Ref 10.151l13v03

traffix
traffic & transport planners

Suite 2.08
50 Holt Street
Surry Hills NSW 2010
PO Box 1124
Strawberry Hills NSW 2012
t: +61 2 8324 8700
f: +61 2 9380 4481
w: www.traffix.com.au
director Graham Pindar
acn: 065132961
abn: 66065132961

21 July 2016

Oakstand
Level 10, 503-505 Kent Street
Sydney
NSW 2000

Attention: Jon Hopkins, Development Manager

Re: Amended Access Arrangement and Internal Road relating to 110-114 Herring Road, Macquarie Park – Design Review Statement

Dear Jon,

This letter has been prepared to accompany updated architectural drawings for the subject development, which have been amended to accommodate a revised access driveway arrangement (via a Concept and Stage 1 Project Section 75W modification and Stage 2 Section 96 modification) and revised kerb lines for the proposed internal road(via a Concept and Stage 1 Project Section 75W modification). It is understood the revised arrangement for the access driveway is required in order to retain an access pit for exist telecommunications services whilst the proposed revision to the kerb line of the internal circulation road is in order to accommodate full access for Fire Truck emergency vehicles.

Our letter addresses the following aspects:

- The traffic engineering implications of the revised access driveway design.
- Parking implications of the revised kerb line for the circulation road.

The current arrangement and the proposed arrangement can be viewed in **Attachments A and B** respectively.

Proposed Access Assessment

The proposed design for the realigned access driveway involves shifting of the current approved footpath crossover by five metres to the south. The design retains the gradients of the previous access arrangement whilst increasing the width from 6m to 7.5m to assist with vehicles negotiating the resulting deflection on the internal road.

A swept path analysis has been undertaken, as permissible under AS2890.2, to confirm the ability of new design to accommodate the largest design vehicle expected on site (a 12.5m Heavy Rigid Vehicle). The assessment confirms the safe operation of the design, the full assessment is included in **Attachment C**.

In addition the following aspects of the proposed design are considered notable:

- An appropriate visual splay is to be provided within the landscaping arrangement to the north of the proposed access driveway in accordance with the requirements of Figure 3.3 of AS2890.1, ensuring sightlines are maintained to passing pedestrians.
- The maximum grade of the driveway access is to be no greater than 1:20 (5%) for the length of the wheelbase of the largest design vehicle (being 6.6m), in accordance with the requirements of Section 3.4.4 of AS2890.2.

Revised Kerb for Emergency Access

In accordance with the wishes of the NSW Fire Brigade full access is to be made available to all podium areas of the development by a 12.4m long 'Aerial Appliance' emergency vehicle. In order to accommodate this vehicle the kerb lines of the internal road have been revised.

A Swept Path Analysis undertaken using a 12.5m HRV demonstrates the provision for the emergency vehicle to now access all areas of the site as required. This swept path analysis can be viewed in **Attachment C**.

The change to the kerb arrangement results in the loss of 5 podium level vehicle spaces, leaving a total of 14 spaces.

The 'MOD5' approval for the subject site states a requirement for 605 basement parking spaces and seven podium spaces. In addition, condition B22 of the project approval and condition 26 of the Stage 2 DA approval require an additional six car spaces to be dedicated to 'car share' operators.

The basement parking provision is to remain as approved whilst the retention of 14 car spaces at podium level ensures the minimum requirement of seven visitor spaces and six car share spaces has been met.

As such the proposed changes remain supportable, meeting the requirements of the project approvals whilst allowing full site access for emergency vehicles.

Summary

In summary:

- The proposal to adjust the access driveway alignment by five metres to the south presents no impediment to the safe operation of the site.
- The gradients of the revised driveway access remain unchanged from the existing approved driveway access with an increased width provided to assist vehicles negotiating the internal deflection of the access driveway.
- The revised deign meets the requirements of AS2890. The operation has been assessed using a swept path analysis and it is considered to operate safely and efficiently.
- The revised internal kerb permits full site access for emergency vehicles, up to and including a 12.4m Aerial Appliance vehicle.
- Whilst the revised kerb results in a loss of five visitor spaces the development meets the parking requirements as set down in the MOD5, Stage 1 and Stage 2 DA approvals.

This application is therefore considered to be supportable from a traffic-engineering perspective.

Please contact the undersigned should you have any queries or require any further information or assistance.

Yours faithfully

traffix

Geoff Higgins

Senior Engineer

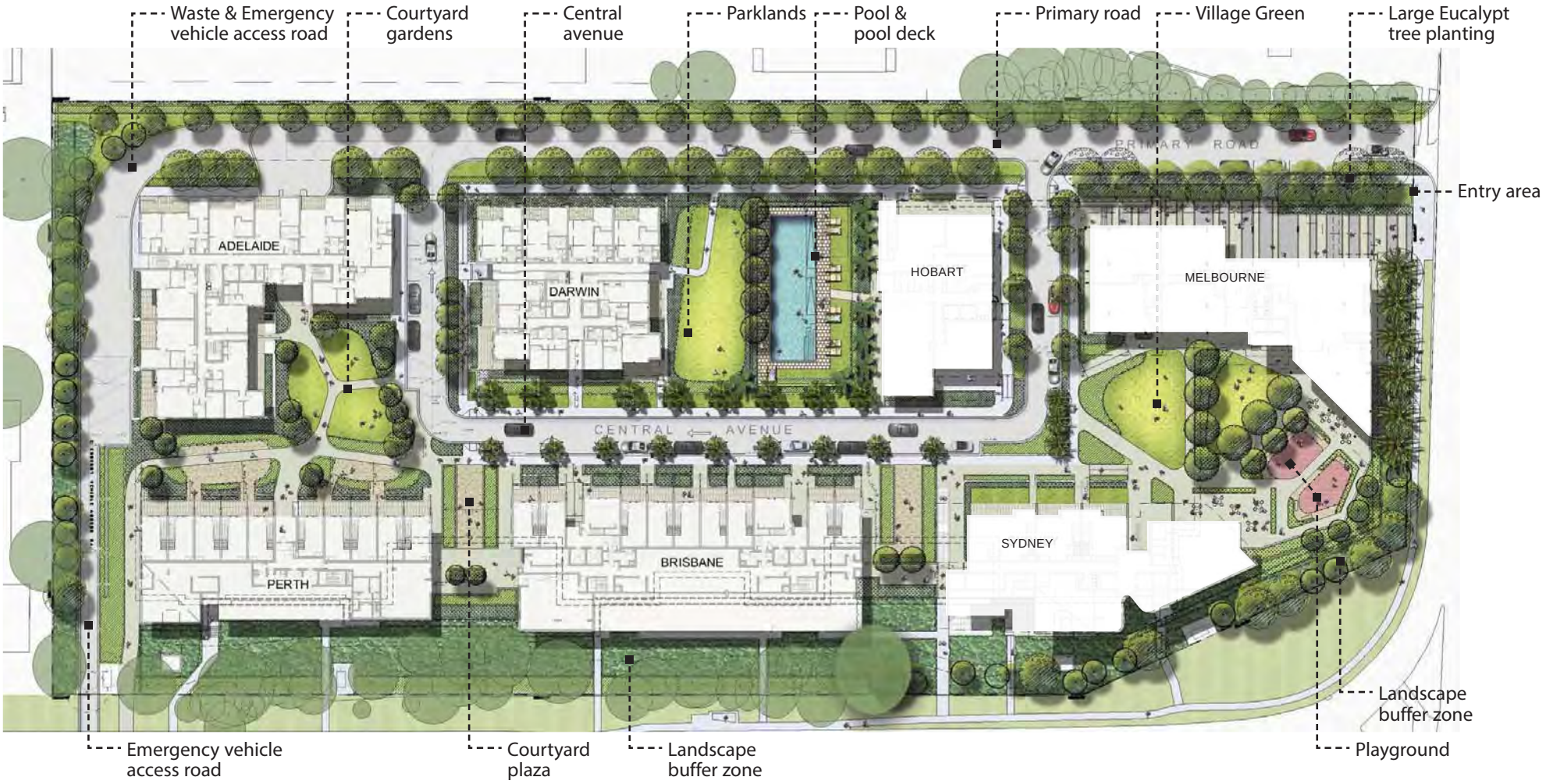
Encl: Attachment A
Attachment B
Attachment C

Attachment A

Current Podium Plan

OPEN SPACE & PUBLIC DOMAIN

Landscape Concept Plan



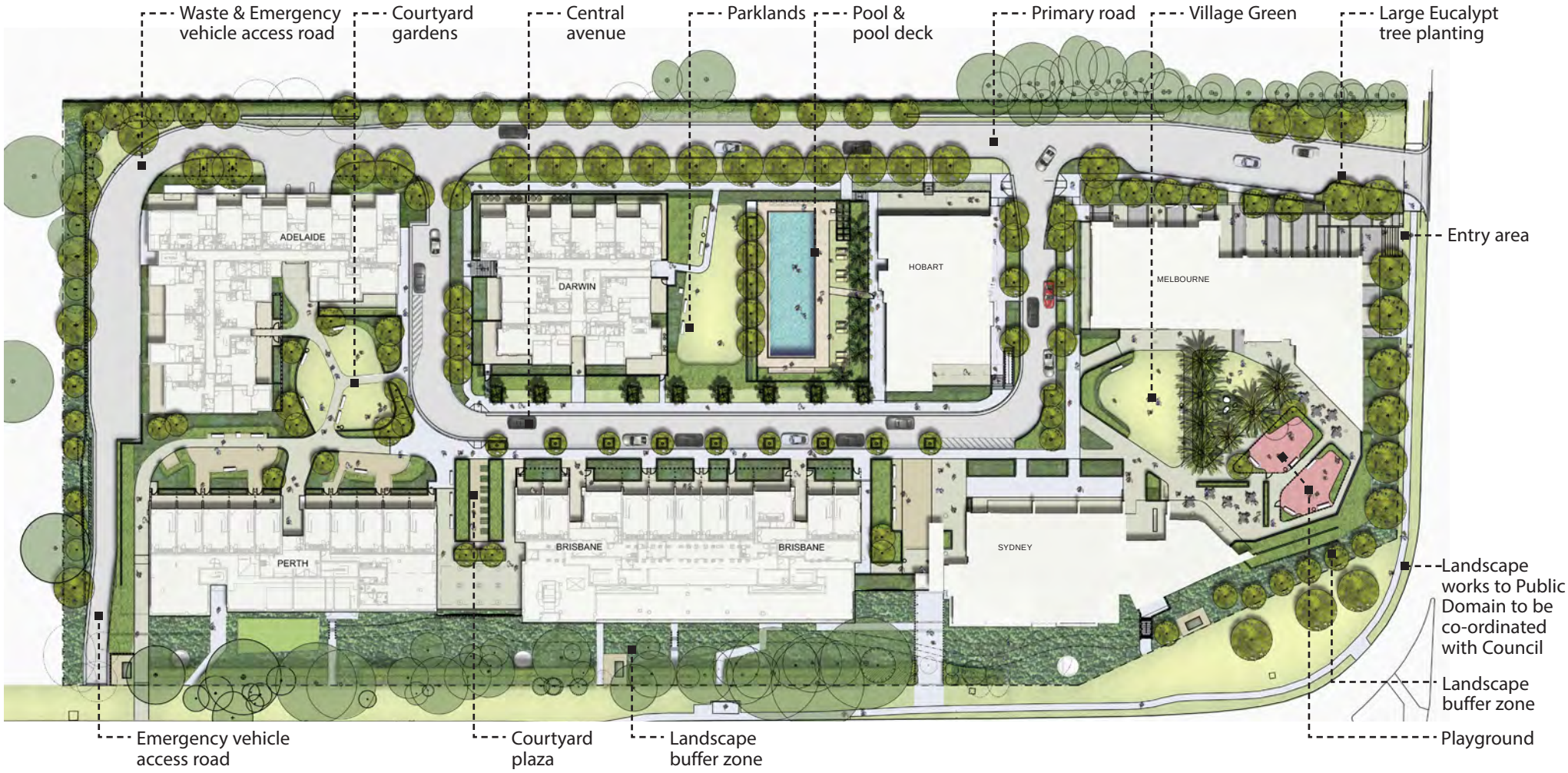
Landscape Masterplan

Attachment B

Proposed Design

OPEN SPACE & PUBLIC DOMAIN

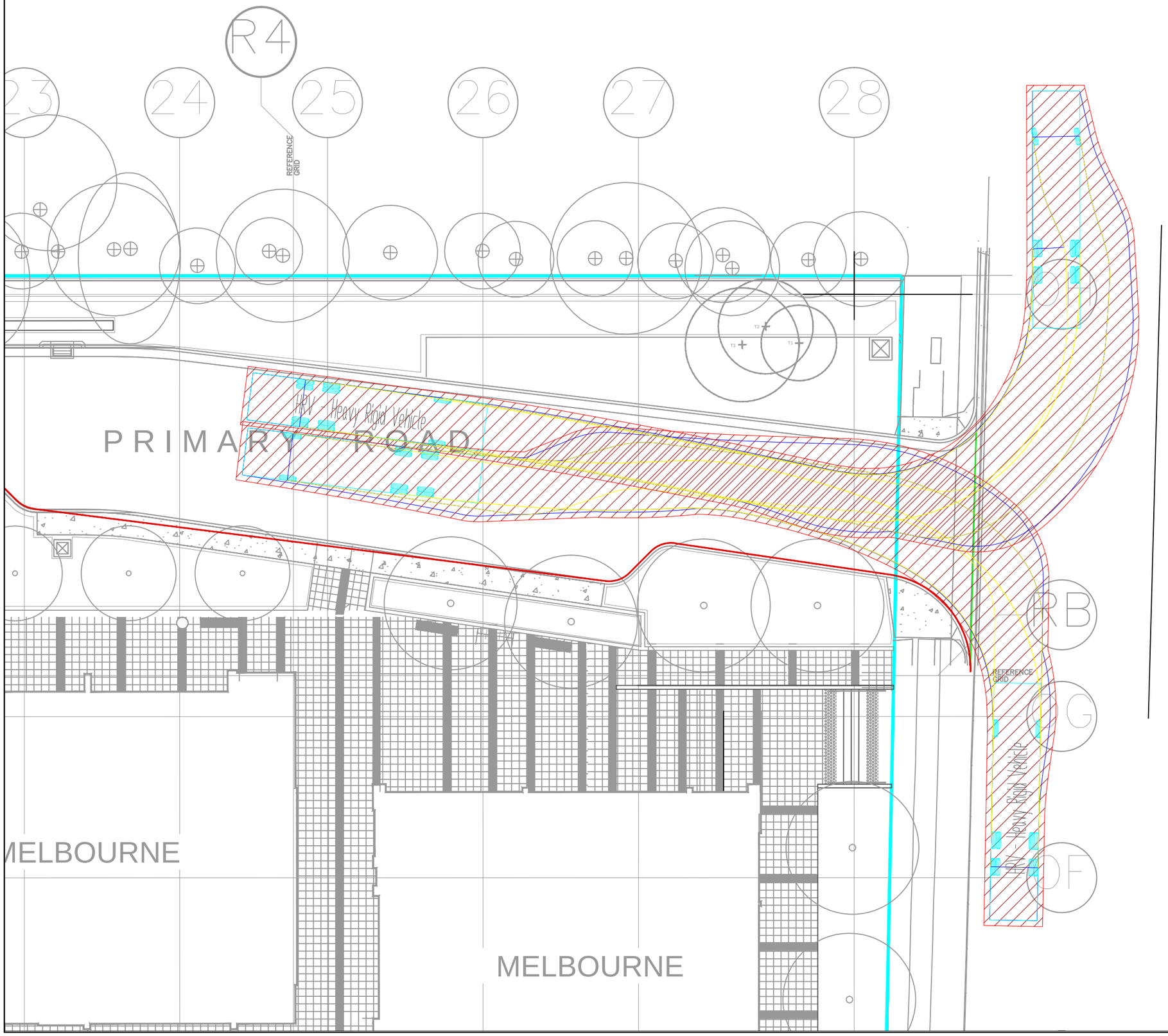
Landscape Concept Plan



Landscape Masterplan

Attachment C

Swept Path Analysis



notes

This drawing is prepared for information purposes only. It is not to be used for construction.

Base drawing prepared by other. TRAFFIX is responsible for the mark-ups and vehicle swept path overlays only.

no.	revision note	by.	date

Swept Path Legend:

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

architect

client

Oakstand

scale

project

110-114 Herring Road
Macquarie Park NSW

drawing prepared by

TRAFFIX
traffic and transport planners

suite 3.08 46a macleay street
potts point NSW 2011

PO Box 1061 potts point nsw 1035

t: +61 2 8324 8700
f: +61 2 9380 4481

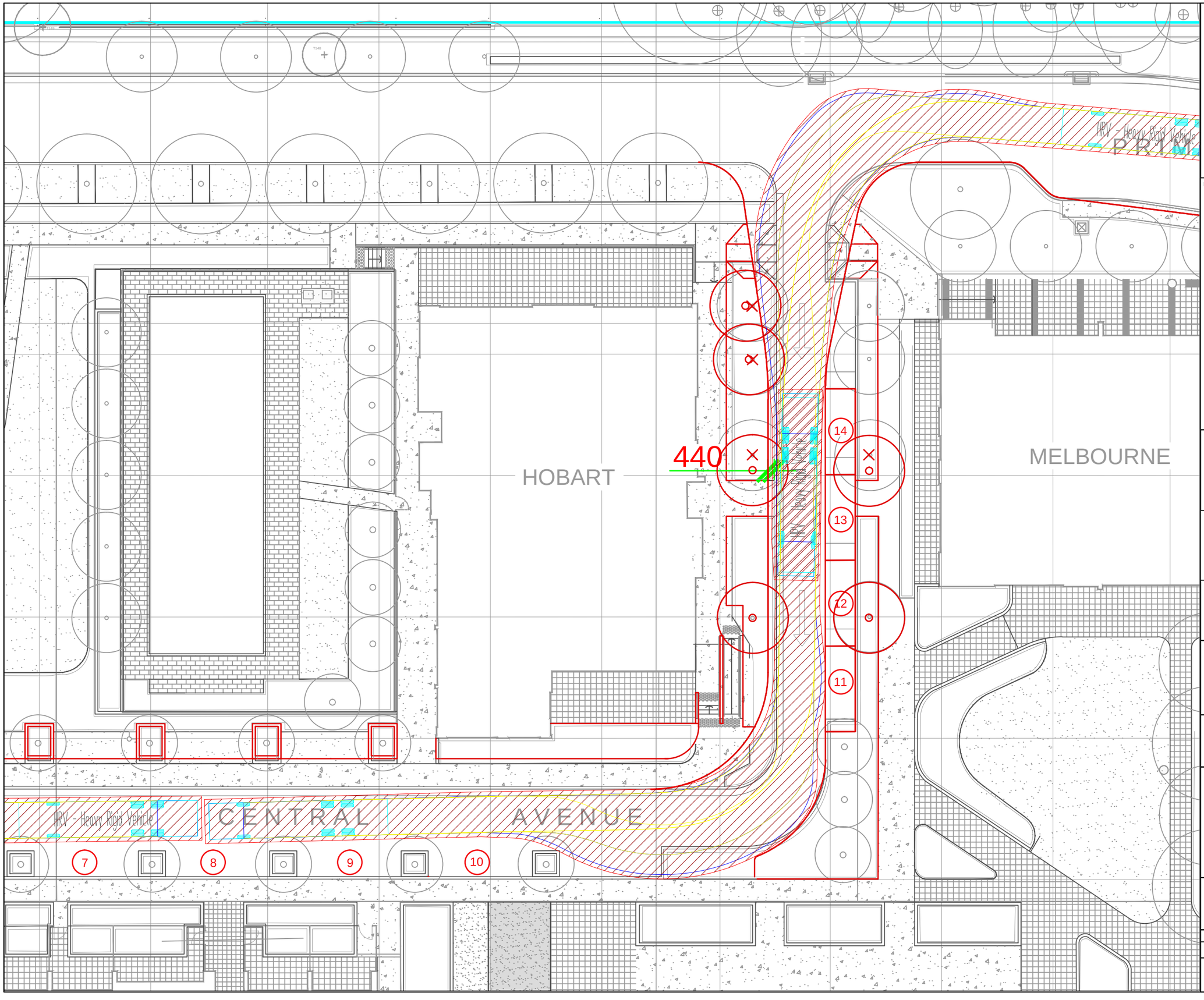
traffix
traffic & transport planners

drawing title

Design Review - 12.5m HRV accessing site

drawn:	checked:	date:
GH	-	23-Jun-16

project no.	drawing phase.	drawing no.	rev
10.151	-	TX.01	-



notes

This drawing is prepared for information purposes only. It is not to be used for construction.

Base drawing prepared by other. TRAFFIX is responsible for the mark-ups and vehicle swept path overlays only.

no.	revision note	by.	date

Swept Path Legend:

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

architect

client

Oakstand

scale

1:250 @ A3

0m 2 4 6 8

project

110-114 Herring Road
Macquarie Park NSW

drawing prepared by

TRAFFIX
traffic and transport planners

suite 3.08 46a macleay street
potts point NSW 2011

PO Box 1061 potts point nsw 1035

t: +61 2 8324 8700
f: +61 2 9380 4481

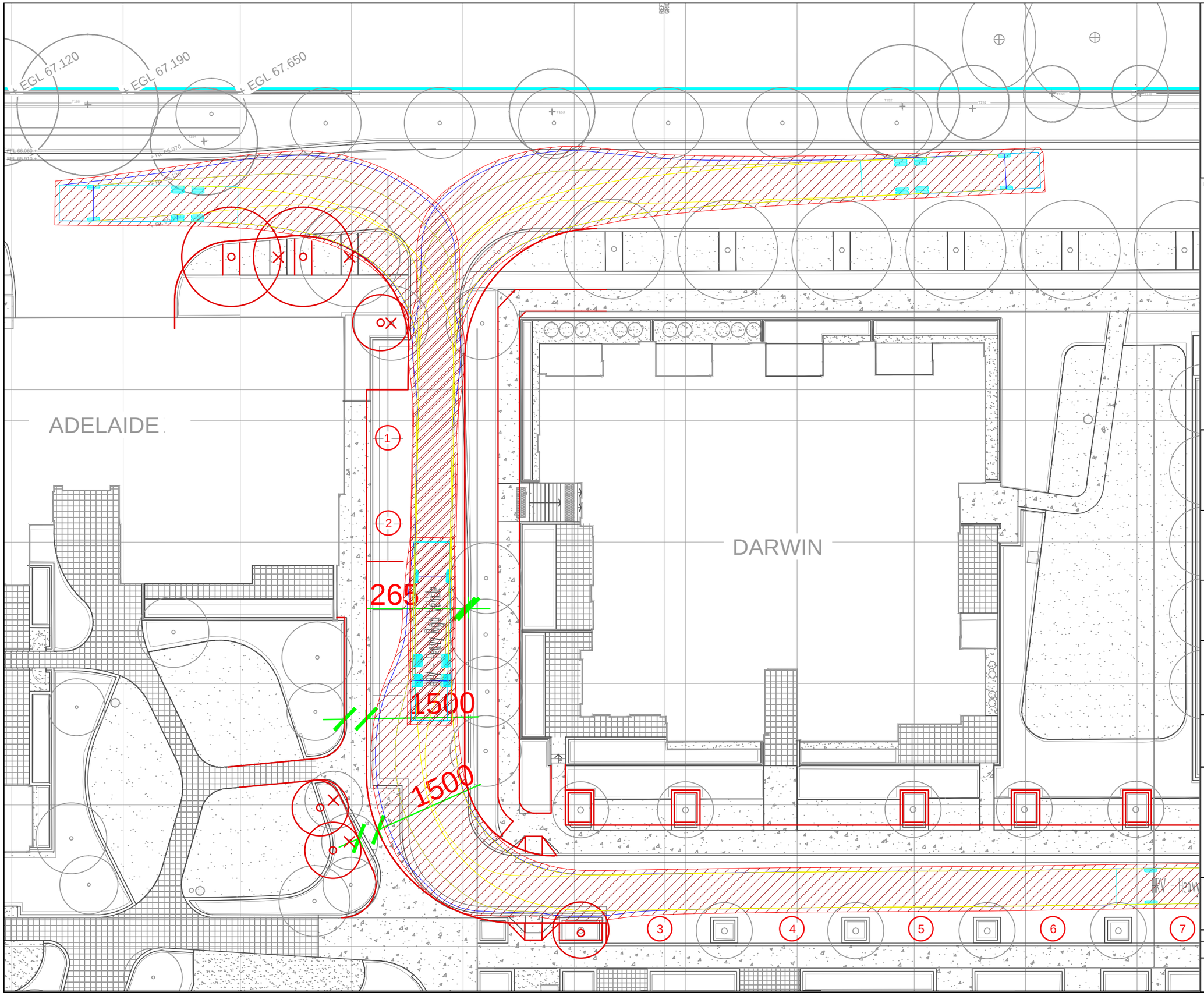
traffix
traffic & transport planners

drawing title

Design Review - 12.5m HRV circulating internal road (eastern half)

drawn:	checked:	date:
GH	-	23-Jun-16

project no.	drawing phase.	drawing no.	rev
10.151	-	TX.02	C



notes

This drawing is prepared for information purposes only. It is not to be used for construction.

Base drawing prepared by other. TRAFFIX is responsible for the mark-ups and vehicle swept path overlays only.

no.	revision note	by.	date

Swept Path Legend:

- Wheel Path
- Vehicle Body Envelope
- Clearance Envelope (300mm)

architect

client

Oakstand

scale

1:250 @ A3

0m 2 4 6 8

project

110-114 Herring Road
Macquarie Park NSW

drawing prepared by

TRAFFIX
traffic and transport planners

suite 3.08 46a macleay street
potts point NSW 2011

PO Box 1061 potts point nsw 1035

t: +61 2 8324 8700
f: +61 2 9380 4481

traffix
traffic & transport planners

drawing title

Design Review - 12.5m HRV circulating internal road (western half)

drawn:	GH	checked:	-	date:	23-Jun-16

10.151	-	TX.03	C
project no.	drawing phase.	drawing no.	rev