MILAN PRODANOVIC B.E. P Eng
TRAFFIC ENGINEERING & ROAD SAFETY

# ADDENDUM TO:

# TRAFFIC IMPACT ASSESSMENT

PROPOSED

TEMPUS
LIFESTYLE RETIREMENT AND
HEALTHCARE VILLAGE
DEVELOPMENT

TASMAN HIGHWAY
SWANSEA

JULY 2020

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TASMAN HIGHWAY
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JULY 2020

*11 KYTHERA PLACE, ACTON PARK TASMANIA 7170*
*TEL: (03) 6248 7323 MOBILE: 0402 900 106*
*EMAIL: milglad@bigpond.net.au ABN: 51 345 664 433*

# CONTENTS

# 1. INTRODUCTION

A Traffic Impact Assessment (TIA) report was prepared in October 2019 in support of the retirement and healthcare village development on the Tasman Highway, south of Swansea.

In considering the development application, the Glamorgan Spring Bay Council has asked for a TIA report addressing Stage 1A of the development.

The October 2019 TIA report addressed the proposed traffic environment and requirements for the full completion and occupancy of the development site.

The proposed development for Stage 1A of the development is fairly minor, therefore it is considered an Addendum to the TIA report would provide the necessary information for this stage of the development without duplicating much of the TIA report.

This Addendum to the TIA report has been prepared to address the traffic generation resulting from the Stage 1A development as well as other relevant matters.

# 2. EXISTING ROAD AND TRAFFIC ENVIRONMENT

The TIA report details the road characteristics and traffic volumes along the Tasman Highway in the area of the proposed access road to the development site.

The site for the access road junction was located to meet onsite design requirements as well as from a consideration of required sight distances along the highway to and from turning vehicles at the junction.

# 3. EXPECTED TRAFFIC GENERATION BY STAGE 1A DEVELOPMENT

Stage 1A of the development will include:

- construction of the main access boulevard into the site;
- construction of the access road junction on the Tasman Highway;
- stage 1 of the Enclave, which will hold the sales office & café (for potential buyers, not for passing public);
- an unoccupied display home to be used to show to prospective buyers;

- the shell of the works area, which will be used by the builders onsite as a base for later stages;

- infrastructure works such as the header tank, substation, and sewer.

A drawing of the proposed development within the site for Stage 1A is attached to this report.

Once this Stage 1A development has been completed, there will be up to 6 Tempus staff on site during business hours. The staff will receive and spend time with prospective buyers, each over a 1-2 hour period. The prospective buyers will be received by appointment only.

Over the day there could be up to five staff vehicles that arrive at the site and possibly up to another five vehicles belonging to interested buyers.

The total maximum traffic generation would be 20 vehicles/day and 2-4 vehicles/hour during business hours.

## 4. OPERATIONAL IMPACT OF STAGE 1A TURNING TRAFFIC ACTIVITY AT DEVELOPMENT SITE JUNCTION

The TIA report determined the full development of the village will generate some 45-60 vehicles/hour at peak times for the development.

Stage 1A of the development will generate only 20 vehicles/day and 2-4 vehicles/hour during business hours.

As the Stage 1A traffic generation will be only around 5% of the expected traffic with the full completed development, no operational or safety issues will arise with this low turning traffic volume, on the understanding that the necessary junction management and sight distance measures on the Tasman Highway at the access road junction will be constructed for this stage of development.

## 5. PROPOSED TASMAN HIGHWAY JUNCTION DESIGN AND SIGHT DISTANCES

The junction of the access road with the Tasman Highway will consist of:

- a full CHR right turn treatment on the highway;

- a short left turn diverge taper on the highway at the southwest corner of the junction;

- a splitter traffic island in the access road; and

- the lighting of the Tasman Highway junction.

Speed surveys found that the 85th percentile vehicle speed on the Tasman highway approaches to the junction is 92km/h for northbound traffic and 94km/h for southbound traffic.

Austroads Guide to Road Design Part 4A indicates that the required sight distances for these vehicle speeds along Tasman Highway, are around 228m to the south and 222m to the north.

Measurements have determined these required sight distances are available within the road reserve (with minor tree branch removal).

**Internal access road**

The internal access road from the Tasman highway will consist of a divided two lane two-way road (3m wide lanes) to the 'Enclave'.

Beyond this will be a circulation road and adjacent parking bays.

The design in this area will be in accordance with requirements set out in the TIA report.

## 6. CONCLUSIONS

Stage 1A of development will generate some 20 vehicles/day and 2-4 vehicles/hour during business hours. No operational of safety issues will arise at the access road junction on the Tasman Highway with this low turning traffic volume.

The junction of the access road with the Tasman Highway will be constructed to the standard required for the traffic which will be generated by the full village development.

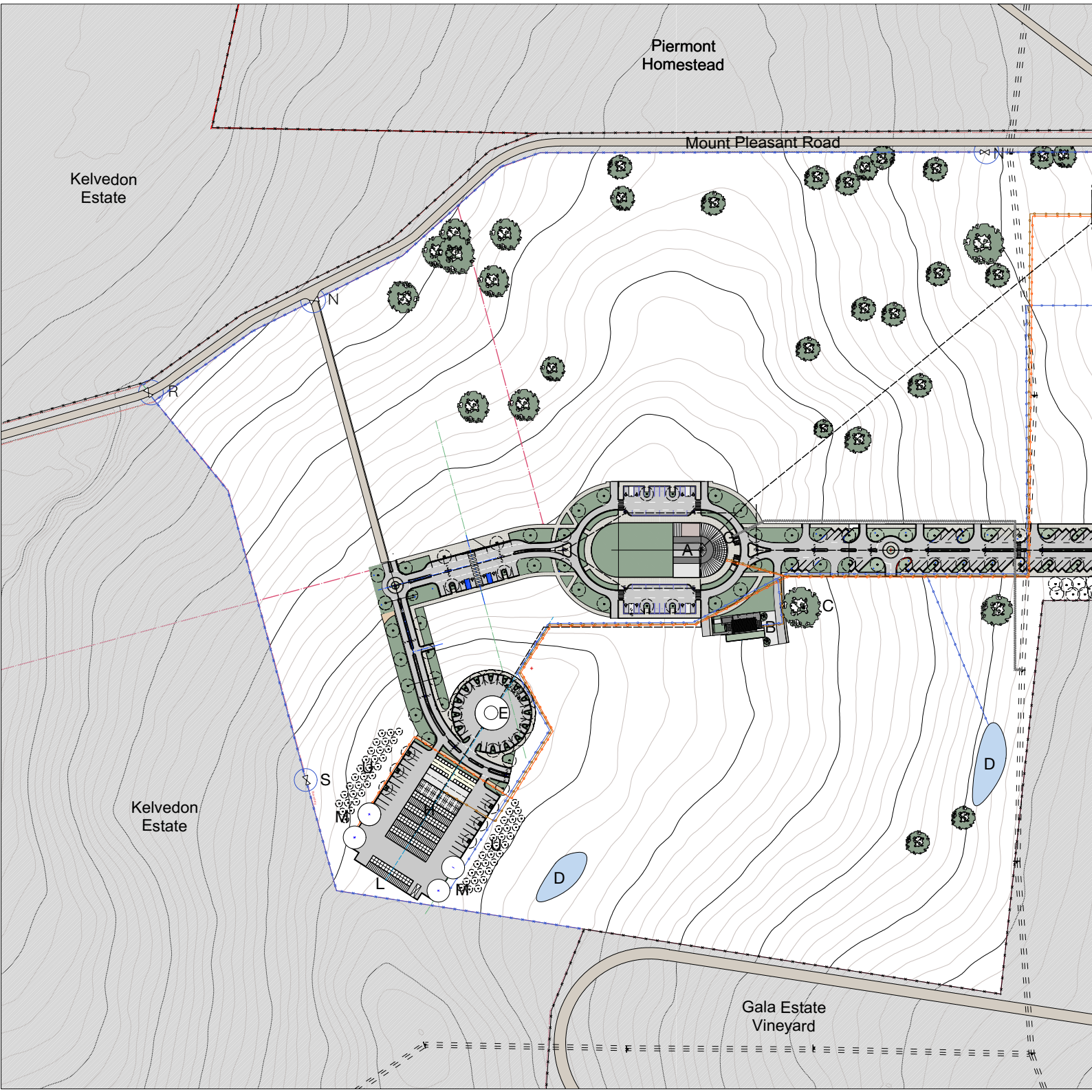
Measurements have determined the required sight distances are available along the Tasman Highway within the road reserve for the 85th percentile approach vehicle speeds (with the minor tree *branch removal).*

The internal access road from the Tasman Highway will consist of a divided two lane two-way road (3m wide lanes) to the 'Enclave', with some standard parking for the few vehicles that will be visiting the site.

The proposed development of Stage 1A together with the construction of the junction of the access road on the Tasman Highway will not create any adverse traffic impacts.

ATTACHMENT A

Drawing detailing proposed Stage 1A development


Piermont
Homestead
Mount Pleasant Road
Kelvedon
Estate
Kelvedon
Estate
Gala Estate
Vineyard
A
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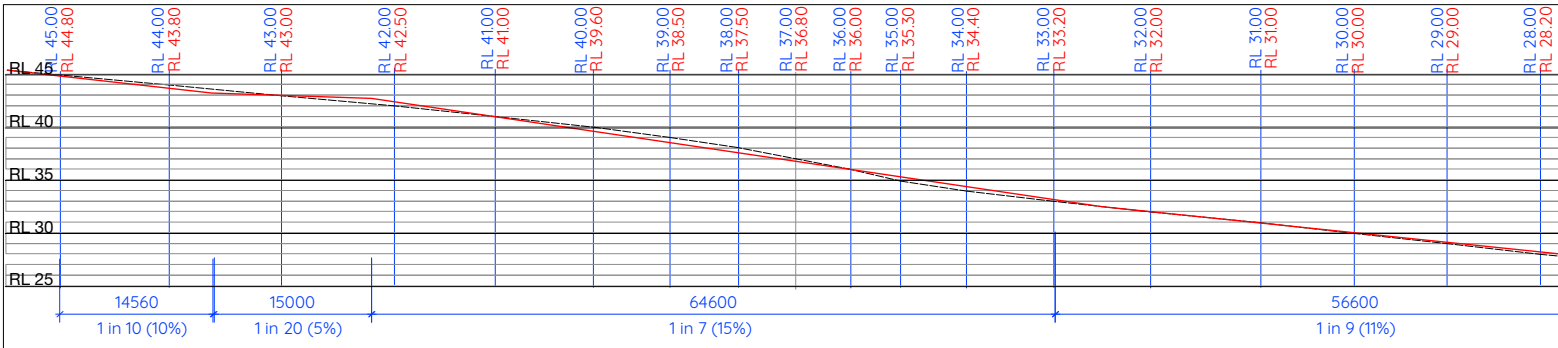
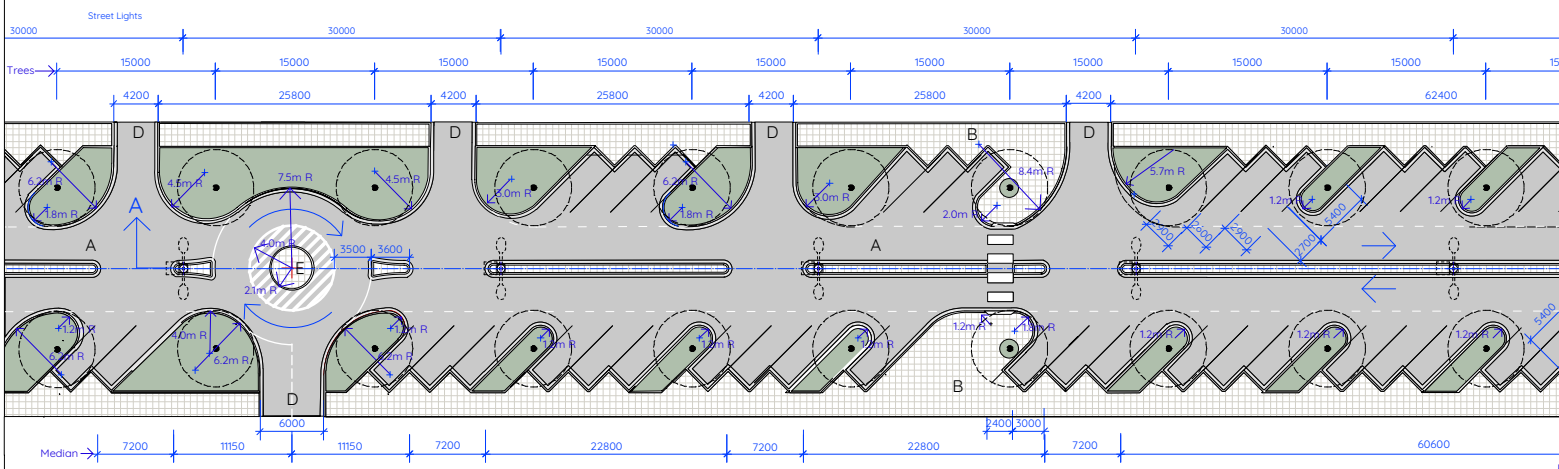



SECTION AA

Proposed Road Level

Scale 1:250 @ A1 / 1:500 @ A3

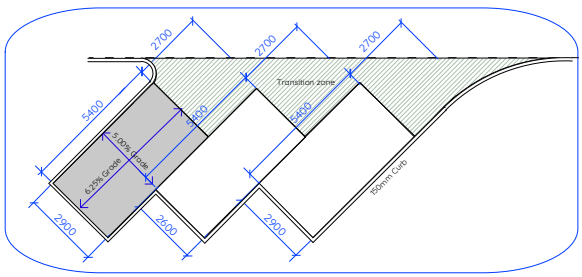



PLAN

Scale 1:250 @ A1 / 1:500 @ A3

Boundary

Refer TRP1 DA02 ENCL




Typical Parking Bay

Scale 1:250 @ A1 / 1:500 @ A3

TEMPUS

Swansea, Tasmania

Contacts:

John Lewis
Board of Architects of Tas. No. 1134
Caliban Consulting Pty Ltd
P: GPO Box 1250, Hobart, Tasmania, 7018
E: john.lewis@vetica.net
M: 0418 445 313

Drawing

No.: TRP1 DA02
Date: 14 Aug 2020
Scale: 1:250 @ A1
1:500 @ A3

Drawing

No. Date Revision

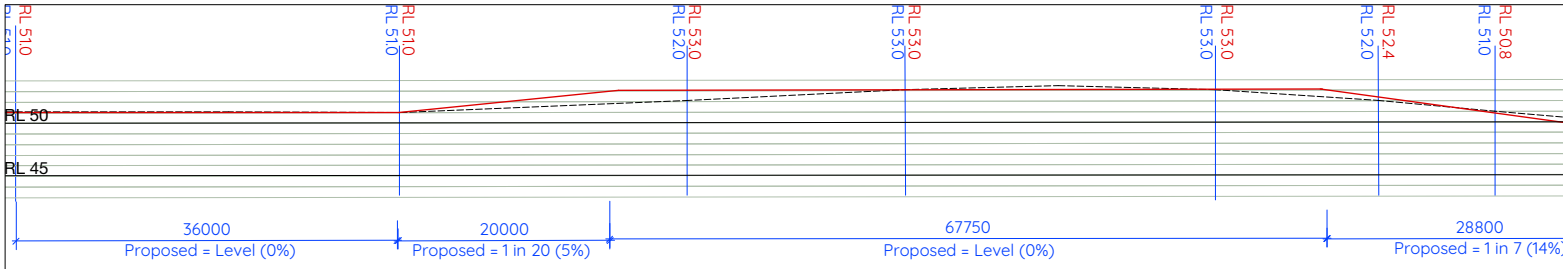
# Road Layout

## Entry Drive

vA

Key

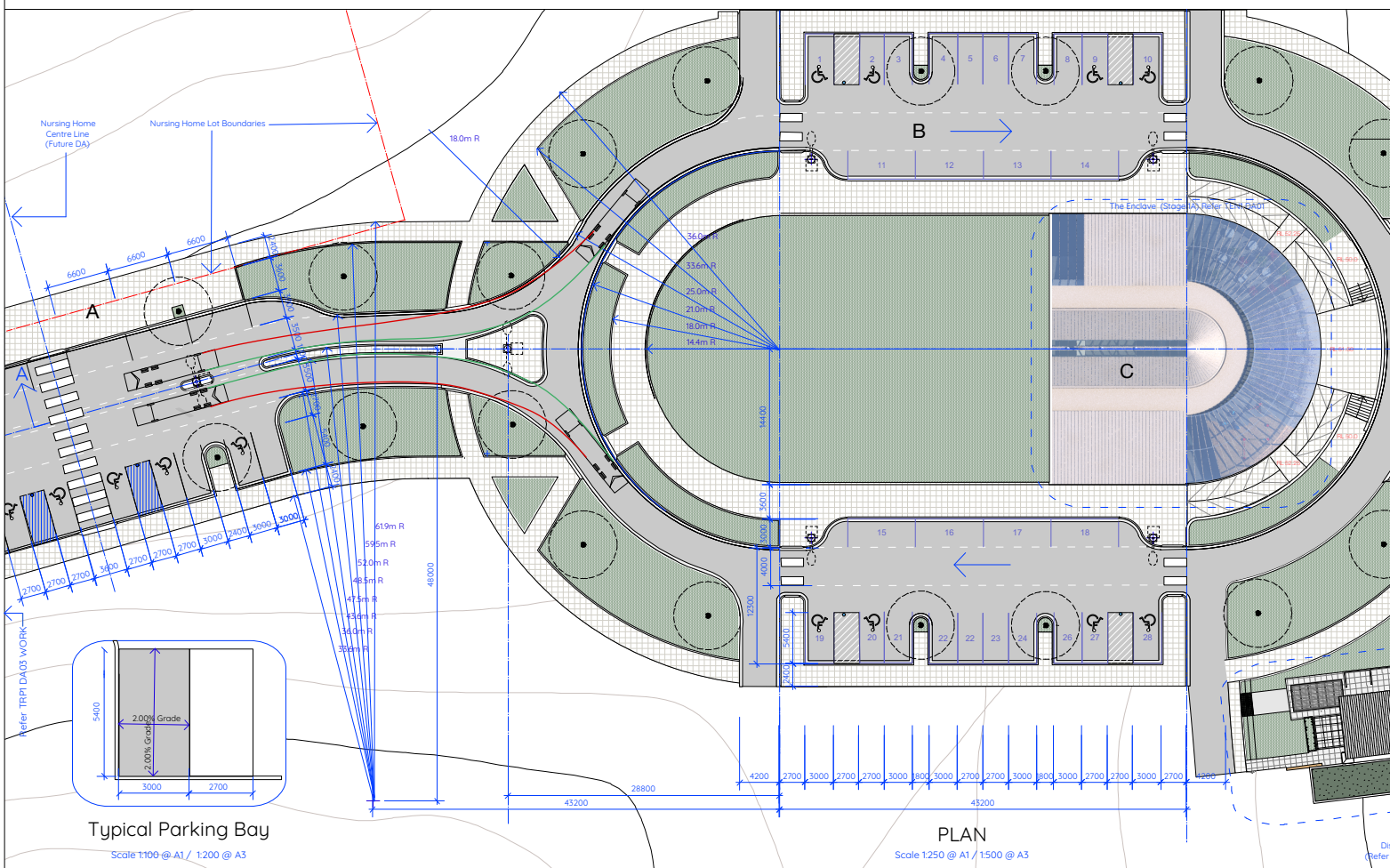
A. Bitumen Road Seal
B. Concrete Footpath
C. Entry Sign (See TRP1 DA04)
D. Future Road Connections
E. 'Drive-over' Roundabout
F. Interim Cattle Grid




SECTION AA

Proposed Road Level

Scale 1:250 @ A1 / 1:500 @ A3

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P: GPO Box 1250, Hobart, Tasmania, 7018
E: john.lewis@vetica.net
M: 0418 445 313

Drawing

No.: TRP1 DA02
Date: 31 July 2020
Scale: 1:250 @ A1
1:500 @ A3

# Road Layouts

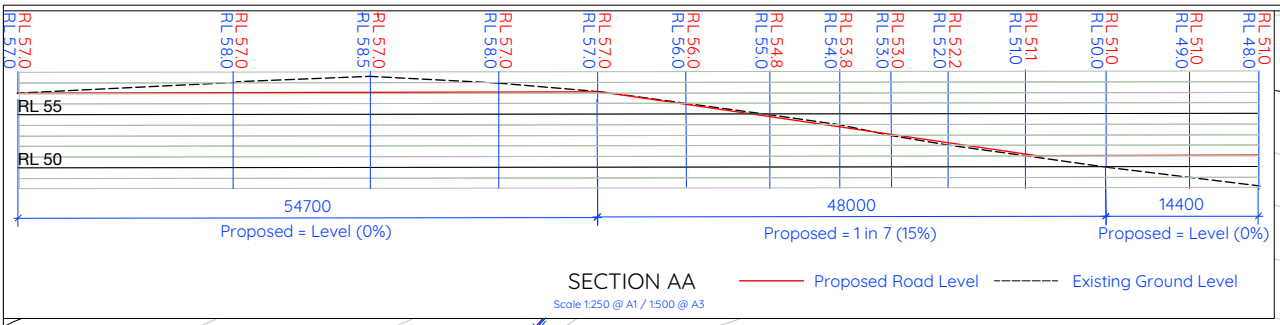
## The Enclave Environs

(Stage 1A)

vC

Key

A. Concrete Pavers
B. Bitumen Surface
C. Stage 1 of The Encalve
D. Display Home
E. Existing Eucalypt Tree Retained




SECTION AA

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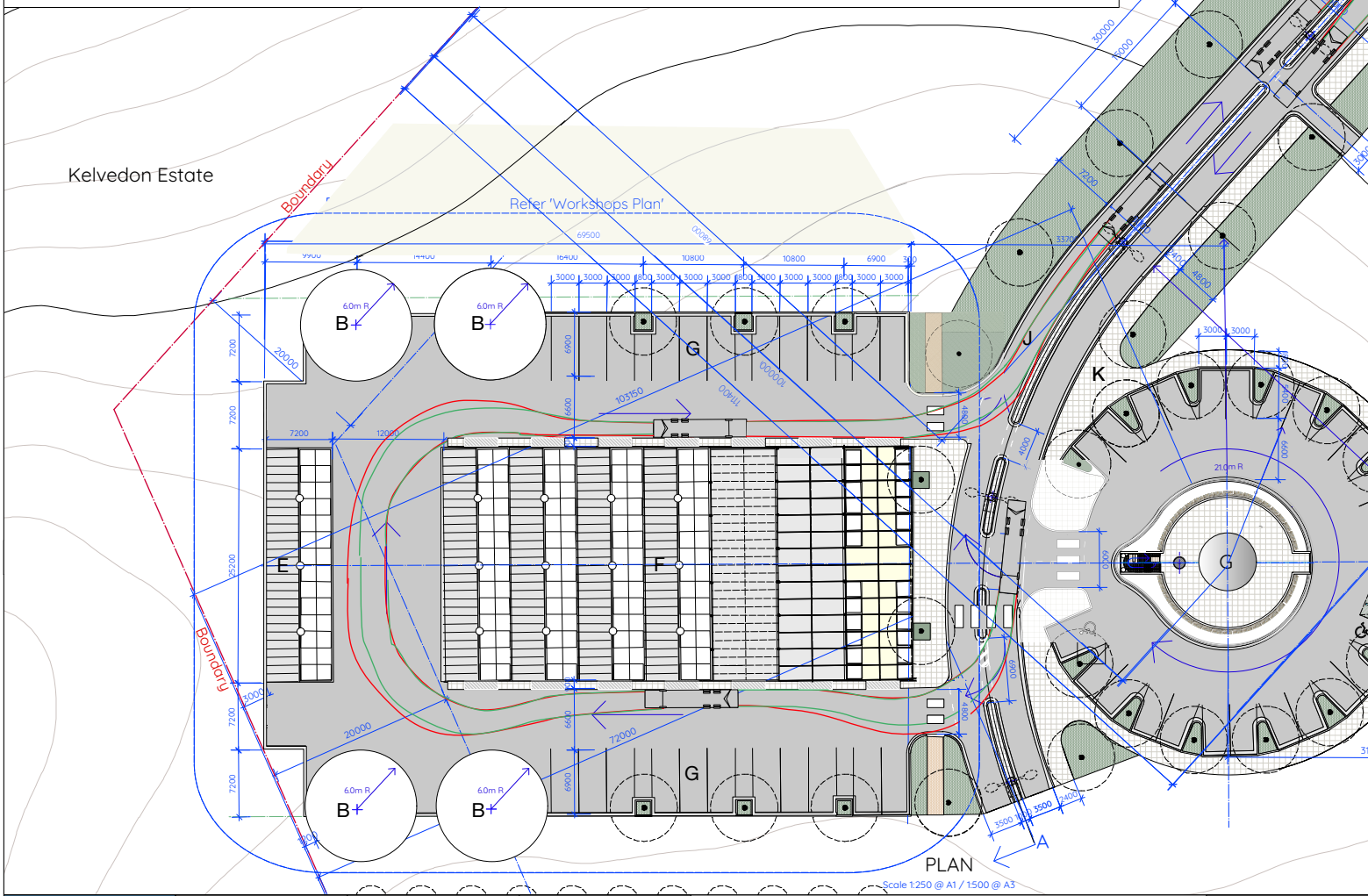
Proposed Road Level ------- Existing Ground Level




PLAN

Scale 1:250 @ A1 / 1:500 @ A3

TEMPUS

Swansea, Tasmania

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Board of Architects of Tas. No. 1134
Caliban Consulting Pty Ltd
P: GPO Box 1250, Hobart, Tasmania, 7018
E: john.lewis@vetica.net
M: 0418 445 313

Drawing

No.: TRP1 DA02
Date: 14 Aug 2020
Scale: 1:250 @ A1
1:500 @ A3

Drawing

No. Date Revision

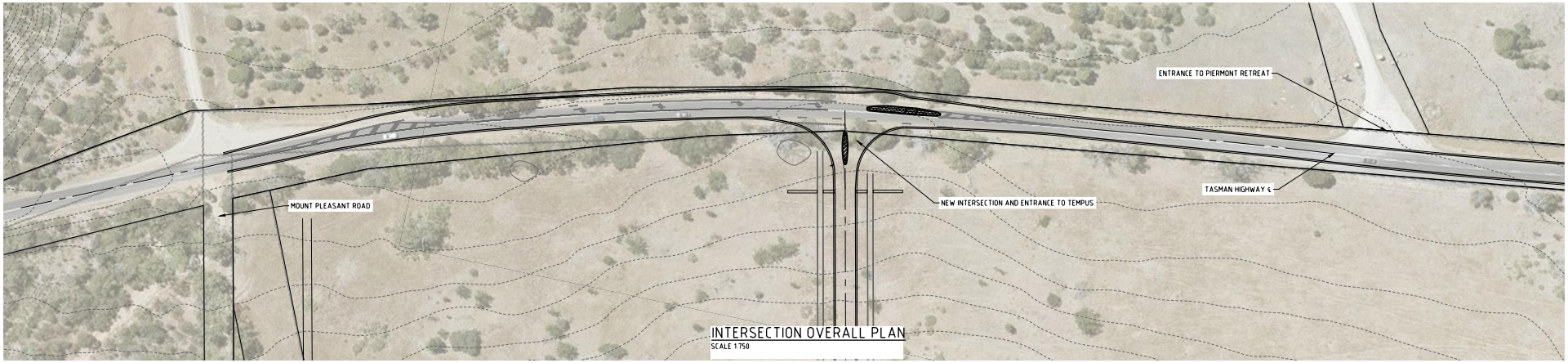
# Road Layout

## Works Area

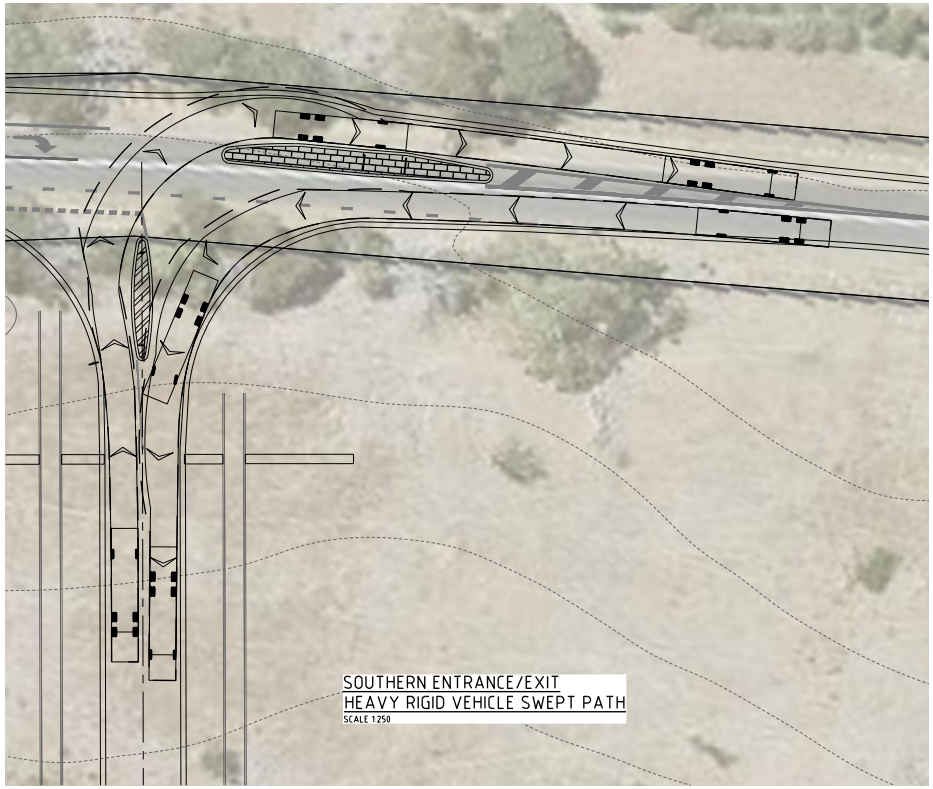
vA

Key

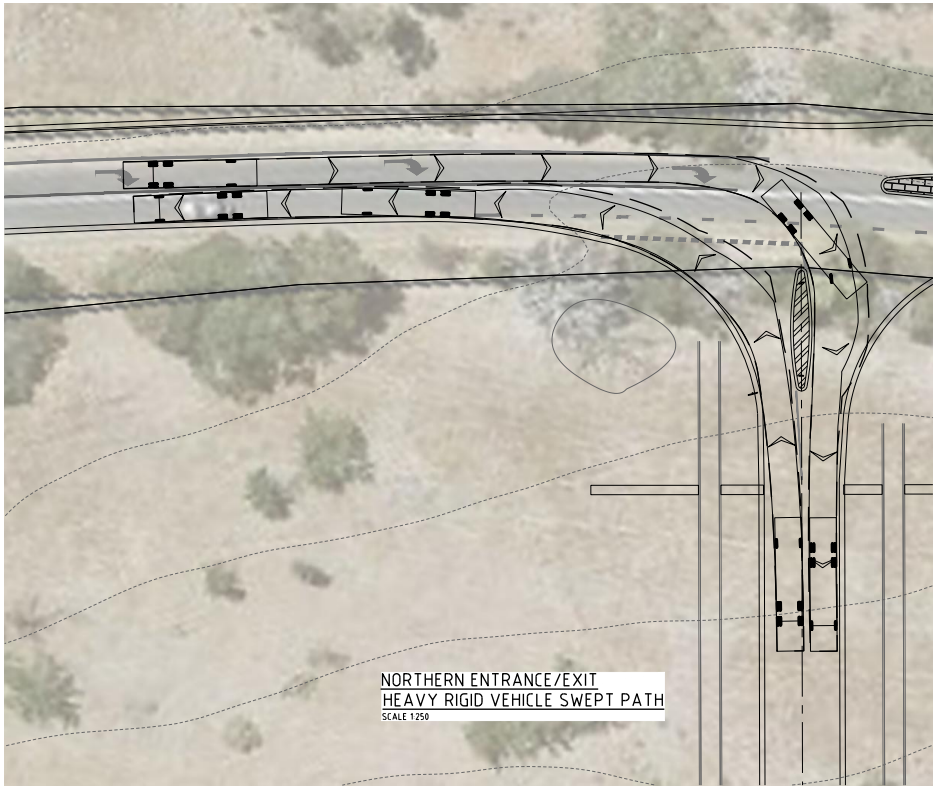
A. Orchard (See Landscape Plan)
B. Concrete RW Tanks
C. LPG Tank
D. Boiler Unit
E. Equipment Carport
F. Workshops
G. Observatory on Header Tank
H. 'Drive-over' Roundabout
J. Bitumen Surface
K. Concrete Pavement
L. Woodchip Horse Trail




INTERSECTION OVERALL PLAN
SCALE 1:750



SOUTHERN ENTRANCE/EXIT
HEAVY RIGID VEHICLE SWEPT PATH
SCALE 1:250



NORTHERN ENTRANCE/EXIT
HEAVY RIGID VEHICLE SWEPT PATH
SCALE 1:250

| REV | DESCRIPTION | APP'D | DATE |
|---|---|---|---|
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| A | PLANNING APPROVAL | AC | 15.10.2019 |

| REV | DESCRIPTION | APP'D | DATE |
|---|---|---|---|

THIS DRAWING HAS NOT BEEN APPROVED FOR CONSTRUCTION

North

GANDY AND ROBERTS CONSULTING ENGINEERS
159 DAVEY ST, HOBART
TASMANIA, AUSTRALIA 7000
www.gandyandroberts.com.au
mail@gandyandroberts.com.au
ph 03 6223 8877 fx 03 6223 7183

TEMPUS - FREYCINET
LOT 50 TASMAN HIGHWAY
SWANSEA TASMANIA 7190
DRAWING TITLE
INTERSECTION OVERALL PLAN

0 50mm

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| 1:750@A1 | SC | SC | AC |

| PROJECT | DRAWING | REVISION |
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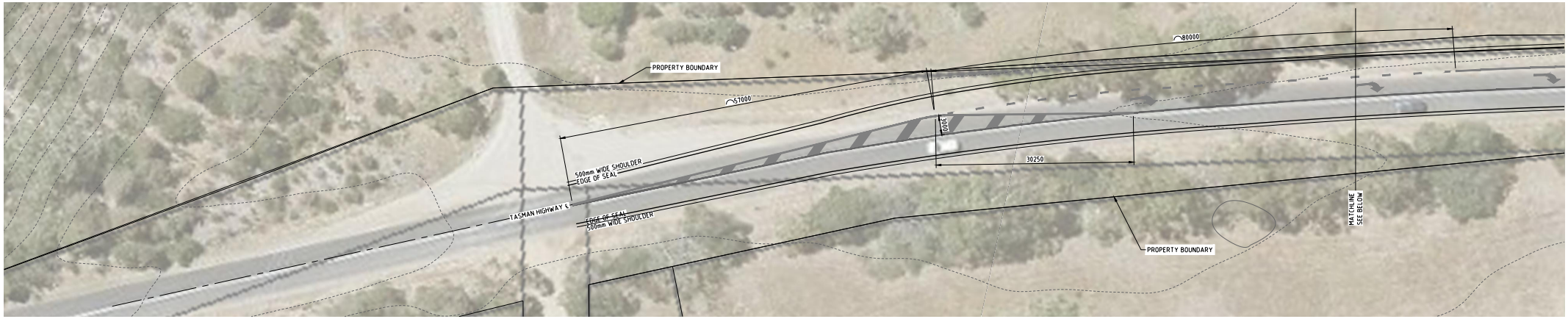


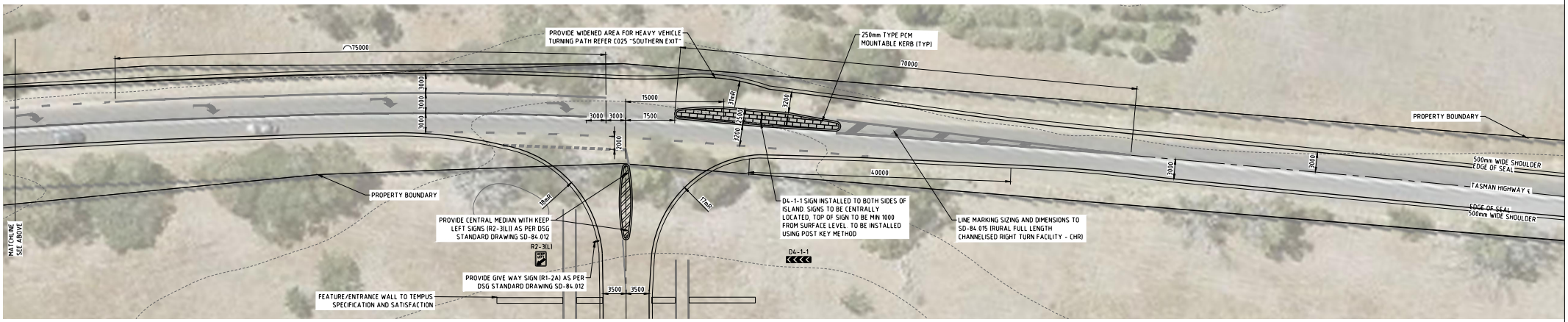


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mail@gandyandroberts.com.au
ph 03 6223 8877 fx 03 6223 7183

TEMPUS - FREYCINET
LOT 50 TASMAN HIGHWAY
SWANSEA TASMANIA 7190
DRAWING TITLE
INTERSECTION LAYOUT PLAN

0 50mm

| SCALE | DESIGNED | DRAWN | CHECKED |
|---|---|---|---|
| 1:300@A1 | SC | SC | AC |

| PROJECT | DRAWING | REVISION |
|---|---|---|
| 19.0291 | C026 | B |

Parking Requirements

| **Stage 1A** | | **The Enclave** | | **Display** | **Works** | **Required** | **Proposed** | **Diff** |
|---|---|---|---|---|---|---|---|---|
| | | **Café** | **Offices** | **Home** | **Area** | **Totals** | **Totals** | |
| **Area** | (m2) | 80 | 100 | 130 | 900 | | | |
| **Cars** | **Staff** | | 1/30m$^2$ | 1/30m$^2$ | 1/50m$^2$ | | | |
| | **Visitor** | 1/100m$^2$ | | | | | | |
| | **Subtotal Cars** | 1 | 4 | 5 | 18 | **28** | **125** | **97** |
| | **+ Disabled** | 1 | 1 | 1 | 1 | 4 | 14 | 10 |
| **Motorbikes** | | 1/20 Cars | 1/20 Cars | 1/20 Cars | 1/20 Cars | | | |
| | **Subtotal MBs** | 0 | 0 | 0 | 0 | **0** | **0** | **0** |
| **Bicycles** | **Staff** | 1/100m$^2$ | 1/250m$^2$ | 1/500m$^2$ | 1/1,000m$^2$ | | | |
| | **Visitor** | 1/200m$^2$ | 0 | 0 | N/A | | | |
| | **Subtotal Bikes** | 2 | 1 | 1 | 1 | **5** | **5** | **0** |