**ANNEXURE D**

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants
ACN 071 762 537 ABN 88 071 762 537

6 October 2022
Ref 21727

Penrith City Council
PO Box 60
PENRITH NSW 2751

Attn: Ms Lucy Goldstein
lucy.goldstein@penrith.city

Dear Lucy,

**MOD22/0083**
**12 CARSON LANE, ST MARYS**
**PROPOSED VEHICULAR ACCESS & WASTE COLLECTION ARRANGEMENTS**

I refer to your email dated 23rd September 2022, addressed to *Michael Ferraro* of Aland Developments, requesting additional information in respect of the abovementioned development proposal (MOD22/0083). The following advice is provided in respect of the matters raised under **Item d** of the 'General' section and **Item a** of the 'Waste Collection' section of your email.

## General

*"d. Clarification is needed regarding the flow of vehicles in the basement. It is understood that residents enter the basement at ground level and travel down the main ramp to Basement Level 2. To get to Basement Level 1, residents would then need to use the ramp located north of the loading bay to ascend to Basement Level 1. If this is the case, directional signage is likely to be required to ensure navigation of the basement is clear for residents."*

Confirming Council's interpretation of the basement access arrangements are accurate as described above. It is also agreed that directional signage is to be provided throughout the basement parking levels to ensure navigation into/out of the basement is clear for residents/visitors.

The appropriate directional signage/s will be required to be installed *prior* to the issue of an Occupation Certificate and can be included as part of the DA consent conditions, consistent with the **DA consent condition No. 76** for **DA14/0513** for the subject site, reproduced below.

> 76 **Prior to the issue of an Occupation Certificate**, directional signage and linemarking shall be installed indicating the garbage truck waste collection area, drop-off area, directional movements and the location of visitor parking to the satisfaction of the Principal Certifying Authority.

## Waste Collection

*"a. The swept path for the waste truck indicates that the waste truck will take up both lanes of traffic when entering/exiting the loading bay, including at the base of the ramp around a blind corner. This arrangement poses a significant safety issue. Consideration should be given to use of traffic signalling to prevent traffic from driving into an oncoming waste truck during truck entry into the basement and prevent traffic from entering the basement while the truck is exiting the loading bay. If possible, the loading bay roller door should automatically open once the traffic signals are triggered, to allow for quicker collection process and reduce waiting time for vehicles. It is recommended that advice be sought from your traffic consultant regarding provision of traffic signals for the basement, and where appropriate, detail the most suitable location of the placement of signals to manage conflicts between resident vehicles and waste truck."*

It is agreed that the waste collection truck will likely take up the width of *both* lanes of traffic when entering/exiting the loading bay. However, it is also noted that waste collection for the proposed residential development will likely be conducted *outside* the morning peak period when residents would be departing for work.

In this regard, it is noted that the vehicular access arrangements have been designed to accommodate the swept turning path requirements of the B99 & B85 design vehicle, as specified in *AS2890.1*, allowing them to *simultaneously* pass each other along the basement access ramp, as illustrated on the attached *swept turning path* diagram.

Given the two-way driveway can accommodate the *simultaneous* passing of B99/B85 vehicles, the more efficient arrangement would be to have an in-ground induction loop sensor at the entry point (detecting trucks *only*), and a warning light sign indicating 'Truck Entering', installed at the bottom of the basement access ramp.

The induction loop at the driveway entrance of the site will also trigger the secured gate/roller shutter door in the dedicated loading dock area, as suggested by Council.

Conversely, a warning light indicating 'Vehicle Exiting' can be installed at the top of the basement access ramp (on the exit side wall), which will also be triggered by an in-ground induction loop sensor located *prior* to the security gates, allowing all vehicles detected to automatically trigger the security gates to open for exiting vehicles.

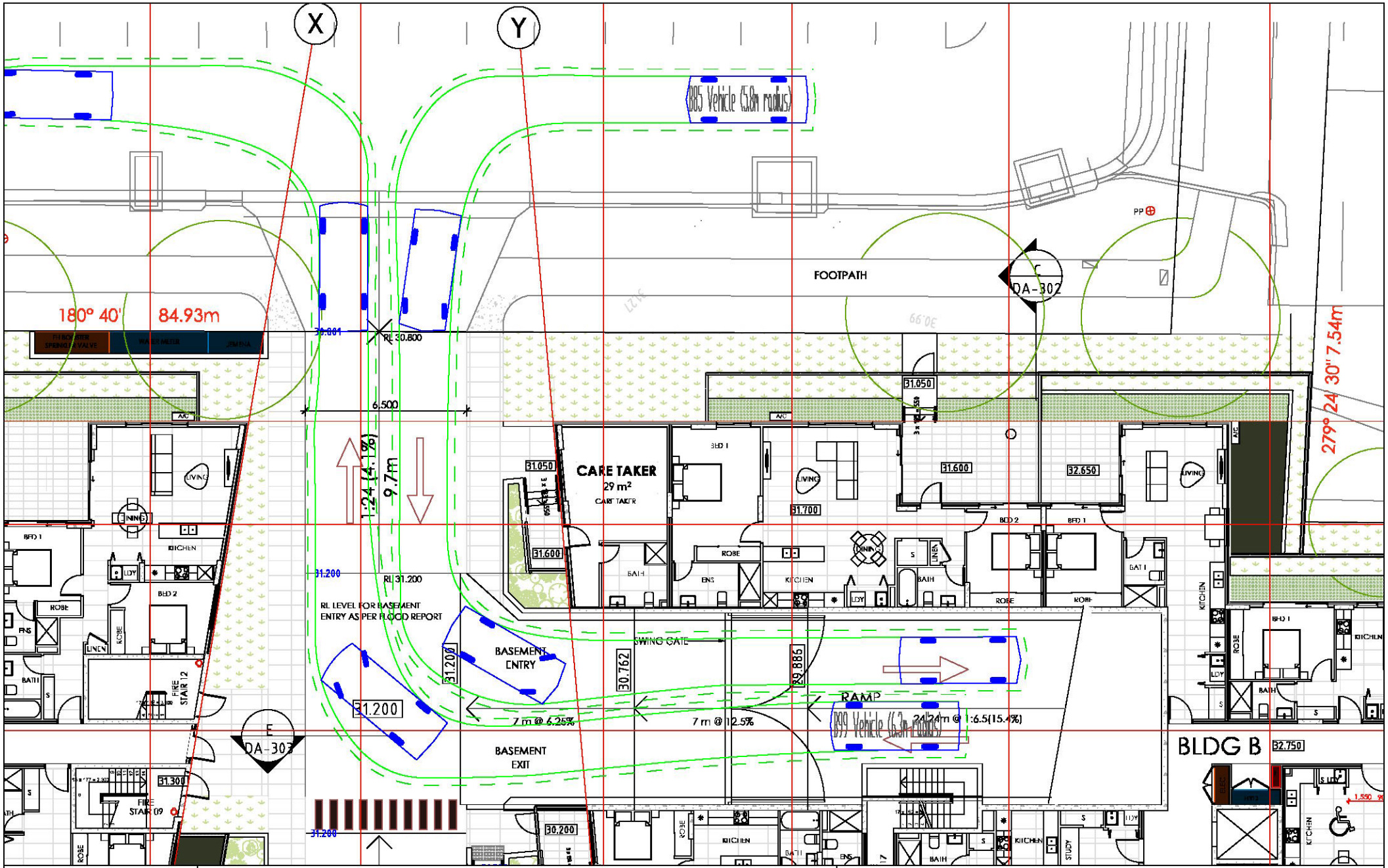
This arrangement is commonplace and will allow a more efficient vehicular access arrangement, as opposed to conventional traffic signals which will invariably create unnecessary waiting times/delay for vehicles wishing to exit the site, noting the ramp has been designed to accommodate simultaneous passing of B99/B85 passenger vehicles.

Furthermore, consideration could also be given to installing convex mirror/s at the top and bottom of the basement access ramp, which will provide increased visibility for drivers entering and exiting the site.

I trust the above information is sufficient. Please do not hesitate to contact me on telephone 9904 3224 should you have any enquiries.

Yours sincerely

Donald Lee
Senior Engineer B.Eng (Civil)
Varga Traffic Planning Pty Ltd

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PROJECT
RESIDENTIAL DEVELOPMENT

N

DRAWING TITLE
B99 VEHICLE TURNING PATHS
Entering / Exiting Site Access Driveway

ADDRESS
12 Carson Lane,
ST MARYS

PROJECT NO.
21727

1:200 @ A4

DATE DRAWN
2022-10-6

PREPARED
DONALD LEE

VARGA TRAFFIC PLANNING Pty Ltd
Transport, Traffic and Parking Consultants