



## **WAVERLEY TRAFFIC COMMITTEE MEETING**

A meeting of the WAVERLEY TRAFFIC COMMITTEE will be held by video conference at:

**10.00 AM, THURSDAY 22 OCTOBER 2020**

Waverley Council  
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## AGENDA

### Apologies

### Declarations of Interests

### Adoption of previous Minutes by Council - 24 September 2020 ..... 9

The recommendations contained in Part 1 - Matters Proposing That Council Exercise Its Delegated Functions - of the Minutes of the Waverley Traffic Committee meeting held on 24 September 2020 are scheduled to be adopted by Council at its meeting on 20 October 2020.

### PART 1 – MATTERS PROPOSING THAT COUNCIL EXERCISE ITS DELEGATED FUNCTIONS

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

#### TC/C      STATE ELECTORATE OF COOGEE

#### TC/C.01/20.10      Bronte Road, Bondi Junction - Pick-Up/Drop-Off (PUDO) Bay Changes (A20/0336) ..... 20

#### COUNCIL OFFICER'S PROPOSAL:

That Council approves a change of length from 21.0 metres to 9.0 metres for the approved pick-up/drop-off bay on the western side of Bronte Road between Ebley Street and Spring Street until such time that the approved 21.0 metres pick-up/drop-off bay can be installed.

#### TC/C.02/20.10      7 Salisbury Street, Waverley - Temporary Road Closure for Crane Lifts (A19/0394) ..... 24

#### COUNCIL OFFICER'S PROPOSAL:

That Council:

1. Approves the temporary closure of Salisbury Street, Waverley, between Carrington Road and Campbell Street on Tuesday, 8 December 2020, between 7.00 am and 11.00 pm in accordance with the Construction Traffic and Plan of Management attached to the report, subject to:
  - (a) A Council officer being present on-site for the duration of the works as the expense of the applicant.
  - (b) The applicant:
    - (i) Obtaining approval from NSW Police.

- (ii) Notifying the State Transit Authority, NSW Ambulance Service and NSW Fire and Rescue.
  - (iii) Notifying local residents and Waverley College prior to the event.
  - (iv) Using Transport for NSW accredited traffic controllers.
  - (v) Covering all costs associated with closing the road, including traffic control.
2. Officers notify the applicant of the conditions outlined in clause 1.
  3. Delegates authority to the Executive Manager, Infrastructure Services, to approve any alternative date and times, if required.

**TC/C.03/20.10            17-19 Henry Street, Queens Park - 'P Motor Bikes Only' Parking (A14/0145) ..... 41**

**COUNCIL OFFICER'S PROPOSAL:**

That Council installs a 'P Motor Bikes Only' zone between the driveways of 17 and 19 Henry Street, Queens Park.

**TC/C.04/20.10            63 Fletcher Street, Bondi - Construction Zone (A03/2514-04) ..... 45**

**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Installs an 18.2 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles' construction zone at 63 Fletcher Street, Bondi.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

**TC/C.05/20.10            29 Macpherson Street, Waverley - Construction Zone (A03/2514-04) ..... 48**

**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Installs a 9 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles Excepted' construction zone in front of 29 Macpherson Street, Waverley.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

<b>TC/C.06/20.10</b>	<b>40 km/h Speed Limit Changes - Traffic Control Devices - Bourke Street south of Bourke Lane, Queens Park (A18/0579) .....</b>	<b>52</b>
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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Approves the installation of speed cushions, a marked bicycle lane, and a kerb extension on Bourke Street south of Bourke Lane, Queens Park as shown in Attachment 1 of the report.
2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.

<b>TC/C.07/20.10</b>	<b>40 km/h Speed Limit Changes - Traffic Control Devices - Park Parade, Bondi (A18/0579) .....</b>	<b>63</b>
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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Undertakes consultation with residents of Park Parade, Bondi, on the installation of traffic control devices along Park Parade comprising:
  - (a) Speed cushions at 32 Park Parade.
  - (b) Speed cushions at 10 Park Parade.
  - (c) A line marked parking lane between Bondi Road and Birrell Street.
  - (d) An S1 dashed centre lane line with raised pavement markers between Bondi Road and Birrell Street.
2. Officers prepare a report for the December 2020 Council meeting on the outcomes of the community consultation.
3. Approves the design of the traffic control devices as shown in Attachment 1 (Option 3) of the report subject to the outcomes of the community consultation and the determination at the December Council meeting on whether to proceed with the work.
4. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.



<b>TC/C.08/20.10</b>	<b>40 km/h Speed Limit Changes - Traffic Control Devices - 25 and 37 Murray Street, Bronte (A18/0579).....</b>	<b>75</b>
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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Approves the installation of kerb extensions and speed cushions outside 25 and 37 Murray Street, Bronte, as shown in Attachment 1 and 2 (Option 2) of the report.
2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.

<b>TC/C.09/20.10</b>	<b>40 km/h Speed Limit Changes - Traffic Control Devices - Ruthven Street, Bondi Junction (A18/0579) .....</b>	<b>92</b>
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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Approves the installation of a two-lane slow point (chicane) in Ruthven Street, Bondi Junction, as shown in Attachment 1 (Option 2) of the report.
2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.

**TC/V      STATE ELECTORATE OF VAUCLUSE**

<b>TC/V.01/20.10</b>	<b>49 Blake Street, Dover Heights - Conversion of No Stopping to No Parking (A14/0145) .....</b>	<b>102</b>
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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Approves modifications to parking restrictions on the northern side of Blake Street between Portland Street and Military Road as shown in Figure 2 of the report to provide:
  - (a) 38 metres of un-restricted parking at the western end.
  - (b) 38 metres of No Stopping restrictions at the eastern end.
  - (c) 18 metres of No Parking restrictions in between.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, as necessary.

**TC/V.02/20.10            4 Macleay Street, North Bondi - Construction Zone (A03/2514-04)..... 105****COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Installs a 15 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles' construction zone at 4 Macleay Street, North Bondi.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

**TC/V.03/20.10            15-17 Lamrock Avenue, Bondi Beach - Construction Zone (A03/2514-04) ..... 109****COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Installs a 13.1 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles Excepted' construction zone in front of 15–17 Lamrock Avenue, Bondi Beach.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

**TC/CV            ELECTORATES OF COOGEE AND VAUCLUSE****TC/CV.01/20.10            Bondi to Bronte Coastal Walk - One Way System (A20/0500)..... 113****COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Endorses the following traffic management measures to be constructed if and when deemed necessary between Bondi Beach and Tamarama Beach:
  - (a) Gaerloch Avenue on the eastern side of Dellview Street – 2 x 'No Entry' signs preventing access to Gaerloch Avenue eastbound.
  - (b) Gaerloch Avenue on the light pole opposite 31 Gaerloch Avenue (the 90-degree bend in the road) – A 'No Right Turn' sign preventing access to Gaerloch Avenue northbound.
  - (c) Gaerloch Avenue eastern side – 2 x 'One Way (Arrow Right)' signs indicating one-way direction on Gaerloch Avenue.
  - (d) Gaerloch Avenue western side facing Kenneth Street – a 'One Way (Arrow Left)' sign indicating one-way direction on Gaerloch Avenue.
  - (e) Dellview Street on the southern side of Fletcher Street – 2 x 'No Entry' signs preventing access to Dellview Street southbound.

- (f) Dellview Street eastern side between Carlisle Street and Dellview Lane – 2 x ‘One Way (Arrow Left)’ signs indicating one-way direction on Dellview Street.
  - (g) Dellview Lane on western side of Dellview Street – A ‘No Right Turn’ sign preventing access to Dellview Street southbound.
  - (h) Carlisle Street on the northern side of Dellview Street – a ‘No Right Turn’ sign preventing access to Dellview Street southbound.
  - (i) Dellview Street on the southern side of Carlisle Street – 2 x ‘No Entry’ signs preventing access to Dellview Street southbound.
  - (j) Western side of Dellview Street facing Gaerloch Avenue – A ‘One Way (Arrow Right)’ indicating one-way direction on Dellview Street.
2. Endorses the following traffic control devices to be constructed if and when deemed necessary between Bondi Beach and Tamarama Beach:
- (a) A continuous footpath treatment – Wilga Street on the eastern side of Sandridge Street.
  - (b) A marked pedestrian crossing – Fletcher Street on the eastern side of Sandridge Street.
  - (c) A marked pedestrian crossing with kerb extensions – Kenneth Street on the eastern side of Alexander Street.
  - (d) A continuous footpath treatment – 22 Gaerloch Avenue (the 90 degree bend in the road).
  - (e) A continuous footpath treatment – Gaerloch Avenue on the eastern side of Dellview Street.
3. Prepares detailed plans and warrants for crossings to be submitted to Council’s traffic committee for review and approval by Council.
4. Investigates the footpath widening required to support the Street Walk route, as presented in the report.
5. Delegates authority to the Executive Manager, Infrastructure Services, to investigate alternative designs as part of the detailed design assessment.

**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    ELECTORATES OF COOGEE AND VAUCLUSE**

Nil

**MINUTES OF THE WAVERLEY TRAFFIC COMMITTEE  
MEETING HELD BY VIDEO CONFERENCE ON  
THURSDAY, 24 SEPTEMBER 2020**



**Voting Members Present:**

Cr P Masselos	Waverley Council – Chair
S/Cst A Birchansky	NSW Police – Eastern Suburbs Police Area Command – Traffic Services
Mr M Carruthers	Transport for NSW – Network and Safety Officer
Mr P Pearce	Representing Marjorie O’Neill, MP, Member for Coogee
Ms J Zin	Representing Gabrielle Upton, MP, Member for Vaucluse

**Also Present:**

Cr T Kay	Waverley Council – Alternate Chair
Mr D Joannides	Waverley Council – Executive Manager, Infrastructure Services
Mr C Hutcheson	Waverley Council – Service Manager, Traffic and Transport
Mr M Almuhanha	Waverley Council – Senior Traffic Engineer

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*At the commencement of proceedings at 10.02 am, those present were as listed above, with the exception of Ms J Zin, who arrived at 10.03 am.*

*At 11.38 am, Ms J Zin left the meeting and did not return.*

**Apologies**

Apologies were received and accepted from Mr B Gidiess (State Transit).

**Declarations of Pecuniary and Non-Pecuniary Interests**

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

1. Cr P Masselos declared a less than significant non-pecuniary interest in item TC/C.01/20.09 – 40 km/h Speed Limit Changes – Traffic Control Devices (Group 2), and informed the meeting that she lives in Murray Street.
2. Mr P Pearce declared a less than significant non-pecuniary interest in item TC/C.01/20.09 – 40 km/h Speed Limit Changes – Traffic Control Devices (Group 2), and informed the meeting that he lives in Murray Street.

**Adoption of Previous Minutes by Council - 27 August 2020**

The recommendations contained in Part 1 – Matters Proposing that Council Exercise its Delegated Functions – of the minutes of the Waverley Traffic Committee meeting held on 27 August 2020 were adopted by Council at its meeting on 15 September 2020 with the following change:

1. TC/V.07/20.08 – Curlewis Street Pop-up Cycleway Concept Plan.

Council adopted the recommendation of the Traffic Committee, subject to amendments to clauses 3 and 4 and the addition of a new clause 10, such that the recommendation now reads as follows:

That Council:

1. Approves the concept design for a temporary pop-up cycleway along Curlewis Street between Campbell Parade and Old South Head Road as documented in Attachment 1 (Curlewis Street Pop-up Cycleway for August TC), subject to detailed design.
2. Delegates authority to Executive Manager, Infrastructure Services, to modify the design following preparation of detailed plans by TfNSW with input from Council officers.
3. Notes that Transport for NSW:
  - (a) Notified residents and businesses along Curlewis Street of the proposed pop-up cycleway on Saturday, 5 September 2020, and intends to consider any community feedback when developing the detailed design.
  - (b) Intends to issue a follow up notification at least five days before construction works commence.
  - (c) Is estimating that construction will start in late October 2020.
4. Officers conduct broad community consultation from February 2021 on the pop-up cycleway and the possibility of the cycleway becoming permanent following the temporary pop-up scheme.
5. Requires that the detailed design process to be undertaken includes a road safety assessment for the following three options:
  - (a) A safe north-south crossing of Curlewis Street at the pedestrian crossing on the western side of Gould Street.
  - (b) A safe north-south crossing of Curlewis Street at the Glenayr Avenue signalised intersection.
  - (c) No crossing of Curlewis Street with the cycleway to run along the northern side of Curlewis Street between Gould Street and Campbell Parade.
6. Requires that the detailed design includes an examination of potential conflict between traffic westbound on Curlewis Street turning right into Old South Head Road and cyclists crossing Old South Head Road. The assessment is to consider the potential need to introduce a right-turn arrow for the turn from Curlewis Street within the signal design.
7. Requires that the 40 km/h speed limit on the eastern end of Curlewis Street is extended to Old South Head Road upon opening of the cycleway.

8. Officers complete a detailed review of cyclist transition to and from the cycleway at Campbell Parade.
9. Officers investigate the implications of the cycleway along Curlewis Street upon deliveries to and from commercial premises and loading/truck zones.
10. Receives a briefing report at the Strategic Planning and Development Committee meeting on 3 November 2020, or as appropriate, which includes any changes to the current concept design along Curlewis Street, and an updated timetable for construction and operation of both the Waverley and Woollahra components of the Beach to Bay pop-up cycleway.

## ITEMS BY EXCEPTION

The following items on the agenda were dealt with together and the Council Officer's Proposal for each item was unanimously supported by the Committee:

- TC/C.03/20.09 Arden Street, Waverley - Varna Street to Chesterfield Parade - 100% Detailed Design.
- TC/C.04/20.09 1 Scott Street, Bronte - 'P Disability Only' Zone.
- TC/C.05/20.09 100 St James Road, Bondi Junction - 'P Disability Only' Zone.
- TC/C.06/20.09 110-116 Bronte Road, Bondi Junction - Construction Zone.
- TC/V.01/20.09 30 Anglesea Street, Bondi - No Stopping Line.
- TC/V.03/20.09 98-102 Brighton Boulevard, North Bondi - Construction Zone.
- TC/V.04/20.09 9 Martins Avenue, Bondi - 'P Disability Only' Zone.

## PART 1 – MATTERS PROPOSING THAT COUNCIL EXERCISE ITS DELEGATED FUNCTIONS

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

### TC/C STATE ELECTORATE OF COOGEE

#### TC/C.01/20.09 40 km/h Speed Limit Changes - Traffic Control Devices (Group 2) (A18/0579)

*Cr P Masselos declared a less than significant non-pecuniary interest in this item and informed the meeting that she lives in Murray Street.*

*Mr P Pearce declared a less than significant non-pecuniary interest in this item and informed the meeting that he lives in Murray Street.*

### COUNCIL OFFICER'S PROPOSAL:

That Council:

1. Approves the designs of the 23 traffic control treatments attached to this report for construction at:
  - (a) Tamarama Marine Drive, Tamarama (at the rear of 23 Thompson Street) – 75 mm high speed hump.
  - (b) 67 Watson Street, Bondi – 75 mm high speed hump.
  - (c) 458 Bronte Road, Bronte – 100 mm high speed hump.
  - (d) 492 Bronte Road, Bronte – 100 mm high speed hump.
  - (e) 18 Brown Street, Bronte – 100 mm high speed hump.
  - (f) 62 Hewlett Street, Bronte – 75 mm high speed hump.
  - (g) 44 Victoria Street, Waverley – 100 mm high speed hump.
  - (h) Queens Park Road at Bourke Street, Queens Park – Pedestrian refuge.
  - (i) 47 York Road, Queens Park – 100 mm high speed hump.
  - (j) Dickson Street at Birrell Street, Bronte – Kerb build-out.
  - (k) Dickson Street at Read Street, Bronte – 100 mm speed hump and kerb build-out.
  - (l) 25 Murray Street, Bronte – 75 mm high speed hump.
  - (m) 37 Murray Street, Bronte – 75 mm high speed hump.
  - (n) Lugar Street at Brae Street, Bronte – Kerb build-out.
  - (o) 2 Birrell Street, Bondi Junction – Raised pedestrian crossing.
  - (p) 67 Birrell Street, Queens Park – Raised pedestrian crossing.
  - (q) Birrell Street at Henrietta Street, Waverley – Raised pedestrian crossing.
  - (r) Pacific Street at Bronte Road, Bronte – Splitter island.
  - (s) 93 Ocean Street, Bondi – 100 mm speed hump.
  - (t) Park Parade at Birrell Street, Bondi – Kerb build-outs.
  - (u) Evans Street at Brae Street, Bronte – 100 mm speed hump and kerb build-out.
  - (v) 13 Sandridge Street, Bondi – 75 mm speed hump.
  - (w) Bourke Street at Bourke Lane, Queens Park – 75 mm speed hump and kerb build-out.
2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.



*The Committee considered and voted on each traffic control treatment separately. Each WTC recommendation was unanimously supported except clauses 1(b) and 1(f), which were split votes, as indicated.*

**WTC RECOMMENDATION (UNANIMOUS SUPPORT):**

That the Council Officer's Proposal be adopted subject to amendments to clause 1 and the addition of a new clause 3, such that the recommendation now reads as follows:

That Council:

1. In relation to the 23 traffic control treatments attached to this report, takes the following action:

- (a) Tamarama Marine Drive, Tamarama (at the rear of 23 Thompson Street) – 75 mm high speed hump.

Does not install the traffic control treatment subject to bringing forward the installation of a raised pedestrian crossing that will connect upper Tamarama Park with the beach at a location deemed safe by Council officers.

- (b) 67 Watson Street, Bondi – 75 mm high speed hump.

**WTC RECOMMENDATION (SPLIT VOTE):**

Does not install the traffic control treatment.

*The NSW Police representative and the TfNSW representative voted against the recommendation.*

- (c) 458 Bronte Road, Bronte – 100 mm high speed hump.

Installs the traffic control treatment subject to relocating it to the western entrance of Bronte Park before the split in the road at approximately 399 Bronte Road and reducing its height to 75 mm.

- (d) 492 Bronte Road, Bronte – 100 mm high speed hump.

Installs the traffic control treatment subject to relocating it to 419 Bronte Road in front of the park entrance eastbound and reducing its height to 75 mm.

- (e) 18 Brown Street, Bronte – 100 mm high speed hump.

Does not install the traffic control treatment.

- (f) 62 Hewlett Street, Bronte – 75 mm high speed hump.

**WTC RECOMMENDATION (SPLIT VOTE):**

Does not install the traffic control treatment.

*The NSW Police representative and the TfNSW representative voted against the recommendation.*

- (g) 44 Victoria Street, Waverley – 100 mm high speed hump.

Does not install the traffic control treatment.

- (h) Queens Park Road at Bourke Street, Queens Park – Pedestrian refuge.

Installs the traffic control treatment.

- (i) 47 York Road, Queens Park – 100 mm high speed hump.

Installs the traffic control treatment subject to reducing its height to 75 mm.

- (j) Dickson Street at Birrell Street, Bronte – Kerb build-out.

Installs the traffic control treatment, including new line marking.

- (k) Dickson Street at Read Street, Bronte – 100 mm speed hump and kerb build-out.

Installs the kerb build-out but does not install the speed hump.

- (l) 25 Murray Street, Bronte – 75 mm high speed hump.

Defers this item to the October Traffic Committee meeting in order to investigate alternative treatments on Murray Street.

- (m) 37 Murray Street, Bronte – 75 mm high speed hump.

Defers this item to the October Traffic Committee meeting in order to investigate alternative treatments on Murray Street.

- (n) Lugar Street at Brae Street, Bronte – Kerb build-out.

Installs the traffic control treatment.

- (o) 2 Birrell Street, Bondi Junction – Raised pedestrian crossing (100 mm high).

Installs the traffic control treatment subject to reducing its height to 75 mm.

- (p) 67 Birrell Street, Queens Park – Raised pedestrian crossing (75 mm high).

Installs the traffic control treatment.

- (q) Birrell Street at Henrietta Street, Waverley – Raised pedestrian crossing (75 mm high).

Installs the traffic control treatment.

- (r) Pacific Street at Bronte Road, Bronte – Splitter island.

Installs the traffic control treatment.

- (s) 93 Ocean Street, Bondi – 100 mm speed hump.

Installs the traffic control treatment subject to reducing its height to 75 mm.

- (t) Park Parade at Birrell Street, Bondi – Kerb build-outs.

Installs the traffic control treatment.

- (u) Evans Street at Brae Street, Bronte – 100 mm speed hump and kerb build-out.

Installs the kerb build-out but does not install the speed hump.

- (v) 13 Sandridge Street, Bondi – 75 mm speed hump.

Installs the traffic control treatment.

- (w) Bourke Street at Bourke Lane, Queens Park – 75 mm speed hump and kerb build-out.

Defers this item to the October Traffic Committee meeting in order to reconsider the design, including the impact on bike lanes.

2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.
3. Investigates roadside barrier treatments of planting and/or fencing for all recommended speed humps, to be installed during construction, and delegates authority to the Executive Manager, Infrastructure Services, to undertake works where need is determined.

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

**TC/C.02/20.09                      Macpherson Street, Bronte - Temporary Road Closure to Dismantle Tower Crane (A19/0394)**

**COUNCIL OFFICER'S PROPOSAL:**

That:

1. Council approves the temporary full closure of Macpherson Street, Bronte, between Albion Street and Leichhardt Street, on Sunday, 31 January 2021, from 4.00 am to 11.00 pm, subject to the applicant:
  - (a) Obtaining approval from NSW Police.
  - (b) Notifying the State Transit Authority, NSW Ambulance Service and NSW Fire and Rescue.
  - (c) Notifying local residents and businesses prior to the event.
  - (d) Using Transport-for-NSW-accredited traffic controllers.
  - (e) Covering all costs associated with closing the road, including traffic control.
2. A Council officer be on-site for the duration of the works at the applicant's expense, and that this be communicated to the applicant.
3. Council delegates authority to the Executive Manager, Infrastructure Services, to approve any backup date and times, if required.

**WTC RECOMMENDATION (UNANIMOUS SUPPORT):**

That the Council Officer's Proposal be adopted subject to clause 1 being amended to read as follows:

'Council approves the temporary full closure of Macpherson Street, Bronte, between Albion Street and Leichhardt Street, on Sunday, 31 January 2021, from 6.00 am to 11.00 pm, subject to the applicant:

- (a) Obtaining approval from NSW Police.
- (b) Notifying the State Transit Authority, NSW Ambulance Service and NSW Fire and Rescue.
- (c) Notifying local residents and businesses prior to the event.
- (d) Using Transport-for-NSW-accredited traffic controllers.
- (e) Covering all costs associated with closing the road, including traffic control and Police user charges.'

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

**TC/C.03/20.09                      Arden Street, Waverley - Varna Street to Chesterfield Parade - 100% Detailed Design (SF18/779)**

**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Endorses the 100% detailed design for Arden Street between Varna Street and Chesterfield Parade, Waverley, attached to this report (Attachment 2).
2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the design should circumstances arise during the delivery of the project.

**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, TfNSW representative and Waverley Council representative (Chair).*

**TC/C.04/20.09                      1 Scott Street, Bronte - 'P Disability Only' Zone (A18/0719)**

**COUNCIL OFFICER'S PROPOSAL:**

That Council installs a 5.4 m 'P Disability Only' zone outside 1 Scott Street, Bronte.

**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, TfNSW representative and Waverley Council representative (Chair).*

**TC/C.05/20.09            100 St James Road, Bondi Junction - 'P Disability Only' Zone (A18/0719)**

**COUNCIL OFFICER'S PROPOSAL:**

That Council installs a 5.4 'P Disability Only' Zone outside 100 St James Road, Bondi Junction, centred at the property frontage.

**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, TfNSW representative and Waverley Council representative (Chair).*

**TC/C.06/20.09            110-116 Bronte Road, Bondi Junction - Construction Zone (A03/2514-04)**

**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Installs an 11.5 m 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles' construction zone along the frontage of 116 Bronte Road, Bondi Junction, on Porter Street.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust 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 Coogee, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).*

**TC/V            STATE ELECTORATE OF VAUCLUSE**

**TC/V.01/20.09            30 Anglesea Street, Bondi - No Stopping Line (A14/0145)**

**COUNCIL OFFICER'S PROPOSAL:**

That Council installs a 1.5 m unbroken yellow (C3) No Stopping line between 30 Anglesea Street and 32 Anglesea Street, Bondi.

**WTC RECOMMENDATION (UNANIMOUS SUPPORT):**

That the Council Officer's Proposal be adopted.

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

**TC/V.02/20.09                    21 Curlewis Street, Bondi Beach - Construction Zone (A03/2514-04)**

**COUNCIL OFFICER'S PROPOSAL:**

That:

1. Council installs a 9 m 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles' construction zone at 21 Curlewis Street, Bondi Beach.
2. The construction zone be 7 m at the frontage of 21 Curlewis Street, 1 m in front of 19 Curlewis Street and 1 m in front of 23 Curlewis Street.
3. Council delegates authority to the Executive Manager, Infrastructure Services, to adjust 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 Vacluse, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).*

*D Craddock (on behalf of Wiseberry Enmore), K Pitharoulis and P Coroneos addressed the meeting.*

**TC/V.03/20.09                    98-102 Brighton Boulevard, North Bondi - Construction Zone (A03/2514-04)**

**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Installs a 16 m 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles' construction zone along the frontage of 98–102 Brighton Boulevard, North Bondi.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust 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 Vacluse, NSW Police representative, TfNSW representative and Waverley Council representative (Chair).*

**TC/V.04/20.09            9 Martins Avenue, Bondi - 'P Disability Only' Zone (A18/0719)****COUNCIL OFFICER'S PROPOSAL:**

That Council installs a 5.4 m 'P Disability Only' zone on the southern side of Martins Avenue adjacent to 2 Ocean Street, Bondi.

**WTC RECOMMENDATION (UNANIMOUS SUPPORT):**

That the Council Officer's Proposal be adopted.

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

**TC/CV            ELECTORATES OF COOGEE AND VAUCLUSE**

Nil.

**THE MEETING CLOSED AT 12.17 PM.**

.....  
**SIGNED AND CONFIRMED**  
**MAYOR**  
**20 OCTOBER 2020**

**REPORT**  
**TC/C.01/20.10**

**Subject:** Bronte Road, Bondi Junction - Pick-Up/Drop-Off (PUDO) Bay Changes

**TRIM No:** A20/0336

**Author:** Leo Huertas-Prieto, Project Manager, Strategic Transport  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authoriser:** Dan Joannides, Executive Manager, Infrastructure Services

---

**COUNCIL OFFICER'S PROPOSAL:**

That Council approves a change of length from 21.0 metres to 9.0 metres for the approved pick-up/drop-off bay on the western side of Bronte Road between Ebley Street and Spring Street until such time that the approved 21.0 metres pick-up/drop-off bay can be installed.

**1. Executive Summary**

The installation of 10 drop-off/pick-up (PUDO) bays in Bondi Junction and Bondi Beach was approved at the 17 March 2020 Council meeting. Nine of these bays have now been installed. Installation of the 10th bay in Bronte Road has been deferred until completion of the Bondi Junction cycleway works along Bronte Road are completed.

The approved PUDO bay in Bronte Road is 12.0 metres long. A 9.0 metre PUDO bay is proposed until the cycleway works are completed. The 9.0 metre PUDO bay does not conflict with the cycleway works.

The Bronte Road PUDO bay location is ideal for drivers (UBER, OLA, taxis, parents, friends) to pick up and drop off their passengers. Drivers will find it more convenient to drop off and pick up their passengers without the risk of being fined for illegal parking.

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

**2. Introduction/Background**

The Smart Cities Transport and Parking Initiative (SCTPI) is a signature project within Waverley's People Movement and Places. It received support from Council at the December 2019 Strategic Planning and Development Committee Meeting. The purpose of the project is to integrate the operation of shared transportation providers into the management of our public domain thereby improving safety and convenience for our community. The project includes the allocation of specific areas as pick-up / drop-off bays that are intended to operate as high turnover short stay zones to enable kiss and ride, taxis and ride share.

Six PUDO bays have been installed at the Bondi Beach area. Three PUDO bays have been installed at the Bondi Junction area, and one still needs to be installed. The PUDO bays are operating for a trial period of twelve months from July 2020 to July 2021.



The PUDO bay that has not been installed is located on the western side of Bronte Road between Ebley Street and Spring Street (location 8 in Figure 1).

The construction of the Bondi Junction cycleway prevents the installation of the Bronte Road PUDO bay to its full length (21 metres) until around June 2021. A 9 metre PUDO bay can be installed at the same location without affecting the cycleway works (within the southern section of the 21 metre approved bay).

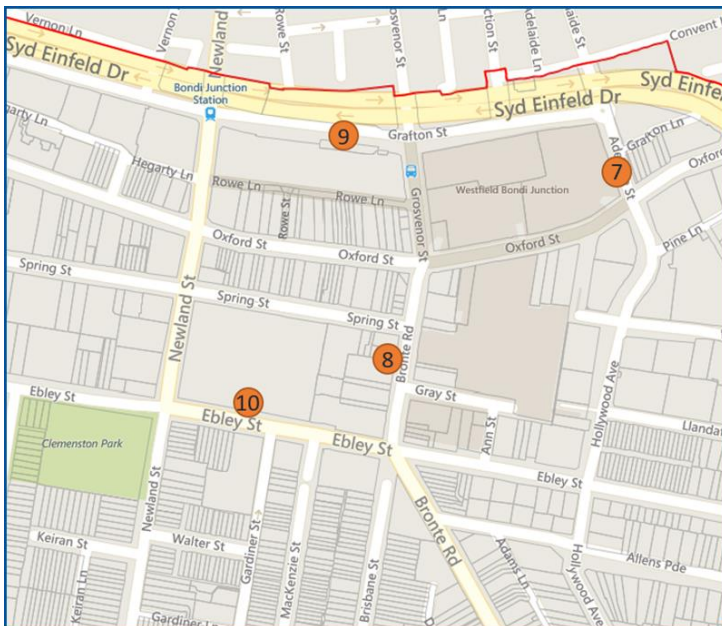


Figure 1. Location of PUDO bays on Bondi Junction (Bronte Road PUDO at location 8).

### 3. Technical Analysis

The PUDO bay was approved as a 21 metre space (Figure 2). There is enough space for installation at a length of 9.0 metres using the existing no parking zone in front of the East Leagues Club at the same location (Figure 3).



Figure 2. 21 metre PUDO bay approved on February 2020.



Figure 3. Proposed 9 metre PUDO bay to be operational until cycleway works are complete.

The PUDO project runs in collaboration with transport providers who are integrating the bay locations on their apps (Figure 4). The Bronte Road bay is one of the most important and central ones as previous research indicates it is the busiest spot in the LGA. As the trial advances, transport providers are integrating the bays and the named bay is critical for the trial's success as it will make walking easier for all patrons willing to be picked-up or dropped-off safely.

As depicted on the images below, transport providers have already started to create points of reference for users to be picked-up or dropped-off at these locations. Installation of the Bronte Road PUDO bay will make access to ride share facilities more efficient.

The Bronte Road PUDO bay location is also ideal for other drivers (taxis, parents, friends) to pick up and drop off their passengers. Drivers will find it more convenient to drop off and pick up their passengers at the same location without the risk of being fined for illegal parking.

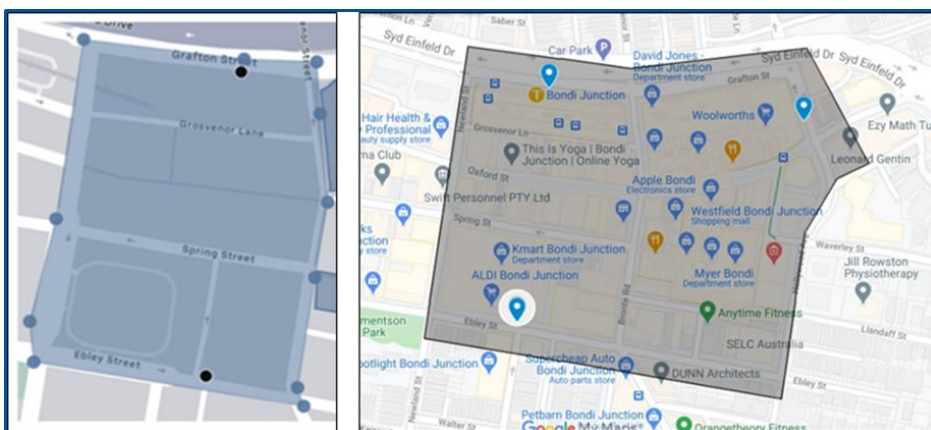


Figure 4. Uber and Ola cabs polygon areas where people in that area will be redirected to a PUDO bay.

#### 4. Financial Information for Council's Consideration

Council will fund the cost of installation from existing budgets.

**5. Attachments**

Nil.

## REPORT



**Subject:** 7 Salisbury Street, Waverley - Temporary Road Closure for Crane Lifts

**TRIM No.:** A19/0394

**Author:** Hamoon Bahari, Professional Engineer, Traffic and Transport  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authorisor:** Dan Joannides, Executive Manager, Infrastructure Services

---

### COUNCIL OFFICER'S PROPOSAL:

That Council:

1. Approves the temporary closure of Salisbury Street, Waverley, between Carrington Road and Campbell Street on Tuesday, 8 December 2020, between 7.00 am and 11.00 pm in accordance with the Construction Traffic and Plan of Management attached to the report, subject to:
  - (a) A Council officer being present on-site for the duration of the works as the expense of the applicant.
  - (b) The applicant:
    - (i) Obtaining approval from NSW Police.
    - (ii) Notifying the State Transit Authority, NSW Ambulance Service and NSW Fire and Rescue.
    - (iii) Notifying local residents and Waverley College prior to the event.
    - (iv) Using Transport for NSW accredited traffic controllers.
    - (v) Covering all costs associated with closing the road, including traffic control.
2. Officers notify the applicant of the conditions outlined in clause 1.
3. Delegates authority to the Executive Manager, Infrastructure Services, to approve any alternative date and times, if required.

### 1. Executive Summary

Council has received an application from Modulum Homes requesting the temporary closure of Salisbury Street, between Carrington Road and Campbell Street, in order to install a mobile crane for the installation of a modular home at 7 Salisbury Street (see Figure 1).

Council officers recommend the road closure is approved for the section of Salisbury Street shown in Figure 2.



Council will need to exercise its delegated functions to implement the temporary closure.

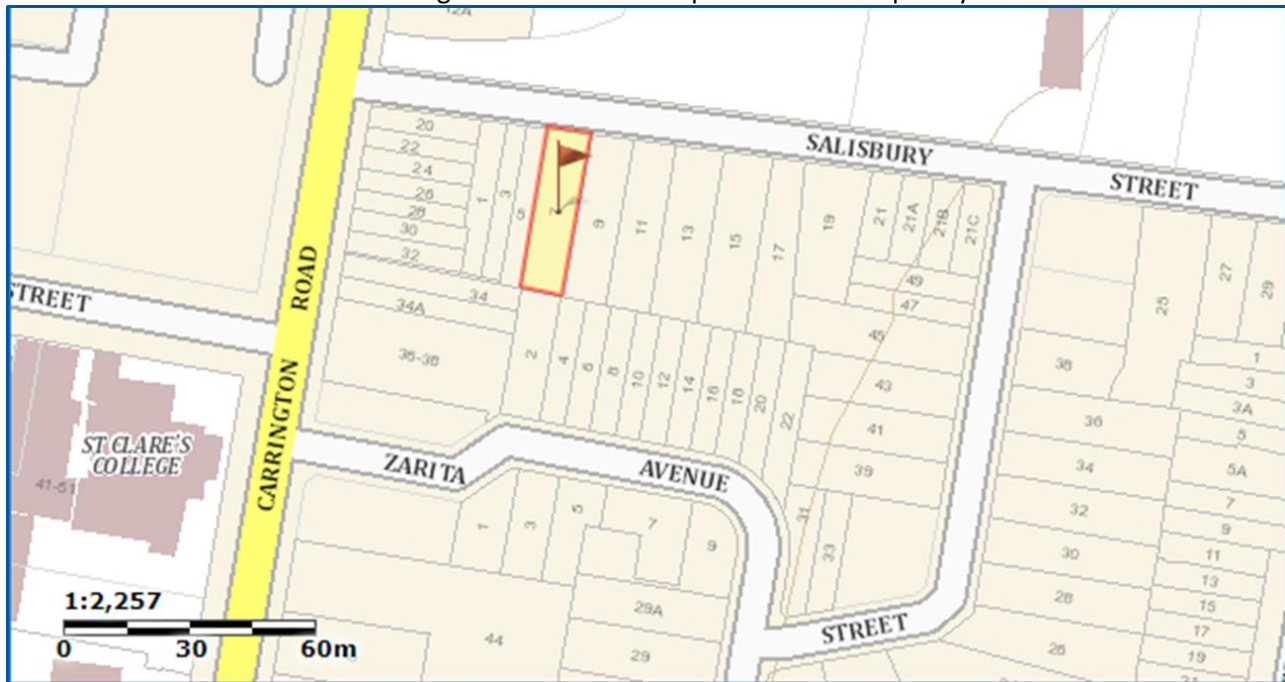


Figure 1. Site location.

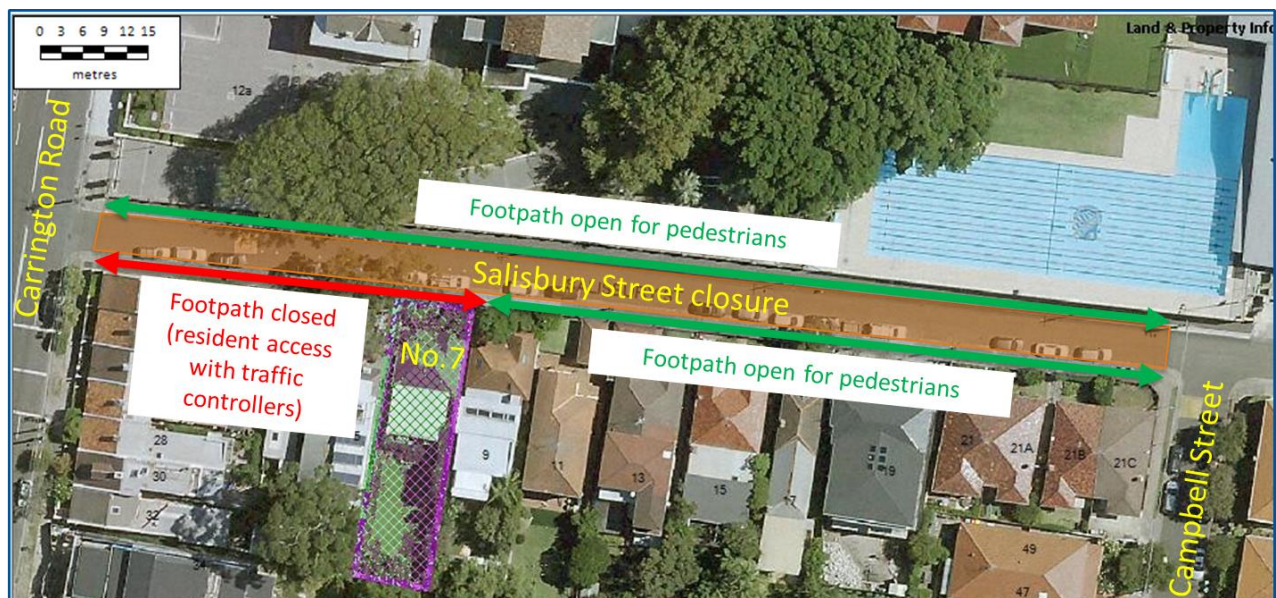


Figure 2. Extent of road closure.

## 2. Introduction/Background

A 110 tonne mobile crane is to be installed adjacent to the construction site at 7 Salisbury Street, Waverley.

The road closure is proposed to be between 7.00 am and 11.00 pm on Tuesday, 8 December 2020. The applicant has programmed the work to be completed by around 5.00 pm. The 11.00 pm finish time is to allow for contingencies that could possibly delay the installation on the day.

A latter date may be required should circumstances warrant (e.g. adverse weather, materials not available in time). This latter date would be subject to approval by Executive Manager, Infrastructure Services.

Waverley College (opposite of the site on Salisbury Street) have been consulted by the applicant. The school has not objected to the work as long as enough notice is given by the developer. Notification will be required to properties in close proximity to the works. The notification area is shown in Figure 3.

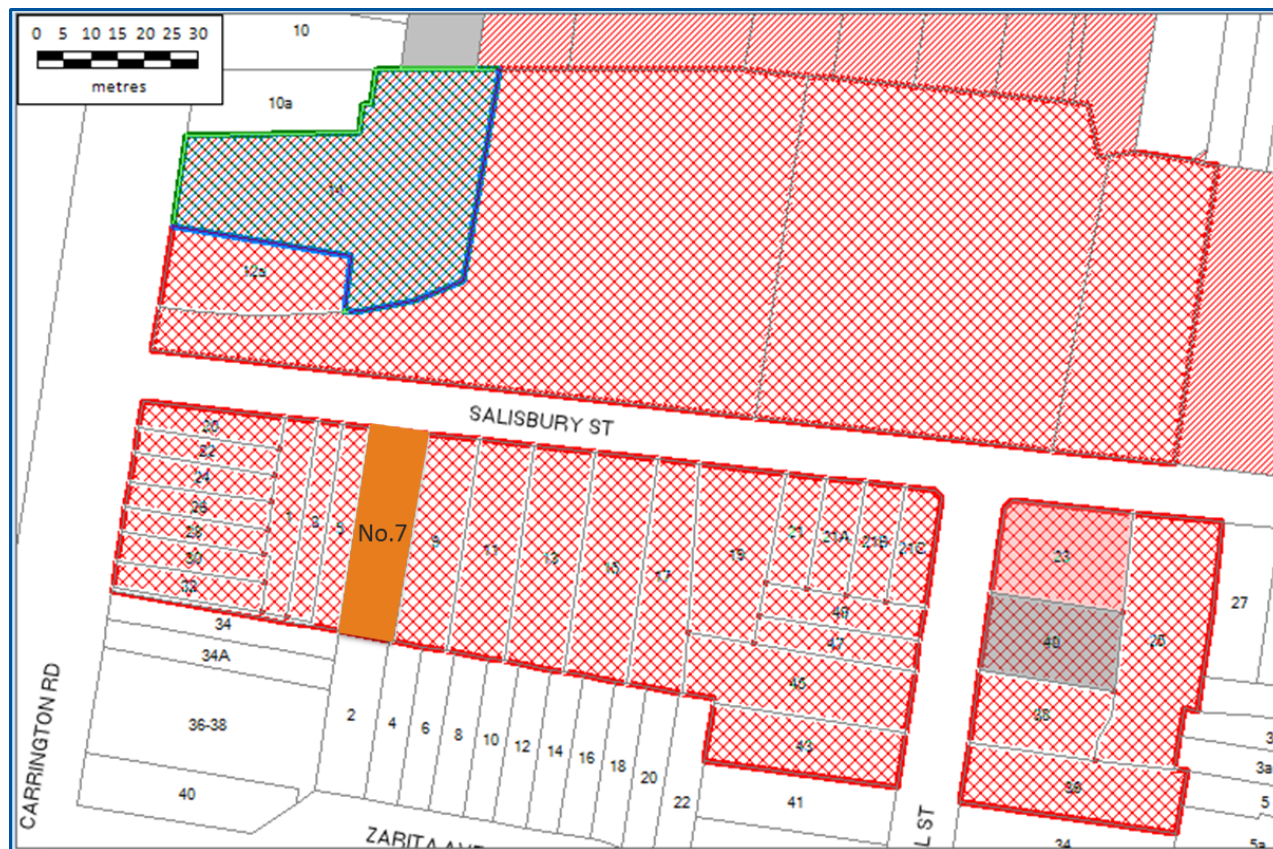


Figure 3. Affected properties to be notified.

The inbound route will be via Zarita Avenue, and Campbell Street to Salisbury Street. The trucks will then reverse west along Salisbury Street to the crane where they will be unloaded. The trucks will exit in a forward direction via Salisbury Street, Wiley Street and Victoria Street.

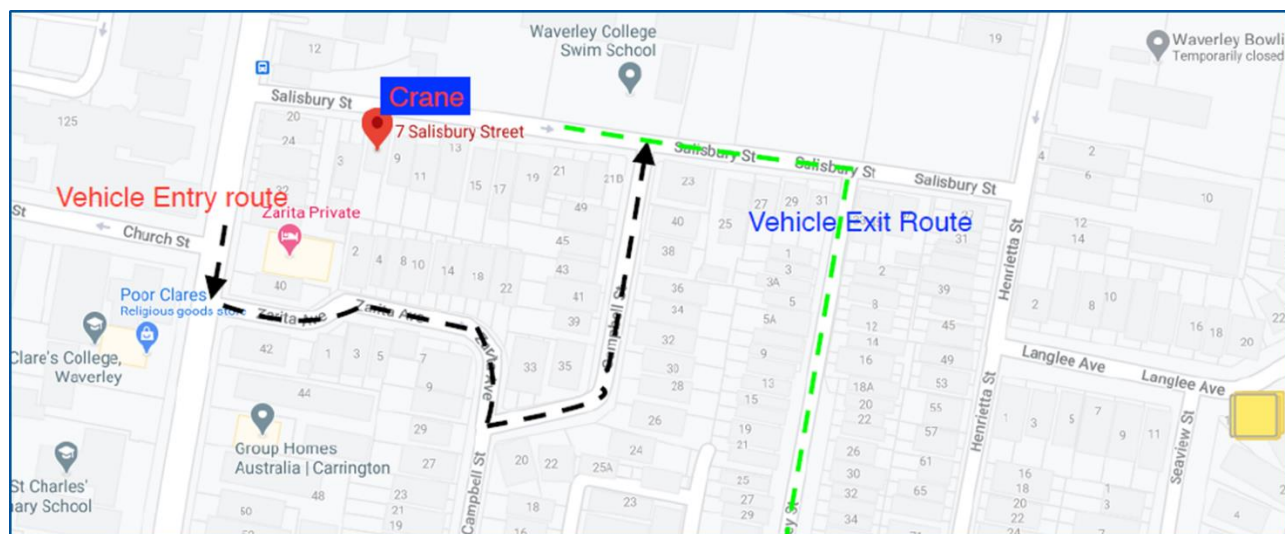


Figure 4. Vehicle entry and exit route diagram.



**3. Technical Analysis**

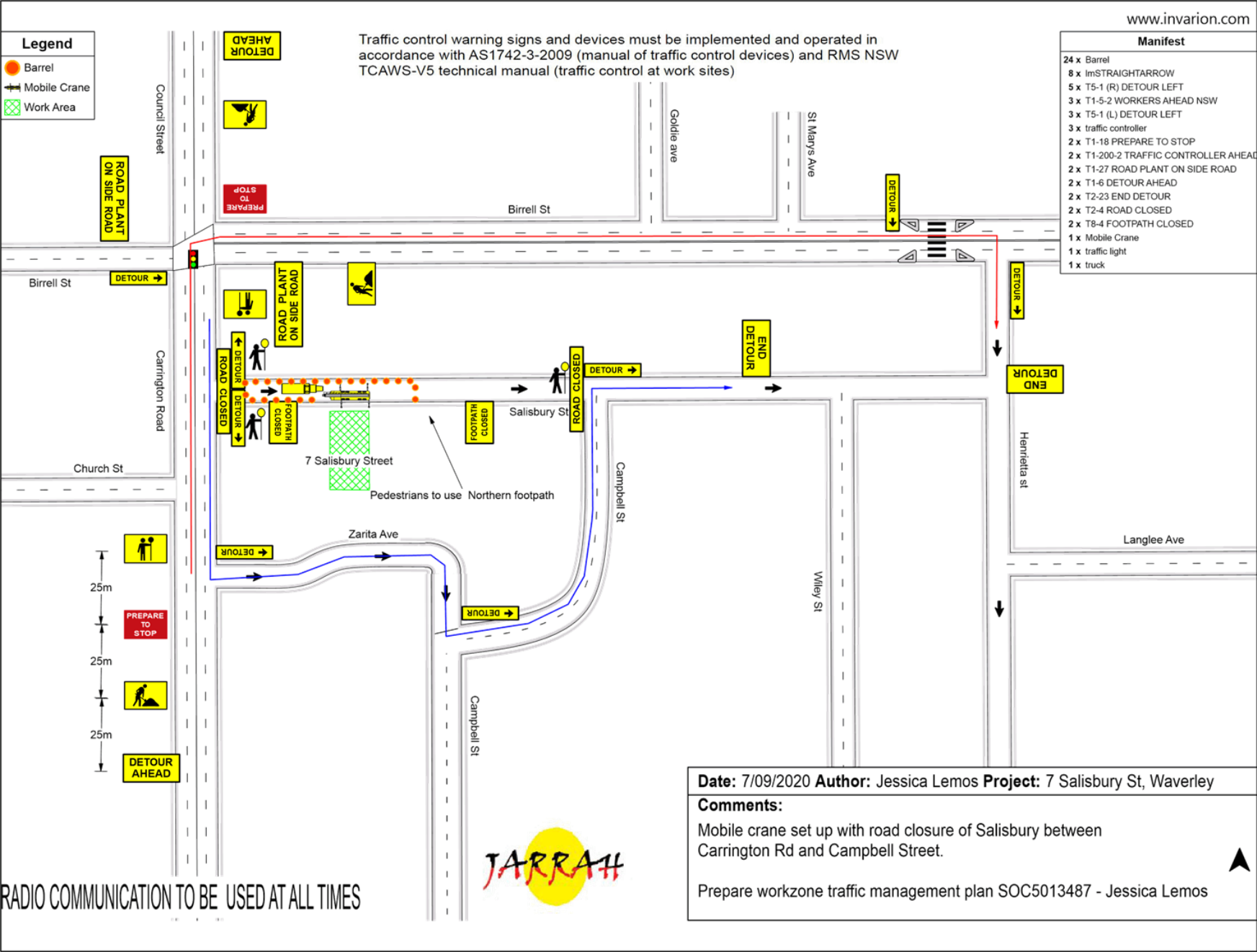
The traffic control plan and traffic management plan, crane lift study and resident notification letter for use during the road closure are attached to this report (Attachments 1, 2, 3, 4). They have been determined in consultation with Council.

**4. Financial Information for Council's Consideration**

The applicant will be required to meet the cost of all traffic control, rubbish removal and damage restoration associated with the road closure.

**5. Attachments:**

1. Traffic Control Plan [↓](#)
2. Traffic Management Plan [↓](#)
3. Crane Lift Study [↓](#)
4. Resident Notification Letter [↓](#)







4B Borthwick Ave, Murrarie, QLD, 4712

## **Proposed Residential Development**

7 Salisbury Street, Waverley

### **Construction Vehicle and Pedestrian Plan of Management**

REV A

October 2020

Mobile: 0402 218 783

Email: [John@modulum.com.au](mailto:John@modulum.com.au)

Email : [Admin@modulum.com.au](mailto:Admin@modulum.com.au)

ACN 614 398 202 | ABN 17 614 398 202

0



4B Borthwick Ave, Murrarie, QLD, 4712

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Construction Vehicles

Truck movements

Construction Hours

Crane and Materials Handling

Site Induction

Traffic control Plans

Pedestrian Management /Hoardings

## **5.0 Crane Works**

Crane Lifting Plan

Risk Assessment

## **Attachments**

**Architectural Plans**

**Transport Services**

**Traffic Control Plan**

**Crane /Lift Study**

**Resident Notification**

Mobile: 0402 218 783

Email: [John@modulum.com.au](mailto:John@modulum.com.au)

Email : [Admin@modulum.com.au](mailto:Admin@modulum.com.au)

ACN 614 398 202 | ABN 17 614 398 202



4B Borthwick Ave, Murrarie, QLD, 4712

## 1.0 Introduction

Modulums Client is in the process of constructing a modular dwelling for installation at 7, Salisbury St, Waverley, Sydney, NSW, 2040.

This document forms the Management Plan for Installation, and has been prepared to inform Council the building process involved in the new dwellings transport and install with its impacts on surroundings and at the site.

## 2.0 Proposed Development

Site 7, Salisbury St, Waverley, Lot 7 DP 1094608, is a two storey CDC addition to an existing residential dwelling, bounded on three sides by adjoining residential dwellings and Salisbury St to the North.

Development The proposed addition consists of one living room, laundry, stairs, master bedroom, study and ensuite. Architectural Plans are provided.

Construction Programme/Process Install Date to be a Tuesday/Wednesday exact Date TBC late November. Pre Install works will be carried out prior to the commencement of Installation date, will be approx 2 weeks, of Demolition and groundworks. Installing 8 Pods into position will take place on a single day. Post Install works will take approximately 4 weeks, and consist of final fit off and connection of services.

## 3.0 Traffic Conditions

Observations of traffic activity have been reviewed on a typical mid week morning to ascertain flow and observed free flowing traffic on Carrington rd. Salisbury Rd being a one way street, minimal flow will be affected by the Construction works carried out by Modulum, traffic control will be stationed at the entrance to Salisbury st, with Detours in place.

No bus routes or Public transport will be affected by the closures.

See Attached Traffic Management Plan by Jarrah Traffic Control.

## 4.0 Proposed Construction Traffic Management Plan

Construction Vehicles for Pre Install and Post Install will be minimal, and access site normally as required.

The Crane Itself will Arrive Via Carrington Rd, onto Salisbury St.

Truck movements for the Crane lift day will **not** be on Articulated Trailer, as Modulums process is smaller and more accessible Modules/Pods, they are all 2440\*6060\*3000, a standard container size. This enables us to utilise a flatbed / Crane truck and no special access requirements are necessary.

Crane Trucks, these 8 individual flatbed / crane trucks will arrive via Zarita Ave and Campbell Street during the course of the morning, beginning at 7:30am and finishing at 11:00am. They will be unloaded as they arrive, if there is any backlog, they will park on the closed section of Salisbury St itself.

Traffic control will follow the points below.

Mobile: 0402 218 783

Email: [John@modulum.com.au](mailto:John@modulum.com.au)

Email : [Admin@modulum.com.au](mailto:Admin@modulum.com.au)

ACN 614 398 202 | ABN 17 614 398 202

2



4B Borthwick Ave, Murrarie, QLD, 4712

See also the attached Traffic Management Plan.

- Road closure, Salisbury St (One Way St ) between Carrington Rd and Campbell St.
- Standard detours in place to move around via Victoria St and Birrell St Onto Henrietta St.
- Local pedestrian access maintained for residents on both ends of the Salisbury closed section.
- All truck entry and exit will be maintained by traffic management onsite staff.
- RMS approval needed for the intersection of Salisbury and Carrington.
- Traffic approaching Salisbury from Campbell St wont be affected as normal route is turned right into one way Salisbury.

Construction hours on site will be as the Timetable below.

### **Crane Lift Timetable.**

- 7 and 2 days Prior - Letter drop
- Day Prior Vehicles moved and hoarding/barriers/signs in place.
- Crane Day, Traffic control arrangements 6am.
- Road Closed and Crane on site 7am.
- 8 pods arrive 7:30-11:00am.
- Crane setup 7-9am
- Crane Lift 9am - 3pm.
- Crane Pack up
- Road Reopens 5PM.

Site Inductions take place as regulations on site during the day. Traffic Control Plan attached also assigns the management of pedestrians, through signage , bollards and Traffic Controllers.

## **5.0 Crane Works**

Modulums Crane Contractor Melrose Cranes has provided a Crane survey and Study attached. Melrose will be using a 110T Crane as the details in the Study , with a Crane truck to assist in set up. Relevant Permits will be applied for once the Crane date is set and approvals obtained. Site inspections and assessments have been carried out by Melrose Cranes, Modulum, and Jarrah Traffic Management.

Mobile: 0402 218 783

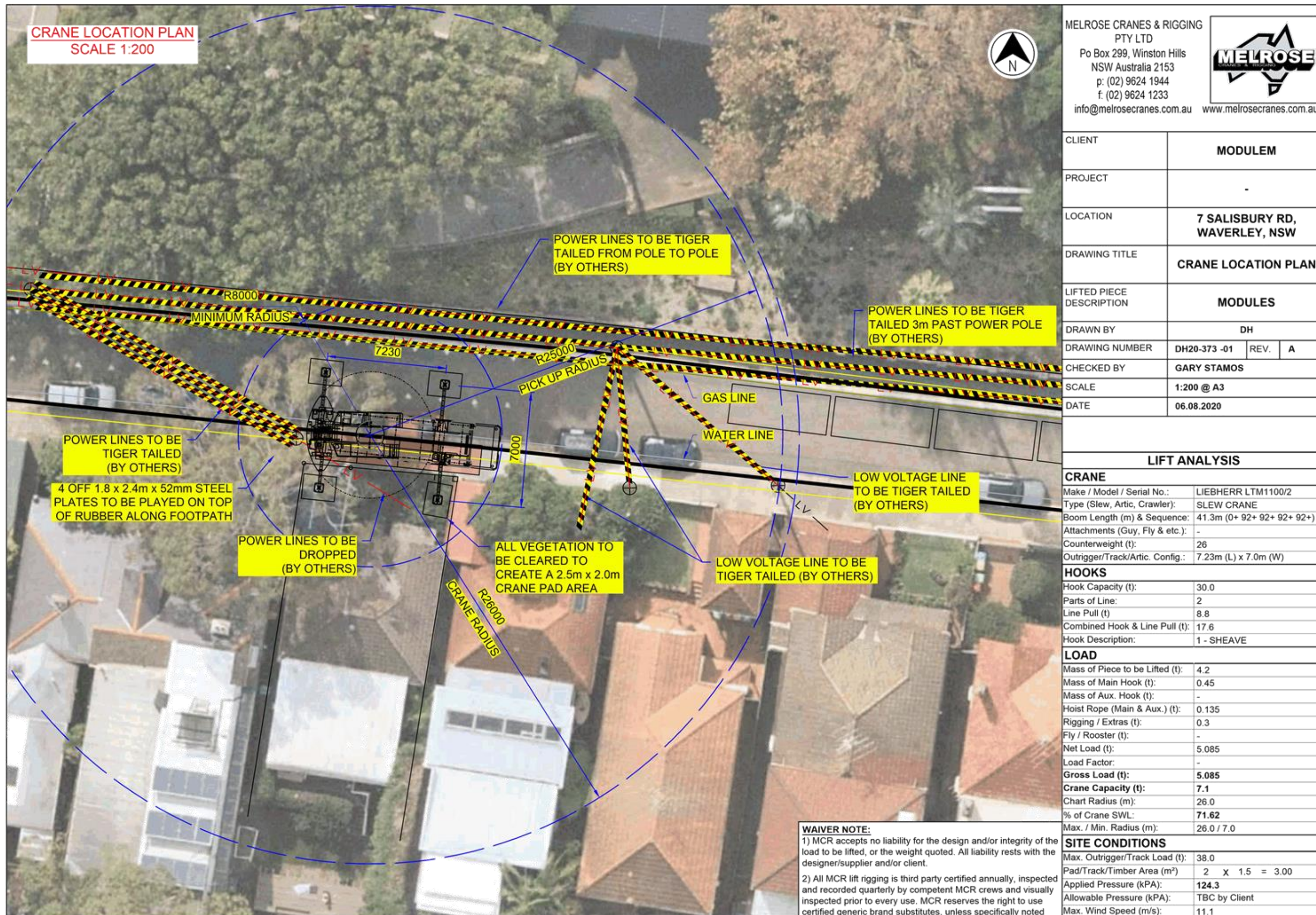
Email: [John@modulum.com.au](mailto:John@modulum.com.au)

Email : [Admin@modulum.com.au](mailto:Admin@modulum.com.au)

ACN 614 398 202 | ABN 17 614 398 202

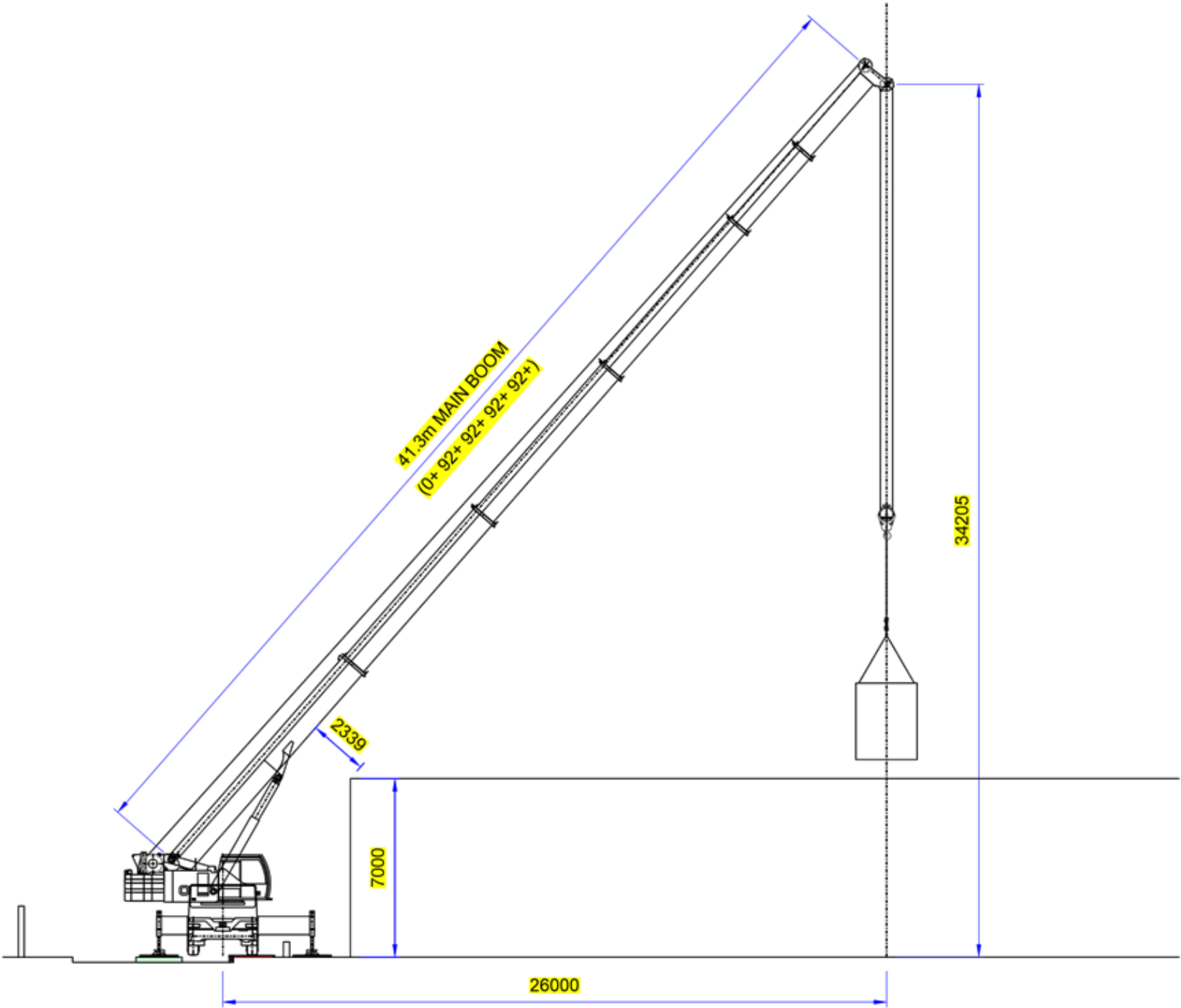
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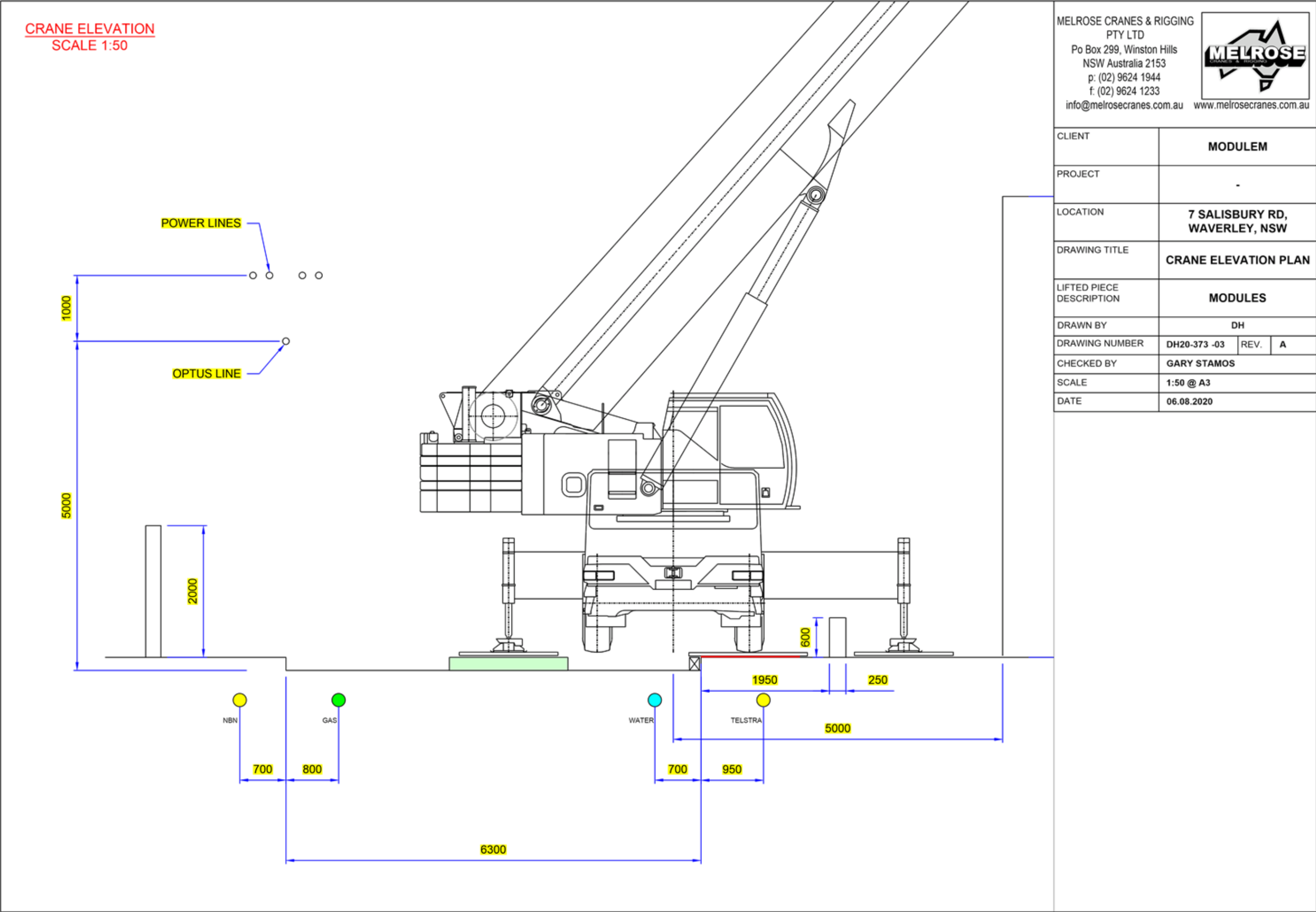
CRANE ELEVATION  
SCALE 1:200

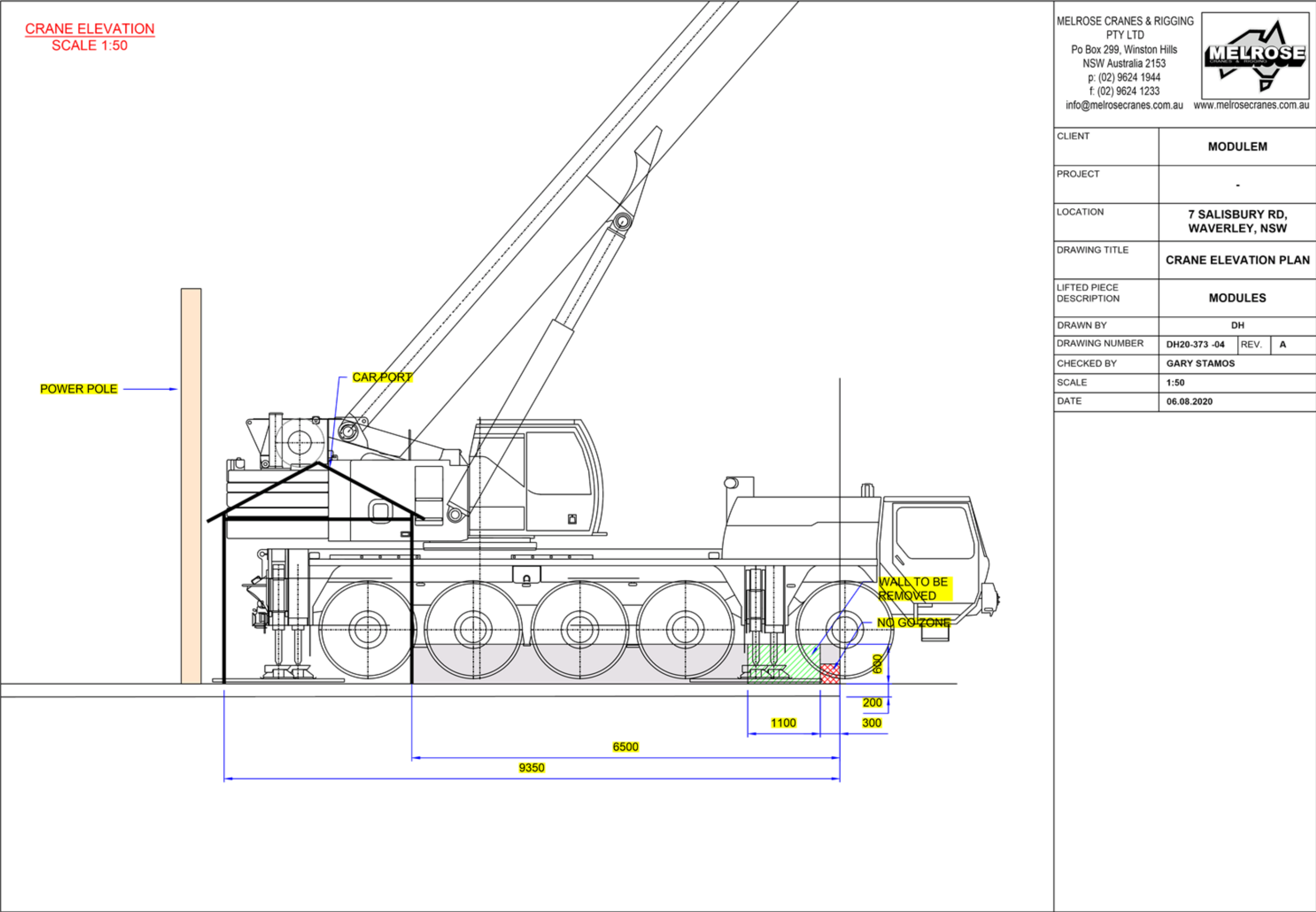


MELROSE CRANES & RIGGING  
PTY LTD  
Po Box 299, Winston Hills  
NSW Australia 2153  
p: (02) 9624 1944  
f: (02) 9624 1233  
info@melrosecranes.com.au www.melrosecranes.com.au

CLIENT	MODULEM		
PROJECT	-		
LOCATION	7 SALISBURY RD, WAVERLEY, NSW		
DRAWING TITLE	CRANE ELEVATION PLAN		
LIFTED PIECE DESCRIPTION	MODULES		
DRAWN BY	DH		
DRAWING NUMBER	DH20-373 -02	REV.	A
CHECKED BY	GARY STAMOS		
SCALE	1:200 @ A3		
DATE	06.08.2020		

LIFT ANALYSIS	
CRANE	
Make / Model / Serial No.:	LIEBHERR LTM1100/2
Type (Slew, Artic, Crawler):	SLEW CRANE
Boom Length (m) & Sequence:	41.3m (0+ 92+ 92+ 92+ 92+)
Attachments (Guy, Fly & etc.):	-
Counterweight (t):	26
Outrigger/Track/Artic. Config.:	7.23m (L) x 7.0m (W)
HOOKS	
Hook Capacity (t):	30.0
Parts of Line:	2
Line Pull (t)	8.8
Combined Hook & Line Pull (t):	17.6
Hook Description:	1 - SHEAVE
LOAD	
Mass of Piece to be Lifted (t):	4.2
Mass of Main Hook (t):	0.45
Mass of Aux. Hook (t):	-
Hoist Rope (Main & Aux.) (t):	0.135
Rigging / Extras (t):	0.3
Fly / Rooster (t):	-
Net Load (t):	5.085
Load Factor:	-
Gross Load (t):	5.085
Crane Capacity (t):	7.1
Chart Radius (m):	26.0
% of Crane SWL:	71.62
Max. / Min. Radius (m):	26.0 / 7.0
SITE CONDITIONS	
Max. Outrigger/Track Load (t):	38.0
Pad/Track/Timber Area (m²)	2 x 1.5 = 3.00
Applied Pressure (kPA):	124.3
Allowable Pressure (kPA):	TBC by Client
Max. Wind Speed (m/s):	11.1







RIGGING DIAGRAM  
SCALE 1:50

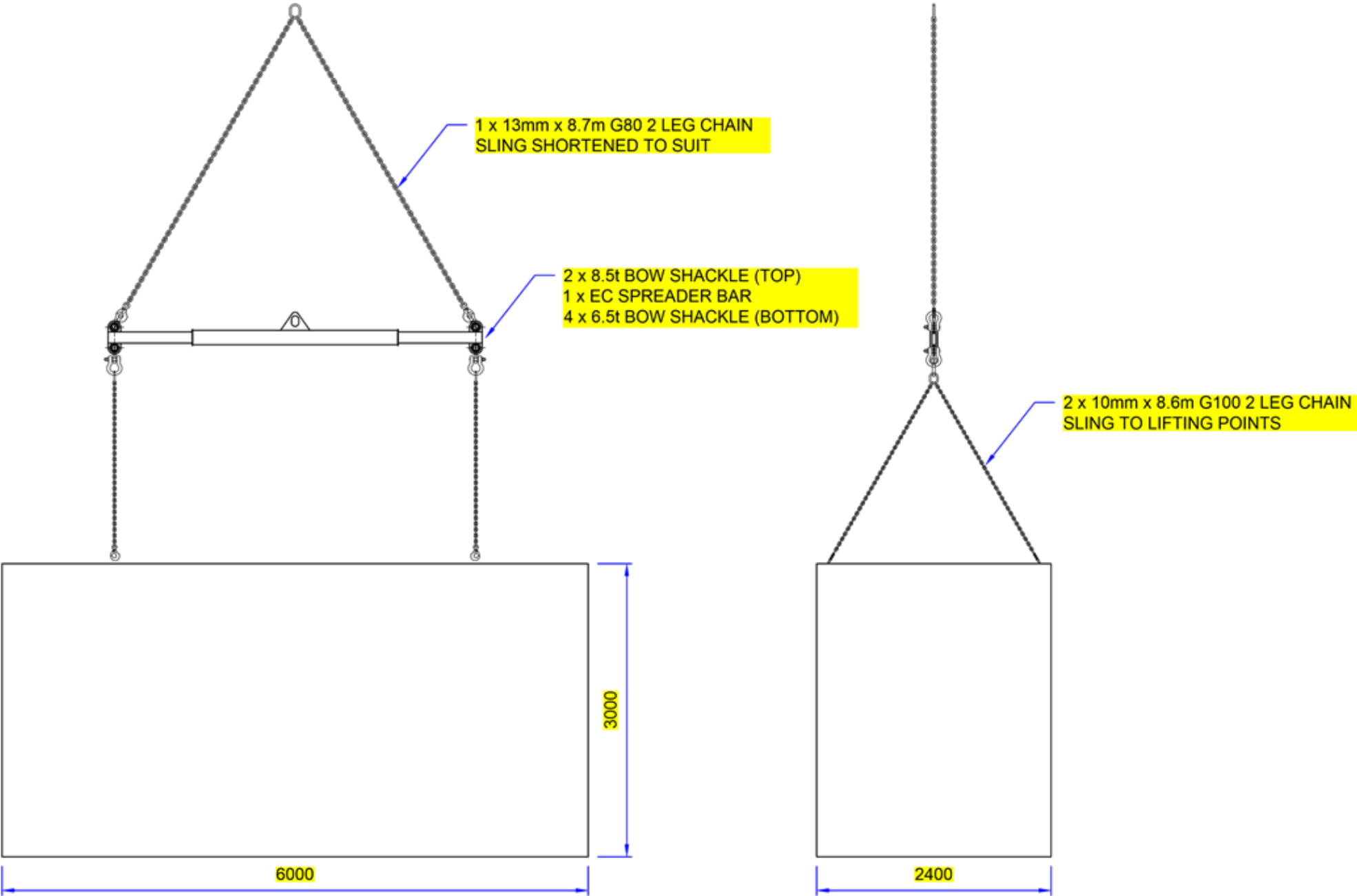
No.	Type	Length (m)	Quantity	Wt./each(kg)	Weight(kg)
1	13mm G80 2 LEG CHAIN SLING	8.7	1	72.2	72.2
2	8.5t BOW SHACKLE	-	2	2.3	4.6
3	EC SPREADER BAR	-	1	100	100
4	6.5t BOW SHACKLE	-	4	1.6	6.4
5	10mm G100 2 LEG CHAIN SLING	8.6	2	55	110

TOTAL RIGGING WEIGHT: 293.2 kg

MELROSE CRANES & RIGGING  
PTY LTD  
Po Box 299, Winston Hills  
NSW Australia 2153  
p: (02) 9624 1944  
f: (02) 9624 1233  
info@melrosecranes.com.au

  
www.melrosecranes.com.au

CLIENT	MODULEM		
PROJECT	-		
LOCATION	7 SALISBURY RD, WAVERLEY, NSW		
DRAWING TITLE	CRANE ELEVATION PLAN		
LIFTED PIECE DESCRIPTION	MODULES		
DRAWN BY	DH		
DRAWING NUMBER	DH20-373 -05	REV.	A
CHECKED BY	GARY STAMOS		
SCALE	1:50		
DATE	06.08.2020		

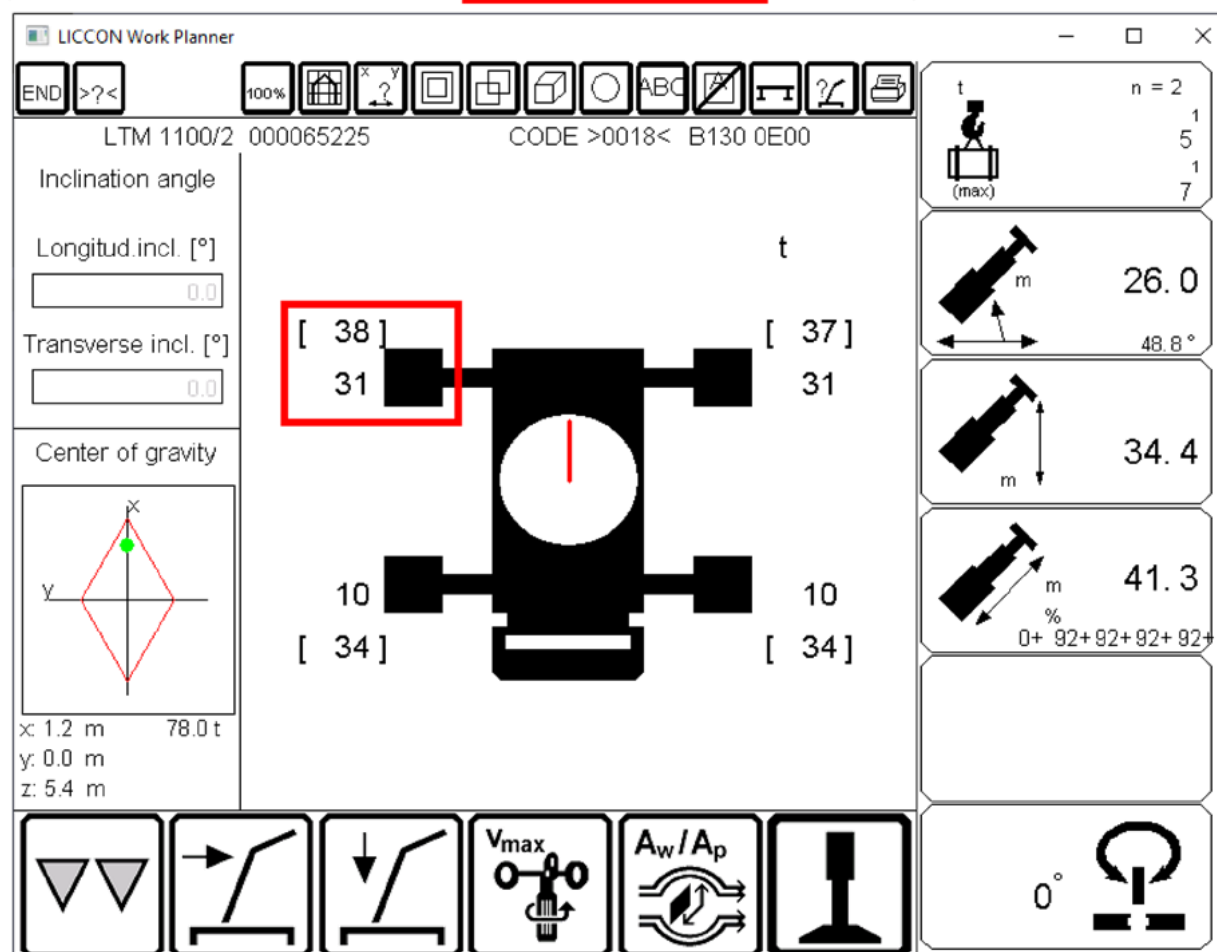
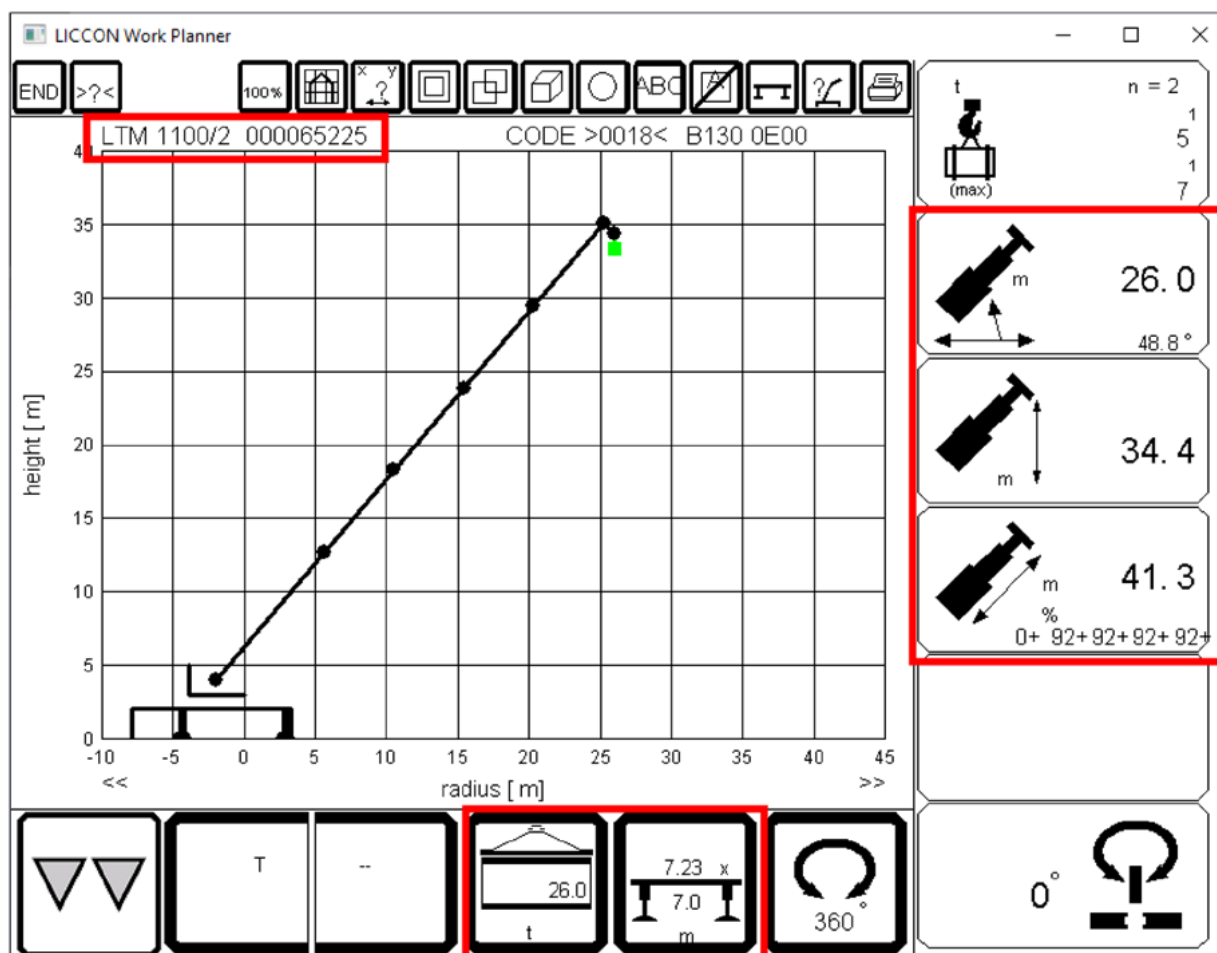


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MODULUM Pty Ltd.  
1B/49 Borthwick Ave,  
Murarrie, QLD, 4712

10/10/2020.

## **Residents Notification Proposed Residential Development**

7 Salisbury Street, Waverley

Modulum is in the process of constructing a modular dwelling for installation at 7, Salisbury St, Waverley, Sydney, NSW, 2040. It will involve a Crane Lift and Road Closure of Part of Salisbury St for one day being December the 8th 2020, to lift singular Modules into the rear of the property to construct a dwelling extension.

The Traffic Management Plan attached, gives the location of the Crane outside 7, Salisbury St, with ancillary vehicles taking up much of the closed area of the Rd at some stage during the day, see the attached timetable below. Pedestrian access will be maintained, with Traffic Controllers assisting.

### **Crane Lift Timetable.**

- 7 and 2 days Prior - Letter drop
- Day Prior Vehicles moved and hoarding/barriers/signs in place.
- Crane Day, Traffic control arrangements 6am.
- Road Closed and Crane on site 7am.
- 8 pods arrive 7:30-11:00am.
- Crane setup 7-9am
- Crane Lift 9am - 3PM.
- Crane Pack up
- Road Reopens 5PM.

Any questions and other Information can be gained from the following Contacts.

**Modulum Pty Ltd , Main Contractor - Contact John Stephens 0402218783**

**Jarrah Traffic Management - Traffic Control - Contact .....TBC**

**Waverley Council - Contact Hamoon Bahari 0423 693164**

**REPORT**  
**TC/C.03/20.10**

**Subject:** 17-19 Henry Street, Queens Park - 'P Motor Bikes Only' Parking

**TRIM No:** A14/0145

**Author:** Paul Cai, Traffic Engineer  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authoriser:** Dan Joannides, Executive Manager, Infrastructure Services

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**COUNCIL OFFICER'S PROPOSAL:**

That Council installs a 'P Motor Bikes Only' zone between the driveways of 17 and 19 Henry Street, Queens Park.

**1. Executive Summary**

Council has received a request from residents at 17 and 19 Henry Street, Queens Park for consideration to be given to installing a 'P Motor Bikes Only' parking zone between the driveways to the two properties (see Figure 1). Currently, there are no parking restrictions between these driveways.

The request arises because of cars being parked between the two driveways and overhanging into one or the other. The request aims to stop this practice.

The distance between the driveways is less than 4.2 metres. 4.2 metres has been adopted as the maximum distance between driveway splays before motor bike parking is considered. This caters for the average small car.

Installation of a motor bike parking zone as shown in Figure 2 is recommended.

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



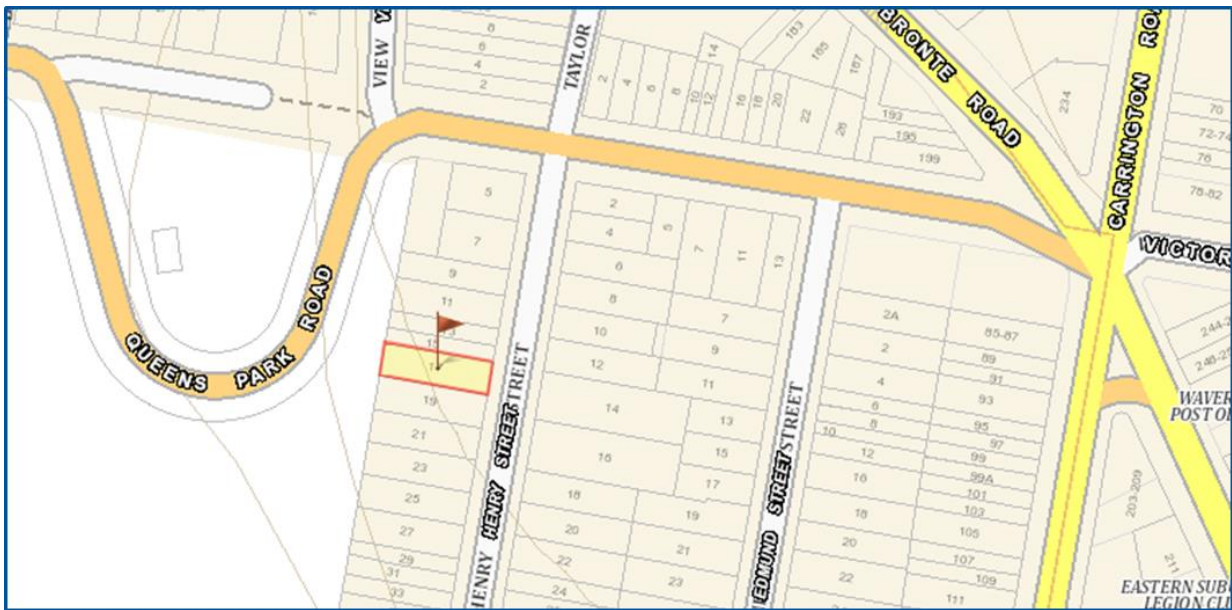


Figure 1. Site location.

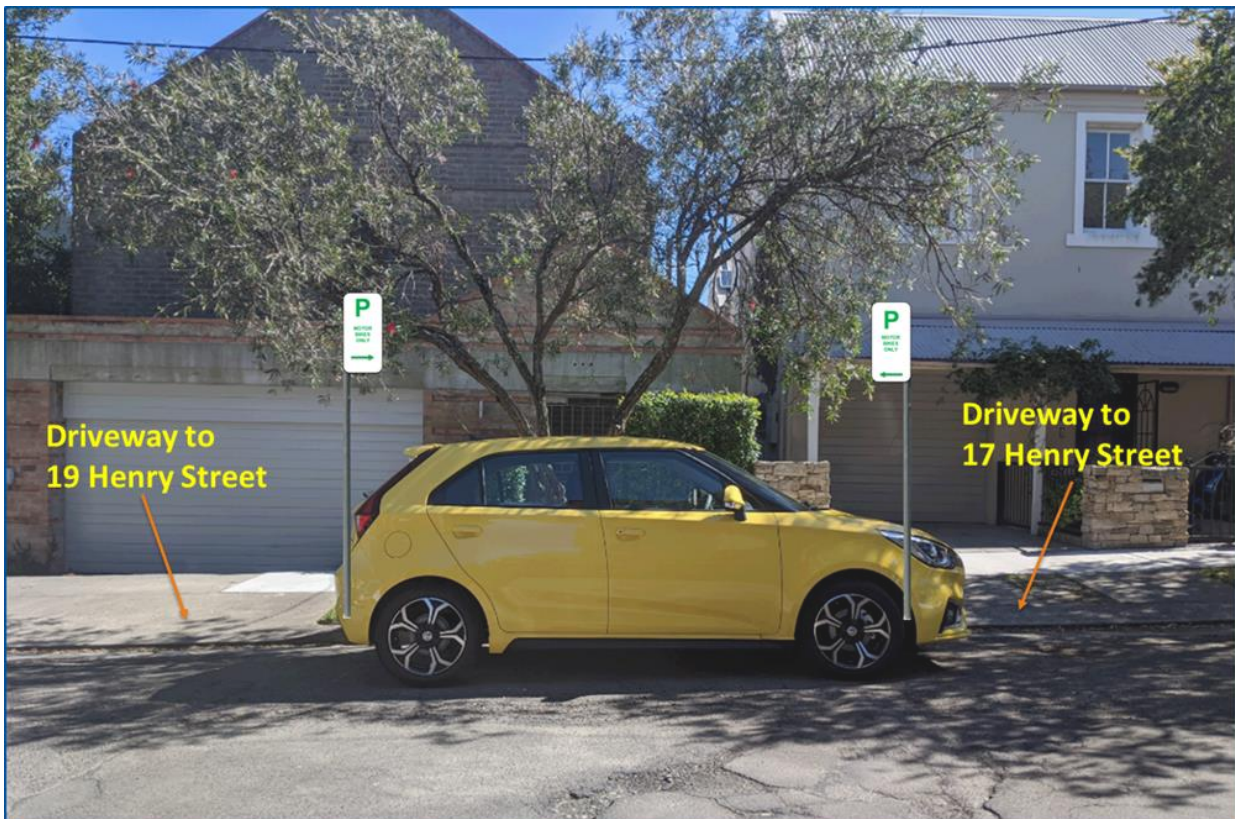


Figure 2. Proposed motorbike signage in the spaces between the driveways to 17 and 19 Henry Street.

## 2. Introduction/Background

There are no parking restrictions in this section of Henry Street. A standard car parked between the driveways would potentially overhang over either one or both driveways and impact the access of the driveways.

The space between the driveways of 17 and 19 Henry Street is approximately 4 metres. It is insufficient to fit a small car.

Motor bike parking is recommended.

### **3. Technical Analysis**

Austroads guidelines and Council resolutions support the use of motorbike parking spaces in circumstances such as the space between 17 and 19 Henry Street.

Austroads' Guide to Traffic Management - Part 11: Parking (Section 7.8.3), states that motorbike parking provision can be achieved by utilising under-sized parking spaces. The Traffic Committee and Council have supported this principle and have previously been in favour of installing 'P Motor Bikes Only' zones in short sections of kerb where other vehicles would obstruct vehicular access.

#### **Warrants**

Criteria for consideration when assessing the justification for installing a 'P Motor Bike Only' zone are presented below.

1. Distance check – 4.2 metres has been adopted as the maximum distance between driveway spaces for motorbike parking to be considered. The distance between the two driveways is approximately 4 metres. The distance check is satisfied.
2. Motor bike parking demand check and evidence of cars over hanging driveways – A site visit was conducted on 28 August 2020. One motor bike was parked on street. A vehicle was parked in the affected space and overhung into one driveway. More than 90% of the kerb-side parking on Henry Street was occupied. The on-street parking conditions warrant consideration of installing motor bike parking.
3. Resident views check – 51 residents on Henry Street were surveyed by letterbox drop. Of these:
  - (a) 9 responses were received by Council.
  - (b) 5 responses were in favour of the motor bike parking.
  - (c) 4 responses objected to the motor bike parking.
  - (d) Residents of 17 and 19 Henry Street were in favour of the proposal.
  - (e) 2 of the 4 objections were received from residents on the other side of the street.
  - (f) The main reason for objection is high parking demands combined with limited parking available on Henry Street.

The above indicates sufficient support from residents to install motor bike parking.

The proposed motor bike parking zone will have minimal impacts on street parking. There is sufficient resident support to warrant its' installation. A motor bike parking zone as shown in Figure 2 is recommended.

#### **Signage**

The proposed signage is shown below in Figure 4.

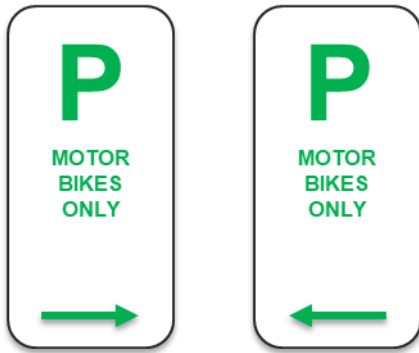


Figure 4. Proposed signage.

#### 4. Financial Information for Council's Consideration

Council will fund the cost of installing the signs from existing budgets if the signage is approved

#### 5. Attachments

Nil.



## REPORT

### TC/C.04/20.10



WAVERLEY  
COUNCIL

**Subject:** 63 Fletcher Street, Bondi - Construction Zone

**TRIM No:** A03/2514-04

**Author:** Hamoon Bahari, Professional Engineer, Traffic and Transport  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authoriser:** Dan Joannides, Executive Manager, Infrastructure Services

#### COUNCIL OFFICER'S PROPOSAL:

That Council:

1. Installs an 18.2 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles' construction zone at 63 Fletcher Street, Bondi.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

#### 1. Executive Summary

Council has received an application from the builder/developer at 63 Fletcher Street, Bondi, for the installation of a 15 metre construction zone (see Figure 1).

It is recommended that an 18.2 metre construction zone is installed (see Figure 2). The zone has been extended from the requested 15 metres to include a 3.2 metre section of parking that would be alienated due to the location of the construction zone.

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



Figure 1. Site location.



Figure 2. Location to install construction zone signs.

## 2. Introduction/Background

The construction zone will be signposted 'No Parking Council Authorised Vehicles Excepted' for the approved construction hours under the development consent. Council will then supply the applicant with transferable permits to be used on the applicant's construction vehicles. The Traffic Committee and Council's requirements for permit approvals are a minimum length of 9 m along the site frontage, with a minimum period of 13 weeks.

## 3. Technical Analysis

The applicant has requested a 15 metre construction zone space, leaving 3.2 metres of on-street parking.

This remainder 3.2 metres cannot accommodate a car. The requested construction zone will be extended to include this section of alienated parking (referred to as the effective construction zone).

The existing and recommended parking allocation is shown below in Figure 3.

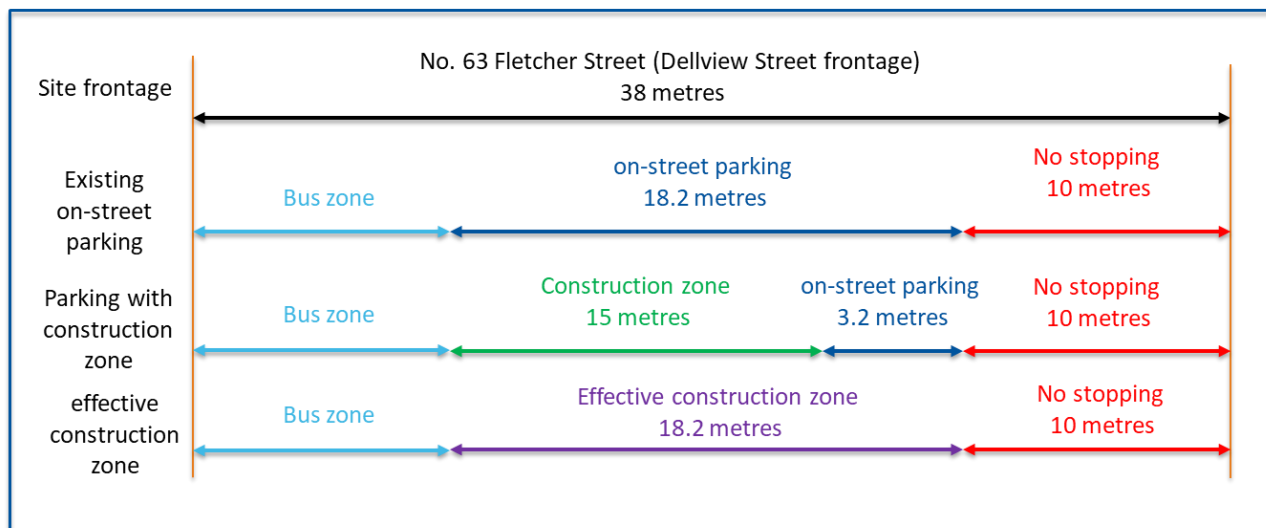


Figure 3. On-street parking allocation

Table 1. Application details.

<b>Applicant</b>	DA Tamarama Pty Ltd
<b>Development application</b>	DA-450/2012/A
<b>Works</b>	Modification to add additional part level, reduce number of units from 16 to 14 (includes internal reconfiguration), changes to north and east elevations including extension of upper level and relocated entrance, and additional car parking.
<b>Approved hours of construction</b>	7 am–5 pm Monday–Friday; 8 am–3 pm Saturday
<b>Frontage length</b>	21 meters on Fletcher Street, 32 metres on Dellview Street
<b>Road</b>	Fletcher Street
<b>Existing parking</b>	2P, 8 am–10 pm, permit holders excepted (Area 11)
<b>Length requested by applicant</b>	15 metres
<b>Length to be signposted</b>	18.2 metres
<b>Duration</b>	To be advised
<b>Fee area</b>	Residential with timed parking
<b>Estimated fees</b>	\$1,212.12 per week (18.2 metres x \$66.60 per metres)

### Signage

The proposed signage is shown below.

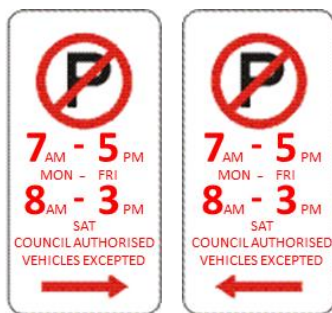


Figure 4. Proposed signage.

## 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 2019–20 financial year are:

- \$66.60 per m per week in a residential development area.
- \$92.20 per m per week in a commercial and mixed-use development area.
- \$377.00 per metred (ticket) car parking space per week in addition to above fees (where applicable).

The cost to the applicant for the 18.2 metres made available for construction vehicles will be \$1,212.12 per week (18.2 metres x \$66.60 per metre).

## 5. Attachments

Nil .

**REPORT**  
**TC/C.05/20.10**

**Subject:** 29 Macpherson Street, Waverley - Construction Zone

**TRIM No:** A03/2514-04

**Author:** Paul Cai, Traffic Engineer  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authoriser:** Dan Joannides, Executive Manager, Infrastructure Services

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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Installs a 9 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles Excepted' construction zone in front of 29 Macpherson Street, Waverley.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

**1. Executive Summary**

Council has received an application from the builder/developer at 29 Macpherson Street, Waverley, for the installation of a 9 metre construction zone on Macpherson Street (see Figure 1).

Council officers propose the installation of a 9 metre zone as shown in Figure 2. 5.8 metres will be in front of 29 Macpherson Street with remaining 3.2 metres in front of 31 Macpherson Street. This ensures maximum availability of on-street parking adjacent to the construction zone.

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

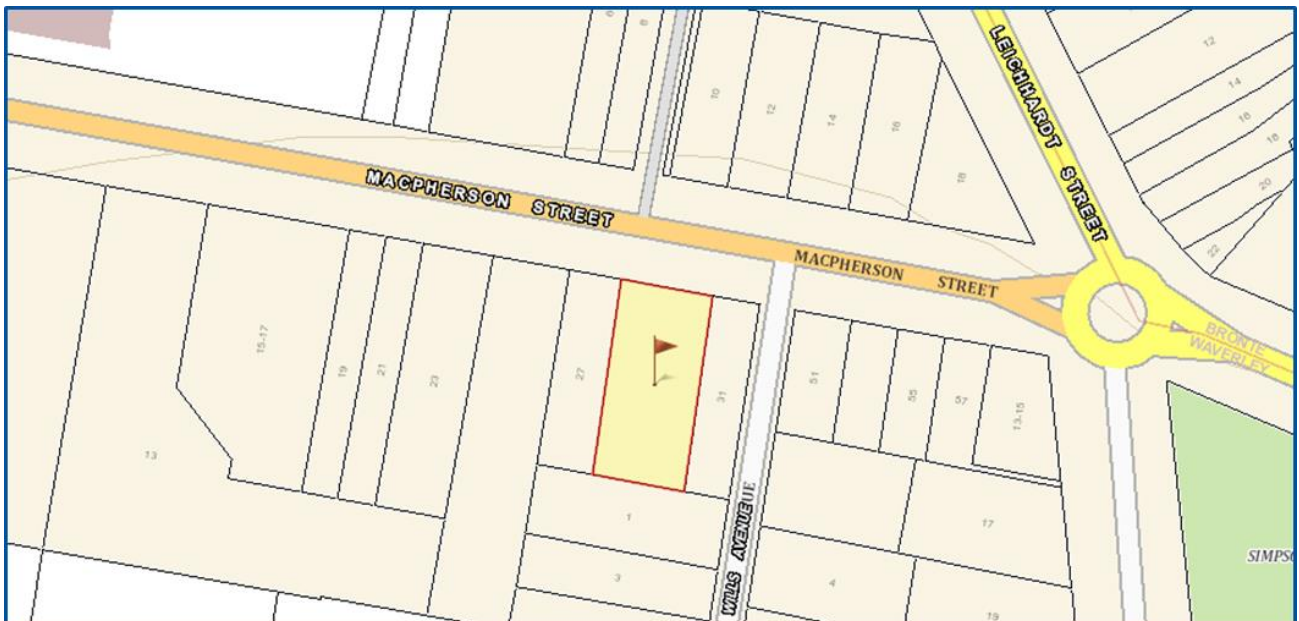


Figure 1. Site location.



Figure 2. Location to install construction zone signs.

## 2. Introduction/Background

In accordance with standard practice at Council, it is proposed that the construction zone is signposted 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles Excepted' for the approved construction hours under the development consent. Council will then supply applicants with transferable permits to be used on the applicant's construction vehicles. The Traffic Committee and Council's requirements for permit approvals are a minimum length of 9 metres along the site frontage with a minimum period of 13 weeks.

## 3. Technical Analysis

The frontage of the site on Macpherson Street is 16.1 metres.



The adjacent property, 31 Macpherson Street, has a site frontage of 8.2 metres, of which 5 metres is taken up by a No Stopping zone (see Figure 3). This leaves 3.2 metres for on-street parking.

The applicant has requested a 9 metre construction zone space. It is Council's proposal to start the construction zone from the existing No Stopping sign. The zone would encompass the 3.2 metres in front of No. 31 and 5.8 metres in front of 29 Macpherson Street leaving around two on-street parking spaces in front of 29 Macpherson Street

The existing and recommended parking allocation is shown below.

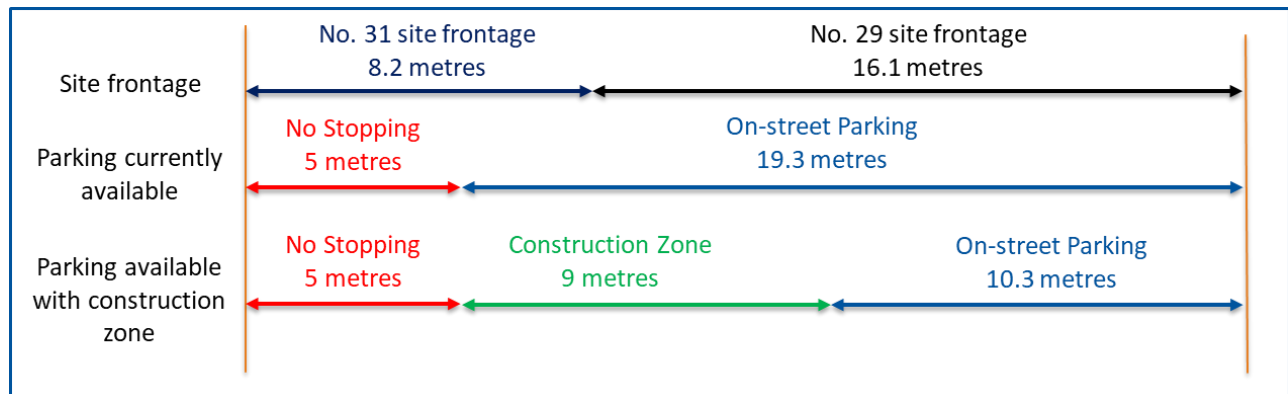


Figure 3. On-street parking allocation.

Table 1. Application details.

<b>Applicant</b>	Timberworx Unlimited Pty Ltd
<b>Development application</b>	DA-48/2020
<b>Works</b>	Alterations and additions to residential flat building including rear decks and strata subdivision into six lots.
<b>Approved hours of construction</b>	7 am–5 pm Monday–Friday; 8 am–3 pm Saturday
<b>Frontage length</b>	16.1 metres
<b>Road</b>	Macpherson Street
<b>Existing parking</b>	No parking restrictions
<b>Length requested by applicant</b>	9 metres
<b>Length to be signposted</b>	9 metres
<b>Effective construction zone - Total length available for construction</b>	9 metres
<b>Duration</b>	9 weeks
<b>Fee area</b>	Residential area without parking restrictions
<b>Estimated fees</b>	\$599.40 per week

## Signage

The proposed signage is shown below.



Figure 4. Proposed signage.

## 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 2020–2021 financial year are:

- \$66.60 per metre per week in a residential area.
- \$92.20 per metre per week in a commercial and mixed-use area.
- \$377.00 per metered (ticket) car parking space per week in addition to above fees (where applicable).

The cost to the applicant for the 9 metres made available for construction vehicles will be \$599.40 per week (9 metres x \$66.60 per metre).

## 5. Attachments

Nil.

**REPORT**  
**TC/C.06/20.10**

**Subject:** 40 km/h Speed Limit Changes - Traffic Control Devices -  
Bourke Street south of Bourke Lane, Queens Park

**TRIM No:** A18/0579

**Author:** Malik Almuhanha, Senior Traffic Engineer  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authoriser:** Dan Joannides, Executive Manager, Infrastructure Services

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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Approves the installation of speed cushions, a marked bicycle lane, and a kerb extension on Bourke Street south of Bourke Lane, Queens Park as shown in Attachment 1 of the report.
2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.

**1. Executive Summary**

This report seeks endorsement of a traffic control device to be installed in Bourke Street south of Bourke Lane, as part of the 40 km/h speed limit changes in the southern part of the Waverley local government area (see Figure 1).

Council's traffic committee previously considered a kerb extension and speed hump at this location at the September 2020 traffic committee meeting. This design did not adequately cater for a bicycle lane along Bourke Street.

A new design has been completed. It is shown in Figure 2 and Figure 3. It comprises:

1. Speed cushions replacing the previously proposed speed hump so that cyclists do not have to travel over the hump.
2. A kerb extension between the bicycle lane and the kerb with soft surface planting.

The speed cushions are manufactured from recycled rubber. They can be removed and replaced with an asphaltic concrete speed hump at a later date should more speed control prove necessary to achieve the 40 km/h target.

Average traffic speeds on Bourke Street are around 42 km/h. 85%ile speeds are around 49 km/h. The 85%ile speeds should be reduced to around 40 km/h to achieve a self-enforcing 40 km/h speed zone.

The new design will reduce 85%ile traffic speeds to around 35 to 40 km/h over the speed cushions.



Two other options without speed humps or speed cushion were considered. These options do not result in significant reductions in traffic speeds as they do not alter the roadside environment in a substantial way. Delegation of authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes is also proposed. This covers situations where factors such as drainage or a minor change in location, size of ramps, wings, or threshold prove necessary.



Figure 1. Traffic device location

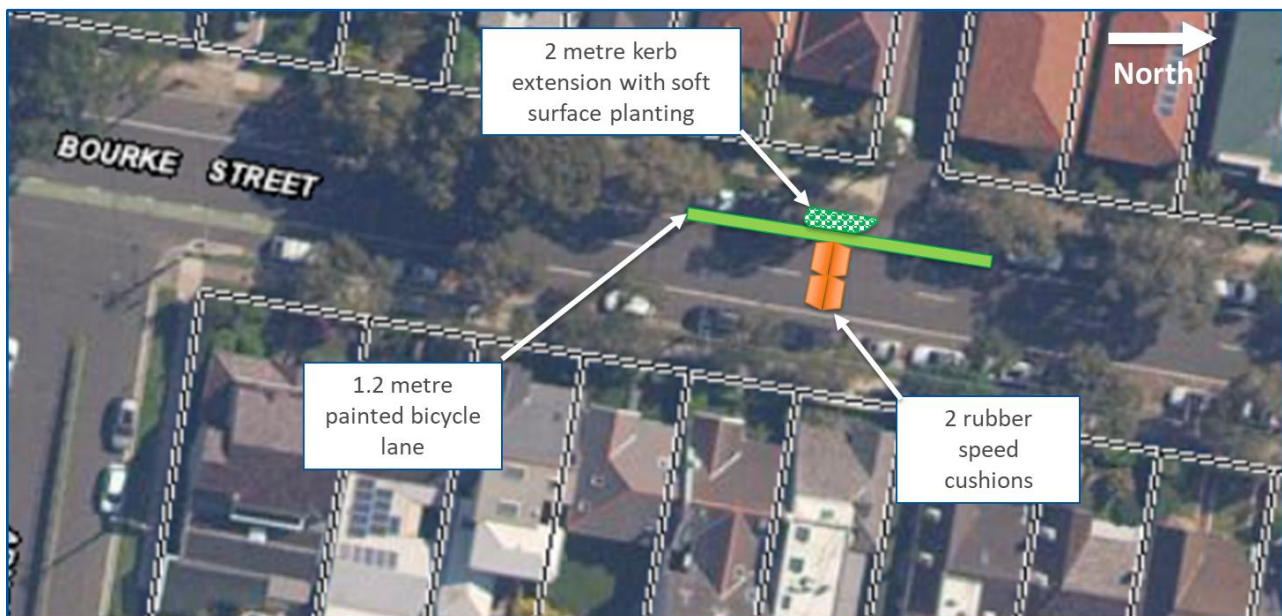


Figure 2. Concept of proposed traffic control device.

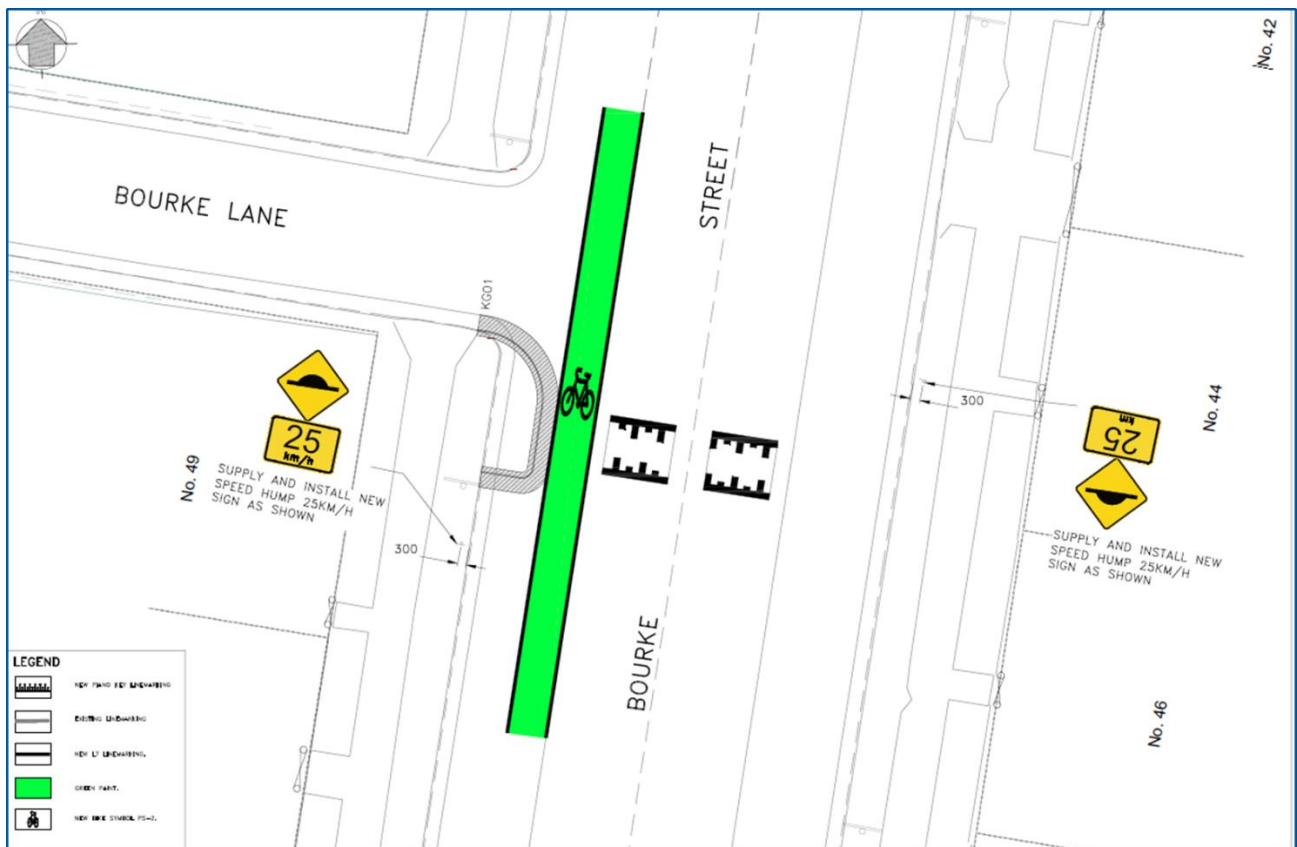


Figure 3. Proposed traffic control device design.

## 2. Introduction/Background

Community consultation within the Waverley local government area has found that an overwhelming proportion of residents would like reduced speed limits in their streets. The proposal to implement a Waverley-wide 40 km/h speed limit was developed as a signature project and adopted by Council in 2017 as part of the adoption of the 'People, Movement and Places' strategy.

### Community consultation

Community consultation took place from November 2019 to January 2020. A range of engagement methods were used to maximise the opportunity for community participation. Of particular note was the use of an interactive map on Have Your Say (HYS) Council's engagement platform, face to face 'Have Your Say Days' in four locations, door knocking on specifically impacted houses and email communication with a range of organisations and community members.

Bourke street was identified as requiring treatment due to the 85%ile speeds being around 49 km/h. Feedback from residents of Bourke Street included:

1. Noise concerns arising from the treatment.
2. Support a speed hump if the data proves the 40km/h objective can be achieved.

The proposed speed cushions are low noise devices. They will achieve the 40 km/h objective.

### Speed humps vs speed cushions

Key differences between speed humps and speed cushions are:

1. Speed humps are made of asphaltic concrete. Speed cushions are made of recycled rubber.
2. Speed humps can cover the entire road width. Speed cushions generally cover a single lane.
3. Speed humps are permanent devices. Speed cushions can be removed with relatively ease.
4. Speed humps are more effective in reducing speeds.

Speed cushions can be removed and replaced with an asphaltic concrete speed hump at a later date should more speed control prove necessary to achieve the 40 km/h target.

### **Buses**

State Transit bus route 357 runs along Bourke Street. The proposed speed cushions are designed to have low impacts on buses (particularly bouncing effects).

### **3. Technical Analysis**

The original design presented to the September 2020 Traffic Committee comprised a kerb extension and a speed hump (see Figure 4). This design interfered with cycle movements.

Two alternative treatments have been assessed. They are:

1. Option 1 – The original design with the speed hump reduced in width to allow for a 1.2m bicycle lane between the kerb extension and the speed hump. The 1.2 metre wide bicycle lane would be painted green (see Figure 5).
2. Option 2 – Replacement of the speed hump with rubber speed cushions and a reduced kerb island width to allow for the 1.2m bicycle and painted bicycle marking. The 1.2 metre wide bicycle lane would be painted green (see Figure 6).

Option 1 would result in car wheels (on the left-hand side) traversing the side ramp of the hump. This presents safety issues and is not recommended.

Option 2 accommodates buses, cars, and cyclists without adverse noise impacts on residents.

Option 2 is recommended.



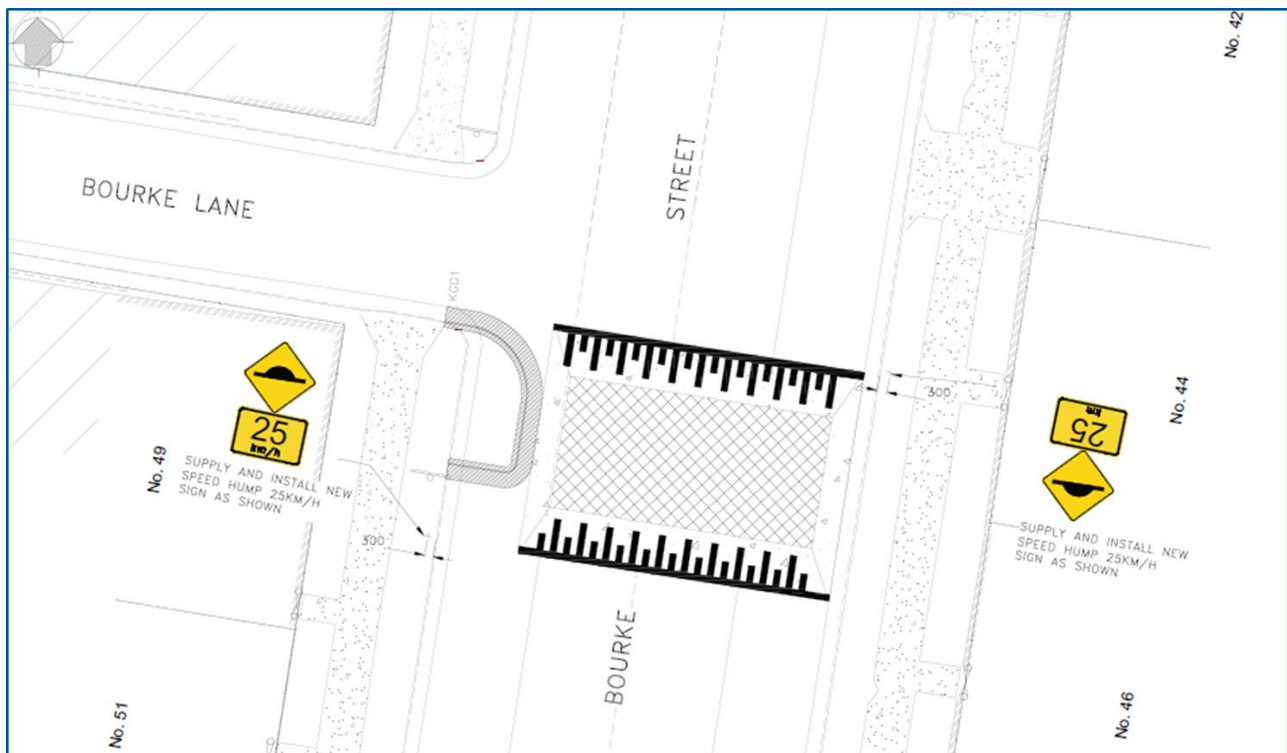


Figure 4. Bourke Street design presented to September 2020 Traffic Committee.



Figure 5. Option 1 – Original design with a reduced kerb island width to allow for a 1.2 metre bicycle lane plus green painted bicycle marking



Figure 6. Option 2 – Rubber speed cushions with a reduced kerb island width to allow for a 1.2 metre bicycle plus green painted bicycle marking (recommended option).

#### 4. Financial Information for Council's Consideration

Council has received a commitment of \$1 million for construction from the RMS NSW Safe Speeds in High Pedestrian Activity and Local Area program. The \$1 million is required to be spent or committed by 30 June 2021.

#### 5. Attachments

1. ID-04 - Bourke Street at Bourke Lane 40 kph treatment .



# WAVERLEY COUNCIL 40KM/H PROPOSAL AT BOURKE LANE INTERSECTION, BONDI PROPOSED KERB BUILDOUT

ISSUED FOR REVIEW

## GENERAL NOTES

1. THE DESIGN DRAWINGS SHOULD BE READ IN CONJUNCTION WITH WAVERLEY COUNCIL'S STANDARD DRAWINGS.
2. DURING CONSTRUCTION THE WORK IS TO BE SIGNPOSTED AND MARKED TO THE REQUIREMENTS OF AS1742.2-2009 AND AS1742.3-2009 "TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS".
3. A TRAFFIC CONTROL PLAN IS TO BE SUBMITTED TO COUNCIL'S PROJECT MANAGER FOR APPROVAL PRIOR TO WORKS.
4. SOIL AND WATER MANAGEMENT PLAN IS TO BE SUBMITTED TO COUNCIL'S PROJECT MANAGER FOR A APPROVAL PRIOR TO WORKS.
5. ALL WORK IS TO BE CARRIED OUT TO BEST PRACTICE STANDARDS AND TO THE SATISFACTION OF COUNCIL'S PROJECT MANAGER.
6. THE WORK SITE IS TO BE PROTECTED USING APPROPRIATE SIGNAGE, FENCING, BARRICADING, AND PARA-WEBBING FOR DURATION OF PROJECT CONSTRUCTION.
7. DURING WORKS, CONTRACTOR TO INSTALL TEMPORARY SIGNS - IN ACCORDANCE WITH APPROVED TCP AND MAINTAIN FOR THE DURATION OF THE WORKS.
8. ALL RESIDENTS AFFECTED BY THE PROPOSED WORKS ARE TO BE NOTIFIED AT LEAST 3 WORKING DAYS BEFORE THE COMMENCEMENT OF ROADWORKS TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT.
9. SUITABLE VEHICULAR ACCESS SHALL BE MAINTAINED TO EACH DRIVEWAY OR ALTERNATIVE ARRANGEMENTS MADE WITH THE OWNERS.
10. WORK TO BE CARRIED OUT WITHIN THE APPROVED HOURS ONLY.

## SERVICES

11. UTILITIES (IF SHOWN) ARE DIAGRAMMATIC ONLY AND HAVE BEEN PREPARED FROM THE INFORMATION PROVIDED BY THE RELEVANT SERVICE AUTHORITIES. CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THE SERVICE AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDELINES.
12. AUSGRID REQUIRES THAT CONTRACTOR SHOULD CONTACT THEM IF WORKING WITHIN 5.0M FROM UNDERGROUND ELECTRICITY CONDUITS.
13. WHERE EXISTING SERVICE COVERS ARE NOMINATED TO BE ADJUSTED TO DESIGN LEVELS, CONTRACTOR IS TO CARRY OUT ALL WORKS IN ACCORDANCE WITH RELEVANT SERVICE AUTHORITY REQUIREMENTS.
14. NO SERVICE COVERS ARE TO BE COVERED.

## SIGNS & LINEMARKING

15. ALL TRAFFIC SIGNS TO COMPLY WITH NATSPEC 1192 & RMS SPECIFICATION R143 AND TO BE OF HIGH INTENSITY CLASS 1 REFLECTIVITY.
16. ALL LINEMARKING IS TO COMPLY WITH NATSPEC 1191 & RMS SPECIFICATION R141 - "PAVEMENT MARKING"
17. LINEMARKING TO BE IN THERMOPLASTIC TYPE (UNLESS STATED OTHERWISE) AND INCLUDE GLASS BEADS IN ACCORDANCE WITH RMS SPECIFICATIONS 3357 AND 3353 RESPECTIVELY. ALL RRPMS TO COMPLY WITH RMS SPECIFICATION R142.
18. KERB FACES OF ALL ISLANDS TO BE PAINTED WHITE AND TO INCLUDE GLASS BEADS IN ACCORDANCE WITH RMS SPECIFICATION NO. 3353.
19. ALL LINEMARKING AND RRPMS REMOVED OR AFFECTED DURING THE COURSE OF THE WORKS ARE TO BE REINSTATED UNLESS NOTED OTHERWISE.
20. ALL EXISTING SIGNS TO REMAIN UNLESS NOTED OTHERWISE.
21. LINEMARKING AND SIGNPOSTING TO BE INSTALLED AS SOON AS PRACTICABLE.
22. REDUNDANT LINEMARKING IS TO BE REMOVED BY GRINDING WHERE SHOWN ON PLANS OR WHERE NEW LINEMARKING IS PROVIDED.
23. ALL SIGNPOSTING ON SPLITTER, KERB OR PEDESTRIAN REFUGE ISLANDS TO BE ERECTED USING V-NOTCH INSERTS, UNLESS NOTED OTHERWISE.
24. UNLESS SHOWN ON PLANS, NO STATE SURVEY MARKS ARE TO BE REMOVED PRIOR TO CONSULTING WITH COUNCIL'S SUPERINTENDENT.
25. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE.

## CONCRETE

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. CONCRETE QUALITY.

ELEMENT	SLUMP	MAX AGGREGATE SIZE	CEMENT TYPE	CEMENT GRADE
ALL	80mm	20mm	GP	25MPa

NO ADMIXTURES SHALL BE USED WITHOUT THE APPROVAL OF COUNCIL'S SUPERINTENDENT.

3. CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN-

ELEMENT	SURFACE OF MEMBER IN INTERIOR ENVIRONMENT	SURFACE OF MEMBER IN ABOVE GROUND EXTERIOR ENVIRONMENT	SURFACE OF MEMBER IN CONTACT WITH GROUND (1)	SURFACE OF MEMBER IN WATER
ALL	35	45	55	75

**NOTE:**  
1. COVER MAY BE REDUCED BY 10mm IF THE SURFACE IS PROTECTED BY A DAMP-PROOF MEMBRANE.  
2. SLABS EXPOSED TO CORROSIVE VAPOURS, CORROSIVE GROUND WATER, SEA WATER, OR SPRAY ARE TO HAVE REINFORCEMENT COVER AS NOTED ON THE DRAWINGS.

4. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
5. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF COUNCIL'S SUPERINTENDENT.
6. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF COUNCIL'S SUPERINTENDENT.
7. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
8. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF COUNCIL'S SUPERINTENDENT. THE CONCRETE COVER TO EMBEDDED PIPES OR CONDUITS SHALL BE A MINIMUM OF 20mm.
9. ALL REINFORCEMENT FABRIC SHALL COMPLY WITH AS 1303 AND AS 1304 AND SHALL BE SUPPLIED AS FLAT SHEETS.
10. ALL CONCRETE TO BE MECHANICALLY VIBRATED IN FORM TO GIVE MAXIMUM COMPACTION WITHOUT SEGREGATION OF CONCRETE.
11. PROVIDE 20mm CHAMFER TO ALL EXPOSED EDGES U.N.O.

## DRAWING SCHEDULE

- 1/5 - NOTES AND SCHEDULES
- 2/5 - LAYOUT PLAN
- 3/5 - DETAILS SHEET
- 4/5 - SIGNAGE AND LINEMARKING PLAN
- 5/5 - SERVICES PLAN



UTILITIES, IF SHOWN, ARE DIAGRAMMATIC ONLY. CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDELINES.

IN CASE OF EMERGENCY, CONTACT THE FOLLOWING UTILITIES IF THEIR SERVICES ARE INVOLVED:  
TELSTRA : 132203  
AGL (GAS) : 131245  
SYDNEY WATER : 132090  
AUSGRID : 131388

**NOTE**  
ALL EXISTING SIGNS AND LINES TO REMAIN UNLESS NOTED OTHERWISE.

**IMPORTANT**  
REDUNDANT LINE MARKING MUST BE REMOVED BY GRINDING WHERE INDICATED ON PLANS.

CHECKED & APPROVED					
APPROVED FOR CONSTRUCTION	2	08/10/20	ISSUED FOR REVIEW	SL	CH
	1	18/03/20	ISSUED FOR REVIEW	SL	CE
AMEND	DATE	DESCRIPTION	DRAWN	APPROV	



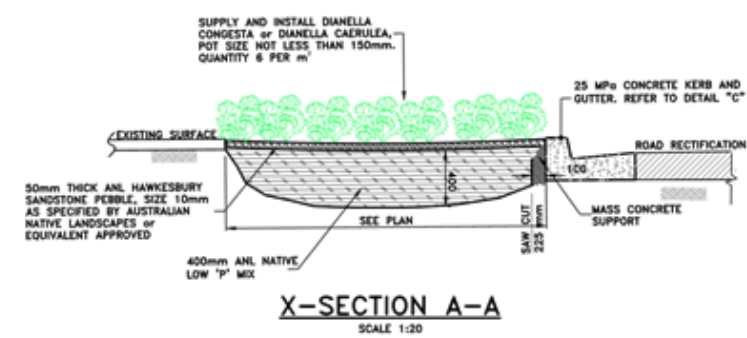
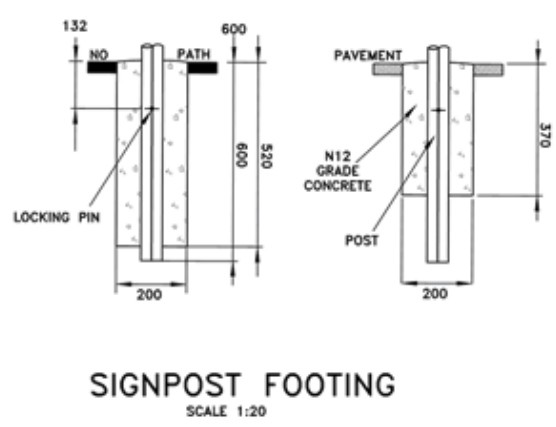
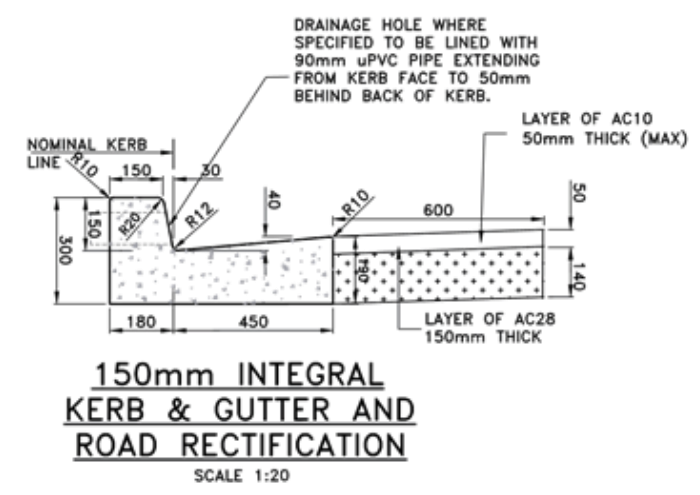
**WAVERLEY COUNCIL**

Cnr PAUL STREET & BONDI ROAD  
BONDI JUNCTION NSW 2022  
Ph (02) 9369 8000 Fax (02) 9387 1820  
www.waverley.nsw.gov.au

SURVEYED DATE	DATUM DATUM	<b>WAVERLEY COUNCIL 40KM/H PROPOSAL AT BOURKE LANE INTERSECTION BONDI KERB BUILDOUT NOTES AND SCHEDULES</b>	SHEET No 1 OF 5 SHEETS	PROJECT No <b>C0716-ID04</b>
DESIGNED S.LUFE DATE 18/03/20	CHECKED C.ECCLES DATE 18/03/20		SCALE NTS	ISSUE No <b>2</b>
DRAWN S.LUFE DATE 18/03/20	X REFERENCES			

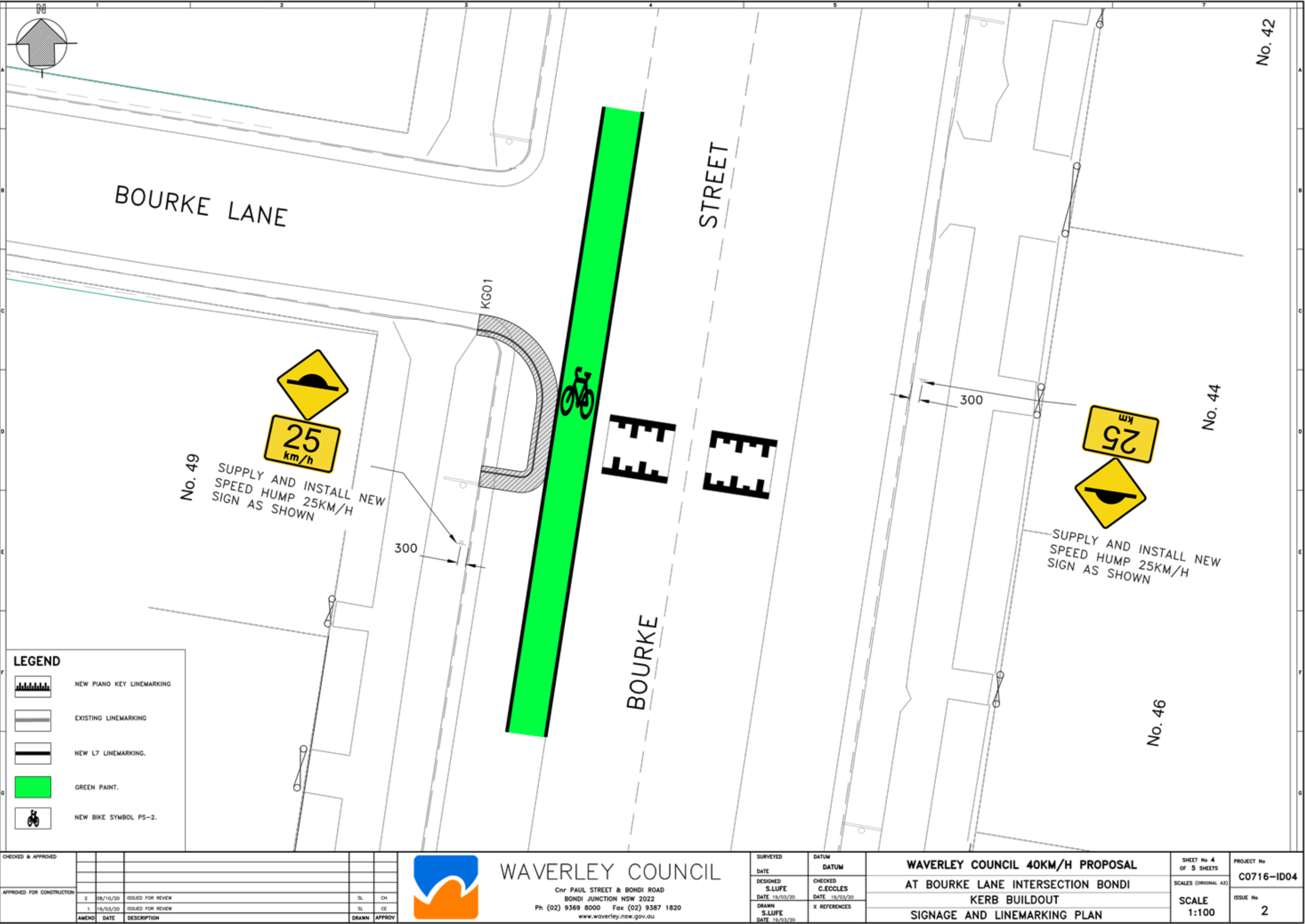


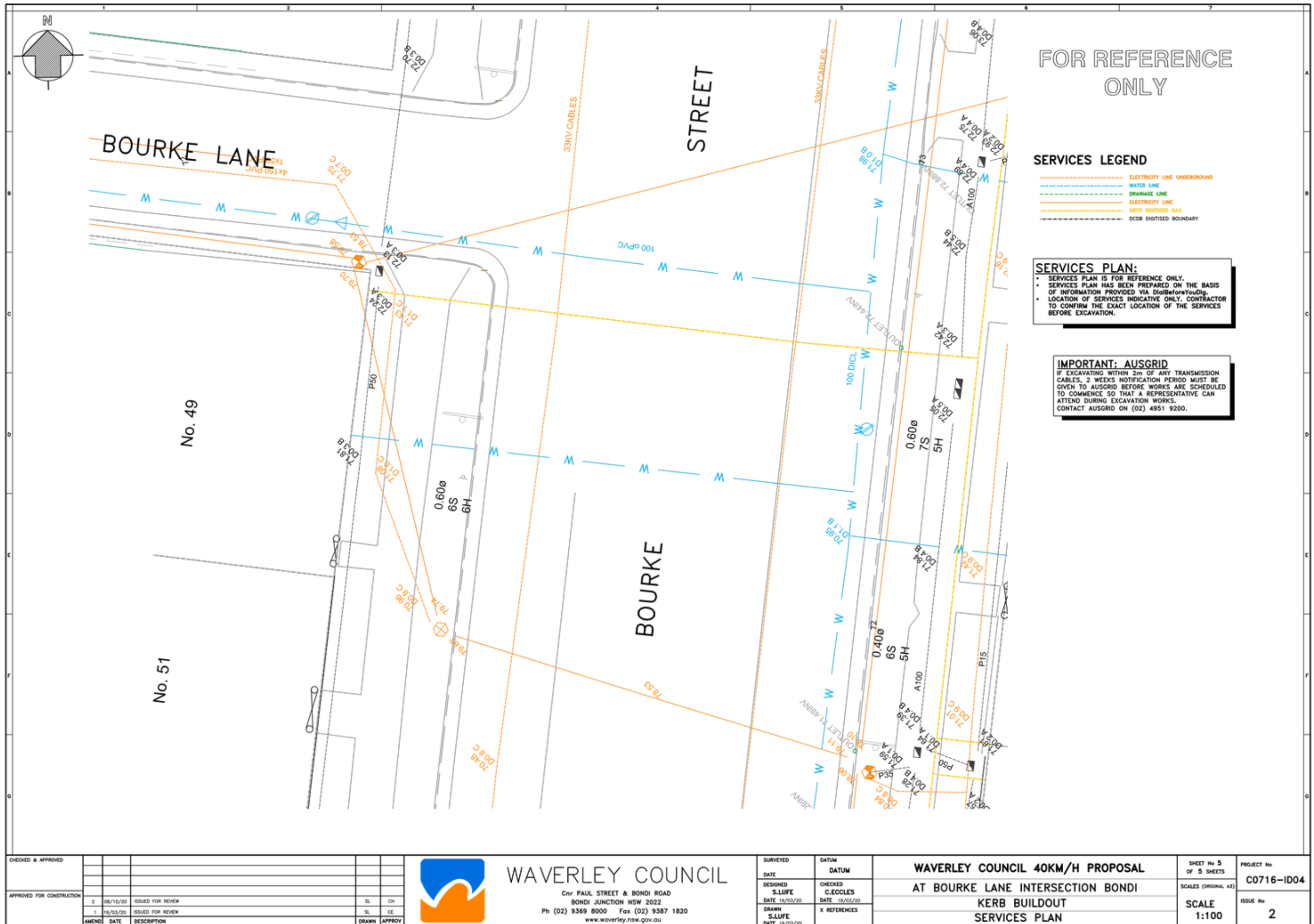
ISSUED FOR REVIEW



CHECKED & APPROVED																			
APPROVED FOR CONSTRUCTION																			







**REPORT**  
**TC/C.07/20.10**

**Subject:** 40 km/h Speed Limit Changes - Traffic Control Devices - Park Parade, Bondi

**TRIM No:** A18/0579

**Author:** Malik Almuhanha, Senior Traffic Engineer  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authoriser:** Dan Joannides, Executive Manager, Infrastructure Services

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**FCOUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Undertakes consultation with residents of Park Parade, Bondi, on the installation of traffic control devices along Park Parade comprising:
  - (a) Speed cushions at 32 Park Parade.
  - (b) Speed cushions at 10 Park Parade.
  - (c) A line marked parking lane between Bondi Road and Birrell Street.
  - (d) An S1 dashed centre lane line with raised pavement markers between Bondi Road and Birrell Street.
2. Officers prepare a report for the December 2020 Council meeting on the outcomes of the community consultation.
3. Approves the design of the traffic control devices as shown in Attachment 1 (Option 3) of the report subject to the outcomes of the community consultation and the determination at the December Council meeting on whether to proceed with the work.
4. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.

**1. Executive Summary**

This report seeks endorsement of traffic control devices to be installed in Park Parade, as part of the 40 km/h speed limit changes in the southern part of the Waverley local government area (see Figure 1 and Figure 2).

A report presented to the May 2020 traffic committee recommended installation of a single speed hump on Park Parade (see Figure 4). Council at its 16 June 2020 meeting resolved that the item be deferred to a Councillor workshop for further consideration of the location and type of traffic calming devices.

Three options were considered. The recommended option is shown in Figure 2 and Figure 3. It comprises:



1. Two sets of speed cushions at 10 and 32 Park Parade.
2. Separate through and parking lane line-marking as well as centre lane line-marking with raised pavement markers.

Average traffic speeds on Park Parade are around 42 km/h. 85%ile speeds are around 51 km/h. The 85%ile speeds should be reduced to around 40 km/h to achieve a self-enforcing 40 km/h speed zone.

The new design is expected to reduce the 85%ile traffic speeds to around 40 km/h along Park Parade and 35 to 40 km/h at the speed cushions.

The new design requires consultation with residents of Park Parade as the traffic control devices are at different locations than was had previously been advertised.

Delegation of authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes is also proposed. This covers situations where factors such as drainage or a minor change in location, size of ramps, wings, or threshold prove necessary.

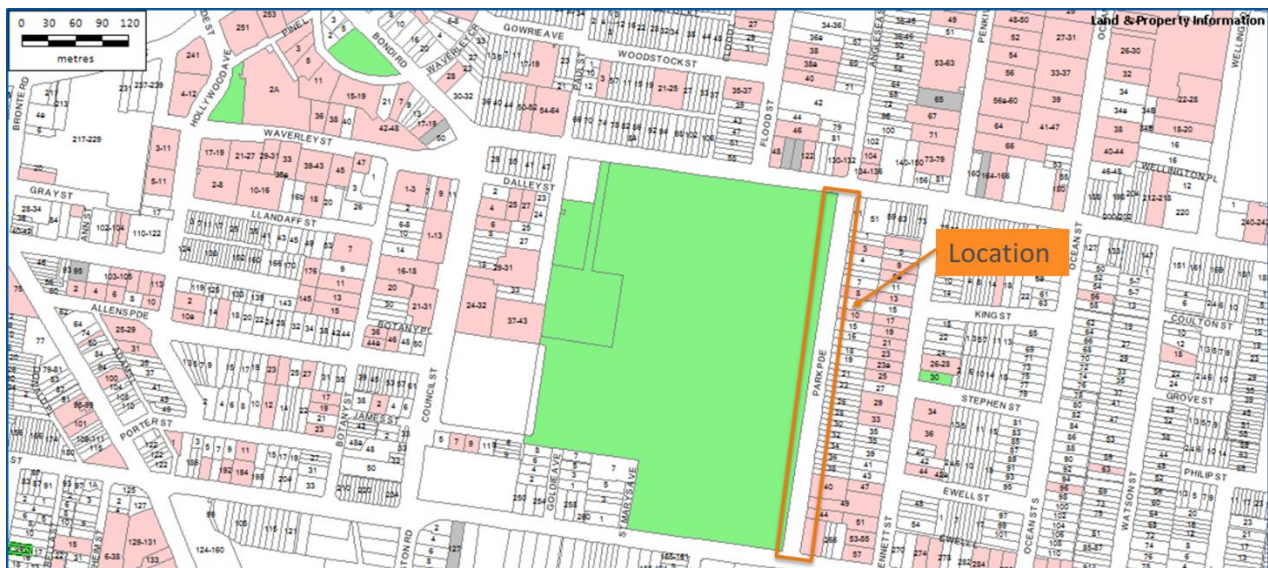


Figure 1. Traffic device location.



Figure 2. Concept of proposed traffic control device.

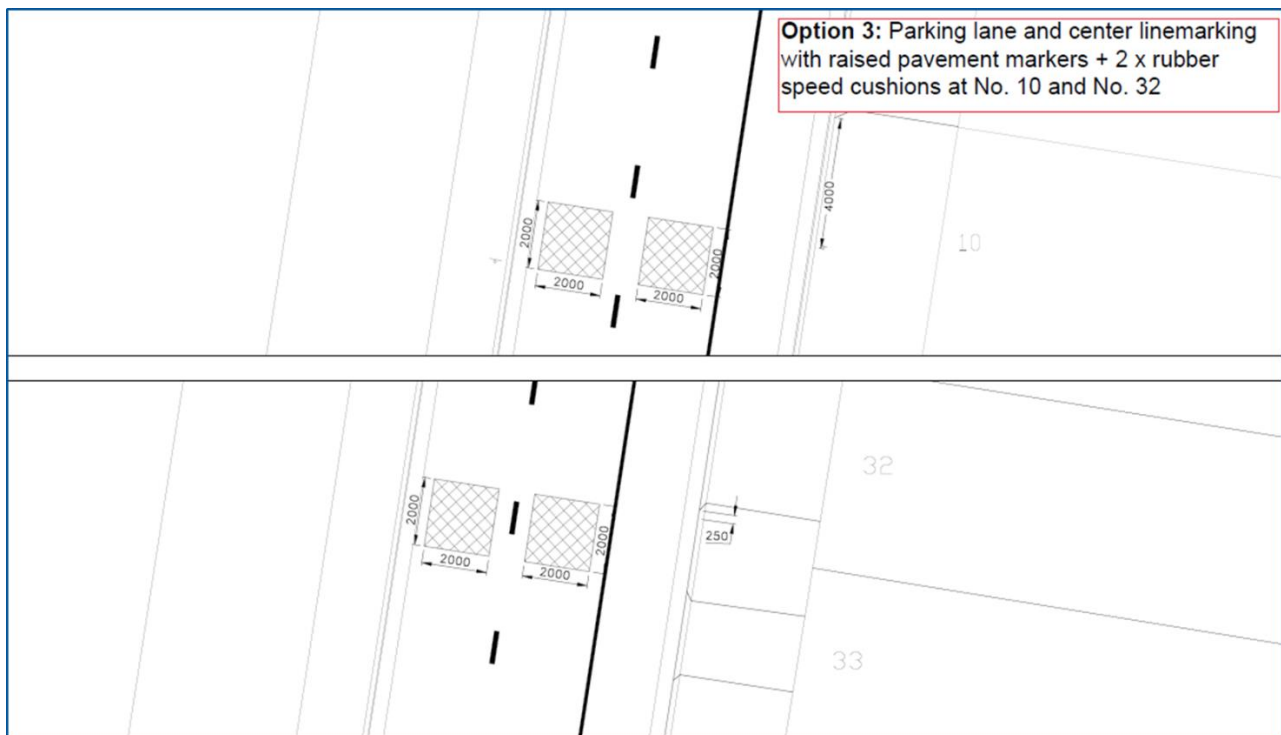


Figure 3. Proposed traffic control devices design.

## 2. Introduction/Background

Community consultation within the Waverley local government area has found that an overwhelming proportion of residents would like reduced speed limits in their streets. The proposal to implement a Waverley-wide 40 km/h speed limit was developed as a signature project and adopted by Council in 2017 as part of the adoption of the 'People, Movement and Places' strategy.

Park Parade was identified as requiring treatment due to the 85<sup>th</sup>ile speeds being around 51 km/h. Feedback from residents of Park Parade included:

1. Not supportive of treatment outside 19 Park Parade because of noise concerns.
2. Cars do speed down Park Parade.
3. Police should enforce speed limits more.

The proposed speed cushions are not located outside 19 Park Parade. While Police have the resources for limited monitoring of speeds in problem street, they do not have resources to cover the whole local government area. Police monitoring addresses the speed issue from time to time. Traffic control devices address the issue on a permanent basis.

### Speed humps vs speed cushions

Key differences between speed humps and speed cushions are:

1. Speed humps are made of asphaltic concrete. Speed cushions are made of recycled rubber.
2. Speeds humps can cover the entire road width. Speed cushions generally cover a single lane.
3. Speed humps are permanent devices. Speed cushions can be removed with relatively ease.
4. Speed humps are more effective in reducing speeds.

Speed cushions can be removed and replaced with an asphaltic concrete speed hump at a later date should more speed control prove necessary to achieve the 40 km/h target.



### 3. Technical Analysis

The original design presented to the May 2020 traffic committee recommended a single speed hump at 19 Park Parade (see Figure 4). Council at its 16 June 2020 meeting resolved that the item be deferred to a Councillor workshop for further consideration of the location and type of traffic calming devices.

Three alternative treatments have been assessed. They are:

1. Option 1 – Centre lines with raised pavement markers plus centre and parking lane line marking (see Figure 5). This option is not expected to slow traffic.
2. Option 2 – A single rubber speed cushion at 19 Park Parade plus a centre line with raised pavement markers and parking lane line marking (see Figure 6). This option is expected to slow traffic to around 35 to 40km/h over the speed cushion.
3. Option 3 (recommended) – Two sets of rubber speed cushions at 10 and 32 Park Parade plus Centre lines with raised pavement markers and separate through and parking lane line marking (see Figure 6). This option is expected to slow traffic down to 40 km/h along Park Parade.

Option 3 is recommended as it is the most effective (among the three options) in reducing speeds along Park Parade.

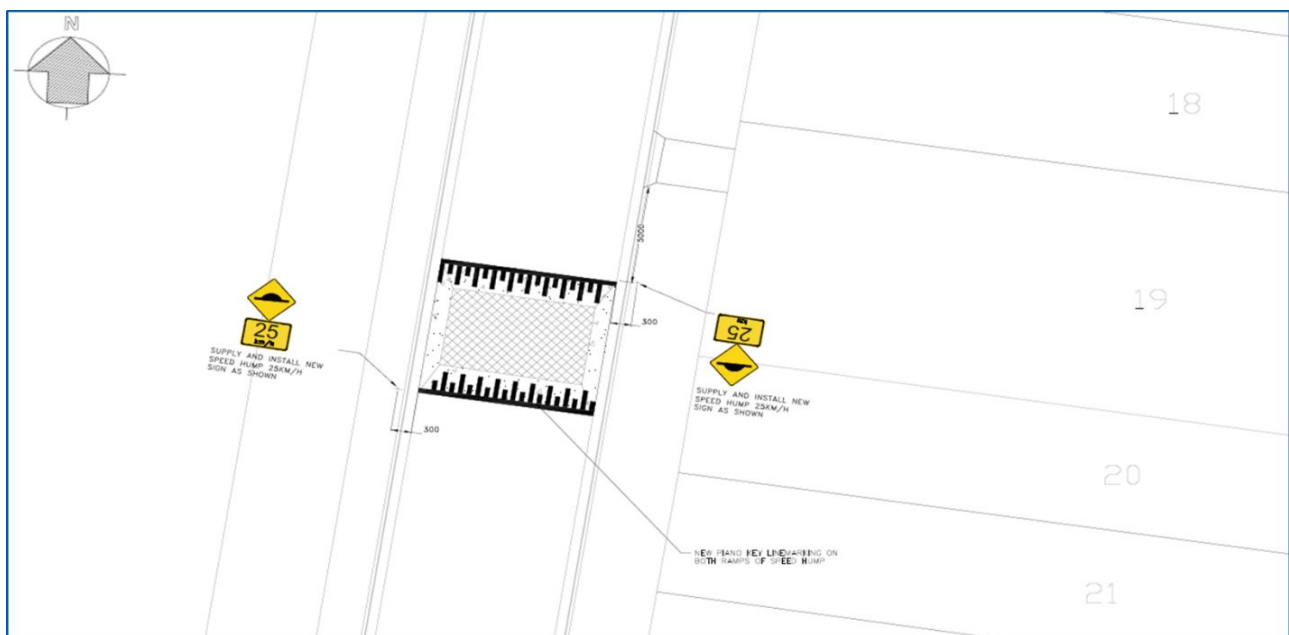


Figure 4. Park Parade original design.





Figure 5. Park Parade Option 1 design.

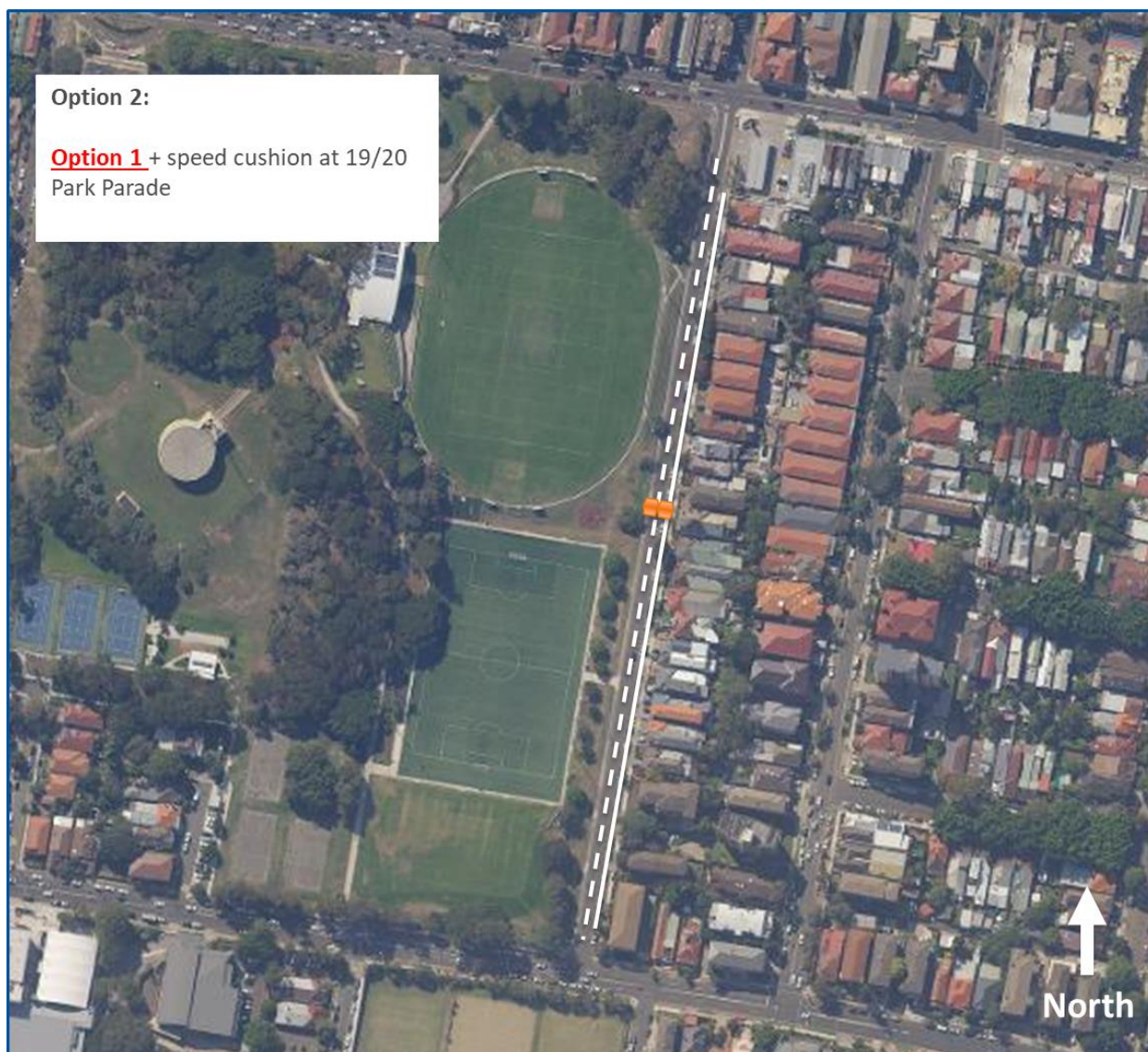


Figure 6. Park Parade Option 2 design.





Figure 7. Park Parade Option 3 design (recommended option).

#### 4. Financial Information for Council's Consideration

Council has received a commitment of \$1 million for construction from the RMS NSW Safe Speeds in High Pedestrian Activity and Local Area program. The \$1 million is required to be spent or committed by 30 June 2021.

#### 5. Attachments

1. ID-14 Park Parade 40 kph treatment [↓](#) .

ISSUED FOR REVIEW

# Park Parade - Bondi

## Proposed Traffic Design Options

### 40km/h Speed Limit Change

#### GENERAL NOTES

1. THE DESIGN DRAWINGS SHOULD BE READ IN CONJUNCTION WITH WAVERLEY COUNCIL'S STANDARD DRAWINGS.
2. DURING CONSTRUCTION THE WORK IS TO BE SIGNPOSTED AND MARKED TO THE REQUIREMENTS OF AS1742.2-2009 AND AS1742.3-2009 "TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS".
3. A TRAFFIC CONTROL PLAN IS TO BE SUBMITTED TO COUNCIL'S PROJECT MANAGER FOR APPROVAL PRIOR TO WORKS.
4. SOIL AND WATER MANAGEMENT PLAN IS TO BE SUBMITTED TO COUNCIL'S PROJECT MANAGER FOR A APPROVAL PRIOR TO WORKS.
5. ALL WORK IS TO BE CARRIED OUT TO BEST PRACTICE STANDARDS AND TO THE SATISFACTION OF COUNCIL'S PROJECT MANAGER.
6. THE WORK SITE IS TO BE PROTECTED USING APPROPRIATE SIGNAGE, FENCING, BARRICADING, AND PARA-WEBBING FOR DURATION OF PROJECT CONSTRUCTION.
7. DURING WORKS, CONTRACTOR TO INSTALL TEMPORARY SIGNS - IN ACCORDANCE WITH APPROVED TCP AND MAINTAIN FOR THE DURATION OF THE WORKS.
8. ALL RESIDENTS AFFECTED BY THE PROPOSED WORKS ARE TO BE NOTIFIED AT LEAST 3 WORKING DAYS BEFORE THE COMMENCEMENT OF ROADWORKS TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT.
9. SUITABLE VEHICULAR ACCESS SHALL BE MAINTAINED TO EACH DRIVEWAY OR ALTERNATIVE ARRANGEMENTS MADE WITH THE OWNERS.
10. WORK TO BE CARRIED OUT WITHIN THE APPROVED HOURS ONLY.

#### SERVICES

11. UTILITIES (IF SHOWN) ARE DIAGRAMMATIC ONLY AND HAVE BEEN PREPARED FROM THE INFORMATION PROVIDED BY THE RELEVANT SERVICE AUTHORITIES. CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THE SERVICE AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDELINES.
12. AUSGRID REQUIRES THAT CONTRACTOR SHOULD CONTACT THEM IF WORKING WITHIN 5.0M FROM UNDERGROUND ELECTRICITY CONDUITS.
13. WHERE EXISTING SERVICE COVERS ARE NOMINATED TO BE ADJUSTED TO DESIGN LEVELS, CONTRACTOR IS TO CARRY OUT ALL WORKS IN ACCORDANCE WITH RELEVANT SERVICE AUTHORITY REQUIREMENTS.
14. **NO SERVICE COVERS ARE TO BE COVERED.**

#### SIGNS & LINEMARKING

15. ALL TRAFFIC SIGNS TO COMPLY WITH NATSPEC 1192 & RMS SPECIFICATION R143 AND TO BE OF HIGH INTENSITY CLASS 1 REFLECTIVITY.
16. ALL LINEMARKING IS TO COMPLY WITH NATSPEC 1191 & RMS SPECIFICATION R141 - "PAVEMENT MARKING"
17. LINEMARKING TO BE IN THERMOPLASTIC TYPE (UNLESS STATED OTHERWISE) AND INCLUDE GLASS BEADS IN ACCORDANCE WITH RMS SPECIFICATIONS 3357 AND 3353 RESPECTIVELY. ALL RRPMS TO COMPLY WITH RMS SPECIFICATION R142.
18. KERB FACES OF ALL ISLANDS TO BE PAINTED WHITE AND TO INCLUDE GLASS BEADS IN ACCORDANCE WITH RMS SPECIFICATION NO. 3353.
19. ALL LINEMARKING AND RRPMS REMOVED OR AFFECTED DURING THE COURSE OF THE WORKS ARE TO BE REINSTATED UNLESS NOTED OTHERWISE.
20. ALL EXISTING SIGNS TO REMAIN UNLESS NOTED OTHERWISE.
21. LINEMARKING AND SIGNPOSTING TO BE INSTALLED AS SOON AS PRACTICABLE.
22. REDUNDANT LINEMARKING IS TO BE REMOVED BY GRINDING WHERE SHOWN ON PLANS OR WHERE NEW LINEMARKING IS PROVIDED.
23. ALL SIGNPOSTING ON SPLITTER, KERB OR PEDESTRIAN REFUGE ISLANDS TO BE ERECTED USING V-NOTCH INSERTS, UNLESS NOTED OTHERWISE.
24. UNLESS SHOWN ON PLANS, NO STATE SURVEY MARKS ARE TO BE REMOVED PRIOR TO CONSULTING WITH COUNCIL'S SUPERINTENDENT.
25. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE.



UTILITIES, IF SHOWN, ARE DIAGRAMMATIC ONLY. CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDELINES.

IN CASE OF EMERGENCY, CONTACT THE FOLLOWING UTILITIES IF THEIR SERVICES ARE INVOLVED:

TELSTRA	: 132203
AGL (GAS)	: 131245
SYDNEY WATER	: 132090
AUSGRID	: 131388

**NOTE**  
ALL EXISTING SIGNS AND LINES TO REMAIN UNLESS NOTED OTHERWISE.

**IMPORTANT**  
REDUNDANT LINE MARKING MUST BE REMOVED BY GRINDING WHERE INDICATED ON PLANS.

#### CONCRETE

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. CONCRETE QUALITY.

ELEMENT	SLUMP	MAX AGGREGATE SIZE	CEMENT TYPE	CEMENT GRADE
ALL	80mm	20mm	GP	25MPa

NO ADMIXTURES SHALL BE USED WITHOUT THE APPROVAL OF COUNCIL'S SUPERINTENDENT.

3. CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN-

ELEMENT	SURFACE OF MEMBER IN INTERIOR ENVIRONMENT	SURFACE OF MEMBER IN ABOVE GROUND EXTERIOR ENVIRONMENT	SURFACE OF MEMBER IN CONTACT WITH GROUND (1)	SURFACE OF MEMBER IN WATER
ALL	35	45	55	75

**NOTE:**  
1. COVER MAY BE REDUCED BY 10mm IF THE SURFACE IS PROTECTED BY A DAMP-PROOF MEMBRANE.  
2. SLABS EXPOSED TO CORROSIVE VAPOURS, CORROSIVE GROUND WATER, SEA WATER, OR SPRAY ARE TO HAVE REINFORCEMENT COVER AS NOTED ON THE DRAWINGS.

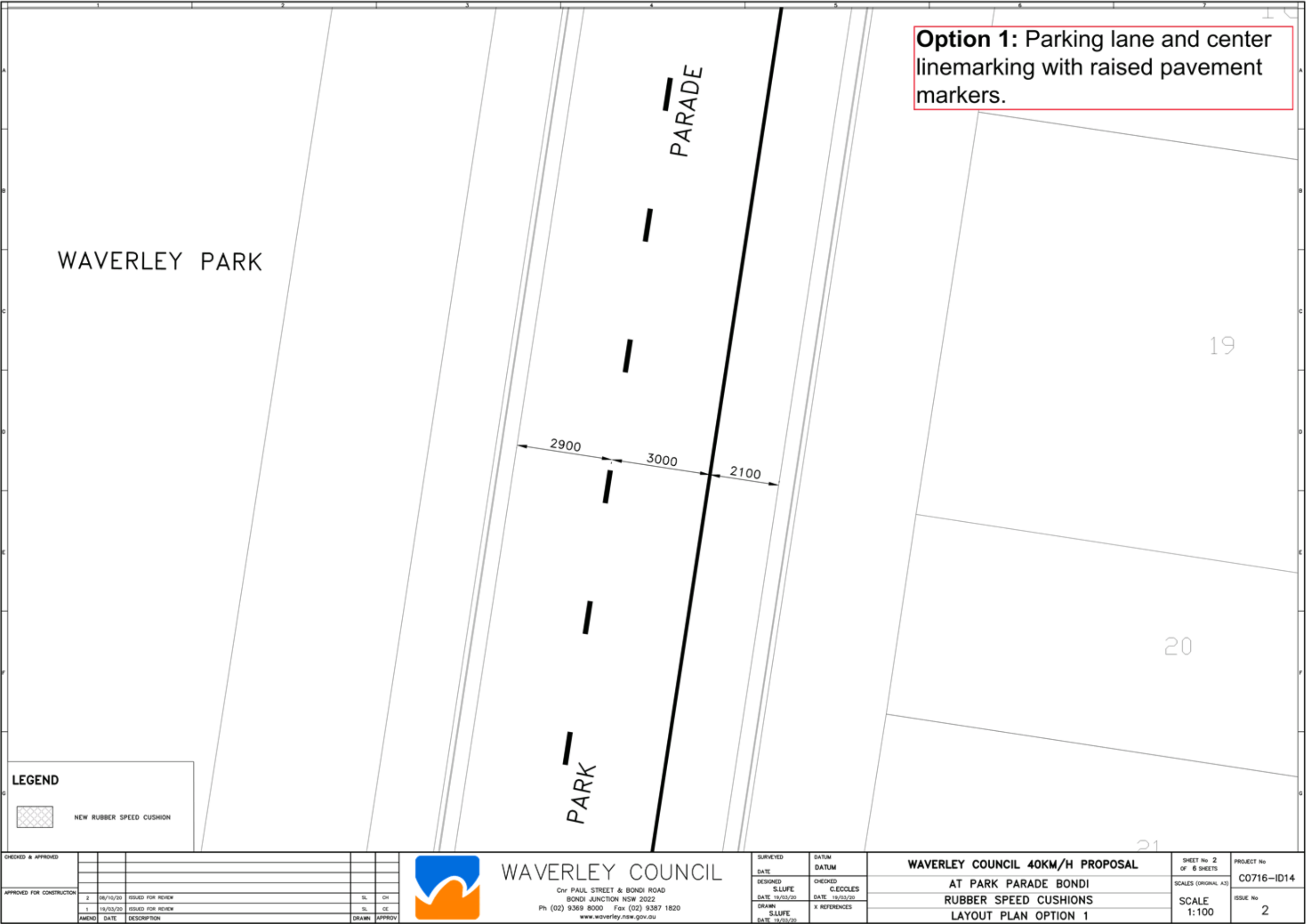
4. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
5. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF COUNCIL'S SUPERINTENDENT.
6. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF COUNCIL'S SUPERINTENDENT.
7. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
8. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF COUNCIL'S SUPERINTENDENT. THE CONCRETE COVER TO EMBEDDED PIPES OR CONDUITS SHALL BE A MINIMUM OF 20mm.
9. ALL REINFORCEMENT FABRIC SHALL COMPLY WITH AS 1303 AND AS 1304 AND SHALL BE SUPPLIED AS FLAT SHEETS.
10. ALL CONCRETE TO BE MECHANICALLY VIBRATED IN FORM TO GIVE MAXIMUM COMPACTION WITHOUT SEGREGATION OF CONCRETE.
11. PROVIDE 20mm CHAMFER TO ALL EXPOSED EDGES U.N.O.

#### DRAWING SCHEDULE

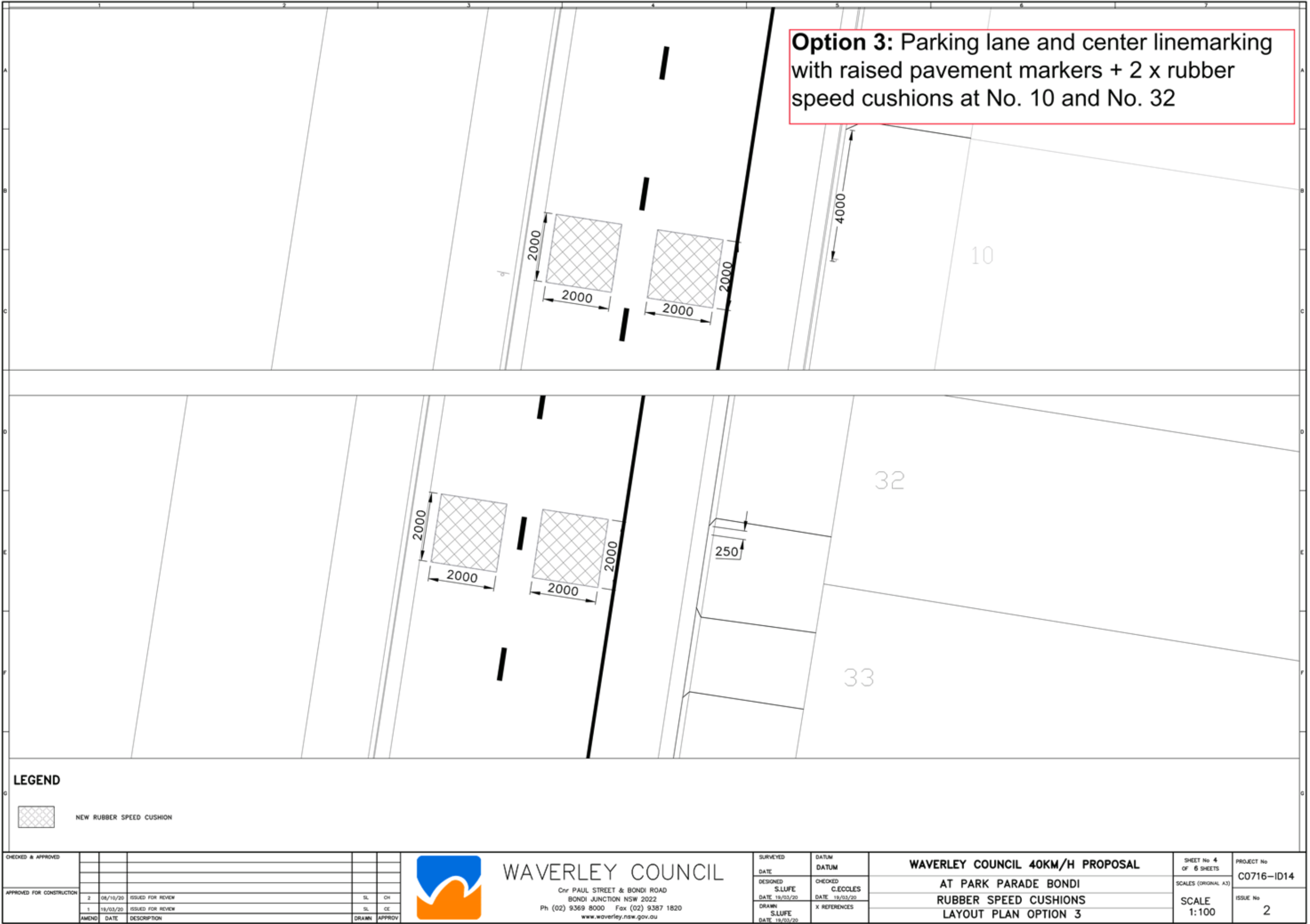
- 1/5 - NOTES AND SCHEDULES
- 2/5 - LAYOUT PLAN
- 3/5 - DETAILS SHEET
- 4/5 - SIGNAGE AND LINEMARKING PLAN
- 5/5 - SERVICES PLAN

CHECKED & APPROVED												<b>WAVERLEY COUNCIL</b> Cnr PAUL STREET & BONDI ROAD BONDI JUNCTION NSW 2022 Ph (02) 9369 8000 Fax (02) 9387 1820 www.waverley.nsw.gov.au		SURVEYED DATE DESIGNED S.LUFE DATE 19/03/20 DRAWN S.LUFE DATE 19/03/20	DATUM DATUM CHECKED C.ECCLES DATE 19/03/20 X REFERENCES	<b>WAVERLEY COUNCIL 40KM/H PROPOSAL</b> <b>AT 19 PARK PARADE BONDI</b> <b>RUBBER SPEED CUSHIONS</b> <b>NOTES AND SCHEDULES</b>		SHEET No 1 OF 6 SHEETS SCALES (ORIGINAL A3) <b>SCALE</b> <b>NTS</b>	PROJECT No <b>C0716-ID14</b> ISSUE No <b>2</b>
APPROVED FOR CONSTRUCTION		2		08/10/20		ISSUED FOR REVIEW		SL		OH									
AMEND		1		19/03/20		ISSUED FOR REVIEW		SL		CE									
								DRAWN		APPROV									











**REPORT**  
**TC/C.08/20.10**

**Subject:** 40 km/h Speed Limit Changes - Traffic Control Devices - 25 and 37 Murray Street, Bronte

**TRIM No:** A18/0579

**Author:** Malik Almuhanha, Senior Traffic Engineer  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authoriser:** Dan Joannides, Executive Manager, Infrastructure Services

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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Approves the installation of kerb extensions and speed cushions outside 25 and 37 Murray Street, Bronte, as shown in Attachment 1 and 2 (Option 2) of the report.
2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.

**1. Executive Summary**

This report seeks endorsement of traffic control devices to be installed along Murray Street, as part of the 40 km/h speed limit changes in the southern part of the Waverley local government area (see Figure 1).

A report presented to the September 2020 traffic committee recommended installation of two single speed humps on Murray Street outside 25 and 37 Murray Street (see Figure 4). The Traffic Committee deferred the report to the October Traffic Committee meeting in order to investigate alternative treatments on Murray Street.

A new design has been completed. It is shown in Figures 2, 3 and 4. It comprises:

1. Two sets of rubber speed cushions replacing the previously proposed speed humps.
2. Upgraded kerb extensions outside 25 and 37 Murray Street, with medium to high soft surface planting.

The upgraded kerb extensions complement the speed cushions by providing a 'closed' through environment (similar to a tunnelling effect).

Average traffic speeds on Murray Street are around 46 km/h. 85<sup>th</sup>ile speeds are around 55 km/h. The 85<sup>th</sup>ile speeds should be reduced to around 40 km/h to achieve a self-enforcing 40 km/h speed zone.

The new design is expected to reduce the 85<sup>th</sup>ile traffic speeds to below 40 km/h at the speed cushions.

Delegation of authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes is also proposed. This covers situations where factors such as drainage or a minor change in location, size of ramps, wings, or threshold prove necessary.



Figure 1. Traffic devices location

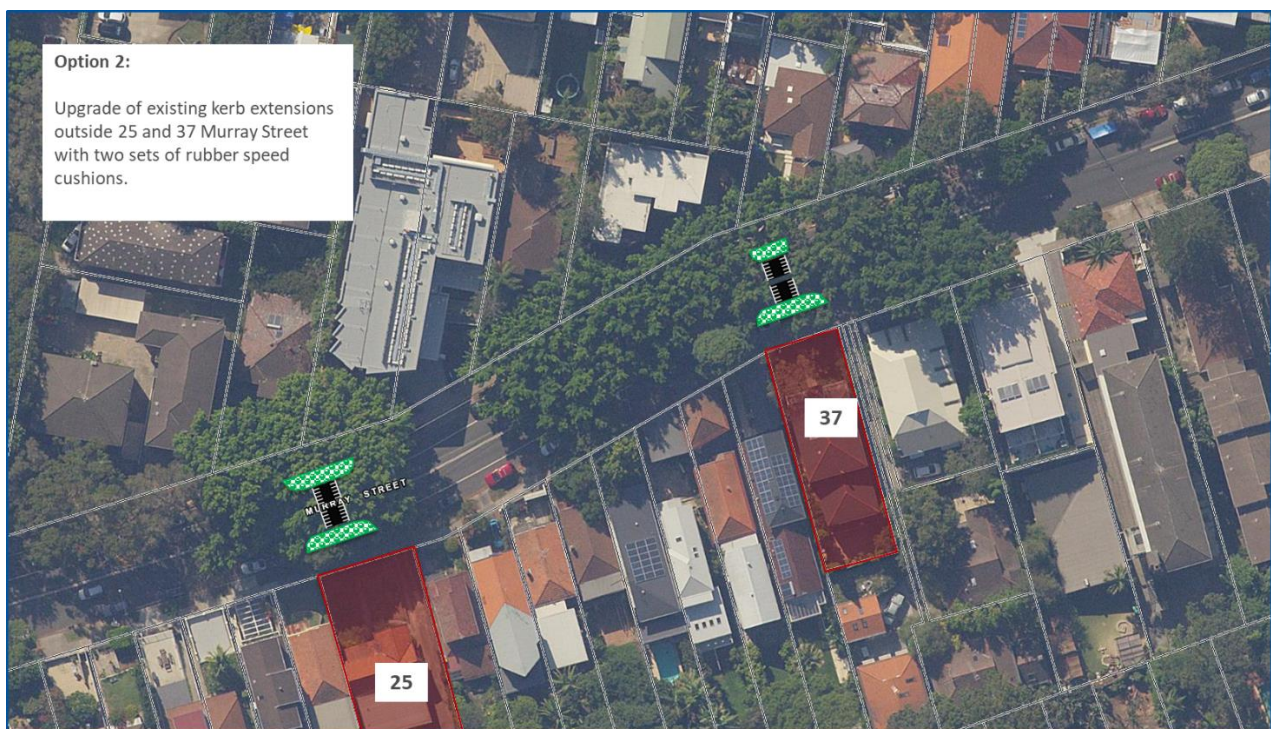


Figure 2. Concept of proposed traffic control devices



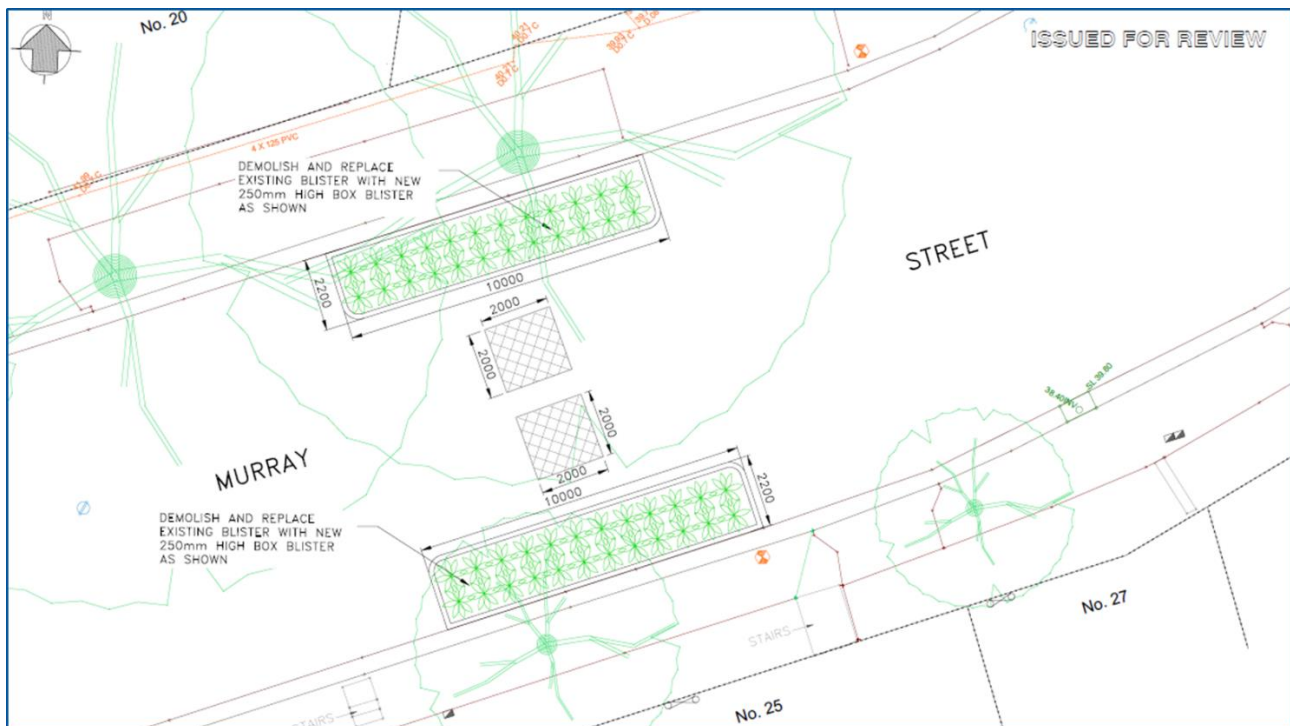


Figure 3. 25 Murray Street – Proposed traffic control device design.

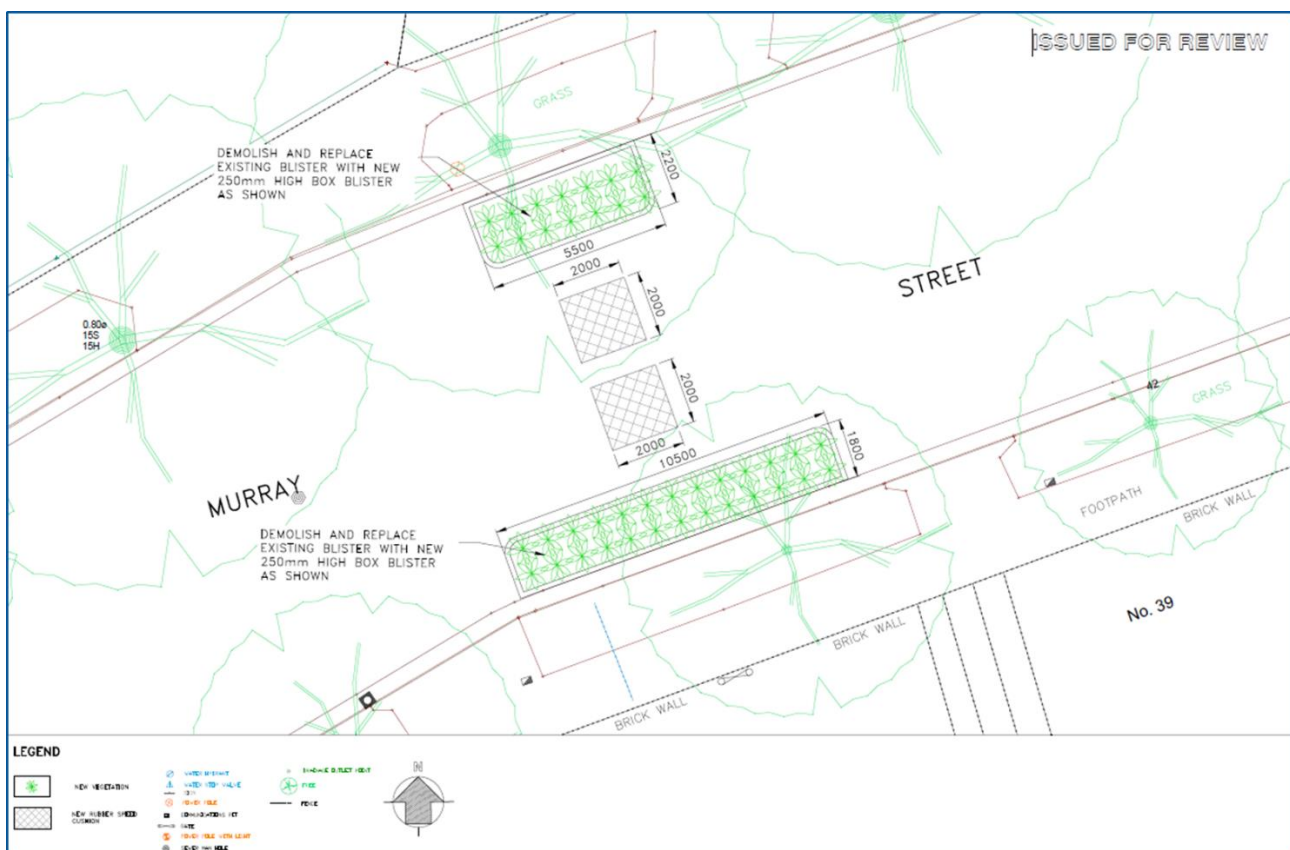


Figure 4. 37 Murray Street – Proposed traffic control device design.

## 2. Introduction/Background

Community consultation within the Waverley government area has found that an overwhelming proportion of residents would like reduced speed limits in their streets. The proposal to implement a Waverley-wide

40 km/h speed limit was developed as a signature project and adopted by Council in 2017 as part of the adoption of the 'People, Movement and Places' strategy.

### **Community consultation**

Community consultation took place from November 2019 to January 2020. A range of engagement methods were used to maximise the opportunity for community participation. Of particular note was the use of an interactive map on Have Your Say (HYS) Council's engagement platform, face to face 'Have Your Say Days' in four locations, door knocking on specifically impacted houses and email communication with a range of organisations and community members.

Murray Street was identified as requiring treatment due to the 85<sup>th</sup> percentile speeds being around 55 km/h. Feedback from residents of Murray Street included:

1. One resident indicated that line marking is required at driveways to stop cars parking over driveway and making it very difficult to get in and out.
2. Another resident advised that Murray Street needs better crossing facilities for the retirement village. There is also a kindergarten and school. You cannot cross from 37 Murray Street.
3. Another resident complained that it is very difficult to cross the road. The resident was supportive of a speed hump plus requested a safe crossing point.

The proposed speed cushions address the speeding issue. They do not address the difficulties in crossing Murray Street.

### **Speed humps vs speed cushions**

Key differences between speed humps and speed cushions are:

1. Speed humps are made of asphaltic concrete. Speed cushions are made of recycled rubber.
2. Speed humps can cover the entire road width. Speed cushions generally cover a single lane.
3. Speed humps are permanent devices. Speed cushions can be removed with relatively ease.
4. Speed humps are more effective in reducing speeds.

Speed cushions can be removed and replaced with an asphaltic concrete speed hump at a later date should more speed control prove necessary to achieve the 40 km/hr target.

### **Buses**

State Transit bus routes 360 and 362 run along Murray Street. The proposed speed cushions are designed to have low impacts on buses (particularly bouncing effects).

### 3. Technical Analysis

The original design presented to the September 2020 traffic committee comprised a kerb extension and a speed hump (see Figure 5).

Two alternative treatments have been assessed. They are:

1. Option 1 – Upgrade and extension of the existing kerb extensions outside 25 and 37 Murray Street with medium to high soft surface planting (see Figure 6). This option will calm traffic but not to below 40 km/hour. It is a supportive measure that helps slow down drivers compared to current conditions.
2. Option 2 (recommended) – Two sets of rubber speed cushions replacing the previously proposed speed humps as well as an upgrade to the existing kerb extensions outside 25 and 37 Murray Street with medium to high soft surface planting (see Figure 7).

The extended kerb extensions will result on the loss of three parking spaces

Option 2 is recommended as it is the most effective in reducing speeds along Murray Street.

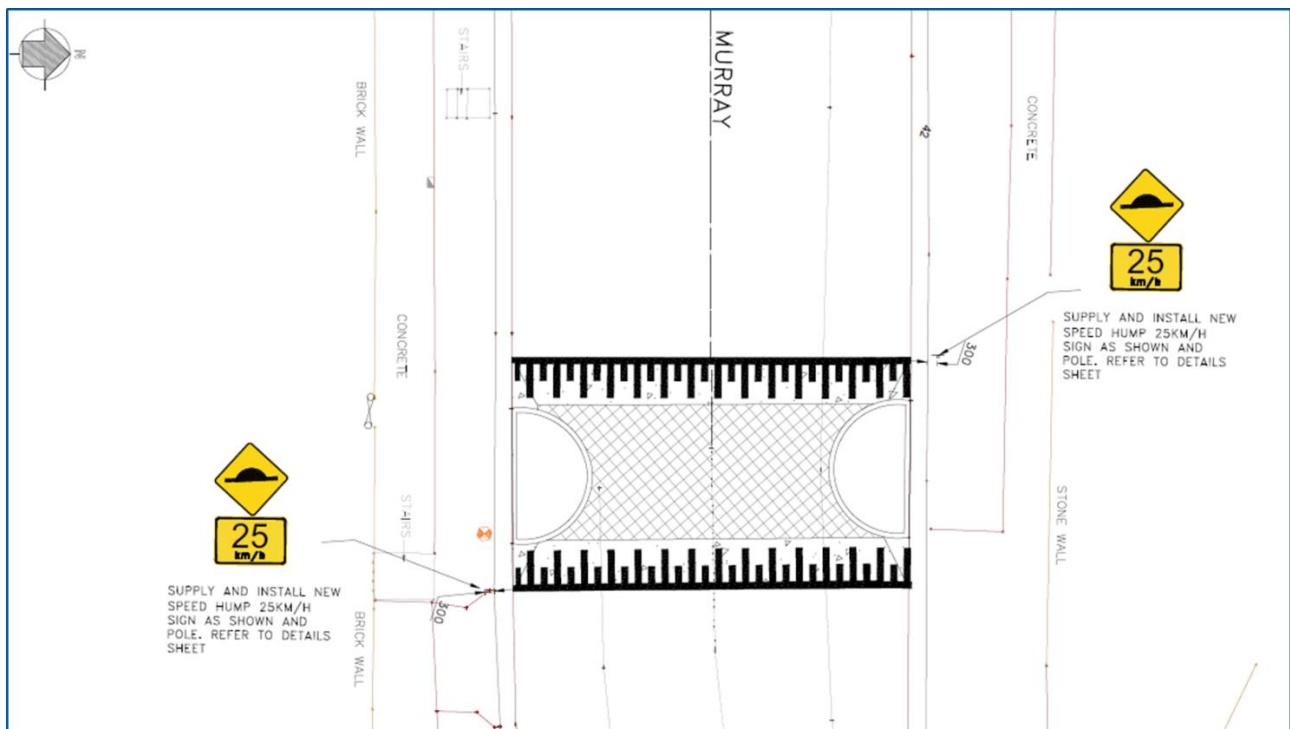


Figure 5. Murray Street design presented to September 2020 Traffic Committee



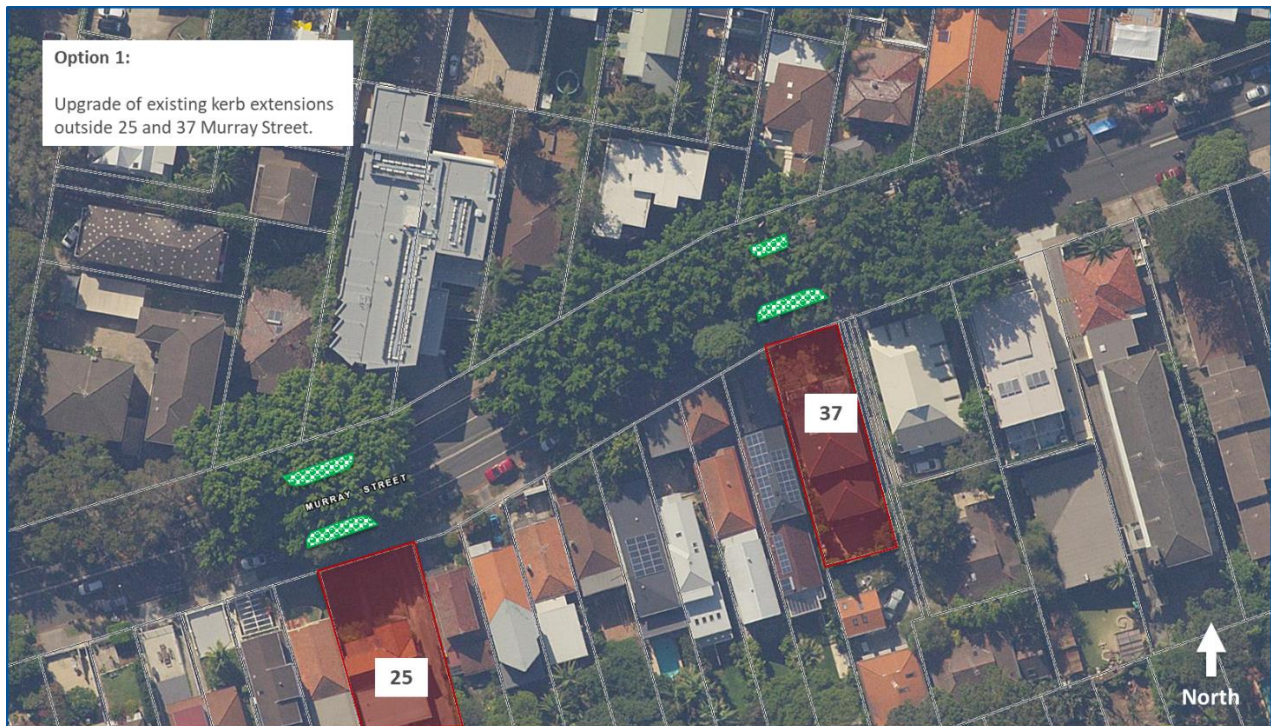


Figure 6. Option 1 – Upgraded kerb extensions only.

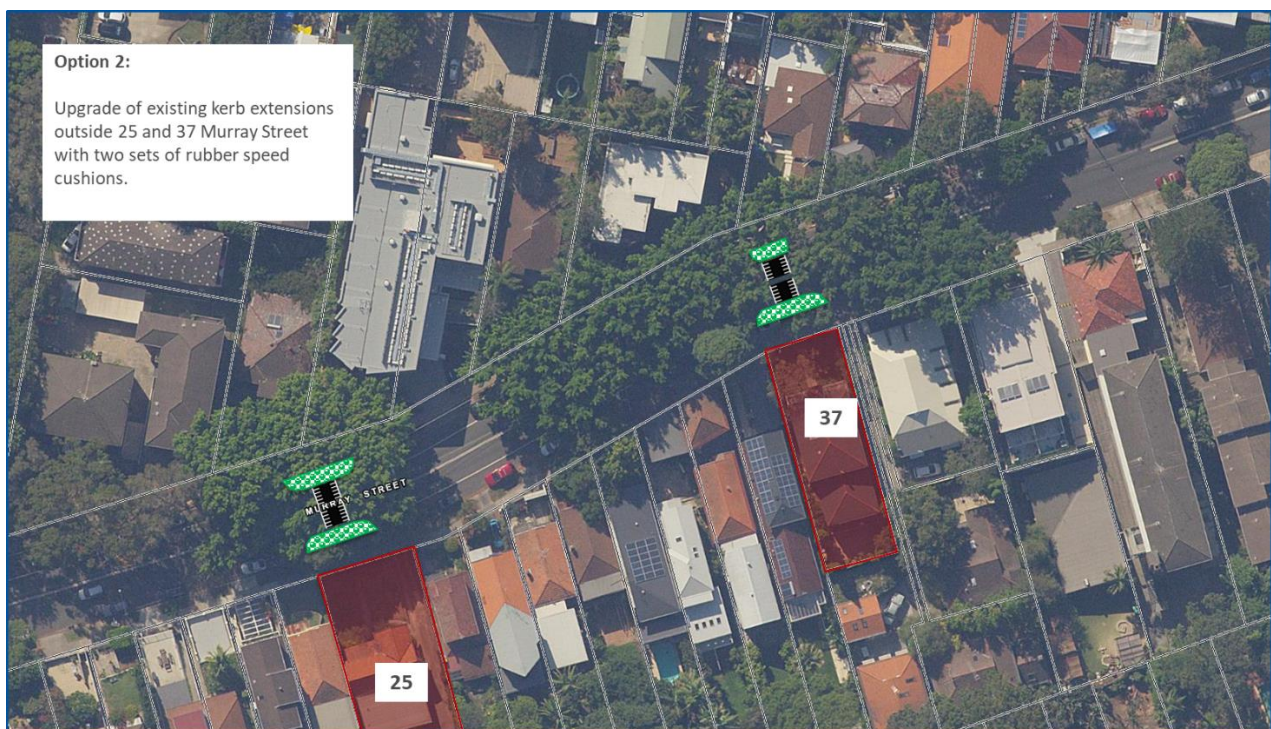


Figure 7. Option 2 – Upgraded kerb extensions with rubber speed cushions (recommended option).

#### 4. Financial Information for Council's Consideration

Council has received a commitment of \$1 million for construction from the RMS NSW Safe Speeds in High Pedestrian Activity and Local Area program. The \$1 million is required to be spent or committed by 30 June 2021.



**5. Attachments**

1. ID-22 25 Murray Street 40kph treatment [↓](#)
2. ID-23 37 Murray Street 40kph treatment [↓](#) .

ISSUED FOR REVIEW

# 25 Murray Street - Bronte

## Proposed Traffic Design Options

### 40km/h Speed Limit Change

#### GENERAL NOTES

1. THE DESIGN DRAWINGS SHOULD BE READ IN CONJUNCTION WITH WAVERLEY COUNCIL'S STANDARD DRAWINGS.
2. DURING CONSTRUCTION THE WORK IS TO BE SIGNPOSTED AND MARKED TO THE REQUIREMENTS OF AS1742.2-2009 AND AS1742.3-2009 "TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS".
3. A TRAFFIC CONTROL PLAN IS TO BE SUBMITTED TO COUNCIL'S PROJECT MANAGER FOR APPROVAL PRIOR TO WORKS.
4. SOIL AND WATER MANAGEMENT PLAN IS TO BE SUBMITTED TO COUNCIL'S PROJECT MANAGER FOR A APPROVAL PRIOR TO WORKS.
5. ALL WORK IS TO BE CARRIED OUT TO BEST PRACTICE STANDARDS AND TO THE SATISFACTION OF COUNCIL'S PROJECT MANAGER.
6. THE WORK SITE IS TO BE PROTECTED USING APPROPRIATE SIGNAGE, FENCING, BARRICADING, AND PARA-WEBBING FOR DURATION OF PROJECT CONSTRUCTION.
7. DURING WORKS, CONTRACTOR TO INSTALL TEMPORARY SIGNS - IN ACCORDANCE WITH APPROVED TCP AND MAINTAIN FOR THE DURATION OF THE WORKS.
8. ALL RESIDENTS AFFECTED BY THE PROPOSED WORKS ARE TO BE NOTIFIED AT LEAST 3 WORKING DAYS BEFORE THE COMMENCEMENT OF ROADWORKS TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT.
9. SUITABLE VEHICULAR ACCESS SHALL BE MAINTAINED TO EACH DRIVEWAY OR ALTERNATIVE ARRANGEMENTS MADE WITH THE OWNERS.
10. WORK TO BE CARRIED OUT WITHIN THE APPROVED HOURS ONLY.

#### SERVICES

11. UTILITIES (IF SHOWN) ARE DIAGRAMMATIC ONLY AND HAVE BEEN PREPARED FROM THE INFORMATION PROVIDED BY THE RELEVANT SERVICE AUTHORITIES. CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THE SERVICE AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDELINES.
12. AUSGRID REQUIRES THAT CONTRACTOR SHOULD CONTACT THEM IF WORKING WITHIN 5.0M FROM UNDERGROUND ELECTRICITY CONDUITS.
13. WHERE EXISTING SERVICE COVERS ARE NOMINATED TO BE ADJUSTED TO DESIGN LEVELS, CONTRACTOR IS TO CARRY OUT ALL WORKS IN ACCORDANCE WITH RELEVANT SERVICE AUTHORITY REQUIREMENTS.
14. NO SERVICE COVERS ARE TO BE COVERED.

#### SIGNS & LINEMARKING

15. ALL TRAFFIC SIGNS TO COMPLY WITH NATSPEC 1192 & RMS SPECIFICATION R143 AND TO BE OF HIGH INTENSITY CLASS 1 REFLECTIVITY.
16. ALL LINEMARKING IS TO COMPLY WITH NATSPEC 1191 & RMS SPECIFICATION R141 - "PAVEMENT MARKING"
17. LINEMARKING TO BE IN THERMOPLASTIC TYPE (UNLESS STATED OTHERWISE) AND INCLUDE GLASS BEADS IN ACCORDANCE WITH RMS SPECIFICATIONS 3357 AND 3353 RESPECTIVELY. ALL RRPM'S TO COMPLY WITH RMS SPECIFICATION R142.
18. KERB FACES OF ALL ISLANDS TO BE PAINTED WHITE AND TO INCLUDE GLASS BEADS IN ACCORDANCE WITH RMS SPECIFICATION NO. 3353.
19. ALL LINEMARKING AND RRPM'S REMOVED OR AFFECTED DURING THE COURSE OF THE WORKS ARE TO BE REINSTATED UNLESS NOTED OTHERWISE.
20. ALL EXISTING SIGNS TO REMAIN UNLESS NOTED OTHERWISE.
21. LINEMARKING AND SIGNPOSTING TO BE INSTALLED AS SOON AS PRACTICABLE.
22. REDUNDANT LINEMARKING IS TO BE REMOVED BY GRINDING WHERE SHOWN ON PLANS OR WHERE NEW LINEMARKING IS PROVIDED.
23. ALL SIGNPOSTING ON SPLITTER, KERB OR PEDESTRIAN REFUGE ISLANDS TO BE ERECTED USING V-NOTCH INSERTS, UNLESS NOTED OTHERWISE.
24. UNLESS SHOWN ON PLANS, NO STATE SURVEY MARKS ARE TO BE REMOVED PRIOR TO CONSULTING WITH COUNCIL'S SUPERINTENDENT.
25. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE.



UTILITIES, IF SHOWN, ARE DIAGRAMMATIC ONLY. CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDELINES.

IN CASE OF EMERGENCY, CONTACT THE FOLLOWING UTILITIES IF THEIR SERVICES ARE INVOLVED:

TELSTRA	132203
AGL (GAS)	131245
SYDNEY WATER	132090
AUSGRID	131388

**NOTE**  
ALL EXISTING SIGNS AND LINES TO REMAIN UNLESS NOTED OTHERWISE.

**IMPORTANT**  
REDUNDANT LINE MARKING MUST BE REMOVED BY GRINDING WHERE INDICATED ON PLANS.

#### CONCRETE

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. CONCRETE QUALITY.

ELEMENT	SLUMP	MAX AGGREGATE SIZE	CEMENT TYPE	CEMENT GRADE
ALL	80mm	20mm	GP	25MPa

- NO ADMIXTURES SHALL BE USED WITHOUT THE APPROVAL OF COUNCIL'S SUPERINTENDENT.
3. CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN-

ELEMENT	SURFACE OF MEMBER IN INTERIOR ENVIRONMENT	SURFACE OF MEMBER IN ABOVE GROUND EXTERIOR ENVIRONMENT	SURFACE OF MEMBER IN CONTACT WITH GROUND (1)	SURFACE OF MEMBER IN WATER
ALL	35	45	55	75

**NOTE:**  
1. COVER MAY BE REDUCED BY 10mm IF THE SURFACE IS PROTECTED BY A DAMP-PROOF MEMBRANE.  
2. SLABS EXPOSED TO CORROSIVE VAPOURS, CORROSIVE GROUND WATER, SEA WATER, OR SPRAY ARE TO HAVE REINFORCEMENT COVER AS NOTED ON THE DRAWINGS.

4. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF COUNCIL'S SUPERINTENDENT.
6. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF COUNCIL'S SUPERINTENDENT.
7. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
8. PIPES OR CONDUITS SHALL NOT BE PLACED WITHIN THE CONCRETE COVER TO REINFORCEMENT WITHOUT THE APPROVAL OF COUNCIL'S SUPERINTENDENT. THE CONCRETE COVER TO EMBEDDED PIPES OR CONDUITS SHALL BE A MINIMUM OF 20mm.
9. ALL REINFORCEMENT FABRIC SHALL COMPLY WITH AS 1303 AND AS 1304 AND SHALL BE SUPPLIED AS FLAT SHEETS.
10. ALL CONCRETE TO BE MECHANICALLY VIBRATED IN FORM TO GIVE MAXIMUM COMPACTION WITHOUT SEGREGATION OF CONCRETE.
11. PROVIDE 20mm CHAMFER TO ALL EXPOSED EDGES U.N.O.

#### DRAWING SCHEDULE

- 1/5- NOTES AND SCHEDULES
- 2/5- LAYOUT PLAN OPTION 1
- 3/5 - LAYOUT PLAN OPTION 2
- 4/5 - SIGNAGE AND LINEMARKING PLAN OPTION 1
- 5/5 - SIGNAGE AND LINEMARKING PLAN OPTION 2

#### LOCATION OF WORKS



**LOCALITY PLAN**  
(NTS)

CHECKED & APPROVED												<b>WAVERLEY COUNCIL</b> Cnr PAUL STREET & BONDI ROAD BONDI JUNCTION NSW 2022 Ph (02) 9369 8000 Fax (02) 9387 1820 www.waverley.nsw.gov.au		SURVEYED DATE DESIGNED SLUFE DATE 19/03/20 DRAWN SLUFE DATE 19/03/20	DATUM DATE CHECKED CECCLES DATE 19/03/20 X REFERENCES	<b>WAVERLEY COUNCIL 40KM/H PROPOSAL</b> <b>AT 25 MURRAY STREET BRONTE</b> <b>NOTES AND SCHEDULES</b>		SHEET No 1 OF 7 SHEETS SCALES (ORIGINAL AS)	PROJECT No <b>C0716-ID22</b> ISSUE No <b>1</b>
APPROVED FOR CONSTRUCTION																			
1		28/06/20		ISSUED FOR REVIEW		SL		RH											
AMEND		DATE		DESCRIPTION		DRAWN		APPROV											













# 37 Murray Street - Bronte

## Proposed Traffic Design Options

### 40km/h Speed Limit Change

ISSUED FOR REVIEW

#### GENERAL NOTES

1. THE DESIGN DRAWINGS SHOULD BE READ IN CONJUNCTION WITH WAVERLEY COUNCIL'S STANDARD DRAWINGS.
2. DURING CONSTRUCTION THE WORK IS TO BE SIGNPOSTED AND MARKED TO THE REQUIREMENTS OF AS1742.2-2009 AND AS1742.3-2009 "TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS".
3. A TRAFFIC CONTROL PLAN IS TO BE SUBMITTED TO COUNCIL'S PROJECT MANAGER FOR APPROVAL PRIOR TO WORKS.
4. SOIL AND WATER MANAGEMENT PLAN IS TO BE SUBMITTED TO COUNCIL'S PROJECT MANAGER FOR A APPROVAL PRIOR TO WORKS.
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6. THE WORK SITE IS TO BE PROTECTED USING APPROPRIATE SIGNAGE, FENCING, BARRICADING, AND PARA-WEBBING FOR DURATION OF PROJECT CONSTRUCTION.
7. DURING WORKS, CONTRACTOR TO INSTALL TEMPORARY SIGNS - IN ACCORDANCE WITH APPROVED TCP AND MAINTAIN FOR THE DURATION OF THE WORKS.
8. ALL RESIDENTS AFFECTED BY THE PROPOSED WORKS ARE TO BE NOTIFIED AT LEAST 3 WORKING DAYS BEFORE THE COMMENCEMENT OF ROADWORKS TO THE SATISFACTION OF COUNCIL'S SUPERINTENDENT.
9. SUITABLE VEHICULAR ACCESS SHALL BE MAINTAINED TO EACH DRIVEWAY OR ALTERNATIVE ARRANGEMENTS MADE WITH THE OWNERS.
10. WORK TO BE CARRIED OUT WITHIN THE APPROVED HOURS ONLY.

#### SERVICES

11. UTILITIES (IF SHOWN) ARE DIAGRAMMATIC ONLY AND HAVE BEEN PREPARED FROM THE INFORMATION PROVIDED BY THE RELEVANT SERVICE AUTHORITIES. CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THE SERVICE AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDELINES.
12. AUSGRID REQUIRES THAT CONTRACTOR SHOULD CONTACT THEM IF WORKING WITHIN 5.0M FROM UNDERGROUND ELECTRICITY CONDUITS.
13. WHERE EXISTING SERVICE COVERS ARE NOMINATED TO BE ADJUSTED TO DESIGN LEVELS, CONTRACTOR IS TO CARRY OUT ALL WORKS IN ACCORDANCE WITH RELEVANT SERVICE AUTHORITY REQUIREMENTS.
14. NO SERVICE COVERS ARE TO BE COVERED.

#### SIGNS & LINEMARKING

15. ALL TRAFFIC SIGNS TO COMPLY WITH NATSPEC 1192 & RMS SPECIFICATION R143 AND TO BE OF HIGH INTENSITY CLASS 1 REFLECTIVITY.
16. ALL LINEMARKING IS TO COMPLY WITH NATSPEC 1191 & RMS SPECIFICATION R141 - "PAVEMENT MARKING".
17. LINEMARKING TO BE IN THERMOPLASTIC TYPE (UNLESS STATED OTHERWISE) AND INCLUDE GLASS BEADS IN ACCORDANCE WITH RMS SPECIFICATIONS 3357 AND 3353 RESPECTIVELY. ALL RRPMS TO COMPLY WITH RMS SPECIFICATION R142.
18. KERB FACES OF ALL ISLANDS TO BE PAINTED WHITE AND TO INCLUDE GLASS BEADS IN ACCORDANCE WITH RMS SPECIFICATION NO. 3353.
19. ALL LINEMARKING AND RRPMS REMOVED OR AFFECTED DURING THE COURSE OF THE WORKS ARE TO BE REINSTATED UNLESS NOTED OTHERWISE.
20. ALL EXISTING SIGNS TO REMAIN UNLESS NOTED OTHERWISE.
21. LINEMARKING AND SIGNPOSTING TO BE INSTALLED AS SOON AS PRACTICABLE.
22. REDUNDANT LINEMARKING IS TO BE REMOVED BY GRINDING WHERE SHOWN ON PLANS OR WHERE NEW LINEMARKING IS PROVIDED.
23. ALL SIGNPOSTING ON SPLITTER, KERB OR PEDESTRIAN REFUGE ISLANDS TO BE ERECTED USING V-NOTCH INSERTS, UNLESS NOTED OTHERWISE.
24. UNLESS SHOWN ON PLANS, NO STATE SURVEY MARKS ARE TO BE REMOVED PRIOR TO CONSULTING WITH COUNCIL'S SUPERINTENDENT.
25. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE.



UTILITIES, IF SHOWN, ARE DIAGRAMMATIC ONLY. CONTRACTORS ARE RESPONSIBLE TO LOCATE AND AVOID DAMAGE TO THEM AS SPECIFIED BY EACH UTILITIES EXCAVATION GUIDELINES.

IN CASE OF EMERGENCY, CONTACT THE FOLLOWING UTILITIES IF THEIR SERVICES ARE INVOLVED:

TELSTRA	+ 132203
AGL (GAS)	+ 131245
SYDNEY WATER	+ 132090
AUSGRID	+ 131388

**NOTE**  
ALL EXISTING SIGNS AND LINES TO REMAIN UNLESS NOTED OTHERWISE.

**IMPORTANT**  
REDUNDANT LINE MARKING MUST BE REMOVED BY GRINDING WHERE INDICATED ON PLANS.

#### CONCRETE

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. CONCRETE QUALITY.

ELEMENT	SLUMP	MAX AGGREGATE SIZE	CEMENT TYPE	CEMENT GRADE
ALL	80mm	20mm	GP	25MPa

NO ADMIXTURES SHALL BE USED WITHOUT THE APPROVAL OF COUNCIL'S SUPERINTENDENT.  
3. CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN-

ELEMENT	SURFACE OF MEMBER IN INTERIOR ENVIRONMENT	SURFACE OF MEMBER IN ABOVE GROUND EXTERIOR ENVIRONMENT	SURFACE OF MEMBER IN CONTACT WITH GROUND (1)	SURFACE OF MEMBER IN WATER
ALL	35	45	55	75

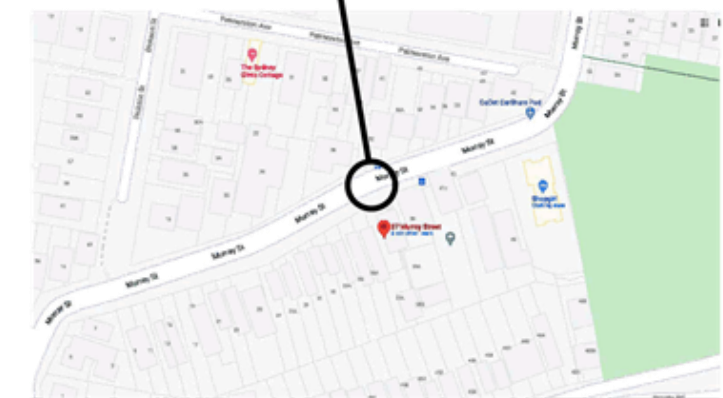
**NOTE:**  
1. COVER MAY BE REDUCED BY 10mm IF THE SURFACE IS PROTECTED BY A DAMP-PROOF MEMBRANE.  
2. SLABS EXPOSED TO CORROSIVE VAPOURS, CORROSIVE GROUND WATER, SEA WATER, OR SPRAY ARE TO HAVE REINFORCEMENT COVER AS NOTED ON THE DRAWINGS.

4. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.
5. CONSTRUCTION JOINTS WHERE NOT SHOWN SHALL BE LOCATED TO THE APPROVAL OF COUNCIL'S SUPERINTENDENT.
6. NO HOLES OR CHASES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR APPROVAL OF COUNCIL'S SUPERINTENDENT.
7. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
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9. ALL REINFORCEMENT FABRIC SHALL COMPLY WITH AS 1303 AND AS 1304 AND SHALL BE SUPPLIED AS FLAT SHEETS.
10. ALL CONCRETE TO BE MECHANICALLY VIBRATED IN FORM TO GIVE MAXIMUM COMPACTION WITHOUT SEGREGATION OF CONCRETE.
11. PROVIDE 20mm CHAMFER TO ALL EXPOSED EDGES U.N.O.

#### DRAWING SCHEDULE

- 1/5- NOTES AND SCHEDULES  
2/5- LAYOUT PLAN OPTION 1  
3/5 - LAYOUT PLAN OPTION 2  
4/5 - SIGNAGE AND LINEMARKING PLAN OPTION 1  
5/5 - SIGNAGE AND LINEMARKING PLAN OPTION 2

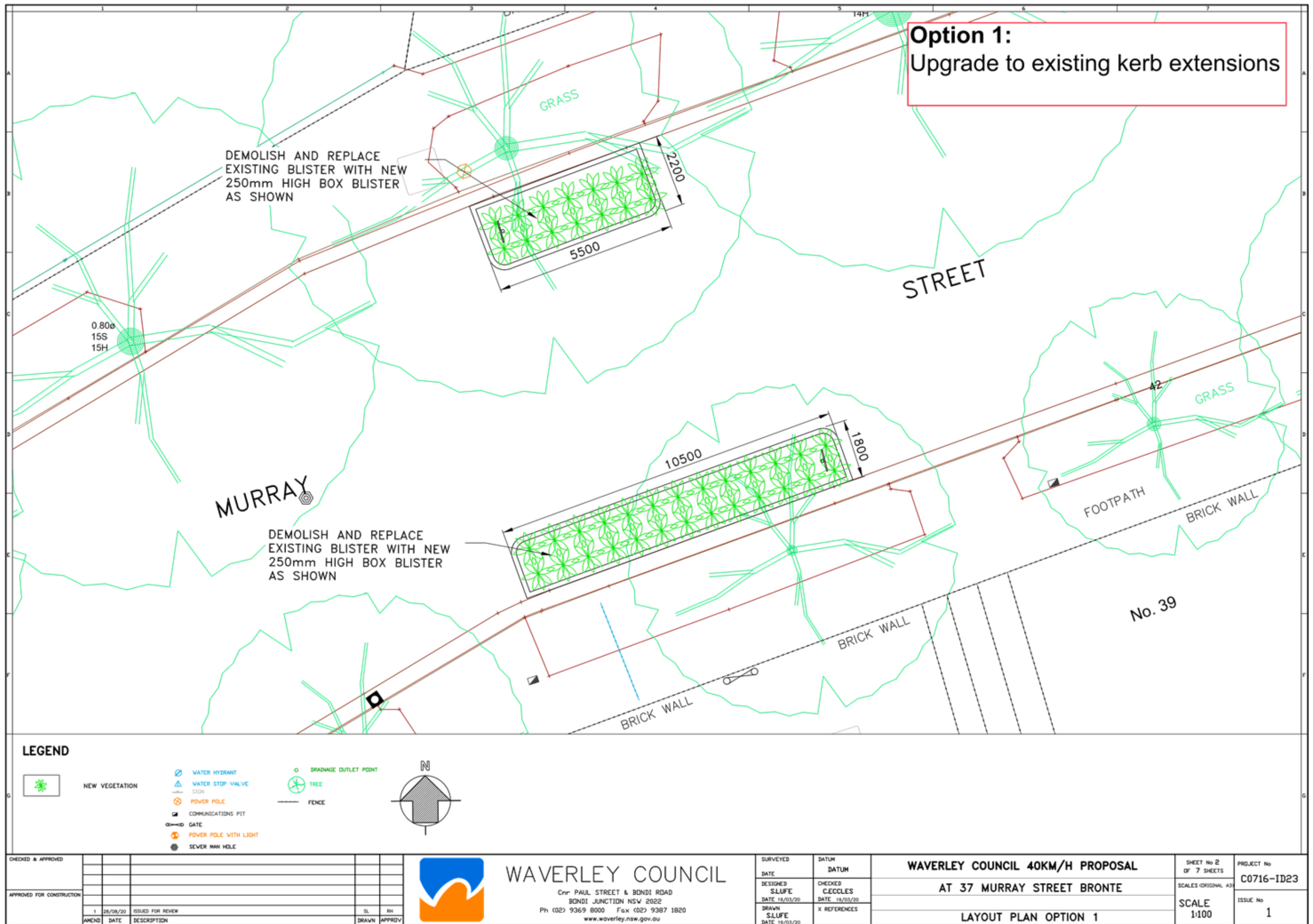
#### LOCATION OF WORKS



LOCALITY PLAN  
(NTS)

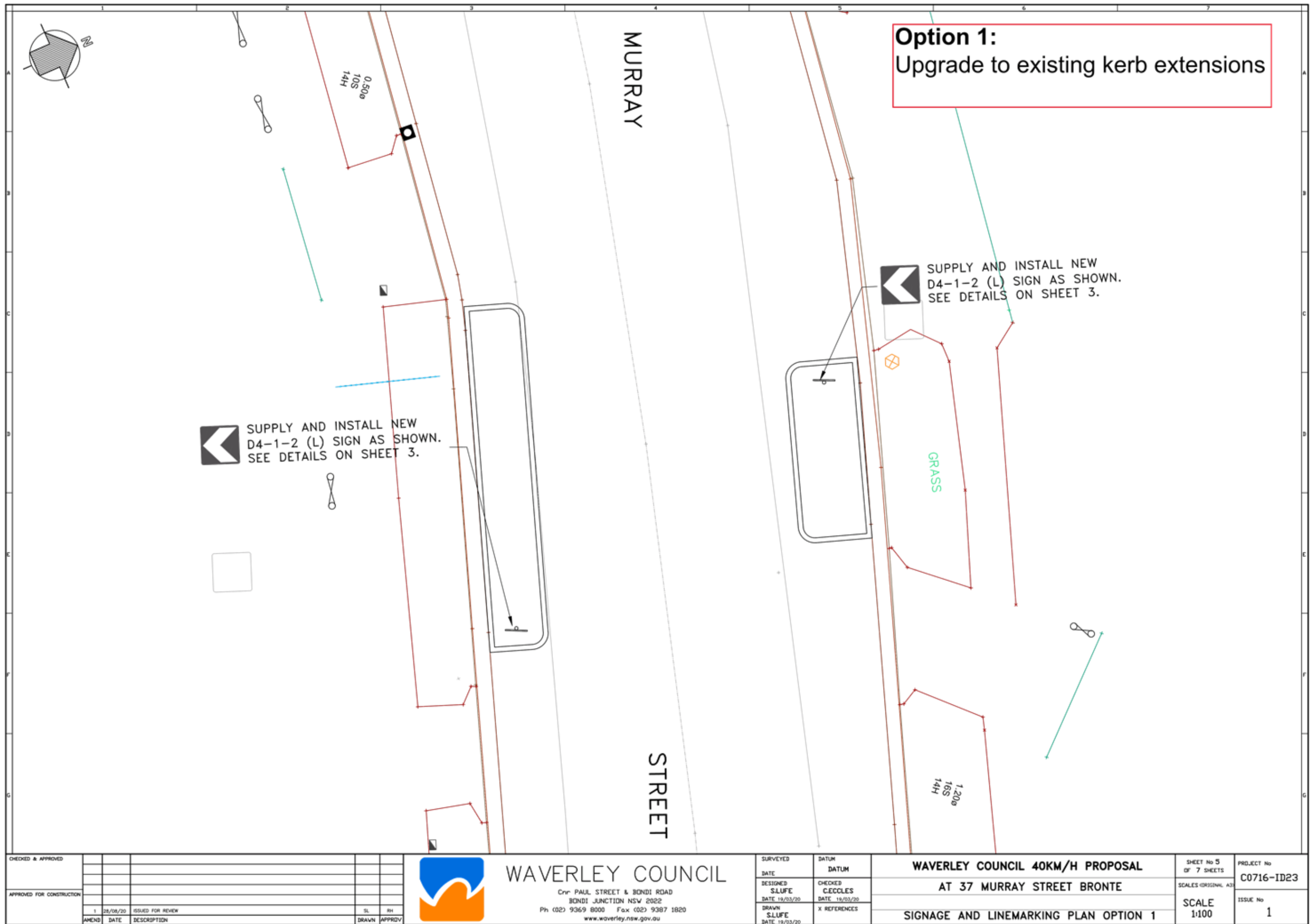
CHECKED & APPROVED												<b>WAVERLEY COUNCIL</b> Cnr PAUL STREET & BONDI ROAD BONDI JUNCTION NSW 2022 Ph (02) 9369 8000 Fax (02) 9387 1820 www.waverley.nsw.gov.au		SURVEYED DATE DESIGNED S.LUFE DATE 19/03/20 DRAWN S.LUFE DATE 19/03/20	DATUM DATUM CHECKED C.ECCLES DATE 19/03/20 X REFERENCES	<b>WAVERLEY COUNCIL 40KM/H PROPOSAL</b> <b>AT 37 MURRAY STREET BRONTE</b> <b>NOTES AND SCHEDULES</b>		SHEET No 1 OF 7 SHEETS SCALES (ORIGINAL A3) <b>SCALE</b> NTS	PROJECT No <b>C0716-ID23</b> ISSUE No <b>1</b>
APPROVED FOR CONSTRUCTION																			
1	28/08/20	ISSUED FOR REVIEW	SL	RH															
AMEND	DATE	DESCRIPTION	DRAWN	APPROV															



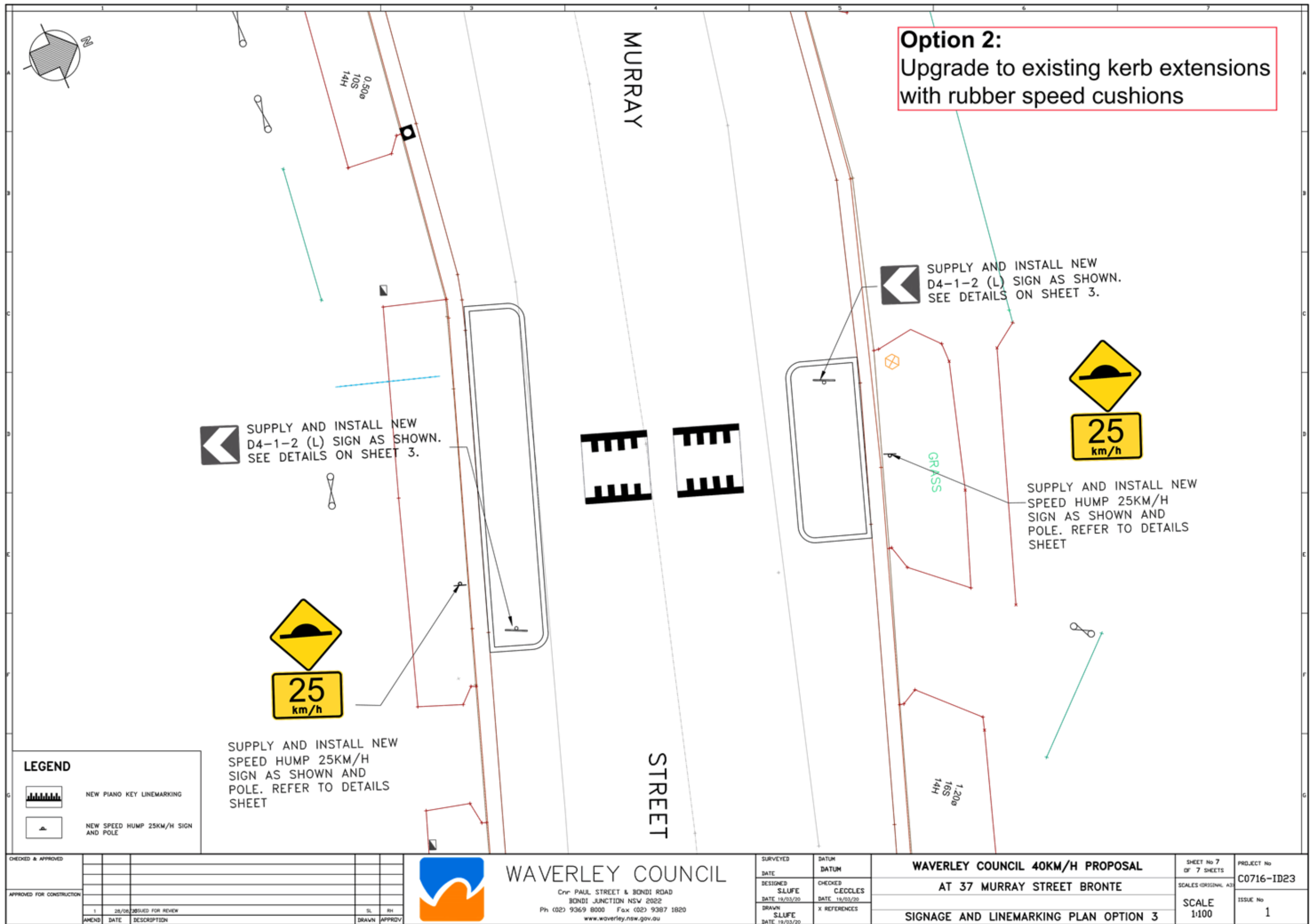












**REPORT**  
**TC/C.09/20.10**

**Subject:** 40 km/h Speed Limit Changes - Traffic Control Devices - Ruthven Street, Bondi Junction

**TRIM No:** A18/0579

**Author:** Malik Almuhanha, Senior Traffic Engineer  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authoriser:** Dan Joannides, Executive Manager, Infrastructure Services

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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Approves the installation of a two-lane slow point (chicane) in Ruthven Street, Bondi Junction, as shown in Attachment 1 (Option 2) of the report.
2. Delegates authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes.

**1. Executive Summary**

This report seeks endorsement of a two-lane slow point (chicane) to be installed in Ruthven Street, as part of the 40 km/h speed limit changes in the southern part of the Waverley local government area (see Figure 1).

A report presented to the May 2020 traffic committee recommended installation of a single speed hump on Park Parade (see Figure 4). Council at its 16 June 2020 meeting resolved that the item be deferred to a Councillor workshop for further consideration of the location and type of traffic calming devices.

Two options have been considered. The recommended option is shown in Figure 2 and Figure 3. It is a two-lane slow point (chicane). The alternative option was installation of speed cushions.

An extension of traffic calming measures in the form of angle parking extending for the full length of Ruthven between Oxford Street and Birrell Street has also been assessed. There are numerous driveways along the street which result in an angle parking scheme being impractical.

Average traffic speeds on Ruthven Street are around 46 km/h. 85%ile speeds are around 56 km/h. The 85%ile speeds should be reduced to around 40 km/h to achieve a self-enforcing 40 km/h speed zone.

The new design will reduce 85%ile traffic speeds to around 35 to 40 km/h through the proposed slow point.

The new design will result in the loss of four on-street parking spaces.

Delegation of authority to the Executive Manager, Infrastructure Services, to modify the designs should on-site circumstances warrant changes is also proposed. This covers situations where factors such as drainage or a minor change in location, size of ramps, wings, or threshold prove necessary.



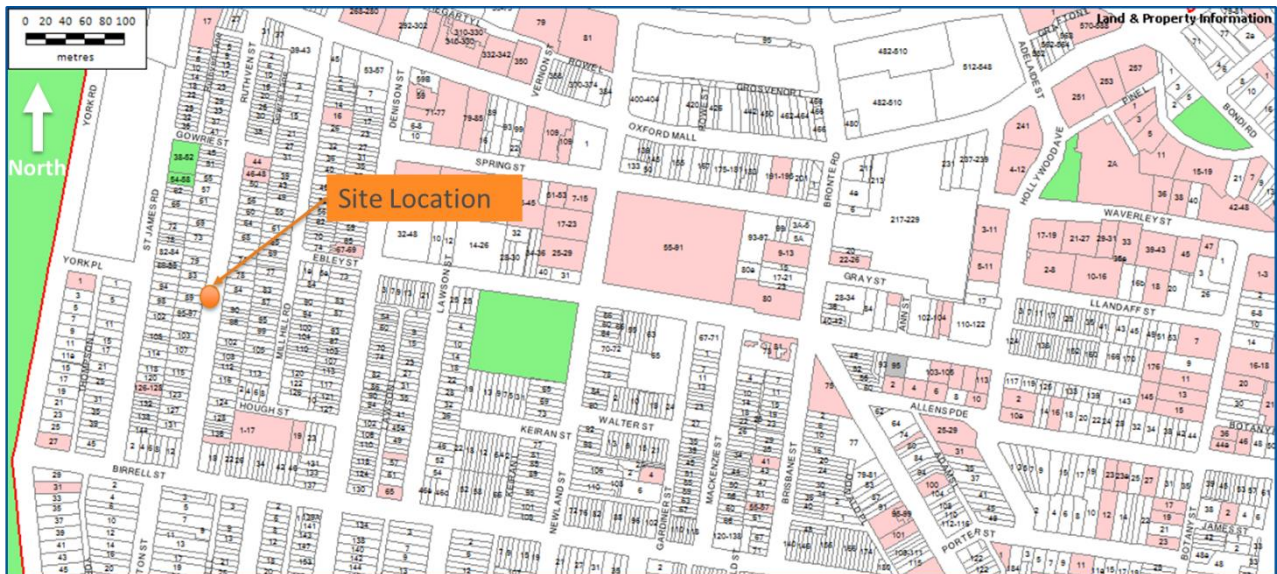


Figure 1. Traffic device location.



Figure 2. Concept of proposed traffic control device.



Figure 3. Proposed traffic control device design.

## 2. Introduction/Background

Community consultation within the Waverley local government area has found that an overwhelming proportion of residents would like reduced speed limits in their streets. The proposal to implement a Waverley-wide 40 km/h speed limit was developed as a signature project and adopted by Council in 2017 as part of the adoption of the 'People, Movement and Places' strategy.

### Community consultation

Community consultation took place from November 2019 to January 2020. A range of engagement methods were used to maximise the opportunity for community participation. Of particular note was the use of an interactive map on Have Your Say (HYS) Council's engagement platform, face to face 'Have Your Say Days' in four locations, door knocking on specifically impacted houses and email communication with a range of organisations and community members.

Ruthven street was identified as requiring treatment due to the 85%ile speeds being around 49 km/h. Feedback from residents of Ruthven Street in relation to a speed hump was mixed:

1. One resident indicated support due to 'fast road, difficult getting in and out of driveway due to traffic speed. Driving behaviour needs improving.'
2. Another resident indicated opposition 'lived there for 43 years – not supportive - no issue, very little speeding cars. Not supportive of treatment.'

The recommend two-lane slow point addresses the speed concerns. It will achieve the 40 km/h objective.

### **Speed humps vs speed cushions**

Key differences between speed humps and speed cushions are:

1. Speed humps are made of asphaltic concrete. Speed cushions are made of recycled rubber.
2. Speed humps can cover the entire road width. Speed cushions generally cover a single lane.
3. Speed humps are permanent devices. Speed cushions can be removed with relatively ease.
4. Speed humps are more effective in reducing speeds.

Speed cushions can be removed and replaced with an asphaltic concrete speed hump at a later date should more speed control prove necessary to achieve the 40 km/h target.

### **3. Technical Analysis**

The original design presented to the May 2020 traffic committee comprised a speed hump from kerb to kerb with parking retained within the parking lane (see Figure 4). This design has been opposed by some members of the local community.

Two alternative treatments have been assessed. They are:

1. Option 1 – A two-lane slow point (chicane) (see Figure 5).
2. Option 2 – Replacement of the speed hump with rubber speed cushions (see Figure 6).

Option 1 - The two-lane slow point results the loss of four parking spaces. Driveways make angle parking on either side of the kerb extensions difficult. This is different to the existing two-lane slow point on Ashton Street where some angle parking can be provided due to driveway being further away from the kerb extensions.

Option 2 accommodates cars and cyclists without adverse noise impacts on residents.

Option 1 is recommended.



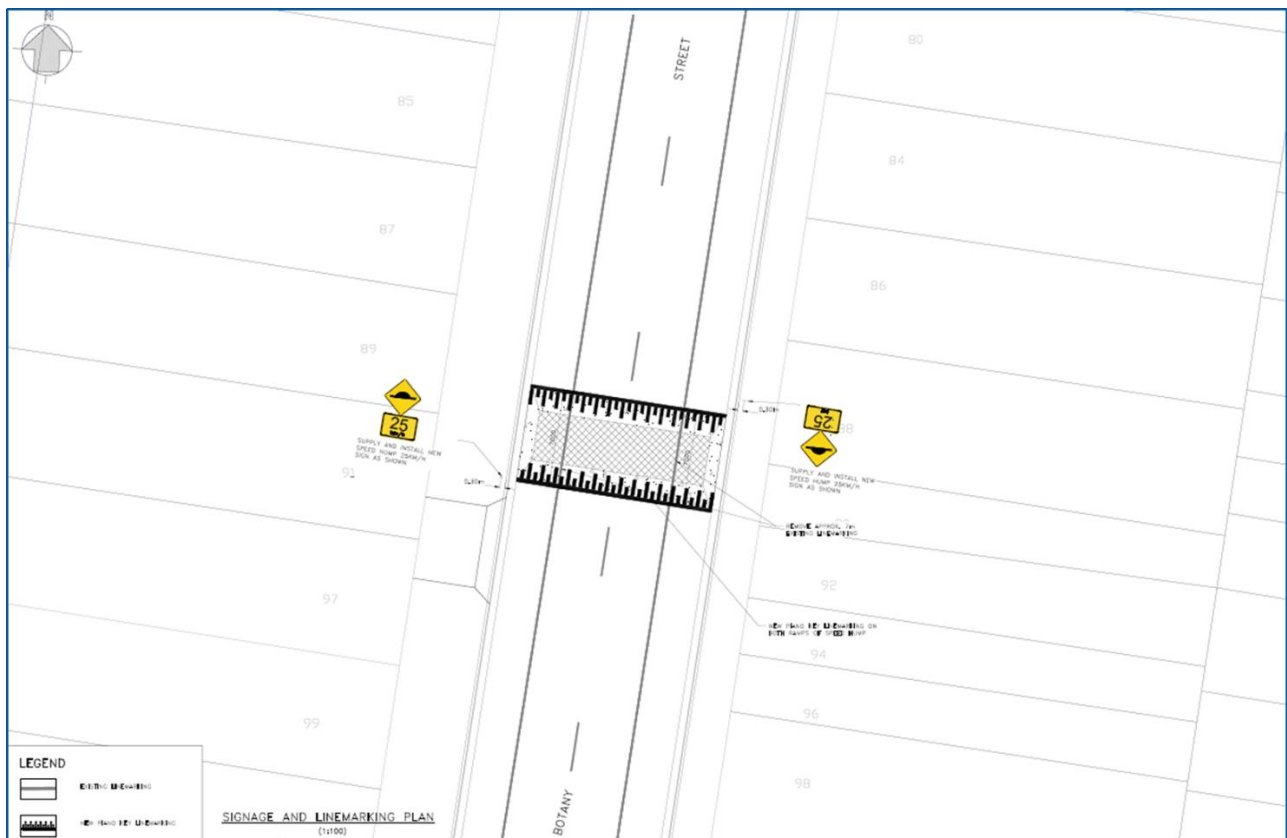
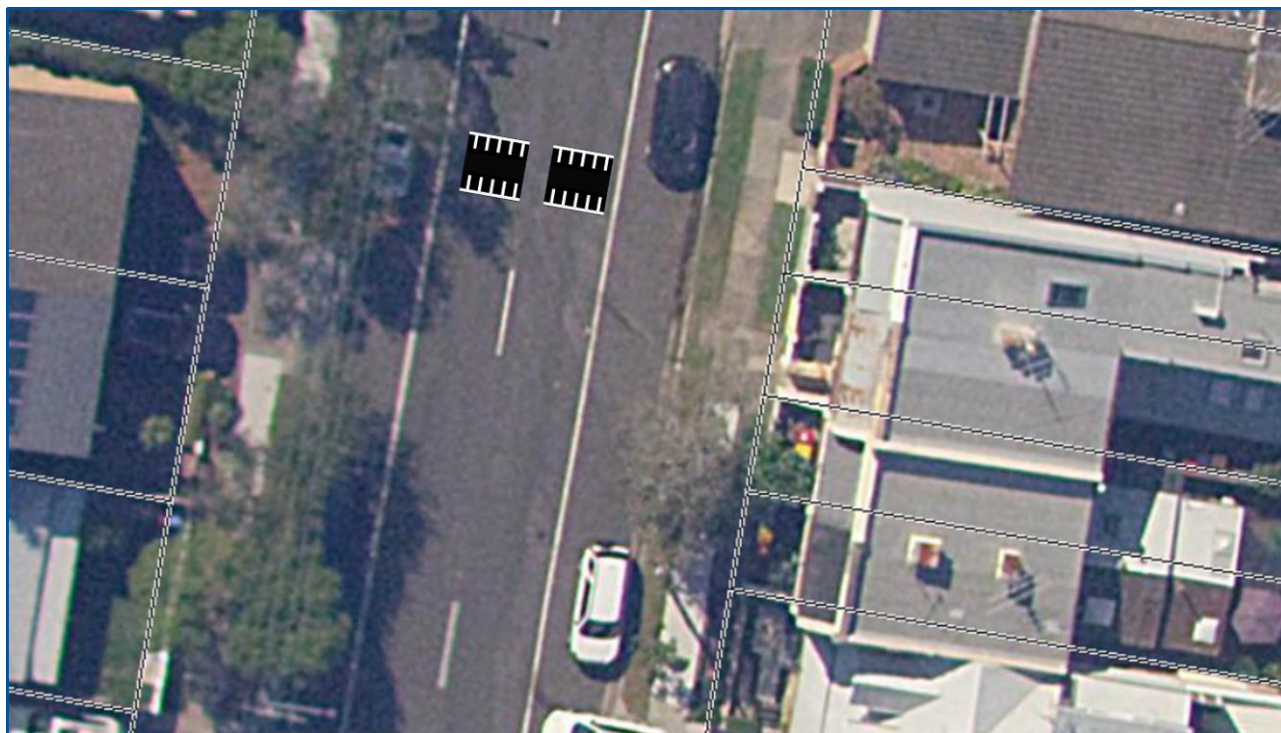


Figure 4. Ruthven Street design presented to May 2020 traffic committee.



Figure 5. Option 1 – Two-lane slow point (chicane).



*Figure 6. Option 2 – Rubber speed cushions*

#### **4. Financial Information for Council's Consideration**

Council has received a commitment of \$1 million for construction from the RMS NSW Safe Speeds in High Pedestrian Activity and Local Area program. The \$1 million is required to be spent or committed by 30 June 2021.

#### **5. Attachments**

1. ID-03 Ruthven Street 40kph treatment [↓](#) .



ISSUED FOR REVIEW

# Ruthven Street - Bondi Junction

## Proposed Traffic Design Options

### 40km/h Speed Limit Change

#### GENERAL NOTES

1. THE DESIGN DRAWINGS SHOULD BE READ IN CONJUNCTION WITH WAVERLEY COUNCIL'S STANDARD DRAWINGS.
2. DURING CONSTRUCTION THE WORK IS TO BE SIGNPOSTED AND MARKED TO THE REQUIREMENTS OF AS1742.2-2009 AND AS1742.3-2009 "TRAFFIC CONTROL DEVICES FOR WORKS ON ROADS".
3. A TRAFFIC CONTROL PLAN IS TO BE SUBMITTED TO COUNCIL'S PROJECT MANAGER FOR APPROVAL PRIOR TO WORKS.
4. SOIL AND WATER MANAGEMENT PLAN IS TO BE SUBMITTED TO COUNCIL'S PROJECT MANAGER FOR A APPROVAL PRIOR TO WORKS.
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9. SUITABLE VEHICULAR ACCESS SHALL BE MAINTAINED TO EACH DRIVEWAY OR ALTERNATIVE ARRANGEMENTS MADE WITH THE OWNERS.
10. WORK TO BE CARRIED OUT WITHIN THE APPROVED HOURS ONLY.

#### SERVICES

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14. NO SERVICE COVERS ARE TO BE COVERED.

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16. ALL LINEMARKING IS TO COMPLY WITH NATSPEC 1191 & RMS SPECIFICATION R141 - "PAVEMENT MARKING"
17. LINEMARKING TO BE IN THERMOPLASTIC TYPE (UNLESS STATED OTHERWISE) AND INCLUDE GLASS BEADS IN ACCORDANCE WITH RMS SPECIFICATIONS 3357 AND 3353 RESPECTIVELY. ALL RRPM'S TO COMPLY WITH RMS SPECIFICATION R142.
18. KERB FACES OF ALL ISLANDS TO BE PAINTED WHITE AND TO INCLUDE GLASS BEADS IN ACCORDANCE WITH RMS SPECIFICATION NO. 3353.
19. ALL LINEMARKING AND RRPM'S REMOVED OR AFFECTED DURING THE COURSE OF THE WORKS ARE TO BE REINSTATED UNLESS NOTED OTHERWISE.
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23. ALL SIGNPOSTING ON SPLITTER, KERB OR PEDESTRIAN REFUGE ISLANDS TO BE ERECTED USING V-NOTCH INSERTS, UNLESS NOTED OTHERWISE.
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ELEMENT	SLUMP	MAX AGGREGATE SIZE	CEMENT TYPE	CEMENT GRADE
ALL	80mm	20mm	GP	25MPa

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- CLEAR CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS UNLESS OTHERWISE SHOWN-

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- NOTE:**
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11. PROVIDE 20mm CHAMFER TO ALL EXPOSED EDGES U.N.O.

#### DRAWING SCHEDULE

- 1/5- NOTES AND SCHEDULES
- 2/5- LAYOUT PLAN OPTION 1
- 3/5 - LAYOUT PLAN OPTION 2
- 4/5 - SIGNAGE AND LINEMARKING PLAN OPTION 1
- 5/5 - SIGNAGE AND LINEMARKING PLAN OPTION 2



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TELSTRA	: 132203
AGL (GAS)	: 131245
SYDNEY WATER	: 132090
AUSGRID	: 131388

**NOTE**  
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**IMPORTANT**  
REDUNDANT LINE MARKING MUST BE REMOVED BY GRINDING WHERE INDICATED ON PLANS.

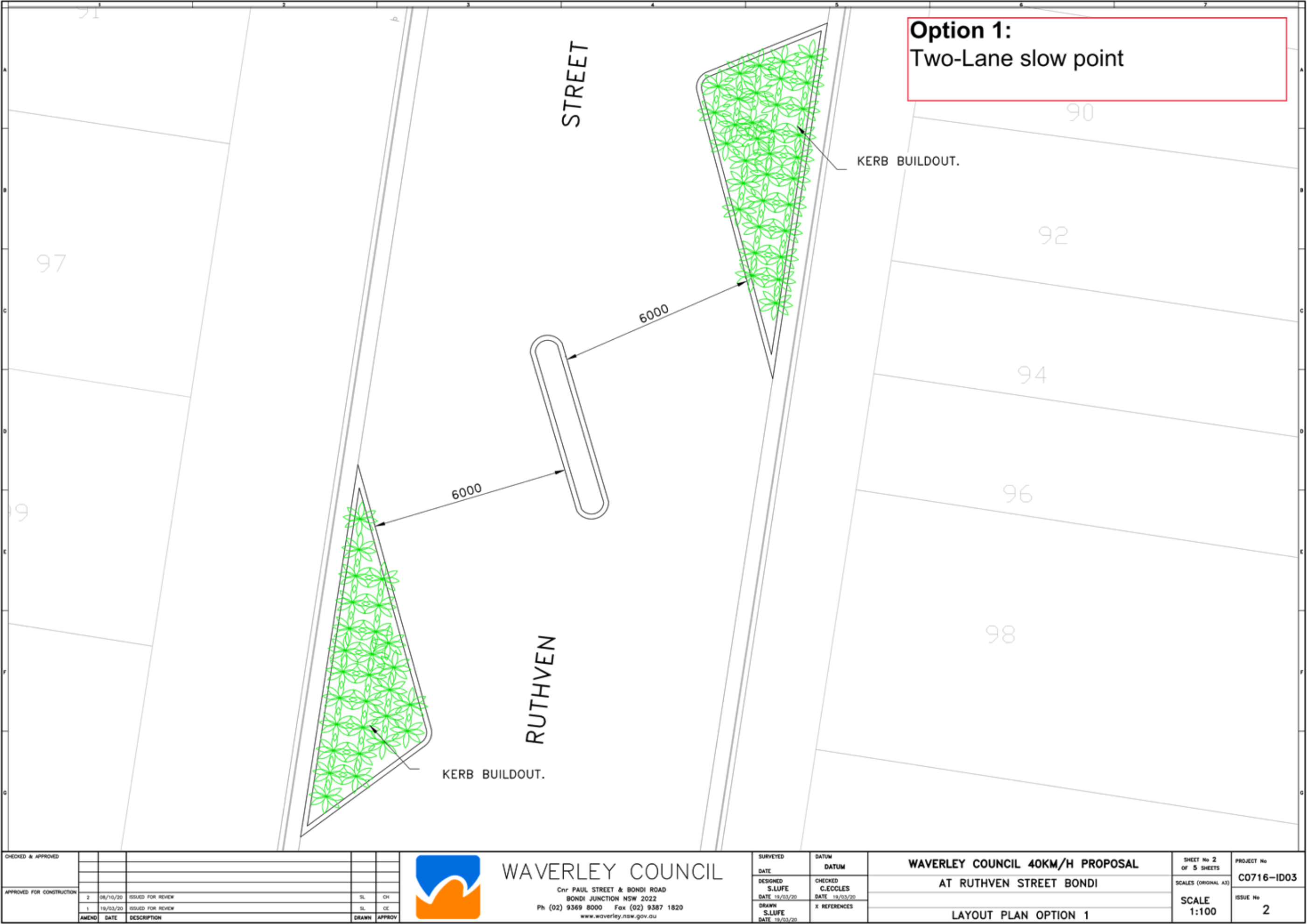
CHECKED & APPROVED					
APPROVED FOR CONSTRUCTION	2	08/10/20	ISSUED FOR REVIEW	SL	CH
	1	18/03/20	ISSUED FOR REVIEW	SL	CE
AMEND	DATE	DESCRIPTION	DRAWN	APPROV	



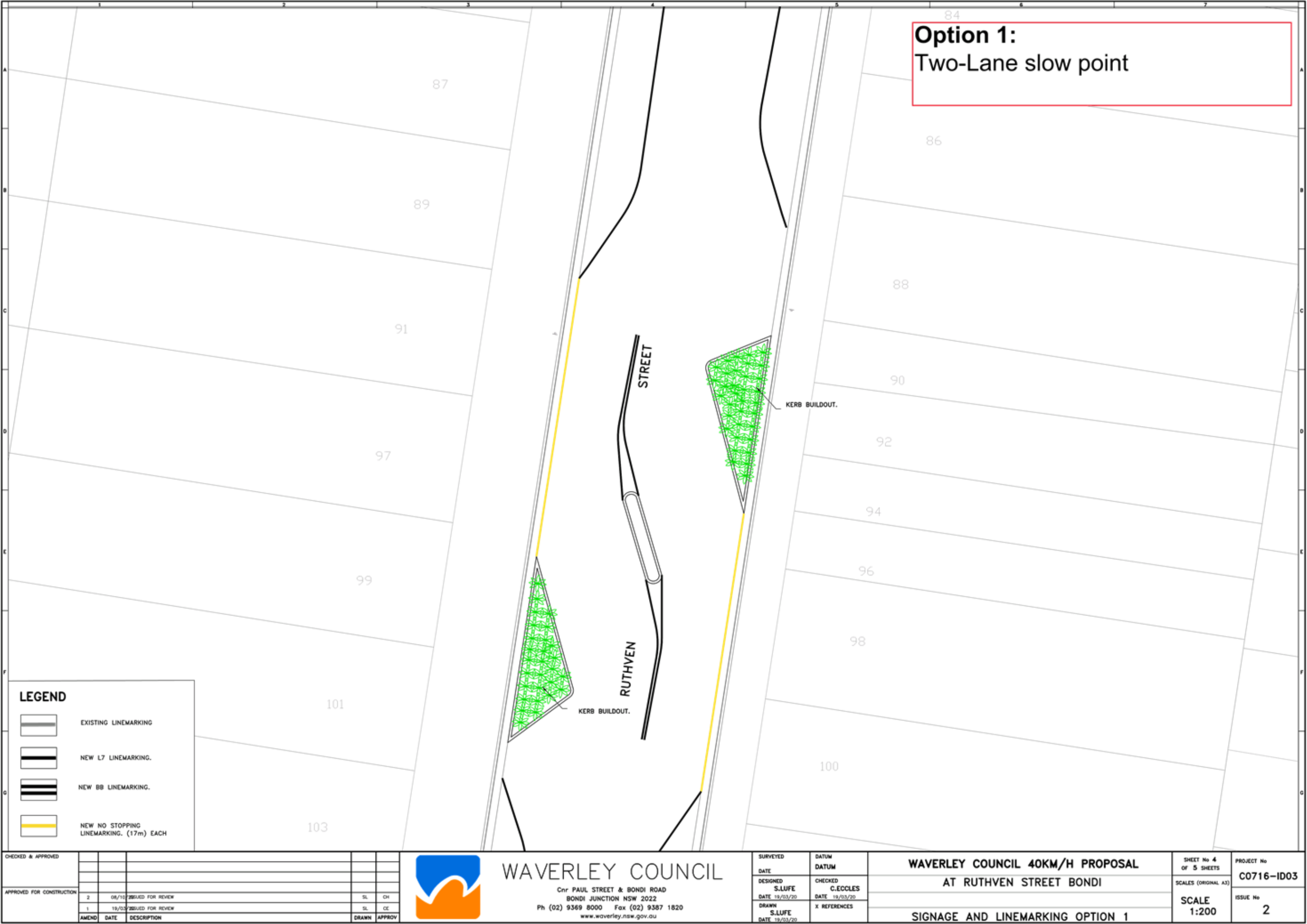
**WAVERLEY COUNCIL**

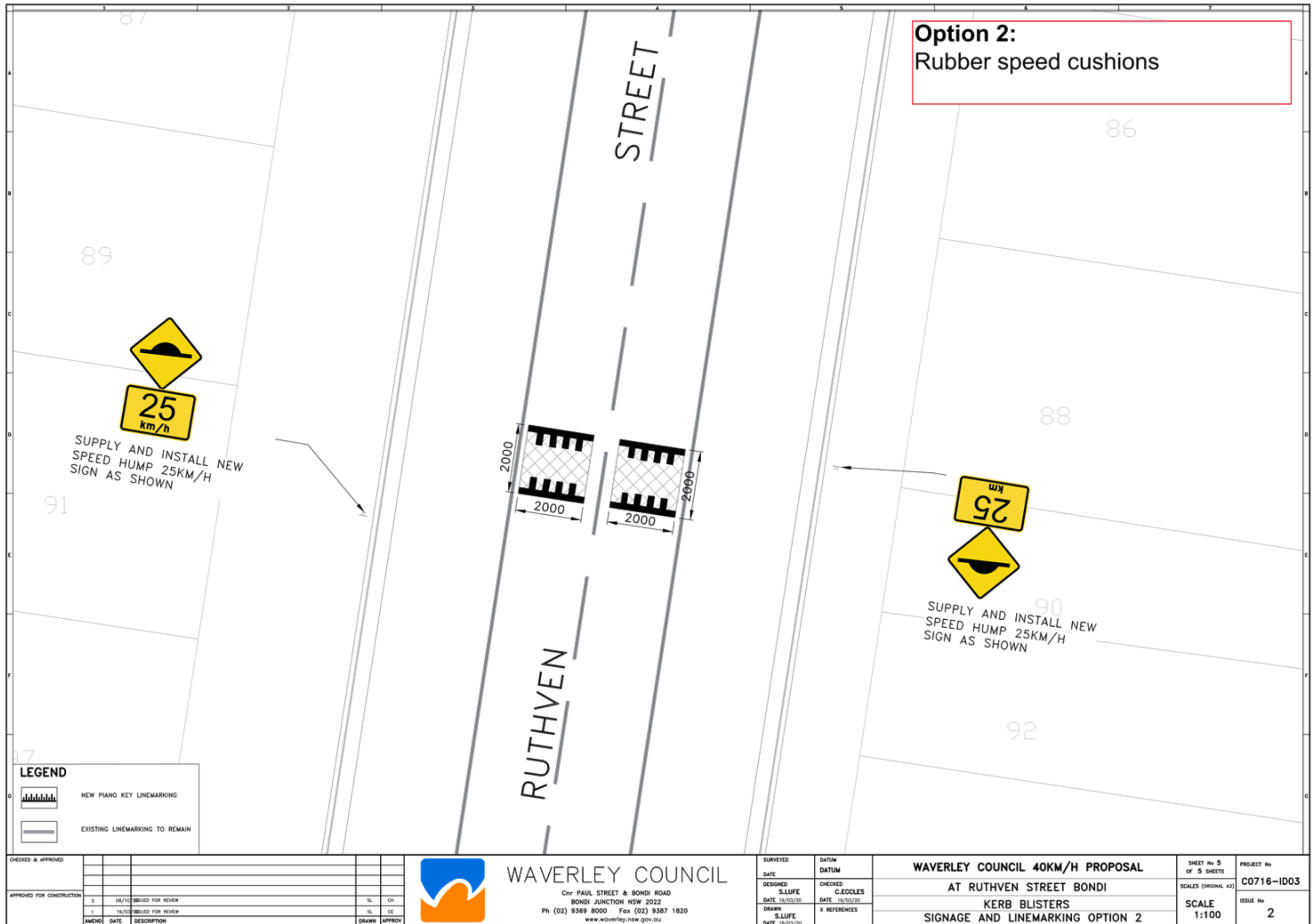
Cnr PAUL STREET & BONDI ROAD  
BONDI JUNCTION NSW 2022  
Ph (02) 9369 8000 Fax (02) 9387 1820  
www.waverley.nsw.gov.au

SURVEYED	DATUM	WAVERLEY COUNCIL 40KM/H PROPOSAL AT RUTHVEN STREET BONDI	SHEET No 1 OF 5 SHEETS	PROJECT No C0716-ID03
DESIGNED	CHECKED		SCALES (ORIGINAL A3)	
DATE 15/03/20	DATE 18/03/20		SCALE NTS	ISSUE No 2
DRAWN	X REFERENCES	NOTES AND SCHEDULES		
DATE 18/03/20				









**REPORT**  
**TC/V.01/20.10**

**Subject:** 49 Blake Street, Dover Heights - Conversion of No Stopping to No Parking

**TRIM No:** A14/0145

**Author:** Hamoon Bahari, Professional Engineer, Traffic and Transport  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authoriser:** Dan Joannides, Executive Manager, Infrastructure Services

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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Approves modifications to parking restrictions on the northern side of Blake Street between Portland Street and Military Road as shown in Figure 2 of the report to provide:
  - (a) 38 metres of un-restricted parking at the western end.
  - (b) 38 metres of No Stopping restrictions at the eastern end.
  - (c) 18 metres of No Parking restrictions in between.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, as necessary.

**1. Executive Summary**

Council has received representations from the resident at 49 Blake Street regarding vehicles parking in an unrestricted parking space opposite their driveway causing inability to access their driveway (see Figure 1).

Council officers propose to convert the northern side of Blake Street from the western end of driveway No. 220 Military Road to 6 metres to the western end of driveway to 56 Blake Street from 'No Stopping' to 'No Parking' as shown in Figure 2.

The recommended No Parking restrictions improve access to 49 Blake Street and also assist access to the properties opposite at 56 Blake Street and 220 Military Road.

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

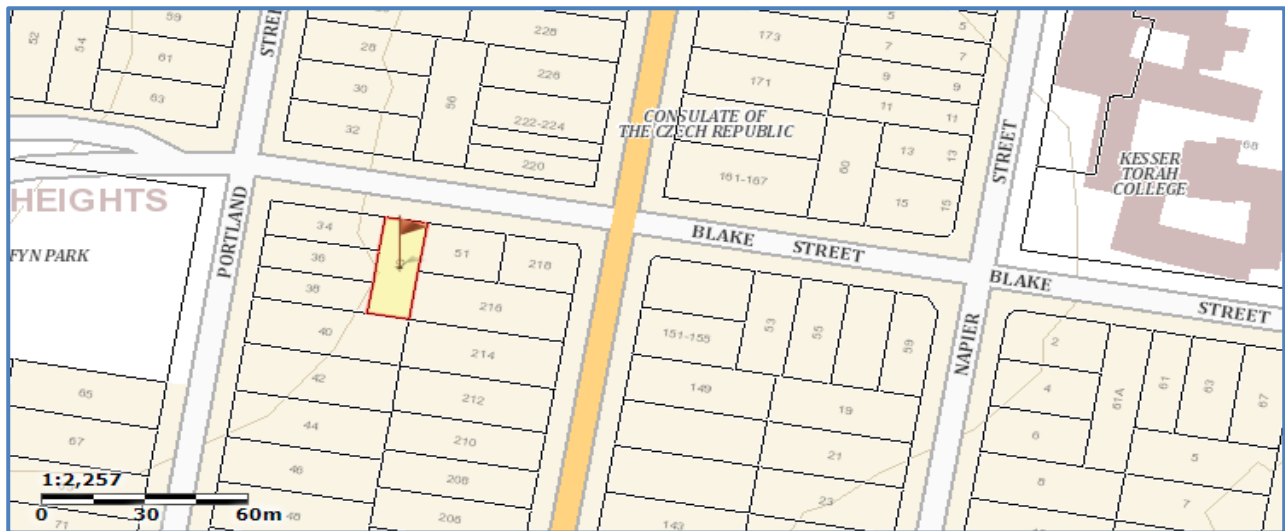


Figure 1. Site location.



Figure 2. Existing and proposed parking.

## 2. Introduction/Background

Blake Street between Portland Street to the west and Military Road to the east is a 7.2 metre wide two-way street. There is unrestricted parking on the southern side, between the driveway of 51 Blake Street to the intersection of Portland Street. There is also unrestricted parking on the northern side, from the driveway of 56 Blake Street to the intersection of Portland Street.

Two-way traffic can be accommodated provided that traffic flows are low, are predominantly cars, and passing opportunities are provided at distances of around 30 metres. Current traffic flows on Blake Street can be accommodated with passing opportunities.



Parking opposite the driveway to 49 Blake Street makes entry or exit difficult with multi-point turns required if cars are parked on both sides of the driveway and opposite.

### 3. Technical Analysis

The carriageway of the street is 7.2 metres wide leaving a single travel lane (around three metres) if cars are parked on both sides (see Figure 3). Cars can be parked on both sides of the street at the western end (Portland Street). This results in drivers having to give way to opposing traffic. The flow on effect is calming of traffic in the same way that a single lane road narrowing works. The calming effect is beneficial to traffic conditions in the street.

The changes in parking restrictions facilitate access to 49 Blake Street and also assist access to the properties opposite 56 Blake Street and 220 Military Road.



*Figure 3. Single travel lane with cars parked on both sides.*

### 4. Financial Information for Council's Consideration

Council will meet the cost of sign installation from existing budgets.

### 5. Attachments

Nil .

**REPORT**  
**TC/V.02/20.10**

**Subject:** 4 Macleay Street, North Bondi - Construction Zone

**TRIM No:** A03/2514-04

**Author:** Hamoon Bahari, Professional Engineer, Traffic and Transport  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authorisor:** Dan Joannides, Executive Manager, Infrastructure Services

---

**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Installs a 15 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles' construction zone at 4 Macleay Street, North Bondi.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

**1. Executive Summary**

Council has received an application from the builder/developer at 4 Macleay Street, North Bondi, for the installation of a 15 metre construction zone (see Figure 1).

Council officers propose the installation of a 15 metre construction zone as shown in Figure 2. It is included within the 26 metre frontage of the property. The remaining frontage will be available for on-street parking.

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



Figure 1. Site location



Figure 2. Location to install construction zone signs

## 2. Introduction/Background

The construction zone will be signposted 'No Parking Council Authorised Vehicles Excepted' for the approved construction hours under the development consent. Council will then supply the applicant with transferable permits to be used on the applicant's construction vehicles. The Traffic Committee and

Council's requirements for permit approvals are a minimum length of 9 metres along the site frontage, with a minimum period of 13 weeks.

### 3. Technical Analysis

The existing and recommended parking allocation is shown below.

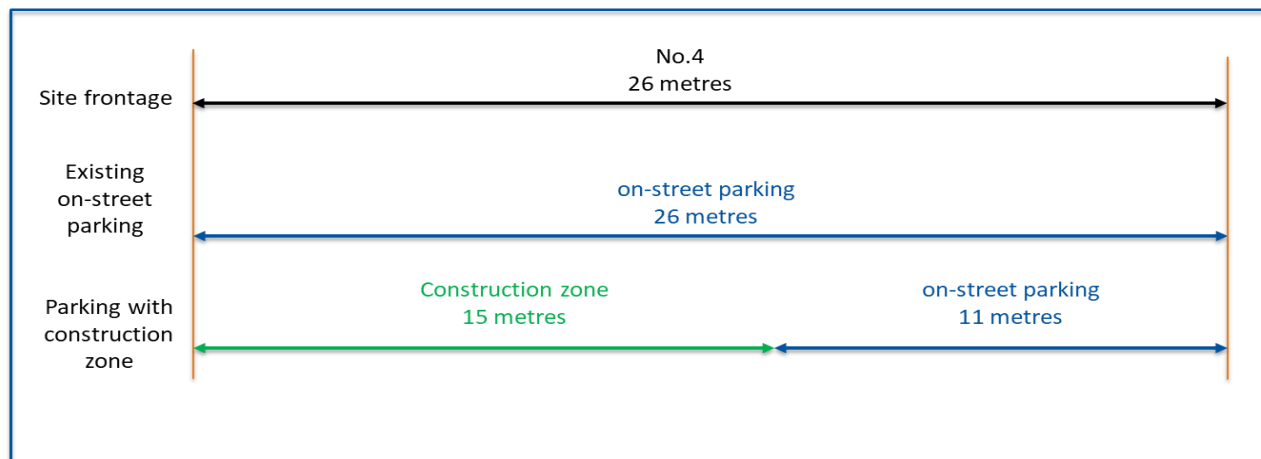


Figure 3. On-street parking allocation.

Table 1. Application details

<b>Applicant</b>	Fergal Murphy
<b>Development application</b>	DA-130/2019/A
<b>Works</b>	Modification to install new skylight to studio roof and amendment of condition 22 (Green Roof)
<b>Approved hours of construction</b>	7 am–5 pm Monday–Friday; 8 am–3 pm Saturday
<b>Frontage length</b>	26 metres
<b>Road</b>	Macleay Street
<b>Existing parking</b>	Unrestricted parking
<b>Length requested by applicant</b>	15 metres
<b>Length to be signposted</b>	15 metres
<b>Duration</b>	17 November 2020 – 17 May 2021
<b>Fee area</b>	Residential with unrestricted parking
<b>Estimated fees</b>	\$999.00 per week (15 metres x \$66.60 per metres)



## Signage

The proposed signage is shown below.

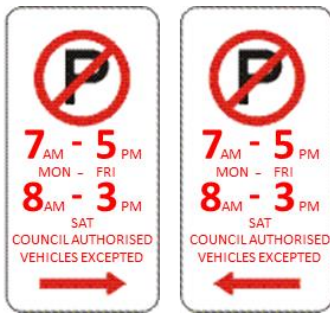


Figure 4. Proposed signage.

## 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 2019–20 financial year are:

- \$66.60 per metre per week in a residential development area.
- \$92.20 per metre per week in a commercial and mixed-use development area.
- \$377.00 per metred (ticket) car parking space per week in addition to above fees (where applicable).

The cost to the applicant for the 15 metres made available for construction vehicles will be \$999.00 per week (15 metres x \$66.60 per metre).

## 5. Attachments

Nil .

**REPORT**  
**TC/V.03/20.10**

**Subject:** 15-17 Lamrock Avenue, Bondi Beach - Construction Zone

**TRIM No:** A03/2514-04

**Author:** Paul Cai, Traffic Engineer  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authoriser:** Dan Joannides, Executive Manager, Infrastructure Services

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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Installs a 13.1 metre 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles Excepted' construction zone in front of 15–17 Lamrock Avenue, Bondi Beach.
2. Delegates authority to the Executive Manager, Infrastructure Services, to adjust the length and duration of, or remove, the construction zone, as necessary.

**1. Executive Summary**

Council has received an application from the builder/developer at 15-17 Lamrock Avenue, Bondi Beach, for the installation of a 9 metre construction zone on Lamrock Avenue (see Figure 1).

Council officers propose the installation of a 13.1 metre zone as shown in Figure 2. The zone has been extended from the requested 9 metres to include a 4.1 metre section of parking that would be alienated due to the location of the construction zone.

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

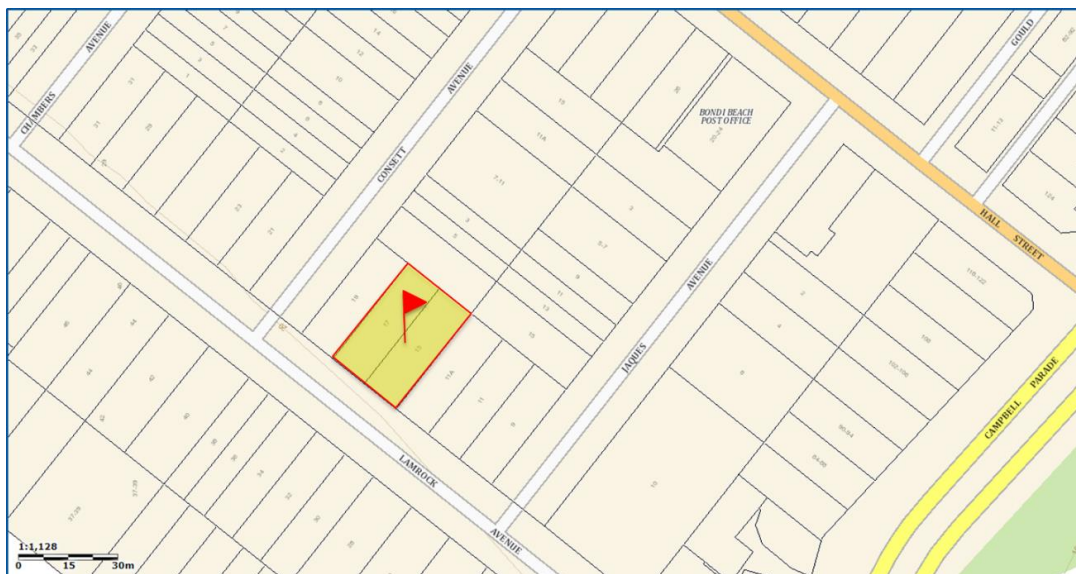


Figure 1. Site location.



Figure 2. Location to install construction zone signs.

## 2. Introduction/Background

In accordance with standard practice at Council, it is proposed that the construction zone is signposted 'No Parking 7 am–5 pm Mon–Fri, 8 am–3 pm Saturday Council Authorised Vehicles Excepted' for the approved construction hours under the development consent. Council will then supply the applicant with transferable permits to be used on the applicant's construction vehicles. The Traffic Committee and Council's requirements for permit approvals are a minimum length of 9 metre along the site frontage with a minimum period of 13 weeks.

## 3. Technical Analysis

The frontage of the site on Lamrock Avenue is 23.4 metres, of which 4.1 metres contains the existing property driveway and 19.3 metres is metered parking.

The applicant has requested a 9 metre construction zone space, leaving 10.3 metres on the northwest side of the driveway and 4.1 metres on the southeast side of the construction zone for car parking.

The 4.1 metres on the southeast side of the zone cannot accommodate a car. This will have to be included as part of the construction zone (referred to as the effective construction zone).

This results in a total construction zone length of 13.1 metres.

The existing and recommended parking allocation is shown below.

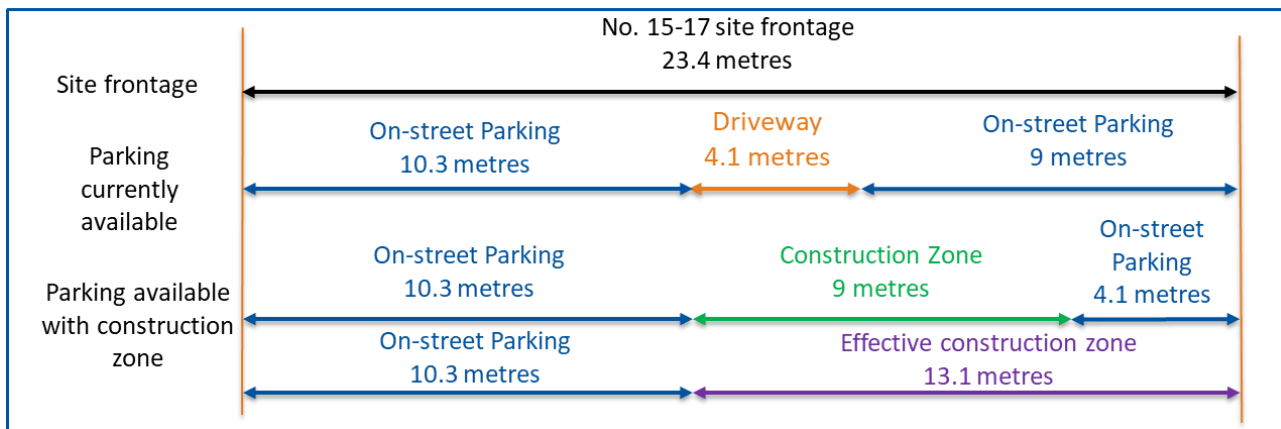


Figure 3. On-street parking allocation.

Table 1. Application details.

<b>Applicant</b>	TC Build Pty Ltd
<b>Development application</b>	DA-170/2019
<b>Works</b>	Demolition of two detached dwellings and construction of a four storey boarding house and integrated car parking.
<b>Approved hours of construction</b>	7 am–5 pm Monday–Friday; 8 am–3 pm Saturday
<b>Frontage length</b>	23.4 metres
<b>Road</b>	Lamrock Avenue
<b>Existing parking</b>	2P Ticket 8AM – 10PM, Permit Holders Excepted (Area 8)
<b>Length requested by applicant</b>	9 metres
<b>Length to be signposted</b>	13.1 metres
<b>Effective construction zone – Total length available for construction</b>	13.1 metres
<b>Duration</b>	17 weeks
<b>Fee area</b>	Residential area with parking restrictions
<b>Estimated fees</b>	\$1,626.46 per week

### Signage

The proposed signage is shown below.

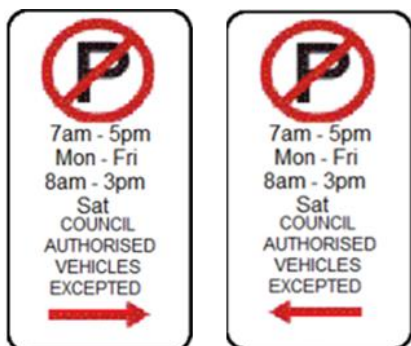


Figure 4. Proposed signage.



**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 2020–2021 financial year are:

- \$66.60 per metre per week in a residential area.
- \$92.20 per metre per week in a commercial and mixed-use area.
- \$377.00 per metered (ticket) car parking space per week in addition to above fees (where applicable).

The cost to the applicant for the 13.1 metres made available for construction vehicles will be \$1,626.46 per week (13.1 m x \$66.60 per metre + 2 metered car parking spaces x \$377).

**5. Attachments**

Nil .

**REPORT**  
**TC/CV.01/20.10**

**Subject:** Bondi to Bronte Coastal Walk - One Way System

**TRIM No:** A20/0500

**Author:** Paul Cai, Traffic Engineer  
Calum Hutcheson, Service Manager, Traffic and Transport

**Authorisor:** Dan Joannides, Executive Manager, Infrastructure Services

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**COUNCIL OFFICER'S PROPOSAL:**

That Council:

1. Endorses the following traffic management measures to be constructed if and when deemed necessary between Bondi Beach and Tamarama Beach:
  - (a) Gaerloch Avenue on the eastern side of Dellview Street – 2 x 'No Entry' signs preventing access to Gaerloch Avenue eastbound.
  - (b) Gaerloch Avenue on the light pole opposite 31 Gaerloch Avenue (the 90-degree bend in the road) – A 'No Right Turn' sign preventing access to Gaerloch Avenue northbound.
  - (c) Gaerloch Avenue eastern side – 2 x 'One Way (Arrow Right)' signs indicating one-way direction on Gaerloch Avenue.
  - (d) Gaerloch Avenue western side facing Kenneth Street – a 'One Way (Arrow Left)' sign indicating one-way direction on Gaerloch Avenue.
  - (e) Dellview Street on the southern side of Fletcher Street – 2 x 'No Entry' signs preventing access to Dellview Street southbound.
  - (f) Dellview Street eastern side between Carlisle Street and Dellview Lane – 2 x 'One Way (Arrow Left)' signs indicating one-way direction on Dellview Street.
  - (g) Dellview Lane on western side of Dellview Street – A 'No Right Turn' sign preventing access to Dellview Street southbound.
  - (h) Carlisle Street on the northern side of Dellview Street – a 'No Right Turn' sign preventing access to Dellview Street southbound.
  - (i) Dellview Street on the southern side of Carlisle Street – 2 x 'No Entry' signs preventing access to Dellview Street southbound.
  - (j) Western side of Dellview Street facing Gaerloch Avenue – A 'One Way (Arrow Right)' indicating one-way direction on Dellview Street.
2. Endorses the following traffic control devices to be constructed if and when deemed necessary between Bondi Beach and Tamarama Beach:

- (a) A continuous footpath treatment – Wilga Street on the eastern side of Sandridge Street.
  - (b) A marked pedestrian crossing – Fletcher Street on the eastern side of Sandridge Street.
  - (c) A marked pedestrian crossing with kerb extensions – Kenneth Street on the eastern side of Alexander Street.
  - (d) A continuous footpath treatment – 22 Gaerloch Avenue (the 90 degree bend in the road).
  - (e) A continuous footpath treatment – Gaerloch Avenue on the eastern side of Dellview Street.
3. Prepares detailed plans and warrants for crossings to be submitted to Council's traffic committee for review and approval by Council.
  4. Investigates the footpath widening required to support the Street Walk route, as presented in the report.
  5. Delegates authority to the Executive Manager, Infrastructure Services, to investigate alternative designs as part of the detailed design assessment.

## 1. Executive Summary

Council resolved a number of actions in response to the management of COVID-19 at its meeting on 15 September 2020 (CM/6.1/20.09). One action was that Council:

*'Investigates a possible solution to overcrowding on the Bondi to Bronte Coastal Walk to see if a one-way system could be safer; for example, one-way south on the actual walkway and a safe northern passage along our streets'.*

This report identifies the traffic related infrastructure required to support a one-way Coastal Walk system and a Street Walk route. The infrastructure could be implemented regardless of whether or not the one-way system is implemented as it improves local conditions for pedestrians regardless.

Maximum pedestrian flows acceptable along the Coastal Walk during the COVID-19 period are 1,029 people per hour. Data from July 2020 indicated a peak of 1,095 people. This will increase as we enter the summer period. This indicates the need to find additional capacity and/or restrict pedestrian movements along the Coastal Walk during the current COVID-19 period.

The Coastal Walk and an alternative Street Walk route between Bondi Beach and Tamarama are shown in Figure 1 as well as locations where pedestrians can access the Coastal Walk.

A one-way system between Bondi Beach and Tamarama is feasible. It would require restriction of access to the coastal walk at eight points along the route and at either end. It would also require development of an alternative route along the local street system (the Street Walk route). The one-way system will have significant severance to the local and tourist community who access the coastal walk.

An alternative of restricting access when demands are too high for safe access during COVID-19 conditions is feasible. This would be triggered when pedestrian flows reach a specified limit. Access to the Coastal Walk could be closed at Bondi and Tamarama for a short period of time (say 15 to 30 minutes) until the density of pedestrians on the coastal walk subsides. People wishing to use the coastal walk could then be given the option of using the alternative Street Walk route.

The Street Walk route involves converting Gaeloch Avenue and Dellview Street from two way to one way. This is required to minimise potential conflict with pedestrians on the Street Walk route. This one-way system has been applied in the past during the Sculpture by the Sea exhibition when pedestrian volumes have been high. It has proved effective in accommodating these high pedestrian volumes.





Locations where pedestrians can access the Coastal walk

- A. Tamarama beach
- B. Gaerloch Avenue via Gaerloch Reserve (3 access points)
- C. Kenneth Street via Marks Park Outdoor Fitness Station
- D. Mackenzies Point, Marks Park
- E. Fletcher Street via Marks Park
- F. Wilga Street
- G. Hunter Park

Figure 1. One-way southbound Coastal Walk and northbound Street Walk system.



## Regulatory signage

Regulatory signage will be required to support the conversion of Gaerloch Avenue and Dellview Street from two way to one way (shown in Figure 2). The signage required is:

1. Gaerloch Avenue on the eastern side of Dellview Street – 2 x 'No Entry' signs preventing access to Gaerloch Avenue eastbound.
2. Gaerloch Avenue on the light pole opposite 31 Gaerloch Avenue (the 90-degree bend in the road) – A 'No Right Turn' sign preventing access to Gaerloch Avenue northbound.
3. Gaerloch Avenue eastern side – 2 x 'One Way (Arrow Right)' signs indicating one-way direction on Gaerloch Avenue.
4. Gaerloch Avenue western side facing Kenneth Street – a 'One Way (Arrow Left)' sign indicating one-way direction on Gaerloch Avenue.
5. Dellview Street on the southern side of Fletcher Street – 2 x 'No Entry' signs preventing access to Dellview Street southbound.
6. Dellview Street eastern side between Carlisle Street and Dellview Lane – 2 x 'One Way (Arrow Left)' signs indicating one-way direction on Dellview Street.
7. Dellview Lane on western side of Dellview Street – A 'No Right Turn' sign preventing access to Dellview Street southbound.
8. Carlisle Street on the northern side of Dellview Street – a 'No Right Turn' sign preventing access to Dellview Street southbound.
9. Dellview Street on the southern side of Carlisle Street – 2 x 'No Entry' signs preventing access to Dellview Street southbound.
10. Western side of Dellview Street facing Gaerloch Avenue – A 'One Way (Arrow Right)' indicating one-way direction on Dellview Street.



Figure 2. Regulatory road signage associated with northbound street walk.

**Traffic control devices**

The Street Walk route will require safe pedestrian crossing points (shown in Figure 3) at:

1. A continuous footpath treatment – Wilga Street on the eastern side of Sandridge Street.
2. A marked pedestrian crossing – Fletcher Street on the eastern side of Sandridge Street.
3. A marked pedestrian crossing with kerb extensions – Kenneth Street on the eastern side of Alexander Street.
4. A continuous footpath treatment – 22 Gaerloch Avenue (the 90 degree bend in the road).
5. A continuous footpath treatment – Gaerloch Avenue on the eastern side of Dellview Street.





Figure 3. Proposed traffic control devices associated with northbound street walk.



## **2. Introduction/Background**

Concerns for public health risk of COVID-19 have been raised in relation to the large amount of people visiting the Bondi to Bronte Coastal Walk. Investigation of possible solutions to overcrowding on the Bondi to Bronte Coastal Walk has been requested by Council.

The part of the route between Bondi Beach and Tamarama is the most critical section where pedestrian demands are at their highest. There are a number of locations between Bondi Beach and Tamarama that restrict social distancing due to limited spaces. These are shown in Figure 4. They include:

1. The stairs from Notts Avenue connecting with South Bondi Park.
2. Walkway adjacent to Bondi Icebergs pool.
3. The rock overhang adjacent to Hunter Park.
4. The stairs on the Coastal Walk between Fletcher and Wilga Streets.
5. The Marks Park observation platform.
6. The southern end of Marks Park.
7. Tamarama Surf Life Saving Club.
8. Tamarama Fitness station.

The assessment of the one-way system and pedestrian flows indicate a need to provide an alternative Street Walk route.

The alternative Street Walk route will require pedestrian crossing treatments at intersections and possibly footpath widening.



Figure 4. Locations where pedestrian conflict occurs.

The table below sets out the previous Council resolution in full:

*Table 1. Previous Council resolution.*

Meeting and date	Minute No.	Decision
Council 15 September 2020	CM/6.1/20.09	<p>That Council:</p> <ol style="list-style-type: none"> <li>1. Notes that:           <ol style="list-style-type: none"> <li>(a) COVID-19 Beach Management plans for this spring and summer have been developed and will be published in the near future.</li> <li>(b) The plan includes significant communication on beach capacity, and infrastructure, increased staffing and an escalation protocols to manage and restrict numbers and access, should numbers at our beaches and public open spaces be too great. The closure of our beaches, open spaces and coastal walk is a last resort and safe access to the water will be maintained.</li> <li>(c) The plan also involves working with closely with other agencies, including NSW Police, NSW Health, Transport for NSW, Surf Life Saving NSW, other councils and LGNSW to take a whole of system approach to managing beach numbers, including promoting social distancing and public health order compliance and trying to prevent too larger numbers of people attending the beach.</li> <li>(d) The on-beach components of this planning work form the basis of current operations, with additional rangers and lifeguards continuing to monitor numbers and ensure the current PHOs are being implemented.</li> <li>(e) In developing the plans, extensive consultation and collaboration have been undertaken with NSW Police, NSW Health, Transport for NSW, and between beach-side Councils in Sydney.</li> <li>(f) The PHOs no longer specify maximum numbers in public open spaces, and instead specify that people can gather in groups of up to 20, and the one person per four square metres rule applies. It is further noted that social distancing of 1.5 metres is health advice only and is not a PHO requirement, but is being encouraged in our beach management approach.</li> <li>(g) LGNSW has convened a meeting of beach-side Mayors, the Police and Surf Life Saving NSW that</li> </ol> </li> </ol>

		<p>has agreed that LGNSW write to the Premier on our behalf seeking funding for additional staff to act as COVID ambassadors/marshals and the development and funding for an education and advertising campaign addressing beach crowding and behaviour.</p> <p>(h) This year's spring and summer temperatures are expected to be above average.</p> <ol style="list-style-type: none"> <li>2. Enters into discussions with the Bondi and District Chamber of Commerce with a view to establishing a voluntary register of businesses and venues that have COVID-safe plans as a means to encourage and facilitate the adoption of best practice COVID-safe plans by businesses and venues, and that potential customers can refer to.</li> <li>3. Develops a COVID counter on Council's home page that shows the number of COVID-19 cases in Waverley at a specified date and refers people to the NSW Health website for further information.</li> <li>4. Writes to the Minister for Health and Medical Research, the Minister for Planning and Open Spaces, and the Minister for Transport seeking a meeting with a delegation of mayors from Waverley, Woollahra, Randwick and Bayside Councils, to discuss the PHOs, our COVID-19 plans, specific challenges, given the ease of access to our iconic city beaches that will need to be met this coming summer, and initiatives for how these may be met.</li> <li>5. Immediately steps up our own community education efforts aimed at encouraging people to help stop the spread, including wearing masks and continuing to use hand sanitiser, as well as a broad social media campaign, given the number of active cases of COVID-19 has been slowly increasing in the Waverley local government area.</li> <li>6. Acknowledges the difficult job our rangers, lifeguards, ambassadors and other staff have in trying to keep our residents, community and visitors safe and appreciates their professionalism and dedication in the execution of their duties in this COVID pandemic environment.</li> <li>7. Investigates a possible solution to overcrowding on the Bondi to Bronte Coastal Walk to see if a one-way system could be safer; for example, one-way south on the actual walkway and a safe northern passage along our streets.</li> </ol>
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### 3. Technical Analysis

#### Pedestrian flows

Council has an automatic pedestrian counter covering the Coastal Walk adjacent to Gaerloch Reserve (see Figure 5).

Daily pedestrian counts at Tamarama have been extracted from the counter for 2 x 4-week periods:

- 2 January to 29 January 2020 (pre-COVID summer peak).
- 26 June to 23 July (during COVID-19 good weather).

Peak hourly flows were extracted for Sunday, 12 January, and Sunday, 5 July, for comparison.

Figure 6 present the daily flows. Figure 7 presents the Sunday hourly flows.

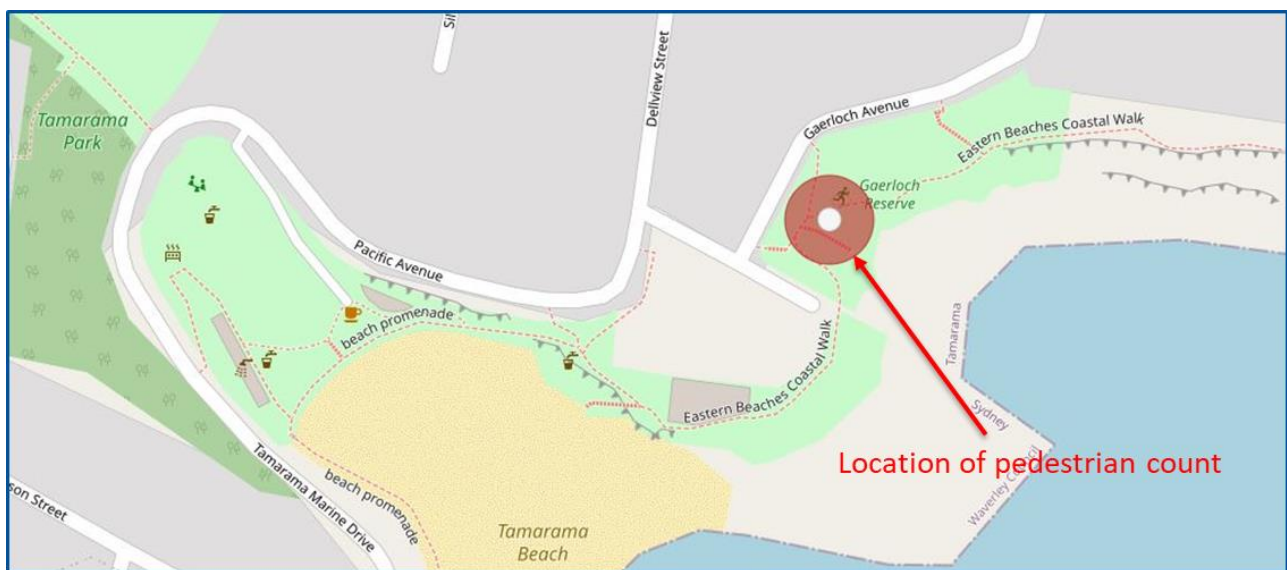


Figure 5. Location of pedestrian count at Tamarama.

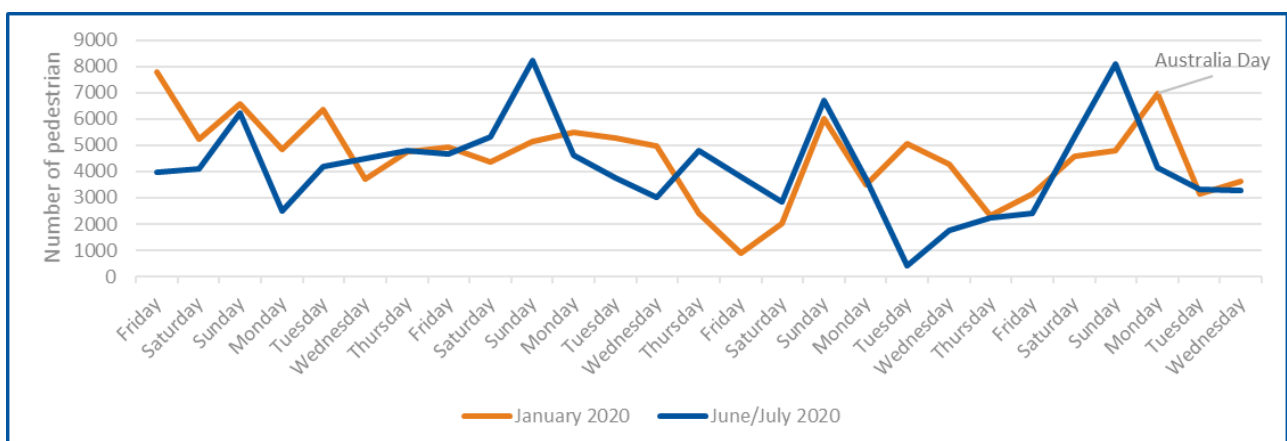


Figure 6. Daily pedestrian count at Tamarama for January and June/July 2020.

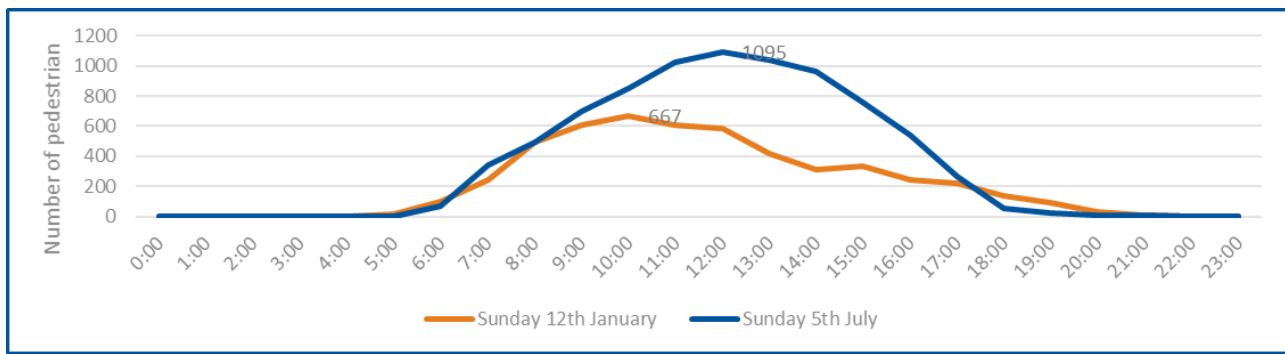


Figure 7. Hourly pedestrian count at Tamarama for Sunday, 12 January, and 5 July.

From Figure 6 it can be seen that the peak summer and during COVID-19 show similar profiles with some higher peaking on weekends during COVID-19.

Figure 7 shows a 64% higher hourly peak occurring during COVID-19. This peak is expected to rise in the summer period.

The hourly peak pedestrian flows can be converted to pedestrians per square metre and compared against the government health authorities' guidelines of a maximum of one person per four square metres.

Pedestrian flows along the Coastal Walk can be compared against Level of Service guidelines contained in the US Highway Capacity Manual (see Figure 8). Level of service is defined as:

*'A quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to manoeuvre, traffic interruptions, and comfort and convenience.'*

**Level of Service A**

Pedestrian Space  $> 5.6 \text{ m}^2/\text{p}$  Flow rate  $< 0$  to 16 p/min/m

At a walkway LoS A, pedestrians move in desired paths without altering their movements in response to other pedestrians. Walking speeds are freely selected and conflict between pedestrians is unlikely.

**Level of Service B**

Pedestrian Space  $> 3.7\text{--}5.6 \text{ m}^2/\text{p}$  Flow rate  $> 16\text{--}23 \text{ p/min/m}$

At LoS B, there is sufficient area for pedestrians to select walking speeds freely, to bypass other pedestrians, and to avoid crossing conflicts. At this level, pedestrians begin to be aware of other pedestrians, and to respond to their presence when selecting a walking path.

**Level of Service C**

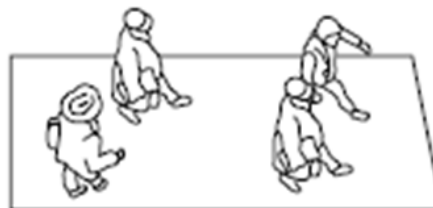
Pedestrian Space  $> 2.2\text{--}3.7 \text{ m}^2/\text{p}$  Flow rate  $> 23\text{--}33 \text{ p/min/m}$

At LoS C, space is sufficient for normal walking speeds, and for bypassing other pedestrians in primarily unidirectional streams. Reverse-direction or crossing movements can cause minor conflicts, and speeds and flow rate are somewhat lower.

**Level of Service D**

Pedestrian Space  $> 1.4\text{--}2.2 \text{ m}^2/\text{p}$  Flow rate  $> 33\text{--}49 \text{ p/min/m}$

At LoS D, freedom to select individual walking speed and to bypass other pedestrians is restricted. Crossing or reverse flow movements face a high probability of conflict, requiring frequent changes in speed and position. The LoS provides reasonably fluid flow, but friction and interaction between pedestrians is likely.

**Level of Service E**

Pedestrian Space  $> 0.75\text{--}1.4 \text{ m}^2/\text{p}$  Flow rate  $> 49\text{--}75 \text{ p/min/m}$

At LoS E, virtually all pedestrians restrict their normal walking speed, frequently adjusting their gait. At the lower range, forward movement is possible only by shuffling. Space is not sufficient for passing slower pedestrians. Cross or reverse flow movements are possible only with extreme difficulties. Design volumes approach the limit of walkway capacity, with stoppages and interruptions to flow.

**Level of Service F**

Pedestrian Space  $< 0.75 \text{ m}^2/\text{p}$  Flow rate varies p/min/m

At LoS F, all walking speeds are severely restricted, and forward progress is made only by shuffling. There is frequent unavoidable contact with other pedestrians. Cross and reverse flow movements are virtually impossible. Flow is sporadic and unstable. Space is more characteristic of queued pedestrians than of moving pedestrian streams.



Figure 8. Pedestrian walkway Level of Service.

Table 1 presents the pedestrian flow rates presented in Figure 8 converted to an equivalent flow rate for the Coastal Walk. Adjustments have been made to account for the width of the Coastal Walk path, slower walking speeds due to the hilly nature of the route, and people stopping along the path.

Table 2 compares the Coastal Walk peak hour flows extracted for 12 January and 5 July with the equivalent hourly flow that would accommodate one person per four square metres (the COVID-19 recommended spacing for people).

The Level of Service criteria indicate that the Coastal Walk operated with a good Level of Service (A or B) in January and July. However, more spacing is required between pedestrians to satisfy COVID-19 separation criteria.

Maximum pedestrian flows acceptable along the Coastal Walk during the COVID-19 period are 1,029 people per hour. The 5 July data indicated a peak of 1,095 people. This will increase as we enter the summer period. This indicates the need to find additional capacity and/or restrict pedestrian movements along the Coastal Walk during the current COVID-19 period.

*Table 1. Level of service criteria for Coastal Walk*

	Peak hour pedestrian sidewalk flow (1.5 metre walkway width)	Peak hour pedestrian sidewalk flow (1.2 metre walkway width)	Adjustment for slower walking speeds (due to hills)	Adjustment for slower walking speeds (due to stops along coastal walk)	Equivalent peak hour flow for Coastal walk
Level of Service A	1,440	1,152	-25%	-10%	749
Level of Service B	2,100	1,680	-25%	-10%	1,092
Level of Service C	3,000	2,400	-25%	-10%	1,560
Level of Service D	4,400	3,520	-25%	-10%	2,288
Level of Service E	6,800	5,440	-25%	-10%	3,536

*Table 2. Coastal Walk level of service compared to COVID-19 four square metre rule.*

	Peak hour	Peak hour Coastal walk flow	Level of Service	% of Covid-safe hourly flow
Covid-safe spacing		1,029	B	100%
12 January 2020	10 to 11 am	667	A	65%
5 July 2020	12 to 1 pm	1,095	B	106%

### Directional signage

Directional signage is required to be installed along the Coastal and Street Walk routes. Locations and signage content are to be determined part of the implementation.

### Traffic control devices

Traffic control devices are shown in Figures 9 to 13. They are required at the following locations:

1. Continuous footpath treatment – Wilga Street on the eastern side of Sandridge Street.
2. Marked pedestrian crossing – Fletcher Street on the eastern side of Sandridge Street.
3. Marked pedestrian crossing with kerb extensions – Kenneth Street on the eastern side of Alexander Street.
4. Continuous footpath treatment – 22 Gaerloch Avenue (the 90 degree bend in the road).
5. Continuous footpath treatment – Gaerloch Avenue on the eastern side of Dellview Street.



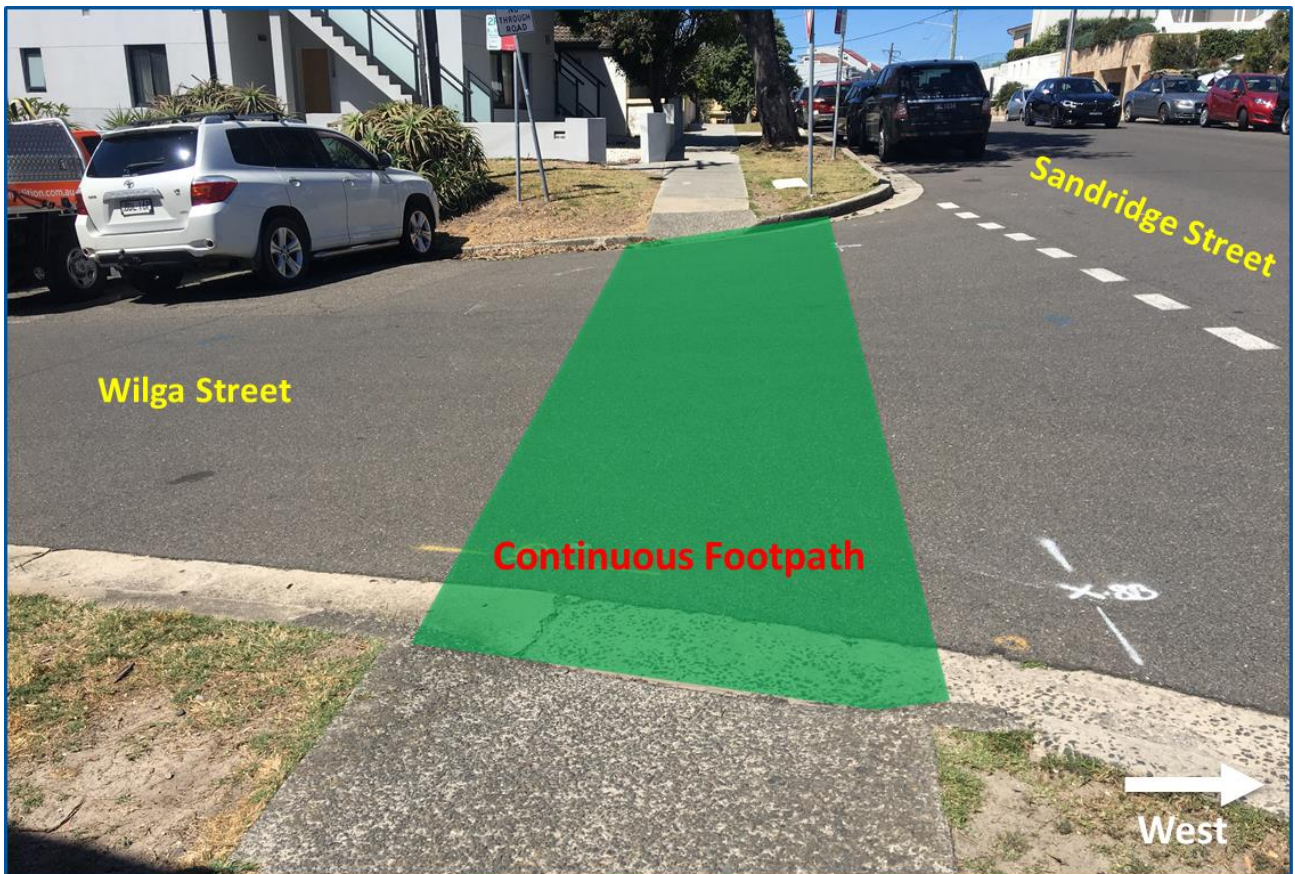


Figure 9. Continuous pedestrian footpath on Wilga Street.



Figure 10. Marked pedestrian crossing on Fletcher Street.



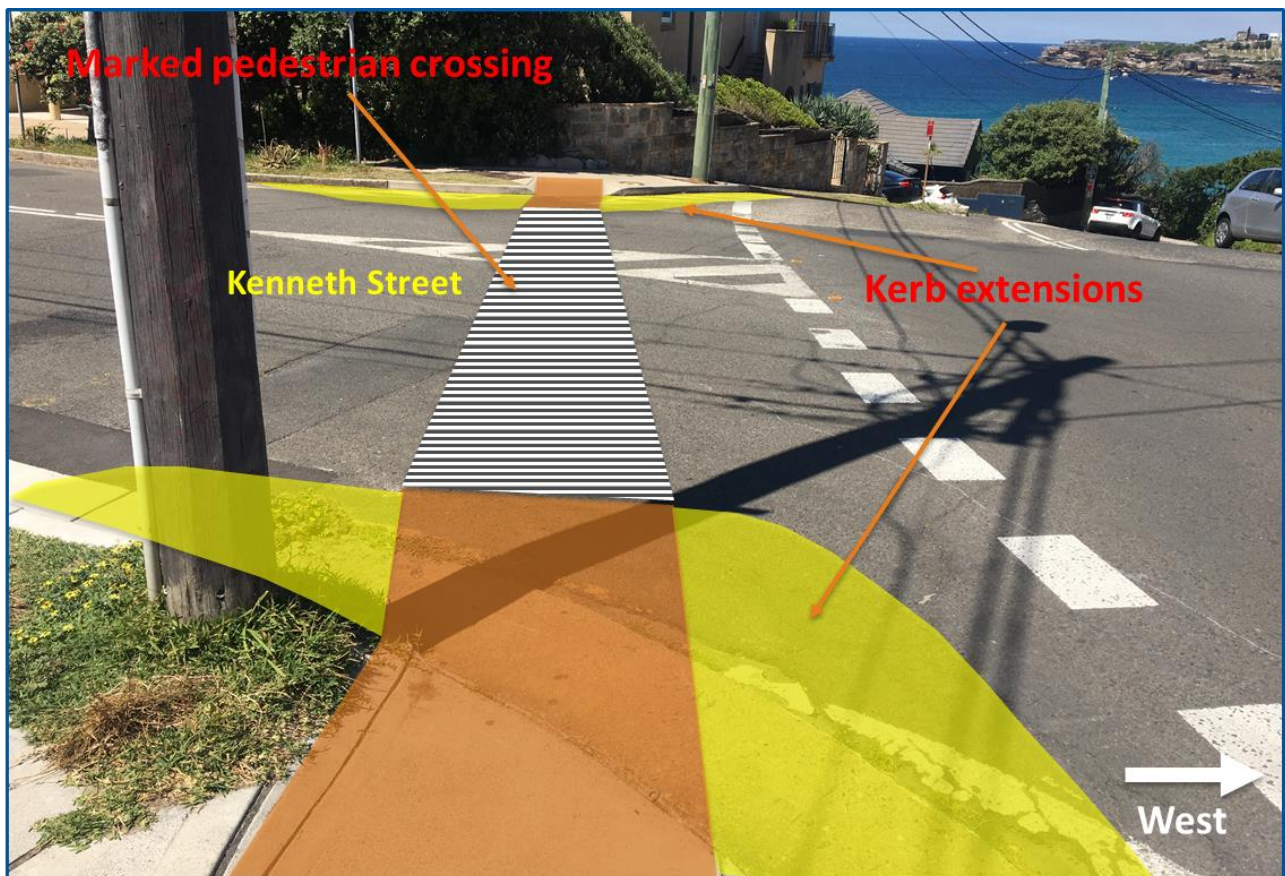


Figure 11. Marked pedestrian crossing with kerb extensions.



Figure 12. Continuous pedestrian footpath on Gaerloch Avenue near Gaerloch Reserve.





Figure 13. Continuous pedestrian footpath at the intersection of Dellview Street and Gaerloch Avenue.

#### Footpath widening

Footpath widening along the Street Walk route is desirable. This will be assessed as part of the detailed design for the intersection crossing treatments.

#### 4. Financial Information for Council's Consideration

The recommended works are currently unfunded.

#### 5. Attachments

Nil.