"DISCOVERY POINT" BUILDING 4
PROPOSED VEHICLE
ACCESS CONNECTION

November 2012

Reference 12142

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1. INTRODUCTION

The Discovery Point site is subject to a Concept Plan approval and a number of building and access road elements are already completed while there are current detail applications for other building elements under consideration.

As the detail planning for each element is undertaken there are issues and considerations which arise that engender some change to the envisaged scheme as identified in the Concept Plan. The detail planning for Building 4 has brought to light the desirability/need to provide a small element of carparking on a first floor level.

In order to access this carparking, it will be necessary to connect an access ramp to Spark Lane located adjacent to the Building 1 carpark and loading dock connections. TTPA have assisted Australand with assessment and advice in relation to the traffic, parking and road system considerations throughout the Discovery Point development process to date and the purpose of this report is to assess the potential design and traffic implications of the proposed change to the previously approved Concept Plan access arrangements.

2. PROPOSED VEHICLE ACCESS ARRANGEMENTS

The proposed vehicle access arrangements on Spark Lane as identified in the Concept Plan and the Building 1 application are shown on the plan overleaf (DA2.200 Rev E). The vehicle access ramp for the Building 1 carpark and the driveway connections for the loading dock are shown separated by the residential waste store and fire stairs.

The carpark ramp rises up to Spark Lane and the loading dock access driveways are essentially at grade while there will be some 246 spaces in the Building 1 carpark. The now proposed access ramp for the Level 1 Building 4 carpark is shown on the plan overleaf (DA2.200 Rev E). With this proposal, the Building 1 residential waste store will be relocated to provide for the ramp connection to Spark Lane.

Details of the proposed driveway are provided on the 1:100 detail plan overleaf with the 5.5m wide driveway connecting at 90^{o} to the roadway.

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

All drawings may not be reproduced or distributed without prior permission from the architect.

COLOUR LEGEND:

- RESIDENTIAL FOYER
- RETAIL
- LOADING
- CARPARK
- CORE
- EXISTING CARPARK

Revision	Date	Description	Initial	Checked
E	15.11.11	Kiss'n'ride labelled	DL	MA
D	11.11.11	Basement Access Amended	DL	MA
C	17.06.11	Project Application	SA	MA
B	13.04.11	Project Application	SA	MA
A	07.02.11	Project Application	AW	MA

Discovery Point

Linc
Discovery Point, Wolli Creek

Ground Level Plan

Status	PLANNING			
Scale	1 : 250	@ A1	1:500	@A3
Drawn	AW	Checked	MP	
Project No.	S11191A			
Plot Date	15/11/2011 2:50:59 PM			
Plot File	C:\Temp\ARCH-BS-DP1_ALA.rvt			

Drawing no. DA2.200

Revision E

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COLOUR LEGEND:

- RESIDENTIAL FOYER
- RETAIL
- LOADING
- CARPARK
- CORE

Issue	Date	Description	Initial	Checked
G	25.10.12	Building 1B West Amended	AW	MA
F	08.08.12	Temporary Park Removed	AW	MA
E	15.11.11	Kiss'n'ride labelled	DL	MA
D	11.11.11	Basement Access Amended	DL	MA
C	17.06.11	Project Application	SA	MA
B	13.04.11	Project Application	SA	MA
A	07.02.11	Project Application	AW	MA

Discovery Point

Linc
Discovery Point, Wolli Creek

Ground Level Plan

Status	FOR INFORMATION
Scale	1 : 250 @ A1 1:500 @A3
Drawn	AW
Checked	MP
Project No.	S11191A
Plot Date	25/10/2012 2:31:08 PM
Plot File	C:\Temp\ARCH-BS-DP1_WAY.rvt
Drawing no.	DA2.200
Revision	G

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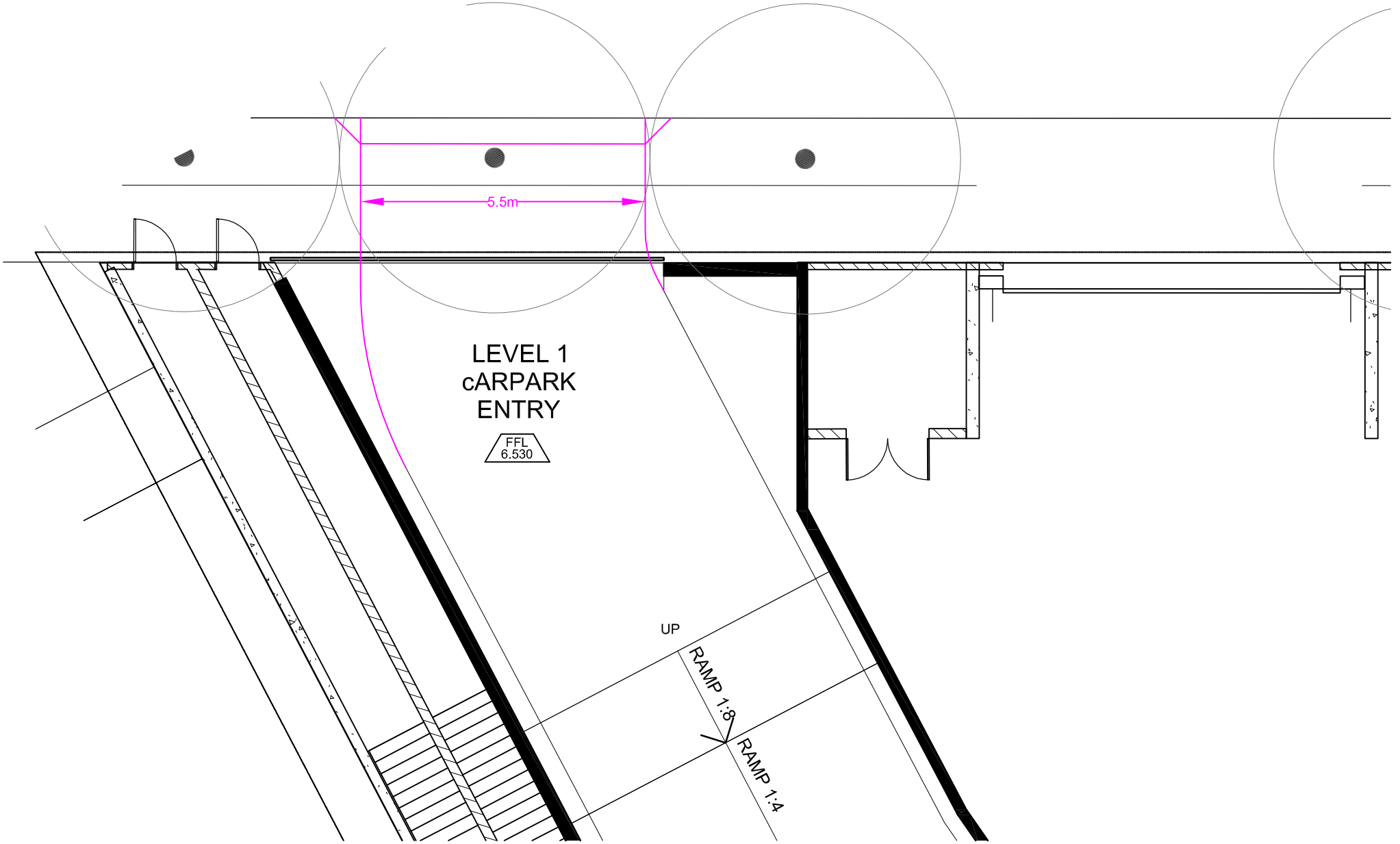

5.5m
LEVEL 1
cARPARK
ENTRY
FFL
6.530
UP
RAMP 1:8
RAMP 1:4

3. DESIGN

AS2890.1 provides design guidance for vehicle access ramps and in this regard the proposed Building 4 access will comply with those requirements particularly in relation to:

- width (5.5m)
- grade (6m @ 1:20)
- sight distance (splay on egress side)
- prohibited locations (at intersections)

The guidelines do not specify any requirement in relation to “separation” from other driveways.

4. TRAFFIC

The proposed Level 1 parking area for Building 4 will contain 29 spaces which will be allocated for some 30-32 residential apartments. Application of the accepted RMS peak traffic generation criteria of 0.29 vtph per apartment would indicate a very minor peak generation of some 9 vtph as follows:

AM		PM	
IN	**OUT**	**IN**	**OUT**
1	8	8	1

The very great majority (if not all) of these vehicle movements (as with the adjacent Building 1 access movements) will be to/from the south (ie Magdelene Terrace/Brodie Spark Drive). As such there will be very minimal, if any, "crossover" conflict (ie vehicles turning right out of Building 1 access and vehicles turning left out of Building 4 access).

Spark Lane will largely reflect a "service road" function and will be subject to relatively minor pedestrian and vehicle movements (as compared to Brodie Spark Drive and Magdelene Terrace etc). As such it is preferable for vehicle access to occur on this roadway.

5. ASSESSMENT

The proposed Building 4 access driveway will have a very clear and defined separation from both the Building 1 driveway and the southern loading dock driveway. While AS2890.1 does not specify a separation criteria numerous Council DCP's specify that driveways should be located at least 1.0m from the boundary (hence 2.0m separation with the driveway for an adjoining property).

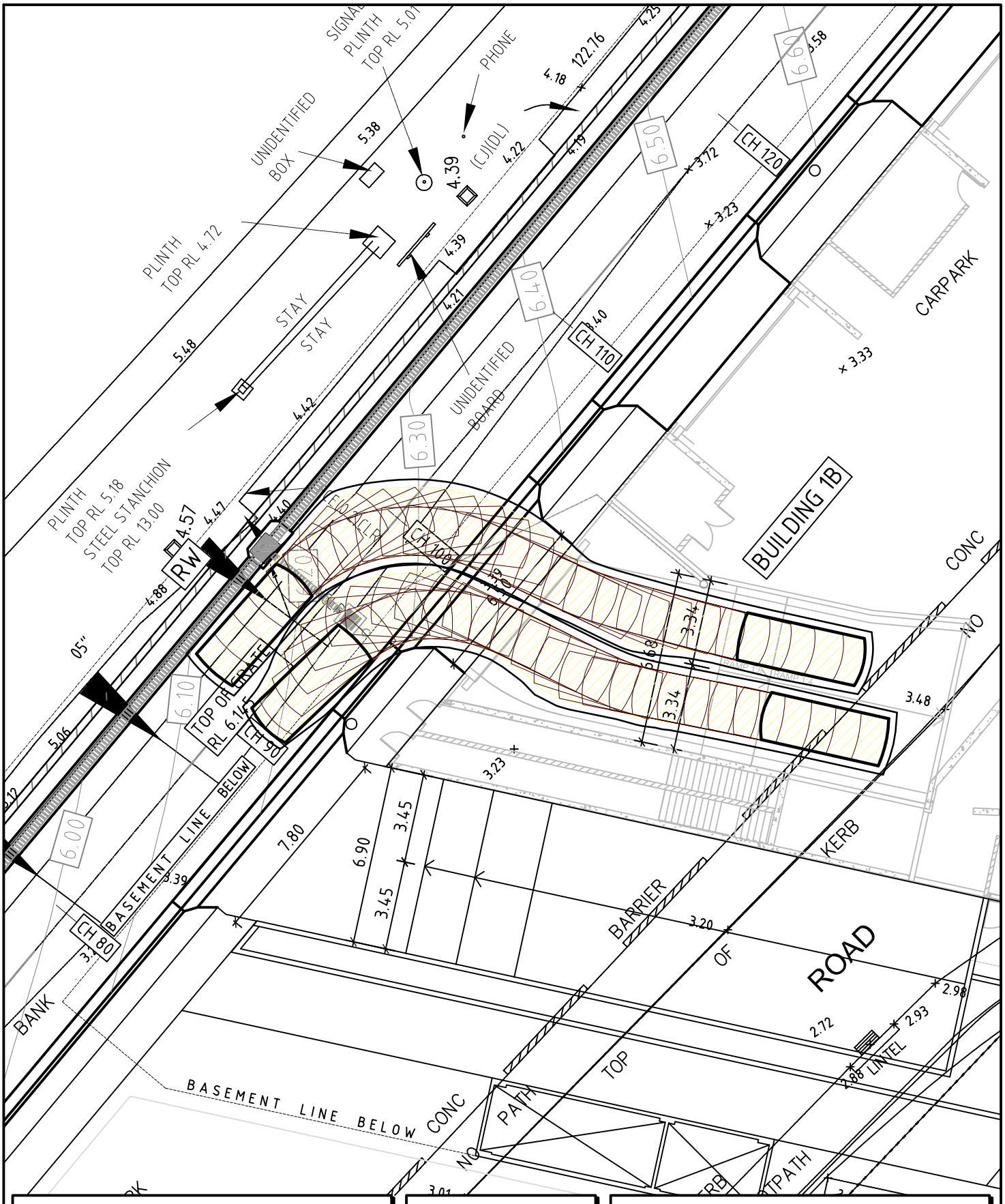
The proposed Building 4 driveway will have a separation from the Building 1 driveway at least 5m and some 7m from the loading dock driveway.

It is concluded that:

- the design of the proposed driveway will comply with the requirements of AS2890.1
- the driveway will be suitably separated from adjacent driveways
- the driveway will have appropriate sight distances available
- there will only be very minor traffic movements on the proposed driveway and extremely minor potential "crossover" conflicts

6. CONCLUSION

It is proposed to submit a S75W Modification Application in relation to the provision of an access driveway for Building 4 on the Spark Lane frontage. Assessment of the design and traffic implications of this proposal have concluded that the design will comply with the appropriate standards and there will be no unsatisfactory traffic implications.



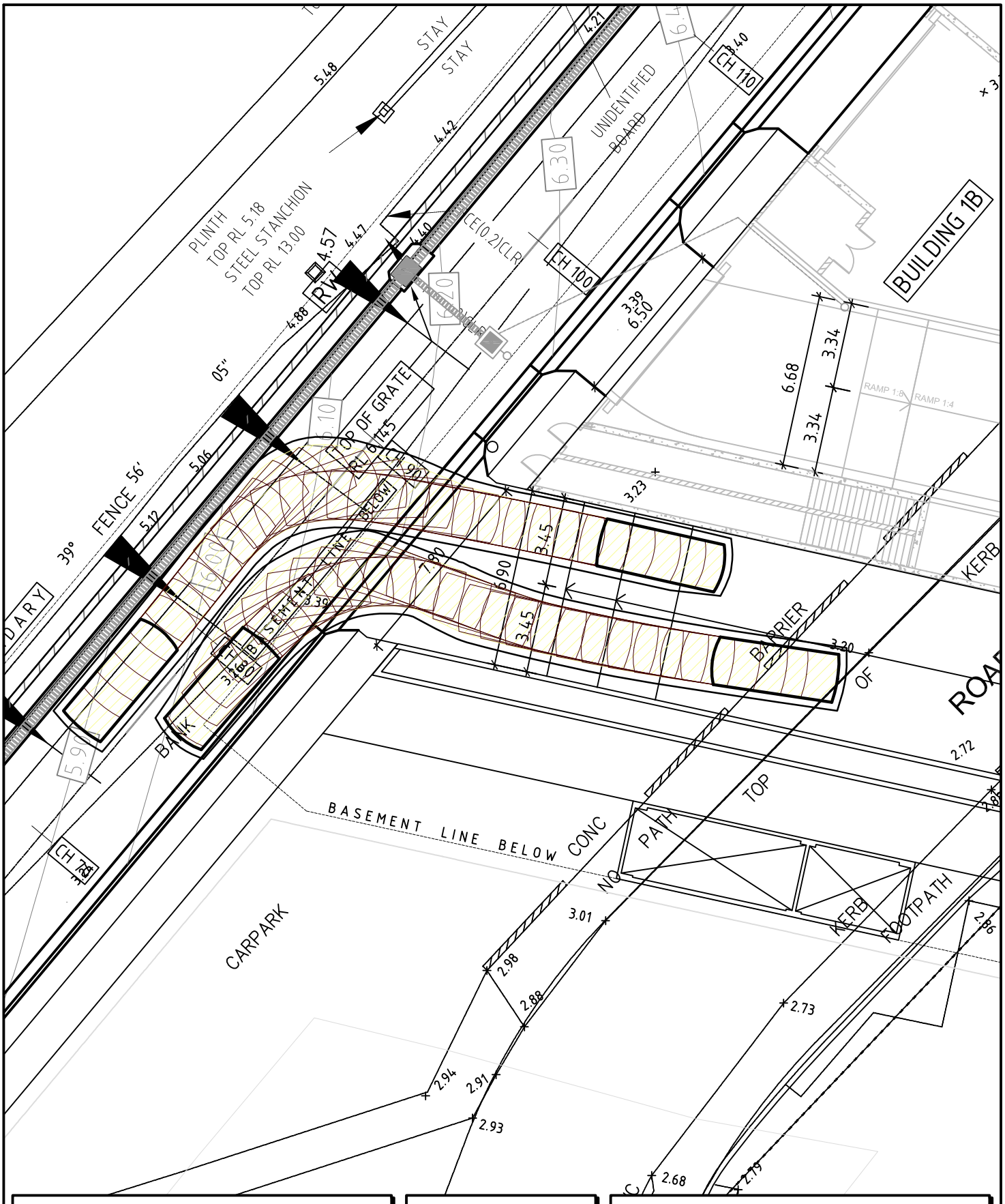
LEGEND

This drawing has been prepared using vehicle modelling computer software AutoTrack V9.21 in conjunction with AutoCAD 2012. 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.

N

SWEPT PATH ANALYSIS OF 85th PERCENTILE VEHICLES ENTERING AND EXITING THE SITE

SP 1



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SWEPT PATH ANALYSIS OF 85th PERCENTILE VEHICLES ENTERING AND EXITING THE SITE

SP 2