

M^CLAREN TRAFFIC ENGINEERING

Transport Planning, Traffic Impact Assessments, Road Safety Audits, Expert Witness

Head Office:

Level 1
29 Kiora Road
MIRANDA NSW 2228
Ph 61-2-8543-3811
Fax 61-2-8543-3801

Email: mclarenc@ozemail.com.au

Mobile (0412) 949-578



Accounts Office:

5 Jabiru Place
Woronora Heights
NSW 2233
Ph 61-2-9545-5161
Fax 61-2-9545-1227

17 October 2012

2012/170.L01 CM/hc

Aevum Limited (Stockland Development Pty Ltd)
C/o EPM Projects Pty Ltd
PO Box 124
ST LEONARDS NSW 2065
Attention: Kathryn Cuno
Dear Kathryn,

**CARDINAL FREEMAN VILLAGE, ASHFIELD
REVISED TRAFF & PARKING IMPACT ASSESSMENT
IN SUPPORT OF CURRENT (SEPT 2012) MASTERPLAN
& PROJECT APPLICATION TO THE DoPI**

Reference is made to your request for the assessment of the proposed upgrade to the Cardinal Freeman Village which was approved as a Part 3A application and is now under a Section 75W application. The site plan and staging is shown in **Annexure A** for reference.

The undersigned is familiar with the site and previously approved development having been involved with the project since 2006 culminating in the preparation of the traffic and parking impact assessment component of the approved development in 2010. Reference is made to the original Traffic Impact Assessment (TIA) dated March 2010 prepared by *M^CLaren Traffic Engineering*.

Parking

Refer to **Annexure B** for the proposed unit mix and parking allocation for Cardinal Freeman Village and the construction stages. The previous proposal was for a total of 311 car parking spaces. The current proposal is for a total of 353 car parking spaces. The existing South West Precinct and Buildings A & B will be retained. **Table 1** below details the proposed scale of development, in comparison to the previous approved Masterplan.



TABLE 1: PROPOSAL DIFFERENCES

Type of Dwelling	Existing	Approved	Proposed	Difference
ILU's	180	225	240	15
Serviced Apartments	49	49	0	-49
RACF	119	132	133	+1
Total ILU's	229	225	240	-34
Total RACF	119	132	133	+1

The proposal has 1 additional aged care bed than the previous assessed Masterplan while due to the changes in apartment mix and layout, there are 34 less ILU's

The current proposal has 240 ILU's with a change in bedroom mix (previously it was 60%/40% one bedroom/two bedroom whereas the current proposal is 10%/82%/8% one/two/three bedroom mix). Consequently, this has resulted in an increase in parking requirement and supply. The current proposal provides an additional 42 spaces to cater for unit mix.

Annexure B also depicts the required parking for the new ILU's and the RACF. Adequate provision for visitors will be provided firstly with up to 28 visitor spaces available during Stage 1 and a final quantum of 48 spaces after the completion of Stage 2. The total of visitor parking equates to 1 space per 5 units under the two stages. Parking will be allocated within basements and the internal street. This parking provision is a worse case given the choice and locality of public transport. Under appropriate onsite parking management, a minimum of 34 visitor spaces should be available after the completion of the two stages as this lower provision is acceptable given the public transport infrastructure surrounding the site.

Reference is also made to the previous TIA with the extract below relevant to the current proposal:

"It is not unreasonable, in transport planning practice, for the quantum of kerbside parking that fronts a development site to be used for parking, particularly for visitors. However, this would not apply to the Clissold Street and Seaview Street frontages of the site, as these streets are narrow and currently safely facilitate local two way traffic flow.

Further, given the close proximity to public transport services (i.e. bus services along Queen Street and Clissold Street frontages of the site and rail services at Ashfield Rail Station within 1km) it is reasonable to encourage public transport usage by limiting on-site car parking supply particularly for visitors and staff."

Additionally, it is recommended that a Work Travel Plan be encouraged and enforced for all staff members. The travel plan should provide the following measures:

- 1) The Village management will provide public transport access information in for all the separate precincts in order to encourage staff to use public transport/cycling/walking transport options (bus and train timetables for Ashfield Railway Station and the surrounding bus stops & routes 409, 411 and 413).
- 2) Village management will provide transport options and public transport timetable information on its website.
- 3) The reception/foyer will be provide relevant information and direction to bus stops, bus routes, nearest train stations, taxi ranks, bicycle paths/links and pedestrian paths/crossing points
- 4) Notice boards within the Village will be displayed to provide information on transport options (bus stops/ bus routes & timetables/ taxi ranks/ bicycle paths/ pedestrian paths.
- 5) Car pooling is also advised to lower private car use to and from the site. This will lower the parking demand for staff and the traffic generated by the site.

Therefore, given the public transport accessibility the staff and lower visitor parking (34) rate is an ideal outcome and achievable on traffic and parking grounds.

Stage 1

Refer to **Annexure A** for the construction phase of Stage 1. This will involve the construction of the RACF and buildings B1, B2, B3 & B4. This stage requires a total of 96 spaces for the Care Precinct, 45 spaces for the Village Precinct and 30 spaces for the RACF. Visitor parking should be made available either in basement or internal street locations with 20-28 spaces. Where internal work zones are required, it is not unreasonable that visitors park on street within the sites frontages during work zone periods.

The RACF will have an ambulance bay which complies with the SEPPSL requirement.

Stage 2

Stage 2 construction consists of the Victoria Precinct (B5 & B6) and the Heritage Precinct (B7). A total of 100 spaces are required for Stage 2 and 14-20 visitor spaces. Upon Completion of Stage 2 the new 240 ILU's will require a minimum of 34 visitor spaces either contained in basement and/or internal streets.

Traffic Generation

Refer to **Annexure C** which shows the variations from the approved traffic generation to what is expected by the current proposal. The current proposal results in a lower level of traffic being generated than what was previously assessed.

Site Access

The current proposed access strategy is consistent with the approved Masterplan. In addition, it is advised the Clissold Street access be limited to Left in/Left out only by the introduction of a FLEXIBLE plastic flaps on Clissold Street. This will prevent right turn entry and exit. It is noted that emergency vehicles (NSWFB vehicles will be able to mount any median/median flaps in Clissold Street.

The proposals main internal access arrangement has been checked with swept path tests shown in **Annexure D**. The new access to the church in the south eastern corner has been successfully assessed.

Stage 1 access will maintain the existing entrance from Victoria Avenue with One Way traffic flow to halfway along before becoming two way to Queen Street. A temporary road will be constructed to Clissold Street which will be Two Way

The final site will be One Way from Victoria Avenue (new entrance location) to halfway along the east-west road to which it will become Two Way to Queen Street and Clissold Street.

Please do not hesitate to contact the undersign if further information is required

Yours faithfully,

M^cLAREN TRAFFIC ENGINEERING



Craig M^cLaren
Director

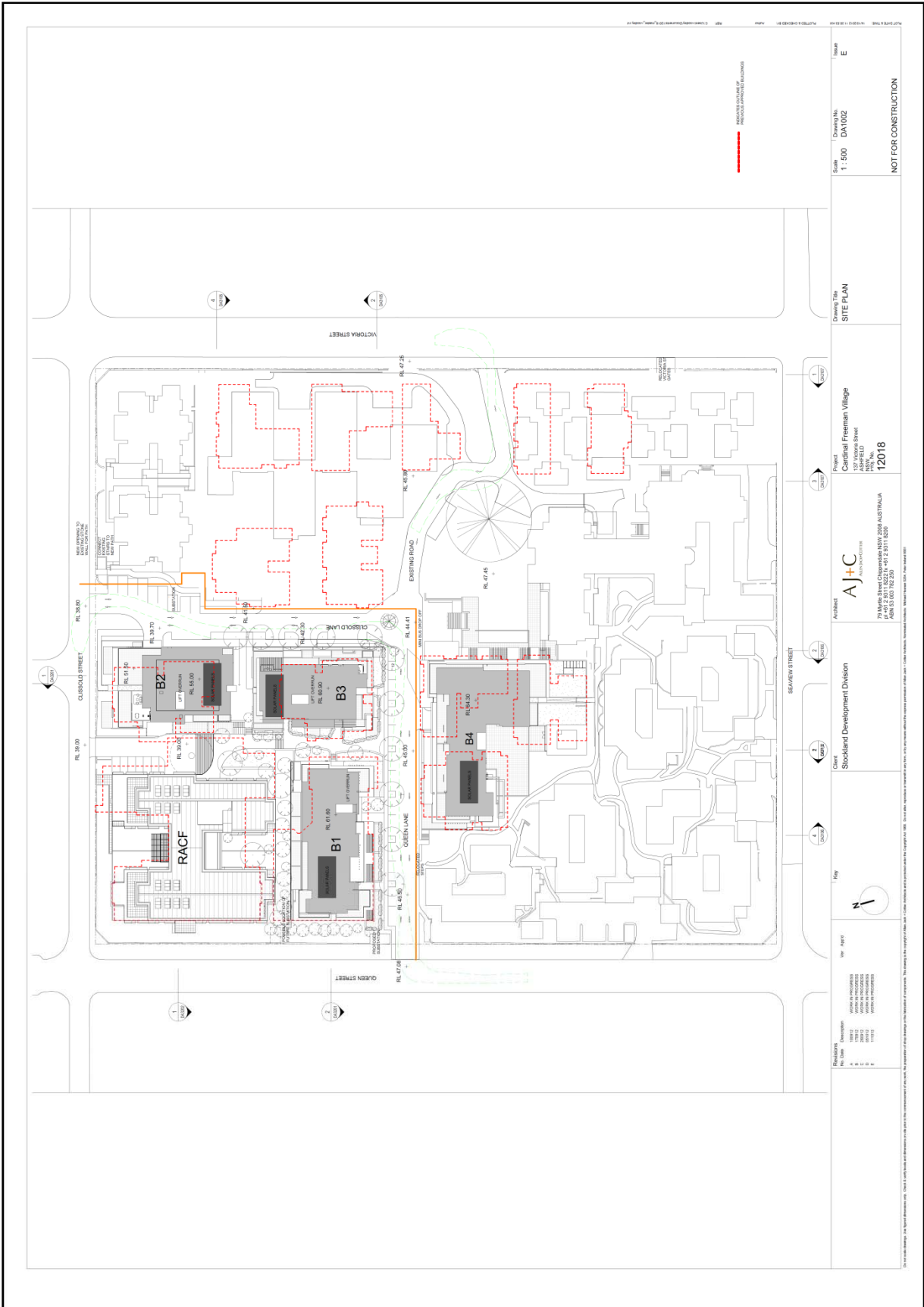
BE Civil. Graduate Diploma (Transport Eng) MAITPM MITE

RMS Accredited Level 3 Road Safety Auditor

RMS Accredited Traffic Control Planner, Certifier & Auditor (Orange Card)

Website: www.mclarentraffic.com.au

ANNEXURE A: STAGING LAYOUT
Stage 1



ANNEXURE A: STAGING LAYOUT Stage 2



ANNEXURE B: PARKING LAYOUT

Component		Units	1 bed	2 bed	3 bed	SEPP SL Parking	Staff Parking
Stage 1							@ 1 per 2 staff
Care Precinct	B1, B2, B3	101	20	72	9		0
Parking			10	72	13.5	96	0
Village Green							
	B4	40		35	5		4
Parking				35	7.5	43	2
RACF		133	98 standard	35 dementia			36
Parking @ 1/10 standard & 1/15 dementia			9.8	2.3		12	18
Total Stage 1 Required						171	
Stage 2							
Victoria & Heritage	B5, B6, B7	99	7	90	2		6
Parking @ 0.5 per bed			3.5	90	3	97	3
Total Stage 2 Required						100	
Total Required						271	
Total Proposed						306	
Retained						Retained	
South West Precinct		79				39	
Buildings A+B		36				8	
Total Site Required						318	
Total Site Proposed						353	

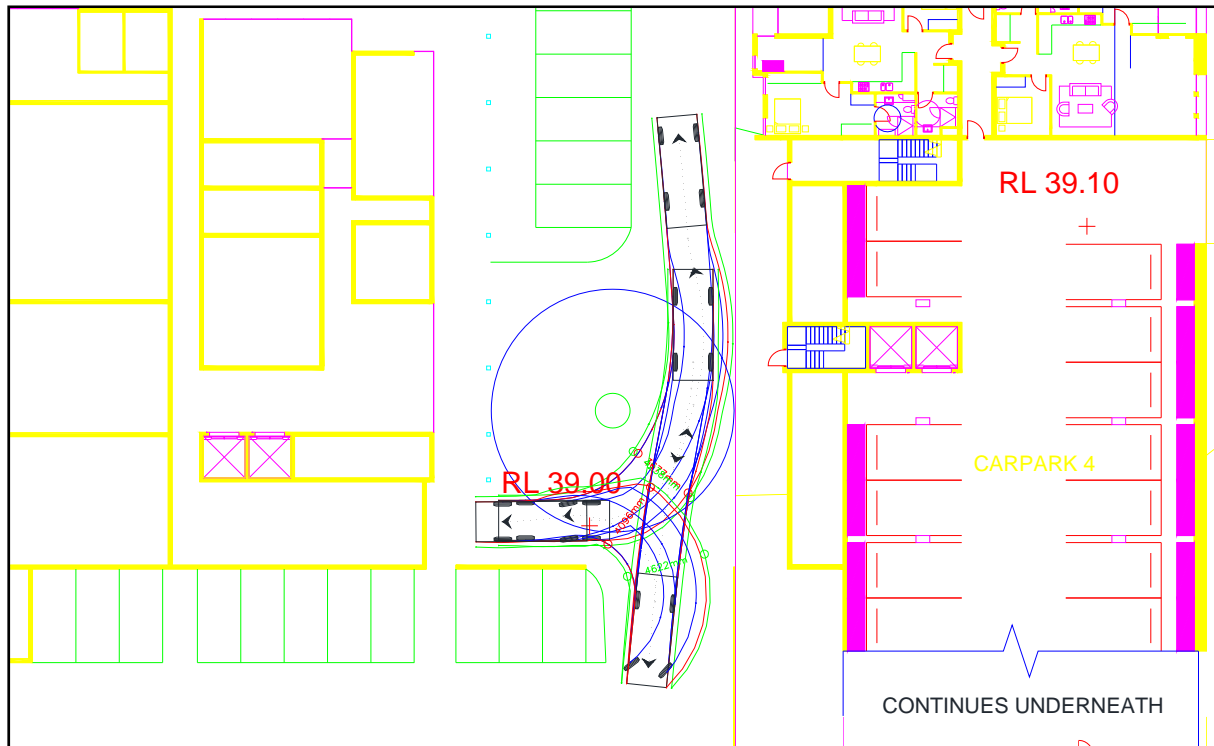
ANNEXURE C: TRAFFIC GENERATION

Component	Existing	Previous Approved	Current Proposal	Difference	Traffic Generation
ILU	180	225	240	+15	+3vph ⁽¹⁾
SA	49	49	0	-49	-10vph ⁽¹⁾
RACF	119	132	133	+1	Nil
Staff	50	56	20 ⁽³⁾	Nil	Nil ⁽²⁾
Total	-	-	-	-	-7vph

Notes:

- (1) RMS Guide to Traffic Generating Developments October 2002 0.2 vehicle trips per dwelling.
- (2) In relation to traffic generation the Masterplan assessed a greater traffic and represents the worse case scenario.
- (3) The RACF beds has a peak staff level of 20 persons at any one time. This is a further refinement of the 56 staff identified in the approved Masterplan assessment report as this number was a total employment figure over the three staff shifts.

ANNEXURE D: SWEEP PATH REVIEW RACF (Services)



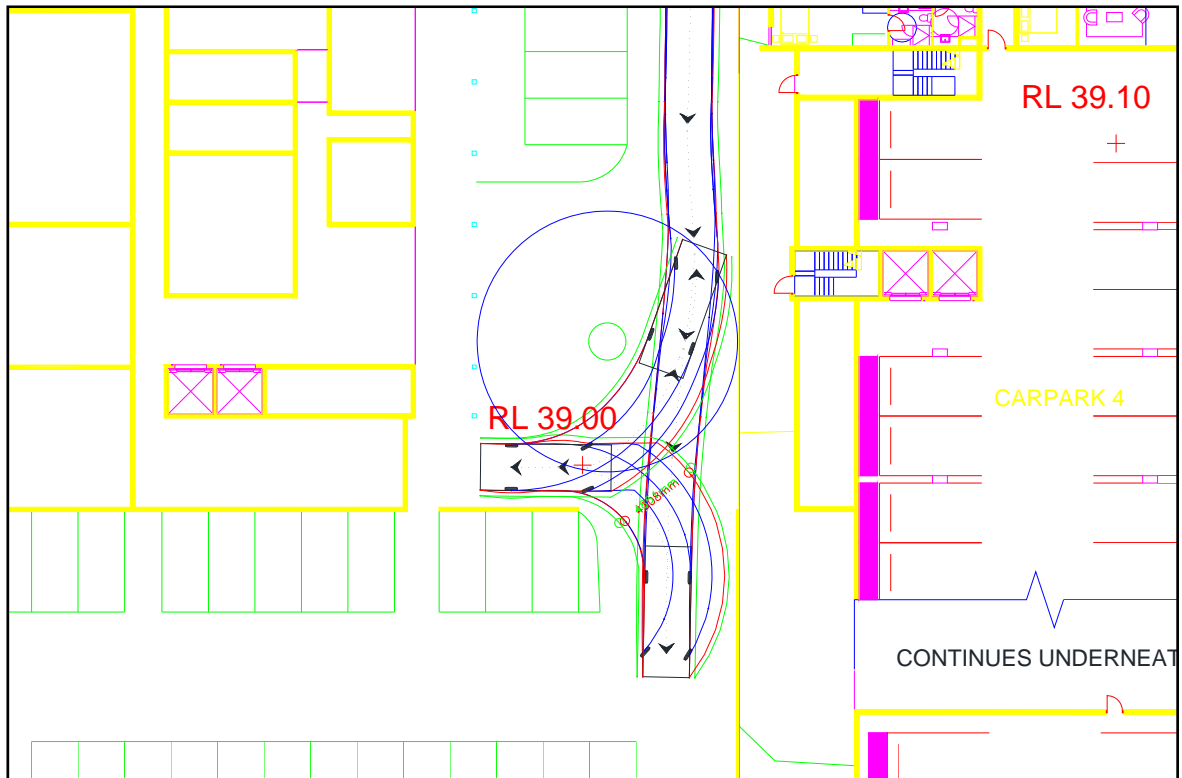
**6.4m Small Rigid Vehicle (SRV) accessing loading area of RACF
5km/h**

3 manoeuvres

Successful- headroom in this area is advised as 4m which exceeds AS2890.2:2002.

**Blue- Vehicle tyre path
Red- Vehicle body
Green- Vehicle 300mm clearances**

ANNEXURE D: SWEEP PATH REVIEW RACF (Ambulance)



7m Bariatric Ambulance

5km/h

3 manoeuvres

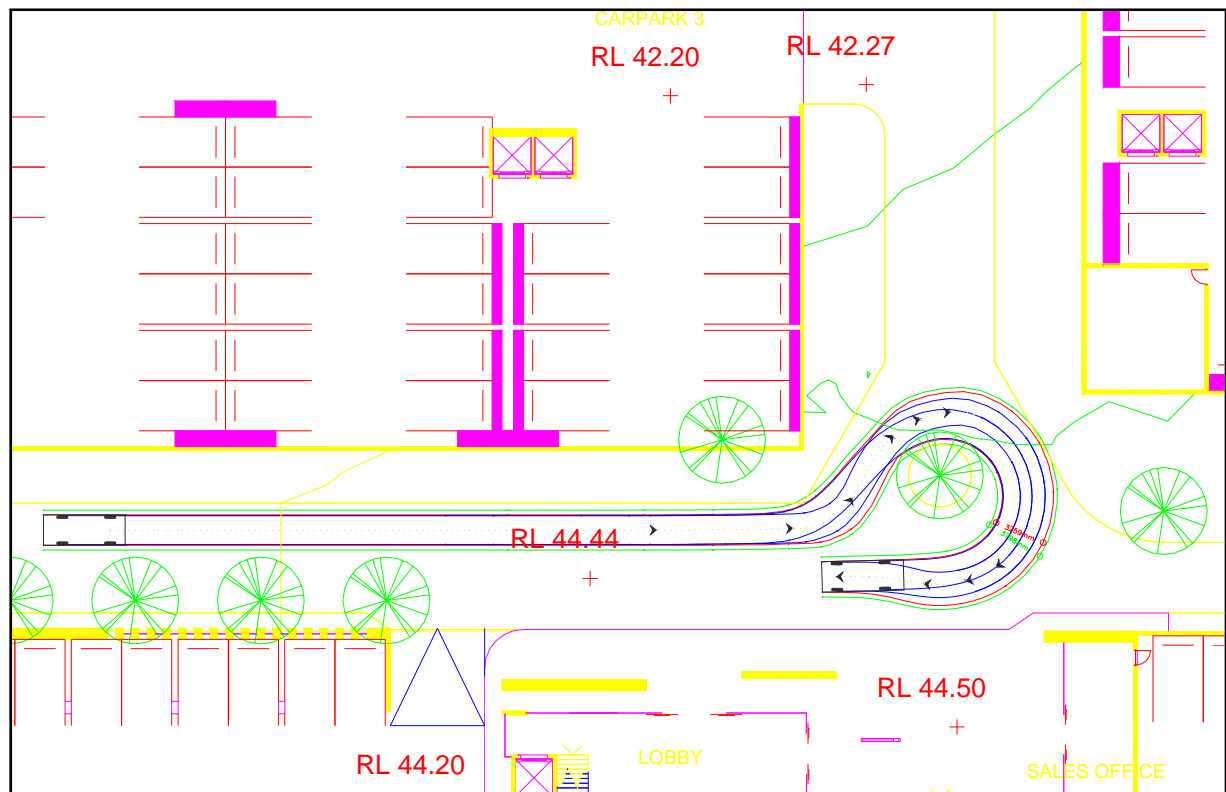
Successful

Blue- Vehicle tyre path

Red- Vehicle body

Green- Vehicle 300mm clearances

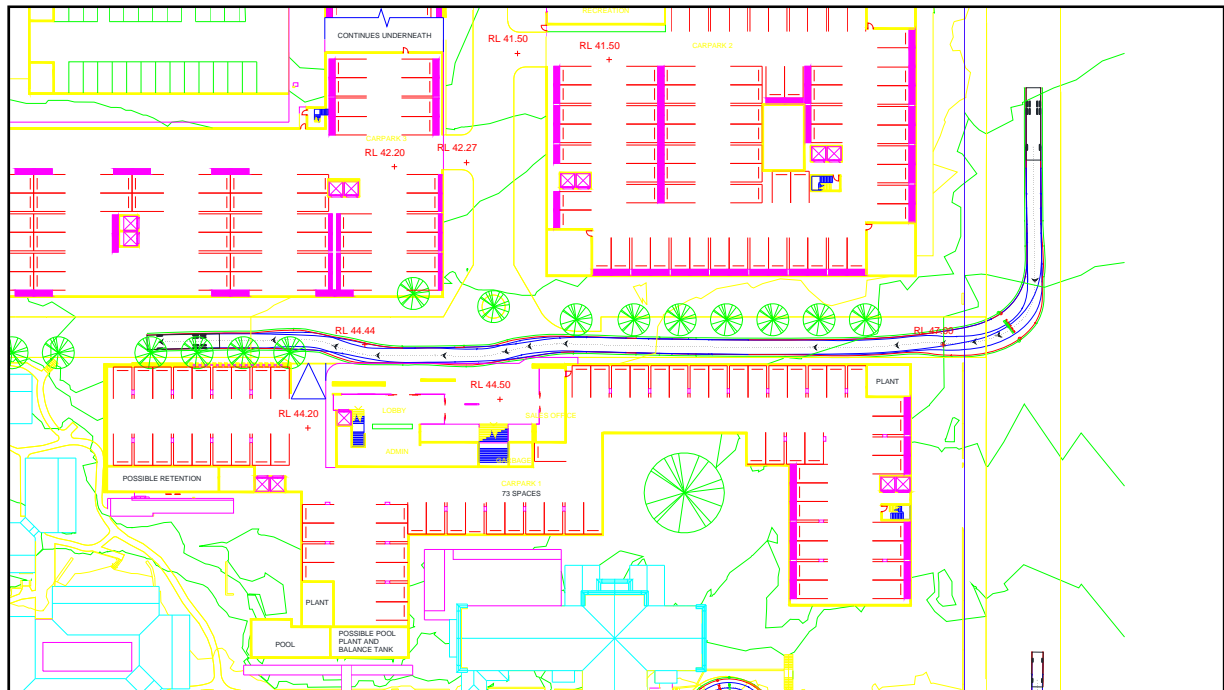
ANNEXURE D: SWEPT PATH REVIEW ROUNABOUT



B99 Vehicle
5km/h
Successful

Blue- Vehicle tyre path
Red- Vehicle body
Green- Vehicle 300mm clearances

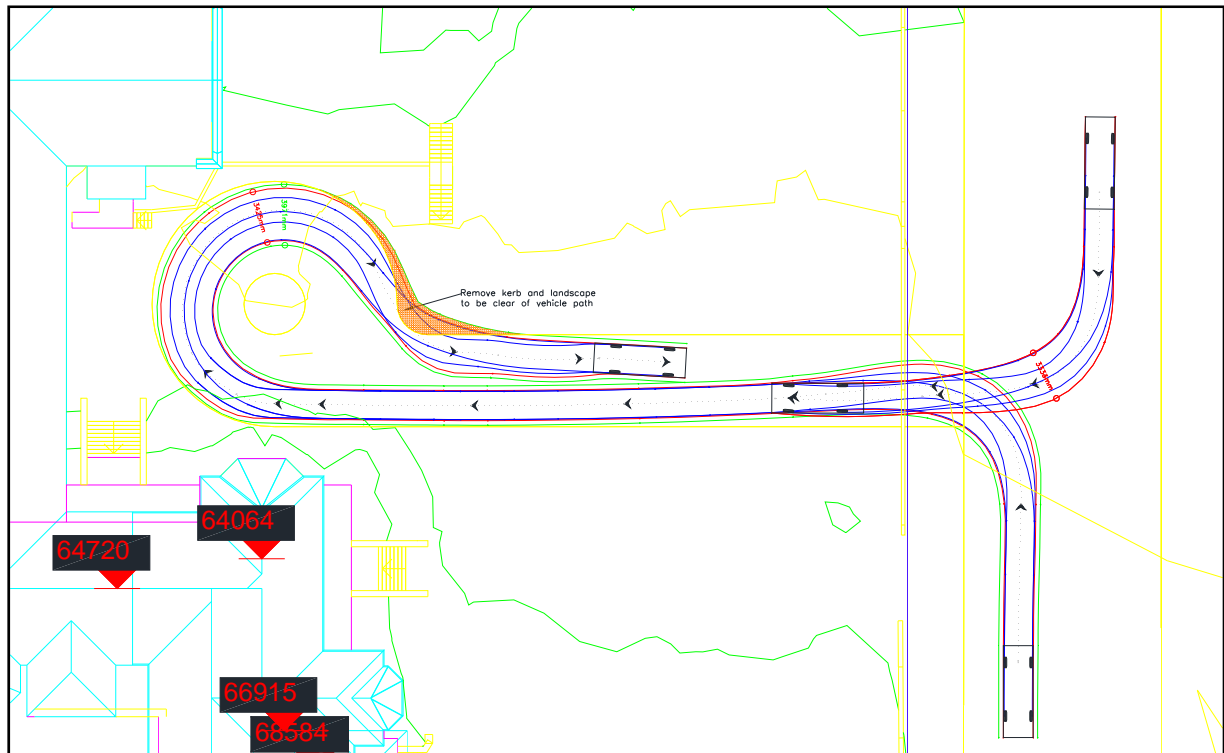
ANNEXURE D: SWEEP PATH REVIEW VICTORIA LANE



**12.5m Bus
10km/h entry
5km/h circulation
Successful**

**Blue- Vehicle tyre path
Red- Vehicle body
Green- Vehicle 300mm clearances**

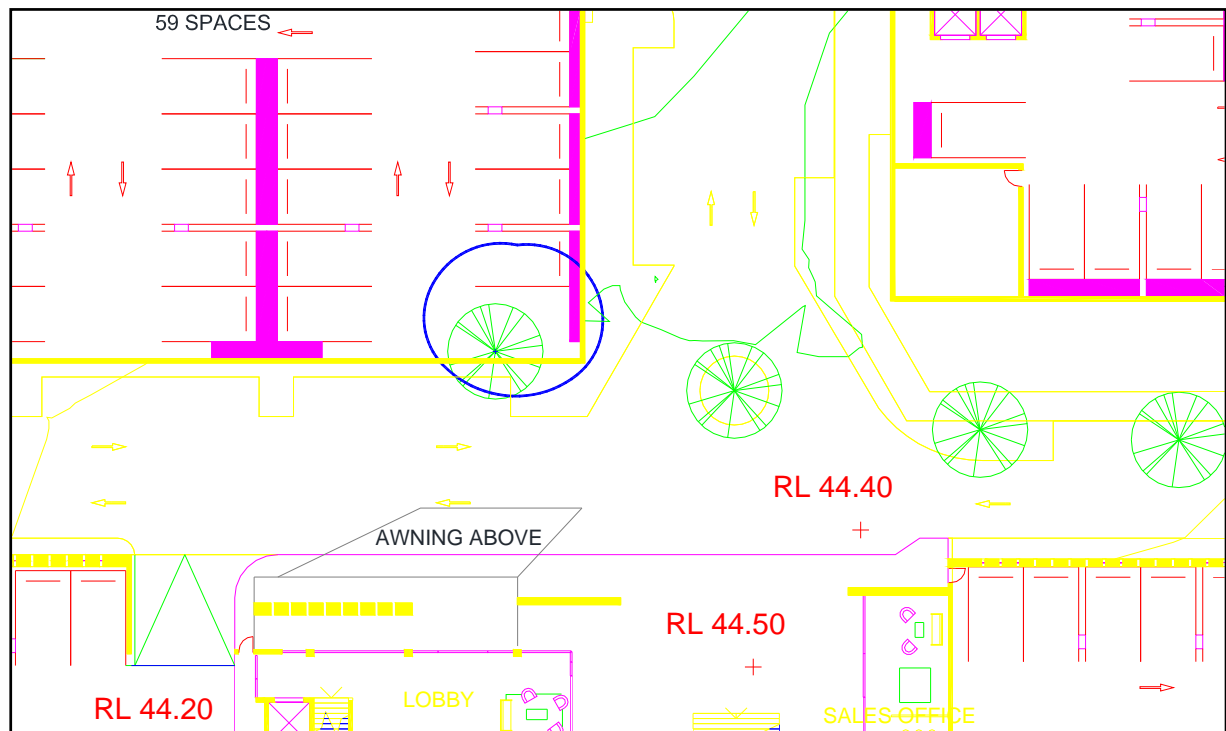
ANNEXURE D: SWEEP PATH REVIEW CHURCH (Hearse)



**6m Hearse
10km/h entry
5km/h circulation
Successful- requires removal of kerb and landscape**

**Blue- Vehicle tyre path
Red- Vehicle body
Green- Vehicle 300mm clearances**

ANNEXURE E: PARKING RECOMMENDATION



The highlighted Blue area can contain an additional residential space bringing the supply to 96 residential spaces.