



79 Cabbage Tree Road, Bayview Construction Traffic Management Plan

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Aveo Group

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The Transport Planning Partnership

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APPENDICES

A. TRAFFIC CONTROL PLAN

1 Introduction

1.1 Overview

This Construction Traffic Management Plan (CTMP) relates to the proposed construction works to expand the existing Peninsula Gardens site to facilitate an additional 25 independent living units (ILU's) at 79 Cabbage Tree Road, Bayview.

A Development Application (DA) is currently being prepared and will be lodged with the Northern Beaches Council (Council) seeking approval for the proposed development. This CTMP has been prepared to accompany the DA.

The Transport Planning Partnership (TPPP) has prepared this CTMP on behalf of Aveo Group to assess the traffic and transport implications of the proposed construction activities as part of this project.

1.2 Purpose of this CTMP

This CTMP addresses the traffic and transport implications during the construction phase of the development. The overall principles of traffic management during construction include:

- manage access to/from adjacent properties
- restrict construction vehicle movements to designated routes to/from the site
- manage and control construction vehicle activity in the vicinity of the site
- provide an appropriate and convenient environment for pedestrians and cyclists
- minimise the impact on pedestrian movements
- maintain appropriate capacity for pedestrians at all times on footpaths adjacent to the site
- maintain appropriate public transport access
- carry out construction activity in accordance with the approved work hours.

The report has been prepared and checked by engineers who hold the RMS Prepare a Work Zone Traffic Management Plan (PWZTMP).

It is noted that a building contractor has not yet been appointed and therefore, details provided in this CTMP may change. Any changes proposed by the appointed contractor will require further approval from the relevant consent authorities.

2 Existing Conditions

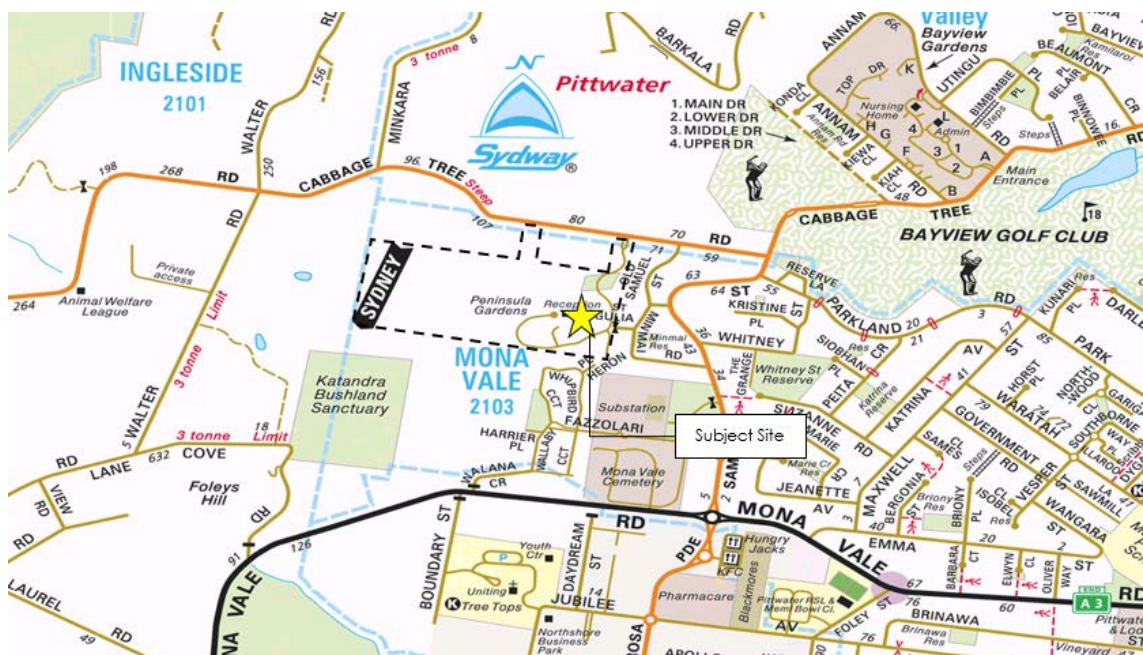
2.1 Site Description

The subject site is located at 79 Cabbage Tree Road, Bayview, and falls within the local government area of the Northern Beaches Council (formerly Pittwater Council). The site is currently situated within Peninsula Gardens, which offers independent living units (ILUs)/Villas and serviced apartments and associated car parking.

Access to Peninsula Gardens is currently provided off Cabbage Tree Road to the north of the site, with parking provided in separate garages and at-grade off the internal service roads. Land surrounding the site predominately comprises low to medium density residential uses and bushland.

The subject site and its surrounds are shown in Figure 2.1.

Figure 2.1: Locality Map



Source: Street directory Australia <http://www.street-directory.com.au/>

2.2 Abutting Road Network

The site fronts Cabbage Tree Road to the north, which provides connectivity to the internal service roads for access to the existing residential dwellings and associated car parking. These roads are described below.

Cabbage Tree Road

Cabbage Tree Road functions as a two-way collector road, generally aligned in an east-west direction. It has a posted speed limit of 50/km, with unrestricted kerbside car

parking on either side of the road. The road travels along the northern perimeter of the site and provides access to Peninsula Gardens. The road generally services residential traffic and provides connectivity between Circada Glen Road/Chiltem Road and Samuel Street, which both lead towards Mona Vale Road, to the south of the site.

Peninsula Gardens – Internal Service Road

This road is unnamed and provides access to/from residential dwellings within Peninsula Gardens. As indicated above, access to the internal service road is provided off Cabbage Tree Road. All turning movements are permitted via the vehicle access point off Cabbage Tree Road, with entry and exit movements separated via a central median island. The road has a posted speed limit of 10km/h with indented at-grade car parking spaces provided off the road.

The existing vehicle access off Cabbage Tree Road is shown in Figure 2.2.

Figure 2.2: Existing Vehicle Access



Photo captured on Sunday, 22 October 2017

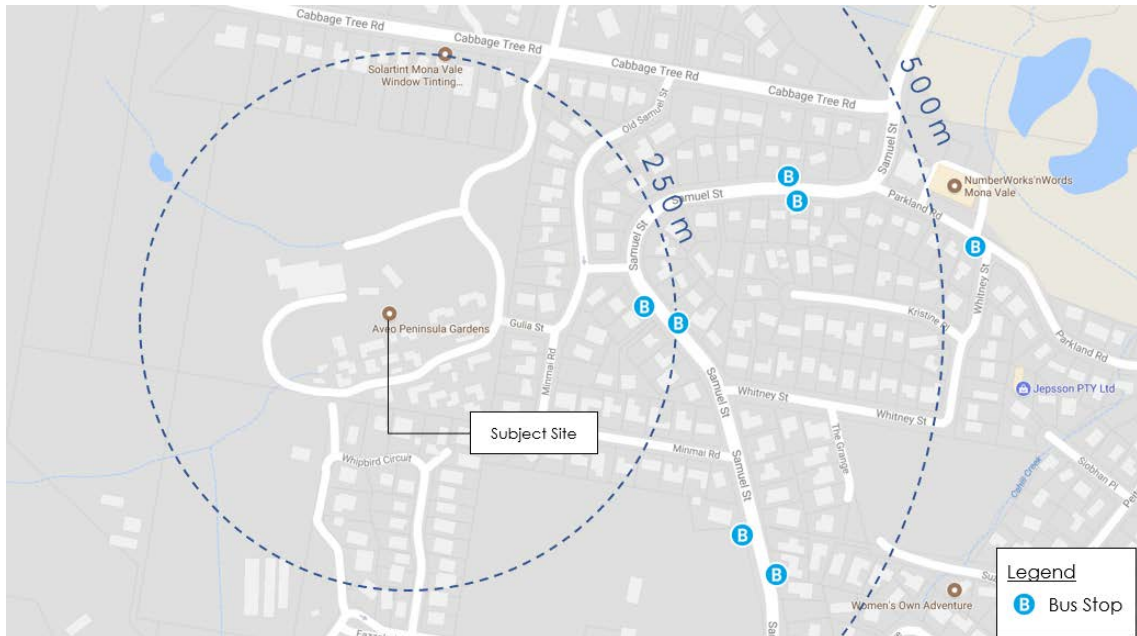
2.3 Public Transport

Limited public transport facilities are currently provided within the vicinity of the site. Within a 500m catchment radius of the site, there are currently six (6) existing bus stops located along Samuel Street, which generally service bus route 182 and additional special school services. It is noted bus route L85 has now been replaced by route 185 Mona Vale to City-Wynyard via Warriewood (effective on 26 November 2017). Stopping patterns have also changed and bus route 185 no longer travels towards Waratah Street, Parkland Road or Samuel Street.

As such, only bus route 182 is available to the public along Samuel Street, which provides connectivity between Mona Vale to Narrabeen via Warriewood Valley and Elanora Heights. This bus service will operate every hour Monday to Saturday.

The site proximity to existing public transport facilities is presented in Figure 2.3.

Figure 2.3: Site Proximity to Public Transport Facilities



Basemap Source: Google Maps Australia, accessed online on 17/11/17

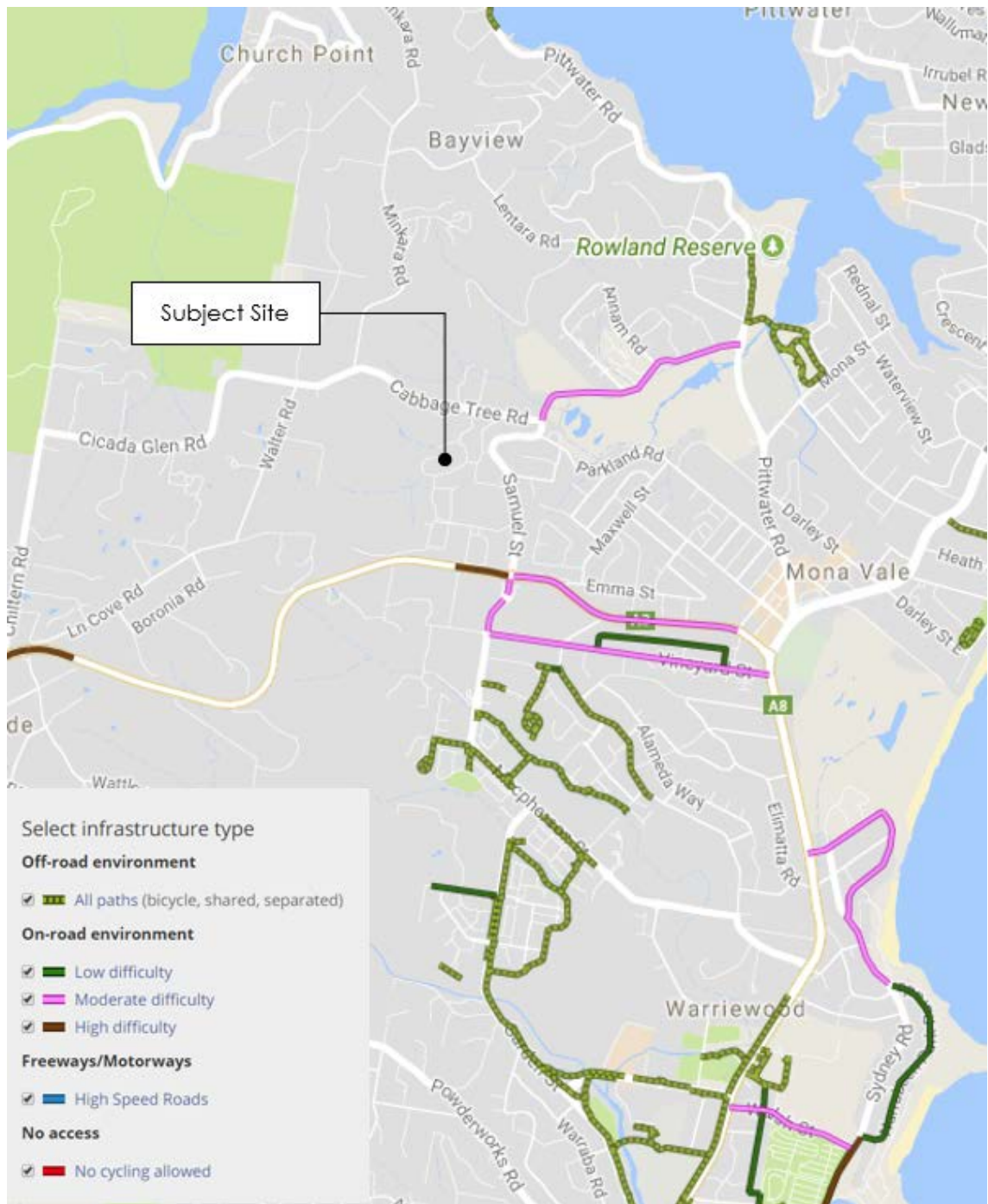
2.4 Pedestrian and Cycling Facilities

Limited pedestrian and cycle facilities are provided within the vicinity of the site, although it is noted that pedestrian and cycle activity was observed to be low.

No pedestrian footpaths are provided along Cabbage Tree Road. In the immediate vicinity of the subject site, pedestrian footpaths are only provided on the western side of Samuel Street, which provides passage onto Parkland Road to the north and Mona Vale Road to the south.

In addition to this, there are no dedicated cycleways currently provided within the vicinity of the site. The nearest cycle route is provided along Mona Vale Road and Cabbage Tree Road, north of Samuel Street. An extract of the existing cycle routes within the vicinity of the site is shown in Figure 2.4.

Figure 2.4: Existing Cycle Map



Source: Roads and Maritime Services, Cycleway Finder V2 (last updated 08/11/17)

3 Proposed Construction Activities

This section of the report outlines the proposed construction methodology and details for the proposed construction works at 79 Cabbage Tree Road, Bayview.

3.1 Description of Construction Activities

The proposed construction works at the Peninsula Gardens site will primarily involve the following:

- site clearing and removal of trees and existing landscaping
- piling and excavation works
- implementation of new internal roads to connect with the existing service road
- construction of the ILU development
- erection of façade and landscaping works
- installation of services and internal finishing.

The extent of the work site shall generally be wholly contained within the site boundary, with minimal impact on the surrounding road network.

3.2 Duration and Staging of Works

The construction works are expected to commence in mid-2018, for a total period of 18-months, completing at the end of 2019.

The construction staging, description and estimated duration of the work activities are summarised in Table 3.1.

Table 3.1: Construction Staging and Duration of Works

Construction Stage	Construction Activities	Description of Works	Duration
1	Early Works	<ul style="list-style-type: none"> • Excavation and removal of trees, soil and existing landscaping • Construction of new internal service roads, retaining walls and services • Site establishment of scaffolding and hoarding along the site perimeter • Piling and concrete pour of piles 	5 months
2	Building Structure Works	<ul style="list-style-type: none"> • Form and pour the ground floor slab • Progressive erection of building perimeter scaffold • Form and pour the structure of the building • Each level of the structure will follow a typical concrete pour cycle 	4 months
3	Façade Works	<ul style="list-style-type: none"> • Erection of the facade structure • Installation of windows • Erect balustrades to balconies 	4 months

Construction Stage	Construction Activities	Description of Works	Duration
		<ul style="list-style-type: none"> Prepare, waterproof and tile balconies Preparation and painting of the façade Remove scaffold from the perimeter of the building 	
4	Internal Fit-Out Works	<ul style="list-style-type: none"> Installation of services and partition walls Installation of joinery and doors Waterproof membranes to wet areas Floor and wall tiling Install floor finishes timber/carpet and internal painting 	3 months
5	External Works	<ul style="list-style-type: none"> Installation of hard landscaping Installation of soft landscaping 	2 months
Total			18 months

3.3 Construction Details

3.3.1 Construction Vehicle Types

Construction vehicles likely to be generated by the proposed construction activities include:

- 19m long articulated trucks and 12.5m long trucks (heavy rigid vehicles) for use during the early works stage
- 8.8m long trucks (medium rigid vehicles) for remaining construction activities
- 6.4m small rigid vehicles, vans and couriers for smaller deliveries.

It is expected that the majority of all construction vehicles will be heavy or medium rigid vehicles.

3.3.2 Work Hours

Construction works shall be carried out in accordance with the approved work hours specified in the conditions of consent for the development. It is envisaged that the typical construction work hours would be as follows:

- Monday to Friday 7:30am – 5:30pm
- Saturday 7:30am – 5:30pm.

No work to be undertaken on Sundays or Public Holidays.

Work outside of these hours shall only occur with approval from the relevant authorities (i.e. Council), prior to the commencement of any works. The Principal Contractor shall be responsible to liaise with Council to obtain all relevant permit approvals.

3.3.3 Construction Worker Parking

At this stage, it is envisaged that there would be at most around 30 construction staff on-site at any time during the project. Limited on-site car parking will be provided during the construction. As such, all workers will be encouraged and expected to use public transport to travel to/from the site. This will be incorporated in the workers induction program to ensure minimal parking impact on the surrounding streets.

Taking into consideration the above, it is proposed to implement the following measures to encourage workers to use public transport:

- provide an on-site tool drop-off and storage facility to allow tradespeople to drop off and store their specific machinery for the project
- inform staff during the induction and regular management meetings that limited on-site car parking will be available
- instruct staff to use public transport to access the site during the induction and regular management meetings
- display public transport timetable information at key locations within the work site and ensure that it is easily accessible by staff.

In addition to this, car sharing between staff will be encouraged, if car travel is necessary to the works site, to mitigate the arising parking impacts on the surrounding streets from the construction activities.

3.3.4 Materials and Handling Area

All materials handling equipment are expected to be wholly stored on-site within the works site. It is not expected that any public road would be required for such purposes.

3.4 Site Access and Construction Vehicle Routes

Generally, construction vehicles would have origins and destinations throughout Sydney. Dedicated construction vehicle routes have been developed to provide the shortest distances to/from the arterial road network, whilst minimising the impact of construction traffic on streets within the vicinity of the site.

Vehicle access to the works site will be provided via the existing driveway off Cabbage Tree Road (refer to Figure 2.2). All truck drivers will be advised of the designated truck routes to/from the site and be required to adhere to the nominated routes.

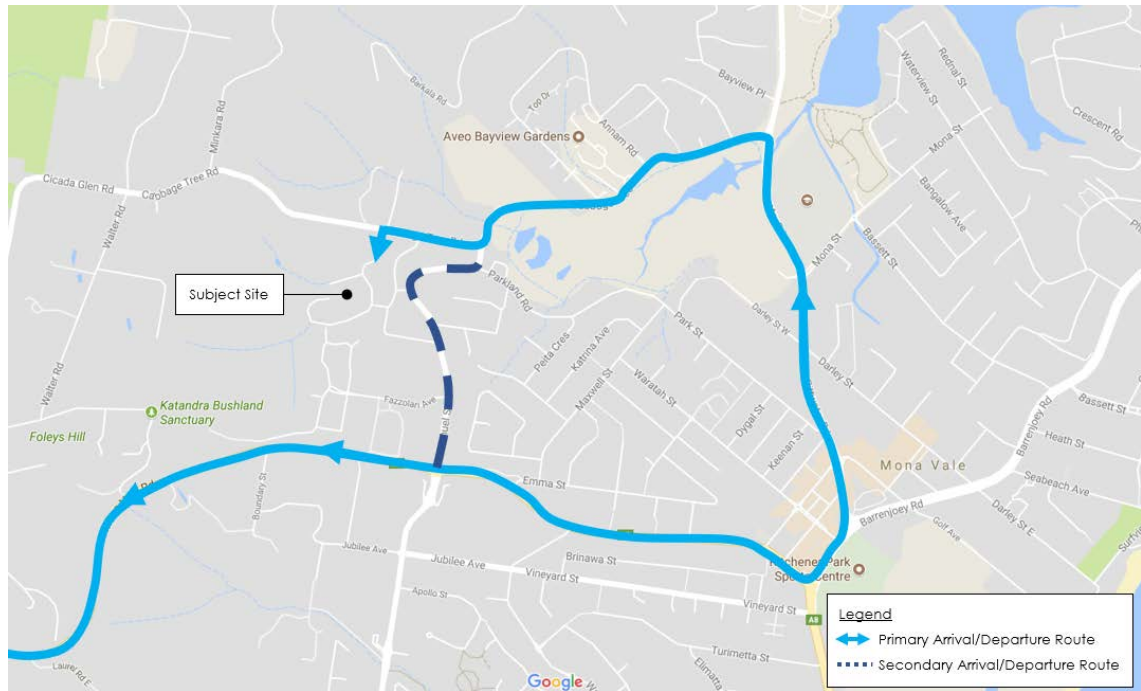
The designated truck routes to/from the works site is summarised as follows:

- approach routes:
 - travelling on Mona Vale Road turn left on Samuel Street or Pittwater Road, before turning left on Cabbage Tree Road
- departure routes:

- turn right out of the site on Cabbage Tree Road and then right on Samuel Street or Pittwater Road before turning right onto Mona Vale Road

This nominated truck routes are shown in Figure 3.1, which is consistent with existing approved RMS 19m B-Double Routes within the Sydney region.

Figure 3.1: Construction Vehicle Routes



Basemap Source: Google Maps Australia

No queuing or marshalling/parking will be permitted on public streets. Construction vehicles are to radio or call on approach to ensure adequate access to the works site is made available.

4 Construction Traffic Assessment and Implications

4.1 Construction Traffic Generation

The estimated traffic movements associated with each stage of the construction works are summarised in Table 4.1.

Table 4.1: Summary of Construction Traffic Movements

Construction Stage	Duration	Hourly Two-way Movements	Daily Two-Way Movements
1	5 months	Up to 5	Up to 50
2	4 months	Up to 7	Up to 70
3	4 months	Up to 5	Up to 50
4	3 months	Up to 5	Up to 50
5	2 months	Up to 2	Up to 20

The proposed construction traffic generation is considered to generate a modest level of vehicular traffic, with up to 7 vehicles per hour expected during the busiest period. As such, the proposed construction activities could not be expected to result in any adverse impact on the surrounding road network.

4.2 Pedestrian and Cycle Access

Pedestrian and cycle access shall be maintained at all times during the project. Whilst there are no pedestrian or cycle paths within the vicinity of the site, pedestrian and cycle safety shall be maintained at all times, particularly when trucks are entering and exiting the site.

4.3 Public Transport Facilities

The proposed construction activities would not impact existing public transport services. Consultation with all key stakeholders shall be undertaken prior to the commencement of any construction works to ensure minimal disruption to the surrounding road network.

4.4 Emergency Vehicles and Heavy Vehicles

No special provisions for emergency service vehicles or heavy vehicles are required as part of the proposed construction works. Emergency and heavy vehicle access shall be maintained at all times.

5 Construction Traffic Management Measures

5.1 Traffic Management Measures

A site-specific Traffic Control Plan (TCP) shall be prepared once a Contractor has been appointed. This TCP shall be designed in accordance with RMS Traffic Control at Works Sites manual, with all relevant approvals and permits obtained prior to the commencement of any construction works.

The proposed construction truck movements to/from the works site shall be accompanied by advisory traffic control signage to minimise the traffic impact on the surrounding road network. The traffic control for these construction truck movements will be largely consistent with TCP195 in the RMS Traffic Control at Work Sites manual, as appended in Appendix A.

All advisory road signage shall be installed in accordance with AS1742.3 Manual of uniform traffic control devices - Traffic control devices for works on roads and the RMS Traffic Control at Worksites Manual. Signs shall be installed and maintained throughout the construction period.

5.2 Vehicle Access

Construction vehicles shall radio / call the site office on approach to the site to ensure access to the works site is available. All loading and unloading shall be undertaken within the site during the approved work hours. As noted previously, the queuing or marshalling of construction vehicles shall not be permitted on public roads.

Notwithstanding this, if there are any materials spilt onto the road, site personnel and equipment shall rectify the issue accordingly, subject to appropriate OH&S provision.

5.3 Truck Routes

Protocols must be in place to ensure:

- site induction shall include procedures for accessing the site
- drivers shall adhere to the nominated truck routes, as shown in Figure 3.1
- drivers shall be aware of pedestrians and cyclists in the vicinity of the site
- drivers shall be aware of existing sign posted speed limits.

5.4 Site Inspections and Record Keeping

The construction operation shall be monitored to ensure that it proceeds as set out in the Contractor's Construction Management Plan provided by the Principal Contractor.

A daily inspection before the start of construction activity shall take place to ensure that conditions accord with those stipulated in the plan and that there are no potential hazards. Any possible adverse impacts shall be recorded and dealt with as they arise.

5.5 Site Induction

All staff employed on the site by the Principal Contractor shall be required to undergo a site induction.

The induction shall include permitted access routes to and from the works site for site staff and delivery vehicles as well as standard environmental, OH&S, driver protocols and emergency procedures.

The workers are to be informed to use public transport to access the site during the induction.

6 Conclusion

This CTMP has been prepared to document the proposed construction activities and associated construction traffic management measures necessary to facilitate the construction of the proposed development at 79 Cabbage Tree Road, Bayview.

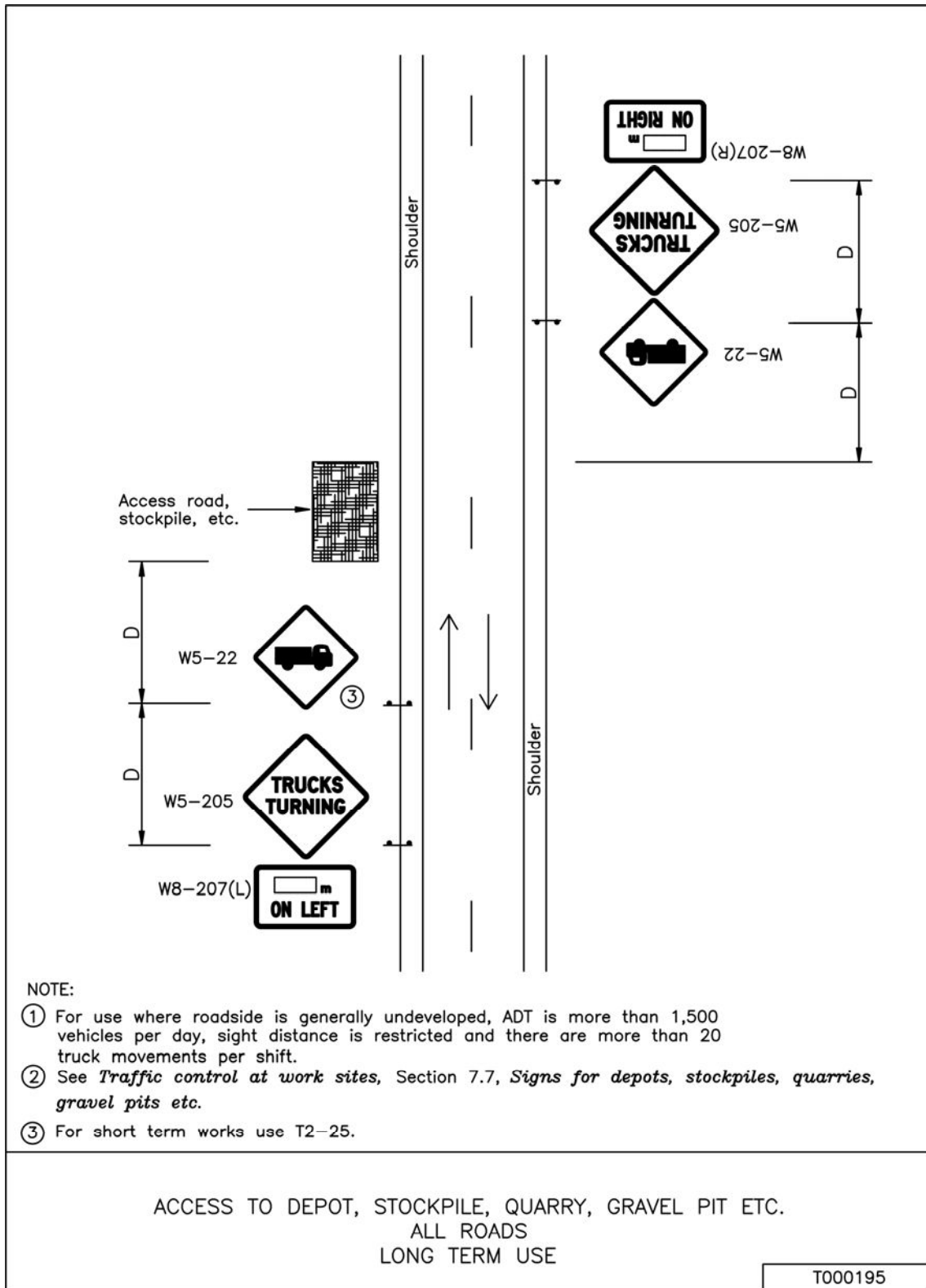
Based on the findings contained in this CTMP, it is concluded that:

- The construction of the proposed development is expected to generate up to 7 vehicles per hour during the busiest period.
- Given the expected low volume of construction vehicles, construction vehicle movements to and from the site can be satisfactorily accommodated by the surrounding road network.
- No pedestrian or cyclist facilities would be impacted as a result of the construction activities.
- It is proposed for loading/unloading of trucks to occur within the site, with construction vehicle access provided off the existing driveway off Cabbage Tree Road.
- A number of driver protocols shall be established as part of the site induction procedure for drivers to ensure the safety of motorists, pedestrians and cyclists.
- Truck drivers are to be instructed to use the designated truck routes to/from the site.

In summary, it is concluded that the proposed CTMP measures would adequately address potential implications associated with proposed construction activities.

Appendix A

Traffic Control Plan



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