



W A V E R L E Y
COUNCIL

W A V E R L E Y T R A F F I C C O M M I T T E E M E E T I N G

L A T E R E P O R T S

10.00 AM, THURSDAY 23 NOVEMBER 2023

Waverley Council
PO Box 9
Bondi Junction NSW 1355
DX 12006 Bondi Junction
Tel. 9083 8000
E-mail: info@waverley.nsw.gov.au

AGENDA

PART 1 – MATTERS PROPOSING THAT COUNCIL EXERCISE ITS DELEGATED FUNCTIONS

NOTE: The matters listed under this part of the agenda propose that Council either does or does not exercise the traffic related functions delegated to it by TfNSW. The recommendations made by the Committee under this part of the agenda will be submitted to Council for adoption.

TC/L ITEMS WITHOUT NOTICE

TC/L.01/23.11 **Woolworths Metro, 113 Macpherson Street, Bronte - Pedestrian Facility
Upgrades and Parking Restrictions (SF23/19)..... 3**

COUNCIL OFFICER’S PROPOSAL:

That Council:

1. Installs a kerb buildout to replace the traffic island in front of 113 Macpherson Street, Bronte, as shown in Figure 2 of the report.
2. Relocates the 15.4 metre Truck Zone 4 metres to the east and lengthens it to 17.5 metres.
3. Changes the ‘Truck Zone, 9 am–12 pm, Taxi Zone at Other Times’ to ‘Truck Zone, 9 am–12 pm, P15 7 am–9 am, 12 pm–10 pm Mon–Sat, 7 am–10 pm Sun.’
4. Upgrades the traffic islands at the intersection of Macpherson Street and Yanko Avenue.
5. Installs ‘Give Way’ line markings and signs at the intersection of Macpherson Street and Yanko Avenue.
6. Installs a 4.2 metre ‘P Motorbikes Only’ in Macpherson Street adjacent to 1 Yanko Avenue, Bronte.

REPORT
TC/L.01/23.11

Subject: Woolworths Metro, 113 Macpherson Street, Bronte - Pedestrian Facility Upgrades and Parking Restrictions

TRIM No: SF23/19

Manager: Nikolaos Zervos, Executive Manager, Infrastructure Services

Director: Sharon Cassidy, Director, Assets and Operations

COUNCIL OFFICER'S PROPOSAL:

That Council:

1. Installs a kerb buildout to replace the traffic island in front of 113 Macpherson Street, Bronte, as shown in Figure 2 of the report.
2. Relocates the 15.4 metre Truck Zone 4 metres to the east and lengthens it to 17.5 metres.
3. Changes the 'Truck Zone, 9 am–12 pm, Taxi Zone at Other Times' to 'Truck Zone, 9 am–12 pm, P15 7 am–9 am, 12 pm–10 pm Mon–Sat, 7 am–10 pm Sun.'
4. Upgrades the traffic islands at the intersection of Macpherson Street and Yanko Avenue.
5. Installs 'Give Way' line markings and signs at the intersection of Macpherson Street and Yanko Avenue.
6. Installs a 4.2 metre 'P Motorbikes Only' in Macpherson Street adjacent to 1 Yanko Avenue, Bronte.

1. Executive Summary

At its meeting on 24 August 2023, the Traffic Committee resolved to not adopt the proposed signage restriction changes in Macpherson Street and consider 15 minute parking and motorbike parking at the corner of 1 Yanko Avenue and Macpherson Street, Bronte.

This report seeks to install a kerb-buildout in replacement of the existing traffic island to get additional on-street parking. Relocation and lengthening of the 'Truck Zone/Taxi Zone' and replacing the 'Taxi Zone' to 15-minute parking is also proposed.

Upgrades are also proposed on the intersection of Macpherson and Yanko Avenue. Larger traffic islands are proposed to replace the existing traffic islands and give way line markings and signages are proposed to be installed to further enforce the priority of the vehicles traversing Macpherson Street. The installation of the proposed traffic islands would then allow motorbike parking to be installed in the location of the existing traffic island on the Macpherson Street frontage of 1 Yanko Avenue.

The locations where the changes are proposed are shown in Figure 1. Figure 2 shows the proposed upgrades.

Council will need to exercise its delegated functions to implement the proposal.

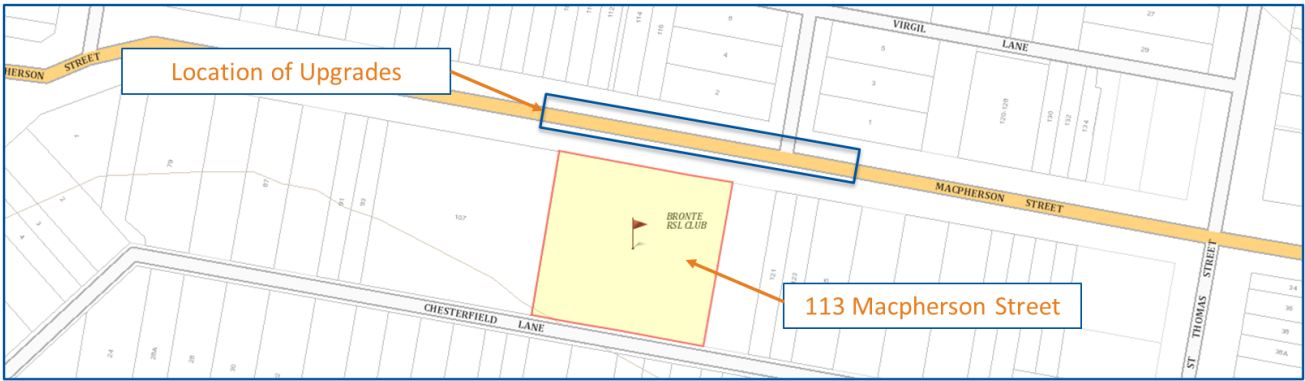


Figure 1. Site location.

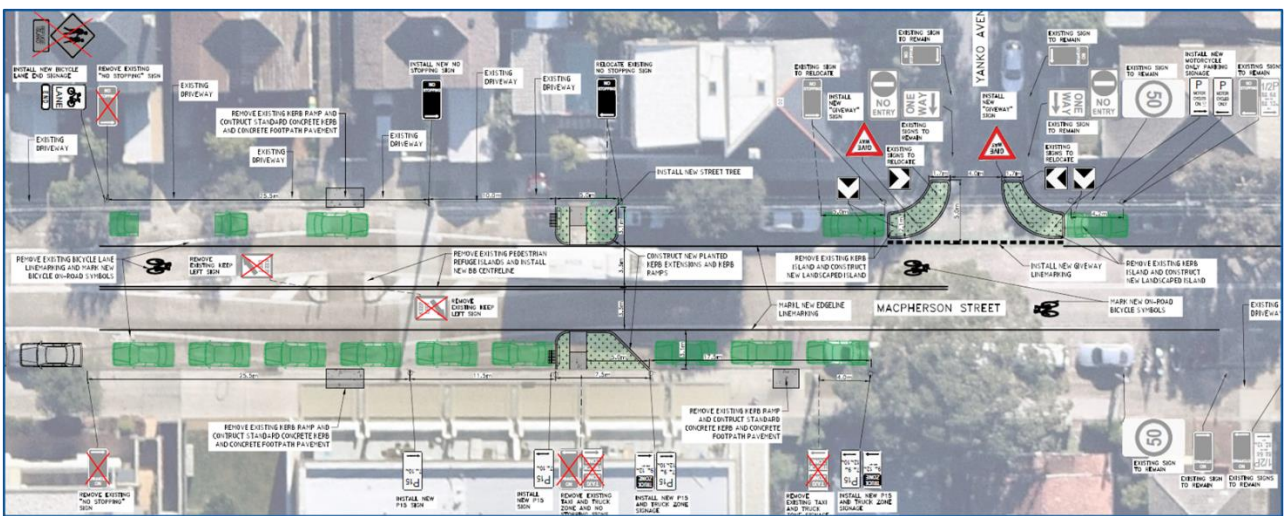


Figure 2. Proposed Kerb-buildout and changes to parking restrictions.

2. Introduction/Background

At its meeting on 24 August 2023, Waverley’s traffic committee resolved to not adopt the proposed signage restriction changes in Macpherson Street and consider 15-Minute parking and motorbike parking at the corner of 1 Yanko Avenue and Macpherson Street, Bronte.

Installing of kerb buildouts and upgrades to the line markings and signages are now proposed in addition to the changes in parking restrictions to improve the parking conditions in the area and to provide additional on-street parking in the vicinity of the Woolworths Metro Supermarket on Macpherson Street.

3. Technical Analysis

Proposed kerb buildout on the frontage of 113 Macpherson Street

Replacing the existing traffic island with kerb-buildouts creates 8 new on-street parking spaces around the vicinity and would help with the current parking conditions in the area. The 2 new on-street parking would be designated as 15-minute parking to be used by the customers of Woolworths Metro.

Relocation and lengthening of Truck Zone/Taxi Zone

The 15.4 metres of current length of the existing truck zone/taxi zone would be lengthened to 17.5 metres and relocated 4 metres to the east of its current position. The lengthening would ensure that a 12.5 metre truck could still access the truck zone now being bound by the kerb buildout on one side and ensure that there is enough space for 3 cars to be accommodated outside the truck zone times.

Replacement of Taxi Zone with 15-minute parking

Replacing the 'Truck Zone, 9 am–12 pm Mon–Sat, Taxi Zone at Other Times' restrictions at the frontage of 113 Macpherson Street with 'Truck Zone 9 am–12 pm Mon–Sat, P15 at 7am -9am, 12 am-10pm Mon -Sat 7 am – 10 pm Sun' restrictions will provide 3 additional 15-minute on-street parking spaces outside the truck zone hours.

Proposed traffic island upgrade on the intersection of Macpherson Street and Yanko Avenue, Bronte

Upgrading the existing traffic island provides an additional 4.2 metres of length to be used for motorbike parking. The upgrade traffic island would also improve the sight distance of cars trying to merge with traffic along Macpherson Street.

Proposed 'Give Way' line marking and signage on the intersection of Macpherson Street and Yanko Avenue, Bronte

Installing 'Give Way' line markings and signage on the intersection would further enforce priority on the traffic traversing Macpherson Street.

Proposed motorbike parking on the Macpherson Street frontage of 1 Yanko Avenue, Bronte.

Replacing the traffic islands with a kerb buildout allows a 4.2 metre motorbike parking to be installed at the Macpherson Street frontage of 1 Yanko Avenue. This would ensure that there would be dedicated motorbike parking area in the vicinity and would free up spaces for cars that would otherwise be occupied by motorcycles in the vicinity.

The proposed changes to signage are shown in figures 3 to 6.



Figure 3. Proposed change to the signage at the frontage of 113 Macpherson Street.



Figure 4. Proposed change to the signage at the frontage of 113 Macpherson Street.

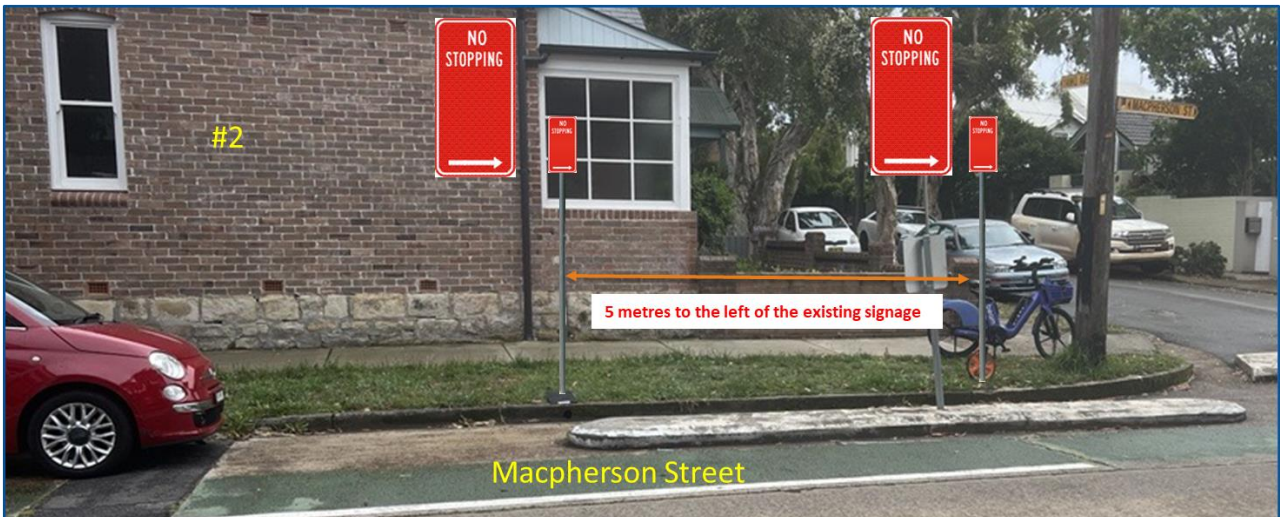


Figure 5. Proposed change to the signage at the Macpherson Street frontage of 2 Yanko Avenue.

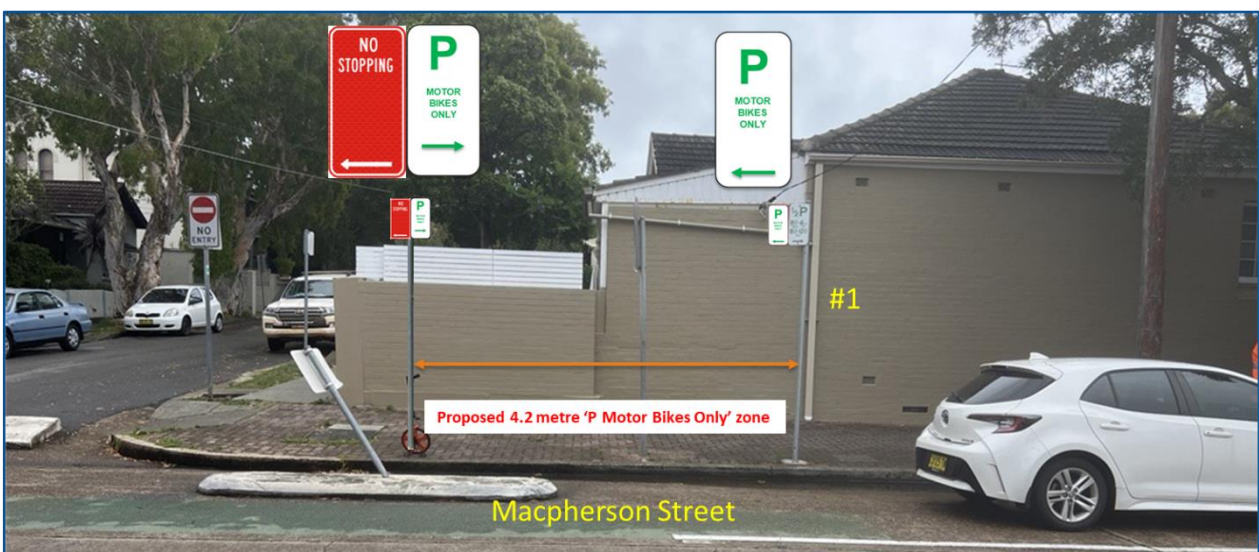


Figure 6. Proposed change to the signage at the Macpherson Street frontage of 1 Yanko Avenue.

'No Stopping' setback distance variation

The proposed design of the kerb buildout at the frontage of 113 Macpherson Street adopts reduced crossing distances in line with the sightline assessment undertaken (Attachment 2). The reduced distances of the 'No Stopping' signages on the westbound approach and eastbound departure deviate from the TfNSW guidelines recommended standard distance of 20 metres.

Attachment 2 also provides a technical analysis of the required safe stopping distance for a vehicle on approach to the intersection, and the line of sight to a pedestrian about to cross indicating the safe stopping distance has been achieved.

Figure 7 shows the calculated 38 metres of stopping sight distance. The illustration shows that vehicles going both westbound and eastbound have a clear sight line of pedestrians who will be using the crossing.

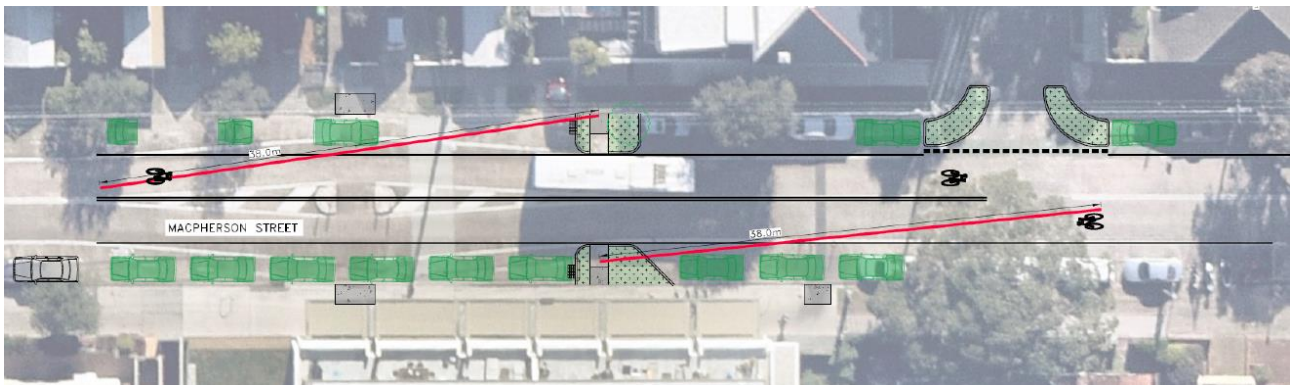


Figure 7. Stopping sight distance.

4. Financial Information for Council's Consideration

Capital works funding will be sought through the budgeting process.

5. Attachments

1. Macpherson Street, Woolworths Metro - Design [↓](#)
2. Macpherson Street, Woolworths Metro - Stopping sight distance [↓](#) .

Stopping Sight Distance

Warrants - Intersection No Stopping Distance - Calculations.xlsx

Also called minimum gap sight distance

Stopping Sight Distance (SSD) is the distance to enable a normally alert driver, travelling at the design speed on wet pavement, to perceive, react and brake to a stop before reaching a hazard on the road ahead. The formula is the same as for the approach sight distance.

Input Data		
R _T , reaction time	1.5	seconds
V, 85 th ile speed	43	km/hr
d, coefficient of deceleration	0.36	km/hr
a = longitudinal grade on approach (%) (positive for uphill, negative for downhill)	0%	
Calculations		
Stopping sight distance (SSD)	38.1	metres

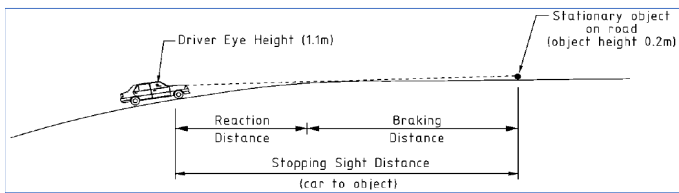
42.5

approximate

$$SSD = \frac{R_T V}{3.6} + \frac{V^2}{254(d + 0.01a)}$$

where

- R_T = reaction time (sec)
- V = operating speed (km/h)
- d = coefficient of deceleration (longitudinal friction factor)
- a = longitudinal grade (% , + for upgrades and - for downgrades)



Source: AUSTRROADS Guide to Road Design Part 3 - Geometric Design
 Section 5.3 Stopping Sight Distance (SSD)
 Part 3 - Geometric Design Table 5.3

R _T , Reaction time (seconds)	Typical road conditions	Typical use
2.5	<ul style="list-style-type: none"> Unalerted driving conditions due to the road only having isolated geometric features to maintain driver interest Areas with high driver workload/complex decisions High speed roads with long distances between towns 	Absolute minimum value for high speed roads with unalerted driving conditions. General minimum value for: <ul style="list-style-type: none"> high speed rural freeways high speed rural intersections isolated alignment features
2.0	<ul style="list-style-type: none"> Higher speed urban areas Few intersections Alerted driving situations in rural areas High speed roads in urban areas comprising numerous intersections or interchanges where the majority of driver trips are of relatively short length 	Absolute minimum value for the road conditions listed in this road General minimum value for most road types, including those with alert driving
1.5	Alert driving conditions e.g.: <ul style="list-style-type: none"> high expectancy of stopping due to traffic signals consistently tight alignments for example, mountainous roads restricted low speed urban areas built-up areas – high traffic volumes interchange ramps when sighting over or around barriers. 	Absolute minimum value. Only used in very constrained situations where drivers will be alert Can be considered only where the maximum operating speed is ≤ 90 km/h Should not be used where other design minima have been used

Vehicle Type	Coefficient of deceleration (d)	Driver/road capability	Typical use
Cars	0.61	Braking on dry, sealed roads	Specific applications where the normal stopping sight distance criteria applied to horizontal curves produce excessive lateral offsets to roadside barriers/structures
	0.46	Mean value for braking on wet, sealed roads for a hazard. Maximum values when decelerating at an intersection	Maximum value for calculating absolute minimum stopping sight distance. Only to be used in constrained locations, typically on: <ul style="list-style-type: none"> lower volume roads less important roads mountainous roads lower speed urban roads sighting over or around barriers tunnels
	0.36	About a 90 th percentile value for braking on wet, sealed roads. Maximum value allowed for deceleration lanes at intersections	Desirable value for calculating minimum stopping sight distance for most urban and rural road types, and level crossings
	0.26	Comfortable deceleration on sealed roads. Normal driving event	Not to be used without the approval of the relevant road agency This value may be adopted for stopping sight distance for major highways and freeways in flat terrain, and for deceleration in turn lanes at intersections Its use can lead to an unnecessarily high standard and expensive design in undulating or hilly terrain. Maximum value for calculation of horizontal curve perception sight distance.
	0.27	Braking on unsealed roads on sealed roads	Used to determine stopping sight distance on unsealed roads. This value is very dependent on the surface material and should be verified where possible
Trucks	0.29	Braking by single unit trucks, semi-trailers and B-doubles on dry, sealed roads. Minimum value required by vehicle standards regulations	Desirable value for calculating truck stopping sight distance for most urban and rural road types, and level crossings
Buses	0.15		Desirable braking to ensure passenger comfort approaching a bus stop.

