

WAVERLEY TRAFFIC COMMITTEE MEETING

A meeting of the WAVERLEY TRAFFIC COMMITTEE will be held in the Customer Service Centre Meeting Room, 55 Spring Street, Bondi Junction at:

10.00 AM, THURSDAY 28 JUNE 2018

Emily Scott **Director, Waverley Renewal**

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AGENDA

Apologies

Declarations of Interests

Adoption of Previous M	linutes by Council -	24 May 2018	10
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The recommendations contained in Part 1 – Matters Proposing that Council Execise its Delegated Functions – of the minutes of the Waverley Traffic Committee meeting held on 24 May 2018 were adopted by Council at its meeting on 19 June 2018 with the following change:

1. TC/L.01/18.05 – Proposed Changes to Parking Restrictions in Bondi Junction.

Council adopted the recommendation of the Traffic Committee, subject to the proposed changes to meter operating times shown in the table in the report being amended to correct identified administrative errors as follows:

- Allens Parade Proposed Time Restrictions changed to No change, residential.
- 2. Leswell Street east side (between Oxford Street and Hegarty Lane) Current Time Restrictions changed to 1/2P ticket 8 am–12 pm 2P ticket 12 pm–7 pm.
- 3. Leswell Street east side (between Oxford Street and Hegarty Lane) Proposed Time Restrictions changed to 1/2P ticket 8 am–12 pm 2P ticket 12 pm–6 pm.
- 4. Leswell Street east side (between Camp Lane and Grafton Street) Current Time Restrictions changed to 1/2P ticket 8 am–12 pm 2P ticket 12 pm–7 pm.
- 5. Leswell Street east side (between Hegarty Lane and Grafton Street) Current Time Restrictions changed to 1/2P ticket 8 am–12 pm 2P ticket 12 pm–7 pm.
- 6. Oxford Street (between Newland Street and Denison Street) Duplicate entry removed.
- 7. Porter Avenue changed to Porter Street.
- 8. Porter Street (between Bronte Road and Adams Lane) Duplicate entry removed.
- 9. Ruthven Street (between Oxford Street and Gowrie Lane) Current Time Restrictions changed to 1/2P ticket 8 am–12 pm 2P ticket 12 pm–7 pm.
- 10. Ruthven Street (between Oxford Street and Gowrie Lane) Proposed Time Restrictions changed to 1/2P ticket 8 am–12 pm 2P ticket 12 pm–6 pm.
- 11. Vernon Street (between Oxford Street and Rowe Lane) Current Time Restrictions changed to 1/2P ticket 8 am–12 pm 2P ticket 12 pm–7 pm.

at Chesterfield Parade.

12. Vernon Street (between Oxford Street and Rowe Lane) – Proposed Time Restrictions changed to 1/2P ticket 8 am–12 pm 2P ticket 12 pm–6 pm.

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 the RMS. The recommendations made by the Committee under this part of the agenda will be submitted to Council for adoption.

TC/C	STATE E	LECTORATE OF COOGEE			
TC/C.01/18.06		Arden Street, Bronte - Installation of a School Days Loading Zone (A02/0637-02)			
cou	NCIL OFFICER'S I	PROPOSAL:			
Bron	ite, immediately	Is m of 'Loading Zone 8 am-4 pm School Days' on the eastern side of Arden Street, south of the existing 'No Stopping' zone at the midblock, signalised pedestrian elly Public School.			
TC/C	2.02/18.06	Ruthven Lane, Bondi Junction - 'No Parking' Zone (A02/0637-02)22			
cou	NCIL OFFICER'S I	PROPOSAL:			
That	Council:				
1.		long 'No Parking' zone in Ruthven Lane opposite the garages serving 17 Oxford Street, as shown in Figure 5 of this report.			
2. Replaces the existing 'No Parking' zone on the inside of the bend in Ruthven Lane, rear of 1 Ru Street, with 'No Stopping'.					
TC/C	2.03/18.06	Arden Street, Bronte - Part Time 'No Right Turn' into Chesterfield Parade (SF18/199)			
cou	NCIL OFFICER'S I	PROPOSAL:			
That	Council Installs '	No Right Turn, Mon–Fri 8.00 am–9.30 am and 2.30–4.00 pm' in Arden Street, Bronte,			

TC/C.04/18.06	Denison Street, Bondi Junction - Temporary Road Closure for Crane Lift	
	(A02/0216)	39

COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Council approves the temporary closure of Denison Street, Bondi Junction, between Oxford Street and Spring Street from 9 am to 6 pm on Sunday, 22 July 2018 in accordance with the Traffic Control Plans 17037 and 17-037-01 prepared by Moits Traffic Services attached to this report.
- 2. The 'VMS' sign shown on Traffic Control Plan 17-037' attached to this report at Newland Street south of Ebley Street be relocated to Denison Street south of Ebley Street.
- 3. Council delegates authority to the Executive Manager, Creating Waverley, to approve any backup dates and times for Denison Street to be closed, if required.
- 4. Businesses and residents affected by the closures and emergency services be notified of the closure in writing by the applicant not less than seven days prior to implementation of the road closure.

COUNCIL OFFICER'S PROPOSAL:

That Council installs 'No Stopping' zones at the intersection of Stephen Street and Ocean Street, Bondi, in the following locations:

- 1. 10 m on the southern side of Stephen Street, west of Ocean Street.
- 2. 10 m on the western side of Ocean Street, north of Stephen Street.
- 3. 10 m on the western side of Ocean Street, south of Stephen Street

COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Council installs a 40 m long 'No Stopping' zone on the northern side of Hegarty Lane at the rear of 292–302 Oxford Street, Bondi Junction, for a period of 13 weeks as shown in Figure 3 of this report.
- 2. Council temporarily relocates the existing 11 m long Loading Zone located on the northern side of Hegarty Lane to a new location commencing 30 m from the intersection of Leswell Street and terminating 41 m from the intersection of Leswell Street.
- 3. Council installs No Stopping signs on the outside of the proposed type A hoarding to be established on the southern side of Hegarty Lane at the rear of 292–302 Oxford Street.

4. Council approves:

- (a) The installation of 23 m of 'No Parking 7 am–5 pm Monday–Friday 8 am–3pm Saturday' on a temporary basis on the western side of Leswell Street, south of Grafton Street.
- (b) The installation of 22 m of 'No Parking 7 am–5 pm Monday–Friday 8 am–3 pm Saturday' on a temporary basis on the eastern side of Vernon Street, south of Oxford, subject to:
 - (i) A notification letter being sent out by the applicant to the residents of Leswell Street, Vernon Street, Hegarty Lane and Grafton Street, west of Newland Street, Bondi Junction, to inform them of the proposed changes to parking conditions.
 - (ii) The temporary changes to parking restrictions in Leswell Street and Vernon Street being removed and the original restrictions being reinstated as soon as possible following the completion of the excavation works at 292–302 Oxford Street.
- 5. Council delegates authority to the Executive Manager, Creating Waverley, to:
 - (a) Extend the duration and length of the construction zone and other zones above as necessary.
 - (b) Audit and cancel this approval, without notice or refund.
- 6. There be no blockage of access to or from the adjacent, private off-street car parks and to through traffic on Hegarty Lane, Leswell Street and Vernon Street other than for short periods of time when manoeuvring vehicles into and out of the building site.

TC/C.07/18.06 Llandaff Street, Bondi Junction - Construction Zone (A03/2514-04)...... 105

COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Council installs a 19 m long 'No Parking 7 am–5 pm Monday–Friday; 8 am–3 pm Saturday Authorised Council Vehicles Excepted' zone across the frontage of 20–22 Llandaff Street, Bondi Junction.
- 2. There be no blockage to through traffic on Llandaff Street other than for short periods of time when manoeuvring vehicles into and out of the zone.
- 3. Council delegates authority to the Executive Manager, Creating Waverley, to extend the length and duration of, or remove the construction zone, as necessary and install a zone with similar times, if necessary, opposite the site.

COUNCIL OFFICER'S PROPOSAL:

That, based on the low response rate from the resident parking survey:

- 1. Council does not introduce a resident parking scheme in Alfred Street, Bronte.
- 2. Council officers notify the chief petitioner accordingly.

TC/C.09/18.06	Langlee Avenue and Seaview Street, Waverley - Resident Parking Scheme
	(A03/2581)

COUNCIL OFFICER'S PROPOSAL:

That, having regard to the lack of support from residents:

- 1. Council does not introduce a resident parking scheme in Langlee Avenue and Seaview Street, Waverley.
- 2. Council officers notify the chief petitioner accordingly.

TC/V STATE ELECTORATE OF VAUCLUSE

TC/V.01/18.06 City2Surf 2018 - Special Event with Temporary Road Closures (A02/0216)..... 125

COUNCIL OFFICER'S PROPOSAL:

- 1. Treats the attachments to this report as confidential as they contain information that would, if disclosed, prejudice the maintenance of law.
- 2. Approves the City2Surf 2018 event and associated road closures to be held on Sunday, 12 August 2018, in accordance with the submitted Transport Management Plan attached to this report, subject to the organisers:
 - (a) Providing public liability insurance for the event.
 - (b) Obtaining NSW Police Force approval.
 - (c) Providing Event Management and Delivery Plans for the approval of Council's Outdoor and Flagship Event team.
 - (d) Notifying the State Transit Authority, NSW Ambulance Service and NSW Fire and Rescue (Bondi, Woollahra and Randwick Fire Stations).
 - (e) Notifying local residents and businesses.
 - (f) Using RMS-accredited traffic controllers only.

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Replaces the existing 'Give Way' sign in Blake Street at its intersection with Victory Street with a 'Stop' sign.
- 2. Renews the existing 'BB' lines and replaces the 'Give Way' lines with 'Stop' lines and 'Continuity' lines in Blake Street on the eastbound approach to Victory Street.
- 3. Installs a new 'T-Intersection' curved approach warning sign in Blake Street west of Victory Street.
- 4. Replaces the existing 'Give Way' signs in Portland Street on both approaches to its intersection with Blake Street.
- 5. Replaces the 'Give Way' lines with 'Stop' lines and 'Continuity' lines in Portland street on both approaches to its intersection with Blake Street
- 6. Installs 10 m of 'BB' lines in Portland Street on both approaches to its intersection with Blake Street

COUNCIL OFFICER'S PROPOSAL:

That Council approves the following changes to 'Bus Zones' and parking restrictions:

- 1. Glenayr Avenue, between Warners Avenue and Glasgow Avenue: install 12 of 'Bus Zone 7 am–8.45 am Mon–Fri' on the eastern side of Glenayr Avenue directly south of the existing 'Bus Zone' and make changes to restrictions, as shown in Figure 2 of this report.
- 2. Glenayr Avenue, between Roscoe Street and O'Brien Street: increase the length of the 'No Stopping' zone on the eastern side of Glenayr Avenue at the Hall Street pedestrian crossing to 20 m, and adjust the loading zone and metered parking to the north, as shown in Figure 6 of this report.
- 3. O'Brien Street, east of Lamrock Avenue: install 7.1 m of 'Bus Zone 7 am—8.45 am Mon—Fri' on the southern side of the road directly east of the existing 'Bus Zone' and make changes to existing parking restrictions, as shown in Figure 11 of this report.

TC/V.04/18.06	Rudolph Lane, Bondi Beach - Installation of 'No Parking' Zone	
	(A02/0637-02)	145

COUNCIL OFFICER'S PROPOSAL:

That Council extends the existing 'No Parking' zone in Rudolph Lane, north side, at the rear of 81–83 O'Brien Street, Bondi Beach, by 5 m to the west terminating at the existing 'No Stopping' zone at Simpson Street upon the completion of DA-86/2018.

COUNCIL OFFICER'S PROPOSAL:

That Council removes the existing 10 m 'No Parking' zone in Barracluff Avenue across the driveways of 1 Rickard Avenue and 115 Francis Street, Bondi Beach.

TC/CV ELECTORATES OF COOGEE AND VAUCLUSE

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Introduces 15 minute free 'drop in' zones at the following locations:
 - (a) Bondi Junction (10 spaces).
 - (i) Spring Street, Bondi Junction.

Southern side of Spring Street adjacent to 3A Bronte Road extending 16.5 m west of current ticket closing sign extending across the disused driveway between 3A Bronte Road and 99 Spring Street (3 spaces).

Southern side of Spring Street outside 35 Spring Street extending 11 m west from the current Loading Zone toward the adjacent driveway (2 spaces).

(ii) Bronte Road, Bondi Junction.

11 m on the Eastern side of Bronte Road outside 28–32 Bronte Road. Move No stopping sign 10 m north and remove meter WBRO02 (2 spaces).

(iii) Hollywood Avenue, Bondi Junction.

Western Side of Hollywood Avenue adjacent to 241 Oxford Street extending 16.5 m south from the current Mail Zone (3 spaces).

- (b) Charing Cross (5 spaces).
 - (i) Bronte Road, Charring Cross.

Eastern side of Bronte Road outside 280 and 282 Bronte Road extending 11 m north of existing Motorbike Parking (2 spaces).

Western Side of Bronte Road south outside 245 Bronte Road extending 16.5 m south from the adjacent driveway (3 spaces).

- (c) Bondi Beach (10 spaces).
 - (i) Curlewis Street, Bondi Beach.

Southern side of Curlewis Street outside 155 Curlewis Street extending 11 m west from the current No Stopping (2 spaces).

(ii) Hall Street, Bondi Beach.

Northern side of Hall Street outside 51–53 Hall Street between existing driveways (3 spaces).

Southern side of Hall Street outside 80 Hall Street extending 11 m east of current No Stopping (2 spaces).

(iii) Campbell Parade, Bondi Beach.

Western side of Campbell Parade outside 140–144 Campbell Parade extending 16.5 m south of the current ticket parking closing sign (3 Spaces).

2. Converts the free 'P 10 minute' parking spaces on Hall Street and Jaques Avenue, Bondi Beach into 15 minute free 'drop in' spaces.

PART 2 – TRAFFIC ENGINEERING ADVICE

NOTE: The matters listed under this part of the agenda seek the advice of the WTC only and do not propose that Council exercise its delegated functions at this point in time (though they may or may not require it in the future).

TC/TEAC STATE ELECTORATE OF COOGEE

Nil.

TC/TEAV STATE ELECTORATE OF VAUCLUSE

Nil.

TC/TEACV <u>ELECTORATES OF COOGEE AND VAUCLUSE</u>

Nil.

MINUTES OF THE WAVERLEY TRAFFIC COMMITTEE MEETING HELD AT WAVERLEY COUNCIL CUSTOMER SERVICE CENTRE MEETING ROOM, 55 SPRING STREET, BONDI JUNCTION ON THURSDAY, 24 MAY 2018



Voting Members Present:

Cr J Wakefield Waverley Council (Chair)

Sgt L Barrett NSW Police – Traffic Services, Eastern Suburbs Local Area Command

Ms J Zin Representing Gabrielle Upton, MP, Member for Vaucluse
Mr B Borger Roads and Maritime Services – Traffic Management (South)
Mr B Morrow Representing Bruce Notley-Smith, MP, Member for Coogee

Also Present:

Mr B Gidies Sydney Buses (Eastern Region)

Mr D Joannides Waverley Council – Executive Manager, Creating Waverley Mr G Garnsey Waverley Council – Manager, Transport and Development

Mr K MowadWaverley Council – Senior Traffic EngineerMr S SamadianWaverley Council – Professional EngineerMr C HandsakerWaverley Council – Manager Customer ParkingMs C NewWaverley Council – Sustainable Transport Officer

At the commencement of proceedings at 10.05 am, those present were as listed above.

Apologies

Apologies were received and accepted from Cr T Kay.

Declarations of Pecuniary and Non-Pecuniary Interests

The Chair called for declarations of interest and the following was received:

1. Mr B Morrow declared a less than significant non-pecuniary interest in Item TC/CV.01/18.05 – Car Next Door – Car Share Spaces, and informed the meeting that he lives in close proximity to the proposed Paul Street car share space.

Adoption of previous Minutes by Council - 26 April 2018

The recommendations contained in Part 1 - Matters Proposing That Council Execise Its Delegated Functions - of the Minutes of the Waverley Traffic Committee meeting held on 26 April 2018 were adopted by Council at its meeting on 15 May 2018.

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 the RMS. The recommendations made by the Committee under this part of the agenda will be submitted to Council for adoption.

TC/C STATE ELECTORATE OF COOGEE

TC/C.01/18.05 Bronte Cutting, Bronte - Surf Life Saving Club Parking (A02/0637-02)

COUNCIL OFFICER'S PROPOSAL:

That Council increases the total number of 'No Parking, Bronte SLSC Vehicles Excepted' parking spaces in Bronte Cutting, Bronte to nine spaces in total as shown on Figure 2 of the report.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Coogee, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/C.02/18.05 Birrell Street, Bondi Junction - Temporary Partial Road Closure at Denison Street (A03/0042-04)

COUNCIL OFFICER'S PROPOSAL:

That Council approves Traffic Control Plan 7038 dated 9 June 2107 and Traffic Control Plan 7038-1 dated 10 November 2017 prepared by Adams Traffic Management for the temporary, partial closure of Birrell Street at Denison Street, Bondi Junction to allow contractors working on behalf of Sydney Water to carry out infrastructure maintenance works.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That:

- 1. The Council Officer's Proposal not be adopted, having regard to the tabling of an amended Traffic Control Plan (TCP) at the meeting.
- 2. Council approves the Birrell Street Queens Park TCP No. TLTCP-AS-29518 Rev 'A' prepared by Traffic Logistics tabled at the meeting subject to:

- (a) Increased warning signage being installed at the corner of Queens Park Road and Baronga Avenue.
- (b) Additional VMS information board be installed on the southern side of Ebley Street, to the east of the Lawson Street intersection.
- (c) Bicycle signage and water filled barriers be installed on both sides of Birrell Street approaching the work site directing cyclists into the travel lane.
- (d) A letter box drop be carried out by the contractor/Sydney Water in the area bounded by Ebley Street, York Road, Queens Park Road and Bourke Street to inform of the changes to traffic conditions not less than seven days prior to the road closure being implemented.
- (e) The 'detour' sign with arrow right on the southern side of Birrell Street immediately east of Ruthven Street being removed and repositioned east of the York Road roundabout.
- (f) The reference to 'Cuthbert' be removed from the information board proposed on the northern side of Queens Park Road west of Newland Street.
- (g) Any further requirements as directed by NSW Police and Council's Executive Manager, Creating Waverley.

Voting members present for this item: Representative of the Member for Coogee, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/C.03/18.05 Alfred Street, Bronte - New Bus Zone (A02/0225-02)

COUNCIL OFFICER'S PROPOSAL:

That Council installs 30 m of 'Bus Zone' on the western side of Alfred Street adjacent to 275 Birrell Street, commencing 20 m south of the existing Bus Stop J-Stem and terminating 10 m north of the J-Stem.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Coogee, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/V STATE ELECTORATE OF VAUCLUSE

TC/V.01/18.05

Queen Elizabeth Drive and Park Drive, Bondi Beach - Changes to North Bondi Surf Life Saving Club Parking (A02/0637-02)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Removes the existing six spaces of 'No Parking, North Bondi SLSC Vehicles Excepted' located on Park Drive North and to the west of Queen Elizabeth Drive at Bondi Beach and reverts the six spaces to ticket parking.
- 2. Installs nine spaces of 'No Parking, North Bondi SLSC Vehicles Excepted' on Queen Elizabeth Drive, south side, east of Park Drive North as shown in the Figure 2 of the report.
- 3. Relocates the existing 'No Parking Authorised Vehicles Excepted' space on Queen Elizabeth Drive adjacent to the car park exit to Campbell Parade and installs it in a new location to the west as shown in the Figure 2 of the report.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/V.02/18.05 Multiple Streets - Installation of 'No Stopping' Zones (A02/0637-02)

COUNCIL OFFICER'S PROPOSAL:

That Council installs 'No Stopping' zones at the following intersections:

- 1. Lancaster Road and Portland Street, Dover Heights:
 - (a) 10 m on the southern side of Lancaster Road, west of Portland Street.
 - (b) 10 m on the southern side of Lancaster Road, east of Portland Street.
- 2. Warners Avenue and Old South Head Road, North Bondi:
 - (a) 10 m on the northern side of Warners Avenue, east of Old South Head Road.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/V.03/18.05 Ramsgate Avenue, North Bondi - Construction Zone (A03/2514-04)

COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Council installs a 19 m long 'No Parking 7 am–5 pm Monday–Friday 8 am–3 pm Saturday Authorised Council Vehicles Excepted' zone across the frontage of 101 Ramsgate Avenue, North Bondi.
- 2. There be no blockage to through traffic on Ramsgate Avenue other than for short periods of time when manoeuvring vehicles into and out of the zone.
- 3. There be a clear width of 3.5 m between any vehicle parked in the construction zone and the kerb forming the road level split in the middle of Ramsgate Avenue.
- 4. Council delegates authority to the Executive Manager, Creating Waverley, to extend the length and duration of or remove the construction zone, as necessary.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/V.04/18.05 Beach Road and Blair Street, Bondi Beach - Pedestrian Refuge Design Amendments (A03/0042-04)

COUNCIL OFFICER'S PROPOSAL:

That Council approves the installation of line marking, signage and pedestrian facilities at the intersection of Beach Road and Blair Street, Bondi Beach, as per Drawing 8948 Issue 'C' attached to this report.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That:

- 1. The Council Officer's Proposal not be adopted.
- 2. The matter be deferred for a further report to be considered on the operation of the intersection 12 months after the construction of the traffic islands.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/V.05/18.05 Multiple Streets - 'P Disability Only' Zone (A02/0273-02)

COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 6.5 m long 'P Disability Only' zone outside 91 O'Brien Street, Bondi Beach.
- 2. Installs a 6.5 m long 'P Disability Only' zone outside 4 Scott Street, Bronte.
- 3. Extends the length of the existing 'P Disability Only' zone at 49 Francis Street, Bondi Beach by 6.5 m to the west.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/V.06/18.05 Beach Road, Bondi Beach - Construction Zone (A03/2514-04)

COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Council installs a 10 m long 'No Parking 7am–5pm Monday–Friday; 8am–3pm Saturday Authorised Council Vehicles Excepted' zone on the Beach Road frontage of 1 Beach Road, Bondi Beach, adjoining and to the immediate west of the loading zone.
- 2. There be no blockage to through traffic on Beach Road other than for short periods of time when manoeuvring vehicles into and out of the existing zone.
- 3. Council delegates authority to the Executive Manager, Creating Waverley, to extend the length and duration of, or remove the construction zone, as necessary.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/V.07/18.05 Hastings Parade, North Bondi - Construction Zone (A03/2514-04)

COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Council installs an 18 m long, 'No Parking 7 am–5 pm Monday–Friday 8 am–3 pm Saturday Authorised Council Vehicles Excepted' zone on the frontage of 4 Hastings Parade, North Bondi.
- 2. There be no blockage to through traffic on Hastings Parade other than for short periods of time when manoeuvring vehicles into and out of the zone.
- 3. Council delegates authority to the Executive Manager, Creating Waverley, if found necessary following approval of the Construction Vehicle and Pedestrian Plan of Management, to install a 'No Parking 7am–5pm Monday–Friday; 8 am–3 pm Saturday' zone on the opposite, southern side of Hastings Parade in order to maintain the legal travel lane width and traffic flow.
- 4. Council delegates authority to the Executive Manager, Creating Waverley, to extend the length and duration of or remove the construction zone, as necessary.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Vaucluse, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/CV ELECTORATES OF COOGEE AND VAUCLUSE

TC/CV.01/18.05 Car Next Door - Car Share Spaces (SF17/2847)

COUNCIL OFFICER'S PROPOSAL:

That Council approves the installation of four Car Next Door car share spaces in Bondi Junction and Bondi Beach at the following sites, on a 12-month trial:

- 1. Paul Street North, Bondi Junction, east side, 6.5 m long space, immediately adjacent to and on the northern side of existing car share space near Bondi Road.
- 2. Warners Avenue, Bondi Beach, north side, 5.5 m long space, west of intersection with Gould Street, immediately adjacent to 2P/No Stopping sign.
- 3. Botany Street, Bondi Junction, west side, 5.5 m long space, adjacent to 1P/No Stopping zone signage south of Waverley Street.
- 4. Llandaff Street, Bondi Junction, north side, 5.5 m long space, adjacent to west side of driveway to No. 2-8 Llandaff Street.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Coogee, Representative of the Member for Vaucluse, NSW Police representative, RMS representative and Waverley Council representative (Chair).

TC/L <u>ITEMS WITHOUT NOTICE</u>

TC/L.01/18.05 Proposed Changes to Parking Restrictions in Bondi Junction (SF17/2867)

COUNCIL OFFICER'S PROPOSAL:

That Council replaces signage associated with ticket parking within Bondi Junction to reflect the changes to meter operating times as shown in the table in this report.

WTC RECOMMENDATION (UNANIMOUS SUPPORT):

That the Council Officer's Proposal be adopted.

Voting members present for this item: Representative of the Member for Coogee, NSW Police representative, RMS representative and Waverley Council representative (Chair).

PART 2 – TRAFFIC ENGINEERING ADVICE

NOTE: The matters listed under this part of the agenda seek the advice of the WTC only and do not propose that Council exercise its delegated functions at this point in time (though they may or may not require it in the future).

TC/TEAC	STATE ELECTORATE OF COOGEE	
Nil.		
TC/TEAV	STATE ELECTORATE OF VAUCLUSE	
TC/TEACV	ELECTORATES OF COOGEE AND VAU	<u>CLUSE</u>
THE MEETIN	NG CLOSED AT 11.35 AM.	
	N	SIGNED AND CONFIRMED MAYOR 19 JUNE 2018

REPORT TC/C.01/18.06

Subject: Arden Street, Bronte - Installation of a School Days

Loading Zone

TRIM No: A02/0637-02

Author: Sam Samadian, Traffic Engineer

Director: Emily Scott, Director, Waverley Renewal



COUNCIL OFFICER'S PROPOSAL:

That Council installs 8 m of 'Loading Zone 8 am—4 pm School Days' on the eastern side of Arden Street, Bronte, immediately south of the existing 'No Stopping' zone at the midblock, signalised pedestrian crossing outside Clovelly Public School.

1. Executive Summary

This report is for the Committee to consider a request for a part time, school days only, loading zone to be installed on Arden Street, Bronte, outside the Clovelly Public School at 3A Arden Street. Council will be required to exercise its delegated function to implement the proposal.

2. Introduction/Background

Council has received a request from the Clovelly Public School at 3A Arden Street, Bronte, to consider installing a 'Loading Zone 8 am—4 pm School Days' zone to facilitate the parking of one delivery vehicle near the school office on the Arden Street frontage. There are currently 620 students attending the Clovelly Public School with a high number of vehicles servicing the school each day including deliveries from school suppliers, courier and tradesmen's vehicles during school hours.



Figure 1. Clovelly Public School, 3A Arden Street, Bronte – Aerial image.

3. Technical Analysis

The Clovelly Public School is located on the eastern side of Arden Street with frontages to Chesterfield Parade to the north and Inverness Street in the east. Parking restrictions in place outside the School are shown in Figure 2.

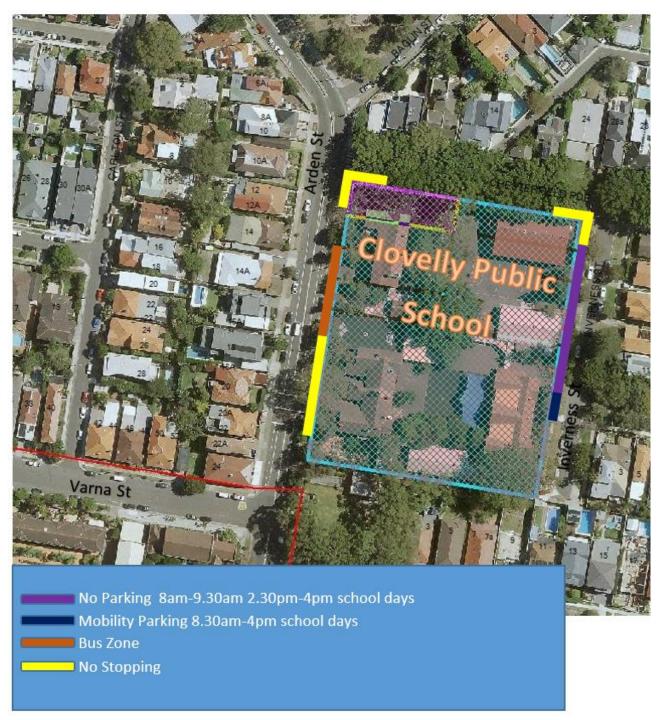


Figure 2. Clovelly Public School – Existing parking restrictions.

An on-site inspection confirmed there is a need for a loading zone in close proximity of the school office situated near the Arden Street frontage as all deliveries to the school are required to be signed-in upon arrival. Parking is in high demand on this part of Arden Street due to the presence of the school, nearby residences with limited off street parking and the nearby businesses. It was observed that delivery trucks often park across driveways obstructing access to residential properties or within the statutory 'No Stopping' zones near the signalised, mid-block pedestrian crossing.

It is recommended an 8m long 'Loading Zone 8 am–4 pm School Days' be installed on the eastern side of Arden Street, immediately south of the existing 'No Stopping' zone at the existing mid-block signalised crossing as shown in Figure 3.



Figure 3. Clovelly Public School, 3A Arden Street, Bronte – Proposed 8 m long loading zone.

As per NSW Road Rules 2014, Rule 179, only drivers of vehicles principally constructed for carrying goods may park their vehicle in a loading zone. These vehicles may stop for up to 30 minutes if they are being loaded or unloaded. A station wagon or a three-wheeled goods vehicle may stop for up to 15 minutes. If you are driving any other sort of vehicle you may only stop to pick up or set down passengers at the kerb. Hours of operation may apply to some signs. This means restrictions apply for those times only.

Guidelines used:

- Transport Administration Act 1988.
- RMS's Delegation to Councils; Regulation of Traffic.
- RMS's Signs Database.
- [NSW] Road Rules 2014.
- Austroads' GTM Part 11.

4. Financial Information for Council's Consideration

If changes to signs are approved, Council will fund the cost of installing the signs from existing budgets.

5. Attachments

Nil.

REPORT TC/C.02/18.06

Subject: Ruthven Lane, Bondi Junction - 'No Parking' Zone

TRIM No.: A02/0637-02

Author: Sam Samadian, Traffic Engineer

Director: Emily Scott, Director, Waverley Renewal



COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Installs a 9.5 m long 'No Parking' zone in Ruthven Lane opposite the garages serving 17 Oxford Street, Bondi Junction, as shown in Figure 5 of this report.
- 2. Replaces the existing 'No Parking' zone on the inside of the bend in Ruthven Lane, rear of 1 Ruthven Street, with 'No Stopping'.

1. Executive Summary

Representations have been received from the residents of the unit block at 17 Oxford Street, Bondi Junction, requesting consideration be given to installing full time, 'No Parking' restrictions opposite their garages located at the rear of the property in Ruthven Lane in order to improve vehicular access. Council will need to exercise its delegated functions to implement the proposal.

2. Introduction/Background

Due to increasing demand for similar requests, Council's policy is to apply the following criteria when assessing the technical aspects of motor vehicular access between the road reserve and adjacent land:

Development Application

If the matter has been raised as part of the Development Application process, Council officers may not support a proposal to remove on-street parking to improve access between the road reserve and adjacent land.

Left and/or Right In/Out Only

Where there is an opportunity for drivers to access and egress off-street parking, unimpeded, through a left and/or right in/out only manoeuvre, Council officers will not support a proposal to remove on-street parking to improve access between the road reserve and adjacent land. It is acknowledged that drivers may need to travel further to access and egress their properties.

B85 Vehicle

Council officers will survey the driveway, off-street parking and surrounding road environment, to be drafted. Australian Standard *AS 2890.1: 2004* provides a turning template for 85th percentile of the

registered passenger vehicles in Australia (B85 Vehicle) and this is to be used to assess the access between the road reserve and adjacent land.

If the access for a B85 Vehicle is not impeded by vehicles legally parked on-street, Council officers will not support a proposal to remove on-street parking to improve access between the road reserve and adjacent land.

If the access for a B85 vehicle is impeded by vehicles legally parked on-street, Council officers will refer the matter to the Traffic Committee and Council. The application to remove the parking is to be advertised by Council officers, by installing a notice in the vicinity of the on-street parking in question.

The matter has been referred to the Traffic Committee to assess the technical aspects of vehicular access between the road reserve and adjacent land.

Council will need to assess the wider issue of equity, having regard to the Traffic Committee's advice and Council's obligations under the *Roads Act 1993*:

- Waverley Council is the Roads Authority for all of these roads: s 7.
- A member of the public is entitled, as of right, to pass along a public road (whether on foot, in a vehicle or otherwise) and to drive stock or other animals along the public road: s 5(1).
- The owner of land adjoining a public road is entitled, as of right, to access (whether on foot, in a vehicle or otherwise) across the boundary between the land and the public road: s 6(1).

The *Roads Act 1993* does not provide a right for members of the public to store private property, such as motor vehicles, on the public road.



Figure 1. Ruthven Lane, Bondi Junction - Aerial image.

3. Technical Analysis

A search of development applications for 17 Oxford Street, Bondi Junction, indicates there are no conditions on any approvals that restrict the removal of vehicles parking opposite the garages to the unit block.

An on-site inspection has revealed that access for a B85 standard design vehicle to and from the garages in Ruthven Lane is impeded when vehicles are parked in the lane directly opposite the garages. There are existing full time, 'No Parking' restrictions on the western side of Ruthven Lane and 'No Parking: 8 am–9 am, Thursdays' restrictions on the eastern (opposite) side to facilitate waste removal.

There are five units in the block with four garages fronting Ruthven Lane. Residents have indicated access is extremely difficult when vehicles are parked on the opposite side of Ruthven Lane outside waste removal restricted parking times. A plan of the swept path of a B85 Vehicle egressing the garages at no. 17 can be seen in Figure 2. It is recommended that, to facilitate access, Council installs a 9.5 m long 'No Parking' zone in Ruthven Lane opposite the garages to 17 Oxford Street, Bondi Junction, as shown in Figure 5. It is also recommended to replace the existing 'No Parking' zone on the inside of the right angled bend in the lane.

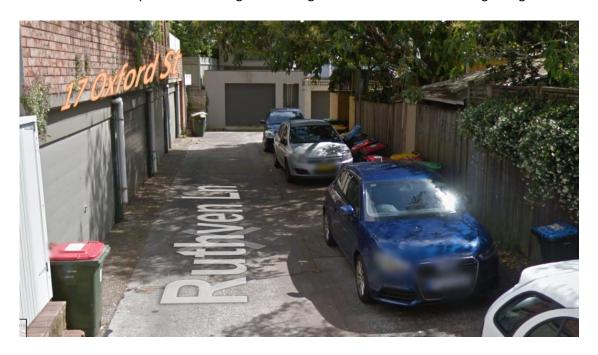


Figure 2. Street view of driveways to 17 Oxford Street in Ruthven Lane.



Figure 3. Ruthven Lane, Bondi Junction – Existing parking.

Council has advertised the proposal to the community, using the signage shown below:



APPLICATION TO REMOVE PARKING

WAVERLEY COUNCIL HAS RECEIVED AN APPLICATION TO REMOVE THIS PARKING.

THE ISSUE WILL BE DISCUSSED AT THE NEXT AVAILABLE TRAFFIC COMMITTEE MEETING.

PLEASE CONTACT COUNCIL ON 9083 8676 FOR FURTHER INFORMATION.

Figure 4. Application to remove parking.

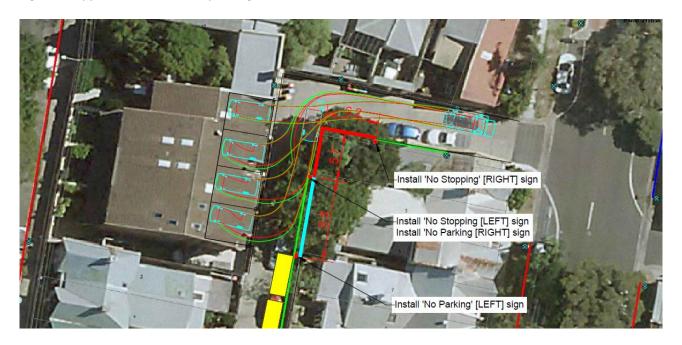


Figure 5. Swept wheel path of B85 vehicle – Proposed No Parking and No Stopping zone.

4. Financial Information for Council's Consideration

The applicants will be required to meet the cost of supplying and installing the signs. Once payment has been received, Council can proceed with installation.

5. Attachments

Nil.

REPORT TC/C.03/18.06

Subject: Arden Street, Bronte - Part Time 'No Right Turn' into

Chesterfield Parade

TRIM No: SF18/199

Author: Carolyn New, Sustainable Transport Officer

Director: Mitchell Reid, Acting Director, Waverley Futures



COUNCIL OFFICER'S PROPOSAL:

That Council Installs 'No Right Turn, Mon–Fri 8.00 am–9.30 am and 2.30–4.00 pm' in Arden Street, Bronte, at Chesterfield Parade.

1. Executive Summary

Council proposes to install 'No Right Turn, Mon–Fri 8.00 am–9.30 am and 2.30–4.00 pm' in Arden Street at Chesterfield Parade as indicated on the Signage Plan in Attachment 2.

Under a Safe Active Schools program, Council identified a safety issue for Clovelly Public School students at the intersection of Arden Street and Chesterfield with motorists turning right into Chesterfield Parade, across contra-direction traffic and with poor sightlines of the pedestrian crossing in Chesterfield Parade. The proposal to install a right hand turn ban was identified as a low cost solution that could be implemented in the short term.

Council engaged consultants to undertake a Traffic Management Plan to support Council's proposal for a right-hand turn ban. Council also consulted the local residential and commercial community about this proposal and received overwhelming support for the proposal. The only negative comments related to the proposed detour route along Maroo Street. The notification letter, consultation area and results of consultation are set out in Attachment 3, 4 and 5.

Council submitted the Traffic Management Plan and results of the consultation to Roads and Maritime Services (RMS). RMS has recommended approval subject to the conditions of the Traffic Management Plan. The Traffic Management Plan with approval recommendation is set out in Attachment 1.

2. Introduction/Background

Council has allocated limited funding to improve safety around schools in the Waverley LGA. This funding is available for infrastructure that will enable and encourage parents and their children to walk and ride their bikes to school, rather than driving their children to school. Council has engaged with various schools to identify barriers and opportunities for infrastructure improvements. Previous works have been completed near Bronte Public School under this program and at Clovelly Public School, engagement with the parent community had identified a number of potential issues.

The intersection of Arden Street and Chesterfield Parade was identified as one area of concern as motorists turning right from Arden Street into Chesterfield Parade were focussed on downhill traffic and not always aware of school children and other pedestrians crossing at the marked pedestrian crossing just downhill

from the intersection. While there were other improvements that could be considered in the future at this intersection, provision of a right hand turn ban could be implemented within this year's budget.

3. Technical Analysis

Council engaged consultants to undertake a Traffic Management Plan for the proposed part time, no right-hand turn ban from Arden Street at Chesterfield Parade, in accordance with RMS's Procedures for Use in the Preparation of a Traffic Management Plan. This Traffic Management Plan has been submitted to RMS and they have recommended approval. This Traffic Management Plan with recommendation for approval is included as Attachment 1.

The consultants undertook counts at the intersection which establish that on that day only 51 vehicles turned right from Arden Street into Chesterfield Parade during the peak period between 8.00am–9.00 am and 43 during the peak period between 2.45 pm and 3.45 pm. These counts also established that there were 92 pedestrians crossing at the intersection in the am peak and 85 during the pm peak.

This Plan noted that there was alternative access to Chesterfield Parade by turning right into Boundary Street and then left into Maroo Street. The redistribution of vehicles to this alternative route was found to not significantly impact the traffic flow at the key intersections in the area. It was noted that traffic conditions on Maroo Street may see slight detrimental changes due to prevalence of parking on both sides of the street forcing driver negotiation along the narrow driveable area.

It was noted that no public transport services or emergency services will be impacted. Pedestrians will not be affected either. Cyclists will follow the same detour route as vehicles.

Council undertook consultation via a notification letter, which was dropped into letterboxes for the impacted residents, businesses and the local school. The area consulted included residences and businesses on sections of Chesterfield Parade, Chesterfield Lane, Macpherson Street and Maroo Street. The notification letter is included at Attachment 3 and the area for consultation in Attachment 4.

There were nine (9) responses received to the notification, eight (8) of which stated support for this proposal, with five (5) recommending the ban not be limited to school zone hours. One response did not indicate their position on the right-hand turn ban, but was opposed to the alternative route along Maroo Street. One of the supportive responses was also opposed to the Maroo Street alternative route and recommended the use of St Thomas Street for the detour. The responses received to the consultation are included at Attachment 5.

4. Financial Information for Council's Consideration

If changes to signs and/or line markings are approved, Council will undertake the installation of signs/lines from existing budgets.

5. Attachments

- 1. TMP approval Arden Street, Waverley \downarrow
- 2. Signage Plan Arden Street and Chesterfield Parade No Right Turn Ban \mathbb{Q}
- 3. Notification of No Right Hand Turn Proposal J.
- 4. Consultation area U
- 5. Consultation responses \downarrow .



Traffic Management Plan

Temporary Road Closure

- Waverley Council has submitted a Traffic Management Plan (TMP) in accordance with RMS'
 Procedures for Use in the Preparation of a Traffic Management Plan. Council proposes to
 implement a part-time "No Right Turn, Mon Fri 8:00am-9:30am and 2:30pm-4:00pm" restriction
 for northbound traffic travelling along Arden Street, Bronte into Chesterfield Parade.
- 2. Council proposes to implement the above closure to improve safety for school children using the pedestrian crossing across Chesterfield Parade during morning and afternoon school periods.
- 3. Alternative access to Chesterfield Parade is achieved by turning right into Boundary Street, and then left into Marroo Street.
- Pedestrians will not be affected and cyclists to follow the same detour route as vehicles.
 Emergency Services will not be affected.
- 5. No public transport services will be impacted.
- Consultation has been completed with the majority of responses being in support of the right turn ban.

The submission from Woollahra Municipal Council has satisfactorily addressed the necessary requirements of the TMP therefore is **RECOMMENDED FOR APPROVAL** subject to the following:

Ben Borger
Network and Safety Officer
Network and Safety Services

CONCURRENCE

MGHAMED TITA

David Ballm
Network and Safety Services Manager, CBD and East
Network and Safety Services

1

CHESTERFIELD PARADE RIGHT TURN BAN TRAFFIC MANAGEMENT PLAN

FOR

WAVERLEY COUNCIL



Gold Coast

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P3487.001R Chesterfield Parade Right Turn Ban Traffic Management Plan	G. Yin/ J. Yang	M. Thompson/ T. Wheatley	T. Wheatley	13 March 2018	Carolyn New, Waverley Council

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Chesterfield Parade Right Turn Bar



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Appendices

Appendix A: SIDRA Outputs

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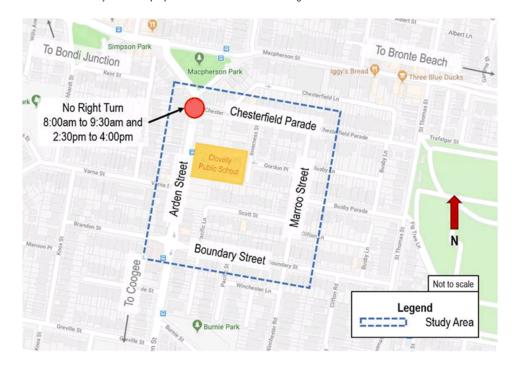


1. PART A – DESCRIPTION OF DETAILED PLAN OF PROPOSED MEASURES

1.1 INTRODUCTION

Bitzios Consulting was commissioned by Waverley Council to prepare a Traffic Management Plan (TMP) for the proposed "No Right Turn, Mon – Fri 8.00am-9.30am and 2.30pm-4.00pm" restriction for northbound traffic travelling along Arden Street, Bronte into Chesterfield Parade. The aim of this right turn restriction is to reduce risk and improve safety during busy school peak traffic periods.

This TMP has been developed in accordance with Roads and Maritime Services *Procedures for Use in the Preparation of a Traffic Management Plan (TMP)*. A copy of this procedure is provided in Appendix A. The location of the study area and proposed restriction is shown in Figure 1.1.



Source: Adapted from Google Maps

Figure 1.1: Study Area and Location of Proposed Restriction

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1.2 BACKGROUND

Waverley Council is seeking to install a "No Right Turn, Mon – Fri 8.00am-9.30am and 2.30pm-4.00pm" restriction for northbound vehicles at the Arden Street and Chesterfield Parade intersection. Concerns regarding the intersection have been previously identified by residents and staff at Clovelly Public School, with traffic incidents occurring at this intersection. The existing pedestrian crossing on Chesterfield Parade is frequently used during school peak traffic periods by students and parents. This proposal is being considered as a means of improving safety for students travelling to and from the school, which is bordered by Chesterfield Parade and Arden Street. The layout of the site is shown in Figure 1.2.



Source: Google Maps

Figure 1.2: Site Layout

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2. PART B - EXISTING CONDITIONS

2.1 ACTIVE TRANSPORT

2.1.1 Cycling

Waverley Council's cycling route map is shown in Figure 2.1.



Source. Adapted from Waveney Council map

Map of cycle routes

Figure 2.1:

Boundary Street west of Marroo Street is part of a main on-street bicycle route. No on-road cycle markings are present.

Chesterfield Parade east of Marroo Street is part of the future Coastal Cycleway, a bicycle route along the coastline, which is planned to form part of a continuous coastal route between Sydney Harbour and Botany Bay. An on-road cycle marking is present at the intersection of Chesterfield Parade and St Thomas Street. Marroo Street is part of the Coastal Cycleway. No on-road cycle markings are present.

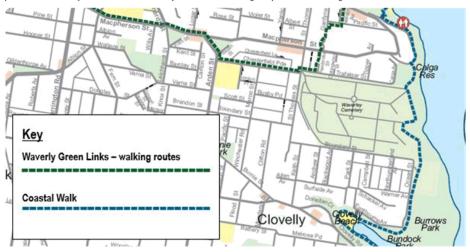
Arden Street is on a northbound uphill slope. On the eastern side of Arden Street, there is a marked green southbound bicycle lane between Baglin Street and Chesterfield Parade. From Chesterfield Parade through to Varna Street southbound, there is a marked road shoulder with a broken line dividing cyclists and the bus zone is provided on the eastern side of Arden Street.

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2.1.2 Walking

Chesterfield Parade is part of Waverley Council's Green Links Project, which aims to promote growth of pedestrian activity in the area. Waverley Council's Walking Map is shown in Figure 2.2.



Source: Adapted from Waverley Council map

Figure 2.2: Walking Map



2.2 BUS ROUTES

Route 362 and Route 360 bus routes operate along Arden Street. Route 360 connects Clovelly to Bondi Junction via Waverley and Bronte. It operates on Arden Street during the morning peak, with the first service leaving Clovelly at 6.38am. Route 362 is a weekend only local bus service that runs between Coogee Beach and Bondi Beach.

Route 379 bus route operates on Macpherson Street. Route 379 is a full time bus service that connects Bronte and North Bondi via Waverley and Bondi Junction.

Route 713E school bus route operates past Clovelly Public School in the afternoon travelling to Eastbourne Avenue, Clovelly. There does not appear to be any morning school bus routes travelling to Clovelly Public School.

A map of the bus routes and bus stops in the area is shown in Figure 2.3.



Source: Adapted from Waverley Council map

Figure 2.3: Map of bus routes and bus stops



2.3 ROAD NETWORK

2.3.1 Chesterfield Parade

Chesterfield Parade is a two lane, two-way street with a posted speed limit of 50km/h. It is a local street that services residents of the area, connecting Arden Street and St Thomas Street. Chesterfield Parade borders Clovelly Public School to the west of Inverness Street. The section of Chesterfield Parade west of Marroo Street includes a 40 km/h school zone. Chesterfield Parade east of Marroo Street is part of the Coastal Cycleway as shown on Randwick City Council's Cycling Map (2010). Unrestricted on-street parking is permitted along the both sides of the street between driveways and on-street trees. A pedestrian crossing is located at the western end of Chesterfield Parade at its intersection with Arden Street. A typical cross-section of the street is shown in Figure 2.4.



Source: Google Street View

Figure 2.4: Typical Cross-section of Chesterfield Parade

2.3.2 Arden Street

Arden Street is a two lane, two-way street with a posted speed limit of 50km/h. It is a regional road, which links Macpherson Street and Malabar Road. The section of Arden Street north of Varna Street is within the Waverley Local Government Area (LGA) and south of Varna Street is in the Randwick LGA. A 40km/h school zone is present on Arden Street, from north of Baglin Street to the roundabout at Arden Street and Clovelly Road.

Unrestricted parking is provided along the majority of Arden Street within the study area, excluding the southbound north of Chesterfield Parade and outside St Anthony's Catholic Primary School. Arden Street has a downward slope southbound. There is a cycle lane on the east side of the road beginning just north of Baglin Street and continuing to Varna Street. A typical cross-section of the street is shown in Figure 2.5.



Source: Google Street View

Figure 2.5: Typical Cross-section of Arden Street



2.3.3 Boundary Street

Boundary Street is a two lane, two-way local street with a posted speed limit of 50km/h. It links Arden Street and Ocean Street, providing a connection between Bronte and the coast. In the study area west of St Thomas Street, Boundary Street is wide with edge lines delineating the parking lanes on both sides of the road. Boundary Street has unrestricted parking on both sides of the street in the study area. A 40km/h school zone starts west of the intersection of Boundary Street and Arden Street. Boundary Street west of Marroo Street is on a main bicycle route on low-traffic streets in Waverley Council's cycle map. A typical cross-section of the western sections of Boundary Street is shown in Figure 2.6.



Source: Google Street View

Figure 2.6: Typical Cross-Section of Boundary Street (Western section)

2.3.4 Marroo Street

Marroo Street is a narrow two lane, two-way street connecting Chesterfield Parade and Boundary Street. It is the only way for vehicles to access Gordon Place and Inverness Street, therefore servicing both residents and Clovelly Public School. There is unrestricted parking on both sides of the street and a steep uphill gradient in the northbound direction. The street is part of Randwick Council's Coastal Cycleway. A typical cross section of the street is shown in Figure 2.7.



Source: Google Street View

Figure 2.7: Typical Cross-Section of Marroo Street



2.3.5 Gordon Place

Gordon Place is a one lane, one-way westbound street connecting Marroo Street and Inverness Street. It is the main approach to the west exit of Clovelly Public School and lies within the school zone. It services residents of the area and visitors to the school. There is a kerb extension at the intersection of Gordon Place and Inverness Street, narrowing the street and preventing parking immediately prior to the intersection. For the remaining length of the street, unrestricted parking is provided on both sides of the street, with gaps for residential driveways. A typical cross section of the street is shown in Figure 2.8.



Source: Google Street View

Figure 2.8: Typical Cross-Section of Gordon Place

2.3.6 Inverness Street

Inverness Street is a one-way northbound street between Gordon Place and Chesterfield Parade with a cul-de-sac south of Gordon Place. It runs adjacent to Clovelly Public School. The entire street is within the school zone. The road is narrowed at the intersection of Gordon Place and Inverness Street with kerb extensions. A "People with Disabilities" (PWD) parking space is provided opposite Gordon Place, to the immediate south of the school gate. A No Parking, Kiss and Go section exists on the western side between the school gate and Chesterfield Parade operating during school hours. Unrestricted parking is provided on the eastern side of the street. At the priority intersection of Inverness Street and Chesterfield Parade, there is a concrete kerb extension, which directs traffic towards the left side of the street and discourages entry against the one-way arrangement. A typical cross section of the street is shown in Figure 2.9.



Source: Google Street View

Figure 2.9: Typical Cross-Section of Inverness Street



2.4 CRASH DATA

2.4.1 Crash History

Crash data was obtained from Transport for NSW for the relevant sections of Chesterfield Parade, Arden Street, Boundary Street, and Marroo Street to develop the recorded crash history profile of the project site. The data used for this assessment comprises of the 5-year period from 2012-2016, the most recent data at the time of request. As per Australian Road Rules, crashes are only recorded if:

- Any person is killed or injured;
- The drivers involved do not exchange particulars; or
- When a vehicle involved in crash is required to be towed away

Crash data was provided in the following severity categories:

- Fatal a crash in which at least one person was killed;
- Serious Injury a crash involving at least one person identified in a police report and matched to a
 health record indicating a history stay due to injuries sustained in a crash, or is identified as an iCare
 (Lifetime Care) participant AND no one was killed in the crash;
- Moderate Injury a crash involving at least one person identified in a police report who is matched to
 a health record that indicates that they were treated at an emergency department but were not
 admitted for a hospital stay, or is matched to a CTP claim indicating a moderate or higher injury AND
 no one was killed or seriously injured;
- Minor Injury/Other injury a crash involving at least one person identified as an injury in a police
 report who is not matched to a health record that indicates the level of injury severity, or is matched to
 a minor injury CTP claim AND no one was killed, seriously injured, or moderately injured; and
- Non-casualty (tow away) a crash in which no one was killed or injured, but at least one motor vehicle was towed away.

Crash data was mapped using GIS software. A crash severity map from the results is shown in Figure 2.10.

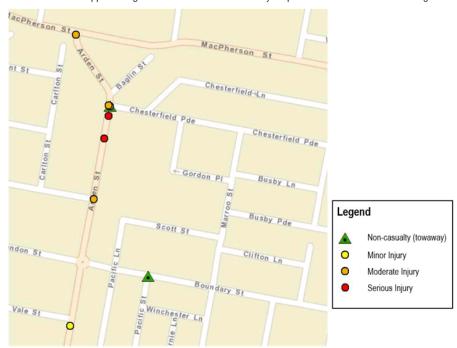


Figure 2.10: Crash Severity Map



The types of crashes are mapped in Figure 2.11.

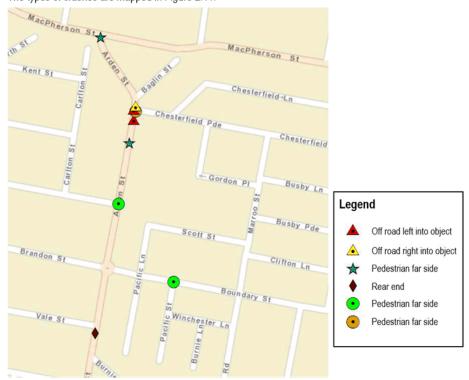


Figure 2.11: Type of Crash

Table 2.1: Summary of Crash Data

Year	Number of crashes		Crash Severity					
Teal		Fatal	Injury*	Non-casualty (towaway)				
2012	3	-	2	1				
2013	4	-	4	-				
2014	1	-	-	1				
2015	-	-	-	-				
2016	1	-	1	-				

*Includes serious, moderate and minor/other injuries.

The crash data show nine incidents over the 5-year study period. From these nine crashes, seven resulted in injury and two non-casualties, with no fatalities recorded. Four of these crashes occurred at the intersection of Arden Street and Chesterfield Drive, with three resulting in injury. There is one instance of a crash occurring due to the proposed banned motion, the right turn from Arden Street onto Chesterfield Parade. The incident was a right through crash, where the vehicle turning right onto Chesterfield Parade was struck by southbound traffic on Arden Street. The other three incidents were due to vehicles swerving off the Arden Street carriageway into parked vehicles, all in close proximity to the Arden Street and Chesterfield Parade intersection. It is possible that the road geometry around the bend and downhill slope of Arden Street in the southern direction were contributors to these crashes.

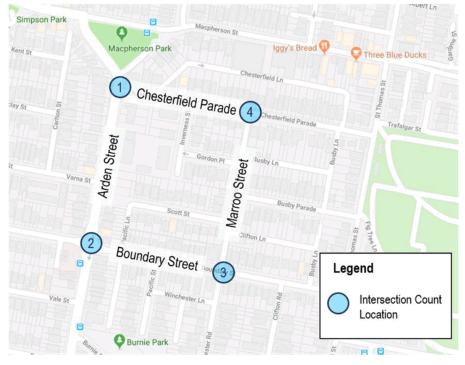


2.5 TRAFFIC VOLUMES

2.5.1 Existing Traffic Counts

Traffic surveys were undertaken on Wednesday, 7 February 2018 from 08.00am – 10.00am and 02.30pm – 04.30pm for the following key intersections seen in Figure 2.12:

- 1. Chesterfield Parade and Arden Street; and
- 2. Arden Street and Boundary Street; and
- 3. Boundary Street and Marroo Street; and
- 4. Chesterfield Parade and Marroo Street.



Source: Adapted from Google Maps

Figure 2.12: Intersection Count Locations

The AM and PM peak periods were identified for each intersection, outlined in Table 2.2.

Table 2.2: Intersection peak periods

Intersection	AM Peak	PM Peak
Chesterfield Parade and Arden Street	08.15 – 09.15am	2.45 – 3.45pm
Arden Street and Boundary Street	08.00 – 09.00am	2.45 – 3.45pm
Boundary Street and Marroo Street	08.00 – 09.00am	2.45 – 3.45pm
Chesterfield Parade and Marroo Street	08.15 – 09.15am	2.45 – 3.45pm

Through analysis of the traffic survey data of the entire study area, the AM and PM peaks periods were found to be 08.00am -09.00am and 2.45pm.



2.5.2 Total Traffic Counts

The peak periods from 8.00am -9.00am and 2.45pm -3.45pm were used for the assessment. Figure 2.13 and Figure 2.14 below show the traffic counts for the Chesterfield Parade and Arden Street intersection for the AM and PM peaks.

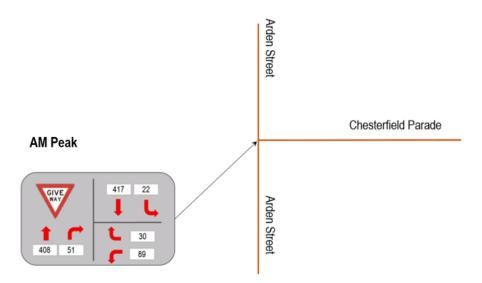


Figure 2.13: Intersection Count Diagram – AM All Traffic – Chesterfield Parade and Arden Street

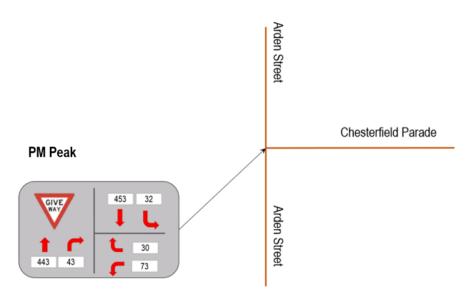


Figure 2.14: Intersection Count Diagram – PM All Traffic – Chesterfield Parade and Arden Street

The surveys show that there were 51 vehicles performing the right turn from Arden Street onto Chesterfield Parade in the AM peak, and 43 vehicles in the PM peak. The majority of vehicles turning out of Chesterfield Parade turn left to head south on Arden Street.



2.5.3 Pedestrian Counts

During the above peak periods, pedestrian counts measured 92 pedestrians in the AM peak and 85 in the PM peak across the pedestrian crossing at the Chesterfield Parade and Arden Street intersection, shown below in Figure 2.15.

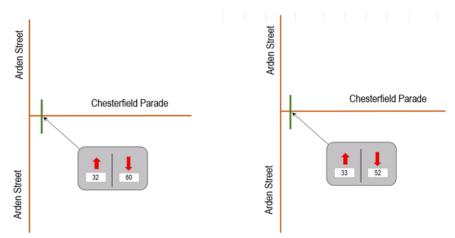


Figure 2.15: Pedestrian survey counts (left AM, right PM)

2.5.4 Pedestrian Crossing Warrant

The traffic counts taken were analysed to determine their accordance with RMS guidelines for pedestrian crossing warrants, found in RMS Australian Standard Supplements to the Australian Standards AS1742.10-2009 Manual of Uniform Traffic Control Devices, Part 10, Section 6.

The RMS guidelines state that a Children's Crossing is warranted under the following conditions:

- Pedestrian children flow per hour (P) crossing the road is greater than or equal to 20;
- Vehicular flow per hour (V1, V2) in each direction through the site is greater than or equal to 50;
- All of the above requirements must be met for a one-hour duration immediately before and after school hours on a typical school day.

The pedestrian and vehicular counts for the crossing on Chesterfield Parade near Arden Street were checked to assess whether the traffic counts taken were in accordance with the warrant requirements. Across the four hourly periods, three of the hours resulted in a children's crossing being warranted. Based on site observations, not all pedestrians crossing the road during these times were children. However, the pedestrian count was suitably high such that it is a reasonable assumption to make that at least 20 children crossed the road in each hour period.

Between the four hours, it was only in the 9.00am - 10.00am period that the vehicular traffic across the crossing in the eastbound direction (V2) did not satisfy the requirement of 50 vehicles per hour.

The results are summarised in Table 2.3.

Table 2.3: Children's Crossing Warrant

Date	Period	V1	V2	٧	Р	War	rant
	8.00am – 9.00am	119	73	192	92	YES	
07/02/2018	9.00am - 10.00am	79	41	120	37	NO	YES
Wednesday	2.30pm – 3.30pm	96	84	180	74	YES	1 1 1 2 3
	3.30pm – 4.30pm	65	51	116	43	YES	



2.6 PARKING

The majority of kerbside parking provided along the streets in the project area is unrestricted. This includes both sides of Chesterfield Parade, Marroo Street, Boundary Street, and Gordon Place. Arden Street, within the project area, also has unrestricted parking on both sides of the street. Further south, there are 10 minutes restricted parking and Kiss & Go No Parking zones outside of St Anthony's Catholic Primary School on the northbound section of Arden Street.

Inverness Street has restricted parking on the western side, immediately adjacent to Clovelly Public School. The area is a Kiss & Go No Parking zone during school traffic periods, along with one disabled parking space. The eastern side of the street has unrestricted kerbside parking.

2.7 SIDRA MODELLING – EXISTING INTERSECTION PERFORMANCE

The Arden Street and Chesterfield Parade intersection is shown below in Figure 2.16.

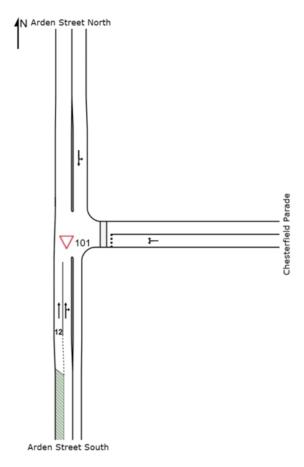


Figure 2.16: Arden Street and Chesterfield Parade

Chesterfield Parade Right Turn Bar



The Arden Street and Boundary Street intersection is shown below in Figure 2.17.

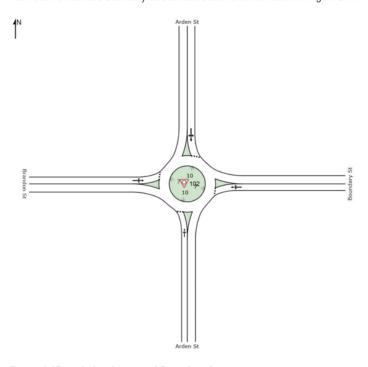


Figure 2.17: Arden Street and Boundary Street

The Boundary Street and Marroo Street intersection is shown below in Figure 2.18.

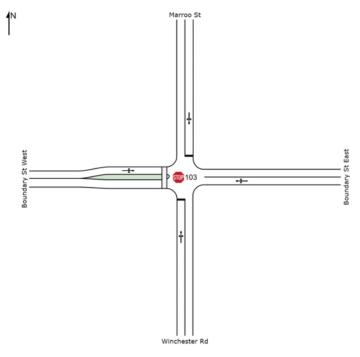


Figure 2.18: Boundary Street and Marroo Street

Chesterfield Parade Right Turn Bar



The Chesterfield Parade and Marroo Street intersection is shown below in Figure 2.19.

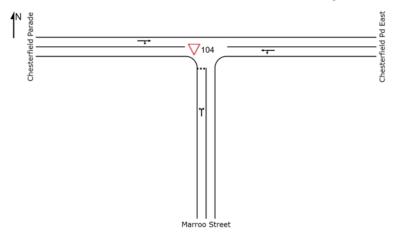


Figure 2.19: Chesterfield Parade and Marroo Street

2.8 BASE MODEL SIDRA INPUTS

The default settings of the base model included:

- 'Current Setup' was set to New South Wales;
- Physical features of the intersection geometries were determined using the latest aerial imagery available;
- Vehicle volumes were obtained from the traffic surveys conducted on Wednesday, 7 February, 2018;
- Priorities were configured as observed on site; and
- Posted speed limits were used as observed on site.

2.9 KEY PARAMETERS

2.9.1 Saturation Flow

The default values for saturation flow were used in the SIDRA intersection models

2.9.2 Gap Acceptance

During the AM and PM peak periods at the Arden Street and Boundary Street intersection, the north and southbound traffic conditions were seen to be flowing smoothly with minimal delays and queueing. Therefore, the minimum critical gap acceptance was manually reduced in SIDRA to more accurately represent the observed traffic flow.

2.9.3 Follow-up Headway

The default values for follow-up headway were used in the SIDRA intersection models.

2.10 MODEL VALIDATION

2.10.1 Back of Queue

A comparison of queue distances between model results and site observations for each approach to each intersection is shown below in Table 2.4 and Table 2.5. The modelled queues are similar to the observed queues on site.



Table 2.4: Model Results vs Site Observations (AM)

Intersection	Approach	SIDRA 95 th Percentile Back of queue (vehicles)	SIDRA 95 th Percentile Back of Queue (metres)	Queue Observed During Site Inspection (metres)
Chesterfield Parade and	Arden St (North)	0.2	1.5	0
Arden Street	Chesterfield Pde (East)	0.7	4.9	24
	Arden St (South)	0.6	4.5	-
Arden Street and	Arden St (North)	3	22.2	18
Boundary Street	Boundary St (East)	1.2	8.4	6
	Arden St (South)	2.1	15	12
	Brandon St (West)	0.4	2.6	6
Boundary Street and	Marroo St (North)	0	0	6
Marroo Street	Boundary St (East)	0.1	0.9	6
	Winchester Rd (South)	0.4	2.6	6
	Boundary St (West)	0	0	6
Chesterfield Parade and	Chesterfield Pde (East)	0	0	0
Marroo Street	Marroo St (South)	0.1	0.5	0
	Chesterfield Pde (West)	0.2	1.1	0

Table 2.5: Model Results vs Site Observations (PM)

Intersection	Approach	SIDRA 95 th Percentile Back of queue (vehicles)	SIDRA 95 th Percentile Back of Queue (metres)	Queue Observed During Site Inspection (metres)
Chesterfield Parade and	Arden St (North)	0.3	2	0
Arden Street	Chesterfield Pde (East)	0.7	4.6	6
	Arden St (South)	0.6	4.0	6
Arden Street and	Arden St (North)	3	21.6	18
Boundary Street	Boundary St (East)	1.8	13	12
	Arden St (South)	2.8	20	18
	Brandon St (West)	0.2	1.6	6
Boundary Street and	Marroo St (North)	0.1	0.7	0
Marroo Street	Boundary St (East)	0.1	0.6	0
	Winchester Rd (South)	0.1	1	0
	Boundary St (West)	0.1	0.6	0
Chesterfield Parade and	Chesterfield Pde (East)	0	0	0
Marroo Street	Marroo St (South)	0.1	0.4	0
	Chesterfield Pde (West)	0.2	1.3	0



It should be mentioned for the AM peak scenario, site observations noted that queues along Arden Street in the northbound direction were a result of the Macpherson Street and Arden Street intersection, north of Chesterfield Parade. Therefore, any queues observed cannot be meaningfully compared to SIDRA results. This applies to both the Chesterfield Parade and Arden Street East and South approaches.

2.10.2 Intersection Performance

The AM and PM peak traffic volumes, degree of saturation, average delay, Level of Service (LOS), and 95th percentile back of queue for each approach of the four intersections in the study area are summarised in this section and shown below in Table 2.6 and Table 2.7. LOS was determined by the worst movement of each approach.

Table 2.6: SIDRA AM Results Summary

Intersection	Approach	Traffic Volumes (veh/h)	Degree of saturation (v/c)	Average Delay (s)	Level of Service	95 th Percentile Queue (m)
	Arden St (North)	439	0.227	0.2	LOS A	1.5
Chesterfield Parade and Arden Street	Chesterfield Pde (East)	119	0.187	8	LOS B	4.9
	Arden St (South)	459	0.228	1.2	LOS A	4.5
	Arden St (North)	491	0.424	3.9	LOS A	22.2
Arden Street and	Boundary St (East)	257	0.21	6.2	LOS A	8.4
Boundary Street	Arden St (South)	631	0.371	3.3	LOS A	15
	Brandon St (West)	44	0.063	9.1	LOS A	2.6
	Marroo St (North)	14	0.017	8.3	LOS A	0.3
Boundary Street	Boundary St (East)	242	0.132	0.7	LOS A	0.9
and Marroo Street	Winchester Rd (South)	80	0.104	9.3	LOS A	2.6
	Boundary St (West)	169	0.09	5.4	LOS A	0.2
	Chesterfield Pde (East)	76	0.04	2.3	LOS A	0
Chesterfield Parade and Marroo Street	Marroo St (South)	21	0.016	5	LOS A	0.5
Street	Chesterfield Pde (West)	89	0.049	1.3	LOS A	1.1



Table 2.7: SIDRA PM Results Summary

Intersection	Approach	Traffic Volumes (veh/h)	Degree of saturation (v/c)	Average Delay (s)	Level of Service	95 th Percentile Queue (m)
	Arden St (North)	485	0.248	0.3	LOS A	2
Chesterfield Parade and Arden Street	Chesterfield Pde (East)	103	0.182	8.8	LOS B	4.6
	Arden St (South)	486	0.236	1.1	LOS A	4
	Arden St (North)	519	0.41	3.4	LOS A	21.6
Arden Street and	Boundary St (East)	213	0.277	8.9	LOS A	13
Boundary Street	Arden St (South)	539	0.481	3.3	LOS A	20.1
	Brandon St (West)	30	0.041	8.8	LOS A	1.6
	Marroo St (North)	36	0.04	8	LOS A	0.7
Boundary Street	Boundary St (East)	176	0.094	0.7	LOS A	0.6
and Marroo Street	Winchester Rd (South)	35	0.039	8.5	LOS A	1
	Boundary St (West)	134	0.072	1.3	LOS A	0.6
	Chesterfield Pde (East)	68	0.035	2.2	LOS A	0
Chesterfield Parade and Marroo Street	Marroo St (South)	18	0.013	4.9	LOS A	0.4
	Chesterfield Pde (West)	89	0.049	1.5	LOSA	1.3

2.11 FUTURE CASE MODEL

SIDRA was used to model a future case where a No Right Turn condition is applied to the Chesterfield Parade and Arden Street intersection for northbound vehicles during both the AM and PM peak school traffic periods. The worst case critical scenario for the model was taken to be where vehicles, which are prevented from taking the right turn onto Chesterfield Parade, would instead take the earlier right turn at the Arden Street and Boundary Street roundabout, then follow Boundary Street to Marroo Street, to left for access to Gordon Place, Inverness Street and Chesterfield Parade. Therefore, all right turning traffic in the existing conditions have been redistributed along the above route.

It was assumed that vehicle behaviour followed existing movement proportions at corresponding intersections. The percentage of future right turning vehicles onto Boundary Street that take the left turn onto Marroo Street has been taken to be the same as the existing right turning vehicles onto Chesterfield Parade that take the right turn onto Marroo Street. It is also assumed that these vehicles are seeking access to Gordon Place, Inverness Street and drop off zones for Clovelly Public School. Furthermore, all redistributed vehicles were assumed to either access Marroo Street to return to Chesterfield Parade or to



continue through on Boundary Street for St Thomas Street. That is, there are no vehicles departing the traffic stream via local streets on Boundary Street or Marroo Street. It was deemed unlikely that vehicles would exhibit a major change in behaviour due to the restricted right turn onto Chesterfield Parade.

A summary of the results for the future case AM and PM models are shown in Table 2.8 and Table 2.9.

Table 2.8: SIDRA Future AM Case Results Summary

Intersection	Approach	Traffic Volumes (veh/h)	Degree of saturation (v/c)	Average Delay (s)	Level of Service	95 th Percentile Queue (m)
	Arden St (North)	439	0.227	0.2	LOS A	1.5
Chesterfield Parade and Arden Street	Chesterfield Pde (East)	121	0.184	7.8	LOS A	4.8
	Arden St (South)	408	0.185	0	LOS A	0
	Arden St (North)	492	0.452	4.4	LOS A	24
Arden Street and	Boundary St (East)	255	0.21	6.2	LOS A	8.5
Boundary Street	Arden St (South)	682	0.401	3.4	LOS A	16.8
	Brandon St (West)	44	0.067	10.2	LOS A	2.8
	Marroo St (North)	10	0.013	8.5	LOS A	0.2
Boundary Street	Boundary St (East)	242	0.132	0.8	LOS A	1
and Marroo Street	Winchester Rd (South)	80	0.109	9.6	LOS A	2.7
	Boundary St (West)	222	0.119	1.3	LOS A	0.2
	Chesterfield Pde (East)	76	0.04	2.3	LOS A	0
Chesterfield Parade and Marroo Street	Marroo St (South)	25	0.019	4.9	LOS A	0.6
	Chesterfield Pde (West)	38	0.021	1.2	LOS A	0.5



Table 2.9: SIDRA Future PM Case Results Summary

Intersection	Approach	Traffic Volumes (veh/h)	Degree of saturation (v/c)	Average Delay (s)	Level of Service	95 th Percentile Queue (m)
	Arden St (North)	485	0.248	0.3	LOS A	2
Chesterfield Parade and Arden Street	Chesterfield Pde (East)	111	0.19	8.6	LOS B	4.9
	Arden St (South)	441	0.197	0	LOS A	0
	Arden St (North)	524	0.439	3.8	LOS A	23.5
Arden Street and	Boundary St (East)	206	0.273	9	LOS A	13
Boundary Street	Arden St (South)	582	0.519	3.5	LOS A	23.1
	Brandon St (West)	30	0.043	9.2	LOS A	1.7
	Marroo St (North)	25	0.029	8.1	LOS A	0.5
Boundary Street	Boundary St (East)	176	0.094	0.8	LOS A	0.6
and Marroo Street	Winchester Rd (South)	35	0.04	8.6	LOS A	1
	Boundary St (West)	177	0.095	1.4	LOS A	0.7
	Chesterfield Pde (East)	68	0.035	2.2	LOS A	0
Chesterfield Parade and Marroo Street	Marroo St (South)	25	0.018	4.8	LOS A	0.6
	Chesterfield Pde (West)	48	0.026	1.5	LOSA	0.6

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A comparison summary of the existing and future scenario results is shown below in Table 2.10.

Table 2.10: Existing and Future Model Comparison

		Level of Service						
Intersection	Approach	Exis	ting	Future				
		AM	PM	AM	PM			
	Arden St (North)	LOS A	LOS A	LOS A	LOS A			
Chesterfield Parade and Arden Street	Chesterfield Pde (East)	LOS B	LOS B	LOS A	LOS B			
	Arden St (South)	LOS A	LOS A	LOS A	LOS A			
	Arden St (North)	LOS A	LOS A	LOS A	LOS A			
Arden Street and	Boundary St (East)	LOS A	LOS A	LOS A	LOS A			
Boundary Street	Arden St (South)	LOS A	LOS A	LOS A	LOS A			
	Brandon St (West)	LOS A	LOS A	LOS A	LOS A			
	Marroo St (North)	LOS A	LOS A	LOS A	LOS A			
Boundary Street	Boundary St (East)	LOS A	LOS A	LOS A	LOS A			
and Marroo Street	Winchester Rd (South)	LOS A	LOS A	LOS A	LOS A			
	Boundary St (West)	LOS A	LOS A	LOS A	LOS A			
	Chesterfield Pde (East)	LOS A	LOS A	LOS A	LOS A			
Chesterfield Parade and Marroo Street	Marroo St (South)	LOS A	LOS A	LOS A	LOS A			
	Chesterfield Pde (West)	LOS A	LOS A	LOS A	LOS A			

The only change in LOS occurs at Chesterfield Parade (East) for the Chesterfield Parade and Arden Street intersection, where there is an improvement from LOS B to LOS A in the future scenario model (bolded).

2.12 CONCLUSIONS

SIDRA models for the existing conditions for the AM and PM peak traffic periods were developed for the four intersections within the study area: Chesterfield Parade and Arden Street, Arden Street and Boundary Street, Boundary Street and Marroo Street and Chesterfield Parade and Marroo Street. Traffic count data was obtained for these intersections, and the SIDRA models were calibrated and validated based on site visit observations during the peak periods. The right turning traffic from Arden Street onto Chesterfield Parade was then redistributed to an alternative route to simulate the traffic flow for the future case scenario. The proposed implementation of a No Right Turn restriction at the Arden Street and Chesterfield Parade intersection for northbound traffic was determined to have insignificant effects on the overall flow of traffic.



There were no major changes to delays or queue lengths at any of the intersections. An improvement of the Chesterfield Parade and Arden Street intersection is noted in an upgrade from LOS B to LOS A for the east approach. The assessment suggests that intersection performance across the study area will not be impacted in any significant manner.

If it is determined that vehicles are to follow a different route than proposed here, a further assessment of traffic impacts would require analysis of additional intersections along Macpherson Street and St Thomas Street

3. PART C - PROPOSED MEASURES

3.1 PROPOSED TRAFFIC MANAGEMENT PLANS

The proposed changes will restrict the right turn for northbound traffic on Arden Street onto Chesterfield Parade. This will be in place through a No Right Turn condition being put in place at the Arden Street and Chesterfield Parade intersection, as shown below in Figure 3.1. This No Right Turn condition will apply only during school traffic hours, 8.00am - 9.30am and 2.30pm - 4.00pm, Monday to Friday.



Source: Adapted from Google Maps

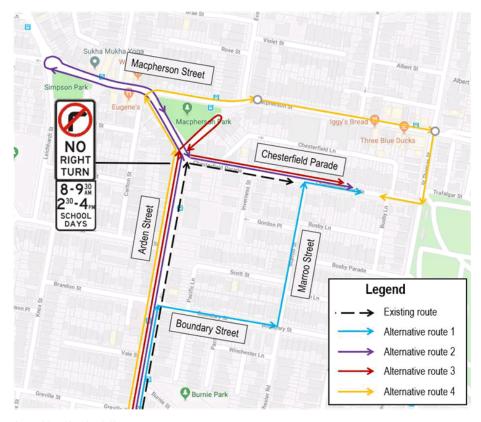
Figure 3.1: Proposed No Right Turn condition onto Chesterfield Parade



3.2 LOCAL TRAFFIC MANAGEMENT

3.2.1 Alternative Routes

Following the introduction of a "No Right Turn, Mon – Fri 8.00am-9.30am and 2.30pm-4.00pm" restriction from Arden Street into Chesterfield Parade, alternative routes as shown in Figure 3.2 may be used to access Chesterfield Parade or Marroo Street.



Source: Adapted from Google Maps

Figure 3.2: Map of Alternative Routes



3.2.2 Alternative Route 1: Local Traffic Management

Alternative Route 1 operates north along Arden Street, taking the right turn at Boundary Street and then the left turn at Marroo Street to access Gordon Place, Inverness Street, and ultimately Chesterfield Parade. A map of the route is shown in Figure 3.3.



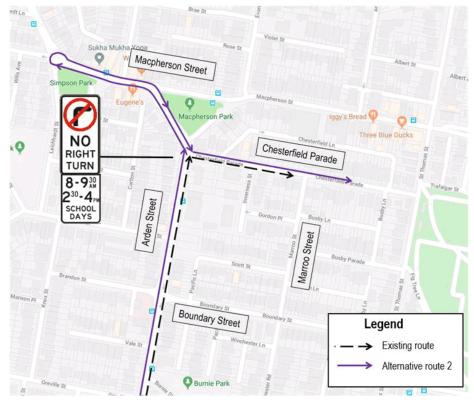
Source: Adapted from Google Maps

Figure 3.3: Map of Alternative Route 1



3.2.3 Alternative Route 2: Local Traffic Management

Alternative Route 2 operates north on Arden Street, passing Chesterfield Parade and turning left onto Macpherson Street. It continues until it reaches the roundabout intersection at Macpherson Street and Leichhardt Street, whereupon it U-turns and returns along Macpherson Street, turning right into Arden Street heading southbound, then turning left onto Chesterfield Parade. A map of the route is shown in Figure 3.4.



Source: Adapted from Google Maps

Figure 3.4: Map of Alternative Route 2



3.2.4 Alternative Route 3: Local Traffic Management

Alternative Route 3 operates north on Arden Street, passing Chesterfield Parade and turning right into the no-through Baglin Street. It performs a U-turn at the end of Baglin Street and returns to Arden Street, turning left to continue in the southbound direction until Chesterfield Parade, whereupon it proceeds to turn left. A map of the route is shown in Figure 3.5.



Source: Adapted from Google Maps

Figure 3.5: Map of Alternative Route 3



3.2.5 Alternative Route 4: Local Traffic Management

Alternative Route 4 operates north on Arden Street, passing Chesterfield Parade and turning right onto Macpherson Street. The route continues east along Macpherson Street, turning right onto St Thomas Street and then immediately right again onto Chesterfield Parade, accessing it from the east approach. A map of the route is shown in Figure 3.6.



Source: Adapted from Google Maps

Figure 3.6: Map of Alternative Route 4



Assessment of Alternative Routes

The four alternative routes were compared to the existing route. As the proposed restriction affects only northbound vehicles, the origin of relevant vehicles will be a point south on Arden Street. For evaluation purposes, the origin is considered as the intersection of Vale Street and Arden Street, and the destination is set as the intersection of Chesterfield Parade and Marroo Street.

Route distance and travel time comparisons were obtained from Google Maps with departure times of 8.00am and 2.30pm. The results of this comparison are provided in Table 3.1.

Table 3.1: Alternative Route Comparisons

Route	Route Distance	Travel Time				
Route	Route Distance	AM	РМ			
Existing route	0.55 km	Typically 2 minutes	Typically 2 minutes			
Alternative route 1	0.55 km	Typically 3 minutes	Typically 3 minutes			
Alternative route 2	1.2 km	Typically 3-6 minutes	Typically 4 minutes			
Alternative route 3	0.75 km	Typically 4 minutes	Typically 3 minutes			
Alternative route 4	1.2 km	Typically 4 minutes	Typically 4 minutes			

Alternative Route 1

Alternative route 1 is the same length as the existing route, requiring no extra travel distance. Despite this, it is expected that travel time increases by approximately 1 minute, most likely due to narrowness of Marroo Street and the requirement to negotiate with other vehicles when travelling along this route. It is expected that this would be the primary route followed by vehicles following the implementation of the right turn restriction. Should northbound vehicles miss the right turn at Boundary Street, they would have to follow one of the other alternative routes to reach their destination.

Alternative Route 2

Alternative route 2 requires an additional 0.65 km travel distance, which more than doubles the distance to be travelled when compared to the existing route. It requires drivers to make the left turn at Macpherson Street, travel to the roundabout approximately 170 metres west, and then return to Arden Street travelling in the southbound direction. Site observations in the AM period noted significant queueing at the Arden Street and Macpherson Street priority intersection. The route increases the typical travel time by 1-4 minutes in the AM, and 2 minutes in the PM compared to the existing route. It is not expected that many vehicles would follow this route, as it requires a significant detour and necessitates navigation of Macpherson Street.

Alternative Route 3

Alternative route 3 requires an additional 0.2 km travel distance. Vehicles restricted from making the right turn into Chesterfield Parade have the option of immediately taking the next right into the no through Baglin Street and performing a U-turn to return to Arden Street travelling in the southbound direction. An additional 2 minutes is required in the AM period, and 1 minute in the PM period.

Alternative Route 4

Alternative route 4 requires an additional 0.65 km travel distance, which, similarly to Alternative route 2, more than doubles route distance compared to the existing route. Vehicles would turn right from Arden Street onto Macpherson Street, following it until St Thomas Street and then turning right, and then right again onto Chesterfield Parade, approaching it from the east side. An additional 2 minutes would be required to follow this route in both the AM and PM periods.



3.3 SAFETY IMPROVEMENTS FOR CYCLISTS AND PEDESTRIANS

The proposed changes at the intersection of Arden Street and Chesterfield Parade are likely to positively benefit cyclist and pedestrian safety in the area. The restriction of the right turn onto Chesterfield Parade during school traffic hours will result in less vehicular traffic across the pedestrian crossing at the intersection, as well as along the length of Chesterfield Parade adjacent to Clovelly Public School. By reducing interaction between pedestrian and vehicle traffic, the overall safety of the area is improved.

Reduced traffic along the section of Arden Street between Macpherson Street and Boundary Street also benefits cyclist safety, as there is a reduction in cyclist-vehicle conflicts. Southbound cyclists will also not have the need to watch for vehicles making the right turn from Arden Street onto Chesterfield Parade as they cross the intersection if the movement is prohibited.

3.4 Measures to Ameliorate Impact of Re-assigned Traffic

Re-assigned traffic is primarily expected to follow Alternative Route 1 (see 3.2.2) due to convenience and minimal change in distance and travel time.

Traffic flow on Boundary Street is smooth, and the introduction of approximately 50 additional vehicles in the peak hour periods will not impact the traffic flow significantly. However, the redirection of additional northbound traffic volumes to Marroo Street could result in a degradation of traffic conditions. Marroo Street's existing conditions have it treated functionally as a one lane, two-way street due to parking on both sides of the already narrow street, requiring negotiation to traverse the street. Vehicles would previously turn into Marroo Street heading southbound, and would only need to traverse a short section of the street. Measures to improve conditions could address kerbside parking; an introduction of parking restrictions along Marroo Street within school traffic hours would enable smoother movement along the street to help ameliorate the impact of re-assigned traffic.

In the case that northbound vehicles miss the Boundary Street turn, it is assumed that they would be likely to follow Alternative Route 3, as the next fastest alternative route to access Chesterfield Parade. This movement will have minimal impacts on the traffic flows due to similarity of movements to those of the existing route. At most, the right turn onto Baglin Street from Arden Street will generate northbound queues as the road narrows at the bend such that there is insufficient clearance for a vehicle to pass another vehicle stopped waiting to make the turn. However, due to low traffic volumes, it is expected that this will not significantly impact traffic flow.

Traffic flow on Chesterfield Parade is unlikely to be impacted, as vehicles are assumed to follow the same movements as existing conditions once they reach the street. At most, there will be less eastbound traffic west of Marroo Street, which will have no negative impact.

4. PART D – ASSESSMENT OF PUBLIC TRANSPORT SERVICES AFFECTED

Is an assessment required? No.

An assessment is not required, as the proposed changes will have no impact on any bus or train services.

4.1 Bus Services

Two bus services utilise Arden Street as outlined in Section 2.2. The proposed measure does not restrict the movement of buses along Arden Street, and therefore will not impact these bus services.

4.2 TRAIN SERVICES

No train services exist within the study area - as such, the proposed changes will have no impact on any train service.



5. PART E – DETAILS OF PROVISION MADE FOR EMERGENCY VEHICLES, HEAVY VEHICLES, CYCLISTS AND PEDESTRIANS

Are these details required? Yes

5.1 EMERGENCY VEHICLES

No impact is expected from the proposed changes. The proposed change to restrict entry to Chesterfield Parade via the right turn from Arden Street during school traffic hours, does not affect emergency vehicles as they are exempt under *Road Rules 2014, Regulation 306*, which states:

A provision of these Rules does not apply to the driver of an emergency vehicle if:

- (a) In the circumstance.
- (i) The driver is taking care, and
- (ii) It is not reasonable that the rule should not apply, and
- (b) If the vehicle is a motor vehicle that is moving, and the vehicle is displaying a blue or red flashing light or sounding an alarm.

Therefore, emergency vehicles would be exempted from the proposed No Right Turn restriction and the proposed measure will have no impact on current operations.

5.2 MEDIUM RIGID AND HEAVY VEHICLES

The traffic count data shows two (2) heavy vehicles making the right turn from Arden Street onto Chesterfield Parade during the AM school traffic period, and one (1) for the PM school traffic period. Therefore, the proposed changes are not expected to have a significant impact on the movement of medium rigid and heavy vehicles. Given the surrounding road network, it is a reasonable assumption that most heavy vehicles entering Chesterfield Parade from the west side are utilising it as a connection to St Thomas Street.

In the case that said vehicles require access to Chesterfield Parade following the implementation of the No Right Turn restriction, they can divert via Alternative Route 1 (refer to section 3.2.2 for further details).

5.3 CYCLISTS

The proposed restriction does not exempt cyclists from performing the right turn and, therefore, could affect cyclists in the area. Traffic counts did not include cyclist movements for the Arden Street and Chesterfield Parade intersection. However, site observations did not note any cyclists making the right turn from Arden Street onto Chesterfield Parade during both the AM and PM school traffic hours.

Therefore, the proposed changes are not expected to have a significant impact on the movement of cyclists.

5.4 PEDESTRIANS

No impact is expected from the proposed changes as the no right turn restriction relates to road access on Arden Street and Chesterfield Parade.



6. PART F – ASSESSMENT OF EFFECT ON EXISTING AND FUTURE DEVELOPMENTS WITH TRANSPORT IMPLICATIONS

Is an Assessment required? No

It is assumed that any traffic generated by a future development north of the Arden Street and Chesterfield Parade intersection will be travelling southbound and would, therefore, be unaffected by the proposed changes. Any future development south of the intersection would be expected to use Arden Street, as it is a main regional street in the area serving the north-south connection between Coogee and Bronte. Northbound traffic along Arden Street will be affected by the proposed measures.

However, a portion of right-turning vehicles during school traffic hours can be reasonably assumed to be seeking access to Clovelly Public School. Future development traffic affected by this proposal would need to fall into this same demographic. As the area immediately south of the Arden Street and Chesterfield Parade intersection is primarily zoned as low density residential, which is fully developed, it is unlikely to see developments in the near future that would significantly increase the residential capacity of the area.

Furthermore, vehicles utilising Chesterfield Parade to access St Thomas Street would not be heavily impacted in being redirected to use Boundary Street during these hours. Therefore, the impact of the proposed restriction on future developments is negligible.

7. PART G – ASSESSMENT OF EFFECT OF PROPOSED MEASURES ON TRAFFIC MOVEMENTS IN ADJOINING COUNCIL AREAS

Is an assessment required? Yes

The study area mostly falls within the Waverley Council region. However, Boundary Street and Arden Street south of Varna Street form the southern borders of the study area and are located within Randwick City Council LGA.

The proposed restriction will act to redirect the flow of northbound traffic within the Randwick City Council region. Vehicles who would otherwise continue north on Arden Street into Waverley Council's region will now potentially turn right at Boundary Street, increasing traffic volumes along the street.

8. PART H – PUBLIC CONSULTATION PROCESS

Is a public consultation process required? Yes

A letterbox drop survey was delivered to local residents of the area requesting feedback on the proposed no right turn condition during school traffic hours. Of the nine responses received:

- eight supported the proposal; and
- one did not support the proposal.

Residents of the area also offered the following feedback:

- An alternative route to access Chesterfield Parade by turning right at Boundary Street, then left into Marroo Street was suggested by Council (see 3.2.2 Alternative Route 1). Of the responses received, two found the suggestion 'unconscionable' and not viable, citing narrowness of Marroo Street due to prevalence of parked vehicles on both sides of the street resulting in only 'one useable lane' and an inability to 'cope with daily traffic, let alone school traffic'.
- Five out of the eight that supported the proposal, recommended extending the ban to be permanently
 active, not only during school traffic hours. Reasons for this included the safety concerns persisting
 throughout the day due to the layout of the intersection, as well as an avoidance of driver confusion,
 not just because of school traffic volumes.
- Other issues mentioned by residents included visibility issues due to road geometry and placement of crossing, dense tree canopy rendering Chesterfield Parade heavily shadowed, as well as poor maintenance of the crossing itself.



9. CONCLUSIONS

The overall volume of vehicles travelling northbound on Arden Street during the AM and PM school traffic period peaks are 459 and 486 respectively. Of these vehicles, 51 and 43 respectively take the right hand turn from Arden Street onto Chesterfield Parade (approximately 9% of the total traffic volume). The implementation of a No Right Turn restriction during school traffic hours as proposed by Waverley Council has been assessed in this report.

The redistribution of vehicles to an alternative route, via Boundary Street and Marroo Street, has been found to not significantly impact the traffic flow at the key intersections of the area. There are no noteworthy increases in delays or queues. However, drivers on the new route are required to navigate a longer section of Marroo Street. Traffic conditions on Marroo Street may see slight detrimental changes due to prevalence of parking on both sides of the street forcing driver negotiation along the narrow driveable area.



APPENDIX A

SIDRA OUTPUTS

Site: 101 [Arden St / Chesterfield Pde - AM Existing]

New Site

Giveway / Yield (Two-Way)

Move	ement Pe	rformance	- Vehic	les							
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	: Arden St	reet South									
2	T1	408	4.2	0.228	0.5	LOS A	0.6	4.5	0.17	0.06	38.6
3	R2	51	2.0	0.228	6.4	LOSA	0.6	4.5	0.21	0.08	38.7
Appro	ach	459	3.9	0.228	1.2	NA	0.6	4.5	0.17	0.07	38.6
East:	Chesterfie	ld Parade									
4	L2	89	0.0	0.187	5.6	LOS A	0.7	4.9	0.59	0.74	35.2
6	R2	30	0.0	0.187	15.0	LOS B	0.7	4.9	0.59	0.74	34.2
Appro	ach	119	0.0	0.187	8.0	LOSA	0.7	4.9	0.59	0.74	35.0
North	: Arden St	reet North									
7	L2	22	4.5	0.227	3.9	LOS A	0.2	1.5	0.03	0.02	40.0
8	T1	417	5.5	0.227	0.0	LOSA	0.2	1.5	0.03	0.02	39.6
Appro	ach	439	5.5	0.227	0.2	NA	0.2	1.5	0.03	0.02	39.7
All Ve	hicles	1017	4.1	0.228	1.6	NA	0.7	4.9	0.16	0.13	38.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Site: 102 [Arden St / Boundary St - AM Existing]

New Site Roundabout

Move	ement Pe	rformance	- Vehic	les	_	_		_			
Mov	OD		Demand Flows Deg. Average Level of 95% Back of Queu			Prop.	Effective	Average			
ID	Mov	Total	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
South	ı: Arden St	veh/h	%	v/c	sec		veh	m		per veh	km/h
1	L2	29	0.0	0.371	2.7	LOSA	2.1	15.2	0.18	0.41	38.8
2	T1	463	4.1	0.371	2.6	LOSA	2.1	15.2	0.18	0.41	38.0
3	R2	139	0.7	0.371	5.5	LOS A	2.1	15.2	0.18	0.41	41.6
Appro	ach	631	3.2	0.371	3.3	LOSA	2.1	15.2	0.18	0.41	38.9
East:	Boundary	St									
4	L2	213	4.7	0.215	5.9	LOS A	1.3	9.1	0.56	0.66	40.1
5	T1	8	0.0	0.215	5.3	LOS A	1.3	9.1	0.56	0.66	43.0
6	R2	36	2.8	0.215	8.3	LOS A	1.3	9.1	0.56	0.66	40.8
Approach		257	4.3	0.215	6.2	LOSA	1.3	9.1	0.56	0.66	40.3
North	: Arden St										
7	L2	30	6.7	0.424	4.1	LOSA	3.0	22.2	0.48	0.49	40.7
8	T1	449	5.1	0.424	3.8	LOS A	3.0	22.2	0.48	0.49	37.5
9	R2	12	0.0	0.424	6.7	LOS A	3.0	22.2	0.48	0.49	38.3
Appro	ach	491	5.1	0.424	3.9	LOSA	3.0	22.2	0.48	0.49	37.7
West:	Brandon	St									
10	L2	12	0.0	0.063	8.8	LOS A	0.4	2.6	0.69	0.71	34.6
11	T1	16	0.0	0.063	8.4	LOS A	0.4	2.6	0.69	0.71	40.5
12	R2	16	6.3	0.063	11.6	LOSA	0.4	2.6	0.69	0.71	36.1
Appro	ach	44	2.3	0.063	9.7	LOSA	0.4	2.6	0.69	0.71	37.3
All Ve	hicles	1423	4.0	0.424	4.2	LOSA	3.0	22.2	0.37	0.50	38.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Site: 103 [Boundary St / Marroo St - AM Existing]

New Site Stop (Two-Way)

South: Winchester Rd 1	e Queued n 6 0.42	Effective Ave Stop Rate Spe per veh
South: Winchester Rd 1	6 0.42	
2 T1 36 0.0 0.104 9.6 LOS A 0.4 2.4 3 R2 30 0.0 0.104 9.5 LOS A 0.4 2.4 Approach 80 0.0 0.104 9.3 LOS A 0.4 2.4 East: Boundary St East 4 L2 20 10.0 0.132 4.9 LOS A 0.1 0.1 5 T1 208 4.8 0.132 0.0 LOS A 0.1 0.1 6 R2 14 0.0 0.132 5.1 LOS A 0.1 0.1 Approach 242 5.0 0.132 0.7 NA 0.1 0.1		0.04
3 R2 30 0.0 0.104 9.5 LOS A 0.4 2.0 Approach 80 0.0 0.104 9.3 LOS A 0.4 2.0 East: Boundary St East 4 L2 20 10.0 0.132 4.9 LOS A 0.1 0.1 5 T1 208 4.8 0.132 0.0 LOS A 0.1 0.1 6 R2 14 0.0 0.132 5.1 LOS A 0.1 0.1 Approach 242 5.0 0.132 0.7 NA 0.1 0.1	5 0.42	0.94
Approach 80 0.0 0.104 9.3 LOS A 0.4 2.3 East: Boundary St East 4 LOS A 0.1	0.42	0.94
East: Boundary St East 4	6 0.42	0.94
4 L2 20 10.0 0.132 4.9 LOS A 0.1 0. 5 T1 208 4.8 0.132 0.0 LOS A 0.1 0. 6 R2 14 0.0 0.132 5.1 LOS A 0.1 0. Approach 242 5.0 0.132 0.7 NA 0.1 0.	6 0.42	0.94
5 T1 208 4.8 0.132 0.0 LOS A 0.1 0. 6 R2 14 0.0 0.132 5.1 LOS A 0.1 0. Approach 242 5.0 0.132 0.7 NA 0.1 0.1		
6 R2 14 0.0 0.132 5.1 LOSA 0.1 0. Approach 242 5.0 0.132 0.7 NA 0.1 0.	9 0.05	0.08
Approach 242 5.0 0.132 0.7 NA 0.1 0.	9 0.05	0.08
	9 0.05	0.08
	9 0.05	0.08
North: Marroo St		
7 L2 3 0.0 0.017 7.7 LOSA 0.0 0.	3 0.26	0.93
8 T1 3 0.0 0.017 8.3 LOSA 0.0 0.	3 0.26	0.93
9 R2 8 0.0 0.017 8.6 LOS A 0.0 0.	3 0.26	0.93
Approach 14 0.0 0.017 8.3 LOS A 0.0 0.	3 0.26	0.93
West: Boundary St West		
10 L2 39 0.0 0.090 4.6 LOS A 0.0 0.	2 0.02	0.13
11 T1 127 1.6 0.090 0.0 LOSA 0.0 0.	2 0.02	0.13
12 R2 3 0.0 0.090 5.4 LOS A 0.0 0.	2 0.02	0.13
Approach 169 1.2 0.090 1.2 NA 0.0 0.	2 0.02	0.13
All Vehicles 505 2.8 0.132 2.5 NA 0.4 2.5		

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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∇ Site: 104 [Chesterfield Pde / Marroo St - AM Existing]

New Site

Giveway / Yield (Two-Way)

Move	ment Pe	rformance	- Vehic	les							
Mov ID	OD Mov	Demand I Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	: Marroo S	Street									
1	L2	11	0.0	0.016	4.8	LOS A	0.1	0.5	0.17	0.51	39.7
3	R2	10	0.0	0.016	5.3	LOSA	0.1	0.5	0.17	0.51	41.3
Approach		21	0.0	0.016	5.0	LOSA	0.1	0.5	0.17	0.51	40.4
East:	Chesterfie	eld Pd East									
4	L2	25	0.0	0.040	4.6	LOS A	0.0	0.0	0.00	0.33	45.6
5	T1	51	0.0	0.040	1.2	LOSA	0.0	0.0	0.00	0.33	47.0
Approach		76	0.0	0.040	2.3	NA	0.0	0.0	0.00	0.33	46.5
West:	Chesterfie	eld Parade									
11	T1	60	3.3	0.049	0.1	LOS A	0.2	1.1	0.11	0.16	42.7
12	R2	29	0.0	0.049	3.7	LOSA	0.2	1.1	0.11	0.16	41.4
Approach		89	2.2	0.049	1.3	NA	0.2	1.1	0.11	0.16	42.2
All Ve	hicles	186	1.1	0.049	2.1	NA	0.2	1.1	0.07	0.27	43.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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V Site: 101 [Arden St / Chesterfield Pde - AM Future]

New Site

Giveway / Yield (Two-Way)

Mov	OD	Demand	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
ID	Mov	Total veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh	Distance m	Queued	Stop Rate per veh	Speed km/h
South	: Arden St	reet South	- / -							p 01 1 011	
2	T1	408	4.2	0.185	0.0	LOSA	0.0	0.0	0.00	0.00	40.0
Appro	ach	408	4.2	0.185	0.0	NA	0.0	0.0	0.00	0.00	40.0
East:	Chesterfie	ld Parade									
4	L2	90	0.0	0.184	5.6	LOSA	0.7	4.8	0.59	0.73	35.4
6	R2	31	0.0	0.184	14.0	LOSA	0.7	4.8	0.59	0.73	34.3
Approach		121	0.0	0.184	7.8	LOSA	0.7	4.8	0.59	0.73	35.1
North:	: Arden Str	reet North									
7	L2	22	4.5	0.227	3.9	LOSA	0.2	1.5	0.03	0.02	40.0
8	T1	417	5.5	0.227	0.0	LOS A	0.2	1.5	0.03	0.02	39.6
Approach		439	5.5	0.227	0.2	NA	0.2	1.5	0.03	0.02	39.7
All Vehicles		968	4.2	0.227	1.1	NA	0.7	4.8	0.09	0.10	38.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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♥ Site: 102 [Arden St / Boundary St - AM Future]

New Site Roundabout

		rformance									
Mov ID	OD Mov	Demand Total	Flows	Deg. Satn	Average	Level of	95% Back		Prop.	Effective	Average
ID	IVIOV	veh/h	ПV %	Sain v/c	Delay sec	Service	Vehicles veh	Distance m	Queued	Stop Rate per veh	Speed km/r
South	: Arden St		70	V/C	300		Vell			per veri	KIIDI
1	L2	29	0.0	0.401	2.7	LOSA	2.4	17.1	0.19	0.43	38.7
2	T1	463	4.1	0.401	2.6	LOSA	2.4	17.1	0.19	0.43	37.9
3	R2	190	1.1	0.401	5.5	LOSA	2.4	17.1	0.19	0.43	41.5
Appro	ach	682	3.1	0.401	3.4	LOSA	2.4	17.1	0.19	0.43	39.0
East:	Boundary	St									
4	L2	211	4.7	0.216	5.9	LOSA	1.3	9.3	0.57	0.67	40.1
5	T1	8	0.0	0.216	5.3	LOSA	1.3	9.3	0.57	0.67	43.0
6	R2	36	2.8	0.216	8.3	LOS A	1.3	9.3	0.57	0.67	40.8
Appro	ach	255	4.3	0.216	6.2	LOSA	1.3	9.3	0.57	0.67	40.2
North	: Arden St										
7	L2	30	6.7	0.452	4.6	LOSA	3.3	24.0	0.55	0.55	40.5
8	T1	450	5.1	0.452	4.3	LOS A	3.3	24.0	0.55	0.55	37.2
9	R2	12	0.0	0.452	7.2	LOSA	3.3	24.0	0.55	0.55	37.9
Appro	ach	492	5.1	0.452	4.4	LOSA	3.3	24.0	0.55	0.55	37.4
West:	Brandon	St									
10	L2	12	0.0	0.067	9.4	LOSA	0.4	2.8	0.71	0.73	34.2
11	T1	16	0.0	0.067	8.9	LOSA	0.4	2.8	0.71	0.73	40.1
12	R2	16	6.3	0.067	12.1	LOSA	0.4	2.8	0.71	0.73	35.7
Appro	ach	44	2.3	0.067	10.2	LOSA	0.4	2.8	0.71	0.73	36.9
All Ve	hicles	1473	3.9	0.452	4.5	LOSA	3.3	24.0	0.39	0.52	38.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Site: 103 [Boundary St / Marroo St - AM Future]

New Site Stop (Two-Way)

Mov	OD	Demand	Flows	Deg.	Average	Level of	95% Back	of Oueue	Prop.	Effective	Average
ID	Mov	Total	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
		veh/h		V/C	sec	0011100	veh	m	Quoucu	per veh	km/h
South	: Winches	ter Rd									
1	L2	14	0.0	0.109	8.3	LOS A	0.4	2.7	0.44	0.95	38.6
2	T1	36	0.0	0.109	10.0	LOSA	0.4	2.7	0.44	0.95	39.1
3	R2	30	0.0	0.109	9.8	LOS A	0.4	2.7	0.44	0.95	37.7
Appro	ach	80	0.0	0.109	9.6	LOSA	0.4	2.7	0.44	0.95	38.5
East:	Boundary	St East									
4	L2	20	10.0	0.132	5.0	LOSA	0.1	1.0	0.06	0.08	47.2
5	T1	208	4.8	0.132	0.1	LOSA	0.1	1.0	0.06	0.08	48.5
6	R2	14	0.0	0.132	5.3	LOS A	0.1	1.0	0.06	0.08	46.5
Appro	ach	242	5.0	0.132	0.8	NA	0.1	1.0	0.06	0.08	48.2
North	: Marroo S	st									
7	L2	2	0.0	0.013	7.8	LOSA	0.0	0.2	0.29	0.92	39.2
8	T1	2	0.0	0.013	8.5	LOS A	0.0	0.2	0.29	0.92	39.8
9	R2	6	0.0	0.013	8.8	LOSA	0.0	0.2	0.29	0.92	38.6
Appro	ach	10	0.0	0.013	8.5	LOSA	0.0	0.2	0.29	0.92	39.0
West:	Boundary	St West									
10	L2	58	0.0	0.119	4.6	LOSA	0.0	0.2	0.02	0.15	47.0
11	T1	161	1.9	0.119	0.0	LOSA	0.0	0.2	0.02	0.15	47.7
12	R2	3	0.0	0.119	5.4	LOSA	0.0	0.2	0.02	0.15	46.0
Appro	ach	222	1.4	0.119	1.3	NA	0.0	0.2	0.02	0.15	47.5
All Ve	hicles	554	2.7	0.132	2.4	NA	0.4	2.7	0.10	0.25	45.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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∇ Site: 104 [Chesterfield Pde / Marroo St - AM Future]

New Site

Giveway / Yield (Two-Way)

Move	ment Pe	rformance -	- Vehic	les							
Mov ID	OD Mov	Demand f Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	Marroo S	Street									
1	L2	13	0.0	0.019	4.8	LOSA	0.1	0.6	0.17	0.51	39.7
3	R2	12	0.0	0.019	5.0	LOSA	0.1	0.6	0.17	0.51	41.3
Appro	ach	25	0.0	0.019	4.9	LOSA	0.1	0.6	0.17	0.51	40.4
East:	Chesterfie	eld Pd East									
4	L2	25	0.0	0.040	4.6	LOS A	0.0	0.0	0.00	0.33	45.6
5	T1	51	0.0	0.040	1.2	LOSA	0.0	0.0	0.00	0.33	47.0
Appro	ach	76	0.0	0.040	2.3	NA	0.0	0.0	0.00	0.33	46.5
West:	Chesterfi	eld Parade									
11	T1	26	3.8	0.021	0.1	LOS A	0.1	0.5	0.11	0.15	42.7
12	R2	12	0.0	0.021	3.7	LOS A	0.1	0.5	0.11	0.15	41.4
Appro	ach	38	2.6	0.021	1.2	NA	0.1	0.5	0.11	0.15	42.3
All Vel	nicles	139	0.7	0.040	2.5	NA	0.1	0.6	0.06	0.31	44.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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∇ Site: 101 [Arden St / Chesterfield Pde - PM Existing]

New Site

Giveway / Yield (Two-Way)

Move	ment Pe	rformance	- Vehic	les							
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	: Arden St	reet South									
2	T1	443	1.8	0.236	0.5	LOSA	0.6	4.0	0.14	0.05	38.7
3	R2	43	2.3	0.236	6.8	LOSA	0.6	4.0	0.18	0.06	38.8
Appro	ach	486	1.9	0.236	1.1	NA	0.6	4.0	0.15	0.05	38.8
East: (Chesterfie	ld Parade									
4	L2	73	0.0	0.182	5.7	LOS A	0.7	4.6	0.61	0.75	34.8
6	R2	30	0.0	0.182	16.1	LOS B	0.7	4.6	0.61	0.75	33.7
Appro	ach	103	0.0	0.182	8.8	LOSA	0.7	4.6	0.61	0.75	34.5
North:	Arden Str	reet North									
7	L2	32	0.0	0.248	3.8	LOS A	0.3	2.0	0.03	0.03	40.0
8	T1	453	2.6	0.248	0.0	LOSA	0.3	2.0	0.03	0.03	39.5
Appro	ach	485	2.5	0.248	0.3	NA	0.3	2.0	0.03	0.03	39.6
All Vel	nicles	1074	2.0	0.248	1.5	NA	0.7	4.6	0.14	0.11	38.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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♥ Site: 102 [Arden St / Boundary St - PM Existing]

New Site Roundabout

Move	ment Pe	erformance	- Vehic	les							
Mov	OD	Demand		Deg.	Average	Level of	95% Back		Prop.	Effective	Average
ID	Mov	Total	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
Courth	: Arden St	veh/h	%	v/c	sec		veh	m		per veh	km/h
1	L2	11	0.0	0.481	2.9	LOSA	2.8	20.1	0.26	0.43	38.7
2	T1	437	1.6	0.481	2.8	LOSA	2.8	20.1	0.26	0.43	37.9
3	R2	91	1.1	0.481	5.8	LOS A	2.8	20.1	0.26	0.43	41.5
Appro	ach	539	1.5	0.481	3.3	LOSA	2.8	20.1	0.26	0.43	38.5
East:	Boundary	St									
4	L2	152	2.6	0.277	8.3	LOSA	1.8	13.0	0.72	0.77	38.8
5	T1	2	0.0	0.277	7.7	LOS A	1.8	13.0	0.72	0.77	41.0
6	R2	59	3.4	0.277	10.8	LOS A	1.8	13.0	0.72	0.77	39.2
Appro	ach	213	2.8	0.277	8.9	LOSA	1.8	13.0	0.72	0.77	38.9
North:	Arden St										
7	L2	49	0.0	0.410	3.5	LOSA	3.0	21.6	0.39	0.43	41.1
8	T1	465	2.8	0.410	3.3	LOS A	3.0	21.6	0.39	0.43	37.7
9	R2	5	0.0	0.410	6.2	LOSA	3.0	21.6	0.39	0.43	38.7
Appro	ach	519	2.5	0.410	3.4	LOS A	3.0	21.6	0.39	0.43	38.0
West:	Brandon	St									
10	L2	5	0.0	0.041	8.2	LOSA	0.2	1.6	0.66	0.67	35.2
11	T1	15	0.0	0.041	7.7	LOSA	0.2	1.6	0.66	0.67	41.2
12	R2	10	0.0	0.041	10.7	LOSA	0.2	1.6	0.66	0.67	36.7
Appro		30	0.0	0.041	8.8	LOSA	0.2	1.6	0.66	0.67	38.7
All Ve	hicles	1301	2.1	0.481	4.4	LOSA	3.0	21.6	0.40	0.49	38.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Site: 103 [Boundary St / Marroo St - PM Existing]

New Site Stop (Two-Way)

Move		erformance	- Vehic	les		_	_	_		_	
Mov	OD	Demand		Deg.	Average	Level of	95% Back		Prop.	Effective	Average
ID	Mov	Total	HV	Satn	Delay	Service	Vehicles	Distance	Queued	Stop Rate	Speed
Courth	: Winches	veh/h	%	v/c	sec		veh	m		per veh	km/h
1	L2	11	0.0	0.039	8.0	LOSA	0.1	1.0	0.32	0.90	39.4
2	T1	13	0.0	0.039	8.7	LOS A	0.1	1.0	0.32	0.90	39.9
3	R2	11	0.0	0.039	8.7	LOS A	0.1	1.0	0.32	0.90	38.6
Appro	ach	35	0.0	0.039	8.5	LOSA	0.1	1.0	0.32	0.90	39.4
East:	Boundary	St East									
4	L2	17	0.0	0.094	4.7	LOSA	0.1	0.6	0.04	0.08	47.6
5	T1	150	3.3	0.094	0.0	LOS A	0.1	0.6	0.04	0.08	48.5
6	R2	9	0.0	0.094	5.0	LOS A	0.1	0.6	0.04	0.08	46.5
Appro	ach	176	2.8	0.094	0.7	NA	0.1	0.6	0.04	0.08	48.3
North	: Marroo S	St									
7	L2	6	0.0	0.040	7.6	LOS A	0.1	0.7	0.23	0.94	39.6
8	T1	7	0.0	0.040	8.0	LOS A	0.1	0.7	0.23	0.94	40.1
9	R2	23	0.0	0.040	8.1	LOSA	0.1	0.7	0.23	0.94	39.0
Appro	ach	36	0.0	0.040	8.0	LOSA	0.1	0.7	0.23	0.94	39.3
West:	Boundary	St West									
10	L2	25	0.0	0.072	4.7	LOSA	0.1	0.6	0.06	0.14	46.8
11	T1	99	1.0	0.072	0.1	LOSA	0.1	0.6	0.06	0.14	47.5
12	R2	10	0.0	0.072	5.1	LOSA	0.1	0.6	0.06	0.14	45.8
Appro	ach	134	0.7	0.072	1.3	NA	0.1	0.6	0.06	0.14	47.2
All Ve	hicles	381	1.6	0.094	2.3	NA	0.1	1.0	0.09	0.26	45.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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∇ Site: 104 [Chesterfield Pde / Marroo St - PM Existing]

New Site

Giveway / Yield (Two-Way)

Move	ment Pe	rformance	- Vehic	les							
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	: Marroo S	Street									
1	L2	12	0.0	0.013	4.7	LOS A	0.1	0.4	0.15	0.50	39.7
3	R2	6	0.0	0.013	5.3	LOSA	0.1	0.4	0.15	0.50	41.4
Appro	ach	18	0.0	0.013	4.9	LOSA	0.1	0.4	0.15	0.50	40.3
East:	Chesterfie	ld Pd East									
4	L2	21	0.0	0.035	4.6	LOS A	0.0	0.0	0.00	0.32	45.7
5	T1	47	0.0	0.035	1.2	LOSA	0.0	0.0	0.00	0.32	47.1
Appro	ach	68	0.0	0.035	2.2	NA	0.0	0.0	0.00	0.32	46.6
West:	Chesterfic	eld Parade									
11	T1	54	1.9	0.049	0.1	LOS A	0.2	1.3	0.12	0.19	42.3
12	R2	35	0.0	0.049	3.7	LOSA	0.2	1.3	0.12	0.19	41.1
Appro	ach	89	1.1	0.049	1.5	NA	0.2	1.3	0.12	0.19	41.8
All Ve	hicles	175	0.6	0.049	2.1	NA	0.2	1.3	0.08	0.27	43.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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V Site: 101 [Arden St / Chesterfield Pde - PM Future]

New Site

Giveway / Yield (Two-Way)

Mov	OD	Demand	Flows	Deg.	Average	Level of	95% Back	of Queue	Prop.	Effective	Average
ID	Mov	Total veh/h	HV %	Satn v/c	Delay sec	Service	Vehicles veh	Distance m	Queued	Stop Rate per veh	Speed km/h
South	: Arden St	reet South									
2	T1	441	1.8	0.197	0.0	LOSA	0.0	0.0	0.00	0.00	40.0
Appro	ach	441	1.8	0.197	0.0	NA	0.0	0.0	0.00	0.00	40.0
East:	Chesterfie	ld Parade									
4	L2	78	0.0	0.190	5.8	LOSA	0.7	4.9	0.61	0.76	34.9
6	R2	33	0.0	0.190	15.2	LOS B	0.7	4.9	0.61	0.76	33.8
Appro	ach	111	0.0	0.190	8.6	LOSA	0.7	4.9	0.61	0.76	34.6
North:	Arden Str	eet North									
7	L2	32	0.0	0.248	3.8	LOSA	0.3	2.0	0.03	0.03	40.0
8	T1	453	2.6	0.248	0.0	LOS A	0.3	2.0	0.03	0.03	39.5
Appro	ach	485	2.5	0.248	0.3	NA	0.3	2.0	0.03	0.03	39.6
All Ve	hicles	1037	1.9	0.248	1.1	NA	0.7	4.9	0.08	0.10	38.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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♥ Site: 102 [Arden St / Boundary St - PM Future]

New Site Roundabout

Move	ment Pe	rformance	- Vehic	les							
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	: Arden St										
1	L2	11	0.0	0.519	2.9	LOSA	3.3	23.1	0.27	0.44	38.5
2	T1	437	1.6	0.519	2.8	LOSA	3.3	23.1	0.27	0.44	37.8
3	R2	134	1.5	0.519	5.8	LOS A	3.3	23.1	0.27	0.44	41.3
Appro		582	1.5	0.519	3.5	LOSA	3.3	23.1	0.27	0.44	38.7
East:	Boundary										
4	L2	147	2.7	0.273	8.3	LOSA	1.8	13.0	0.72	0.77	38.8
5	T1	2	0.0	0.273	7.7	LOS A	1.8	13.0	0.72	0.77	41.0
6	R2	57	3.5	0.273	10.8	LOS A	1.8	13.0	0.72	0.77	39.2
Appro	ach	206	2.9	0.273	9.0	LOS A	1.8	13.0	0.72	0.77	38.9
North:	Arden St										
7	L2	49	0.0	0.439	3.9	LOSA	3.3	23.5	0.48	0.48	40.8
8	T1	470	2.8	0.439	3.7	LOS A	3.3	23.5	0.48	0.48	37.5
9	R2	5	0.0	0.439	6.6	LOSA	3.3	23.5	0.48	0.48	38.3
Appro	ach	524	2.5	0.439	3.8	LOS A	3.3	23.5	0.48	0.48	37.8
West:	Brandon :	St									
10	L2	5	0.0	0.043	8.6	LOSA	0.2	1.7	0.68	0.68	34.9
11	T1	15	0.0	0.043	8.1	LOS A	0.2	1.7	0.68	0.68	40.9
12	R2	10	0.0	0.043	11.0	LOSA	0.2	1.7	0.68	0.68	36.4
Appro	ach	30	0.0	0.043	9.2	LOSA	0.2	1.7	0.68	0.68	38.4
All Ve	hicles	1342	2.1	0.519	4.6	LOSA	3.3	23.5	0.43	0.51	38.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Site: 103 [Boundary St / Marroo St - PM Future]

New Site Stop (Two-Way)

Move	ement Pe	erformance	- Vehic	les							
Mov ID	OD Mov	Demand Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	: Winches		70	V/C	300		VCII			per veri	KIII/II
1	L2	11	0.0	0.040	8.0	LOSA	0.1	1.0	0.33	0.91	39.3
2	T1	13	0.0	0.040	9.0	LOSA	0.1	1.0	0.33	0.91	39.8
3	R2	11	0.0	0.040	8.9	LOSA	0.1	1.0	0.33	0.91	38.5
Appro	ach	35	0.0	0.040	8.6	LOSA	0.1	1.0	0.33	0.91	39.2
East:	Boundary	St East									
4	L2	17	0.0	0.094	4.8	LOSA	0.1	0.6	0.04	0.08	47.6
5	T1	150	3.3	0.094	0.0	LOS A	0.1	0.6	0.04	0.08	48.5
6	R2	9	0.0	0.094	5.1	LOS A	0.1	0.6	0.04	0.08	46.5
Appro	ach	176	2.8	0.094	8.0	NA	0.1	0.6	0.04	0.08	48.3
North	: Marroo S	St									
7	L2	4	0.0	0.029	7.7	LOSA	0.1	0.5	0.25	0.93	39.5
8	T1	5	0.0	0.029	8.1	LOS A	0.1	0.5	0.25	0.93	40.1
9	R2	16	0.0	0.029	8.2	LOSA	0.1	0.5	0.25	0.93	38.9
Appro	ach	25	0.0	0.029	8.1	LOSA	0.1	0.5	0.25	0.93	39.2
West:	Boundary	St West									
10	L2	42	0.0	0.095	4.7	LOSA	0.1	0.7	0.05	0.15	46.7
11	T1	125	1.6	0.095	0.1	LOS A	0.1	0.7	0.05	0.15	47.3
12	R2	10	0.0	0.095	5.1	LOSA	0.1	0.7	0.05	0.15	45.7
Appro	ach	177	1.1	0.095	1.4	NA	0.1	0.7	0.05	0.15	47.1
All Ve	hicles	413	1.7	0.095	2.2	NA	0.1	1.0	0.08	0.23	46.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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∇ Site: 104 [Chesterfield Pde / Marroo St - PM Future]

New Site

Giveway / Yield (Two-Way)

Move	ment Pe	rformance -	- Vehic	les							
Mov ID	OD Mov	Demand F Total veh/h	Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back Vehicles veh	of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South	: Marroo S	Street									
1	L2	17	0.0	0.018	4.7	LOSA	0.1	0.6	0.16	0.50	39.7
3	R2	8	0.0	0.018	5.0	LOSA	0.1	0.6	0.16	0.50	41.4
Appro	ach	25	0.0	0.018	4.8	LOSA	0.1	0.6	0.16	0.50	40.2
East: (Chesterfie	eld Pd East									
4	L2	21	0.0	0.035	4.6	LOS A	0.0	0.0	0.00	0.32	45.7
5	T1	47	0.0	0.035	1.2	LOSA	0.0	0.0	0.00	0.32	47.1
Appro	ach	68	0.0	0.035	2.2	NA	0.0	0.0	0.00	0.32	46.6
West:	Chesterfi	eld Parade									
11	T1	30	0.0	0.026	0.1	LOS A	0.1	0.6	0.12	0.18	42.5
12	R2	18	0.0	0.026	3.7	LOS A	0.1	0.6	0.12	0.18	41.2
Appro	ach	48	0.0	0.026	1.5	NA	0.1	0.6	0.12	0.18	41.9
All Vel	nicles	141	0.0	0.035	2.4	NA	0.1	0.6	0.07	0.31	43.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab). Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

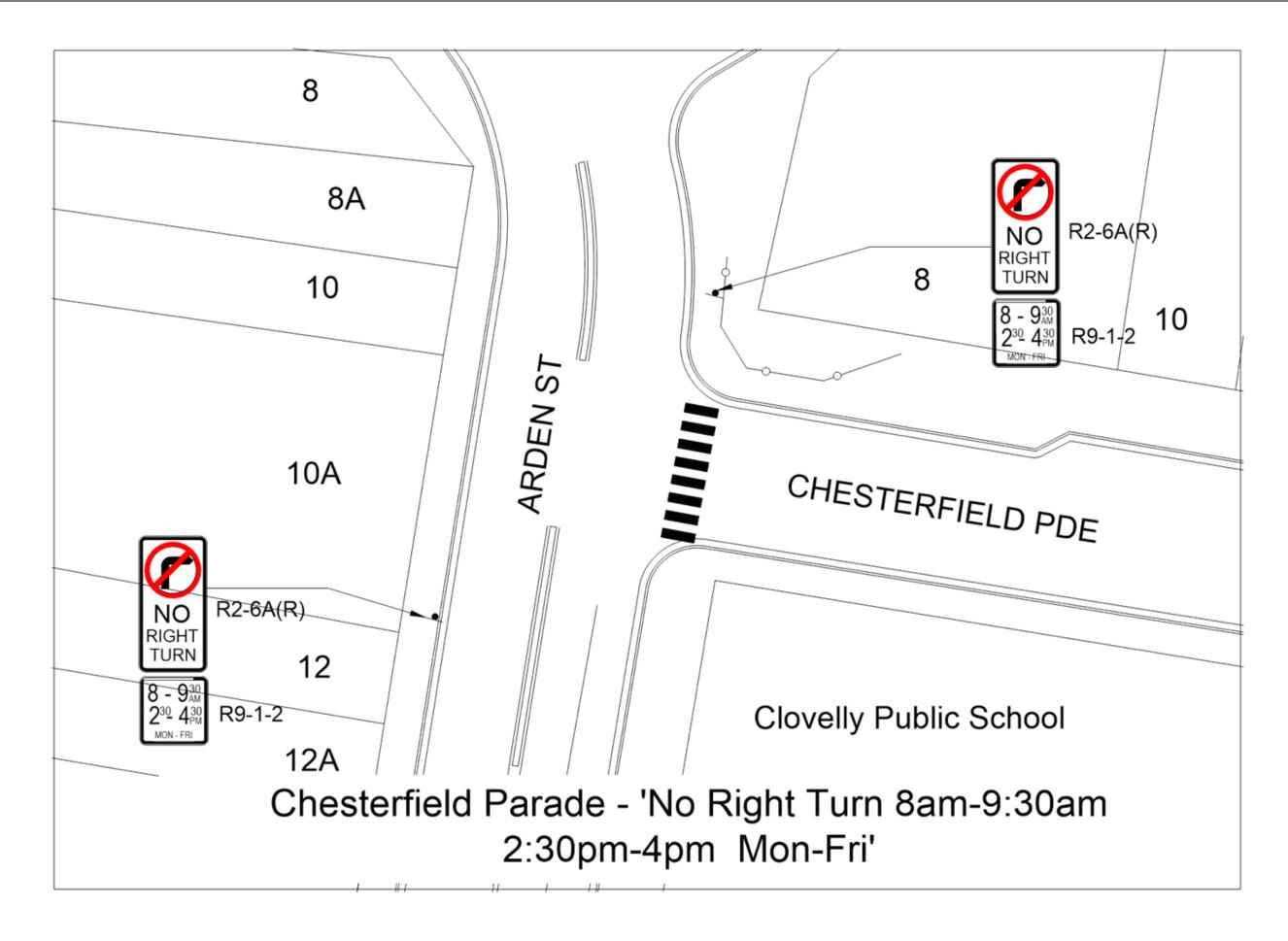
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Waverley Traffic Committee Agenda 28 June 2018



TC/C.03/18.06- Attachment 2



Waverley Council PO Box 9, Bondi Junction NSW 1355 DX 12006, Bondi Junction **Customer Service Centre** 55 Spring Street, Bondi Junction 2022 ABN: 12 502 583 608

Our ref: SF18/199

1 February 2018

Re: Arden Street at Chesterfield Parade, Bronte – Proposed 'NO RIGHT TURN, 8:00 AM-9:30AM and 2:30 PM- 4:00PM, SCHOOL DAYS'

Dear Sir/Madam

Parents at Clovelly Public School have raised concerns with Council for the safety of their children walking to or from the school. One site that we have reviewed is the intersection of Arden Street and Chesterfield Parade where there is concern as to the visibility of children and adult pedestrians walking across the pedestrian crossing on Chesterfield Parade near Arden Street. The main concern is that motorists, turning right from Arden Street may be focusing on southbound traffic, and not aware of people using the pedestrian crossing.

Council is therefore considering a proposal to ban northbound traffic in Arden Street from performing right turns into Chesterfield Parade between the hours 8:00am and 9:30am AND between 2:30pm and 4:00pm on schooldays, which correspond with the school zone times. We are inviting your feedback on the proposal.

A map showing the location of the proposed partial ban and the proposed alternative signposted route is on the reverse of this Notification Letter.

We invite your feedback on this proposal by:

- emailing carolyn.new@waverley.nsw.gov.au
- posting to PO Box 9, Bondi Junction NSW 1355 marked attention to Sustainable Transport Officer, Strategic Transport

Council will consider all feedback received before making its decision on whether to proceed with the proposal. The deadline for submitting feedback is Friday 23 February 2018. It is anticipated that a decision will be made in April 2018. In the event there is support for the proposal, and it is approved by Council, residents would be advised before the introduction of

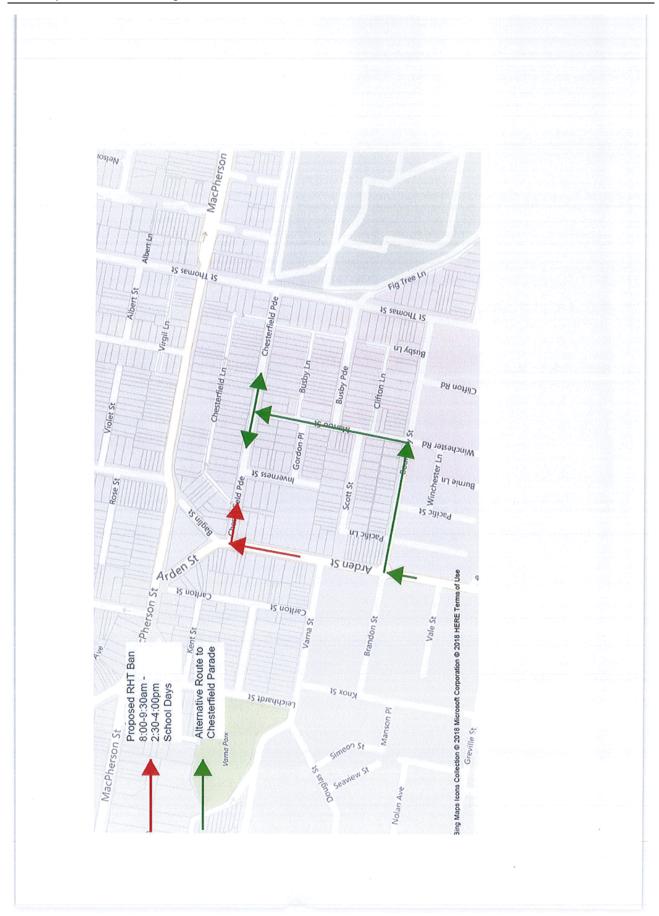
If you would like more information about the proposed changes, please contact me on 9083 8678 during business hours.

Best regards,

Carolyn New Sustainable Transport Officer

Phone: 9369 8000 Fax: 9387 1820 Email: info@waverley.nsw.gov.au Web: www.waverley.nsw.gov.au

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Waverley Traffic Committee Agenda



TC/C.03/18.06- Attachment 4

	Support /	Not		
	Not	Support	Support	
	Support	Detour	Extend to All	
#	NRH Turn	Route	Times	Comment
				Yes I agree with this idea as its very dangerous to not only children also the elderly. The traffic coming down Arden St (South bound) can also be dangerous, as they go to fast. It can also be dangerous turning into Baglin St
1	Yes			from the right.
2	Yes			We agree that there should be ban during school zone times, as it's a dangerous corner and hard to see pedestrians until you have made the actual right turn. A ban is safer for children.
2	Yes			Although, I don't have children at Clovelly Public and it will inconvenience me as I access my garage from Chesterfield Lane, I support the No Right Turn initiative, during the times you quoted. I have always thought that the crossing is dangerous for the children and possible that it should have been 5 metres further down Chesterfield Parade. As you say, often when turning right into Chesterfield Parade drivers are concentrating on the on coming traffic, rather than who might be on the crossing. The other issue is that when a car has made the right turn and then has to stop for pedestrians on the crossing, the traffic heading south down Arden Street is blocked, which can lead to a bit of road rage. So, I would definitely support this initiative.
3				Having lived in Chesterfield Pde for nearly 30 years, I do support this proposal but even so maybe have a permanent no right turn. It is such a dangerous spot at anytime especially coming down Arden St and turning left into Chesterfield Pde. You enter Chesterfield on a steep angle and with that crossing along with cars coming so fast behind it becomes quite difficult to negotiate even out of school hours. Another major problem is the crossing on McPherson st at St Thomas St.With all those added extra cafes and with more development to come, people, dogs etc walk willy nilly across the road at that crossing and along with delivery vans, cars, bikes etc doing u turns it becomes extremely dangerous, at anytime. People jogging up from the beach, (not looking) pushing prams, standing around Huxtons, and Cali Press and spilling onto the street and cars double parked! It all becomes very difficult to negotiate. Entering into McPherson St from St Thomas especially at certain times with the sun, is another issue. Maybe moving that crossing further up near the medical centre?? Unfortunately the STOP sigh in Chesterfield Pde and around St Thomas St near cemetery entrance and child care was a waste of rate payers money. I know this was done at huge expense. I gather this was to reduce speed from cars coming up St Thomas St and make it safer around the Child care. In actual fact it has made it worse. Cars come up even faster, and people cross with prams and kids find it extremely hard to negotiate crossing. Maybe a sped hump and or Stop sign in St Thomas st at the top of the rise (adjacent to Chesterfield?) With cars parked within 1 meter of the curbs (1 thought the law was 10 meters?) this also adds to the danger. I have lived in the area a long time and I have yet to see a ranger in the area. Cars are always parked less than 1/2 meter from curb corner Chesterfield pde and Chesterfield Lane (entrance end there is one now a black Barina, been there a few days)which again is dangerous. In Chesterfield Lane at the exit, cars
4	Yes		Yes	keep going around in circles and eventually the residents get exhausted. I hope my compaints / ideas are somewhat taken on board. I agree with your proposal to ban the right hand turn from Arden St to Chesterfield Parade during school zone
				times but it does not go far enough and your proposed alternative is completely unworkable. 1. You must also ban the right hand turn from Chesterfield to Arden at the same times. I am sure you are aware that Arden is completely blocked in the northerly direction between 8 and 8.30 every morning and this turn is even more dangerous for children and adult pedestrians. 2. Marroo St has only one useable lane as cars are always parked on both sides of the street and the notrhern section is always blocked at school zone times by many vehicles (mostly massive 4 wheel Drives) travelling from Chesterfield to Marroo to Gordon Place to Inverness St to drop off at school. As a long term local resident, I would NEVER use Marroo to access Chesterfield during school zone times. The only alternative is to send the traffic to St Thomas St and then into Chesterfield.
5	Yes	No	Yes	
	Ver		Ver	In response to your letter re the proposed no right turn off Arden, to Chesterfield - we (2/87 Macpherson St) are wholeheartedly in support of banning the right hand turn during school hours - this won't impact us in any way and will make it safer for the school kids. I would gas far to say this right hand turn should be permanently banned to avoid any confusion, as even with the pedistriant crossing danger, there's the fact that cars fly down
6	Yes		Yes	Arden Street and it's essentially a blind corner on a hill - I dread turning right there.
7	Yes		Yes	Banning right turns from Arden Street into Chesterfield Parade during peak hour would make that intersection less dangerous than it is now - in fact it is hazardous at all times - why not permanently? YES PLEASE

				I write to provide feedback on the proposal to limit times when right hand turns can be made from Arden St into
				Chesterfield Parade. While I FULLY SUPPORT THIS INITIATIVE(without condition) the following is also worth
				considering: · Imposing variability to road rules such as this serves to create a certain level of confusion
				amongst drivers - who or what is going to police that people are doing the right thing?; · Without physical
				barriers, the effectiveness of the restriction will only be as effective as the associated policing of the restriction;
				The visibility of the crossing at this intersection is extremely limited – note the first attached photo taken at
				the point at which a car would typically begin to make the right hand turn – the existence of the crossing and
				the markings on the road are barely visible, thereby placing reliance on the driver to see the crossing sign in
				order to know that the crossing is there; With these points in mind, the council may wish to consider banning
				the right hand turn from Arden St altogether, thus allowing for a physical barrier to be put in place (presumably
				by connecting the ones that already exist on Arden St). As an additional point, please refer to the second and
				third photos – the second shows the point at which a car would typically begin to line up to make a LEFT hand
				turn into Chesterfield Parade from Arden St – the crossing markings on the road are almost completely invisible
				here also, thereby placing additional reliance on the driver to see the crossing sign in order to know that the
				crossing is there. Further, the camber of the corner is sufficiently distracting to the driver that they often are
				not able to adequately focus on the crossing and any pedestrians that are waiting to use it. The third photo
				shows the condition of the cross walk itself. In the 14 years I've been living in Chesterfield Parade I've not seen
				, ,
				any work being undertaken to maintain that crossing. It badly needs it. As you'll note, there isn't even decent markings showing that a crossing is being approached. In summary, the visibility of the crossing from both
				directions along Arden St is so limited that it renders the crossing – for pedestrian purposes – almost useless.
				While I support the proposed initiative, it is because it's better than the existing situation and without a means
				of improving visibility and/or policing of the crossing, serious consideration should be given to banning turning
				into Chesterfield Parade from Arden St altogether.
8	3 Yes		Yes	
				As residence of this area, and in close proximity to the school, for over 33 years we find this proposal has not
				taken into account the traffic congestion the area already has to contend with outside of school hours but
				definitely worse at going to and from Schools . Banning a turn right into Chesterfield Parade from Arden Street,
				at school time, your alternate route to turn right into Boundary Street then left into Marroo Street is
	1			I
				unconscionable. Marroo Street is struggling to cope with daily traffic let alone school traffic. Marroo Street is
				unconscionable. Marroo Street is struggling to cope with daily traffic let alone school traffic. Marroo Street is narrow and with cars parked either side there is barely enough room for one car to drive up or down the street
				, , ,
				narrow and with cars parked either side there is barely enough room for one car to drive up or down the street
				narrow and with cars parked either side there is barely enough room for one car to drive up or down the street at one time. Major issue. There is an issue at the turning right from Arden Street, not only at school time but at
	Unknown	No		narrow and with cars parked either side there is barely enough room for one car to drive up or down the street at one time. Major issue. There is an issue at the turning right from Arden Street, not only at school time but at any time. There is also an issue turning left or right from Chesterfield Parade into Arden Street due to lack of

REPORT TC/C.04/18.06

Subject: Denison Street, Bondi Junction - Temporary Road Closure

for Crane Lift

TRIM No: A02/0216

Author: Kablan Mowad, Senior Traffic Engineer

Director: Emily Scott, Director, Waverley Renewal

WAVERLEY

COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Council approves the temporary closure of Denison Street, Bondi Junction, between Oxford Street and Spring Street from 9 am to 6 pm on Sunday, 22 July 2018 in accordance with the Traffic Control Plans 17037 and 17-037-01 prepared by Moits Traffic Services attached to this report.
- 2. The 'VMS' sign shown on Traffic Control Plan 17-037' attached to this report at Newland Street south of Ebley Street be relocated to Denison Street south of Ebley Street.
- 3. Council delegates authority to the Executive Manager, Creating Waverley, to approve any backup dates and times for Denison Street to be closed, if required.
- 4. Businesses and residents affected by the closures and emergency services be notified of the closure in writing by the applicant not less than seven days prior to implementation of the road closure.

1. Executive Summary

Council has received an application for the temporary, full closure of Denison Street, Bondi Junction, in the section between Oxford Street and Spring Street, to facilitate the removal of excavators via a crane lift from the development site at 59-69 Oxford Street, Bondi Junction. Council will need to exercise its delegated function to approve the proposal.

2. Introduction/Background

An application has been received for a temporary, full closure of Denison Street in the section between Oxford Street and Spring Street to facilitate the removal of excavators via a crane lift.

3. Technical Analysis

DA-585/2015 was approved by Council in September 2016 for the construction of a new 12 storey, mixed use development with basement car park at 59-69 Oxford Street, Bondi Junction. With the excavation works nearing completion, an application has been received for the closure of Denison Street so that mobile cranes can be erected for the extraction of the excavators from the site.

This site has frontages to both Oxford Street and Denison Street. It is considered unsuitable to setup a mobile crane on Oxford Street to remove the excavators without creating major disruption to traffic.

The road closure will involve the section of Denison Street between Oxford Street and Spring Street being closed under full traffic control with traffic being detoured around the site. The applicant has requested that the road be closed on Sunday, 22 July for at least 9 hours to allow for the removal of all four excavators in one shift.



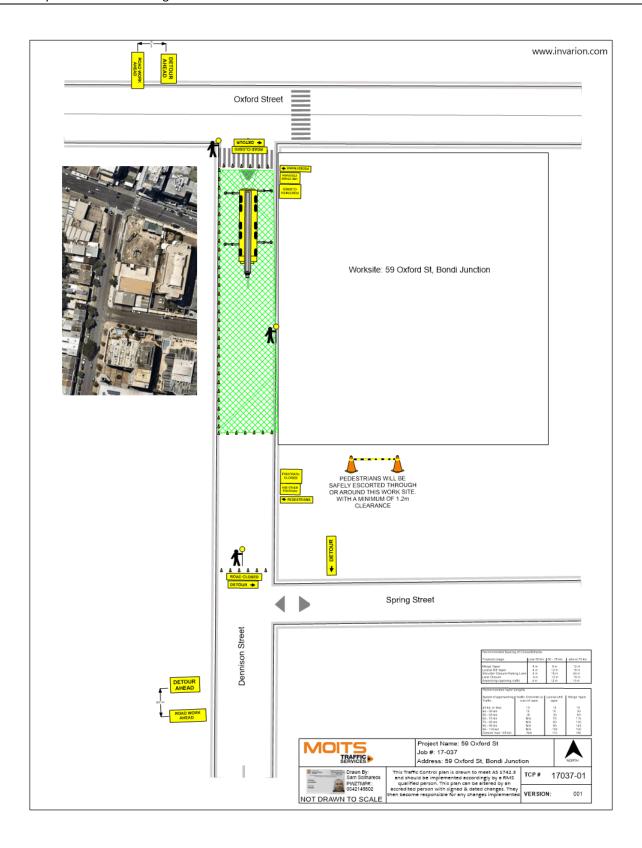
Figure 1: Aerial photo of 59-69 Oxford Street, Bondi Junction.

4. Financial Information for Council's Consideration

The applicant will be required to meet the cost of closing the road and standing plant in accordance with Council's fees and charges for 2017–18.

5. Attachments

- 1. Denison Street Crane TCP U.
- 2. Denison Street Crane Detour TCP U



Waverley Traffic Committee Agenda 28 June 2018



TC/C.04/18.06- Attachment 2

REPORT TC/C.05/18.06

Subject: Stephen Street and Ocean Street, Bondi - Installation of

'No Stopping' Zones

TRIM No: A02/0637-02

Author: Behzad Saleh, Professional Engineer

Director: Emily Scott, Director, Waverley Renewal



COUNCIL OFFICER'S PROPOSAL:

That Council installs 'No Stopping' zones at the intersection of Stephen Street and Ocean Street, Bondi, in the following locations:

- 1. 10 m on the southern side of Stephen Street, west of Ocean Street.
- 2. 10 m on the western side of Ocean Street, north of Stephen Street.
- 3. 10 m on the western side of Ocean Street, south of Stephen Street

1. Executive Summary

Council has received representations from a resident requesting consideration be given to improving sight distances, manoeuvrability and safety at the intersection of Stephen Street and Ocean Street, Bondi by imposing statutory 10 m 'No Stopping' restrictions. Council will need to exercise its delegated functions to implement the proposal.

2. Introduction/Background

A resident is reporting that vehicles have been parking within 10 m of the intersection on both Ocean Street and Stephen Street, Bondi, reducing sightlines; in particular, for drivers when turning from Stephen Street into Ocean Street.



Figure 1. Aerial view of the Stephen Street and Ocean Street intersection.

3. Technical Analysis

Currently, the north side of Stephen Street has 13.5 m of 'No Stopping' on the approach to Ocean Street. All other kerb returns at the intersection do not have signposted parking restrictions. Evidence has been provided and at on-site inspections, that vehicles frequently park within 10 m of the intersection.

Under the [NSW] Road Rules 2014:

'A driver must not stop on a road within 10 metres from the nearest point of an intersecting road at an intersection without traffic lights, unless the driver stops ... at a place on a length of road, or in an area, to which a parking control sign applies and the driver is permitted to stop at that place under these Rules...'

Considering this, vehicles parked at these locations may be infringed without the installation of additional signage. However, the RMS's Technical Direction 'TDT 2002/12 Stopping and Parking Restrictions at intersections and Crossings' addresses the installation of 'No Stopping' and 'No Parking' signs at intersections and states:

'It is not intended that signs be installed at all locations. Where signs are not installed the legislative restrictions will apply. Generally signposting of restrictions covered by legislative requirements is only required where there is adjoining signposting or compliance is an issue.'

A site inspection by Council's Traffic Officer has revealed that driver visibility is significantly reduced when vehicles park within 10 m of the intersection. As compliance is an issue at this location, it is recommended that the legislative requirements be signposted. This will not result in a net loss of legal, on-street parking spaces.

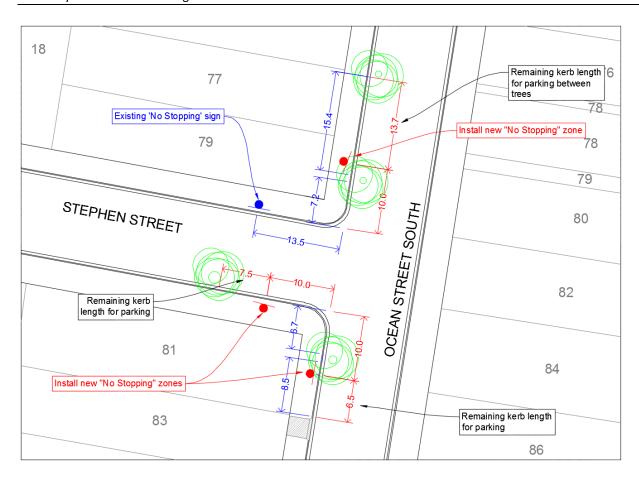


Figure 2. Proposed locations of signposted 'No Stopping' zones.



Figure 3. Vehicles parked in Ocean Street south of Stephen Street within 10 m of the intersection.



Figure 4. Vehicles parked in vicinity of Stephen Street and Ocean Street intersection.

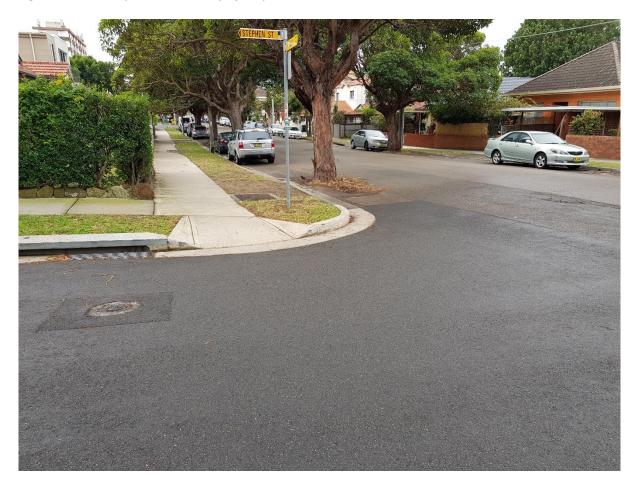


Figure 5. Ocean Street looking north from Stephen Street.

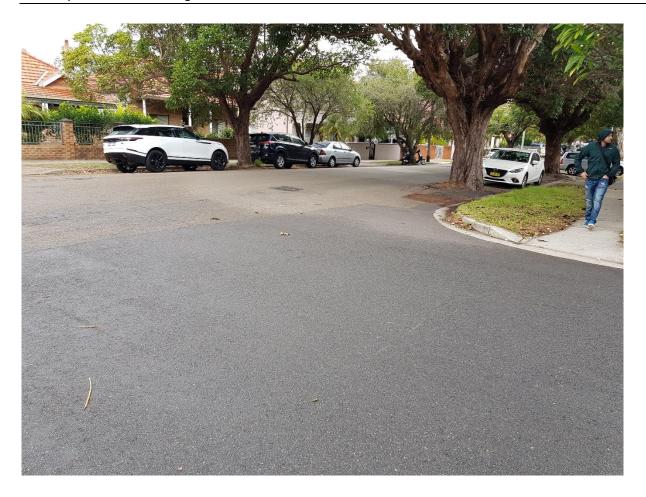


Figure 6. Ocean Street looking south from Stephen Street.

Guidelines used:

- Transport Administration Act 1988.
- RMS's Delegation to Councils; Regulation of Traffic.
- RMS's Signs Database.
- [NSW] *Road Rules 2014.*
- RMS's TDT 2002/12.

4. Financial Information for Council's Consideration

If changes to signs and/or line marking are approved, Council will undertake the installation of signs/lines from existing budgets.

5. Attachments

Nil.

REPORT TC/C.06/18.06

Subject: Hegarty Lane, Leswell Street and Vernon Street, Bondi

Junction - Construction Zone and Temporary Parking

Restrictions

TRIM No.: A03/2514-04

Author: Sam Samadian, Traffic Engineer

Director: Emily Scott, Director, Waverley Renewal



COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Council installs a 40 m long 'No Stopping' zone on the northern side of Hegarty Lane at the rear of 292–302 Oxford Street, Bondi Junction, for a period of 13 weeks as shown in Figure 3 of this report.
- 2. Council temporarily relocates the existing 11 m long Loading Zone located on the northern side of Hegarty Lane to a new location commencing 30 m from the intersection of Leswell Street and terminating 41 m from the intersection of Leswell Street.
- 3. Council installs No Stopping signs on the outside of the proposed type A hoarding to be established on the southern side of Hegarty Lane at the rear of 292–302 Oxford Street.
- 4. Council approves:
 - (a) The installation of 23 m of 'No Parking 7 am–5 pm Monday–Friday 8 am–3pm Saturday' on a temporary basis on the western side of Leswell Street, south of Grafton Street.
 - (b) The installation of 22 m of 'No Parking 7 am–5 pm Monday–Friday 8 am–3 pm Saturday' on a temporary basis on the eastern side of Vernon Street, south of Oxford, subject to:
 - (i) A notification letter being sent out by the applicant to the residents of Leswell Street, Vernon Street, Hegarty Lane and Grafton Street, west of Newland Street, Bondi Junction, to inform them of the proposed changes to parking conditions.
 - (ii) The temporary changes to parking restrictions in Leswell Street and Vernon Street being removed and the original restrictions being reinstated as soon as possible following the completion of the excavation works at 292–302 Oxford Street.
- 5. Council delegates authority to the Executive Manager, Creating Waverley, to:
 - (a) Extend the duration and length of the construction zone and other zones above as necessary.
 - (b) Audit and cancel this approval, without notice or refund.
- 6. There be no blockage of access to or from the adjacent, private off-street car parks and to through traffic on Hegarty Lane, Leswell Street and Vernon Street other than for short periods of time when

manoeuvring vehicles into and out of the building site.

1. Executive Summary

Council has received an application from the developer/builder at 292–302 Oxford Street, Bondi Junction to install a construction zone at the rear of the site on Hegarty Lane. The development was approved under DA-600/2015, and is located on Oxford Street, north side, opposite Denison Street. Council will need to exercise its delegated functions to implement the proposal.



Figure 1. Aerial view of the site at 292-302 Oxford Street, Bondi Junction.

2. Introduction/Background

This application forms part of a Construction Vehicle and Pedestrian Plan of Management (CVPPM) received recently and yet to be assessed.

The construction zone application proposes an arrangement similar to that approved in 2017 for the adjoining site at 306 Oxford Street whereby trucks were approved to stand on the south side of the lane in a fenced area with gates with parking removed on the opposite side of the lane to cater for through traffic.

The Oxford Street frontage of the site is unsuitable for a construction zone having regard to high traffic volumes and the impact such a zone would have on traffic movements including buses. Part of the frontage of the site is a 'No Stopping' zone on the approach to a pedestrian crossing.

3. Technical Analysis

In order for the construction zone to be provided along the full length of the rear of the site in Hegarty Lane, a 40 m long 'No Stopping' zone is required on the northern side of Hegarty Lane to facilitate through movements while the fenced area is in place. Trucks in the zone on the southern side will be enclosed by a class A hoarding (fencing) with gates. As per the arrangements at 306 Oxford Street, it is recommended the costs associated with the construction zone also apply to the northern side 'No Stopping' zone. See Figure 2 for details.

The parking on the northern side of Hegarty Lane where the proposed 'No Stopping' zone is proposed is currently 11 m of loading zone and 29 m of ½P 8 am–12 pm 3P 12 pm–6 pm Mon–Fri. The loading zone is required for deliveries in the area and will be temporarily relocated further west on Hegarty Lane for the duration of the works. An adjoining area of ½P 8 am–12 pm 3P 12 pm–6pm Mon–Fri will be shortened by 11 m to accommodate the relocated loading zone.



Figure 2. Rear of 292–302 Oxford Street, Bondi Junction on right of image.

In accordance with standard practice in Waverley Council, it is proposed that the construction zone be signposted 'No Parking Council Authorised Vehicles Excepted' for the approved construction hours under the DA consent. Council will then issue the applicant with a number of transferable permits to be used on their construction-related vehicles.

In addition to the works/construction zone application, the builder is seeking a temporary removal of onstreet parking spaces on the western side of Leswell Street, north of Hegarty Lane, to facilitate turn movements by truck and dog trailers when travelling between Hegarty Lane and Grafton Street as per the CVPPM. At present, and it has been observed, some trucks with dog trailers are unable to exit Hegarty Lane and travel north in Leswell Street in a single, right-turn movement. Some drivers need to execute one or more forward and reversing movements at the Hegarty Lane/ Leswell Street intersection to avoid impacting parked vehicles at the Leswell Street western kerb. The current parking restrictions in Leswell Street, west side north of Hegarty Lane are:

- 1/2P ticket
- 8am-12pm
- 2P ticket
- 12pm-7pm
- Permit holders excepted
- Area 22

In order for trucks to travel in accordance with the CVPPM and make a right turn out of Hegarty Lane in one movement, vehicles parked kerbside on the western side of Leswell Street from Hegarty Lane to Grafton Street (some 4 vehicles) will need to be temporarily removed during the approved site work hours. Inspections reveal there is available parking for residents and others in close proximity to the temporarily lost parking spaces.

In this regard, it is recommended a 23 m long 'No Parking 7am–5pm Monday–Friday 8 am–3 pm Saturday' zone be installed on the western side of Leswell Street north of Hegarty Lane to facilitate turn movements during the final stages of excavation. See Figure 4 for details.

In addition to a temporary removal of parking in Leswell Street, a similar arrangement is required in Vernon Street on the eastern side from Oxford Street to Rowe Lane. Swept wheel path drawings submitted with the CVPPM show for a truck and dog trailer that vehicles parked in the metered parking spaces will need removal during work hours. See Figure 4 for details.

Works/Construction Zone Details

Applicant	HWC Constructing Pty Ltd
Development Application	DA-600/2015
Works	Demolition of existing building and construction of 12 storey mixed use development including basement parking, retail on the ground floor and 48 residential apartments
Approved Hours of Construction	7 am–5 pm Mon–Fri
Frontage Length	8 am-3 pm Sat 20 m to Hegarty Lane and 20m to Oxford Street
Road	Hegarty Lane
Existing Parking	Hegarty Lane: (a) No Stopping (South) (b) PARKING AREA ½ P 8 am-12 noon 3P 12 noon-9 pm EXCEPT AS SIGNED Leswell Street: ½ P ticket 8 am-12 pm 2P ticket 12 pm-7 pm Permit Holders Excepted Area 22 Vernon Street: ½ P ticket 8 am-12 pm; 2P Ticket 12 pm-7 pm
Requested Length	21 m
Proposed Length	40 m in Hegarty Lane 23 m in Leswell Street 22 m Vernon Street
Duration	13 weeks

Beginning	July 2018
Fee Area	Commercial without metered parking in Hegarty Lane Commercial with metered parking in Leswell Street and Vernon Street
Estimated Fees	\$3,400 per week for Hegarty Lane \$3,175 per week for Leswell Street \$3,090 per week for Vernon Street \$9,665 total per week (40 m without metered and eight parking spaces with metered parking spaces)

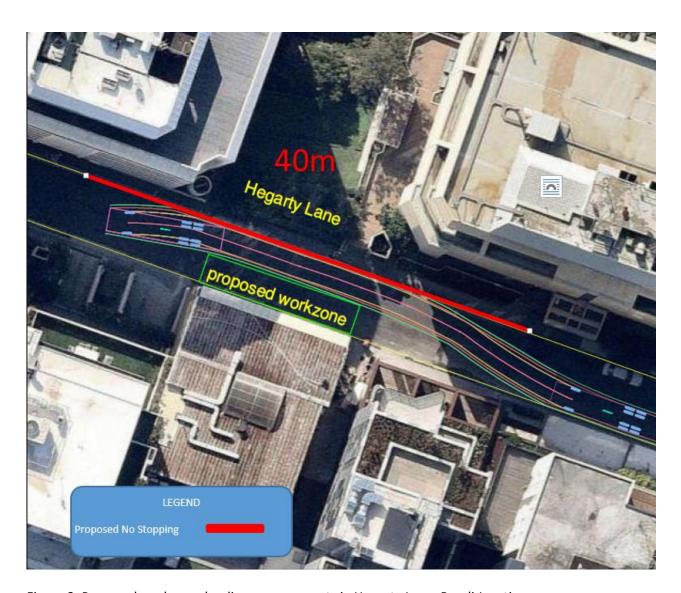


Figure 3. Proposed work zone loading arrangements in Hegarty Lane, Bondi Junction.

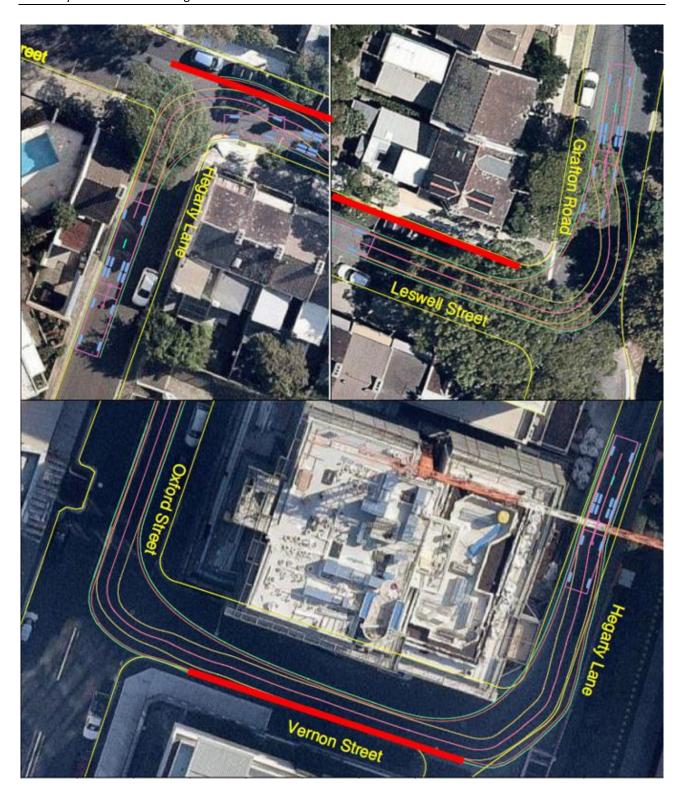


Figure 4. Proposed 'No Parking 7 am–5 pm Monday–Friday 8 am–3 pm Saturday' in Leswell Street and Vernon Street, Bondi Junction.

4. Financial Information for Council's Consideration

The applicant will be required to pay the approved application fee, which covers the cost of administration and signage.

The approved usage charges for the 2017–18 financial year are:

• \$60 per metre per week in a residential developments.

• \$85 per metre per week in a commercial and mixed-use developments.

An additional fee of \$305 per metered/ticketed parking space per week is applicable where Council would normally charge for on-street parking.

5. Attachments

Nil.

REPORT TC/C.07/18.06

Subject: Llandaff Street, Bondi Junction - Construction Zone

TRIM No.: A03/2514-04

Author: Sam Samadian, Traffic Engineer

Director: Emily Scott, Director, Waverley Renewal



COUNCIL OFFICER'S PROPOSAL:

That:

- 1. Council installs a 19 m long 'No Parking 7 am–5 pm Monday–Friday; 8 am–3 pm Saturday Authorised Council Vehicles Excepted' zone across the frontage of 20–22 Llandaff Street, Bondi Junction.
- 2. There be no blockage to through traffic on Llandaff Street other than for short periods of time when manoeuvring vehicles into and out of the zone.
- 3. Council delegates authority to the Executive Manager, Creating Waverley, to extend the length and duration of, or remove the construction zone, as necessary and install a zone with similar times, if necessary, opposite the site.

1. Executive Summary

Council has received an application from the builder/developer at 20–22 Llandaff Street, Bondi Junction for the installation of a construction zone on the site frontage. Council will need to exercise its delegated function to implement the proposal.



Figure 1. 20–22 Llandaff Street, Bondi Junction – Aerial image.

2. Introduction/Background

In accordance with standard practice at Council, it is proposed that the zone be signposted 'No Parking Council Authorised Vehicles Excepted' and for the zone to operate during standard hours approved under development consents. Council will then issue the applicant with a number of transferable permits to be used on their construction-related vehicles.

The Traffic Committee and Council generally only approve construction zones at the same length as the frontage, regardless of the location of driveways, for a minimum of thirteen weeks.

3. Technical Analysis

The site is located on the northern side of Llandaff Street approximately 50m west of Botany Street, Bondi Junction. It is proposed to install a construction zone across the site frontage by converting 19 m of the existing parking area as shown in Figure 2.

Applicant	New Space Project Management
Development Application	DA-101/2017
Works	Demolition of existing buildings and construction of new Residential Flat Building with 26 units, basement parking.
Approved Hours of Construction	7 am–5 pm Mon–Fri, 8 am–3 pm Saturday
Frontage Length	19 m
Road	Llandaff Street
Existing Parking	1P, 8 am-6 pm Mon-Sat, Permit Holders Excepted, Area 22
Requested Length	12 m
Proposed Length	19 m
Duration	13 weeks
Beginning	July 2018
Fee Area	Residential without metered parking
Estimated Fees	\$1,140 per week

Table 1. 20–22 Llandaff Street, Bondi Junction.



Figure 2. 20–22 Llandaff Street, Bondi Junction – Proposed construction zone.

4. Financial Information for Council's Consideration

The applicant will be required to pay the approved application fee, which covers the cost of administration and signage.

The approved usage charges for the 2017–18 financial year are:

- \$60 per metre per week in a residential developments.
- \$85 per metre per week in a commercial and mixed-use developments.

5. Attachments

Nil.

REPORT TC/C.08/18.06

Subject: Alfred Street, Bronte - Resident Parking Scheme

TRIM No: A03/2581

Author: Kablan Mowad, Senior Traffic Engineer

Director: Emily Scott, Director, Waverley Renewal

WAVERLEY

COUNCIL OFFICER'S PROPOSAL:

That, based on the low response rate from the resident parking survey:

- 1. Council does not introduce a resident parking scheme in Alfred Street, Bronte.
- 2. Council officers notify the chief petitioner accordingly.

1. Executive Summary

Following receipt of a petition signed by some residents of Alfred Street requesting the introduction of resident parking, Council officers conducted a survey of all residents to determine the level of support or otherwise to the introduction of a residential preferential parking scheme (RPPS) into that street. This would be done via the extension of the existing RPPS area 43 to the west into Alfred Street which would result in '2P 8 am–6 pm Permit Holders Excepted Area 43' parking restrictions being installed. However, based on the survey results and relatively low parking occupancy, it is recommended that the introduction of the RPPS does not proceed.



Figure 1. Map showing the boundaries of the existing Resident Parking Scheme Area 43.

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2. Introduction/Background

A petition was received from residents of Alfred Street, Bronte requesting the introduction of two-hour parking restrictions with a resident exemption. In accordance with standard practice following receipt of such a petition, a survey was undertaken of all residents having a frontage to Alfred Street to gauge the level of support or otherwise to the introduction of resident parking restrictions.

3. Technical Analysis

All households in the survey area sketch (Attachment 1) received a survey form from Council regarding the proposed introduction of an RPPS. Residents were asked to answer questions on:

- Number of vehicles owned/ driven by their household.
- Number of off-street parking spaces available.
- The level of difficulty they experience finding a parking space.
- Whether or not they support the introduction of residential preferential parking scheme in their area.

The response rate of the survey was quite low at 37% with 55% of those respondents in favour of the proposed restrictions. However, given that Council has previously resolved to only proceed with the introduction of resident parking with at least a response rate of 50%, it is not recommended that the introduction of the RPPS be supported.

A site inspection was undertaken in Alfred Street on Thursday 7 June at 10.30 am. During this site inspection, the parking occupancy was approximately 56% percent (approximately 43 on-street car spaces and 24 cars parked along Alfred Street). This level of parking occupancy leaves additional capacity for parking in the street. If the 2P resident parking restrictions were installed, residents may experience a minor improvement in access to on street parking spaces along the street. It is also acknowledged that during special events such as Sculptures by the Sea, parking occupancy would regularly be at 100%.



Figure 2. Photo taken during site inspection.

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Concerns were raised with Council by the chief petitioner in regards to the voting process. It was alleged that some of the survey forms distributed to residents had been removed from mailboxes. Council has no formal evidence to confirm or deny the allegations at this stage.

Residents provided comments on the proposal and the current parking situation in their street, some of the key comments were:

- The new policy relating to the changes for resident parking permit fees may have affected the outcome if it was known prior to the commencement of the survey.
- Object to paying for parking permits.
- Impact of resident parking restrictions upon regular visitors.
- Limited benefits if the scheme were introduced as parking shortage is caused by residents.
- Disagreement over whether parking in the area is difficult or not outside of summer time
- RPPS does not suit households with large numbers of vehicles.

Attachment 2 contains a summary of the survey results provided by residents. Of the responses received, there was a higher percentage of residents with off-street parking who responded to the survey than residents without off-street parking.

4. Financial Information for Council's Consideration

Nil.

5. Attachments

- 1. Residential Parking Survey Flyer Alfred Street J.
- 2. Resident Parking Scheme Alfred Street Survey Responses &

TC/C.08/18.06 Page 110

Waverley Traffic Committee Agenda 28 June 2018







Proposal to install residential parking restrictions in your area.

Residents have contacted Council with concerns about the lack of available parking for residents within the survey area. In response, Council is considering the installation of time limited parking restrictions – with an exemption for permit holders.

We want you to have your say on the proposal. Please complete the enclosed survey form by Friday 18 May 2018.

How might the RPS benefit me?

The scheme gives preference to residents who live in streets where there might be competition for parking spaces with commuters or visitors to the area.

A two hour time limit will apply to vehicles without a permit.

Through enforcement, Council encourages the regular turnover of spaces and discourages long term parking.

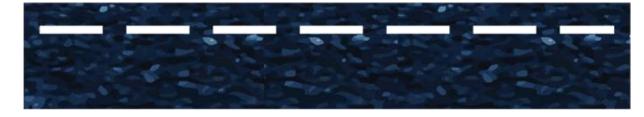
Resident parking permits do not guarantee parking availability but do provide a comparative advantage for residents.

Permits

If you are a Waverley resident living in a RPS area, you may be eligible to apply for a Residential Parking Permit for up to three vehicles.

The number of permits you may be entitled to depends on whether you have any off-street parking spaces on your property.

The fee structure is designed to encourage residents with off-street parking spaces to utilise those spaces rather than park on the street. This increases availability of the limited number of on-street parking spaces.



Waverley Traffic Committee Agenda 28 June 2018

NOTE Prices valid until 30 June 2018 Resident parking permits RESIDENT PARKING PERMIT CHARGES AND ELIGIBILITY If you have an off street **OFF STREET SPACES** parking space you are not entitled to a third permit. If you have two off street \$135 \$205 1st Permit will cost \$45 parking spaces you are not Motorcycle/Scooter \$30 \$30 \$30 entitled to a second or third parking permit Low Emissions Vehicle \$30 \$45 \$135 *** If you have three or more Concession rate \$30 off-street parking spaces you are not entitled to any ** 2nd Permit will cost \$135 \$205 permits. Low Emissions Vehicle \$45 \$135 Multi-dwelling, non-strata buildings are entitled to one permit only per \$205 3rd Permit will cost residence.

Conditions of issue

In order to be eligible for a permit you must be a resident within one of these areas. Information is available from Council's Customer Service Centre on 9083 8000.

Council cannot issue a Residential Parking Permit to a non-resident even if they operate a business in the Waverley area or are a Waverley Council rate payer.

Vehicles not registered in the name and address of the applicant will only be issued Temporary Permits.

A maximum of three permits may be issued to any residence (conditions apply). The maximum number of permits is reduced by the number of off-street parking spaces available. Permits will only be issued if there are more vehicles at the residence concerned than available spaces. See chart of costs above for details.

Permits will only be issued to registered motor vehicles less than 4.5 T GVM. Valid vehicle registration papers must be presented at time of permit application. Permits are not available for light registered trailers (e.g. box, caravan and boat trailers).

Permits will not be issued where the applicant has rendered available offstreet parking unavailable through change of use or granting usage to a third party.

Conditions of use

A permit entitles the holder to unrestricted parking only where signs state 'Permit Holders Excepted' together with the area number to which your permit applies. Aside from this sole exemption, permits do not provide any right to park a vehicle contrary to the (NSW) Road Rules 2014 (e.g. parking in 'P Disability Only' zones or without payment in Ticket parking zones/areas).

Permits must be displayed on the passenger side of the vehicle and in such a manner as to be readily visible from outside the vehicle. If displaying the permit on the windscreen, ensure the permit is displayed away from the tinted area.

Permits are issued for the duration of the vehicle's registration. It is the responsibility of the resident to renew the permit. Reminders will not be issued.

A permit may only be used on the nominated vehicle. Permits are not transferable.

In the event of relocation to another residence, the disposal/ sale of the nominated vehicle, or off-street parking at the residence becoming available the permit must be returned to Waverley Council immediately.

The permit may be revoked by members of the NSW Police Force or by an authorised Council officer should there be any breach of these conditions. Waverley Council may withdraw permits at its discretion.

Council may vary conditions of issue and use of permits.

No fee is refundable once a permit is issued.

The following constitute an offence in a permit parking space or area:

- parking without a permit for longer than the period (time limit) shown on the signs
- fraudulent use of permits
- use of permits not applicable to the area
- use of defaced or incorrectly 'scratched' or wrongly displayed permits which cannot be read from outside the vehicle by an authorised officer
- use of an expired permit
- use of a permit not applicable to the vehicle or address.

Making a false or misleading statement within the permit application is an offence.

New RPS Area in Alfred Street

Council is considering the installation of time limited parking restrictions with resident exemptions in your area.

The proposal is to install time limited parking along Alfred Street. This would limit parking in the street to two hours from 8am to 6pm, with authorised resident permit holders excepted.

The proposed signage is:



Please take the time to complete the survey, making sure to include your address and any comments you may wish to add.

Please note that even though you have signed a petition or made representation to a Councillor, we advise that you still need to complete this survey to ensure your feedback is formally captured.

Mowad, Senior Traffic Engineer at
Waverley Council:

POST PO Box 9, Bondi Junction NSW 1355

EMAIL yourtrafficsurvey@waverley.nsw.gov.au
IN PERSON Customer Service Centre
55 Spring Street, Bondi Junction
FAX 9387 1820

Please return this form to Kablan

Closing date for submissions is Friday 18 May 2018.

Do you support introducing parking restrictions into streets surrounding you, as shown on the map overleaf?

o Yes o N

How difficult is it to find parking within the area shown on the map?

O Very easy O Easy

O Difficult O Very difficult

How many vehicles do you have?

Property address (in proposed RPS area)

Do you have off street parking?......How Many Spaces?.....

Nama

.....

Residential address (if different to above)

.....

Email address

Comments

.....

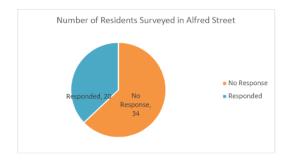
The survey results will be reviewed by the Waverley Traffic Committee, which is made up of representatives from Council, Roads and Maritime Services and NSW Police Force. The Committee will then make a recommendation to Council as to whether the parking restrictions should be changed or not, which Council will consider (along with the survey results) before making a final decision.

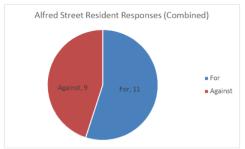
In the event there is support for changes to parking restrictions, and it is approved by Council, residents will be advised before the introduction of the changes.

Waverley Traffic Committee Agenda

Number of Residents Surveyed in Alfred Street	54	
No Response	34	63.0 %
Responded	20	37.0 %

Analysis/Breakdown of Responses				
Combined Responses				
For	11	55.0 %		
Against	9	45.0 %		
Respondants Without Off-street Parking	9	16.7% of Alfred Street Residents		
For	6	66.7% of residents without off-street parking		
Against	3	33.3% of residents without off-street parking		
Respondants With Off-street Parking	11	20.4% of Alfred Street Residents		
For	5	45.5% of residents with off-street parking		
Against	6	54.5% of residents with off-street parking		



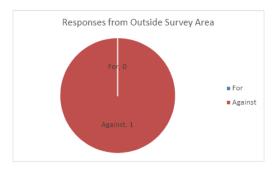






Number of Responses from Outside Survey Area 1	

Analysis/Breakdown of Responses				
Combined Responses				
For	0	0.0 %		
Against	1	100.0 %		



REPORT TC/C.09/18.06

Subject: Langlee Avenue and Seaview Street, Waverley - Resident

Parking Scheme

TRIM No: A03/2581

Author: Kablan Mowad, Senior Traffic Engineer

Director: Emily Scott, Director, Waverley Renewal



COUNCIL OFFICER'S PROPOSAL:

That, having regard to the lack of support from residents:

- 1. Council does not introduce a resident parking scheme in Langlee Avenue and Seaview Street, Waverley.
- 2. Council officers notify the chief petitioner accordingly.

1. Executive Summary

Following receipt of a petition from residents of Langlee Avenue, Waverley, for Council to introduce resident parking restrictions in that street, Council officers have conducted a survey of residents to determine the level of support or otherwise to the introduction of restrictions.

Seaview Street was included in the survey following a request by a resident raising similar issues. Langlee Avenue and Seaview Street are contained within the boundaries of existing RPS area number 25.

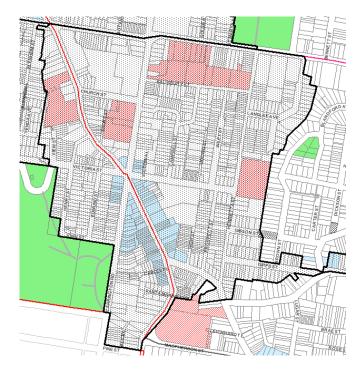


Figure 1. Boundaries of existing RPPS Area 25.

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2. Introduction/Background

A petition was received from residents of Langlee Avenue requesting installation of the following:

'2 hour parking in our street but only from Monday to Friday 8 am-6 pm and Saturday 8 am-12 pm'.

A survey was undertaken of the residents to gauge the level of support for the introduction of resident parking restrictions. See Figure 2 for the survey area.

3. Technical Analysis

Due to the streets close proximity to Waverley College, Waverley Park and Waverley Bowling Club, there is a high demand for on-street parking. Langlee Avenue and Seaview Street both have unrestricted parking along their full length on both sides. Both streets carry relatively low traffic volumes and low speeds, particularly Seaview Street.

A site inspection was undertaken in Langlee Avenue and Seaview Street on Thursday, 7 June at 10.00 am. During this site inspection, the parking occupancy was at 100% percent in both streets (approximately 65 cars parked in Langlee Avenue and 21 cars parked along Seaview Street). This is a clear indication that onstreet parking in both streets is in high demand throughout the day.

Council undertook consultation with residents to gauge the level of support to the introduction of parking restrictions. Attachment 1 contains a summary of the survey results provided by residents. The response rate was 65.1% in Langlee Avenue and 45.2% in Seaview Street and of the responses received, there was a clear majority of residents against the introduction of any resident parking restrictions for both streets. Given the results of the survey, it is recommended that there be no action in regard to the introduction of resident parking restrictions in Langlee Avenue or Seaview Street at this time.



Figure 2. Area surveyed for proposed restrictions.

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4. Financial Information for Council's Consideration

Nil.

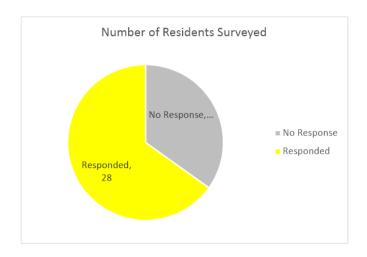
5. Attachments

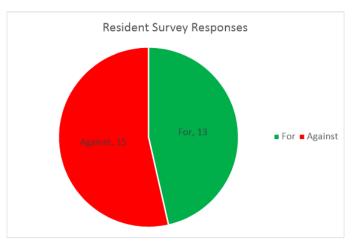
- 1. Resident Parking Scheme Langlee Avenue Seaview Street Survey Responses 😃
- 2. Langlee Avenue and Seaview Street RPS Questionnaire J

TC/C.09/18.06 Page 117

Number of Residents Surveyed in Langlee Avenue	43	
No Response	15	34.9 %
Responded	28	65.1 %

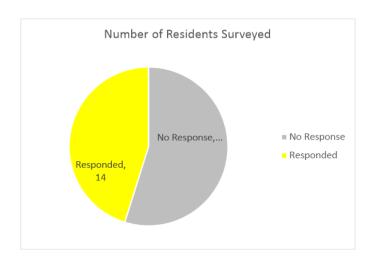
Analysis/Breakdown of Responses			
Option 1 '2P 8am-6pm Mon-Fri'	13	46.4 %	
Against	15	53.6 %	

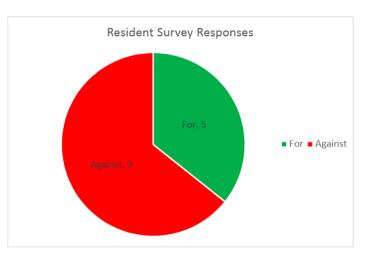




Number of Residents Surveyed in Seaview Street	31	
No Response	17	54.8 %
Responded	14	45.2 %

Analysis/Breakdown of Responses		
Option 1 '2P 8am-6pm Mon-Fri'	5	35.7 %
Against	9	64.3 %





Our ref: A03/2581

1 May, 2018

The Resident
Langlee Avenue and Seaview Street
WAVERLEY NSW 2024

Dear Sir/Madam,

Re: Proposed Resident Parking Restrictions - Langlee Avenue and Seaview Street, Waverley

Following receipt of a petition to improve parking availability, Council is considering installing resident parking restrictions in Langlee Avenue and Seaview Street, Waverley. The streets are already contained within the boundaries of residential preferential parking scheme (RPPS) area 25 however, parking restriction signage is yet to be installed.

As not all residents were signatories to the petition, Council is carrying out its own survey of residents via a questionnaire to determine the overall level of support.

Would you kindly complete the attached questionnaire and return it to Council prior to close of business on **Friday 18 May, 2018**. If you have already signed the petition or contacted a Councillor, it is requested you complete the questionnaire to ensure your feedback is formally captured. You can send your response indicating whether or not you support the proposal via:

- Email: yourtrafficsurvey@waverley.nsw.gov.au or;
- Post: PO Box 9, Bondi Junction NSW 1355 or;
- **Fax:** 9387 1820 or;
- Submitting it to Council's Customer Service Centre, 55 Spring Street, Bondi Junction

To maintain consistency with other parking restrictions in nearby streets in area 25 and to aid enforcement, Council is proposing parking restrictions be as follows:



Prior to indicating your preferred option, would you kindly take time to read the "Parking Permits-Conditions of Use" form attached.

A 7-day, "Tradesperson Parking Permit" is also available to assist with parking when having work carried out at a property. Further information on these permits is available on Council's website.

Finally, approval needs to be obtained from the Waverley Traffic Committee and Council prior to resident parking restriction signs being installed.

Should you have any questions relating to the matter, please contact the below on 9083 8674.

dued

Yours faithfully

Kablan Mowad

Senior Traffic Engineer

Waverley Council

QUESTIONNAIRE RESIDENT PARKING RESTRICTIONS LANGLEE AVENUE & SEAVIEW STREET, WAVERLEY

(PLEASE READ THE ATTACHED INFORMATION SHEET 'PARKING PERMITS - CONDITIONS OF USE' BEFORE COMPLETING THE QUESTIONNAIRE.)

Name:		
Address:		
PLEASE T	ICK ONE (1) OPTION ONLY:	
	I support the proposal to install ' <u>2P 8am-6pm Mon-Fri</u> Permit Holders Excepted Area 25' restrictions in Langlee Avenue and Seaview Street (excluding those locations with existing parking restrictions).	
	I <u>do not support</u> any changes to parking conditions in Langlee Avenue and Seaview Street.	
Comme	ents:	
For the	attention of:	
	Mowad	
	Traffic Engineer ey Council	

PARKING PERMITS - CONDITIONS OF USE

Waverley Council offer various types of permits to its residents who reside within the <u>Residential Parking</u> <u>Scheme</u> (RPS)



These permits include Residential, Annual Visitors, Short Term Visitors, Interim and Carers.

The (RPS) operates in parts of Bondi Junction, Queens Park, Bondi Beach, Tamarama, Bronte and Charing Cross. To check eligibility please visit our website: www.waverlev.nsw.gov.gu or phone our Customer Service Centre on 9083 8000.

Council also offers a Beach Parking Scheme that allows residents and non-residents unlimited parking in Queen Elizabeth Drive & Park Drive North (Bondi Beach) and Bronte Cutting (Bronte).

Parking permits provide greater opportunity to park in some of Waverley's busiest areas, however it does not guarantee the availability of a parking space to the holder.

ELIGIBILITY:

- To be eligible for any permits (excluding a Beach Parking Permit, Visitor Parking Permit and Carers Parking Permit), the
 applicant on the form must be a resident (not ratepayer/business owner) and reside within a Waverley Council
 Residential Parking Scheme (RPS).
- Residents in a Non Strata Building/Dwelling are only entitled to one Residential Parking Permit per household (excluding Beach Parking Permits). This excludes Non Strata properties where there is an off-street car space.
- Residential Parking Permits will not be issued to any businesses or business owners (excluding Beach Parking Permits).
- Permits are not available for light registered trailers (e.g. box, caravan and boat trailers).
- Permits can only be issued to motor vehicles less than 4.5 tonnes and no longer than 7.5 metres.
- A maximum of three permits may be issued to any residence (conditions apply), however this is reduced by the number
 of off-street parking spaces available for that household.

CONDITIONS OF USE:

- Permits are non-transferrable and can only be used on the nominated vehicle.
- Permits must be displayed on the left-hand side of the front windscreen (away from any tinted area) or on the inside of a
 window on the left-hand side of the vehicle. In the case of motorcycles, the printed parking permit should be displayed in
 a special holder attached to the vehicle.
- Permits must be clearly visible to Authorised Officers at all times.
- In the event of relocation to another residence, disposal or sale of the vehicle, the permit must be returned to Waverley Council immediately.
- Permits do not provide any right to park a vehicle contrary to the Australia Road Rules (e.g. Disabled Parking Areas, Commercial Parking Areas, Clearways and Special Events).
- It is the responsibility of the resident to renew their permit.
- Misuse of a permit is an offence. A permit may be revoked by an Authorised Council Officer should there be any breach
 of these conditions.
- Council may withdraw/cancel permits at its discretion.

TYPES OF PERMITS:

RESIDENTIAL PARKING PERMIT:

Only a resident in the RPS can apply for a Residential Parking Permit which entitles the holder to unrestricted parking
where signs display "Permit Holders Excepted" together with the Area to which their permit applies.

ANNUAL VISITORS PARKING PERMIT:

- Only a resident in the RPS can apply for an Annual Visitors Parking Permit on behalf of a visiting vehicle/s not registered in the name and the address on the application form.
- Annual Visitors Parking Permit entitles the holder to unrestricted parking where signs display "<u>Permit Holders Excepted</u>" together with the <u>Area</u> to which their permit applies.

SHORT TERM PERMIT:

- Only a resident in the RPS can apply for a Short Term Visitors Parking Permit on behalf of a visiting vehicle/s not registered in the name and the address on the application form.
- Short Term Parking Permit entitles the holder to unrestricted parking where signs display "Permit Holders Excepted" together with the <u>Area</u> to which their permit applies.

CARERS PERMIT:

- A Carers Parking Permit is new and designed to support members of our community who rely on a Carer for support in their day-to-day life.
- When a Carer requires a Carers Parking Permit and the resident is unable to apply, then the Carer may apply directly to Waverley Council.
- The applicant must provide Proof of Employment from a registered organisation (e.g. Centrelink, Mission Australia)
- A Carers Parking Permit entitles the holder to unrestricted parking where signs display "Permit Holders Excepted" together with the <u>Area</u> to which their permit applies.

INTERIM PERMIT:

- An Interim Parking Permit allows a resident time to transfer their vehicle registration details from one address to another
- The Parking Permit is issued for a period of 30 Days to transfer registration details within NSW or three months for transferring registration details interstate.
- A resident in the RPS can only apply for an Interim Parking Permit once. Interim Parking Permit will not be renewed.
- An Interim Parking Permit entitles the holder to unrestricted parking where signs display "Permit Holders Excepted" together with the <u>Area</u> to which their permit applies.

BEACH PERMIT:

- A Resident or a Ratepayer of Waverley Council can apply for a Beach Parking Permit which entitles the holder to
 unlimited parking in Queen Elizabeth Drive & Park Drive North (Bondi Beach) and Bronte Cutting (Bronte Beach).
 Concessions are available for Pensioners, Seniors, Veterans and Youth Card holders.
- Non-Residents and Business Owners can apply for a Beach Parking Permit, however this is at the full rate (please refer to fees and charges below).
- A Beach Parking Permit only entitles the holder to park in the two allocated car parks, as mentioned above.

HOW TO APPLY:

IN PERSON: Applications may be submitted in person at our Customer Service Centre, 55 Spring St, Bondi Junction between 8.30am and 5pm Monday to Friday, and Thursdays until 7pm. Please bring your completed application form with the relevant supporting documentation and required payment. The permit will then be issued immediately.

EMAIL: You can email Waverley Council all supporting documentation along with a completed application form to parkingadmin@waverley.nsw.gov.au. Once a completed application is submitted, a Customer Service Representative will contact you to take credit card payment over the phone. The permit can be mailed to you or collected from our Customer Service centre during office hours.

Residential	1st Permit Property has no parking space	2nd Permit Property has 1 car space	3rd Permit Property has 2 car spaces
12 Months	\$45.00 Concession \$30.00	\$135.00	\$205.00
Low Emissions Vehicle	\$30.00	\$45.00	\$135.00
6 Months	\$30.00 Concession \$22	\$85.00	\$130.00
Motorcycles/Scooters	\$30.00	\$30.00	\$30.00
Electric Scooter	Free	Free	Free
Annual Visitors	1 Registration	2 or 3 Registrations	
	\$165.00	\$480.00	
Short Term Visitor	30 Days		
	\$45.00		
Carers	12 Months		
	\$50.00		
Interim	30 Days (NSW)	3 Months (Interstate)	
	\$45.00	\$140.00	
Beach	12 Months	6 Months	3 Months
Residents/Ratepayers	\$130.00	\$90.00	Not Available
Seniors Card	\$96.00	\$65.00 Concession Card No:	Not Available
Pensioners/Veterans Card	\$96.00	\$65.00 Concession Card No:	Not Available
Youth Allowance Card	\$96.00	\$65.00 Concession Card No:	Not Available
Non Residents	\$1620.00	\$810.00	\$405.00

ADDITIONAL FEES: A 1% surcharge on the total value of the credit card payment.

Replaced/Lost/Damaged/Stolen/Change/Update Permits attract a \$20 fee.

REPORT TC/V.01/18.06

Subject: City2Surf 2018 - Special Event with Temporary Road

Closures

TRIM No.: A02/0216

Author: Sam Samadian, Traffic Engineer

Director: Emily Scott, Director, Waverley Renewal

WAVERLEY

COUNCIL OFFICER'S PROPOSAL:

- 1. Treats the attachments to this report as confidential as they contain information that would, if disclosed, prejudice the maintenance of law.
- 2. Approves the City2Surf 2018 event and associated road closures to be held on Sunday, 12 August 2018, in accordance with the submitted Transport Management Plan attached to this report, subject to the organisers:
 - (a) Providing public liability insurance for the event.
 - (b) Obtaining NSW Police Force approval.
 - (c) Providing Event Management and Delivery Plans for the approval of Council's Outdoor and Flagship Event team.
 - (d) Notifying the State Transit Authority, NSW Ambulance Service and NSW Fire and Rescue (Bondi, Woollahra and Randwick Fire Stations).
 - (e) Notifying local residents and businesses.
 - (f) Using RMS-accredited traffic controllers only.

1. Executive Summary

Council has received an application from Fairfax Events in co-ordination with the State Planning Police Special Events to temporarily close a number of roads in the Waverley LGA to conduct the 2018 City2Surf event. This is an annual event, and the report recommends approval of the event with the associated temporary road closures. Council will need to exercise its delegated functions to implement the proposal.

2. Introduction/Background

John Fairfax Publications has submitted the Transport Management Plan (TMP) (Attachment 1) for Council's consideration.

The only change from the previous year is the early soft closure of Military Road and Campbell Parade between Blair Street and Ramsgate Avenue to start at 6.00 am.

Previously, Military Road, at Blair Street, to Campbell Parade, at Ramsgate Avenue, has been closed from 7 am to 4 pm.

Due to the changing environment and necessity of further measures on roads to secure the closures, the applicant has advised a 6.00 am closure is required from the start line at William Street, Hyde Park, to Ocean Street in Edgecliff and Military Road, at Blair Street through to Campbell Parade at Curlewis Street.

This early closure also provides the sufficient time for the event team to ensure the course is ready for runners and for NSW Police to confirm that the roads are safely closed for runners.

To ensure residents are not negatively impacted, crossover points at Ramsgate Avenue and Brighton Boulevard will be implemented until 7 am.

Crossing Points

- 1. Ramsgate Avenue: residents can cross over Campbell Parade until 7.00 am. Exit only is permitted.
- 2. Brighton Boulevard: residents can cross over Campbell Parade until 7.00 am in both directions.
- 3. Military Road: Residents on Military Road between Blair Street and Campbell Parade will be directed to exit at Ramsgate Avenue or Blair Street until 7.00 am. No vehicle movements will be permitted after 7.00 am as per previous years.

Special Event Clearways

In 2017, Special Event Clearways were introduced along the whole length of the course including Military Road.

This will remain the same in 2018 with towing compounds at Blair Street and Park Parade operated by TMC. This was successfully implemented last year with minimal increase to cars being towed from previous years.

This is a Hallmark Class 1 Special Event, with road closures implemented under the RMS's *Guide to Traffic* and *Transport Management for Special Events*. The Traffic Committee is required to make recommendations to Council regarding the traffic management aspects of the event and advise Council on conditions to set for the use of the road space. Council will then consider these recommendations and assess all other impacts on the surrounding environment before issuing a Schedule of Conditions.

3. Technical Analysis

The road closures will require approval from the Transport Management Centre (TMC). Once all approvals and conditions have been met, staff from the RMS and Council can sign the TMP to authorise implementation. The proposed road closures and clearways are shown on plans attached.

Council officers have not received any major objections from the Waverley residents with regard to last year's event. Participant cut off points will be implemented to ensure roads will be opened at specified times.

4. Financial Information for Council's Consideration

The applicant is required to cover all costs associated with the event.

5. Attachments

- 1. City2Surf 2018 Transport Management Plan DRAFT V2 (confidential)
- 2. City2Surf 2018 TCPs (confidential)

REPORT TC/V.02/18.06

Subject: Blake Street, Dover Heights - Replace 'Give Way' with

'Stop' Control at Victory Street and Portland Street

TRIM No: A03/0042-04

Author: Behzad Saleh, Professional Engineer

Director: Emily Scott, Director, Waverley Renewal



COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Replaces the existing 'Give Way' sign in Blake Street at its intersection with Victory Street with a 'Stop' sign.
- 2. Renews the existing 'BB' lines and replaces the 'Give Way' lines with 'Stop' lines and 'Continuity' lines in Blake Street on the eastbound approach to Victory Street.
- 3. Installs a new 'T-Intersection' curved approach warning sign in Blake Street west of Victory Street.
- 4. Replaces the existing 'Give Way' signs in Portland Street on both approaches to its intersection with Blake Street.
- 5. Replaces the 'Give Way' lines with 'Stop' lines and 'Continuity' lines in Portland street on both approaches to its intersection with Blake Street
- 6. Installs 10 m of 'BB' lines in Portland Street on both approaches to its intersection with Blake Street

1. Executive Summary

A request has been received from a Councillor for consideration to be given to changing the existing 'Give Way' signs and line marking at the intersection of Blake Street and Victory Street and replace it with 'Stop' signs and line marking.

In addition, the Dover Heights Precinct Committee passed a motion recently requesting the same changes to controls be made to the nearby intersection of Blake Street with Portland Street. Council will need to exercise its delegated functions to implement the proposal.

2. Introduction/Background

A Councillor has raised concerns regarding road safety at the intersection of Blake Street and Victory Street, Dover Heights following a recent car crash.

Blake Street and Victory Street meet in a modified 'T-Intersection' with priority allocated to vehicles travelling eastbound on Victory Street and westbound on Blake Street. Eastbound traffic in Blake Street (lower section) is required to 'Give Way' and approaches Victory Street at an acute angle and below the Victory Street level.

In addition to this request, the Dover Heights Precinct Committee at a recently held meeting has requested that the 'Give Way' signs in Portland Street on both approaches to its intersection with Blake Street be replaced with 'Stop' signs. This intersection is located in close proximately to the Blake Street/Victory Street intersection; see Figure 1.



Figure 1: Aerial image of the intersection of Blake Street and Victory Street and Blake Street and Portland Street, Dover Heights.



Figure 2. Intersection of Victory Street and Blake Street looking west.



Figure 3. Intersection of Portland Street and Blake Street looking north.

3. Technical Analysis

Within a five year period between 2012 and 2016 inclusive, there have been no recorded crashes at either of these intersections that relate to intersection road user movements.

AS 1742.2-2009 states that 'Stop' signs are only to be used where intersection sight distances are below standard and that crash warrants are not given for their use. The reason for this is that using 'Stop' signs where poor sight distances are not factors may lead to driver disobedience. This in turn can also affect the overall credibility of 'Stop' signs.

A site inspection by Council's Traffic Officer indicated the sight distance from Blake Street looking west on to Victory Street was 82 m. The sight distance from Blake Street looking east was 75 m. Both distances fail to meet the Australian Standards requirement of being below 30 m where the speeds of the major road is 50km/h.

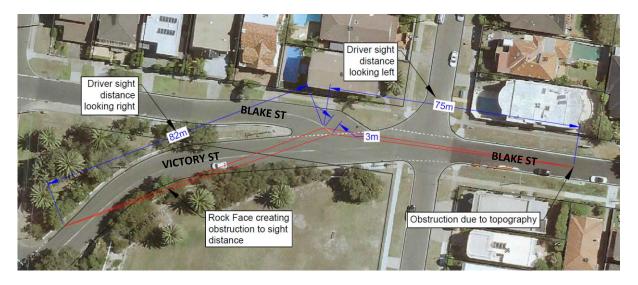


Figure 4. Existing sight distances in Blake Street measured at a setback of 3 m from the intersection and at a height of 1.05 m as per the Australian Standards.

It was however observed that issues did exist regarding the visibility of the intersection itself from Blake Street travelling east due to the topography of the site. The sandstone retaining wall along the south side of Blake Street added a further obstruction to the driver's view of vehicles in Victory Street even though the distance requirements were met when vehicles arrived at the intersection. The acute angle of the intersection also created a tendency for some drivers to not look right before proceeding.

Having regard to the existing unique site conditions such as the topography and the acute angle on the approach, and also considering the recent car crash for which there are currently no details, it is recommended that the existing 'Give Way' sign and lines be replaced with a 'Stop' sign and lines. In order to improve the visibility of the intersection, it is further recommended that the existing and fading 'BB' lines in Blake Street, be renewed and that a 'T-Intersection' curved approach warning sign be installed in Blake Street approaching the intersection.

With regard to the intersection of Portland Street and Blake Street, the sight distance for northbound traffic on Portland Street looking west was 67 m and looking east was 64 m. For vehicles travelling southbound on Portland Street, the sight distance looking west was 101 m and looking east was 64 m. These distances also fail to meet the requirements set within the Australian Standards.



Figure 5. Existing sight distances in Portland Street northbound measured at a setback of 3m from the intersection and at a height of 1.05 m as per the Australian Standards.

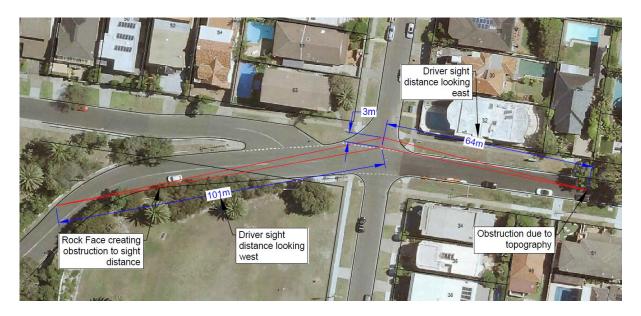


Figure 6. Existing sight distances in Portland Street southbound measured at a setback of 3 m from the intersection and at a height of 1.05 m as per the Australian Standards.

Due to the complexity of the traffic movements caused as a result of the two intersections being located in close proximity to one another, it is considered that extra time is required by drivers to safely navigate the intersection. It is therefore recommended that the 'Give Way' signs and lines be replaced with 'Stop' signs and lines in Portland Street at its intersection with Blake Street. This will allow extra time for drivers to comprehend the unique traffic situation at this location. Ten metres of BB lines are recommended for installation in Portland Street on both approaches to the intersection in accordance with AS 1742.13-2009.

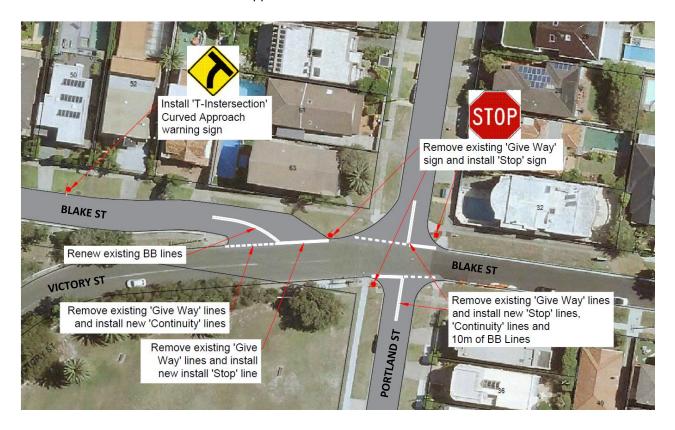


Figure 7. Proposed changes to controls at the intersections of Blake Street and Victory Street and Blake Street at Portland Street, Dover Heights.

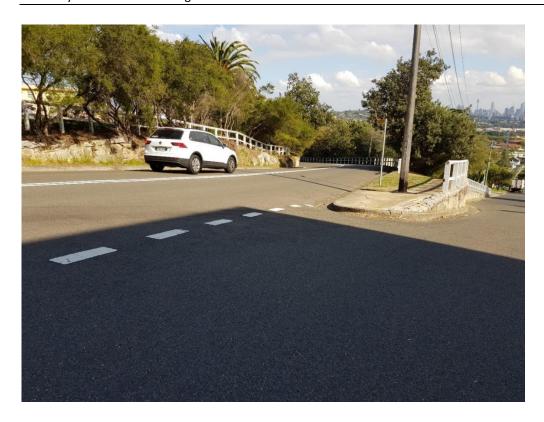


Figure 8. Existing sightline to the right from Blake Street.



Figure 9. Existing sightline to the left from Blake Street.

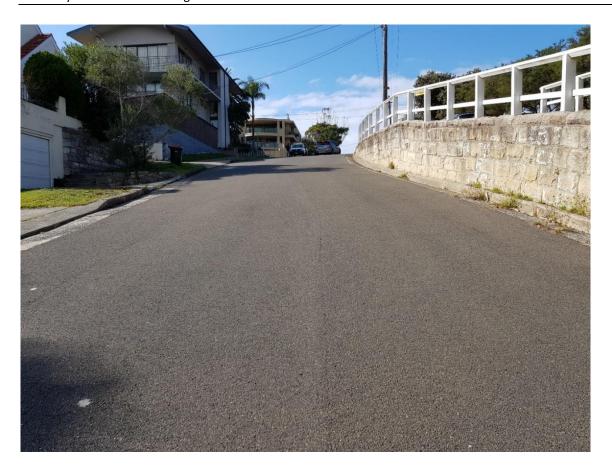


Figure 10. View of the intersection approach from Blake Street travelling east and the retaining wall obstructing the view of Victory Street.



Figure 11. Existing sightline to the right (east) for northbound traffic in Portland Street at Blake Street.

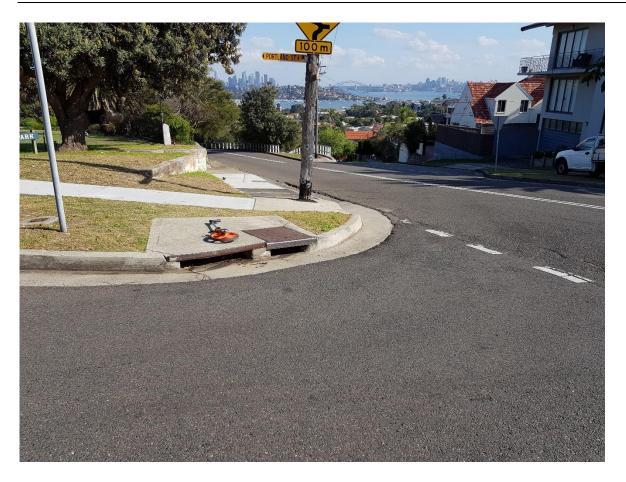


Figure 12. Existing sightline to the left (west) for northbound traffic in Portland Street at Blake Street.



Figure 13. Existing sightline to the right (west) for southbound traffic in Portland Street at Blake Street.



Figure 14. Existing sightline to the left (east) for southbound traffic in Portland Street at Blake Street.

Guidelines used:

- Transport Administration Act 1988.
- RMS's Delegation to Councils; Regulation of Traffic.
- RMS's Signs Database.
- [NSW] Road Rules 2014.
- Australian Standards.

4. Financial Information for Council's Consideration

If changes are approved, Council will supply and install the signs and line marking with funds from existing budgets.

5. Attachments

Nil.

REPORT TC/V.03/18.06

Subject: Glenayr Avenue and O'Brien Street, Bondi Beach - Bus

Zone Extensions and Alterations to Existing Parking

Restrictions

TRIM No: A02/0225-02

Author: Behzad Saleh, Professional Engineer

Director: Emily Scott, Director, Waverley Renewal



COUNCIL OFFICER'S PROPOSAL:

That Council approves the following changes to 'Bus Zones' and parking restrictions:

- 1. Glenayr Avenue, between Warners Avenue and Glasgow Avenue: install 12 of 'Bus Zone 7 am–8.45 am Mon–Fri' on the eastern side of Glenayr Avenue directly south of the existing 'Bus Zone' and make changes to restrictions, as shown in Figure 2 of this report.
- 2. Glenayr Avenue, between Roscoe Street and O'Brien Street: increase the length of the 'No Stopping' zone on the eastern side of Glenayr Avenue at the Hall Street pedestrian crossing to 20 m, and adjust the loading zone and metered parking to the north, as shown in Figure 6 of this report.
- 3. O'Brien Street, east of Lamrock Avenue: install 7.1 m of 'Bus Zone 7 am–8.45 am Mon–Fri' on the southern side of the road directly east of the existing 'Bus Zone' and make changes to existing parking restrictions as shown in Figure 11 of this report.

1. Executive Summary

Council has received a request from State Transit Authority of NSW (STA) to extend 'Bus Zones' in Glenayr Avenue (two zones) and O'Brien Street to improve the draw in/draw out manoeuvres of STA articulated buses which the Authority is proposing to introduce onto the routes. Council will need to exercise its delegated functions to implement the proposals.

2. Introduction/Background

STA is currently reviewing the schedules of buses operating throughout Waverley LGA. In order to improve services offered through better utilisation of the existing bus fleet, including the operation of articulated vehicles, changes are requested to a series of existing 'Bus Zones' as follows:

- Glenayr Avenue (eastern side of the road) south of Warners Avenue. The proposal is for a part time (in the am) extension of the existing 'Bus Zone' to the south by 12 m using two ticketed parking spaces.
- 2. Glenayr Avenue (eastern side of the road) near O'Brien Street. The proposal is to relocate the existing 'Bus Zone' 20 m north of the pedestrian crossing into an existing 'No Parking' zone. An existing 'Loading Zone' is also affected and is to be relocated to the north into two ticketed parking spaces accordingly.

3. O'Brien Street (southern side) near Lamrock Avenue. The proposal is for a part-time (in the am) extension of the existing 'Bus Zone' to the east by 7.1 m by using one parking space.

3. Technical Analysis

Glenayr Avenue near Warners Avenue (Stop ID: 202692)

The existing 'Bus Zone' is located on the eastern side of Glenayr Avenue between Warners Avenue and Glasgow Avenue and has a length of 24 m. Restrictions before the 'Bus Zone' is 10 m of 'No Stopping' from Warners Avenue and after, 12 m of 1P Ticket 8 am–6 pm, 4P Ticket 6 pm–10 pm.



Figure 1. Aerial view of the existing 'Bus Zone' in Glenayr Avenue near Warners Avenue.

It is recommended to extend the existing 'Bus Zone' by 12 m to the south, using the existing metered parking spaces during the times of 7 am–8.45 am Mon–Fri. The area is to return to existing restrictions outside of these hours. These changes will help improve the draw in and draw out of the larger buses in the STA fleet. Safety will be subsequently improved as buses will not be required to stop at an angle to the kerb which can be hazardous for passengers. Furthermore, traffic flow will also be improved as buses stopping at an angle can result in it occupying two lanes and restricting traffic.

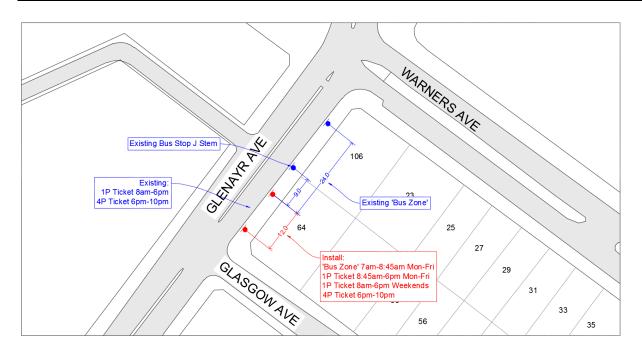


Figure 2. Existing and proposed restrictions.



Figure 3. Existing parking and bus stop in Glenayr Avenue near Glasgow Avenue.



Figure 4. Existing bus stop with two parking spaces at southern end.

Glenayr Avenue near O'Brien Street (Stop ID: 202666)

The existing 'Bus Zone' is located on the eastern side of Glenayr Avenue just north of O'Brien Street and has a length of 21.5m

The restrictions adjoining the 'Bus Zone' are:

- 12 m of 'Loading Zone Ticket 6.30 am–6 pm Mon–Sat, 1P Ticket 8 am–6 pm Sun, 4P Ticket 6 pm–10 pm.
- 16 m of 'No Parking' across driveways
- 26.4 m of 1P Ticket 8 am–6 pm; 4P Ticket 6 pm–10 pm parking terminating at a zebra crossing near Roscoe Street.

The 'Bus Zone' ends 4 m before the pedestrian crossing at O'Brien Street/Hall Street, which is not in compliance with RMS standards.



Figure 5. Aerial view of the existing 'Bus Zone' in Glenayr Avenue near O'Brien Street.

Under the [NSW] Road Rules 2014:

'A driver must not stop on a pedestrian crossing that is not at an intersection, or on the road within 20 metres before the crossing and 10 metres after the crossing, unless the driver stops at a place on a length of road, or in an area, to which a parking control sign applies and the driver is permitted to stop at that place under these Rules.'

Similarly, both AS 1742.10-2009 and RMS TDT 2002/12c instruct that a minimum of 20m of 'No Stopping' is required before a pedestrian crossing and 10m after the crossing. This is to ensure that drivers have adequate distance to sight pedestrians using the crossing. If a kerb extension is provided however, the 'No Stopping' distance before the crossing may be reduced depending on the width of the extension. Further to this, within the five-year period between 2012 and 2016, there has been one recorded pedestrian crash at this crossing resulting in one moderate injury and one minor injury.

In order to provide a 20 m 'No Stopping' zone and to increase the length of the existing 'Bus Zone' such that it can cater for the larger buses in the STA fleet, changes to parking controls on the eastern side of Glenayr Avenue from Roscoe Street to Hall Street are required.

The 'Bus Zone' is to be relocated 16 m north and occupy both the 12 m of 'Loading Zone' and 16 m of 'No Parking'. This will increase the size of the 'Bus Zone' to 33.5 m and will improve draw in and draw out manoeuvres of the larger buses in the STA fleet. Safety will be subsequently improved as buses will not be required to stop at an angle to the kerb which can be hazardous for passengers. Furthermore, traffic flow will also be improved as buses stopping at an angle can result in it occupying 2 lanes and restricting traffic. The 'Loading Zone' is to be relocated 16 m north and be reduced in size from 12 m to 9 m which will still accommodate an 8.8 m long medium rigid vehicle. This change will result in the reduction of two parking spaces that currently have restrictions of '1P Ticket 8 am–6 pm, 4P Ticket 6 pm–10 pm'. It is noted that there are still two other 'Loading Zones' in O'Brien Street located 40 m to the east of Glenayr Avenue and 20 m to the west of Glenayr Avenue.

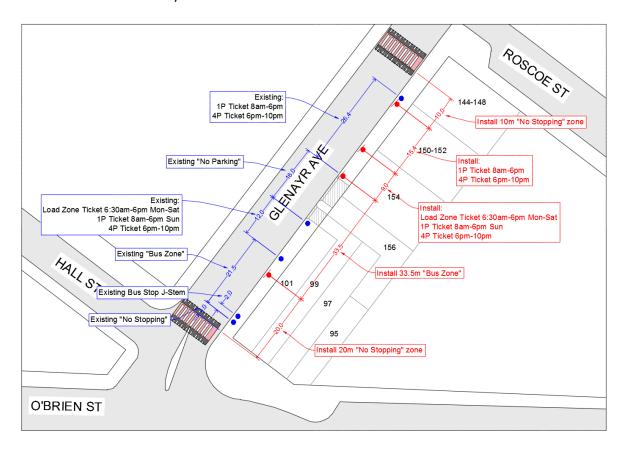


Figure 6. Existing and proposed restrictions.



Figure 7: Bus stop and pedestrian crossing in Glenayr Avenue in vicinity of Hall Street/O'Brien Street.



Figure 8. Existing 'Loading Zone' and 'No Parking' across driveways in Glenayr Avenue.



Figure 9. Two existing on street parking spaces requiring removal to extend the bus zone.

O'Brien Street near Lamrock Avenue (Stop ID: 202695)

The existing 'Bus Zone' is located on the southern side of O'Brien Street just east of Barracluff Avenue and has a length of 25.5 m. The restrictions before the 'Bus Zone' is 22.5 m of 2P 8 am–10 pm Permit Holders Excepted Area 4' and after is 'No Stopping' restrictions preceding a roundabout controlled intersection.



Figure 10. Aerial view of the existing 'Bus Zone' in O'Brien Street near Lamrock Avenue.

It is recommended to extend the existing 'Bus Zone' by 7.1 m to the east by using one parking space during the times of 7 am—8.45 am Mon—Fri. The remaining kerb length that will be available for parking will be 15.4 m. The 'Bus Zone' is to return to the existing parking restrictions outside of these hours. These changes will help improve the draw in and draw out of the larger buses in the STA fleet. Safety will be subsequently improved as buses will not be required to stop at an angle to the kerb which can be hazardous for passengers. Furthermore, traffic flow will also be improved as buses stopping at an angle can result in it occupying two lanes and restricting traffic.

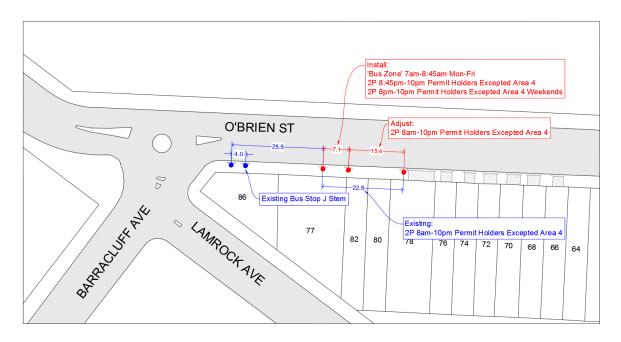


Figure 11. Existing and proposed restrictions.

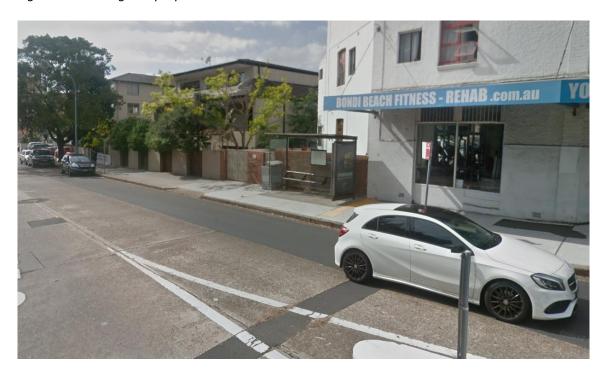


Figure 12. Bus stop in O'Brien Street, south side, near Barracluff Avenue.

Guidelines used:

- [NSW] Road Rules
- RMS TDT 2002/12c
- AS 1742.10-2009
- RMS Signs Database

4. Financial Information for Council's Consideration

If changes to signs are approved, Council will undertake the installation of signs from existing budgets.

5. Attachments

Nil.

REPORT TC/V.04/18.06

Subject: Rudolph Lane, Bondi Beach - Installation of 'No Parking'

Zone

TRIM No: A02/0637-02

Author: Behzad Saleh, Professional Engineer

Director: Emily Scott, Director, Waverley Renewal



COUNCIL OFFICER'S PROPOSAL:

That Council extends the existing 'No Parking' zone in Rudolph Lane, north side, at the rear of 81–83 O'Brien Street, Bondi Beach, by 5 m to the west terminating at the existing 'No Stopping' zone at Simpson Street upon the completion of DA-86/2018.

1. Executive Summary

Council has received a development application (DA-86/2018) at 81–83 O'Brien Street, Bondi Beach, for 'Alteration and additions including two additional carports at the rear of the existing dwelling'. In order to access the two new carports, Council will need to remove a single on-street parking space opposite the proposed driveways in Rudolph Lane. Council will need to exercise its delegated functions to implement the proposal.

2. Introduction/Background

A residential apartment building comprising of four units currently sits on the subject site located at 81-83 O'Brien Street, Bondi Beach. At present, only one of the units has access to a carport at the rear of the building with access via Rudolph Lane. The proposed development will increase the amount of off-street parking by two spaces.



Figure 1. Shows an aerial view of 81–83 O'Brien Street and surrounding streets.

Due to increasing demand for similar requests, Council's policy is to apply the following criteria when assessing the technical aspects of motor vehicular access between the road reserve and adjacent land:

Development Application

If the matter has been raised as part of the Development Application process, Council officers may not support a proposal to remove on-street parking to improve access between the road reserve and adjacent land.

Left and/or Right In/Out Only

Where there is an opportunity for drivers to access and egress off-street parking, unimpeded, through a left and/or right in/out only manoeuvre, Council officers will not support a proposal to remove on-street parking to improve access between the road reserve and adjacent land. It is acknowledged that drivers may need to travel further to access and egress their properties.

B85 Vehicle

Council officers will survey the driveway, off-street parking and surrounding road environment, to be drafted. Australian Standard *AS 2890.1: 2004* provides a turning template for 85th percentile of the registered passenger vehicles in Australia (B85 Vehicle) and this is to be used to assess the access between the road reserve and adjacent land.

If the access for a B85 Vehicle is not impeded by vehicles legally parked on-street, Council officers will not support a proposal to remove on-street parking to improve access between the road reserve and adjacent land.

If the access for a B85 vehicle is impeded by vehicles legally parked on-street, Council officers will refer the matter to the Traffic Committee and Council. The application to remove the parking is to be advertised by Council officers, by installing a notice in the vicinity of the on-street parking in question.

3. Technical Analysis

Rudolph Lane is a two-way street with a kerb to kerb width of 4.3 m. On-street parking is allowed along sections of the northern kerb side only. Within the vicinity of the subject site, there is currently 5 m of unrestricted parking space available in Rudolph Lane bounded by a 'No Stopping' zone to the west and 'No Parking' zone to the east. It was also noted on-site that the existing 'No Parking' zones are there to cater for the swept wheel paths of vehicles entering and exiting the garages of neighbouring properties.

The applicant for DA-86/2018 has provided a traffic report by ML Traffic Engineers detailing the proposed changes to parking in Rudolph Lane. This report shows a swept wheel path analysis for six scenarios for the three parking spots. The analysis confirms that access by a B85 vehicle will not be possible without the removal of on-street parking.

Considering that only one on-street parking space is to be removed to provide two off-street parking spaces, there is no net loss of on street parking. Furthermore, Rudolph Lane represents the only option in providing an off-street parking solution to the residents of 81–83 O'Brien Street. It is therefore recommended that the existing 'No Parking' zone in Rudolph Lane be extended by 5 m to the west linking to the existing 'No Stopping' zone.

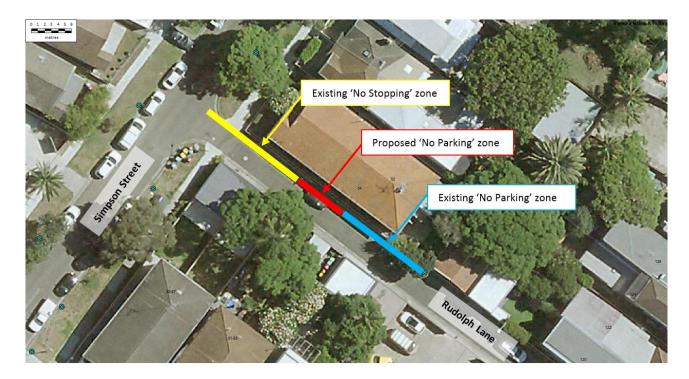


Figure 2. Existing and proposed 'No Parking' zones.



Figure 3. Rudolph Lane looking west with locations of the proposed development and proposed 'No Parking'.

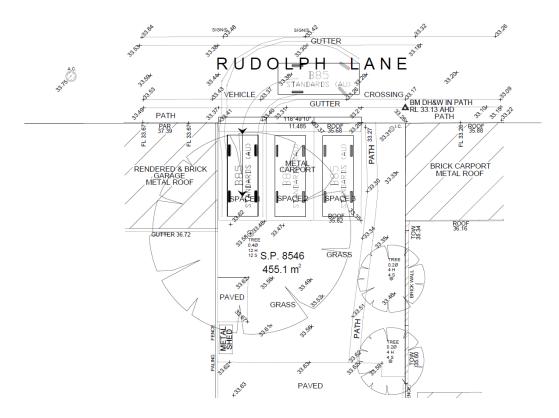


Figure 4. Swept wheel path for a vehicle turning left into space one.

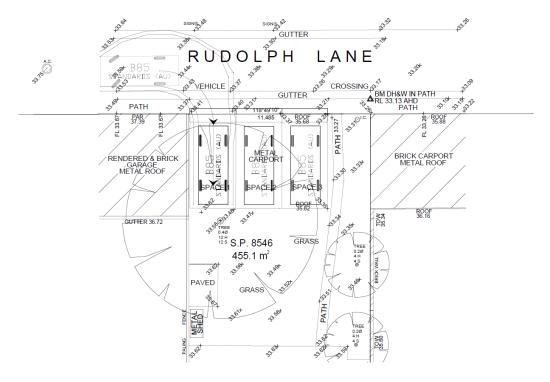


Figure 5. Swept wheel path for a vehicle turning right into space one.

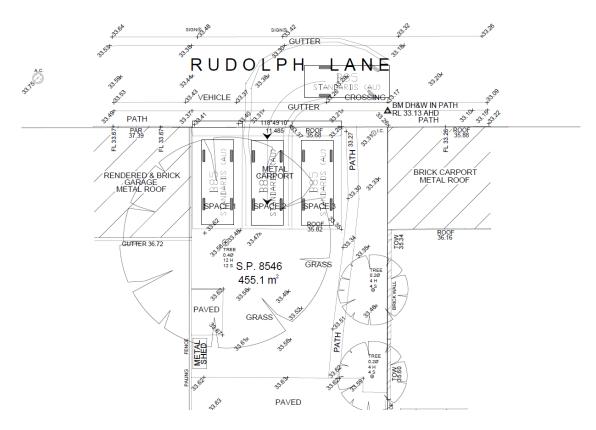


Figure 6. Swept wheel path for a vehicle turning left into space two.

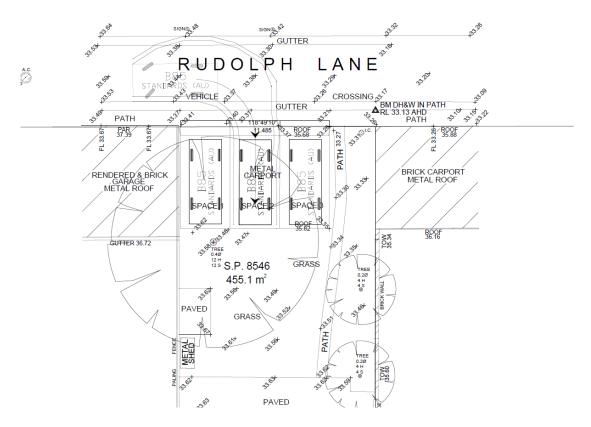


Figure 7. Swept wheel path for a vehicle turning right into space two.

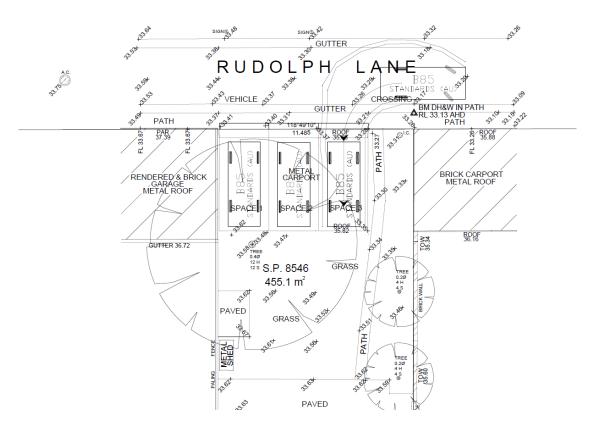


Figure 8. Swept wheel path for a vehicle turning left into space three.

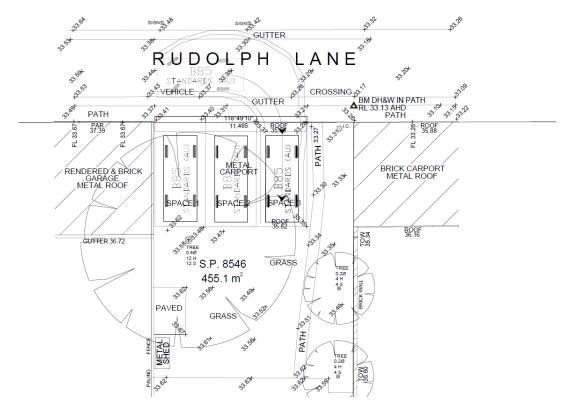


Figure 9. Swept Wheel Path for a vehicle turning right into space three.

Guidelines used:

- RMS's Signs Database
- [NSW] Road Rules 2014
- Australian Standard AS 2890.1: 2004
- Australian Standard AS 2890.5 1993.

4. Financial Information for Council's Consideration

The applicant will be required to meet the cost of supplying and installing the signs. Once payment has been received, Council can proceed with installation.

5. Attachments

Nil.

REPORT TC/V.05/18.06

Subject: Barracluff Avenue, Bondi Beach - Removal of 'No Parking'

Across Driveways

TRIM No: A02/0637-02

Author: Kablan Mowad, Senior Traffic Engineer

Director: Emily Scott, Director, Waverley Renewal



COUNCIL OFFICER'S PROPOSAL:

That Council removes the existing 10 m 'No Parking' zone in Barracluff Avenue across the driveways of 1 Rickard Avenue and 115 Francis Street, Bondi Beach.

1. Executive Summary

Council has received a request from the residents of 1 Rickard Avenue and 115 Francis Street, Bondi Beach for the removal of the existing 'No Parking' signage from across their adjacent driveways. Council will need to exercise its delegated function to approve the proposal.

2. Introduction/Background

Council considers the installation of 'No Parking' across driveways in certain cases at the request of affected residents. Given both of the affected residents in this case have requested the removal of the 'No Parking' signs from across their driveways, the matter is referred to the Traffic Committee for consideration.

3. Technical Analysis

The driveways to 1 Rickard Avenue and 115 Francis Street are located adjacent to each other on Barracluff Avenue, Bondi Beach and currently have 'No Parking' restrictions signposted across them. A letter has been submitted and signed by residents of both properties requesting the signage be removed. The distance between the signs is 10 m.



Figure 1. Image of existing 10 m 'No Parking' Zone.

The removal of the signage would not legally allow any extra parking in the street. It is recommended that the signs are removed as per the request of the affected residents.

4. Financial Information for Council's Consideration

If changes to signs and/or line marking are approved, Council will undertake the installation of signs/lines from existing budgets.

5. Attachments

Nil.

REPORT TC/CV.01/18.06

Subject: Implementation of 15 Minute 'Drop In' Zones

TRIM No: SF17/2767

Author: Tanya Potts, Acting Executive Manager, Customer First

Colin Handsaker, Manager, Customer Parking

Director: Rachel Jenkin, Acting Director, Waverley Life



COUNCIL OFFICER'S PROPOSAL:

That Council:

- 1. Introduces 15 minute free 'drop in' zones at the following locations:
 - (a) Bondi Junction (10 spaces).
 - (i) Spring Street, Bondi Junction.

Southern side of Spring Street adjacent to 3A Bronte Road extending 16.5 m west of current ticket closing sign extending across the disused driveway between 3A Bronte Road and 99 Spring Street (3 spaces).

Southern side of Spring Street outside 35 Spring Street extending 11 m west from the current Loading Zone toward the adjacent driveway (2 spaces).

(ii) Bronte Road, Bondi Junction.

11 m on the Eastern side of Bronte Road outside 28–32 Bronte Road. Move No stopping sign 10 m north and remove meter WBRO02 (2 spaces).

(iii) Hollywood Avenue, Bondi Junction.

Western Side of Hollywood Avenue adjacent to 241 Oxford Street extending 16.5 m south from the current Mail Zone (3 spaces).

- (b) Charing Cross (5 spaces).
 - (i) Bronte Road, Charring Cross.

Eastern side of Bronte Road outside 280 and 282 Bronte Road extending 11 m north of existing Motorbike Parking (2 spaces).

Western Side of Bronte Road south outside 245 Bronte Road extending 16.5 m south from the adjacent driveway (3 spaces).

- (c) Bondi Beach (10 spaces).
 - (i) Curlewis Street, Bondi Beach.

Southern side of Curlewis Street outside 155 Curlewis Street extending 11 m west from the current No Stopping (2 spaces).

(ii) Hall Street, Bondi Beach.

Northern side of Hall Street outside 51–53 Hall Street between existing driveways (3 spaces).

Southern side of Hall Street outside 80 Hall Street extending 11 m east of current No Stopping (2 spaces).

(iii) Campbell Parade, Bondi Beach.

Western side of Campbell Parade outside 140–144 Campbell Parade extending 16.5 m south of the current ticket parking closing sign (3 Spaces).

2. Converts the free 'P 10 minute' parking spaces on Hall Street and Jaques Avenue, Bondi Beach into 15 minute free 'drop in' spaces.

1. Executive Summary

On 25 February 2016, the Traffic Committee recommended that Council implements a 12 month trial of 'P 10 minute' parking in a designated section of Jaques Avenue and Hall Street, Bondi Beach. Four 'P 10 minute' parking spaces were installed in January 2018 with a further report to be submitted to the Traffic Committee at the conclusion of the 12 month trial. This report recommends that these 'P 10 minute' parking spaces be converted into 15 minute free 'drop in' zones for consistency.

On 15 May 2018, Council resolved to introduce 15 minute free 'drop in' zones near/in local shopping strips with a maximum of 10 spaces allocated in Bondi Junction and 10 spaces allocated in Bondi Beach, and five spaces in Charing Cross and that a report be prepared for the June Waverley Traffic Committee outlining proposed locations.

2. Introduction/Background

On 10 October 2017, Council resolved to receive a report outlining the implications of and options for a number of parking proposals, one of which was introducing 15 minute free 'drop in' zones within metered areas of Bondi Junction and Bondi Beach.

Following extensive community consultation in April 2018, including a phone and online survey, Council received strong support for introducing free drop in zones, with 62% of those surveyed supportive of the change. The community consultation report was tabled at the Council meeting on 15 May 2018.

On 15 May 2018 Council resolved to introduce 15 minute free 'drop in' zones near/in local shopping strips with a maximum of 10 spaces allocated in Bondi Junction and 10 spaces allocated in Bondi Beach, and five spaces in Charing Cross and that a report be prepared for the June Waverley Traffic Committee outlining proposed locations.

On 25 February 2016 the Waverley Traffic Committee recommended that Council implements a 12 month trial of 'P 10 minute' parking in a designated section of Jaques Avenue and Hall Street, Bondi Beach. On 15

March 2016, Council resolved to adopt the recommendation of the Waverley Traffic Committee. In January 2018 two 'P 10 minute' parking spaces were installed on Hall Street and two on Jaques Avenue. It is the recommendation of this report that these 4 'P 10 minute' parking spaces be converted into 15 minute free 'drop in' zones so that there is consistency with the other new spaces and to avoid confusion among motorists.

3. Technical Analysis

The Executive Managers of Customer First and Creating Waverley, as well as the Manager, Customer Parking, inspected areas within Bondi Junction, Charring Cross and Bondi Beach and determined that the locations below were best suited for the introduction of 15 minute free 'drop in' zones.

The introduction of these zones will necessitate the removal of 1 parking meter (WBRO02) outside 28-32 Bronte Road, Bondi Junction.

To facilitate the roll out of the new 'drop in' zones Council will install informational signage as well as regulatory signage to assist motorists in recognising the spaces easily.

Bondi Junction

Spring Street (3 spaces)

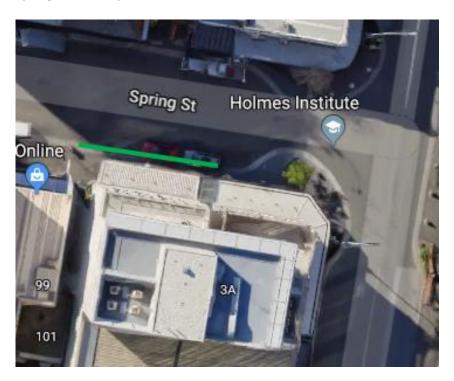


Figure 1. Three spaces Spring Street adjacent to 3A Bronte Road.

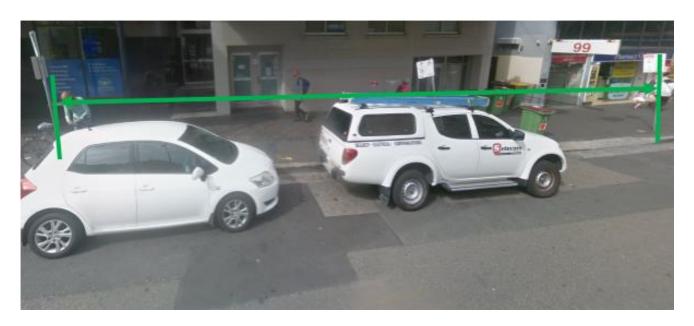


Figure 2. Three spaces Spring Street adjacent to 3A Bronte Road.

Spring Street (2 spaces)



Figure 3. Two spaces outside 35 Spring Street.

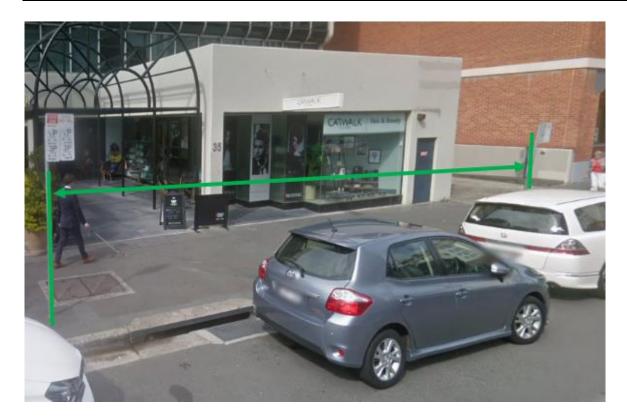


Figure 4. Two spaces outside 35 Spring Street.

Bronte Road (2 spaces)

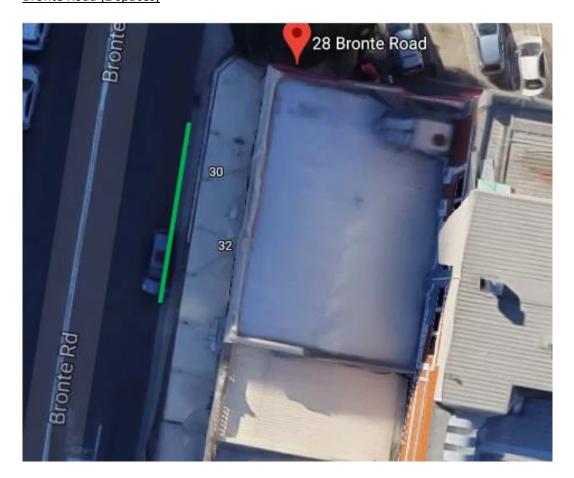


Figure 5. Two spaces outside 28–32 Bronte Road.



Figure 6. Two spaces outside 28–32 Bronte Road. No Stopping to be moved 10 m North. Meter BRO02 to be removed.

Hollywood Avenue (3 spaces)

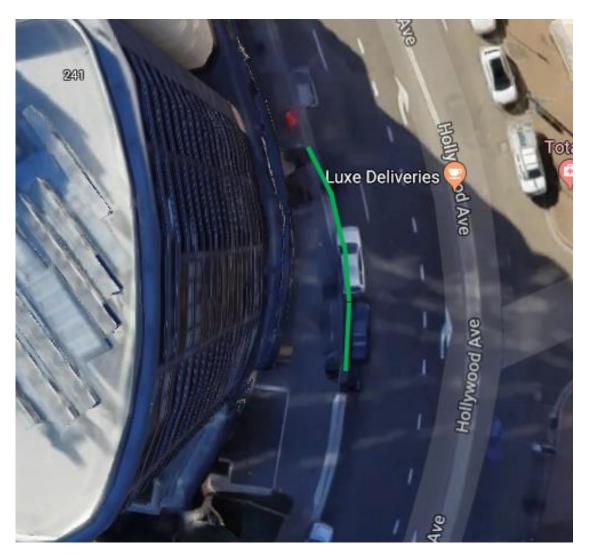


Figure 7. Three spaces in Hollywood Avenue adjacent to 241 Oxford Street.



Figure 8. Three spaces in Hollywood Avenue adjacent to 241 Oxford St.

Charing Cross

Bronte Road (2 spaces)

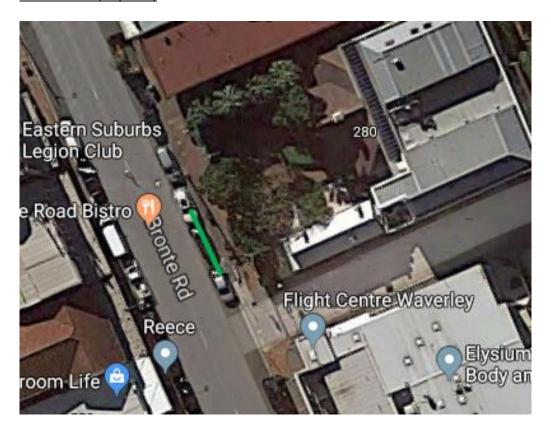


Figure 9. 2 spaces outside 280 and 282 Bronte Road.



Figure 10. Two spaces outside 280 and 282 Bronte Road extending 11 m north of current Motor Bike parking zone

Bronte Road (3 spaces)



Figure 11. Three spaces outside 245 and 247 Bronte Road.



Figure 12. Three spaces outside 245 and 247 Bronte Road, extending 16.5 m south of driveway

Bondi Beach

Curlewis Street (2 spaces)

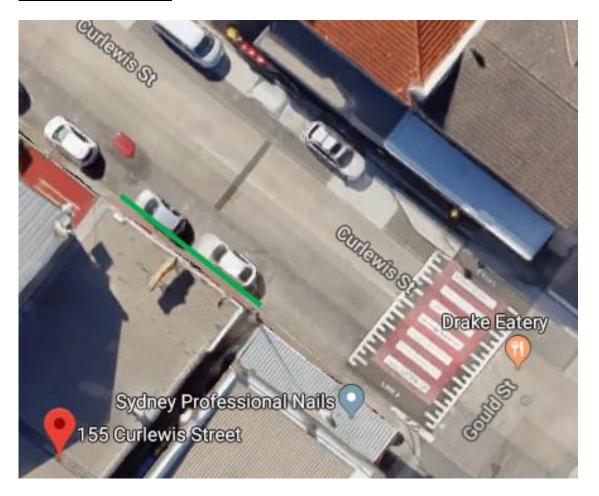


Figure 13. Two spaces outside 155 Curlewis Street.



Figure 14. Two spaces outside 155 Curlewis Street (now F45 fitness), extending 11 m west of current No Stopping.

Hall Street (3 spaces)

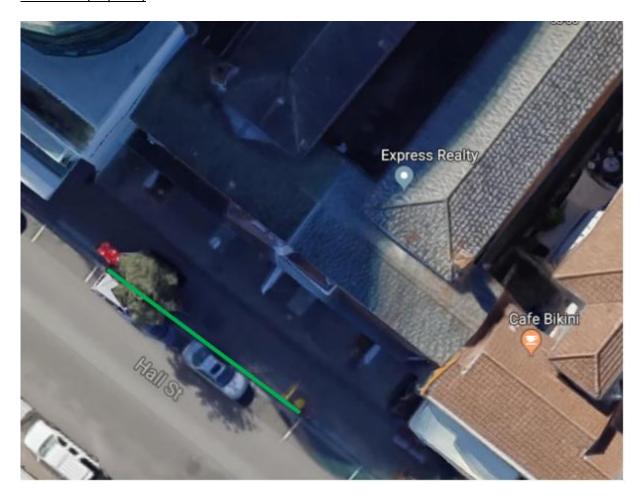


Figure 15. Three spaces outside 53 to 57 Hall Street.



Figure 16. Three spaces outside 53 to 57 Hall Street between existing driveways

Hall Street (2 spaces)



Figure 17. Two spaces outside 78 to 80 Hall Street.

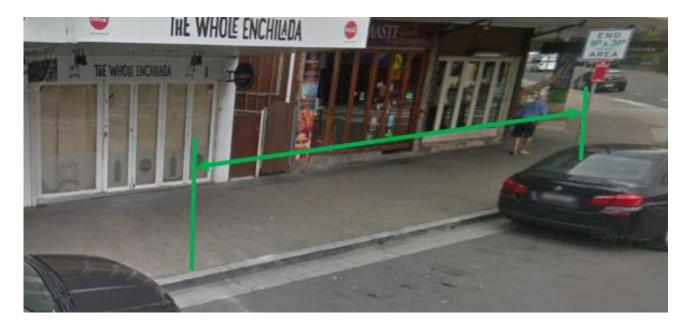


Figure 18. Two spaces outside 78 to 80 Hall Street extending 11 m east of No Stopping.

Campbell Parade (3 spaces)

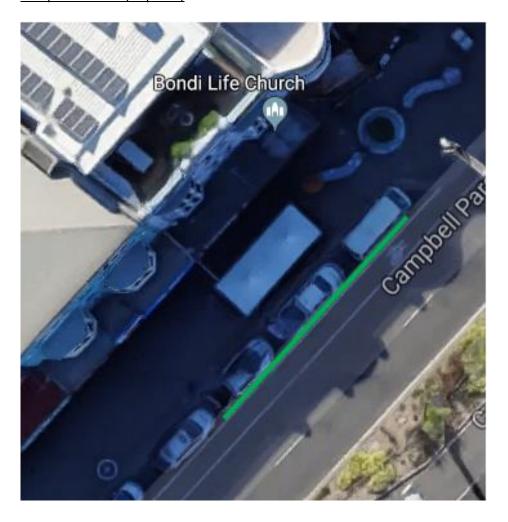


Figure 19. Three spaces outside 140–144 Campbell Parade.



Figure 19. Three spaces outside 140–144 Campbell Parade extending 16.5 m south of current ticket parking sign.

Hall Street and Jaques Avenue Street P10 min spaces

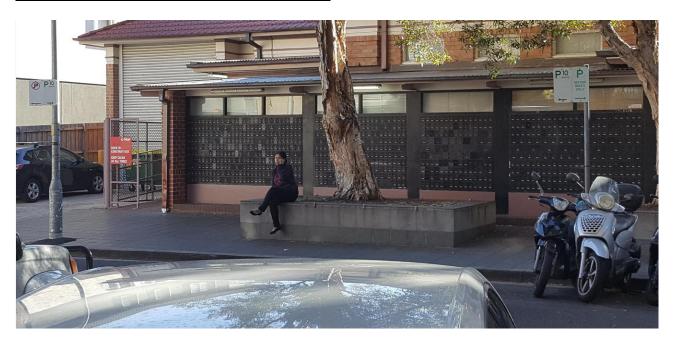


Figure 20. Two spaces outside Jaques Avenue adjacent to Post Office change from P10 minutes to P15 minutes.



Figure 2. Two spaces Hall Street outside Post Office change from P10 minutes to P15 minutes.

Guidelines used:

- Transport Administration Act 1988.
- RMS Delegation to Councils; Regulation of Traffic.
- RMS Traffic Signs Database.
- RMS Pay Parking Guidelines.
- [NSW] *Road Rules 2014*.

4. Financial Information for Council's Consideration

The impact on the 2018–19 budget was presented in the report to Council on 15 May 2018.

The cost of replacing signs/poles and the removal of a parking meter, will be allocated from existing Council budget.

5. Attachments

Nil.