



TRANSPORT AND TRAFFIC PLANNING ASSOCIATES

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24 March 2020
Ref: 041/2020_Revision B

Ms Anna Soryal
Assistant Project Manager
Momentum Projects

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c.c. Frida Blomqvist (frida@platformarchitects.com.au)
c.c. Alex Kyrikos (alex@momentumprojects.com.au)

Dear Anna

**Proposed Residential Apartment Development
5 Commonwealth Parade, Manly
S4.55 Application
Traffic and Parking Assessment**

Development Consent No. 211/04 was granted in 2005 for demolition of existing buildings and construction of a residential flat building with basement car parking on the subject site. Since that time, there have been a number of approved modifications to the proposed development including Mod 2018/0575.

The proposed S4.55 Application involves a number of minor further modifications including:

- removal of the proposed car stacker
- adjustment of the access ramp and driveway
- reconfiguration of the core
- reconfiguration of the roof, external appearance and internal layouts

The Application also proposes to modify Consent Condition No. 5 which requires the construction of a median island extension in Commonwealth Parade to restrict access movements to left turn IN/OUT. It is now proposed that the TfNSW required access restrictions be achieved by construction of separate angled driveways with NO RIGHT TURN signage in a manner which has been adopted by TfNSW for circumstances where

the provision of a central median island would be problematic (as is the case at the subject site).

The proposed modified development (see S4.55 plans in Attachment A) comprises:

2 x Three Bed apartments

1 x Four Bed apartment

Total: 3 apartments

8 basement car parking spaces

Parking:

The parking provision of 8 spaces includes 1 visitor space and is numerically compliant with Council's DCP criteria and the previous consents.

Traffic:

The potential traffic generation will be slightly less than the original approved development scheme which had 4 apartments with 9 parking spaces.

Design:

The design of the basement car park complies with the requirements of AS2890.1 and the turning path diagrams (provided in Attachment B) confirm that there will be appropriate provision for turning and manoeuvring. The design of the access driveway and ramp complies with the grade requirements of AS2890.1 given that it is classed as a "domestic driveway" (3 or less dwellings).

Access:

Consent Condition No. 5 requires the construction of a central median island extension along Commonwealth Parade to prevent right turn movements into and out of the site. BG&E (Civil Engineers) undertook an assessment of the proposed median island and assessed that it would have an adverse impact on the movement of large vehicles (e.g. buses). The BG&E assessment (Attachment C) only adopted a quite narrow median island extension whereas the normal specified minimum width of a median island where pedestrians cross is 0.9m. The provision of a median island 0.9m wide would have an even greater adverse impact on the movement of large vehicles on this narrow section of roadway.

The former RMS developed an alternative driveway arrangement for road circumstances which precluded the provision of a central median island and an example of this is provided in Attachment D. The circumstances of the approved and proposed S4.55 development scheme cannot fully accommodate the RMS alternative treatment.

However, the proposed arrangement shown in Attachment E would achieve a satisfactory comparable outcome for this small low traffic generating development.

Conclusion:

Assessment of the proposed S4.55 development scheme has concluded that:

- there will be no adverse traffic implications
- the proposed parking provision will be appropriate and satisfactory
- the design of the vehicle access and internal circulation arrangements will be suitable and appropriate.

Yours faithfully



Ross Nettle
Director

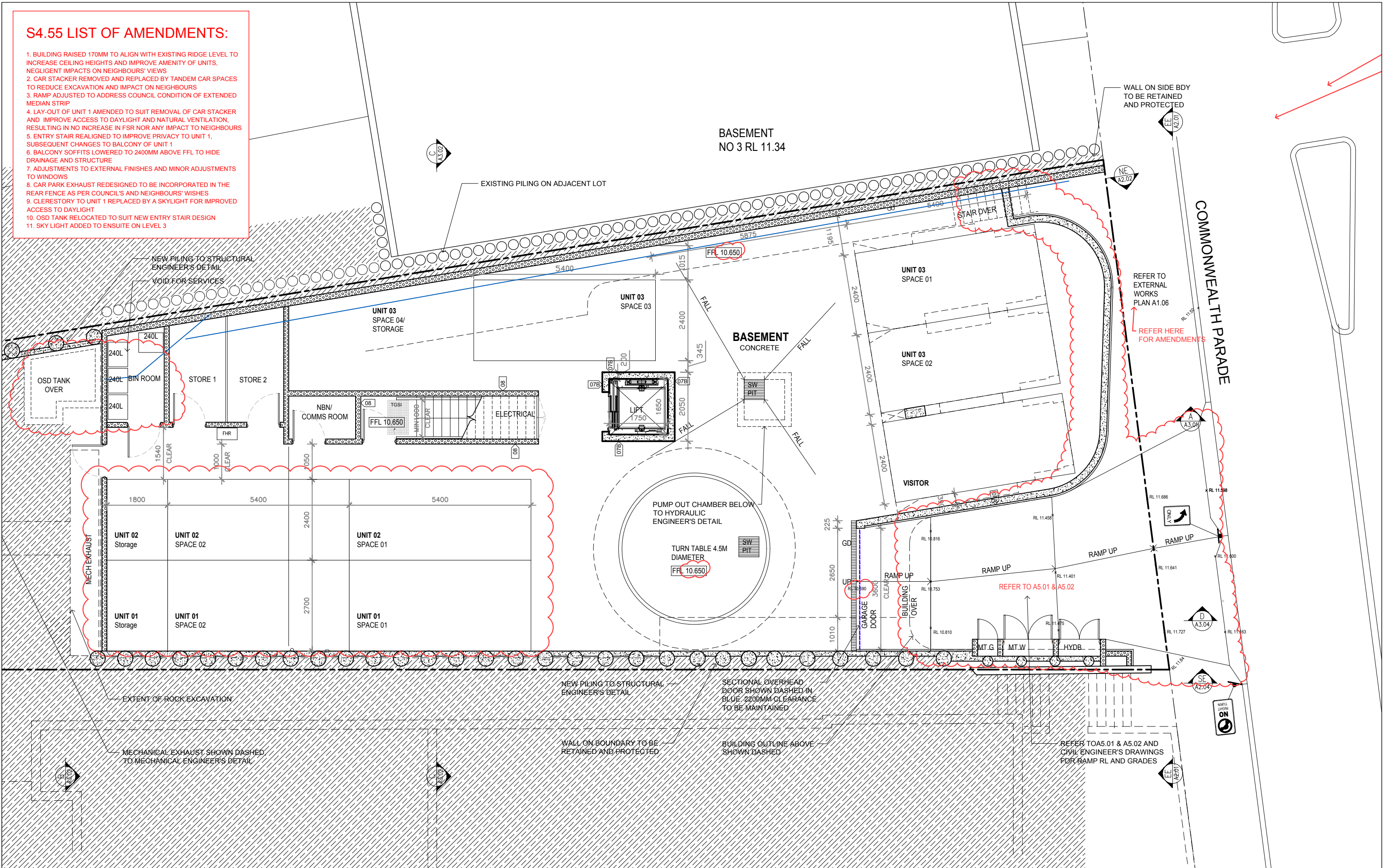
Transport and Traffic Planning Associates

Attachment A

S4.55 Plans

S4.55 LIST OF AMENDMENTS:

1. BUILDING RAISED 170MM TO ALIGN WITH EXISTING RIDGE LEVEL TO INCREASE CEILING HEIGHTS AND IMPROVE AMENITY OF UNITS, NEGLIGENT IMPACTS ON NEIGHBOURS' VIEWS
2. CAR STACKER REMOVED AND REPLACED BY TANDEM CAR SPACES TO REDUCE EXCAVATION AND IMPACT ON NEIGHBOURS
3. RAMP ADJUSTED TO ADDRESS COUNCIL CONDITION OF EXTENDED MEDIAN STRIP
4. LAY-OUT OF UNIT 1 AMENDED TO SUIT REMOVAL OF CAR STACKER AND IMPROVE ACCESS TO DAYLIGHT AND NATURAL VENTILATION, RESULTING IN NO INCREASE IN FSR NOR ANY IMPACT TO NEIGHBOURS
5. ENTRY STAIR REALIGNED TO IMPROVE PRIVACY TO UNIT 1, SUBSEQUENT CHANGES TO BALCONY OF UNIT 1
6. BALCONY SOFFITS LOWERED TO 2400MM ABOVE FFL TO HIDE DRAINAGE AND STRUCTURE
7. ADJUSTMENTS TO EXTERNAL FINISHES AND MINOR ADJUSTMENTS TO WINDOWS
8. CAR PARK EXHAUST REDESIGNED TO BE INCORPORATED IN THE REAR FENCE AS PER COUNCIL'S AND NEIGHBOURS' WISHES
9. CLERESTORY TO UNIT 1 REPLACED BY A SKYLIGHT FOR IMPROVED ACCESS TO DAYLIGHT
10. OSD TANK RELOCATED TO SUIT NEW ENTRY STAIR DESIGN
11. SKY LIGHT ADDED TO ENSUITE ON LEVEL 3



IMPORTANT NOTES:
Do not scale from drawings. Use figured dimensions only. Ensure that the drawings used carry the latest revision no. Read in conjunction with consultant engineers drawings - refer contract drawing list.

- All dimensions to be checked on site before commencement of work.
- All discrepancies to be brought to the attention of the Architect.
- Larger scale drawings and written dimensions take precedence.
- The Esplanade Planning Level is min 3.1m AHD. All levels to AHD.

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REVISION	DATE	DESCRIPTION	BY
PR	2019.05.16	PRELIMINARY	FB
PR1	2019.05.30	PRELIMINARY	FB
PR2	2019.06.12	PRELIMINARY	FB
PR3	2019.06.18	PRELIMINARY	FB
PR4	2019.07.02	PRELIMINARY	FB
PR5	2019.07.04	PRELIMINARY	FB

REVISION	DATE	DESCRIPTION	BY
PR6	2019.07.12	PRELIMINARY	FB
PR7	2019.10.31	PRELIMINARY	FB
PR8	2020.01.14	PRELIMINARY s4.55	FB
PR9	2020.02.14	PRELIMINARY s4.55	FB
PR10	2020.02.20	PRELIMINARY s4.55	FB
S4.55	2020.03.13	s4.55 APPLICATION	FB

REVISION NOTES

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ARCHITECTS

Suite 503/39 East Esplanade, Manly 2095
p. 02 9976 6666 abn. 74602856157
nominated architect Bridie Gough Reg No. 8280

PROJECT
THREE STOREY RESIDENTIAL FLAT BUILDING
WITH BASEMENT CAR PARK AT:

5 COMMONWEALTH PDE,
MANLY, NSW

CLIENT
C.G. & I.B. KOUTSOS

DRAWING TITLE
BASEMENT PLAN

SCALE
1:100
@A3

STATUS
S4.55

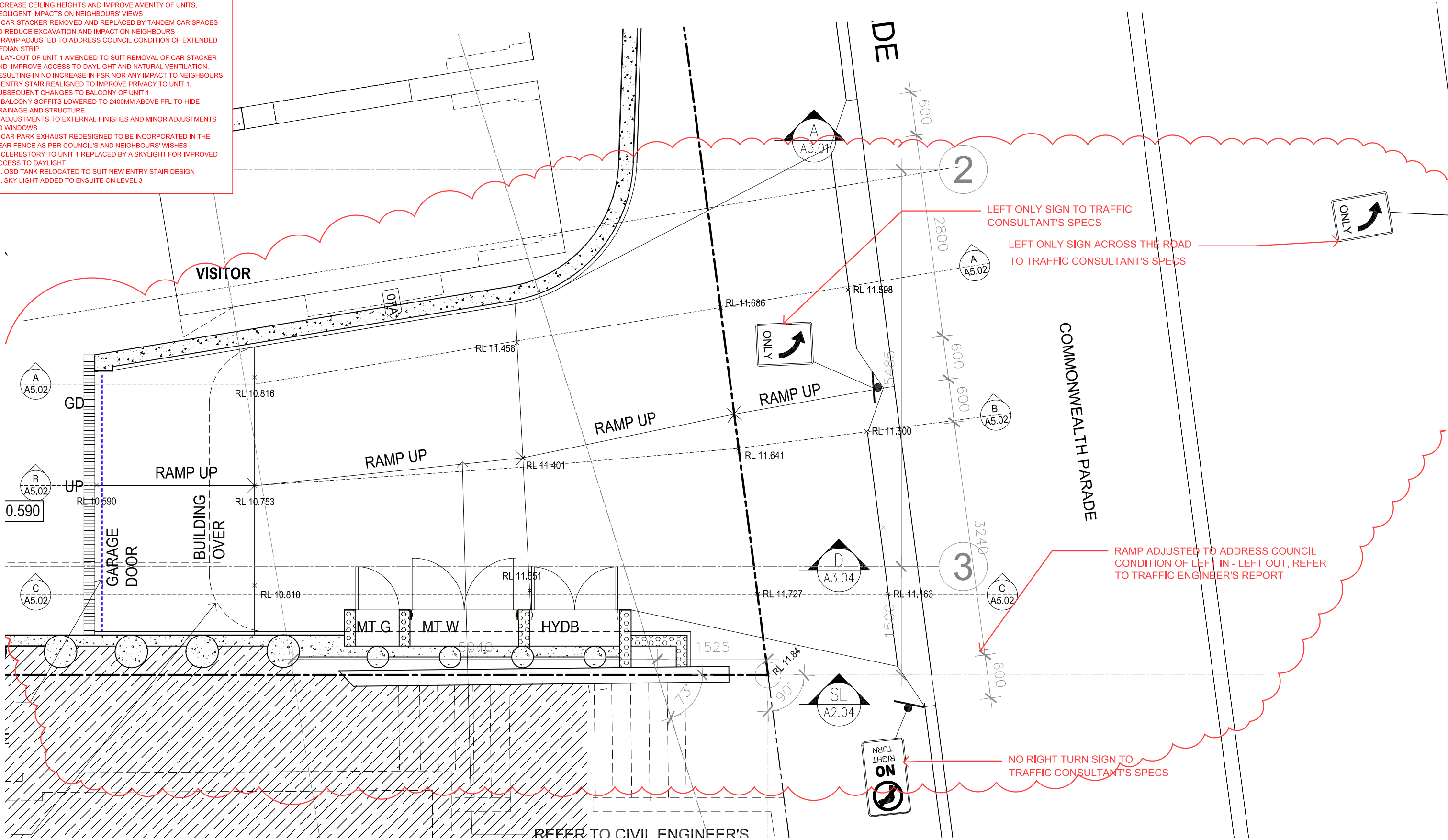
NUMBER
A1.00

PROJECT
CPM

REVISION
s4.55

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REVISION	DATE	DESCRIPTION	BY
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s4.55	2020.03.13	s4.55 APPLICATION	FB

REVISION	DATE	DESCRIPTION	BY

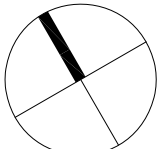
REVISION NOTES

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nominated architect Bldg. Gough Reg No. 8280

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WITH BASEMENT CAR PARK AT:
**5 COMMONWEALTH PDE,
MANLY, NSW**

CLIENT
C.G. & I.B. KOUTSOS



DRAWING TITLE
DRIVEWAY PLAN

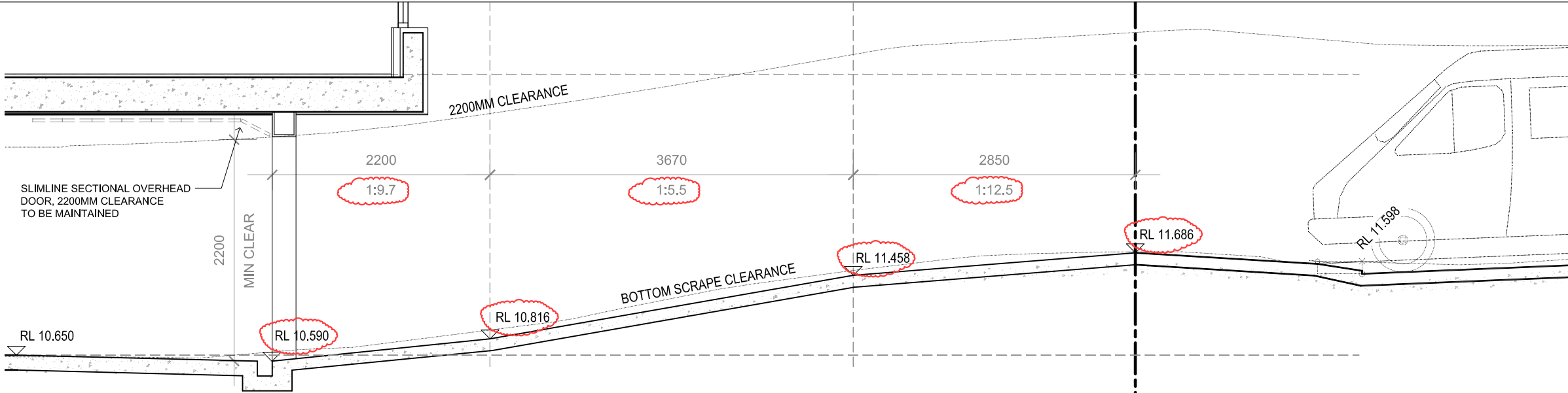
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PROJECT
CPM

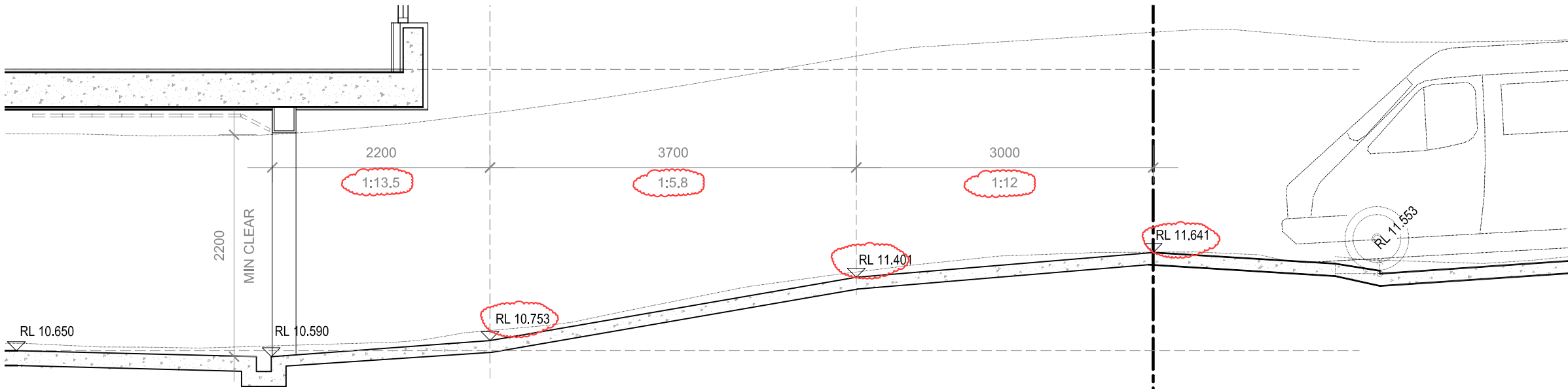
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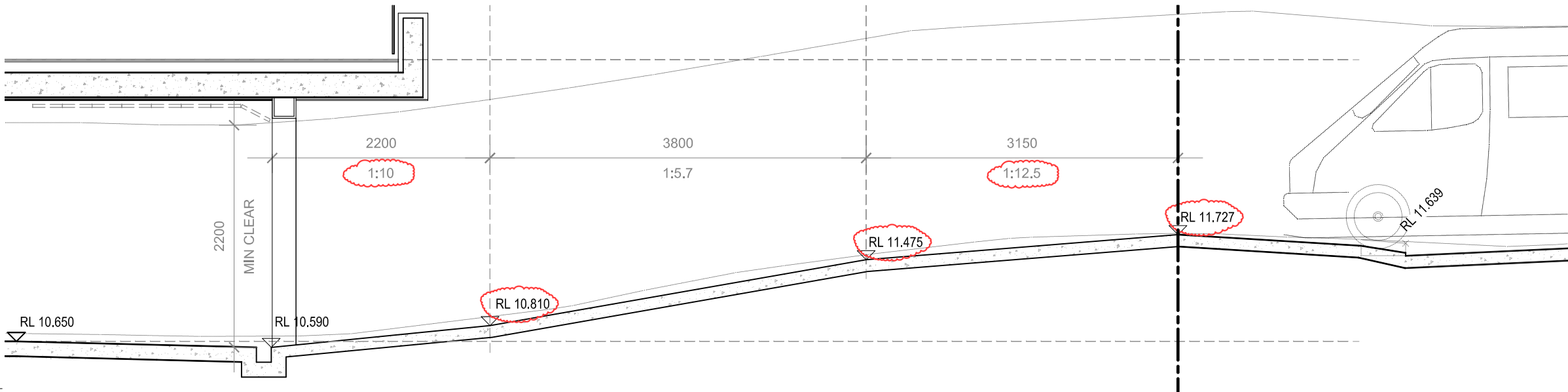
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BB SECTION BB
SCALE 1:50



CC SECTION CC
SCALE 1:50



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REVISION	DATE	DESCRIPTION	BY
PR1	2020.02.20	PRELIMINARY S4.55	FB
S4.55	2020.03.19	S4.55 APPLICATION	FB

REVISION	DATE	DESCRIPTION	BY

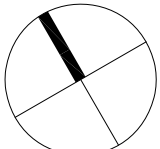
REVISION NOTES

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MANLY, NSW**

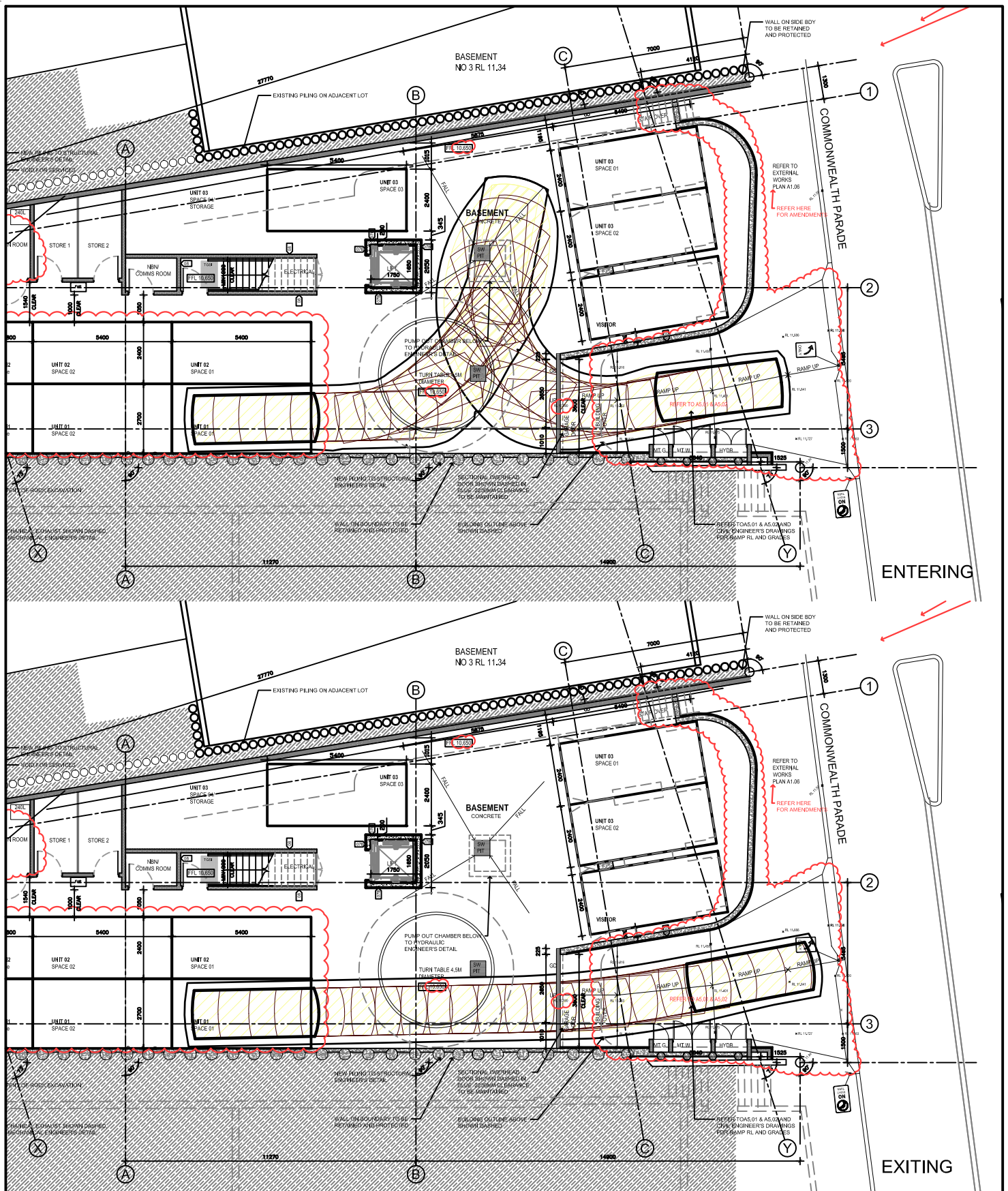
CLIENT
C.G. & I.B. KOUTSOS



DRAWING TITLE			PROJECT
DRIVEWAY SECTIONS			CPM
SCALE	STATUS	NUMBER	REVISION
1:50 @A3	\$4.55	A5.02	\$4.55

Attachment B

Turning Path Assessment



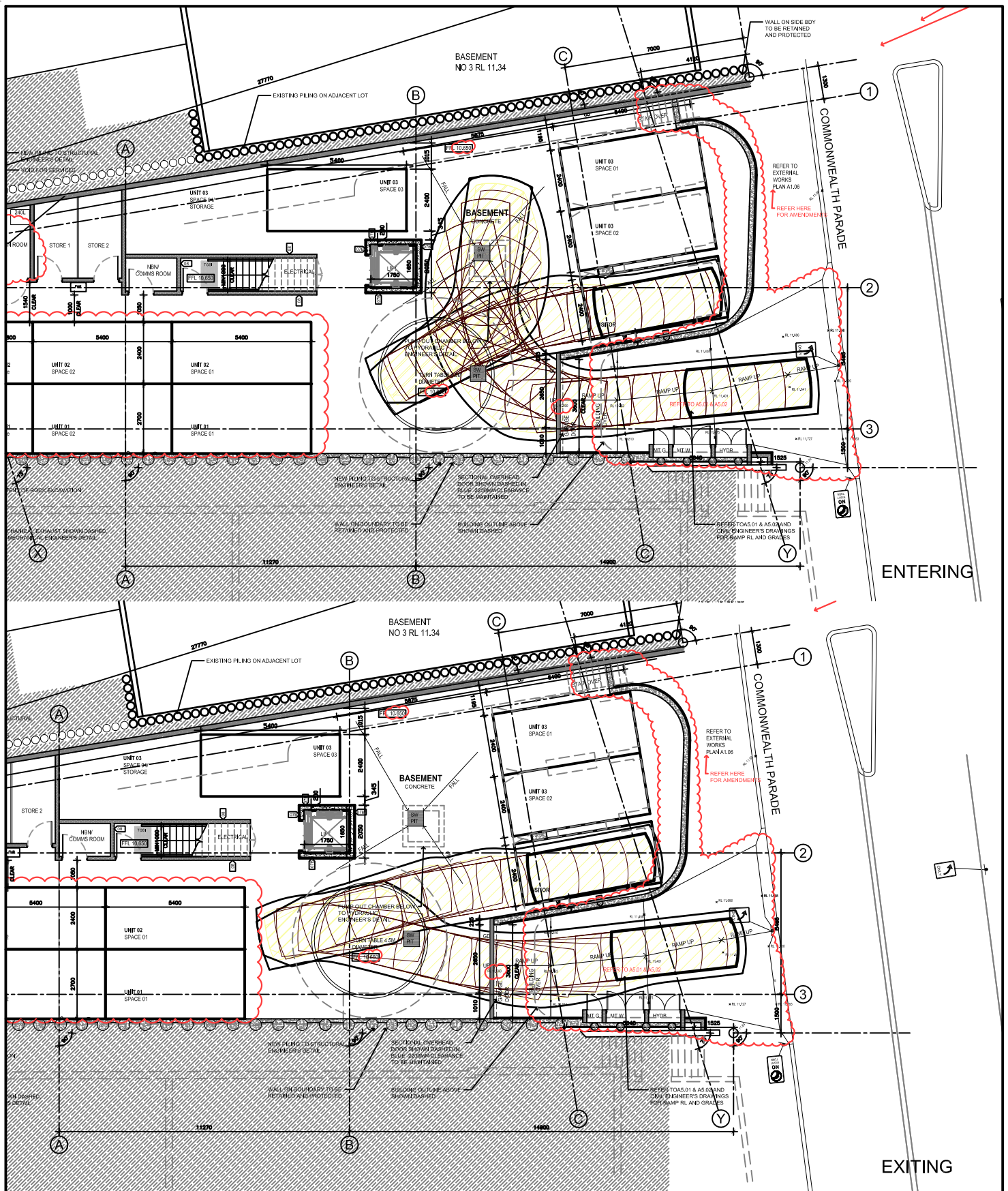
LEGEND

This drawing has been prepared using vehicle modelling computer software AutoTrack V5.00a in conjunction with AutoCAD 2013. The vehicle used is based upon vehicle data provided by Austroads and incorporates a reasonable degree of tolerance. However, it is not possible to account for all vehicle types/characteristics and/or driver ability.



**SWEPT PATH ANALYSIS
OF AN 85th PERCENTILE
VEHICLE ENTERING AND
EXITING THE SITE**

SP 2



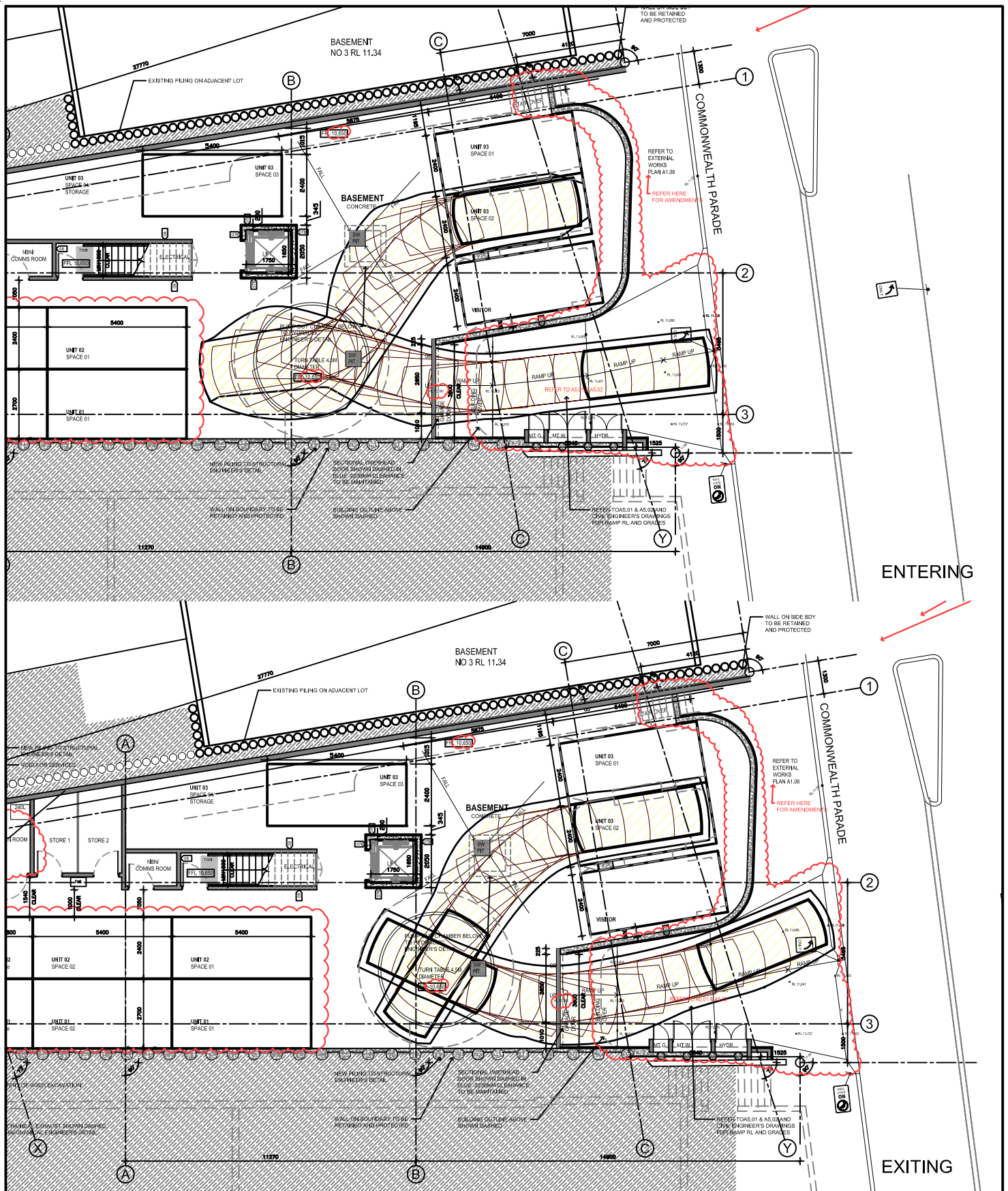
LEGEND

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**SWEPT PATH ANALYSIS
OF AN 85th PERCENTILE
VEHICLE ENTERING AND
EXITING THE SITE**

SP 3



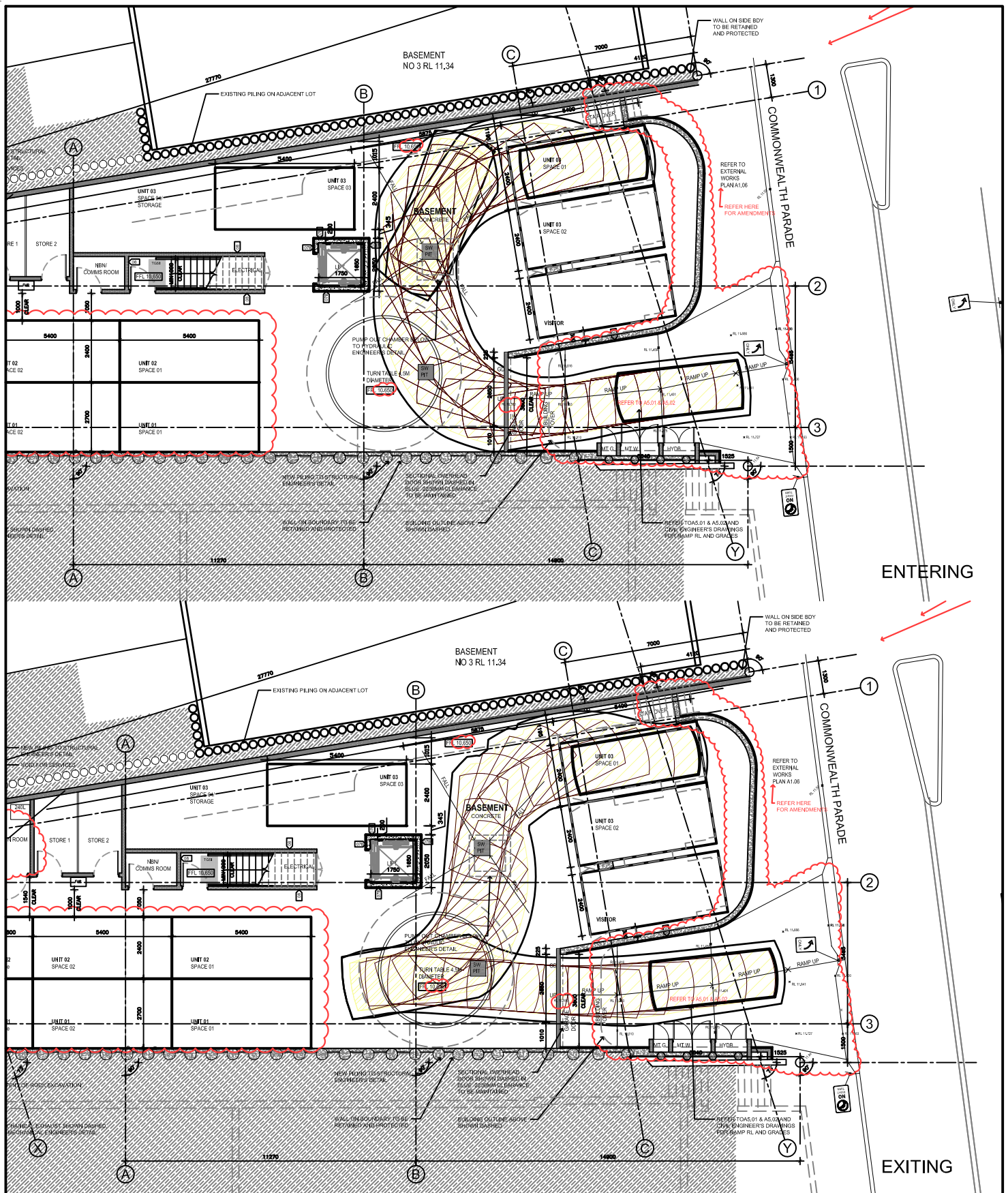
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**SWEPT PATH ANALYSIS
OF AN 85th PERCENTILE
VEHICLE ENTERING AND
EXITING THE SITE**

SP 4



LEGEND

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**SWEPT PATH ANALYSIS
OF AN 85th PERCENTILE
VEHICLE ENTERING AND
EXITING THE SITE**

SP 5

Attachment C

BG&E Assessment

Subject: 5 Commonwealth Parade, Manly - Roadworks Concept
Date: Friday, 12 July 2019 at 4:28:23 pm Australian Eastern Standard Time
From: Sid Phatak
To: Anna Soryal
CC: Andrew Wallis
Attachments: image001.gif, S19156-SKE-C-0011-A.PDF, S19156-SKE-C-0010-A.PDF

Hi Anna,

We are developing the roadworks design along the site frontage to Commonwealth parade, to provide the 25m long median extension as per the DA conditions. Since the extent on the original median island at the time of determination of the DA is unknown, we have assumed that the required 25.0m new median length should be measured from the end of the existing median island, located immediately south of the Commonwealth Parade/West Esplanade intersection. As such, the existing pedestrian refuge islands will be included as part of the 25.0m new median. This arrangement spans across the entire site frontage and enables the site access to be restricted to left in/left out movement only.

It should also be noted that the Commonwealth Parade is an existing bus route and has existing on-street parking along the eastern kerb of the road. We have conducted some vehicle swept path analysis to check the feasibility of the proposed median. The analysis suggests that the turning movements along the existing arrangement on Commonwealth are highly constrained. We have considered two scenarios with the swept path analysis:

1. Scenario 1, shown on sketch SKE-C-0010 attached. This scenario shows the vehicle swept path following along the existing and proposed median islands, with the entire turning movement located entirely with the eastern half of the existing road. This scenario will create a conflict with the existing on-street parking lane located along the eastern kerb. It is worth noting that in the existing scenario, the vehicle swept path already conflicts with the existing parking lane. The provision of the new median further increases the encroachment within the parking lane. This scenario may require the parking lane to be shortened by approx. 10m (approximately 2 parking spaces).
2. Scenario 2, shown on sketch SKE-C-0011 attached. This scenario shows the vehicle swept path following along the existing parking lane. This scenario, does not reduce the existing carparking spaces. However, as shown in the sketch, this vehicle swept path encroaches across the existing road centreline and does not allow adequate road width for the provision of the raised median across the site frontage, as required by the DA consent.

In summary, the analysis suggests that the provision of the median will impact upon Council's existing carparking spaces. Conversely, if the carparking spaces are to be retained, the DA consent item requiring the 25.0m median extension may need to be lifted. Alternatively, given the constrained nature of the site, the Council may need to provide dispensation for the vehicle swept path analysis to be conducted at reduced clearances and reduced vehicle speeds. The current analysis has been conducted with a vehicle clearance envelope of 500mm around the vehicle, at a speed of 20km/h.

Could you please suggest how you would like us to proceed?

If you have any questions, please don't hesitate to contact me on the number below.

Regards

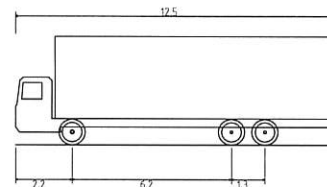
Sid Phatak—
Civil Engineer



Level 2, 8 Windmill Street, Sydney NSW 2000
P/+61 2 9770 3300 E/sid.phatak@bgeeng.com W/bgeeng.com

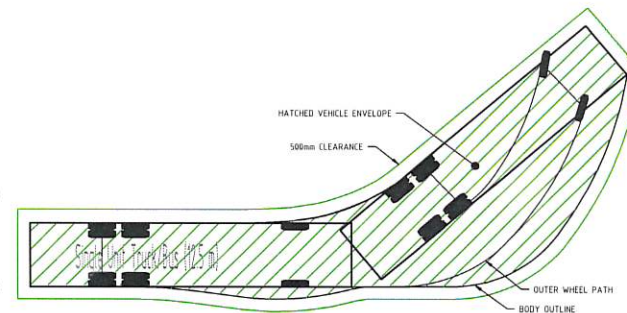
Opportunities Through Excellence—

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Single Unit Truck/Bus (12.5 m)
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock-to-lock time
Curb to Curb Turning Radius

12.500m
2.500m
4.300m
0.490m
2.500m
6.00s
12.500m



SINGLE UNIT TRUCK/BUS PROFILE AND PATH



NOTE:
1. VEHICLE SWEEP PATH HAS BEEN PERFORMED AT 20 KM/H.



REV	DATE	DESCRIPTION	BY	CHK
1	10/10/19	ISSUED FOR INFORMATION	JAW	NSD
2	10/10/19	REVISIONS	JAW	NSD
3	10/10/19	REVISIONS	JAW	NSD

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Sydney Office -
L2, 8 Windmill St
Sydney NSW 2000
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bgeeng.com



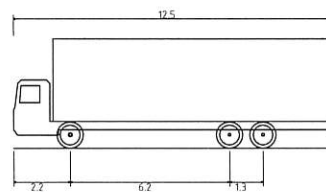
5 Commonwealth Pde, Manly

SKETCH ONLY

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AHD	PGA	1:100	A1 A1-02

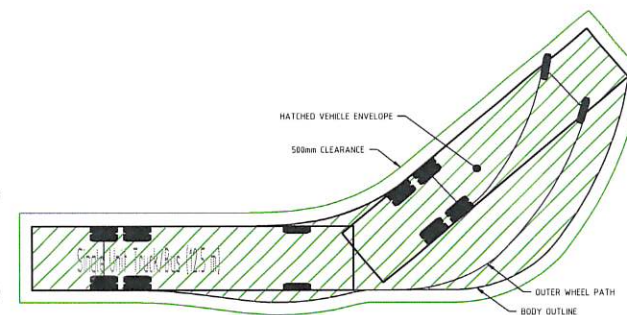
COMMONWEALTH PARADE
ROADWORKS CONCEPT PLAN
SHEET 1 OF 2

PROJECT NO: S19156 DRAWING NO: SKE-C-0010 REV: A



Single Unit Truck/Bus (12.5 m)
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock-to-lock time
Curb to Curb Turning Radius

12.500m
2.500m
4.300m
0.490m
2.500m
6.00s
12.500m



SINGLE UNIT TRUCK/BUS PROFILE AND PATH



NOTE:

1. VEHICLE SWEEP PATH HAS BEEN PERFORMED AT 20 KM/H.



A	REVIEWER	COLUMBIA FORD CORPORATION		AND					
SERV.	DATE	DESCRIPTION		DRAWN	REV.	DATE	DESCRIPTION		EXISTS
REVISIONS						REVISIONS			

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L2, 8 Windmill St
Sydney NSW 2000
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5 Commonwealth Pde, Manly

SKETCH ONLY

DESIGNED	CHECKED	APPROVED	
SP	SP	=	=
DATE	UNIT	SCALE	
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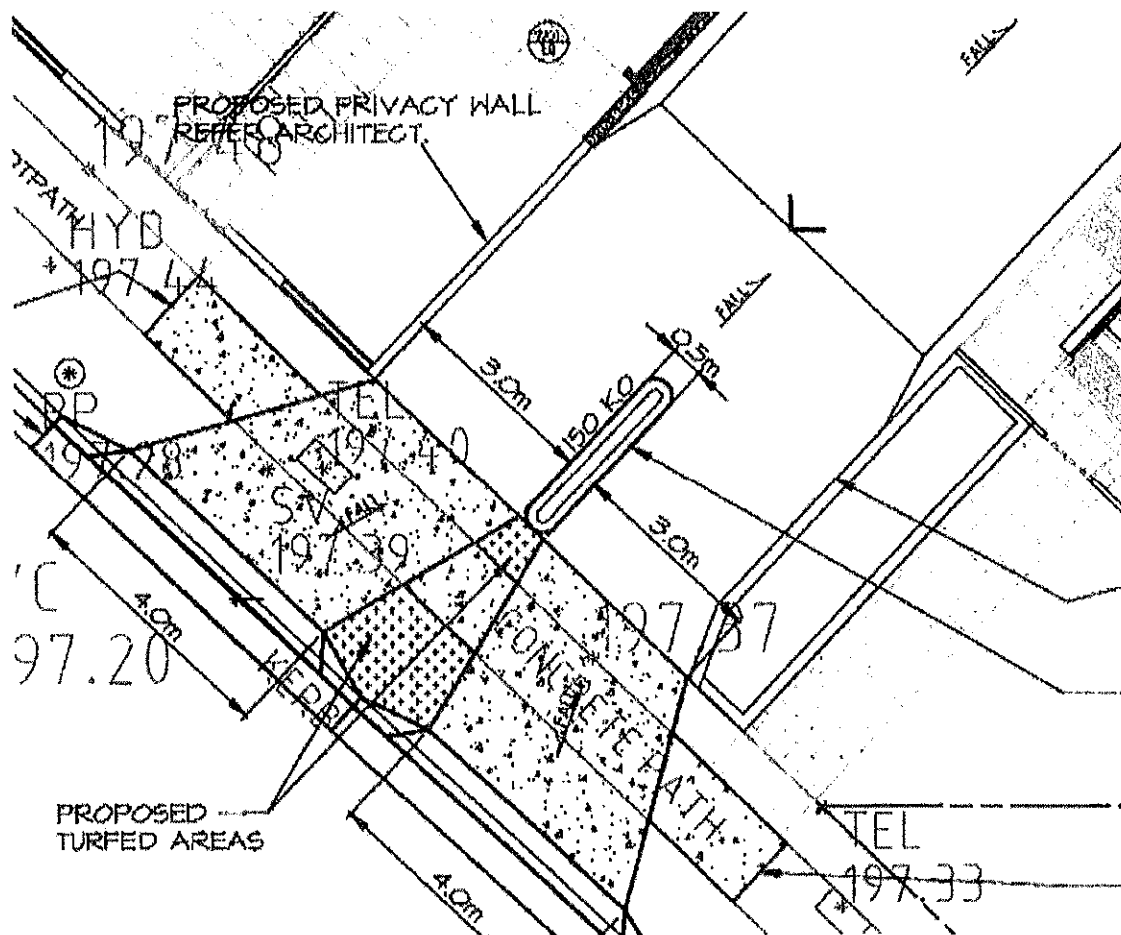
COMMONWEALTH PARADE
ROADWORKS CONCEPT PLAN
SHEET 2 OF 2

PROJECT No.	CRKNG No.	REV
S19156	SKE-C-0011	A

Attachment D

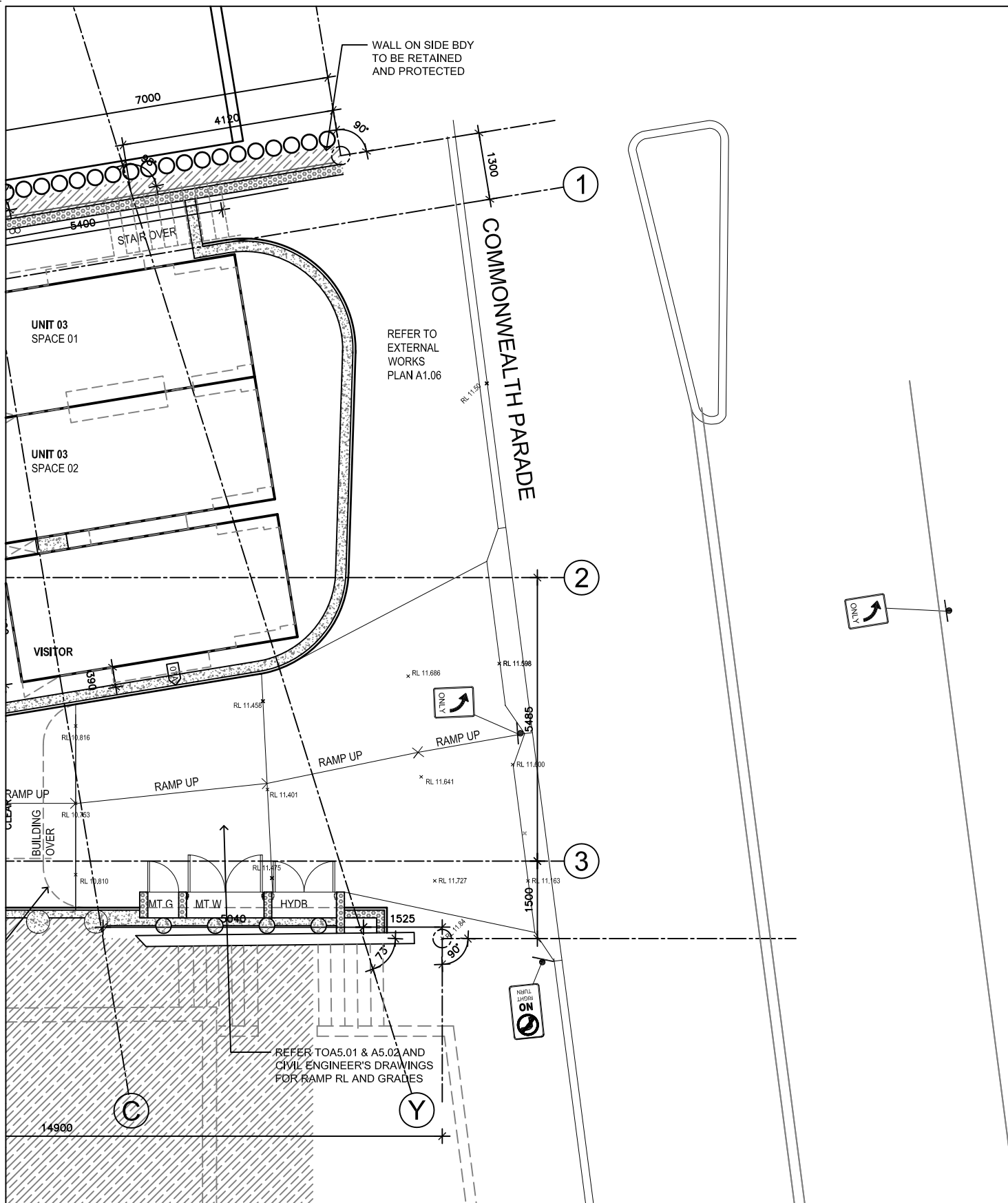
RMS Alternative Driveway Arrangement Example

Attachment 1

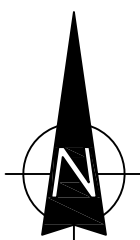


Attachment E

Proposed Driveway Arrangement



LEGEND



PROPOSED ACCESS ARRANGEMENT