TRAFFIC ENGINEERING STUDY

ROAD LAYOUT OPTIONS

BAY LANE, FRANKSTON

4 MAY 2023

BAY LANE, FRANKSTON

CLIENT: Frankston City Council

OBT JOB NUMBER: 24138

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CONTENTS

1 INTRODUCTION

O'Brien Traffic has been engaged by Frankston City Council to investigate options for the development of Bay Lane, Frankston, to safely and efficiently accommodate potential traffic generated by adjacent developments.

In the course of preparing this report:

- Existing information in relation to the study area has been reviewed;
- A site inspection of the area has been undertaken;
- Potential traffic generation from adjacent development sites has been considered;
- Layout options for Bay Lane have been considered; and
- A concept plan of an alternative layout has been prepared.

2 BACKGROUND

Council has received several applications to develop sites in the area bounded by Young Street, Plowman Place, Nepean Highway and Davey Street over the last five years, including applications for high rise residential developments with access from Bay Lane.

Bay Lane is approximately 3 m wide and Council is concerned that it may be not be adequate to safely and efficiently accommodate potential traffic generated from adjacent developments.

A 2019 study undertaken for Council examined the potential road network impacts from future developments in the Bay Lane block, including the need for widening of Bay Lane. A number of alternative layouts for Bay Lane were investigated.

This report provides further comprehensive investigation of options for Bay Lane, in particular to justify any required widening of Bay Lane that will impact on adjacent land holdings.

3 EXISTING CONDITIONS

Bay Lane is currently 3.0m wide, extending from Bay Street/Nepean Highway to the western boundary of 16 Davey Street and 3 Plowman Place.

Bay Lane and the surrounding road network are shown in **Figure 1.** An aerial view of Bay Lane and adjacent uses are shown in **Figure 2**.

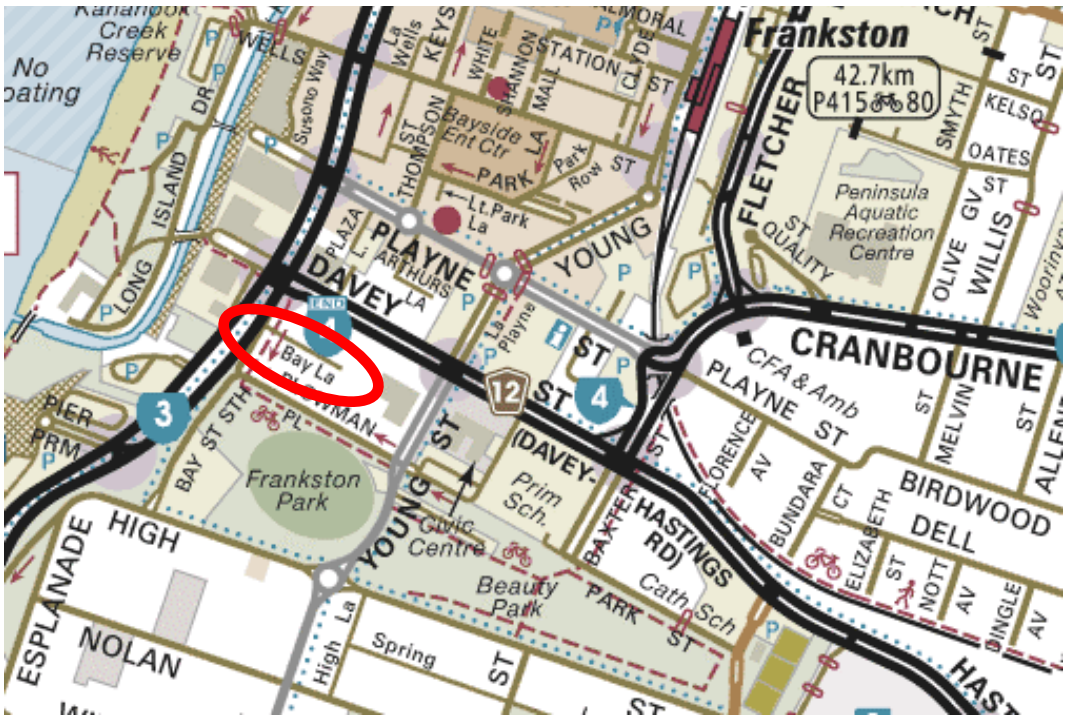

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FIGURE 1: BAY LANE AND SURROUNDING ROAD NETWORK

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FIGURE 2: AERIAL VIEW OF BAY LANE

Abutting the southern side of Bay Lane, at its western end, is the Mechanic's Hall car park and a Council car park. Adjacent to the Council car park, a multi-storey residential development ('Horizon') is currently being constructed. Vehicular access to Horizon will be via Plowman Place. Further east, along Plowman Place are residential properties with vehicular access via Plowman Place.

On the northern side of Bay Lane, at the western end, is "The Deck" (bar). Adjacent sites are currently undeveloped. Further east, at 14, 16 and 18 Davey Street, is an accountants, speech pathologist and hearing aid specialist, respectively.

Further redevelopment of land abutting Bay Lane is likely to occur the future. In particular, land on the northern side of Bay Lane is likely to be developed as high rise residential with vehicular access via Bay Lane. It is understood that no vehicular access to future redevelopments along here would be permitted via Davey Street.

4 DEVELOPMENT SCENARIOS AND LIKELY TRAFFIC VOLUMES

4.1 BAY LANE BLOCK ACCESS STUDY

The Bay Lane Block Access Study undertaken by SMEC (2019) considered a scenario of development for Davey Street and Plowman Place based on hypothetical floor areas and height restrictions of 38m on the northern side and 26m on the southern side as per the 2015 Frankston MAC Structure Plan. It was assumed developments on the northern side of Bay Lane (i.e. Davey Street addresses) would have vehicular access via Bay Lane, and developments on the southern side (i.e. Plowman Place addresses) would have vehicular access via Plowman Place.

The development scenarios with assumed vehicular access to Bay Lane were as follows:

- 6-12 Davey Street - 196 dwellings
- 14-18 Davey Street - 108 dwellings

In determining the likely traffic generation, SMEC has used rates provided in the RMS Guide to Traffic Generating Developments (2013), specifically the number of trips per car space for regional high-density flat developments. These rates are as follows:

- AM peak: 0.35 trips/car space
- PM peak: 0.26 trips/car space

The directional split applied for the peak hours is 20% in/80% out in the AM peak and 80% in/20% out in the PM peak.

Applying the above rates and directional splits to the Davey Street development sites equates to:

- AM peak: 129 trips (26 in/103 out)
- PM peak: 96 trips (77 in/19 out)

It is questionable whether data for regional NSW is applicable to Frankston. In particular, the number of trips in the PM peak appears low. Further, the directional split in the PM peak is likely too far skewed towards entering vehicles.

For comparison, the TraffixGroup TIA for 6-12 Davey Street (February 2019) assumes traffic generation rates and directional splits as follows:

- AM peak 0.4 trips/dwelling, split 20% in/80% out
- PM peak 0.4 trips/dwelling, split 70% in/30% out

Applying these rates to the Davey Street development sites equates to:

- AM peak: 121 trips (24 in/97 out)
- PM peak: 121 trips (85 in/36 out)

While the traffic generation for the AM peak is similar using the SMEC and TraffixGroup rates, the PM peak traffic generation differs. The TraffixGroup rates are consistent with survey data held by O'Brien Traffic for other, similar developments. Therefore, the traffic generation based on the TraffixGroup rates and directional split are considered more appropriate.

It is noted that the SMEC study also applied 20% and 40% increases in post development traffic volumes as sensitivity tests.

4.2 6-12 DAVEY STREET

A proposed development for 6-12 Davey Street assessed by TraffixGroup (February 2019) differed from the above scenario, and comprised residential, office and retail. The traffic assessment provided by TraffixGroup indicated the traffic generation would be 91 vph in the AM and PM peak hours, which is somewhat higher than considered in the SMEC report.

4.3 14, 16 & 18 DAVEY STREET

It is understood that there are no current applications for development of the remaining Davey Street sites. Whilst the development scenario considered by SMEC remains possible in the future, development is unlikely to occur in the short term. Any development of these sites would be subject to the existing Heritage Overlay (HO49).

4.4 DRAFT FRANKSTON MAC STRUCTURE PLAN

The October 2022 draft Frankston MAC Structure Plan contemplates maximum building heights of 35m (10 storeys) for properties along the northern side of Bay Lane and 28m (8 storeys) for properties along the southern side of Bay Lane. These differ slightly to the maximum heights in the 2015 Frankston MAC Structure Plan of 38m and 26m on the northern and southern sides of Bay Lane, respectively.

The height restriction changes contemplated by the 2022 draft Structure Plan may reduce the traffic volumes realised in Bay Lane, as discussed above, by around 8-10%.

4.5 LIKELY BAY LANE TRAFFIC VOLUMES

Based on the considerations above, traffic volumes at the western end of Bay Lane could be expected to be 110 vph in the AM and PM peak hours. Traffic volumes at the eastern end of Bay Lane would be lower, around 40 vph. The likely traffic volumes for the AM and PM peak hours are shown in **Figure 3**.

FIGURE 3: LIKELY AM AND PM PEAK HOUR TRAFFIC VOLUMES ON BAY LANE FOLLOWING FULL REDEVELOPMENT OF 6-18 DAVEY STREET

The traffic volumes shown above assume no vehicles exit Bay Lane via the Council car park to Plowman Place.

5 BAY LANE LAYOUT OPTIONS

To accommodate future development along Bay Lane, it is apparent that it will need to be widened to cater for future traffic volumes and extended (to the east) to serve potential redevelopment of 16 & 18 Davey Street.

Figure 12 of the draft Frankston MAC Structure Plan (2022) shows a future laneway connection of Bay Lane to Young Street. Therefore, the development of Bay Lane should consider this future context.

5.1 CROSS SECTION

5.1.1 Frankston Planning Scheme - Clause 56.06

Clause 56.06 of the Frankston Planning Scheme provides guidance on the design of street carriageways to '*provide an accessible and safe neighbourhood street system for all users*'.

Given the traffic volumes in Bay Lane contemplated above following redevelopment between 6 and 18 Davey Street, Bay Lane would be akin to an Access Place – a minor street with a traffic volume of 300-1,000 vpd.

Clause 56.06 indicates the appropriate cross section for an Access Place is a 5.5m wide carriageway with a 1.5m wide footpath offset 1m from the kerb.

5.1.2 Likelihood of two vehicles passing

The need to widen Bay Lane to two lanes wide can also be considered in context of the likely traffic volumes, how likely it is that two vehicles will meet in the lane and how passing will be accommodated.

Western section: Nepean Highway to access point to 6-12 Davey Street

Assuming a travel speed of 15 km/h, a vehicle will take 12 seconds to traverse the 50m section of the lane at the western end (this assumes an access to 6-12 Nepean highway approximately 50m east of Nepean Highway).

During the AM peak hour, there are 22 eastbound and 88 westbound movements anticipated. Assuming an even distribution of cars arriving and leaving in the peak hour, there would be a eastbound vehicle in the lane (22 x 12/3600) = 7% of the time. A westbound vehicle would meet an eastbound vehicle (88 x 0.07) = 6.2 times in the peak hour.

Similarly, during the PM peak hour, there are 77 eastbound and 33 westbound movements anticipated. Again, assuming an even distribution of cars arriving and leaving in the peak hour, there would be a eastbound vehicle in the lane (77 x 12/3600) = 26% of the time. A westbound vehicle would meet an eastbound vehicle (33 x 0.26) = 8.6 times in the peak hour.

Given the above, the probability of two vehicles passing in the lane during the AM and PM peak hours is 100%. As such, Bay Lane should be two lanes wide to cater for traffic flows between Nepean Highway and the access to 6-12 Nepean Highway.

Eastern section: Access point to 6-12 Davey Street to 18 Davey Street

Again, assuming a travel speed of 15 km/h, a vehicle will take 17 seconds to traverse the 70m section of the lane at the eastern end.

During the AM peak hour, there are 8 eastbound and 32 westbound movements anticipated. Assuming an even distribution of cars arriving and leaving in the peak hour, there would be a eastbound vehicle in the lane (8 x 17/3600) = 4% of the time. A westbound vehicle would meet an eastbound vehicle (32 x 0.04) = 1.2 times in the peak hour.

Similarly, during the PM peak hour, there are 27 eastbound and 12 westbound movements anticipated. Again, assuming an even distribution of cars arriving and leaving in the peak hour, there would be an eastbound vehicle in the lane (27 x 17/3600) = 13% of the time. A westbound vehicle would meet an eastbound vehicle (12 x 0.13) = 1.5 times in the peak hour.

While the frequency of two vehicles passing in the eastern section of Bay Lane will be considerably lower, the cross section of Bay Lane will need to cater for vehicles passing.

5.1.3 Other considerations

It is noted that Australian Standard *AS2890.1 Parking facilities: Off Street car parks* provides guidance on width requirements for access driveways and connecting roadways. AS 2890.1 notes that '*30 or more movements in a peak hour (combined in and out) would usually require provision for two vehicles to pass…passing opportunities should be provided every 30m*'.

Clause 52.06 of the Frankston Planning Scheme also recognises the need to provide for two vehicles to pass. Design standard 1 – Accessways states '*Accessways must…provide a passing area at the entrance at least 6.1m wide and 7 metres long if the accessway serves ten or more car parking spaces and is either more than 50 metres long or connects to a road in a Road Zone.*'

The decision guidelines at Clause 52.06-10 requires the responsible authority to consider '*the role and function of nearby roads and the ease and safety with which vehicles gain access to the site*'.

5.1.4 Carriageway Width

Given the above, it is clear that Bay Lane will need to accommodate two vehicles passing within the western section of the lane, based on the likely development at 6-12 Davey Street and the future potential to develop land at 14-18 Davey Street (with vehicular access from Bay Lane).

At minimum, Bay Lane should be two lanes wide between Nepean Highway and the vehicular access to 6-12 Davey Street.

Between the vehicular access to 6-12 Davey Street and 18 Davey Street, Bay Lane would need to be two lanes wide or provide passing areas to allow two vehicles to pass. Given the distance that would be required for a passing bay (with tapers), continuation of two lanes across the remaining sites to 18 Davey Street is considered appropriate. This would be in accordance with Clause 56.06 of the Planning Scheme which, as noted above, requires an Access Place to have a width of 5.5m.

Adjacent to 14 Davey Street

Adjacent to 14 Davey Street, the level difference between Bay Lane and 14 Davey Street makes it impractical to widen on the northern side of Bay Lane until this site is developed. This section of Bay Lane could continue in its current form, i.e. as a 3.0m wide lane, if passing movements can be accommodated elsewhere in the lane.

When/if the site at 14 Davey Street is developed, a condition of permit should require the developer to widen Bay Lane at the appropriate level.

Adjacent to 16 Davey Street

Bay Lane will need to be extended across 16 Davey Street/3 Plowman Place to provide access to 18 Davey Street and facilitate future redevelopment of that site (noting no vehicle access to Davey Street would be permitted for a future redevelopment).

Adjacent to 18 Davey Street

Bay Lane could be terminated at the boundary of 16/18 and still accommodate redevelopment of 18 Davey Street. In that case, any redevelopment of 18 Davey Street would have to ensure all traffic movements can be adequately accommodated within the site. That is, the development should ensure vehicle turning movements and passing movements can be accommodated within the site without unreasonable impact on Bay Lane.

However, Bay Lane would need to extend across 18 Davey Street/4 Plowman Place if the ultimate vision for Bay Lane to continue to Young Street is to be realised.

5.1.5 Footpath

Given the anticipated development along Bay Lane, there is likely to be significant pedestrian demand to/from the city centre, train station, waterfront and ovals/parkland, as shown in **Figure 4**. Likely desire lines are shown in **Figure 5**.

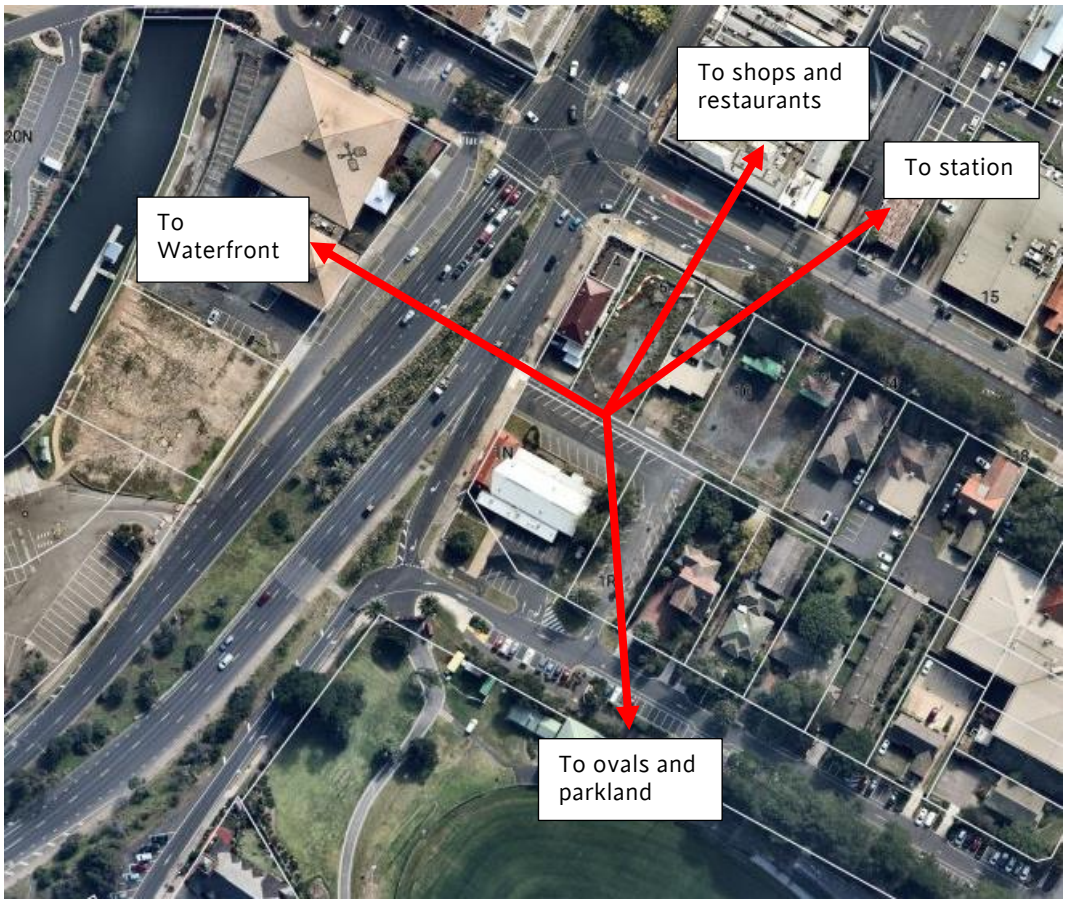

FIGURE 4: PEDESTRIAN DESTINATIONS

FIGURE 5: LIKLEY PEDESTRIAN DESIRE LINES

Provision of a footpath along Bay Lane would be desirable to accommodate pedestrian movements between the development sites, Nepean Highway and Plowman Place, particularly if developments provide pedestrian access to/from Bay Lane. (It is noted that the 2019 plans for proposed development at 6-12 Davey Street show a pedestrian entrance from Bay Lane).

Clause 56.06 indicates an Access Place should provide a 1.5m wide footpath if it serves more than 5 dwellings – as will be the case for Bay Lane if anticipated development occurs.

For Bay Lane, provision of a 2m wide footpath would be appropriate to allow for lighting to be provided within the footpath.

5.2 SMEC CONCEPT DESIGNS

The SMEC concept designs show Bay Lane comprising two lanes of 3.2m narrowing to 3.0m, plus a 2.0m footpath. At Nepean Highway, access is restricted to left in, with egress restricted to left out to Bay Street South. At the eastern end a turn-around area is proposed to accommodate a 12.5m single unit truck.

Option 1 is on a straight alignment, with widening occurring on the southern side of the existing lane, as shown in **Figure 6**.

FIGURE 6: SMEC CONCEPT PLAN FOR BAY LANE – OPTION 1

Option 2 is on a kinked alignment, with widening occurring on the southern side of the lane initially (i.e. through Mechanics Hall and Council car parks), and on the northern side of the lane further to the east, as shown in **Figure 7**.

FIGURE 7: SMEC CONCEPT PLAN FOR BAY LANE – OPTION 2

Note that both alignments avoid taking any land from the corner property with Nepean Highway (currently occupied by the Deck) as this property is covered by Heritage Overlay HO55 in the Planning Scheme and has limited on-site parking.

With regard to the above proposed layouts, the following commentary is provided:

- The Option 1 alignment requires all the widening on the southern side of Bay Lane which would impact the properties fronting Plowman Place. The current development of 1 Plowman Place (Horizon) limits the amount of widening that could on the southern side. In any case, it may be hard to justify widening on the southern side given these properties will not have vehicular access from the lane.
- The level difference between Bay Lane and 14 Davey Street makes it impractical to widen the lane on the northern side at this location (until such time as 14 Davey Street is redeveloped).
- Both alignments result in the loss of parking at Mechanics Hall. The remaining parking could be re-configured (e.g. to 90 degree) to maximise the number of spaces achieved.
- The proposed cross section of Bay Lane, i.e. 2 lanes + footpath, is considered appropriate at the western end (i.e. west of 14 Davey Street) given the discussion above (Section 5.1).
- The proposed width of the lanes (2 x 3.0m) exceeds the recommended width of 5.5m for an Access Place in Clause 56.06, and is considered excessive.
- The proposed width of 2.0m for a footpath is greater than the recommended width of 1.5m given in Clause 56.06 for an Access Place. However, the greater width is considered appropriate as there would be no offset from the traffic lane. The additional width would also allow lighting to be provided within the footpath without impacting pedestrian accessibility.
- The proposed turn-around area at the eastern end of Bay Lane is designed to accommodate the turning movements of 8.8m and 12.5m vehicles – which is considered excessive. Any developments at 14-18 Bay Lane should be required to accommodate the turning movements of their service vehicles within their site.
- The Nepean Highway intersection treatment is considered appropriate, noting that left turn movements from Bay Lane to Nepean Highway are not to be permitted. A left turn lane from Nepean Highway to Bay Lane should be considered (this could be accommodated by removing parking on the eastern side of Nepean Highway north of Bay Lane).

5.3 ALTERNATIVE LAYOUT

An alternative layout for Bay Lane has been developed by O'Brien Traffic which avoids the corner property at Nepean Highway, minimises the impact on the Mechanics Hall car park, and facilitates the long term vision of Bay Lane extending to Young Street. The alternative layout is shown in **Figure 8** and provided in **Appendix A.**

FIGURE 8: BAY LANE ALTNERNATIVE LAYOUT OPTION

The alternative alignment comprises a 6.0m wide carriageway initially, i.e. between Nepean Highway and 6/8 Davey Street, narrowing to 5.5m wide to the boundary of 18/20 Davey Street consistent with the carriageway width for an Access Place given in Clause 56.06. Note the wider carriageway width at the western end will ensure adequate clearance to adjacent properties on the northern side where no footpath is proposed.

A kinked alignment is shown at the western end to avoid the corner property and minimise the impact on Mechanics Hall carpark. East of the Council carpark, the alignment kinks slightly to the north again to avoid the properties fronting Plowman Place. The proposed alignment minimises the number of properties impacted.

A 2.0m wide footpath is proposed along the northern side of Bay Lane, east of 6/8 Davey Street. This differs slightly from the footpath provision for an Access Place given in Clause 56.06, i.e. 1.5m with a 1.0m offset. As an offset is not proposed, the footpath width has been increased to 2.0m. The greater width would also allow for provision of lights along the footpath.

West of 6/8 Davey Street, pedestrian movements would be accommodated along the southern side of Bay Lane. A pedestrian connection between Bay Lane and Plowman Place could be provided by a footpath between Mechanics Hall and the car park (either adjacent to Mechanics Hall or adjacent to the car spaces), or via a shared area through the Council car park.

Parking adjacent to the lane at Mechanics Hall would be reconfigured, with a loss of 5 car spaces. The proposed concept shows the angle parking reconfigured to 90° on the southern side and parallel on the northern side, with dimensions in accordance with Australian Standard AS2890.1. Approximately 1.5m separation is proposed between the lane and the car spaces and could accommodate a footpath to facilitate pedestrian movements to/from Nepean Highway.

On the Council car park site, parking has been shifted towards the eastern boundary (which would require construction of a retaining wall along the site boundary) and generally formalised. The one-way exit lane through the car park to Plowman Place would be approximately 3.7m wide to accommodate through traffic and parking manoeuvres. The 45° angle parking would be retained either side of the one-way exit lane, with dimensions in accordance with AS2890.1.

The layout provided in Figure 8 shows a loss of 2 car spaces on the Council car park site. Note this layout does not include any accessible car spaces in the Council carpark as these have been recently replaced with 2 new accessible spaces in the Mechanic Hall carpark which will be retained.

A swept path for an 8.8m truck entering Bay Lane from Nepean Highway, and exiting to Plowman Place is provided in **Appendix A**.

5.4 PARKING

The proposed options for Bay Lane discussed above would result in an overall loss of parking spaces. To off-set the loss of parking, Council could provide 5 on-street parking spaces in Bay Lane South, as shown in **Figure 9**.

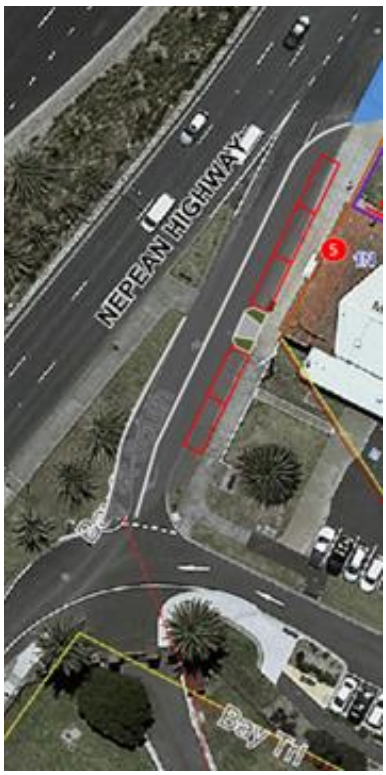

FIGURE 9: PROPOSED PARKING SPACES ON BAY LANE SOUTH

A comparison of parking supply for existing conditions, the SMEC layout options and the alternative layout (as per Figure 8) is provided in **Table 1**. The comparison assumes provision of 5 new on-street spaces in Bay Lane South for all options.

OPTION	PARKING SUPPLY (NO. OF SPACES)			
	MECHANICS HALL	COUNCIL	BAY STREET SOUTH	TOTAL
Existing conditions	23 incl 2 d/a	20 incl 2 d/a[1]	0	43 incl 4 d/a[1]
SMEC Option 1 (straight alignment)	11	17	5	33 incl 0 d/a
SMEC Option 2 (kinked alignment)	11	19 incl 2 d/a	5	35 incl 2 d/a
OBT alternative alignment	18 incl 2 d/a	18	5	36 incl 2 d/a

Note: 1 – the 2 disabled spaces in the Council carpark are not currently available and have been replaced with 2 new disabled spaces in the Mechanics Hall carpark

TABLE 1: COMPARISON OF PARKING SUPPLY

Table 1 indicates the alternative option would result in a loss of 7 car spaces. The SMEC options would result in a loss of 10 spaces (Option 1) and 8 spaces (Option 2).

5.5 NEPEAN HIGHWY INTERSECTION

As noted above, DTP does not support access to Nepean Highway from Bay Lane.

The SMEC designs above (Figures 7 and 8) accommodate left in movements from Nepean Highway and left out movements to Bay Street. Swept paths prepared by SMEC indicate the designs would accommodate 8.8m and 12.5m trucks.

Similarly, **Figure 10** shows a proposed intersection treatment for Nepean Highway/Bay Lane with movements restricted to left in to Bay Lane and left out to Bay Street. Figure 10 shows a left turn deceleration lane on Nepean Highway. This can be readily achieved by removing the parking along this section (approximately 4 spaces).

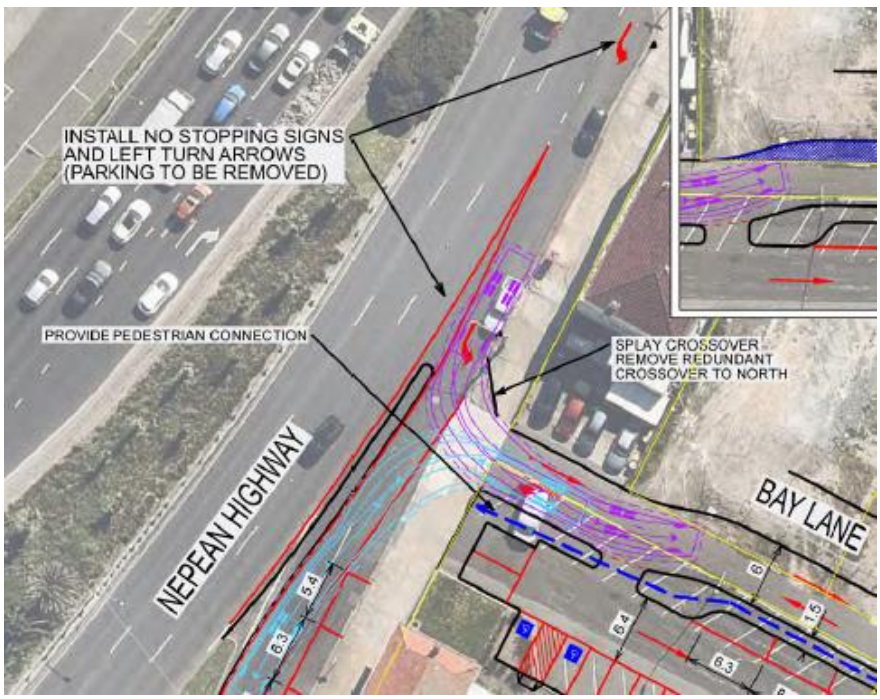

FIGURE 10: NEPEAN HIGHWAY/BAY LANE PROPOSED INTERSECTION TREATMENT (NO EXIT MOVEMENTS FROM BAY LANE)

5.6 TURN-AROUND

A turn-around area at the eastern end of Bay Lane is not considered necessary. As discussed above, new developments with vehicular access to Bay Lane should be required to accommodate the turning movements of their service vehicles on the site. Demand for other vehicles turning at the end of the lane is anticipated to be negligible.

Emergency service vehicles attending the Davey Street or Plowman Place properties would be expected to access the properties at their street address frontages rather than Bay Lane. The exception may be a fire truck attending an incident – and they would typically do whatever was necessary to attend the incident (e.g. reverse in the lane).

If the lane is adequately signed as a No Through Road, cars would be unlikely to continue past the entrance to the Mechanics Hall and Council car park or 6-12 Davey Street unless they are accessing the sites further to the east.

However, if Council desired a turn-around area, it would be appropriate to provide this to accommodate a B99 vehicle. A side turning bay could be considered to minimise impact on sites fronting Plowman Place.

The required area for a side turning bay is shown in **Figure 11**. For comparison, the required area for a side turning bay for an 8.8m service vehicle is shown in **Figure 12**. In any case, potential locations for a side turning bay would be limited by the level differences between Bay Lane and adjacent properties.

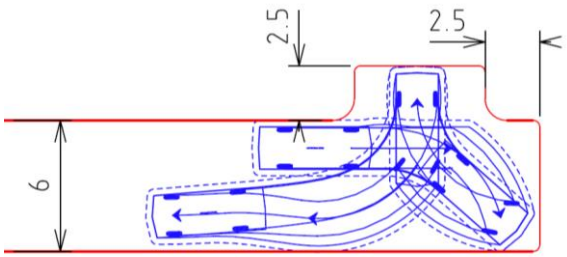

FIGURE 11: SIDE TURNING BAY FOR B99

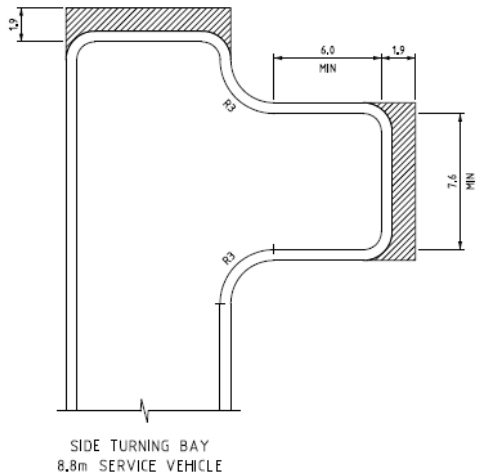

FIGURE 12: SIDE TURNING BAY FOR 8.8M SERVICE VEHICLE

5.7 LAND ACQUISITION

The SMEC concept plan for the straight alignment indicates land acquisition would be required on the southern side of Bay Lane – impacting the Mechanics Hall car park and properties fronting Plowman Place. The kinked alignment would require land acquisition from the Mechanics Hall site and properties fronting Davey Street, east of (and including) 8 Davey Street.

The alternative layout option would require all the land acquisition on the southern side initially. Part way along the frontage of 6 Davey Street, land acquisition would be predominantly on the northern side of the lane. East of the Council car park, the land acquisition would wholly on the northern side. (Note that given that development of sites fronting Plowman Place would not have vehicle access via Bay Lane, it is appropriate for the widening to occur on the northern side of the lane). The extent of land acquisition required for the alternative layout option is shown in **Figure 13**.

FIGURE 13: REQUIRED LAND ACQUISTION FOR BAY LANE ALTERNATIVE LAYOUT OPTION

Figure 13 shows the required land acquisition for the alternative layout option would not impact the corner property at Nepean Highway (occupied by The Deck). It is noted that while the term 'acquisition' is used above, the actual mechanism for gaining use of the land may be other than an acquisition (for example, Public Acquisition Overlay).

6 SUMMARY

Following an assessment of likely future traffic volumes in Bay Lane, it is considered that Bay Lane should accommodate simultaneous two-way traffic movements between Nepean Highway and 18/20 Davey Street to facilitate redevelopment of adjacent sites and support the ultimate vision for Bay Lane to extend to Young Street.

A review of concept plans for the layout of Bay Lane (prepared by SMEC) has been undertaken and an alternative layout option developed.

The alternative layout comprises a two-lane (two-way) carriageway between Nepean Highway and 18/20 Davey Street with left in entry from Nepean Highway and left out exit to Bay Street. A footpath is proposed along the northern side east of 6/8 Davey Street, with pedestrian movements accommodated along the southern side between 6/8 Davey Street and Nepean Highway.

Consideration has also been given to the parking impact of each option, the Nepean Highway intersection, need for a turn-around area, and the extent of land acquisition required.

APPENDIX A

CONCEPT PLAN
BAY LANE ALTERNATIVE LAYOUT OPTION

INSTALL NO STOPPING SIGNS
AND LEFT TURN ARROWS
(PARKING TO BE REMOVED)

PROVIDE PEDESTRIAN CONNECTION

SPLAY CROSSOVER
REMOVE REDUNDANT
CROSSOVER TO NORTH

REQUIRED ACQUISITION
APPROX 589m²

NEPEAN HIGHWAY

BAY LANE

PROPOSED PEDESTRIAN ACCESS

POTENTIAL FOOTPATH

BUILDING SETBACK 0.5m FROM
EDGE OF LANE

PLOWMAN PLACE

N

ISSUE	DATE	AMENDMENTS	BY

NOT FOR CONSTRUCTION

NOTES:

O'BRIEN TRAFFIC
• Traffic Planning • Transport Planning
• Traffic Engineering • Road Safety
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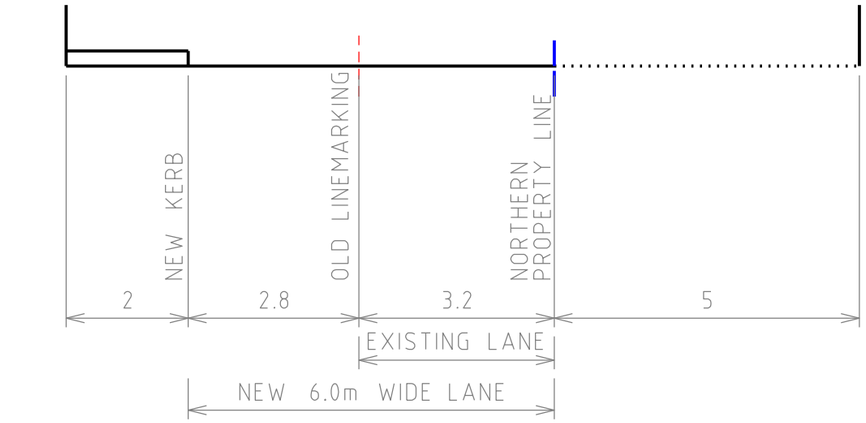
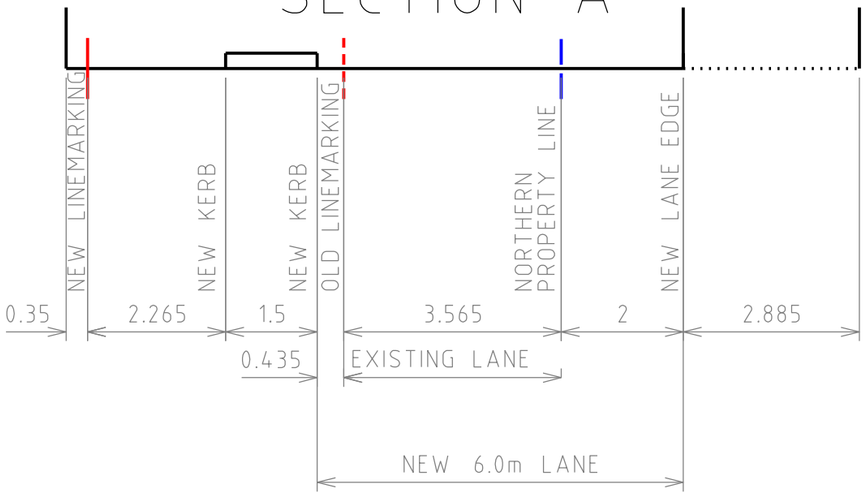
ENGINEER: J.MACAULAY	DRAWING NO: 24138002
DESIGNED BY: B.VANDERWERF	SHEET NO: 1 OF 2
DATE: 03/05/2023	JOB NO: 24138
SCALE: 1:500	
Hor. Scale Ver. 0 5 10	ORIGINAL: A3 ISSUE: -

BAY LANE, FRANKSTON

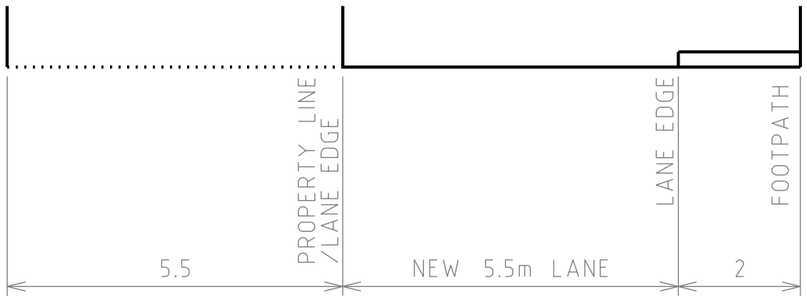
PROPOSED LANEWAY ALIGNMENT



SECTION A



SECTION B



SECTION C

ISSUE	DATE	AMENDMENTS	BY

NOT FOR CONSTRUCTION

NOTES:

O'BRIEN TRAFFIC

• Traffic Planning • Transport Planning
• Traffic Engineering • Road Safety

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ENGINEER: J.MACAULAY		DRAWING NO: 24138002	
DESIGNED BY: B.VANDERWERF		SHEET NO: 2 OF 2	
DATE: 03/05/2023	JOB NO: 24138	SCALE: 1:200	
Hor. Scale Ver. 0 2 4		ORIGINAL: A3	ISSUE: -

BAY LANE, FRANKSTON

PROPOSESD LANEWAY CROSS-SECTIONS