

Report No. 6.4
File No:

Bay Lane - Traffic Management
I2019/1514

Summary

- 5 This report seeks Council's support to manage vehicular access to the western portion of Bay Lane, Byron Bay.

10 Bay Lane is a one way (west to east) service laneway connecting Jonson Street and Fletcher Street. The length of road under consideration is approximately 75m. Refer to Figure 1 for the section under consideration.

It is proposed to permit vehicular access into the section of Bay lane between 5am to 5pm and to prohibit vehicular access between 5pm to 5am.

- 15 It is proposed to do this through a combination of regulatory signage, modifying traffic flow directions and installation of traffic control devices that are non regulatory and not part of the LTC process.

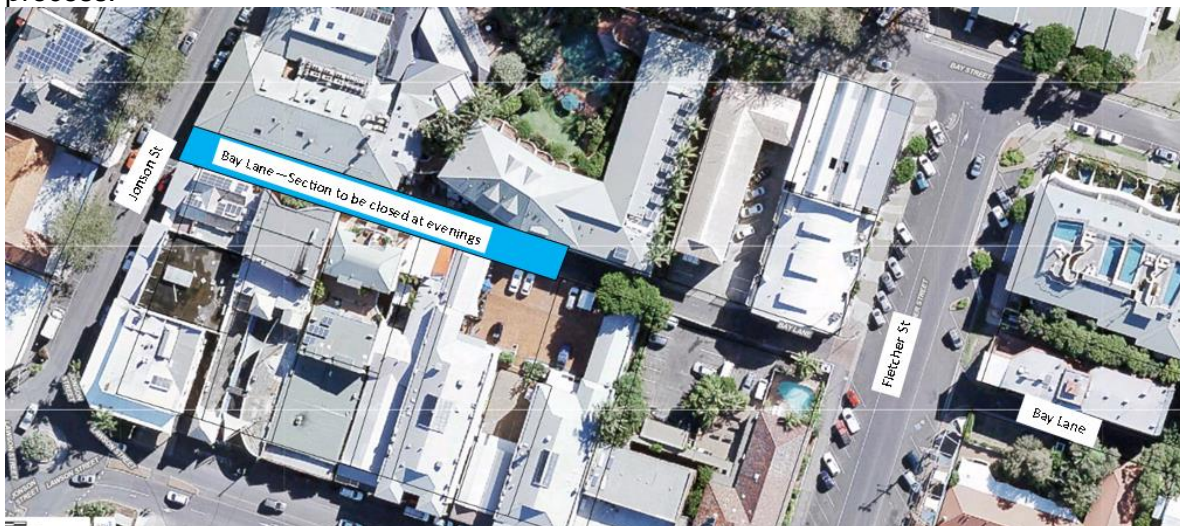


Figure 1 – Bay Lane proposed controlled access.

20 Project Concept

Refer to Attachment 1 for Council's concept design to control access into Bay Lane between 5pm and 5am.

25 The street landscape would not be altered and Bay Lane would maintain its laneway feel. It is proposed to regulate vehicular access off Jonson St into Bay Lane in the following manner:

- i. Permit vehicular access into Bay Lane off Jonson St between 5am to 5pm;
- ii. Prohibit vehicular access into Bay Lane off Jonson St 5pm to 5am;
- iii. Install a No Entry sign (R2-4n) at the Jonson St / Bay Lane entrance with a 5m – 5am time plate (R5-603).
- iv. Install a No Right Turn sign (R2-6) at the Jonson St / Bay Lane entrance with a 5m – 5am time plate (R5-603).
- v. Install one way painted and signage arrows, as required.

35 Note: Attachment 1 shows a concept entry statement that may be installed to create a visual feature that helps calm traffic entering the laneway between 5am – 5pm and increase pedestrian safety. It's wide enough to permit service vehicle access. A removable bollard may be installed, as

required, across the entrance of Bay Lane to acts as Hostile Vehicle Mitigation device if an event is held within the laneway between 5pm to 5am. The visual feature shown in attachment 1 is not a regulatory feature and is just indicative of what could be done to help increase pedestrian safety, particularly between 5pm to 5am.

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Two (2) car parks gain access off Jonson St at approximate chainage 80m. To maintain access to these car parks between 5pm and 5am the following modifications are proposed to regulate traffic at the eastern end of Bay Lane.

- 10 i. Install a blister with No Entry signage at CH75m to prevent cars travelling west past this point. The image below illustrates what this structure would look like.
- ii. Remove on street loading bays along the full length of Bay Lane.
- 15 iii. Change traffic flow to permit two-way access off Fletcher St. Note, Bay Lane carriage width between chainage 80m-120m is 5.5m. Between CH 120m and 150m Bay Lane carriage width is 7m. Between CH 120-150m Bay Lane is currently 2-way to permit access to a youth hostel basement car park.



Note: Attachment 1 shows a concept removable bollard may be installed adjacent to the mid point blister, as required, to act as Hostile Vehicle Mitigation device if an event is held within the laneway between 5pm to 5am. The bollard would not be a regulatory feature and is just indicative of what could be done to help increase pedestrian safety between 5pm-5am.

Background

The project aims to create an iconic place making venue in the heart of Byron Bay where patrons come and experience a Melbourne Laneway type feel with pop up stalls, lighting and music.

Figure 2 below shows a montage of venues similar to the style Byron Shire Council is attempting to create between 5pm to 5am through regulating traffic as proposed above.



Figure 2 – Montage of laneway venues that priorities pedestrian

Traffic Data

Two traffic counts have been done in Bay Lane: 1) August 2017, located 30m west of the Fletcher St intersection, and 2) Oct 2019 30m east of Jonson St. These counts reveal almost identical traffic patterns as seen in the virtual counts shown below:

* Virtual Day (7)

Time	Total	Total	Total	Cl%	Cl%	Cl%	Cl%	Cl%	Cl%	Cl%	Cl%	Cl%	Cl%	Cl%	Cl%	Cl%	Mean	Vpp
		AB	BA	1	2	3	4	5	6	7	8	9	10	11	12			85
0000	5	5	0	94.4	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	-	
0100	1	1	0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7	-	
0200	1	1	0	83.3	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.8	-	
0300	1	1	0	75.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1	-	
0400	1	1	0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.9	-	
0500	4	4	1	72.4	0.0	17.2	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.8	-	
0600	14	10	5	58.6	0.0	28.3	10.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6	29.9	
0700	13	10	2	87.5	0.0	11.4	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.4	26.6	
0800	22	20	2	88.3	0.6	10.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.4	28.4	
0900	25	22	2	90.7	0.0	8.1	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.9	26.3	
1000	25	23	2	92.5	0.6	5.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.6	24.5	
1100	19	17	2	89.2	0.0	10.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.6	25.9	
1200	23	21	2	90.1	1.2	8.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	25.2	
1300	19	16	2	92.4	0.0	6.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.9	25.2	
1400	17	15	2	92.4	0.0	6.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1	27.0	
1500	26	24	2	94.4	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.5	26.6	
1600	26	23	2	93.9	0.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.4	25.9	
1700	28	27	1	95.9	0.0	3.6	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.2	27.7	
1800	20	18	1	99.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.1	24.1	
1900	17	17	1	96.7	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.9	24.8	
2000	13	13	1	97.8	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.8	24.1	
2100	10	9	1	97.1	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.0	-	
2200	9	9	0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.1	-	
2300	4	4	0	96.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7	-	
07-19	261	237	24	92.5	0.2	6.7	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7	26.3	
06-22	315	285	31	91.6	0.2	7.1	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7	26.3	
06-00	328	297	31	91.9	0.2	6.9	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.7	26.3	
00-00	341	309	32	91.7	0.2	7.0	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.8	26.6	

Vehicles - 2390

Posted speed limit - 50 km/h, Exceeding - 0 (0.00%), Mean Exceeding - 0.00 km/h

Maximum - 43.7 km/h, Minimum - 10.0 km/h, Mean - 20.8 km/h

85% Speed - 26.6 km/h, 95% Speed - 31.0 km/h, Median - 20.2 km/h

20 km/h Pace - 11 - 31, Number in Pace - 2231 (93.35%)

Variance - 33.57, Standard Deviation - 5.79 km/h

Another traffic count was done between 14th Oct to 23 Oct 2019 with the follow summary data:

BYRON SHIRE COUNCIL

LOCAL TRAFFIC COMMITTEE MEETING

6.4

* Virtual Day (8)

Time	Total	Total	Total	C1%	C1%	C1%	C1%	C1%	C1%	C1%	C1%	C1%	C1%	C1%	C1%	C1%	Mean	Vpp
<--		AB	BA	1	2	3	4	5	6	7	8	9	10	11	12			
0000	4	0	4	100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25.4	-	
0100	2	0	2	100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26.6	-	
0200	2	0	2	100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	26.4	-	
0300	1	0	1	100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	22.7	-	
0400	1	0	1	100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	24.8	-	
0500	3	0	3	66.67	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.9	-	
0600	19	3	16	78.95	0.000	15.79	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.8	21.6	
0700	13	1	12	91.67	0.000	8.333	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	19.0	26.5	
0800	23	2	21	90.91	0.000	9.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.3	23.0	
0900	29	2	27	92.86	0.000	7.143	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.2	23.1	
1000	23	1	22	86.36	0.000	13.64	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.7	19.5	
1100	23	1	22	82.61	0.000	13.04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.2	20.3	
1200	22	1	22	86.36	0.000	9.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.6	22.0	
1300	22	0	21	90.48	0.000	4.762	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.6	18.8	
1400	23	1	22	90.91	0.000	9.091	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.4	19.2	
1500	20	1	19	90.00	0.000	5.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.6	23.9	
1600	18	1	17	94.12	0.000	5.882	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	17.1	23.9	
1700	25	1	24	95.83	0.000	4.167	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	14.9	20.7	
1800	19	1	18	94.44	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.1	17.9	
1900	17	0	16	93.75	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	12.8	17.8	
2000	10	0	10	100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	13.0	-	
2100	9	0	9	100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.4	-	
2200	8	1	8	100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	18.5	-	
2300	6	0	5	100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	23.6	-	
07-19	258	13	245	90.31	0.000	8.527	0.388	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.7	21.8	
06-22	313	17	296	90.06	0.000	8.654	0.641	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.6	21.4	
06-00	326	18	309	90.49	0.000	8.282	0.613	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	15.8	21.6	
00-00	340	18	322	90.59	0.000	8.235	0.588	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	16.1	22.1	

Vehicles = 2720

Posted speed limit = 50 km/h, Exceeding = 1 (0.037%), Mean Exceeding = 56.12 km/h

Maximum = 56.1 km/h, Minimum = 5.0 km/h, Mean = 16.1 km/h

85% Speed = 22.14 km/h, 95% Speed = 27.36 km/h, Median = 15.30 km/h

20 km/h Pace = 5 - 25, Number in Pace = 2501 (91.95%)

Variance = 38.15, Standard Deviation = 6.18 km/h

Based on the Virtual Week from this count:

- Total daily traffic was approximately 340vpd
- 91% were Class 1 vehicles suggesting most vehicles are patrons of car parks east of the lane closure.
- Peak traffic volumes were between 8am-6pm.
- 85th % speed are between 22-26km/hr
- Between 5pm-5am total traffic volumes were between 115-120 vehicles.

- 10 Based on the above, traffic volumes impacted by traffic regulation between 5pm-5am is considered to be minimal.

RECOMMENDATION:

That Council supports:-

1. The people focused activation of Bay Lane through regulating access of vehicles into Bay Lane, subject to the following:
 - a) Vehicle access within Bay Lane, between chainages CH 0-75m (approx.), be prohibited generally between 5pm to 5am;
 - b) Vehicle access between chainages CH 0-75m be permitted generally between 5am to 5pm;
 - c) Detail design to be generally in accordance with attached drawing E2019/79917 and must include appropriate regulatory signage and relevant time plates;

2. The following modifications to traffic flow in Bay Lane:
- a) Maintaining one way traffic flow between chainages 0-75m (approx.);
 - b) Change traffic flow to two way between chainages 75-150m;
 - c) Detail design to be generally in accordance with attached drawing E2019/79917 and must include appropriate regulatory signage and relevant time plates;

Attachments:

- 1 Concept - Bay Lane modifications, E2019/79917