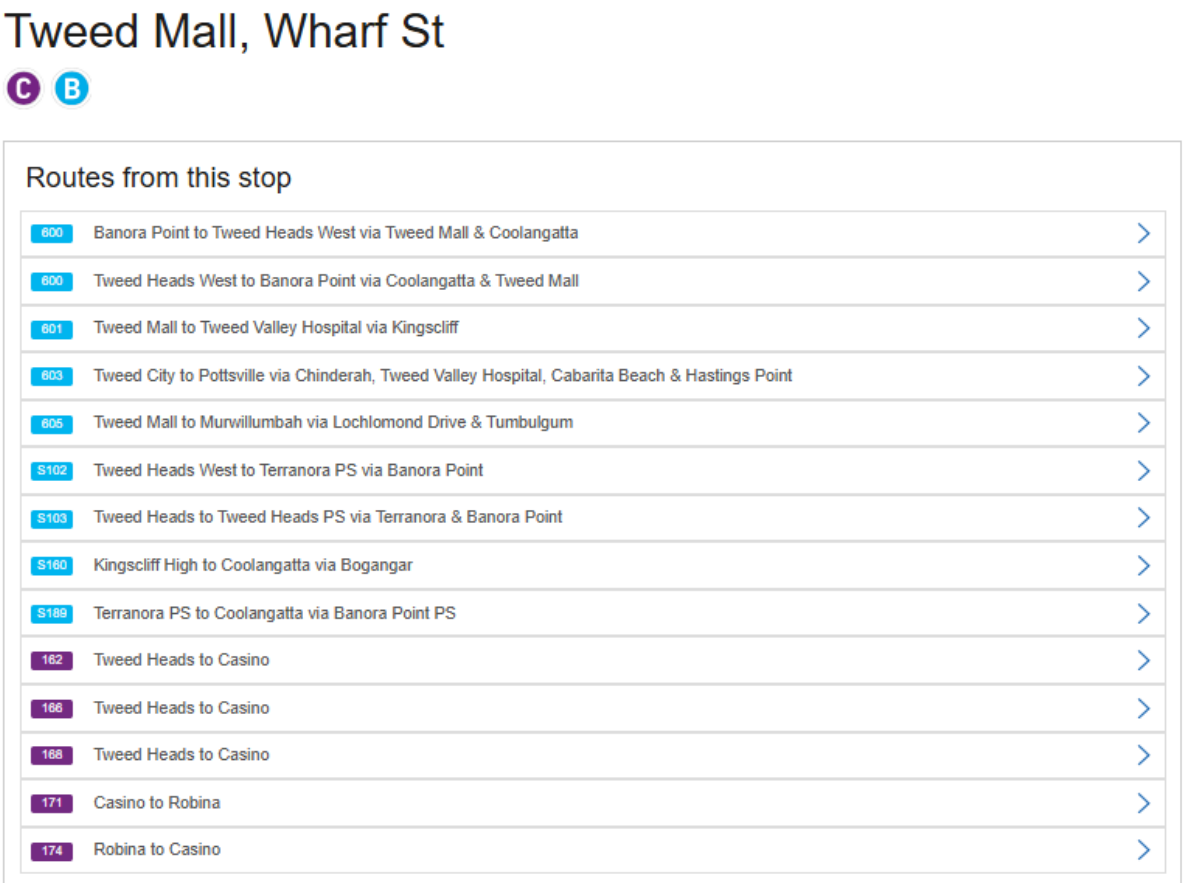


Figure 5-7 Services from Tweed Mall bus stop

5.2.3 Community Transport

A not-for-profit transport service supports older people, people with disability and those who have difficulty accessing public transport. (Registered provider with the NDIS).

See community-transport.org.au.

5.2.4 Cycling

There are a range of on-road and off road cycling facilities in the general vicinity of the site as shown below in Figure 5-8.

Allowing for the level riding conditions and low traffic demands on side streets these provide an effective route for local trips in lieu of private car use.

A broader network of cycleways also allow for recreational riding and connection to various locations further afield (Figure 5-9)

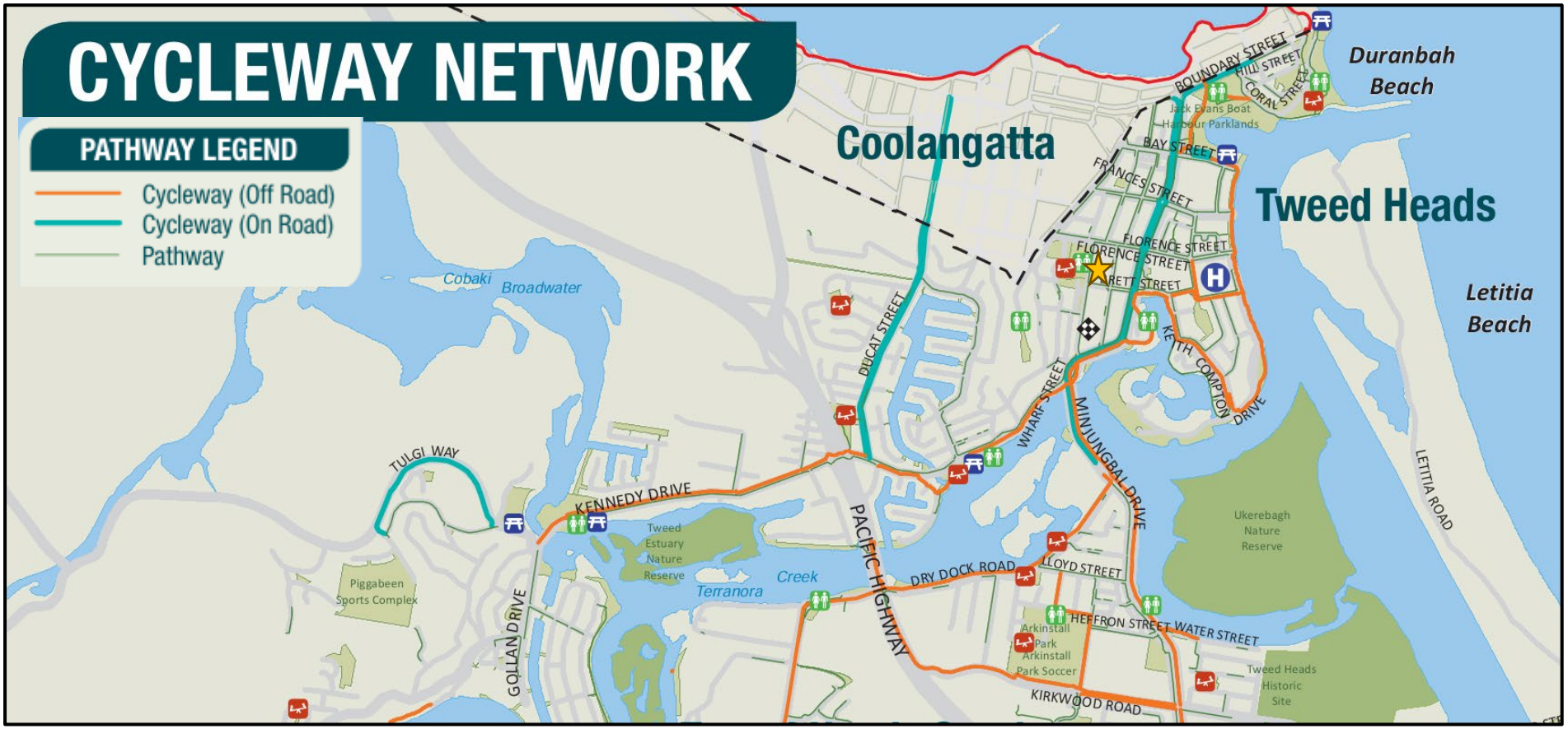


Figure 5-8 Local bike routes within vicinity of site (★)

Figure 5-9 Cycleway Network

5.2.5 Pedestrian Facilities

Being part of the town centre the site is well connected with a series of footpaths providing connection to both public transport (bus) facilities as well as local shopping centres, schools and recreational sites.

5.2.6 Parking

The subject site provides parking on site for 66 vehicles and 36 bicycles (28 residential and 8 visitor).

On-street car parking is available along the local roads surrounding the subject site. Most of this parking is unrestricted however Boyd Street and Brett Street east of Boyd Street is time controlled 9am-5pm Monday – Friday and 9am-noon Saturday.

Customer parking is available in local shopping centres and in various tourist and community facilities.

5.3 Trip Planning

There are a range of services to assist in planning bus and train travel throughout the Tweed Shire and Gold Coast.

Information can be sought online for NSW at https://transportnsw.info/trip/#/ but also by calling 131 500 and selecting option 2.

Gold Coast trip planning is available at Gold Coast Public Transport - Gold Coast Australia

Online planners provide commuters with a mobile friendly option with real time data. Ongoing improvements to wayfinding and mapping tools also see public transport and cycling links on most mobile devices eg google maps.(Figure 5-1 and 5-2 above).

Tweed, Byron, Ballina Community Transport - community-transport.org.au.

5.4 Future Travel Demands

To support Active Travel the following is noted as being relevant for future residents of the subject site:

- **Hybrid Working –** The most significant shift in journey to work patterns has been the opportunity for staff to work from home. This will be a significant driver in a Green Travel Plan with flexible work arrangements permitting people to work away from the office 1 or 2 days per week. This is consistent with the trend of many major employers across the state. It does however require access to quality, high speed internet connections.
  ACTION: Ensure the site is connected to quality high speed internet.
- **End of Trip Facilities –** Support residents who are prepared to walk or cycle in this choice through safe and well lit connections between the site and the street frontages.
  The provision of secure bike storage for 28 bicycles as well as visitor bike storage supports this form of travel to and from the subject site.
  ACTION: Ensure pedestrian and cycling links between the site and the frontage roads are well lit with passive surveillance supporting safe use at night.
- **Bus Travel** –The site can connect with quality bus connections and so can provide an effective transport option for residents looking to use bus travel as a connection between work, services and the subject site.
- **Community Transport** – This local service can enable residents who quality access to additional transport services, reducing the reliance on private car use.
- **Car Pooling** –Carpooling programs can provide a practical alternative to single commuter driving daily.
  The *Northern Rivers Carpool* has been operating for almost 10 years and was Australia's first government-funded regional carpooling initiative. The scheme's original aim was to link commuters from Clarence to Tweed Heads in northern NSW. It is now open for all trips in the area. The scheme has close to 3,000 members. www:nrcarpool.org or Facebook.
  ACTION: Display a brochure and link on the resident notice board or in resident welcome packs

Parking policy – The reduced parking supply onsite encourages the use of alternate travel and supports residents who either choose to or don't have access to private car use.

5.5 Promotion of Active Transport Options

To promote available services for new residents it is important to provide up to date transport information.

If there is an opportunity, develop an online Transport Portal to provide an electronic one stop shop where various links to external transport providers can be placed. This will ensure that changes to travel and transport options are updated by the transport providers ensuring information is current.

Otherwise, a leaflet with the links listed above (Trip Planning) can be included in a new resident welcome back or promoted by email to residents.

5.6 Monitoring and Review

A Green Travel Plan is a living document which to ensure a successful outcome needs to be monitored and the actions reviewed and modified to support changing circumstances.

Actions implemented should be monitored to ensure they are having a positive impact in achieving the goals of reducing the degree of private car usage.

Such a review should be initially undertaken with the end user once residents have moved in with a further review during the first year of implementation to adjust and modify as necessary.

Once the plan has been fully implemented an annual review is appropriate. This should include a survey of all residents of the building to quantify car ownership and travel patterns. This will inform necessary mitigation measures, support or changes to the Green Travel Plan to support the use of alternate travel options.

6 Summary and Recommendations

6.1 Summary

The following summary is drawn from the investigations into the proposed Affordable Housing development at 25-27 Boyd Street (cnr Brett Street), Tweed Heads.

The development will allow for 80 1 and 2 bedroom units and 66 parking spaces, eight of which are in accordance with AS2890.6 to provide accessible parking.

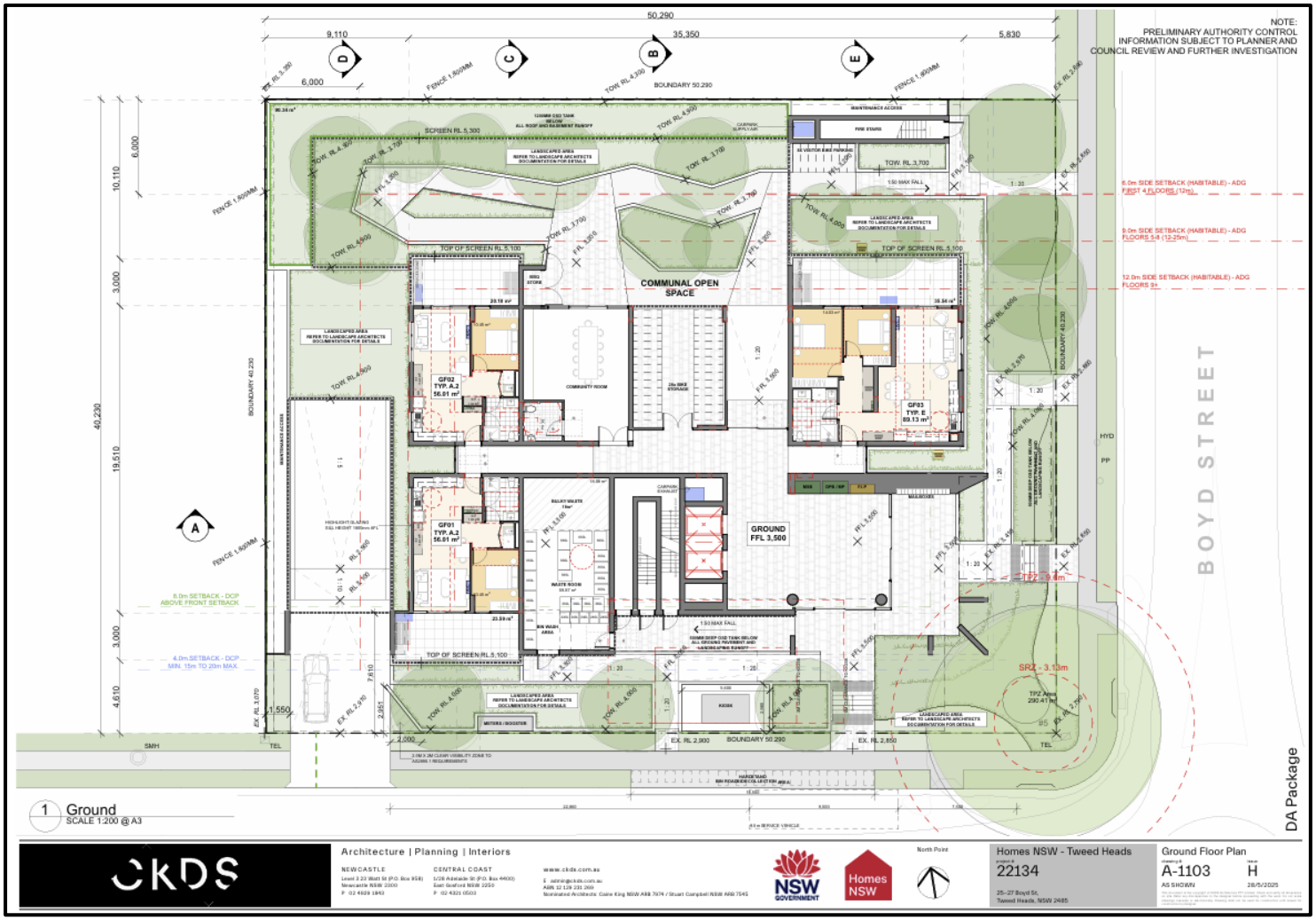
All parking will be accommodated within the proposed site in accordance with the Housing SEPP.

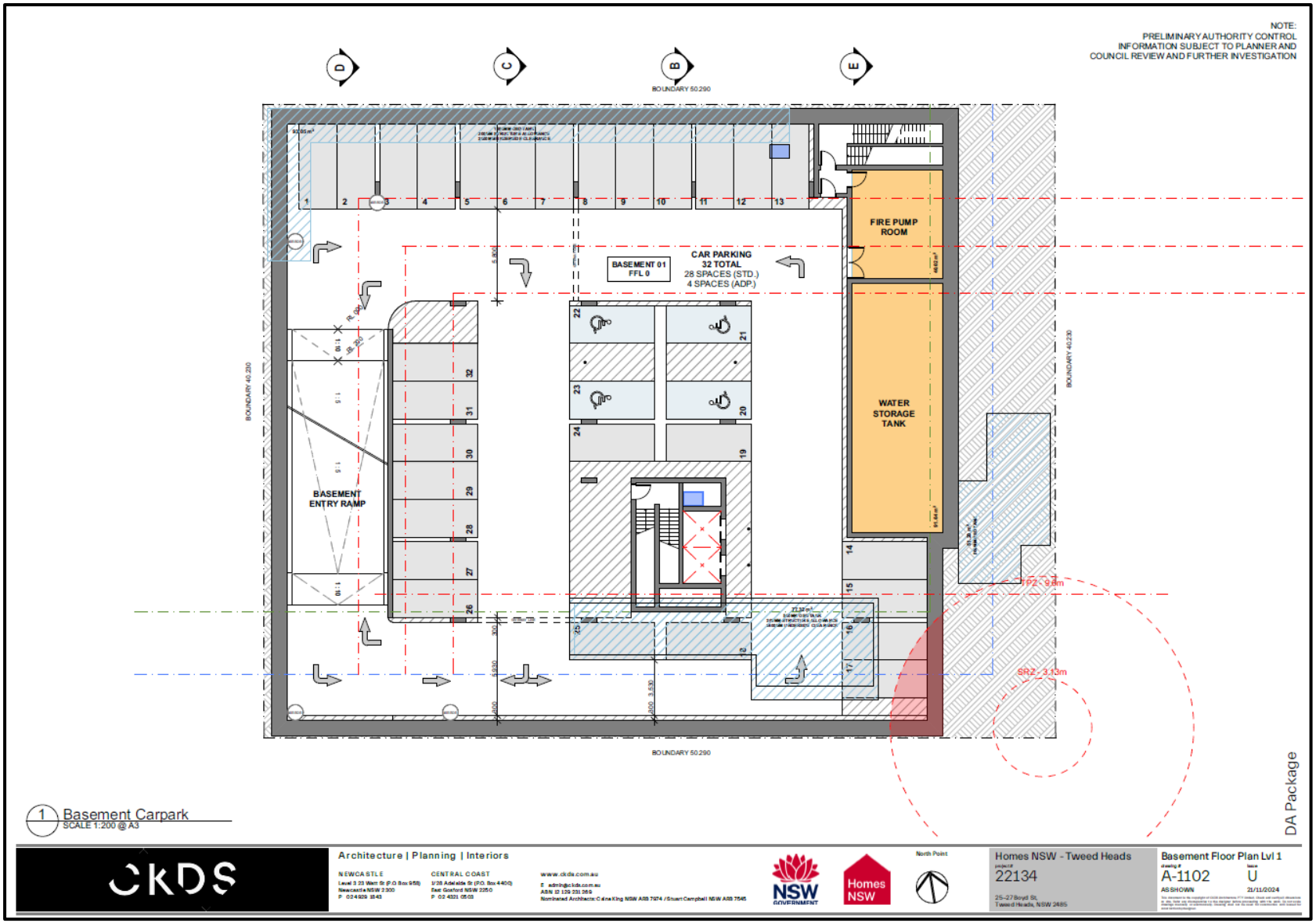
Vehicle access to the site will be from Brett Street with visibility meeting the sight lines requirements of AS2890.

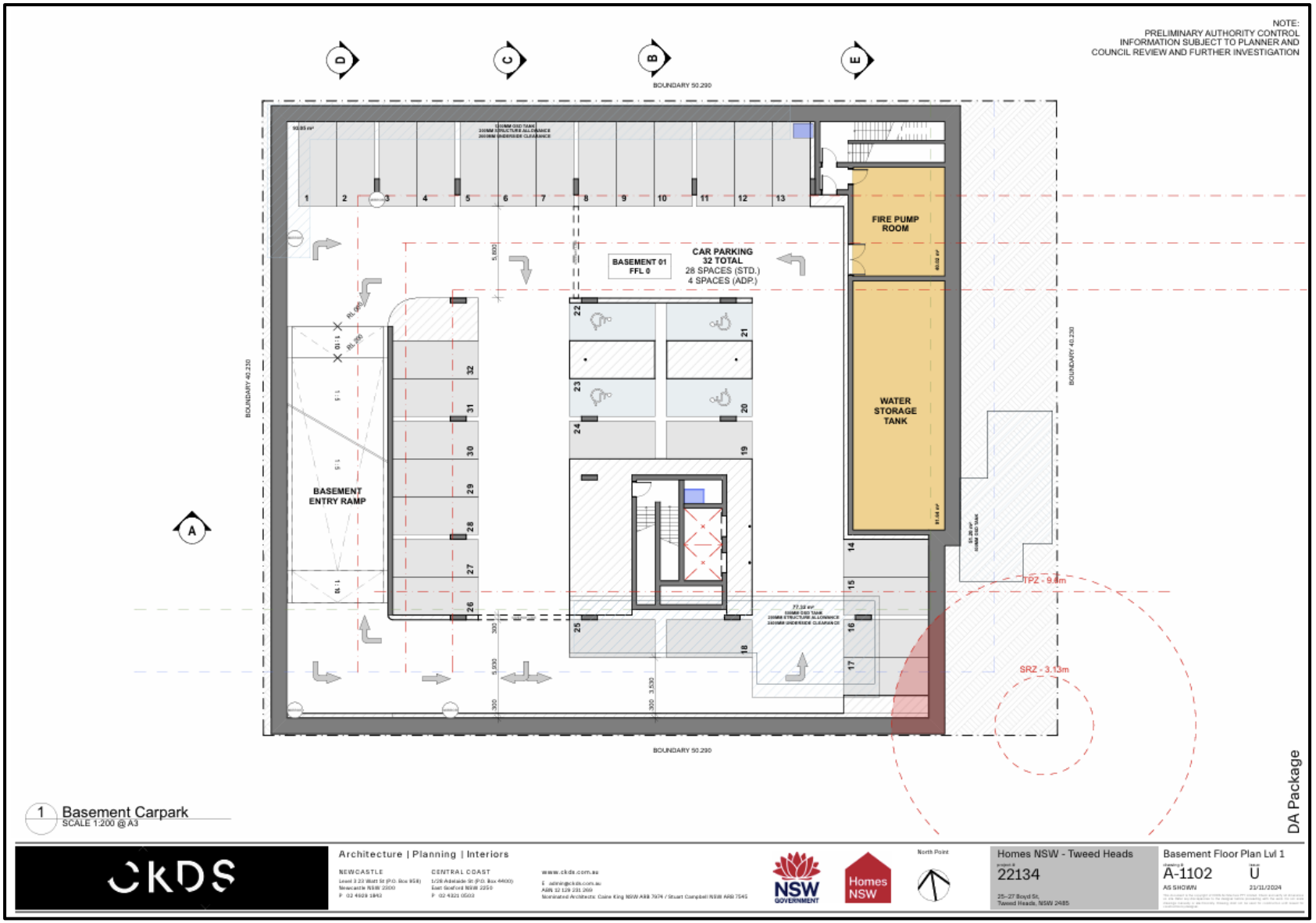
Servicing for the site will primarily be associated with waste collection and shall be on street, as will occasional deliveries or the need for deliveries by larger vehicles.

As part of the development, traffic survey data has been collected by Seca Solution at the intersection of Boyd Street and Brett Street to determine traffic movements at this intersection as well as two-way movements past the site. This roundabout operates well with minimal delays and adequate capacity to accommodate the additional 19 vph that may travel through this intersection to approach or depart the site.

Appendix A – Site Plan




NOTE:
PRELIMINARY AUTHORITY CONTROL
INFORMATION SUBJECT TO PLANNER AND
COUNCIL REVIEW AND FURTHER INVESTIGATION
BOUNDARY 50.290
BOUNDARY 40.230
BOUNDARY 40.230
BOUNDARY 50.290
FIRE PUMP ROOM
BASEMENT 01
FFL 0
CAR PARKING
32 TOTAL
28 SPACES (STD.)
4 SPACES (ADP.)
WATER STORAGE TANK
BASEMENT ENTRY RAMP
SR2 - 9.8m
SR2 - 3.13m
DA Package
1 Basement Carpark
SCALE 1:200 @ A3
CKDS
Architecture | Planning | Interiors
NEWCASTLE
CENTRAL COAST
www.ckds.com.au
NSW GOVERNMENT
Homes NSW
North Point
Homes NSW - Tweed Heads
22134
25-27 Boyd St,
Tweed Heads, NSW 2485
Basement Floor Plan Lvl 1
A-1102
U
AS SHOWN
21/11/2024


NOTE:
PRELIMINARY AUTHORITY CONTROL INFORMATION SUBJECT TO PLANNER AND COUNCIL REVIEW AND FURTHER INVESTIGATION
BOUNDARY 50.290
BOUNDARY 40.230
FIRE PUMP ROOM
BASEMENT 01
FFL 0
CAR PARKING
32 TOTAL
28 SPACES (STD.)
4 SPACES (ADP.)
WATER STORAGE TANK
BASEMENT ENTRY RAMP
TPZ - 9.4m
SRZ - 3.13m
DA Package
1 Basement Carpark
SCALE 1:200 @ A3
CKDS
Architecture | Planning | Interiors
NEWCASTLE
CENTRAL COAST
NSW GOVERNMENT
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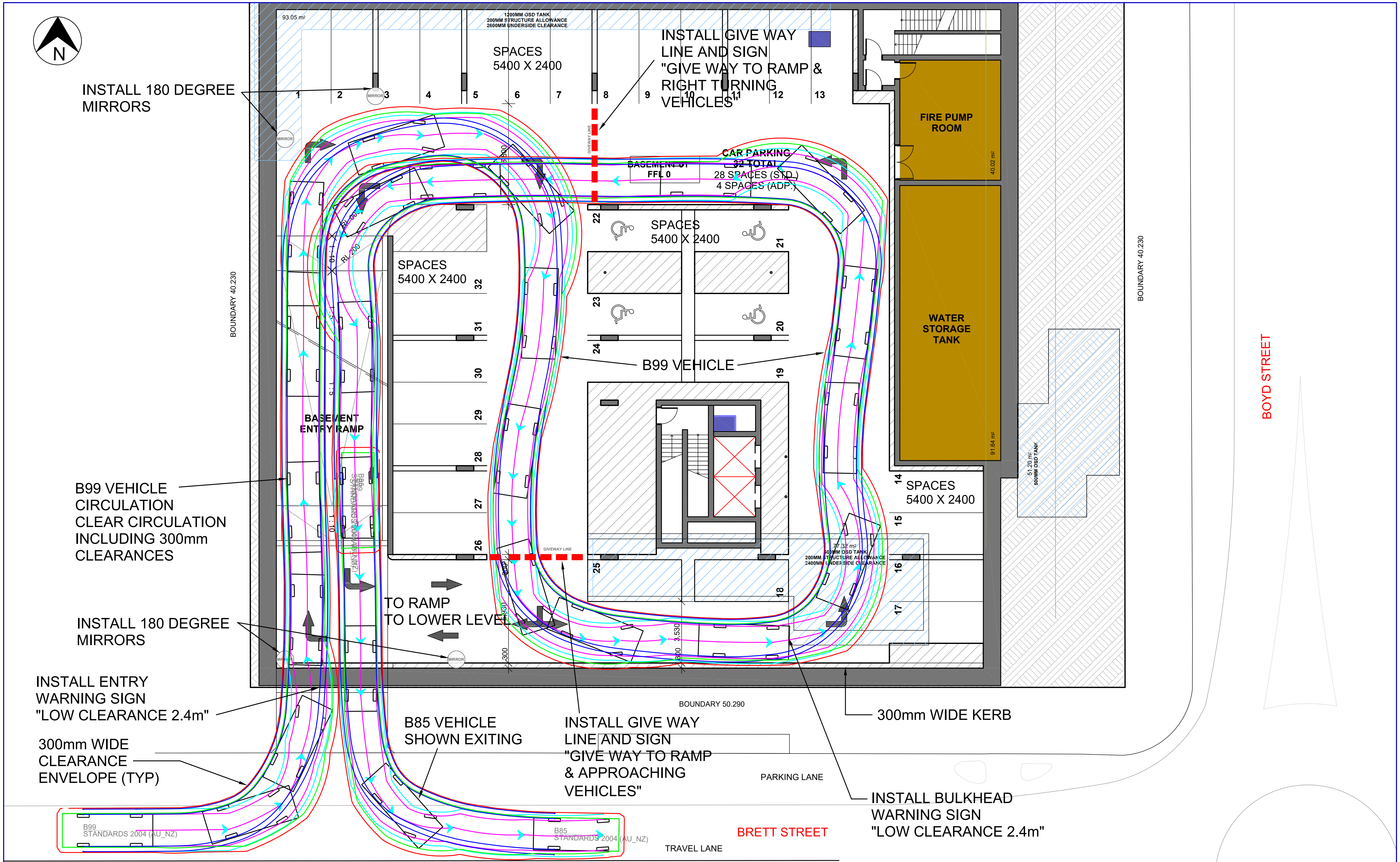
Homes NSW - Tweed Heads
22134
25–27 Boyd St, Tweed Heads, NSW 2485
Basement Floor Plan Lvl 1
A-1102
U
AS SHOWN
21/11/2024

Appendix B– Swept Paths



N
INSTALL 180 DEGREE MIRRORS
SPACES 5400 X 2400
INSTALL GIVE WAY LINE AND SIGN "GIVE WAY TO RAMP & RIGHT TURNING VEHICLES"
1200MM OSD TANK 200MM STRUCTURE ALLOWANCE 2600MM UNDERSIDE CLEARANCE
FIRE PUMP ROOM
CAR PARKING 32 TOTAL 28 SPACES (STD) 4 SPACES (ADP)
BASEMENT 01 FFL 0
SPACES 5400 X 2400
WATER STORAGE TANK
BOUNDARY 40.230
B99 VEHICLE
BASEMENT ENTRY RAMP
B99 VEHICLE CIRCULATION CLEAR CIRCULATION INCLUDING 300mm CLEARANCES
SPACES 5400 X 2400
BOYD STREET
TO RAMP TO LOWER LEVEL
INSTALL 180 DEGREE MIRRORS
INSTALL ENTRY WARNING SIGN "LOW CLEARANCE 2.4m"
BOUNDARY 50.290
300mm WIDE KERB
B85 VEHICLE SHOWN EXITING
INSTALL GIVE WAY LINE AND SIGN "GIVE WAY TO RAMP & APPROACHING VEHICLES"
300mm WIDE CLEARANCE ENVELOPE (TYP)
PARKING LANE
INSTALL BULKHEAD WARNING SIGN "LOW CLEARANCE 2.4m"
B99 STANDARDS 2004 (AU_NZ)
B85 STANDARDS 2004 (AU_NZ)
BRETT STREET
TRAVEL LANE

SECAsolution
SECA Solution Pty Ltd
Your Traffic Engineering Specialist

OFFICE COMMUNICATION NUMBERS
Newcastle Ph(02) 4032-7979
admin@secasolution.com.au
PO Box 570, Toronto NSW 2283

VEHICLE MOVEMENT PLAN
CARPARK BASEMENT LEV 1
B99 LEVEL 1 CIRCULATION

PROJECT
P2559

HOMES NSW - TWEED HEADS
25-27 BOYD ST TWEED HEADS

SHEET 1 OF 6

SCALE 1 : 200 @ A3

DETAILED BY
FRANK IACONO

APPROVED BY

N

93.05 m²

1200MM OSD TANK
200MM STRUCTURE ALLOWANCE
2600MM UNDERSIDE CLEARANCE

1 2 3 4 5 6 7 8 9 10 11 12 13

MIRROR

5.800

GIVEWAY LINE

BASEMENT 01
FFL 0

CAR PARKING
32 TOTAL
28 SPACES (STD.)
4 SPACES (ADP.)

FIRE PUMP ROOM

40.02 m²

WATER STORAGE TANK

91.64 m²

51.20 m²
600MM OSD TANK

BOUNDARY 40.230

BOUNDARY 40.230

RL 000

RL 200

1 : 10

1 : 5

1 : 5

1 : 10

BASEMENT ENTRY RAMP

22 21 23 20 24 19 32 31 30 29 28 27 26 25 18 17 16 15 14

B85 STANDARDS 2004 (AU_NZ)

B85 STANDARDS 2004 (AU_NZ)

B85 STANDARDS 2004 (AU_NZ)

B85 STANDARDS 2004 (AU_NZ)

300 5.930 300

5.550

B85 VEHICLE FORWARD PARK TO SPACE 27

B85 VEHICLE REVERSE PARK TO SPACE 14

BOUNDARY 50.290

PARKING LANE

BOYD STREET

BRETT STREET

TRAVEL LANE

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SHEET 2 OF 6

SCALE 1 : 200 @ A3

VEHICLE MOVEMENT PLAN
CARPARK BASEMENT LEV 1
B85 FWD & REV PARKING

PROJECT
P2559

DETAILED BY
FRANK IACONO

APPROVED BY

HOMES NSW - TWEED HEADS
25-27 BOYD ST TWEED HEADS

B99 FORWARD PARK TO SPACE 3

B99 VEHICLE FORWARD PARK TO SPACE 24 & REVERSE OUT OF SPACE

B99 REVERSE PARK TO SPACE 20

93.05 m²

1200MM OSD TANK
200MM STRUCTURE ALLOWANCE
2600MM UNDERSIDE CLEARANCE

B99 STANDARDS 2004 (AU_NZ)

BASEMENT 01
FFL 0

CAR PARKING
32 TOTAL
28 SPACES (STD.)
4 SPACES (ADP.)

FIRE PUMP ROOM

40.02 m²

WATER STORAGE TANK

91.64 m²

51.20 m²
600MM OSD TANK

77.32 m²
500MM OSD TANK
200MM STRUCTURE ALLOWANCE
2400MM UNDERSIDE CLEARANCE

BASEMENT ENTRY RAMP

RL 000

RL 200

1 : 5

1 : 5

1 : 10

5.800

5.930

3.530

300

300

300

GIVEWAY LINE

GIVEWAY LINE

MIRROR

MIRROR

MIRROR

BOUNDARY 40.230

BOUNDARY 40.230

BOUNDARY 50.290

BOYD STREET

PARKING LANE

BRETT STREET

TRAVEL LANE

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SHEET 3 OF 6

SCALE 1 : 200 @ A3

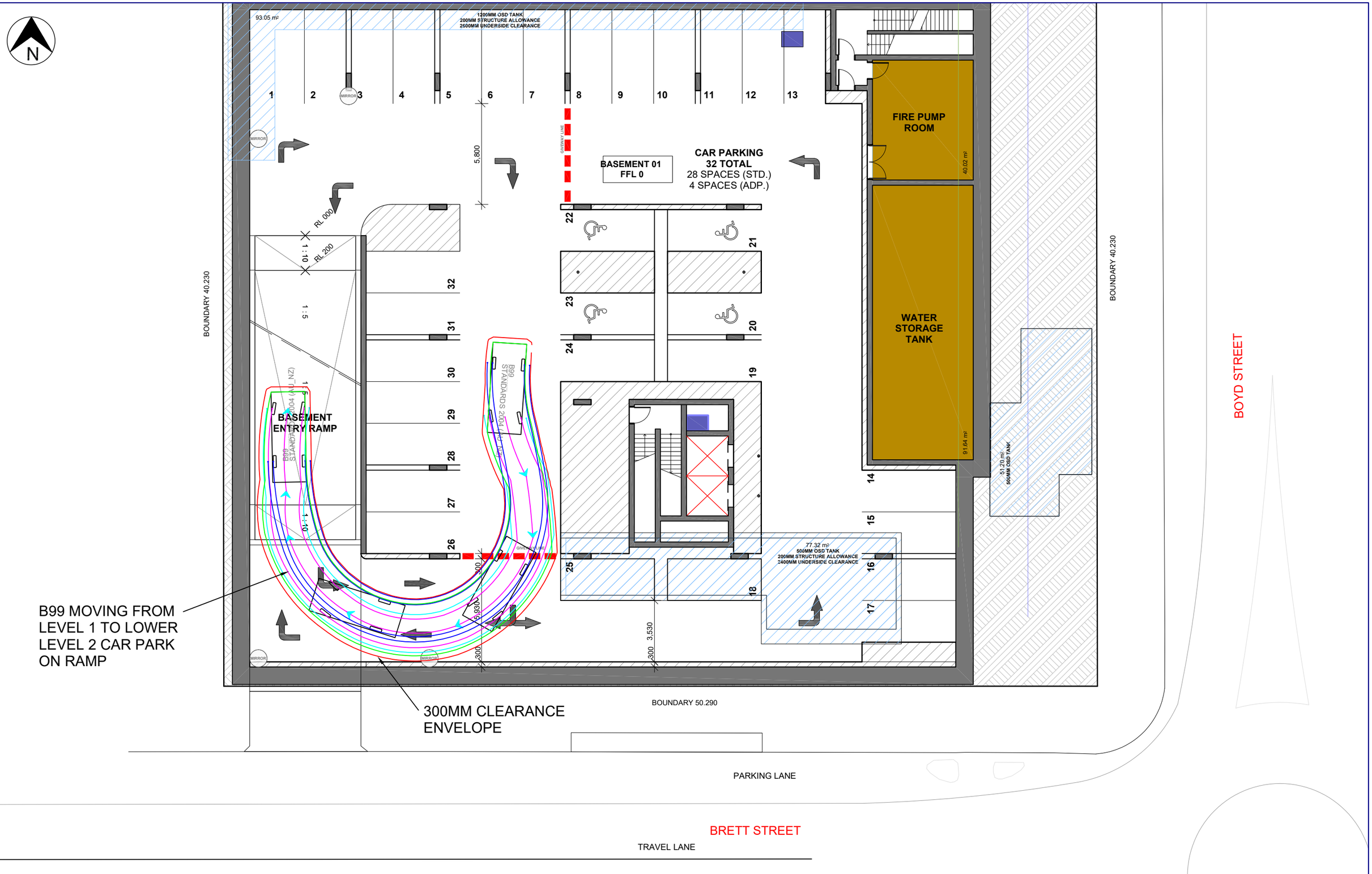
VEHICLE MOVEMENT PLAN
CARPARK BASEMENT LEV 1
B99 FWD & REV PARKING

PROJECT
P2559

HOMES NSW - TWEED HEADS
25-27 BOYD ST TWEED HEADS

DETAILED BY
FRANK IACONO

APPROVED BY



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SHEET 4 OF 6

SCALE 1 : 200 @ A3

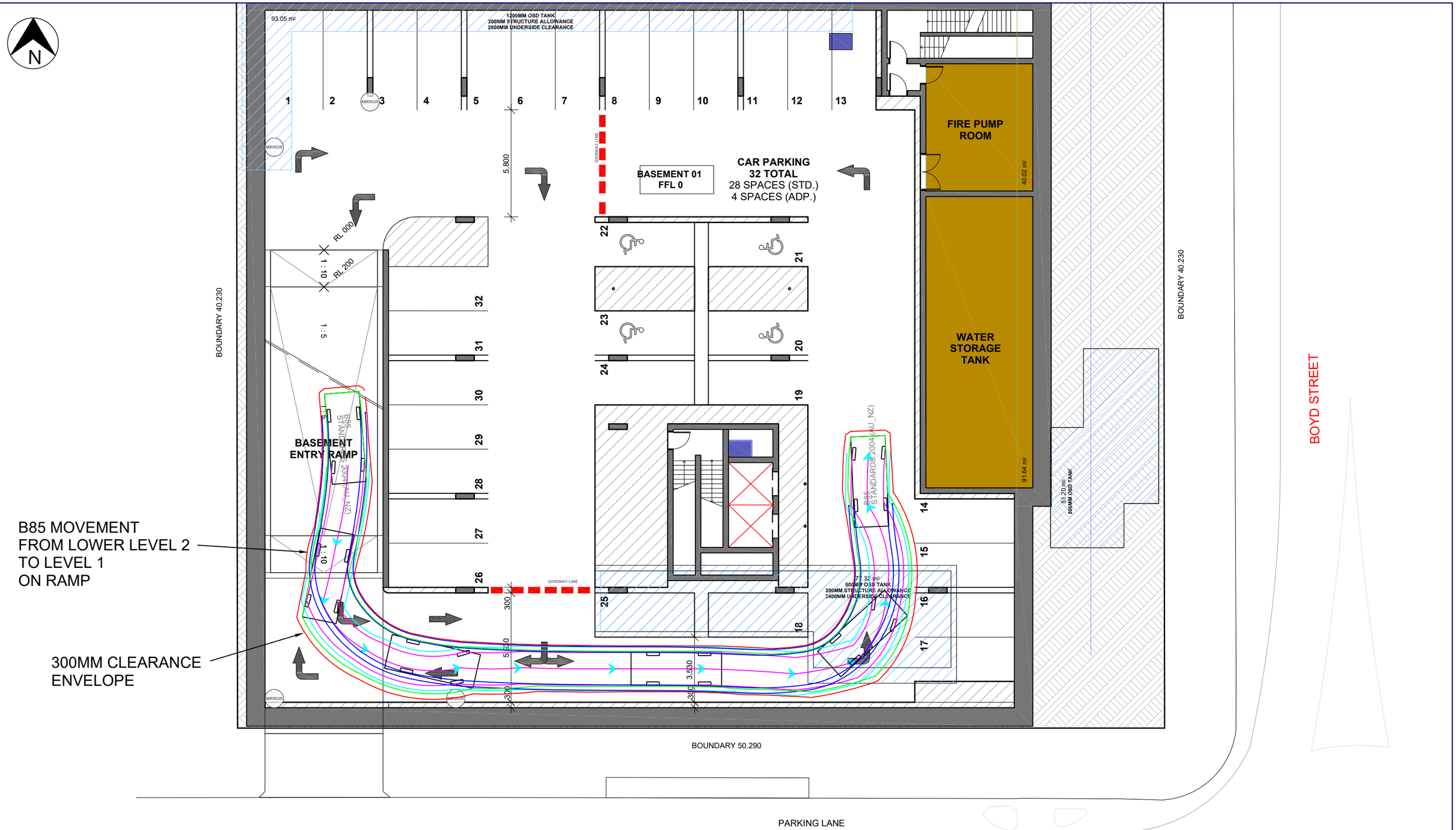
VEHICLE MOVEMENT PLAN
CARPARK BASEMENT LEV 1
B99 DOWN RAMP TO LEVEL 2

PROJECT
P2559

HOMES NSW - TWEED HEADS
25-27 BOYD ST TWEED HEADS

DETAILED BY
FRANK IACONO

APPROVED BY



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SHEET 5 OF 6

SCALE 1 : 200 @ A3

VEHICLE MOVEMENT PLAN
CARPARK BASEMENT LEV 1
B85 UP RAMP TO LEVEL 1

PROJECT
P2559

DETAILED BY
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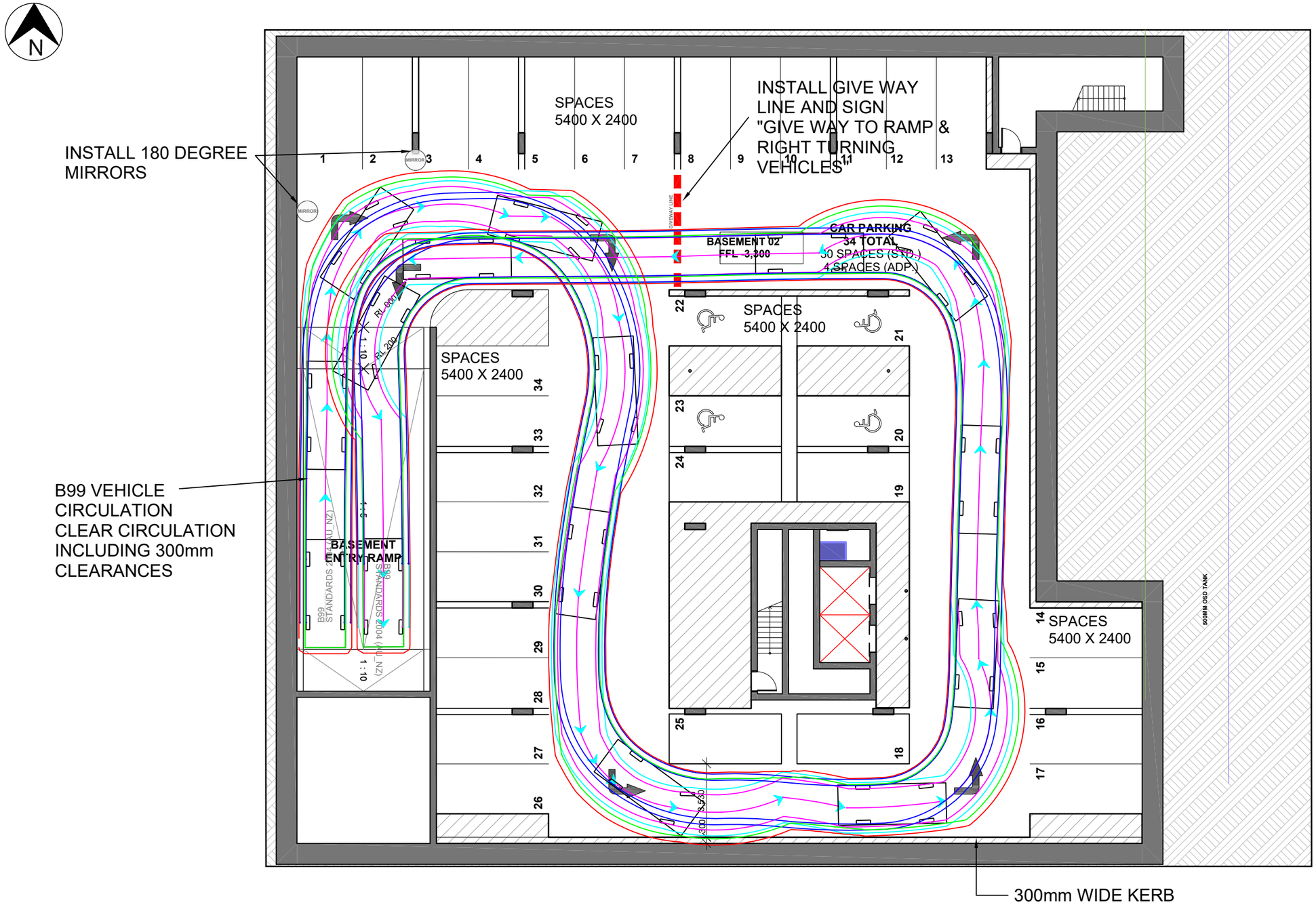
HOMES NSW - TWEED HEADS
25-27 BOYD ST TWEED HEADS



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SHEET 6 OF 6

SCALE 1 : 200 @ A3

VEHICLE MOVEMENT PLAN
CARPARK BASEMENT LEV 2
B99 LEVEL 2 CIRCULATION

PROJECT
P2559

HOMES NSW - TWEED HEADS
25-27 BOYD ST TWEED HEADS

DETAILED BY
FRANK IACONO

APPROVED BY