

16 March 2022

201459 TAAA

Peter Stutchbury Architecture
5/364 Barrenjoey Road
Newport NSW 2106

Attention: Belinda Koopman

Ledge House - 2 Wyadra Avenue, Freshwater

Driveway Traffic Assessment

Dear Belinda,

We have reviewed comments provided by Northern Beaches Council regarding DA2020/0147 (letter dated 02/04/2020), particularly the following remarks:

- 1. No details have been provided of the proposed parking platform. These would include typical cross sections with existing and finished surface levels, retaining wall locations etc. An engineering plan drawing at a suitable scale prepared by a suitably qualified engineer.*
- 2. The proposed parking platform is to demonstrate compliance with AS2890.1:2004 – Off-street carparking such that the turning templates detail the ability of a typical service vehicle to exit the site in a forward direction.*

Swept Path Analysis

Swept path analysis has been undertaken in accordance with AS2890.1 for the proposal. The layout is shown to provide compliant access to and within the site, based on the swept path plans which have been overlaid onto the architectural design (refer attached **Traffic Diagrams**).

The proposed vehicle turntable has been sized for a B99 vehicle in accordance with AS2890.1, including a 300mm clearance buffer around the perimeter (as per AS2890.2; there is no equivalent clause in AS2890.1), resulting in a total clear diameter of 6.0 metres. The turntable itself is proposed with an operating diameter of 4.8m which is sufficient to accommodate the wheelbase of a B99 vehicle centred within the 6-metre clear diameter.

To accommodate the turntable within the site constraints, one of the two parking spaces is designated as a Small Car space (5.0m in length vs. typical 5.4m) which is also in accordance with AS2890.1. Therefore, at least one parking space is to be provided as a full-length space.

Sections and Levels

The proposed ramp design has been checked for vehicle underside scraping in accordance with AS2890.1. The attached **Vehicle Scraping Analysis** demonstrates that a B99 vehicle can traverse the ramp in both directions with no clash at the front or rear of the vehicle. The scraping analysis has been undertaken at the shortest/steepest section of the ramp; the driveway centreline has a longer transition and would provide additional clearance.

A previous ramped option which was investigated for the car parking platform is no longer proposed. The car parking area will be constructed with a maximum gradient of 1:20 (5%) in accordance with AS2890.1.

Other engineering details and plans would be prepared by others, however it has been demonstrated that a compliant parking and access solution can be achieved for the proposal.

Should you require anything further please contact the undersigned.

Yours faithfully,
TTW (NSW) PTY LTD



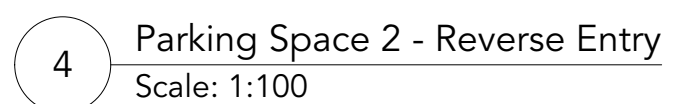
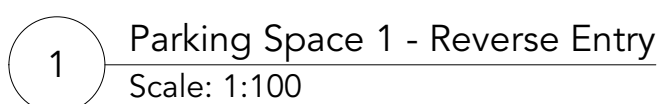
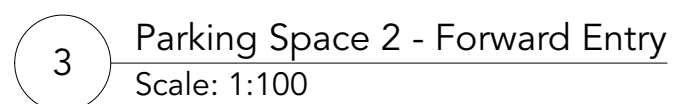
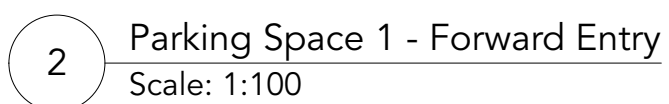
MICHAEL BABBAGE
Associate (Traffic)

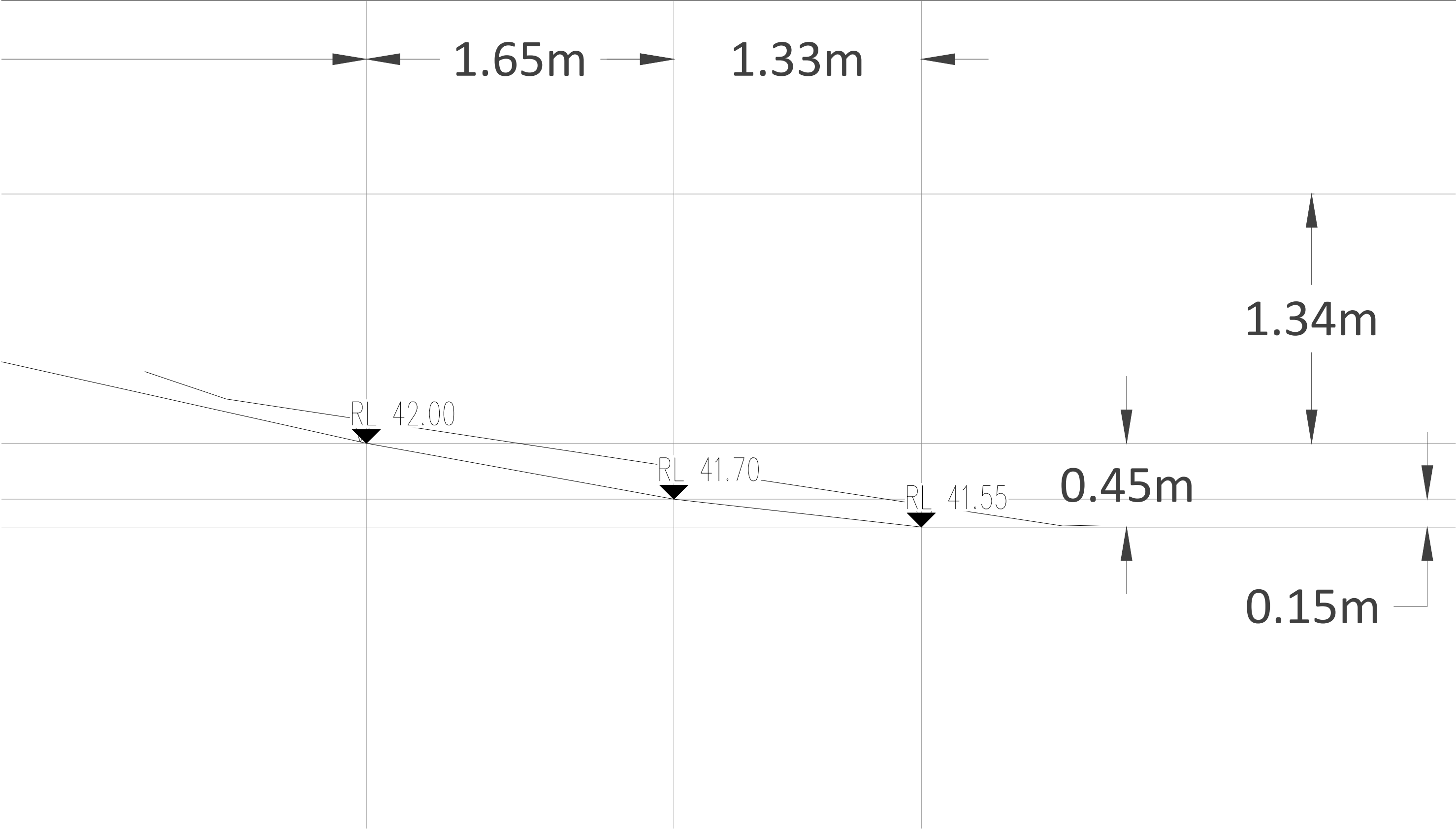
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Attachments

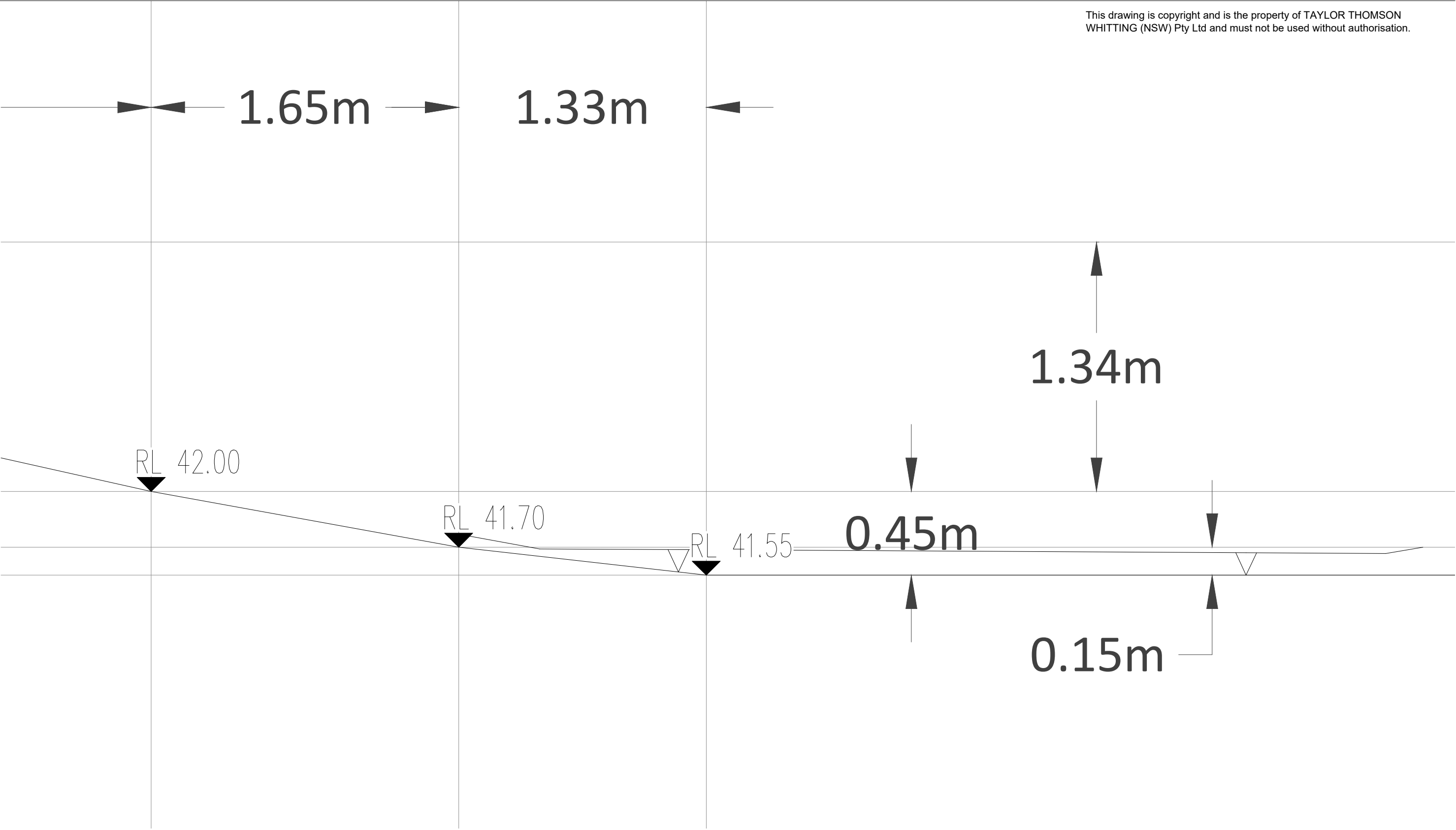
TRAFFIC DIAGRAMS (PETER STUTCHBURY ARCHITECTURE)

VEHICLE SCRAPING ANALYSIS (TTW)

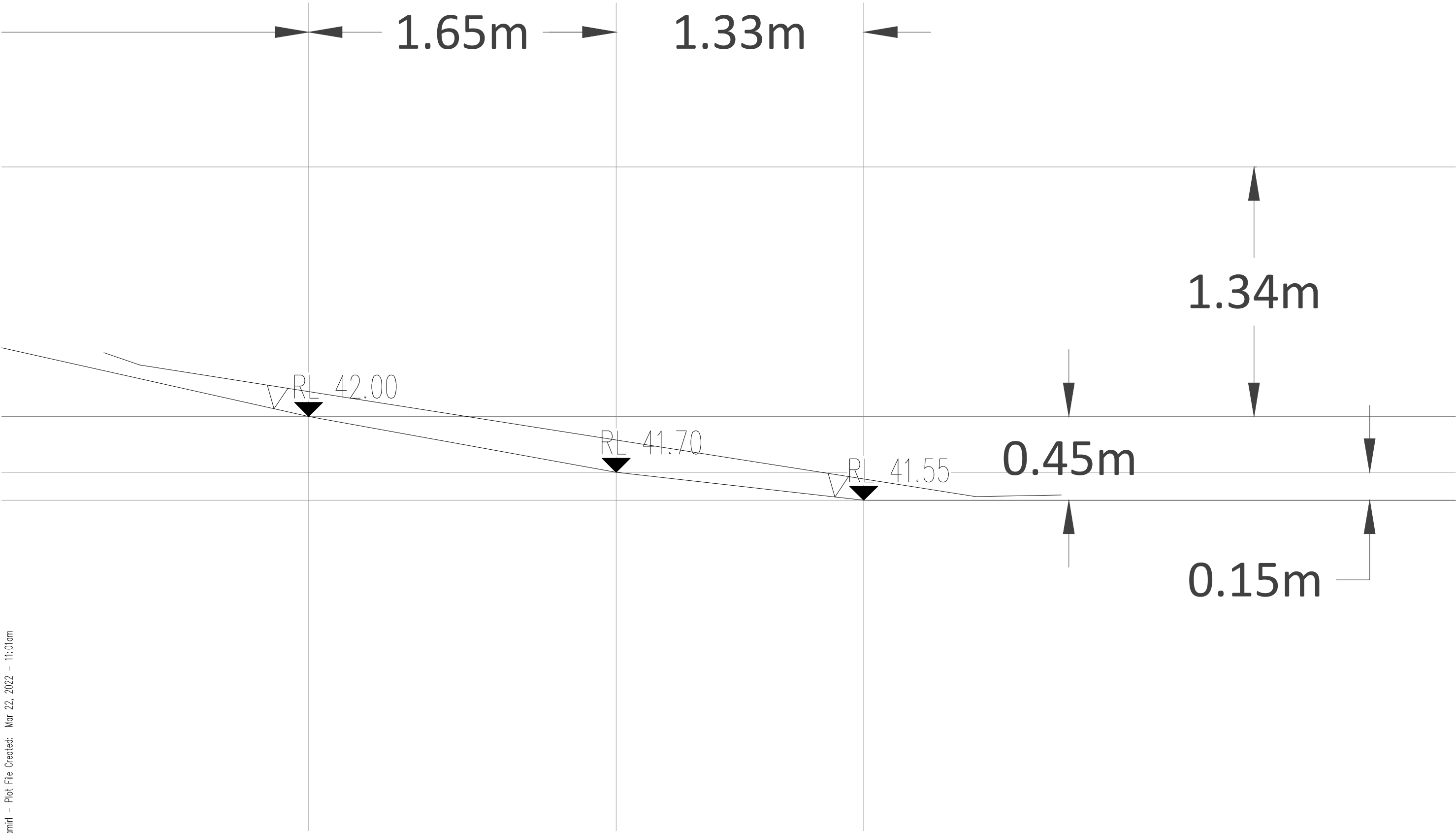




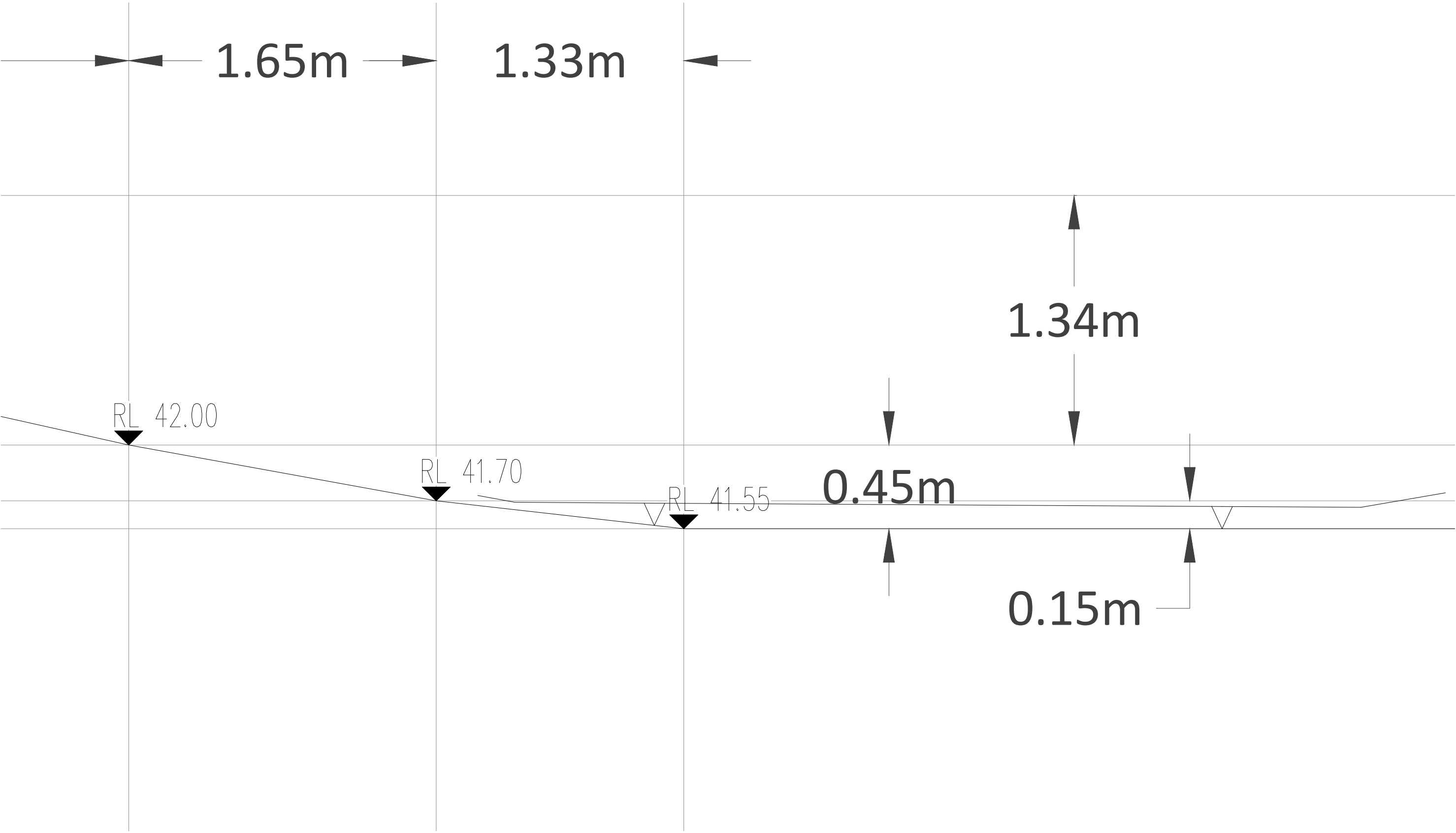
ENTRY PATH – FRONT OF VEHICLE (B99)
SCALE 1: 20



ENTRY PATH – REAR OF VEHICLE (B99)
SCALE 1: 20



EXIT PATH – REAR OF VEHICLE (B99)
SCALE 1: 20



EXIT PATH – FRONT OF VEHICLE (B99)
SCALE 1: 20

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1 ISSUE FOR DA			MB	MB	22.03.22			
Rev	Description	Eng	Draft	Date	Rev	Description	Eng	Draft

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**Structural
Civil
Traffic
Façade**

Project
LEDGE HOUSE

Sheet Subject
VEHICLE SCRAPING
ANALYSIS

PRELIMINARY
NOT TO BE USED
FOR CONSTRUCTION

Scale : A1 As shown	Drawn MB	Authorised -
Job No 201459	Drawing No T04	Revision 1
Plot File Created: Mar 22, 2022 - 11:01am		