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3 April 2025

Kylie Hitchman
3 Lauderdale Avenue
Fairlight NSW 2094

c/o: Mark Baxter <mark@bja.net.au>

Traffic and Parking Impact Assessment – 3 Lauderdale Avenue, Fairlight

Dear Michelle

1.0 lintroduction

Stellen consulting was engaged to undertake a traffic and parking impact assessment of the proposed new development at 3 Lauderdale Avenue, Fairlight. The report provides an assessment of the proposed parking arrangement on site against the relevant requirements of Manly Council's Development Control Plan, and the relevant Australian Standards.

The proposed parking design is in accordance with the following:

- *Australian Standard - AS/NZS 2890.1 Part 1: Off-street car parking*
- *Australian Standard - AS/NZS 2890.3 Part 3: Parking Facilities Bicycle Parking Layout*
- *Manly DCP 2019, Schedule 3 - Part A1: Parking Rates and Requirements for Vehicles*
- *Manly DCP 2019, Schedule 3 - Part A2: Parking Rates and Requirements for Bicycles*
- *RTA Guide to Traffic Generating Developments 2002*

1.0 Information relied upon

This report is based on the DA drawings by Baxter & Jacobson Architects listed in Appendix A

2.0 Description of the site and proposed development

The development proposes demolition of the existing dwelling, garage, and car port, and construction of a new residential flat building with a basement car park. The new building consists of three units. Unit 1 is located at the basement and fronting the North Harbour, Unit 2 is located at the ground floor with a deck fronting the North Harbour, and Unit 3 is located at the upper floor fronting Lauderdale Avenue. This development is classified as a residential flat building in accordance with the RTA guide to traffic generation and the Manly Development Control Plan (DCP) land use definitions. The location of the proposed development is shown in Figure 1.

Figure 1: Site location (Source: Six Maps)

3.0 Traffic Generation

The traffic generation of the site has been calculated and its impact on the surrounding road network assessed, with the relevant details of this assessment summarised below in Table 1:

Table 1: Traffic Generation

Traffic Generation	➢ *Medium-density residential flat building*[1] - *Units and flats (3+ bedrooms):* ○ *Weekday peak hour vehicle trips = 0.5-0.65 per dwelling.*	The traffic generation of the three dwellings (3+ bedrooms) is estimated to be 2 (rounded up from 1.95) trips per peak hour. So, the total traffic generation is 2.0 trips per peak hour.
Impact Assessment	*Low Impact (<10 Trips per peak hour):* *No Detailed Assessment Required* [2]	The traffic generation of the site is below 10 trips per peak hour and therefore no detailed assessment of traffic impacts is recommended. This low volume of vehicles is within the daily fluctuations in traffic on the surrounding roads and will not have a noticeable effect on conditions.

Notes:

(1) RTA Guide to Traffic Generating Developments (GTGD) 2002

(2) Austroads Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments Figure 5.1

No service delivery areas are proposed, and no recommendations are made to mitigate impacts of the proposal upon the surrounding road network.

4.0 Assessment of parking bays requirements

The number of recommended car parking spaces of the site has been calculated according to Manly Development Control Plan 2019 with the requirements provided below in Table 2:

Table 1: Parking space assessment

Manly Development Control Plan 2019	*Spaces based on number of bedrooms per dwelling :*	1.5 x 3 (3 bedroom) dwellings = 5 parking spaces (rounded up from 4.5)
	0.25 visitor parking space for each dwelling.	0.25 x 3 dwellings = 1.0 parking spaces. (rounded up from 0.75) The required parking arrangement is 6 parking spaces. The proposed parking arrangement complies by providing 7 car parking spaces.

The proposed parking arrangement complies by providing 7 car parking bays. (Please see Figure 2 for the proposed parking arrangement).

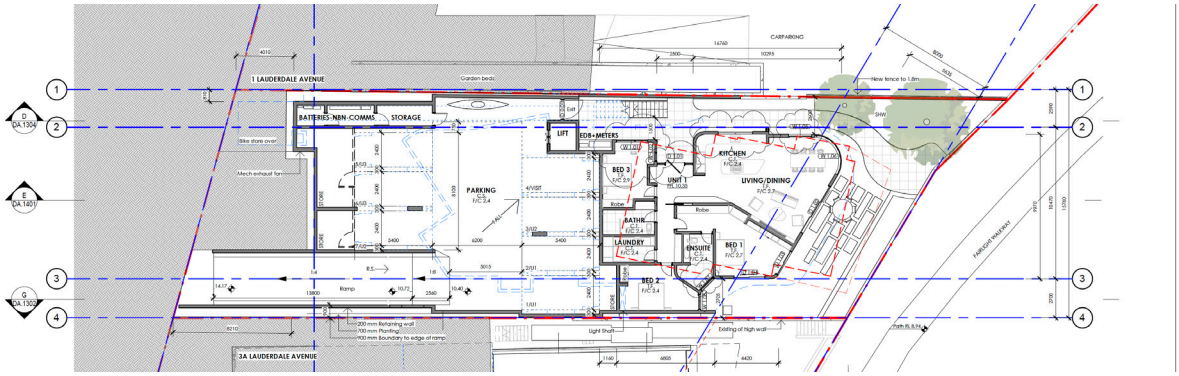

Figure 2: Proposed parking arrangement

5.0 On-Site bicycle parking

Manly Development Control Plan 2019, Schedule 3 - Part A2 - Parking Rates and Requirements for Bicycles requires one stand for every three car parking bays with a minimum provision of one stand for each premise. The development consists of seven (7) car parking and must, therefore, provide a minimum of 3 bicycle parking bays (rounded up from 2.33). Five bicycle parking bays have been provided.

6.0 Traffic Management

The development proposes a single lane driveway for vehicle manoeuvring from/to Lauderdale Avenue to/from the proposed basement car park. To avoid conflicts when vehicles move in and out of the basement, a traffic priority system is proposed. The system consists of a sensor installed at the bottom of the ramp, fobs, and a lighting system installed at both the basement and boundary, as shown in Figure 3.

For vehicles exiting the basement, the senor activates a red light at the boundary and then triggers the shutter to open. When the red light is on, vehicles entering the basement will stop for 10 seconds on Lauderdale Avenue. This is analogous to vehicles stopping for 5 to 10 seconds while parallel parking and is considered acceptable for the low traffic intensity of Lauderdale Avenue.

For vehicles entering the basement, when the fob is pressed, it activates the red light in the basement and the shutter opens. When the red light is on, vehicles leaving the basement will wait until the vehicle enters the basement and the light turns green.

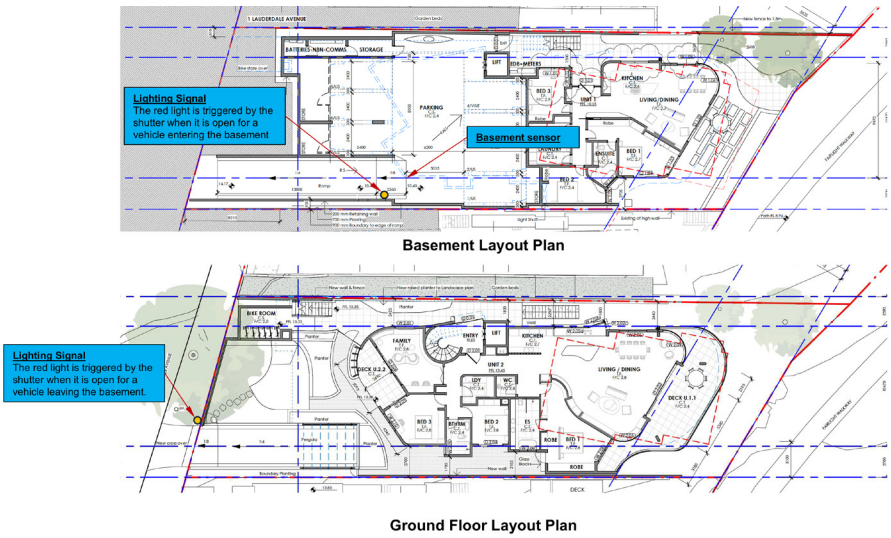

Figure 3: Traffic priority system

7.0 Conclusion

This report provides a traffic and parking impact assessment of the proposed development at Lauderdale Avenue, Fairlight. The following can be concluded from the assessment:

1. It is not expected that the proposed development will impact traffic as the actual number of trips is expected to be less than 10 trips per peak hour and Lauderdale Avenue has low intensity traffic. Therefore, traffic impact assessment was not part of this report.
2. The proposed development complies with the relevant requirement for car parking space and bicycle parking space requirements.
3. The development proposes traffic priority system to manage vehicle manoeuvring from/to the basement and Lauderdale Avenue.

We recommend the proposed parking arrangement (as described in the drawings) as a safe and practical solution to support the development.

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Please contact me should you have any questions.

Kind regards,

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Quality Information

Revision:	2
Date:	3 April 2025
Prepared by:	Ayad Mutafi
Checked by:	Tyler Karvinen Senior Engineer E. tyler.karvinen@stellenconsulting.com.au

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Appendix A - Architectural Plans

Sheet Number	Sheet Name	Revision	Date
DA.0000	COVER PAGE	A	01/04/25
DA0001	BASIX	A	01/04/25
DA.0002	LOCATION PLAN	A	01/04/25
DAOIO1	SITE ANALYSIS	A	01/04/25
DA.1201	DEMOLITION PLAN	A	01/04/25
DAJ211	LVL1 PLAN	A	01/04/25
DA.1212	LVL2 PLAN	A	01/04/25
DA.1213	LVL3 PLAN PENTHOUSE	A	01/04/25
DA.1214	ROOF PLAN	A	01/04/25
DA.1301	NORTH ELEVATION AND STREET ELEVATION	A	01/04/25
DA.1302	WEST-ELEVATION AND BOUNDARY FROM N°3.	A	01/04/25
DA.1303	SOULTH ELEVATION AND ELEVATION FROM WALKWAY	A	01/04/25
DA.1304	EAST-ELEVATION AND BOUNDARY FROM N#1	A	01/04/25
DA.1401	LONG SECTIONS	A	01/04/25
DA.1402	CROSS _SECTIONA	A	01/04/25
DA.1403	CROSS _SECTIONB	A	01/04/25
DA.1404	CROSS _SECTIONC	A	01/04/25

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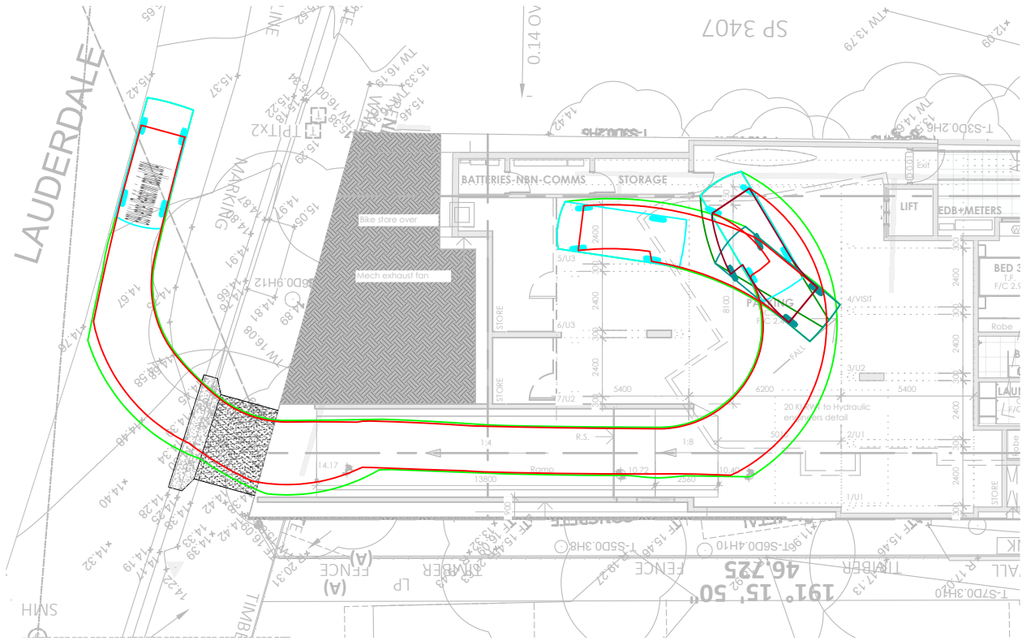
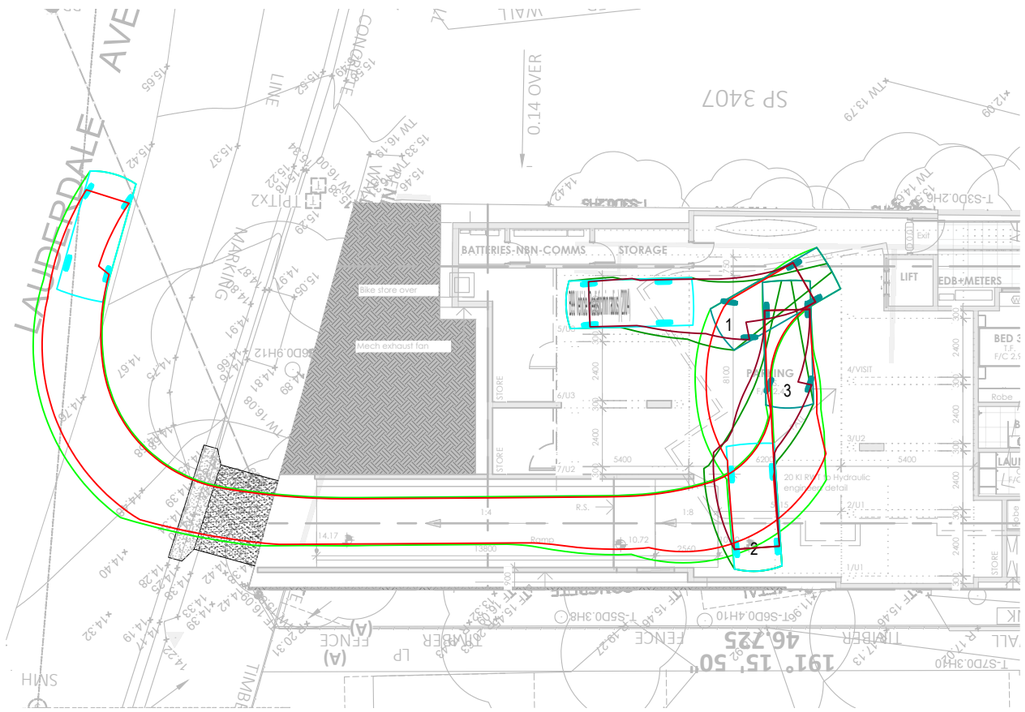
Appendix B - Swept paths



PLAN 2 SWEPT PATH - INGRESS (B99 VEHICLE)

1:250



PLAN 3 SWEPT PATH - EGRESS (B99 VEHICLE)

1:250

REVISIONS					
1	MH	03.04.2025	FOR DA SUBMISSION		MH
0	NTM	01.04.2025	FOR DA SUBMISSION		FRM
No.	BY	DATE	DESCRIPTION		APPD

Scale

AS NOTED

DO NOT SCALE. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED

THE SIGNING OF THIS TITLE BLOCK CONFIRMS THE DESIGN AND DRAFTING OF THIS PROJECT HAVE BEEN PREPARED AND CHECKED IN ACCORDANCE WITH GZ CONSULTING ENGINEERS' QUALITY SYSTEM

DESIGNED	NTM	CHECKED	FRM
DRAWN	NTM	CHECKED	MH
APPROVED	FRM	DATE	03.04.2025

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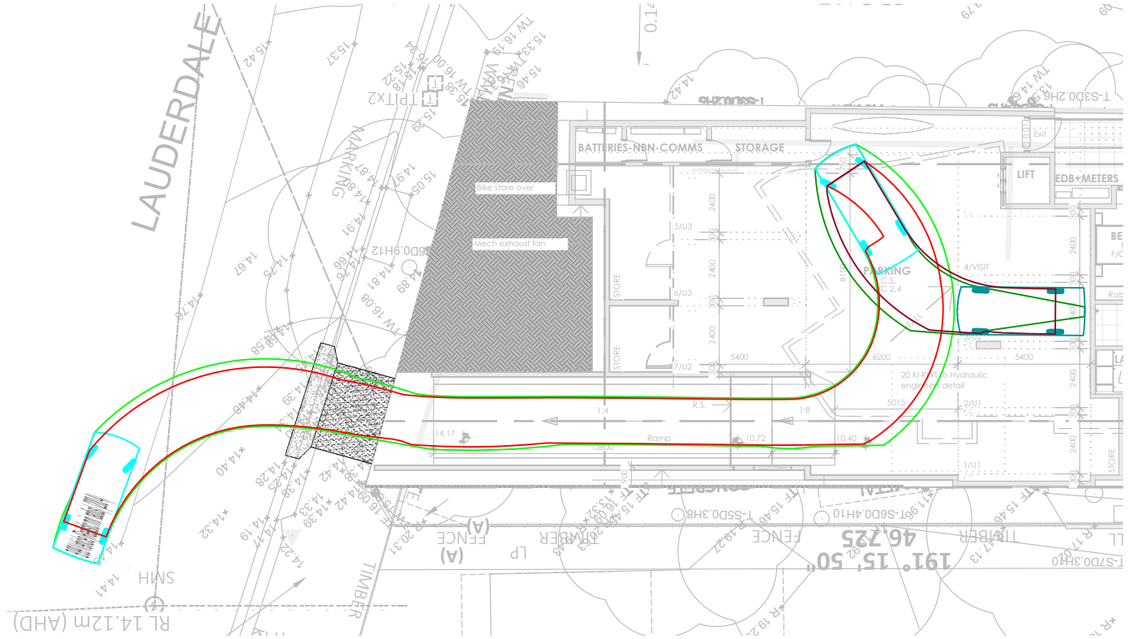
N

3 LAUDERDALE AVENUE, FAIRLIGHT

SWEPT PATH ANALYSIS - SHEET 1

Size	Status	Drg No.	Rev.
A3	FOR DA SUBMISSION	CV-104	1


LAUDERDALE
BATTERIES-NBN-COMMS
STORAGE
LIFT
EDB+METERS
Bike store over
Mech exhaust fan
PARKING
Ramp
20 KL RWT to Hydraulic engineers detail
SWALE
SWALE
SWALE