



24 August 2021
Ref 21375

Mr Keith Skinner
114 Whale Beach Road
WHALE BEACH NSW 2107

keithwskinner@gmail.com

Dear Keith,

**PROPOSED DRIVEWAY WIDENING
114 WHALE BEACH ROAD, WHALE BEACH
TRAFFIC ASSESSMENT**

Introduction

This report has been prepared to assess the traffic implications of a proposal to undertake minor widening of the existing driveway at the above location.

Background Information

The existing driveway provides vehicular access to two adjacent residential dwelling houses. It has a gradient of approximately 25% up from Whale Beach Road which slopes downhill in the same direction at approximately 3%.

The applicant who resides at No. 114 Whale Beach Road owns a large B99 car and has advised that their car scrapes and that the wheel on one corner of the car lifts off the ground when it traverses the gutter invert.

An analysis of the gradients at the driveway gutter invert reveals that the grade changes are *substantially* non-compliant with AS2890.1 on the northern part of the driveway, and that those non-compliances cannot be avoided with the current driveway configuration.

Proposed Driveway Widening

The retaining wall alongside the existing driveway has partially collapsed exposing a very steep earth embankment.

It is therefore necessary to replace the retaining wall and to rectify the *substantial* non-compliances with AS2890.1 by slightly widening the driveway so that a B99 vehicle could *avoid* the non-compliant part of the driveway, thereby eliminating the scraping and wheel lifting.

The proposed widening is minor, and variable in width, up to 800mm at its maximum extent.

Analysis of Proposed Driveway Widening

An analysis of the proposed driveway widening using the *swept turn paths* (see attached) of a B99 vehicle reveals that:

- it is impossible to avoid the *substantially* non-compliant gradients under the *existing* arrangements when turning to/from the south
- widening the driveway will enable the *substantially* non-compliant grade changes to be avoided
- the widened driveway will enable a B99 vehicle turning to/from the south to traverse the gutter invert with fully compliant grade changes, thereby eliminating any scraping or wheel lifting.

The widening of the driveway will also enable B85 and B99 cars to turn right into the driveway from the north in a single movement (i.e. without a three-point-turn). Whilst these right-turn movements will not be able to avoid the non-compliant gradients near the gutter invert it is likely that high clearance vehicles such as SUVs could access the site from the north with improved safety, without a three point turn.

Conclusion

The foregoing analysis has found that:

- it is impossible to access the site without traversing grade changes that are *substantially* non-compliant with AS2890.1, resulting in scraping and wheel lifting
- the minor widening proposed on the driveway would provide a *fully compliant* path for a B99 vehicle turning to/from the south, thereby eliminating any scraping or wheel lifting.

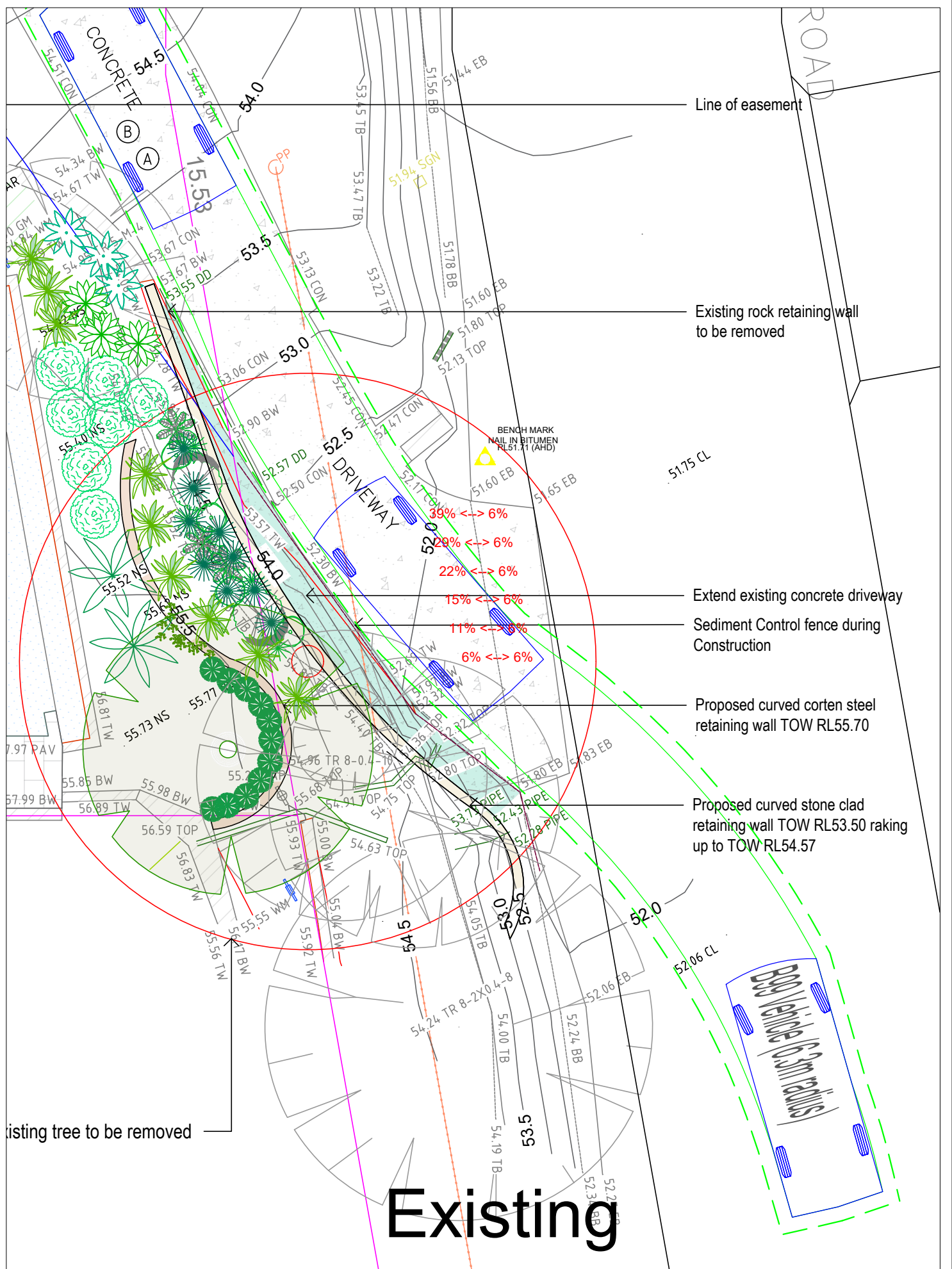
It is therefore recommended that the minor driveway widening (up to 80mm at its maximum extent) be approved.

Please do not hesitate to contact me on telephone 9904 3224 should you have any enquiries.

Yours sincerely



Robert Varga
Director
Varga Traffic Planning Pty Ltd



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PROJECT
 RESIDENTIAL DEVELOPMENT



DRAWING TITLE
 B99 VEHICLE TURNING PATH
 Entering Site Access Driveway

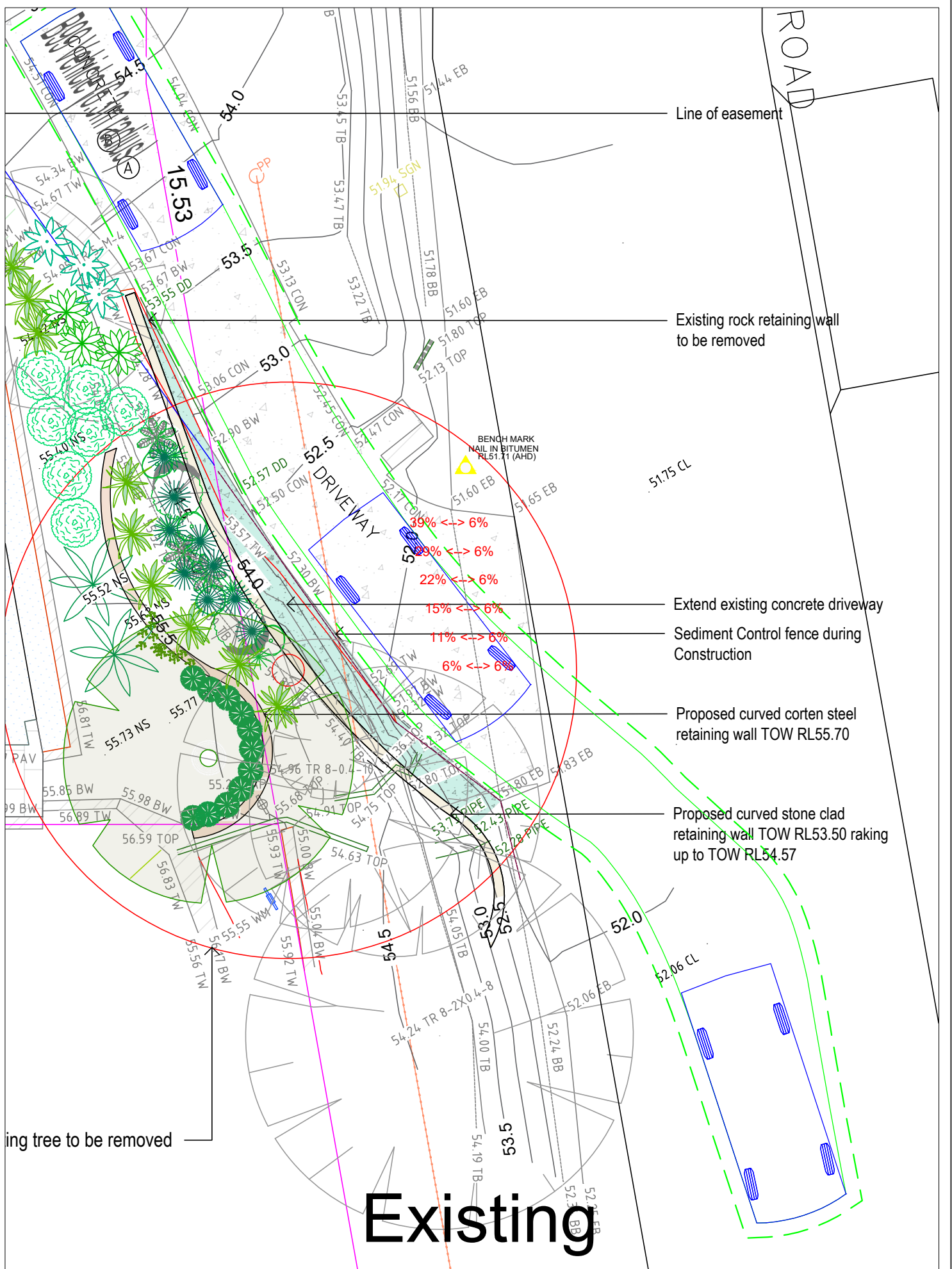
ADDRESS
 114 Whale Beach Road,
 WHALE BEACH

PROJECT NO.
 21375
 REVIEWED
 ROBERT VARGA

1:100 @ A4

DATE DRAWN
 2021-8-19
 PREPARED
 DONALD LEE

VARGA TRAFFIC PLANNING Pty Ltd
 Transport, Traffic and Parking Consultants



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B99 VEHICLE TURNING PATH
Exiting Site Access Driveway
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