

## Land Use Planning and Approvals Act 1993

APPLICATION NO.

SA2024/011

LOCATION OF AFFECTED AREA

**80 POSSUM ROAD, BRIDGEWATER** 

DESCRIPTION OF DEVELOPMENT PROPOSAL

**SUBDIVISION (3 LOTS PLUS BALANCE)** 

A COPY OF THE DEVELOPMENT APPLICATION MAY BE VIEWED AT <a href="https://www.brighton.tas.gov.au">www.brighton.tas.gov.au</a> AND AT THE COUNCIL OFFICES, 1 TIVOLI ROAD, OLD BEACH, BETWEEN 8:15 A.M. AND 4:45 P.M, MONDAY TO FRIDAY OR VIA THE QR CODE BELOW. ANY PERSON MAY MAKE WRITTEN REPRESENTATIONS IN ACCORDANCE WITH S.57(5) OF THE LAND USE PLANNING AND APPROVALS ACT 1993 CONCERNING THIS APPLICATION UNTIL 4:45 P.M. ON 15/09/2025. ADDRESSED TO THE CHIEF EXECUTIVE OFFICER AT 1 TIVOLI ROAD, OLD BEACH, 7017 OR BY EMAIL

AT

development@brighton.tas.gov.au.

REPRESENTATIONS SHOULD INCLUDE A DAYTIME TELEPHONE NUMBER TO ALLOW COUNCIL OFFICERS TO DISCUSS, IF NECESSARY, ANY MATTERS RAISED.

GILLIAN BROWNE Acting Chief Executive Officer







HC

for DAVID HAZELL

EN/MK

23/05/2025

TURNING CIRCLE ADDED

PLAN OF SUBDIVISION

### **PLAN OF SUBDIVISION**

**Owners** R.G. Hazell Pty. Ltd. David Hazell Pty Ltd

Title References FR 159938/4

Address 80 Possum Road Bridgewater

**Brighton Council** 

Tasmanian Planning scheme Brighton Local Provisions Schedule

19.0 General Industrial

Code Overlay 9 Attenuation Code/Bridgewater Quarry 13 Bushfire-prone Area BRI-S4.0, BRI-S10.0,

3511316

Point of interest GDA2020 MGA55 59752E, 5270805N

Schedule of Easements Proposed Rights of Way as shown. Proposed Drainage Easement 6.00 wide

### NOTES

This plan has been prepared only for the purpose of obtaining preliminary subdivision approval from the Council and the information shown hereon should be used for no other purpose. All measurements and areas are subject to final survey.

All lots shown on plan cannot be serviced by water and sewer. On site treatment for sewer is required.

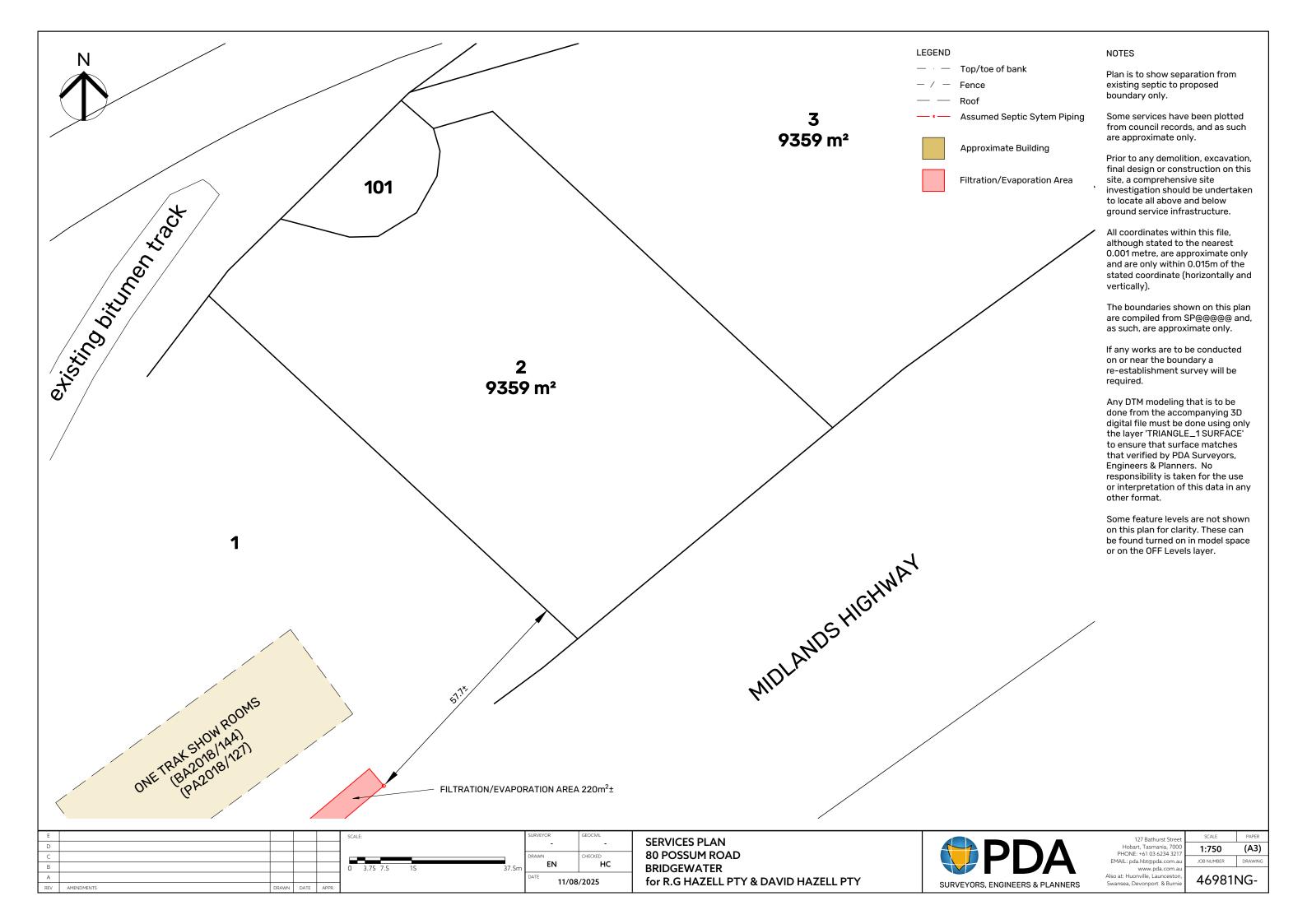
Water tanks are required for firefighting purposes.

The Site is covered in its entirety by the Codes listed above and have not been shown for clarity.



127 Bathurst Stree Hobart, Tasmania, 700 PHONE: +61 03 6234 321 FAX: +61 03 6234 5085 EMAIL: pda.hbt@pda.com.au www.pda.com.

1:1500 (A3) JOB NUMBER 46981NG-1g



	DRAWING LIST	
DRAWING NUMBER	DRAWING TITLE	REVISION
001	COVER SHEET	A
002	PROJECT NOTES	А
003	TYPICAL DETAILS	A
100	OVERALL SITE PLAN	А
101 - 102	ROADS & STORMWATER DETAIL PLAN	А
200	ROAD 1 LONG SECTION	A
201	ROAD 1 CUL DE SAC PLAN & LONG SECTION	А
202	ROAD 1 KERB RETURN PLAN & LONG SECTION	А
210 - 212	V-DRAIN LONG SECTION	А
300 - 302	ROAD 1 CROSS SECTIONS	А
310 - 311	V-DRAIN CROSS-SECTIONS	А
400 - 403	STORMWATER LONG SECTIONS	А
700	TRUCK TURNING PATHS FOR LOT 2	А
900	STREET LIGHTING DETAIL PLAN	А

BRIGI	HTON COU	NCIL SUBMISSIONS - SA3035/00011
REV	DATE ISSUED	DESCRIPTION
PRELIM	14/08/2024	-
А	-	-

## **ONETRAK** 80 POSSUM ROAD, BRIDGEWATER **4 LOT INDUSTRIAL SUBDIVISION**





		PRO	OJECT ST	ATUS		
REV	DATE ISSUED	DRAWN BY	AMENDED BY	CHECKED BY	COUNCIL SUBMISSION	TASWATER SUBMISSION
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Α	8/08/2025	FM	-	MW	-	-

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Α	COUNCIL RAI RESPONSE (DATED 30.06.2025)	FM	8/08/2025	MW	GDA2020 GIND	JOB MANAGER: CRAIG	TERRY
REV	AMENDMENTS	DRAWN	DATE	APPR.	THIS SHEET MAY BE PRINTED USING COLOUR AND MAY BE INCOMPLETE IF COPIED	ISSUED DATE: 25/0	7/2024

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JOB MANAGER: CRAIG	TERRY	l

ONETRAK
4 LOT SUBDIVISION
80 POSSUM ROAD
COVER SHEET

	127 Bathurst Street	CONTRACT NO.	SCA	LE	PAPER
	Hobart, Tasmania, 7000 PHONE: +61 03 6234 3217 EMAIL: pda.hbt⊚pda.com.au		1: N	ITS	(A3)
	www.pda.com.au	JOB NUMBER	DISCIPLINE	SHEET	REVISION
SURVEYORS, ENGINEERS & PLANNERS	Also at: Kingston, Launceston & Burnie	14091NIC		001	٨

#### **GENERAL NOTES:**

- NO ATTEMPT HAS BEEN MADE TO LOCATE ALL SERVICES. ONLY THOSE SERVICES CONSPICUOUS DURING FIELD SURVEYS ARE SHOWN. PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE, THE RELEVANT AUTHORITY(S) SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICE AND DETAILED LOCATIONS OF ALL
- 2. ALL DIMENSIONS AND LOT SIZES SUBJECT TO FINAL SURVEY.
- 3. REFER IPWEA LGAT SPECIFICATIONS, TASMANIAN STANDARD DRAWINGS ISSUED - 03 DECEMBER 2020

TSD-G01.v3 - TRENCH REINSTATEMENT FLEXIBLE PAVEMENTS

TSD-G02.v3 - URBAN ROADS - TYPICAL SERVICE LOCATIONS

TSD-R01.v3 - RURAL ROADS UNSEALED

TSD-R02.v3 - RURAL ROADS SEALED

TSD-R03.v3 - RURAL ROADS - TYPICAL DRIVEWAY ACCESS

TSD-R04.v3 - RURAL ROADS - TYPICAL DRIVEWAY PROFILE

TSD-R05.v3 - TRUCK ACCESS TO RURAL PROPERTIES 'TYPE A'

TSD-R06.v3 - URBAN ROADS - TYPICAL SECTIONS & PAVEMENT WIDTHS

TSD-R09.v3 - URBAN ROADS - DRIVEWAYS

TSD-R11.v3 - URBAN ROADS - FOOTPATHS

TSD-R12.v3 - SUB SOIL DRAINS - CONSTRUCTION DETAILS

TSD-R13.v3 - SUBSOIL DRAINS PIT CONNECTION - TYPE FD TSD-R14.v3 - CONCRETE KERBS & CHANNELS DIMENSIONS

TSD-R15.v3 - CONCRETE KERBS & CHANNELS CONSTRUCTION DETAILS

TSD-R16.v3 - CONCRETE KERBS & CHANNELS VEHICULAR CROSSINGS

TSD-R18.v3 - CONCRETE KERBS & CHANNELS ACCESS RAMPS

TSD-R26 v3 - DELINEATORS

TSD-R28.v3 - W-BEAM - INSTALLATION DETAILS

TSD-SW01.v3 - PIPE INSTALLATION ANCHOR BLOCKS

TSD-SW02.v3 - MANHOLES - 100-600 DIA. PIPES - GENERAL ARRANGEMENTS

TSD-SW03.v3 - MANHOLES - 100-600 DIA. PIPES - BENCHING DETAILS

TSD-SW09.v3 - SIDE ENTRY PITS - 'TYPE 3'

TSD-SW11.v3 - SIDE ENTRY PITS - KERB TRANSITIONS

TSD-SW15.v3 - STORMWATER - 'GP

TSD-SW17.v3 - OUTLET HEADWALLS 300 - 600 DIA PIPES

TSD-SW25.v3 - STORMWATER PROPERTY CONNECTIONS TO MAINS

TSD-SW26.v3 - SADDLE CONNECTION TO STORMWATER DRAIN TSD-SW27.v3 - REPAIRS/ NEW CONNECTION TO STORMWATER DRAIN

TSD-SW28.v3 - GUIDELINES FOR SEDIMENT CONTROL

TSD-RF04.v3 - NATURE STRIP DETAILS

- 4. CONSTRUCTION TO COMPLY WITH WSAA SEWERAGE CODE OF AUSTRALIA (MELBOURNE RETAIL WATER AGENCIES EDITION) - WSA 02-2014-3.1 v3 AND TASWATER SUPPLEMENT TO THE CODE
- 5. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE TASMANIAN SUBDIVISION GUIDELINES (VERSION 1.0, DATED OCTOBER 2013) UNLESS
- 6. ALL CONNECTIONS TO EXISTING SEWER AND WATER MAINS TO BE CARRIED OUT BY TASWATER OR APPROVED CONTRACTOR AT DEVELOPER'S COST UNLESS APPROVED OTHERWISE.

#### **SURVEY NOTES:**

- 1. DATUM: XXXX
- PLANAR OR GRID: GDA 2020 GRID
- SITE CONTROL: XXXX
- SURVEYED BY: F.N XXXX
- ACCURACY OF SURVEY:
- ACCURACY/STATUS OF EXISTING
- & FUTURE PROPERTY BOUNDARIES: XXXX

#### **ROADS & STORMWATER NOTES:**

- ALL STORMWATER LOT CONNECTIONS TO BE DN150 UNLESS OTHERWISE NOTED.
- ALL STORMWATER LINES DN300 PVC-U SN8 OR EQUIVALENT UNLESS NOTED OTHERWISE
- ALL FOOTPATHS TO BE N25 CONCRETE 100mm THICK, SL72 CENTRAL, 100 x 20 FCR BASE.
- 4. 2 x 65 DIA WEEPHOLES TO BE PLACED IN ALL STORMWATER SIDE ENTRY PITS AND MANHOLES WITH NO SUBSOIL DRAIN CONNECTIONS.
- 5. ALL STORMWATER BRANCHES TO TERMINATE AT PROPERTY BOUNDARIES WITH AN INSPECTION OPENING RAISED TO SURFACE WITH AN APPROVED COVER 1m INSIDE PROPERTY BOUNDARY.
- 6. ALL LOT CONNECTIONS TO BE CONSTRUCTED IN THE POSITION SHOWN UNLESS APPROVED BY THE SUPERINTENDENT
- FINAL POSITION AND WIDTH OF ALL DRAINAGE EASEMENTS IS TO BE DETERMINED FOLLOWING CONSTRUCTION.
- 8. EXTENT OF ROADWORKS SHOWN SHADED.
- 9. ALL FILL AREAS TO BE PLACED AND COMPACTED PRIOR TO TRENCH EXCAVATION.
- 10.PROVIDE TRAFFICABLE LIDS TO CONNECTIONS IN TRAFFICABLE AREAS INCLUDING DRIVEWAYS.
- 11. ALL DRIVEWAYS TO HAVE MAXIMUM GRADE 20% OUTSIDE LOT BOUNDARIES AND 25% INSIDE LOT BOUNDARIES AND CONSTRUCTED AS PER TSD-R09 V3.
- 12. PROVIDE MINIMUM 150mm CLEARANCE FROM TOP OF ROD EYES TO SURFACE COVER LID.

#### STORMWATER LONG SECTION NOTES:

- 1. ALL EXCAVATION OVER 1.5m IN DEPTH MUST BE CARRIED OUT IN ACCORDANCE WITH WORKPLACE SAFETY STANDARDS CODE OF PRACTICE FOR EXCAVATION WORK
- 2. COMPACTED FCR BACKFILL UNDER ROADS & DRIVEWAYS
- ALL ANCHOR BLOCKS (CONCRETE BULKHEADS) ARE TO BE KEYED INTO UNDISTURBED, COMPETENT MATERIAL TO ENSURE THE MIGRATION OF BEDDING AND BACKFILL MATERIAL IS REDUCED AND THE INTEGRITY OF THE PIPE IS MAINTAINED.
- 4. TRENCHES >10% ARE TO HAVE CONTINUOUS DRAINAGE PATH INSTALLED TO ENSURE WATER THAT HAS MIGRATED INTO THE TRENCH IS CARRIED TO THE RETICULATED SYSTEM. REFER TSD-SW01.
- 5. ALL FILL TO BE PLACED & COMPACTED PRIOR TO TRENCH FXCAVATION
- 6. FILL IN EXCESS OF 300mm DEPTH TO BE COMPACTED TO 95% STANDARD DENSITY (AS 1289E4.01) IN 150mm MAX LAYERS.
- PROVIDE MINIMUM 150mm CLEARANCE FROM TOP OF ROD EYES TO SURFACE COVER LID.

#### NATURE STRIP NOTES:

- 1. APPLY 100mm THICK 20mm SCREENED LOAM TO NATURE STRIP & APPLY GRASS SEED AS PER TSD-RF04-v3.
- 2. NATURE STRIPS TO BE WATERED & MAINTAINED INCLUDING WEED REMOVAL & MOWING THROUGHOUT THE MAINTENANCE PERIOD.
- 3. FOR FILL BATTERS, BENCH AS SHOWN AND PLACE APPROVED FILL IN 300mm LAYERS COMPACTED TO 95% MAX DRY DENSITY. FILL TO BE PLACED & COMPACTED PRIOR TO TRENCH EXCAVATION.
- 4. MATERIAL TO BE PLACED AND COMPACTED UNIFORMLY IN LAYERS ACROSS THE EMBANKMENT NO GREATER THAN 300mm TO ACHIEVE 95% MDD. FOR FILL BATTERS, BENCH AS

#### **ENGINEERED FILL NOTES:**

- 1. FILL MATERIAL FOR NEW ROAD AND FILL EMBANKMENTS MUST NOT CONTAIN ORGANIC OR OTHER MATERIALS THAT DECOMPOSE OR OTHERWISE LEAD TO LONG TERM SETTLEMENT AND TO BE APPROVED BY SUPERINTENDENT BEFORE USE.
- MATERIAL TO BE PLACED AND COMPACTED UNIFORMLY IN LAYERS UNDER NEW ROAD NO GREATER THAN 150mm TO ACHIEVE 98% MDD AND ACROSS ROAD EMBANKMENT NO GREATER THAN 300mm TO ACHIEVE 95% MDD. FOR FILL BATTERS, BENCH AS SHOWN.
- ROAD EMBANKMENT TO BE FULLY CONSTRUCTED PRIOR TO TRENCHING FOR WATER AND SEWER SERVICES.
- 4. FILL TO BE PLACED & COMPACTED PRIOR TO TRENCH EXCAVATION.
- 5. SITE FILLING THAT EXCEEDS A DEPTH OF 300mm MUST BE PLACED IN ACCORDANCE WITH THE AS3798 GUIDELINES FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS 1996. UPON COMPLETION OF THE WORKS THE CLIENTS GEOTECHNICAL ENGINEER MUST CONFIRM IN WRITING THAT THE WORKS HAVE BEEN CARRIED OUT IN ACCORDANCE WITH AS3798.

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**ONETRAK** 4 LOT SUBDIVISION 80 POSSUM ROAD **GENERAL NOTES** 

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ANAGER: CRAIG TERRY

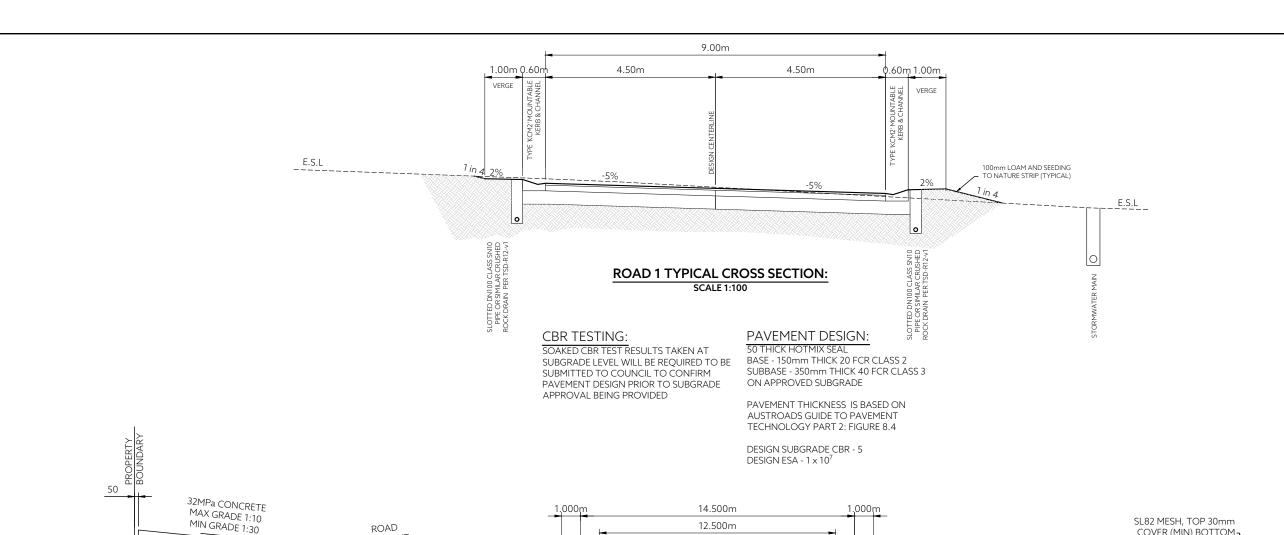
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	Launceston & Burnie

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www.pda.com.au	JOB NUMBER	DISCIPLINE	SHEET	REVISION
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1. T.O.K. DENOTES TOP OF KERB

2. WHERE THERE ARE EXPANSIVE SOILS AN ADDITIONAL LAYER OF REINFORCEMENT MAY BE REQUIRED AT 60mm COVER FROM THE BOTTOM OF THE SLAB.

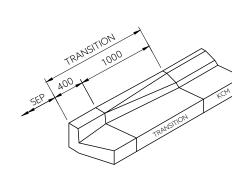
3. FOR STEEP TERRAIN CONTACT THE COUNCIL FOR GUIDANCE.

TYPICAL INDUSTRIAL DRIVEWAY CROSS SECTION:

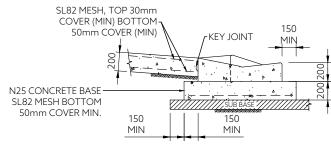
SCALE 1:20 SEE TSD-R16-V3

PAVEMENT

TYPICAL INDUSTRIAL DRIVEWAY DETAIL:



MOUNTABLE KERB TRANSITION AT SIDE ENTRY PITS: NOT TO SCALE



**TYPE KCRB & (HEAVY VEHICLES) EXTRUDED ON REINFORCED BASE:** NOT TO SCALE (TYPES KCS & KCM SIMILAR)

# 3.41m 2.10m **KERB FLAREOUT:** SCALE 1:100

MOUNTABLE KERB TRANSITION AT DRIVEWAY CROSSOVER: NOT TO SCALE

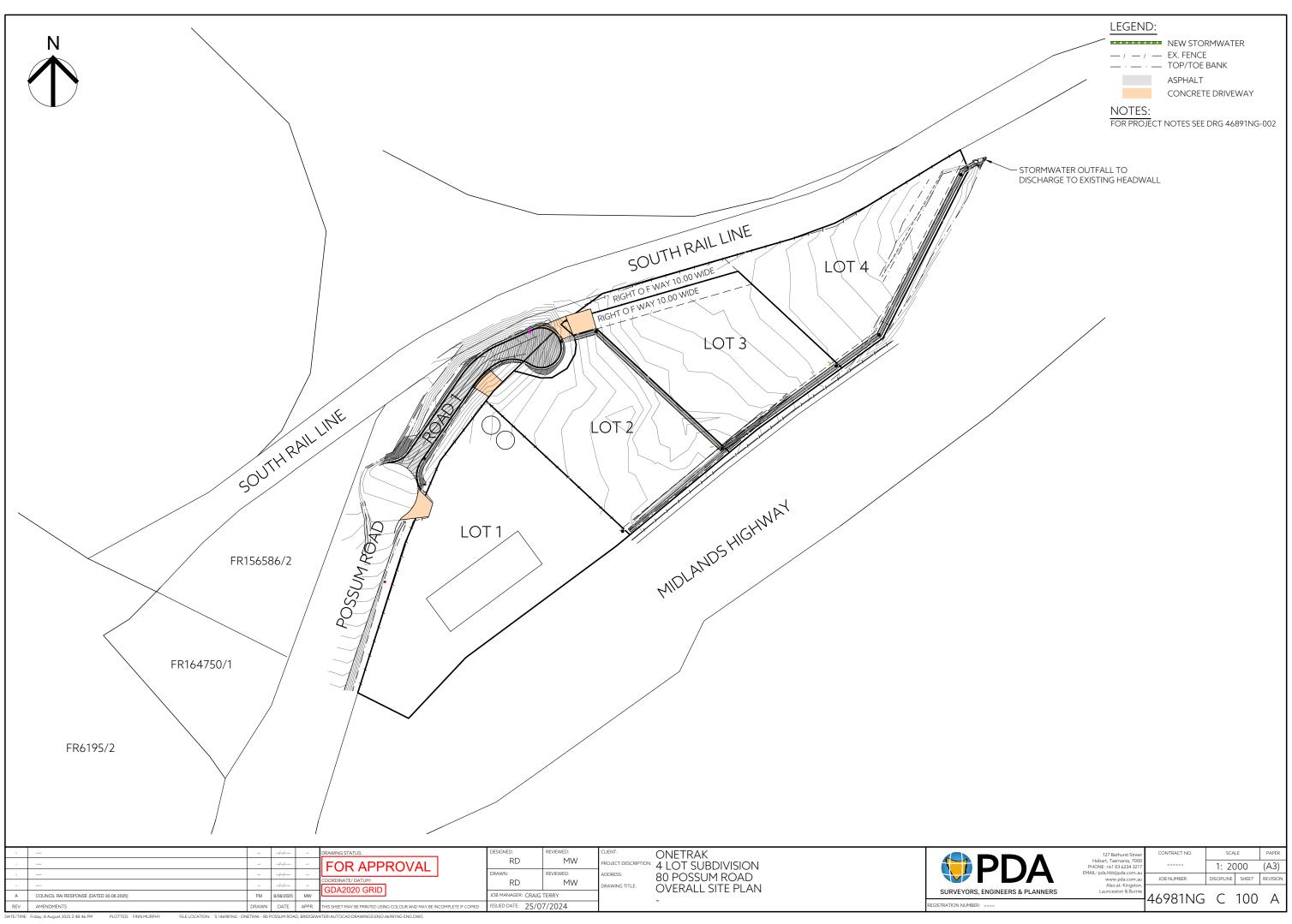
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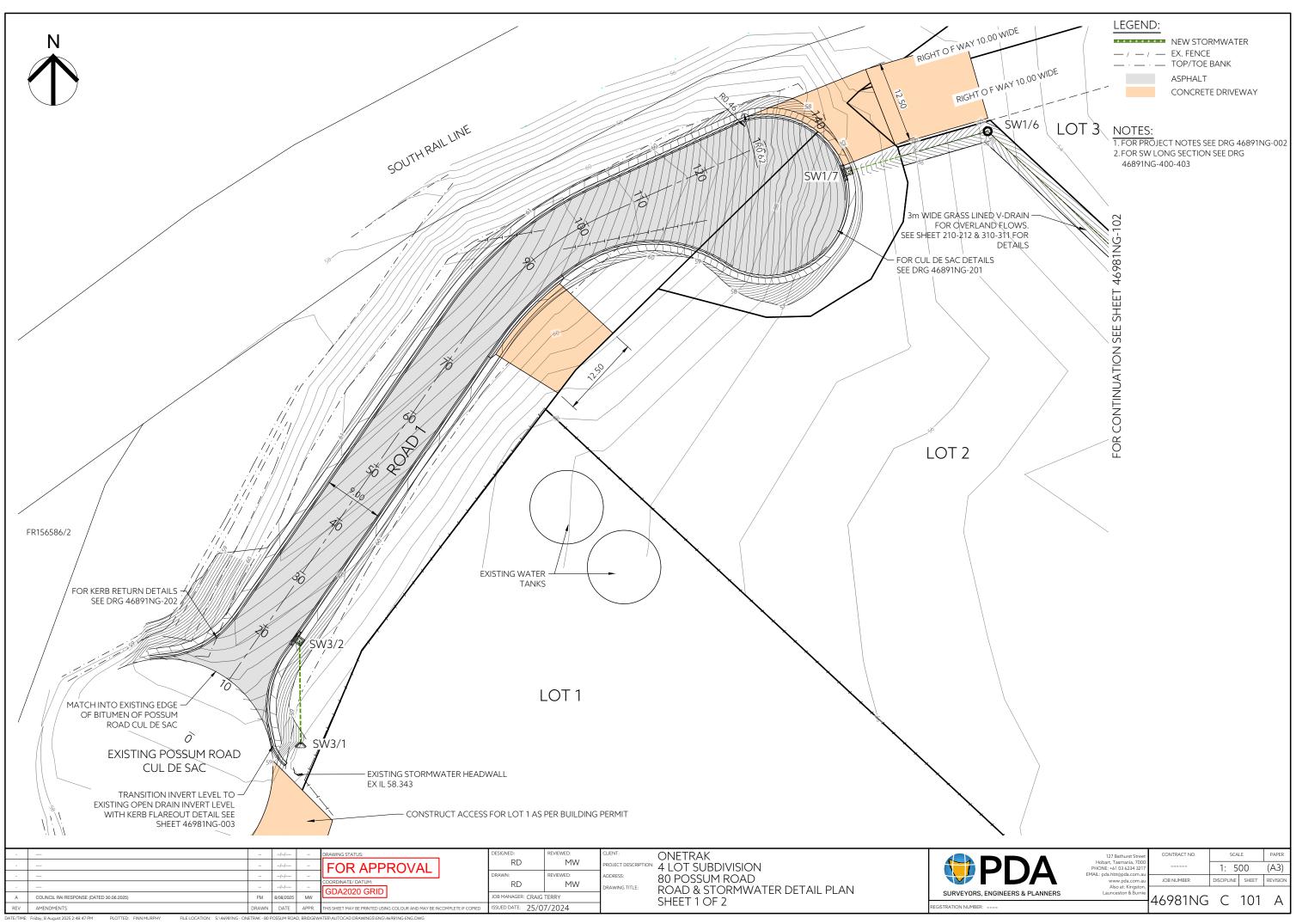
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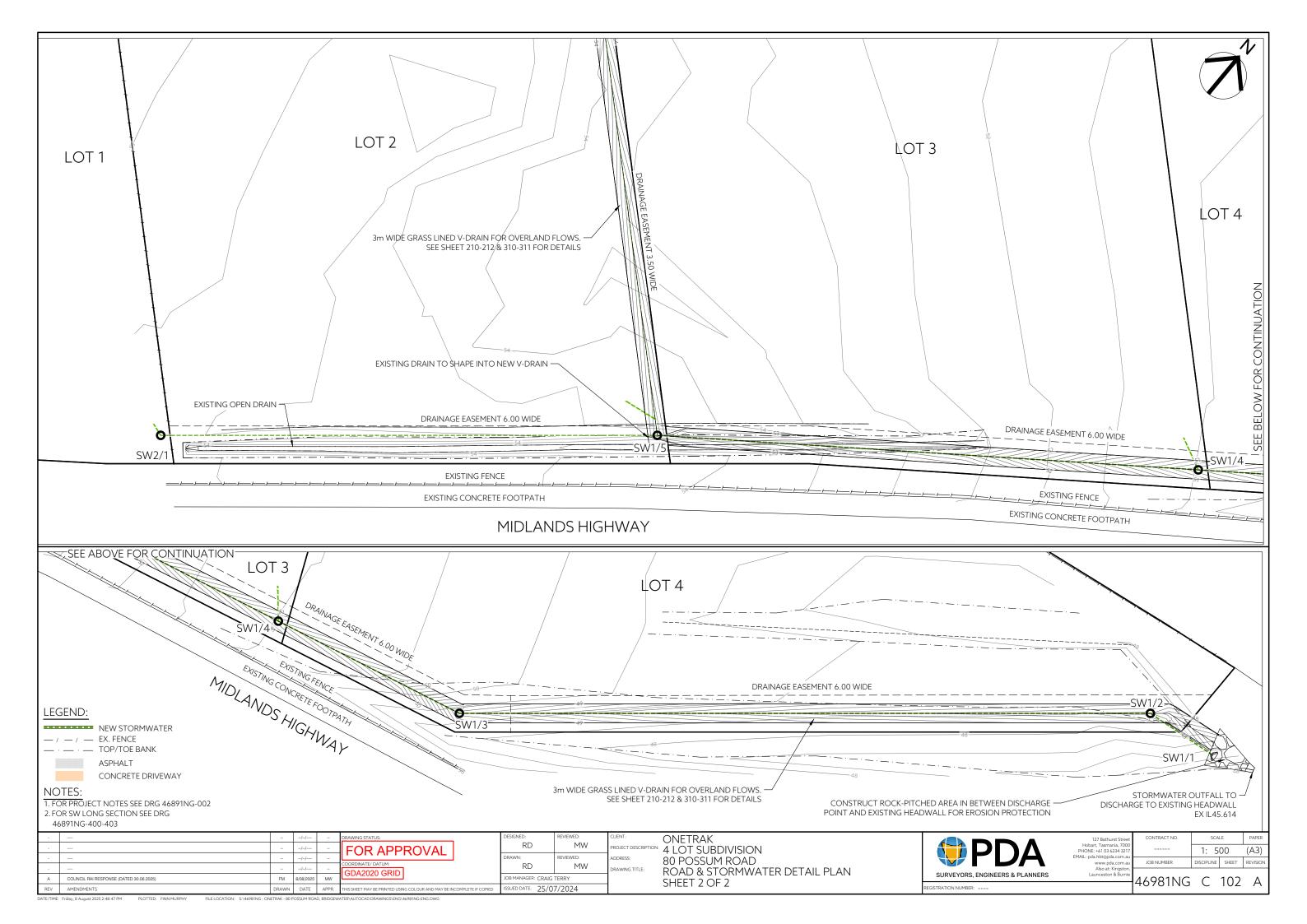
**ONETRAK** 4 LOT SUBDIVISION 80 POSSUM ROAD TYPICAL DETAILS

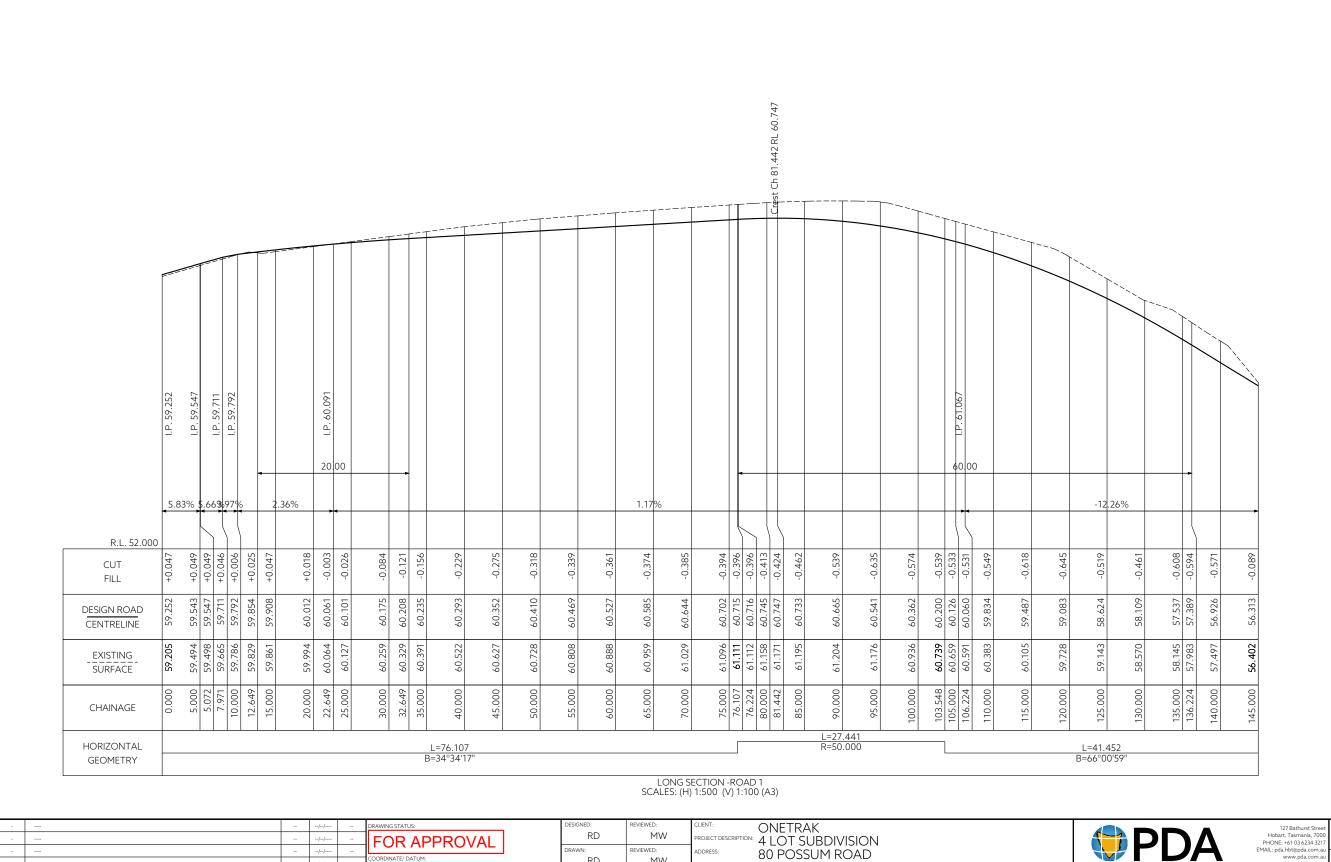
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Launceston & Burnie	4/001110		000	٨		









RD

DB MANAGER: CRAIG TERRY

ISSUED DATE: 25/07/2024

MW

RAWING TITLE

**ROAD 1 LONG SECTION** 

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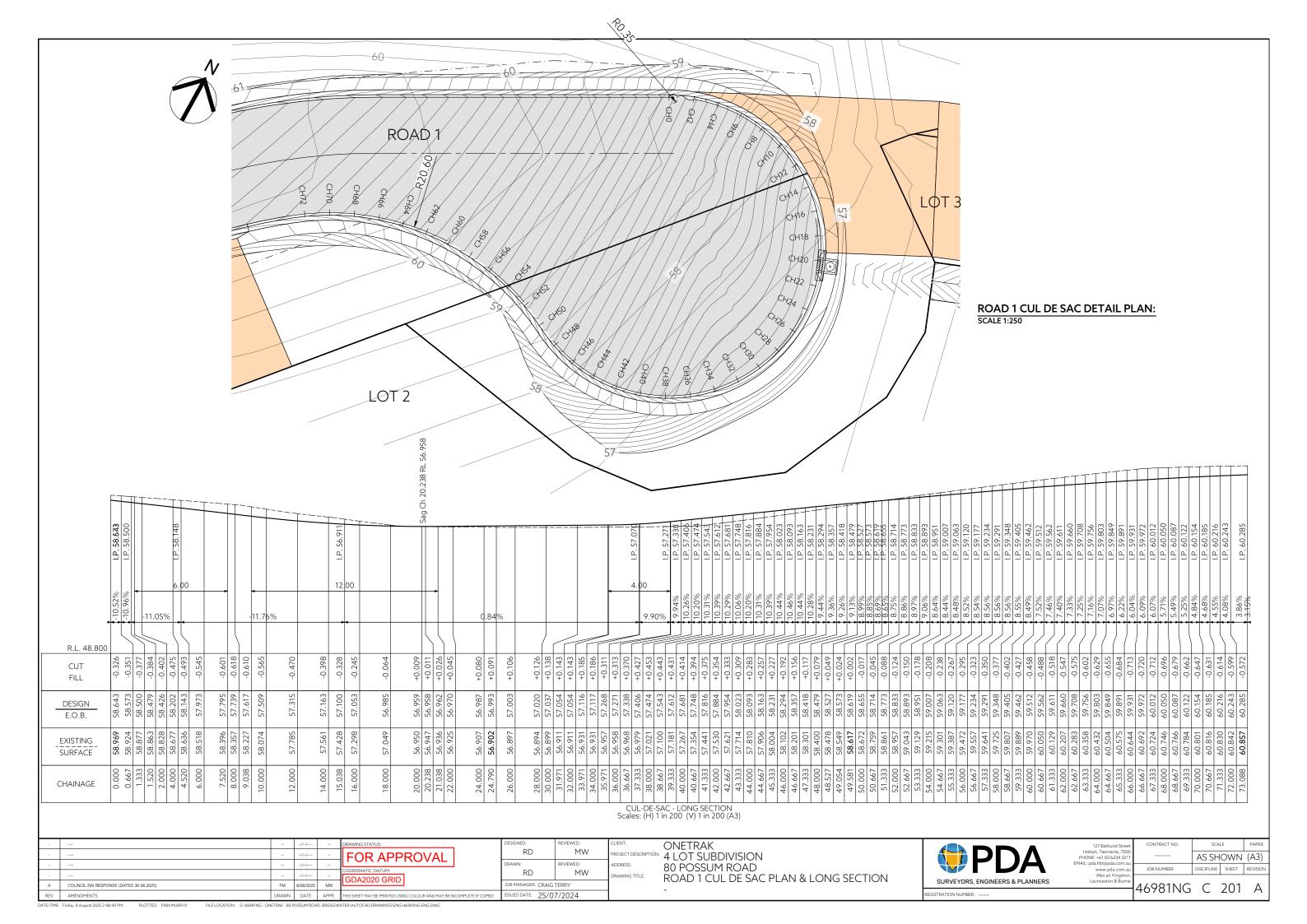
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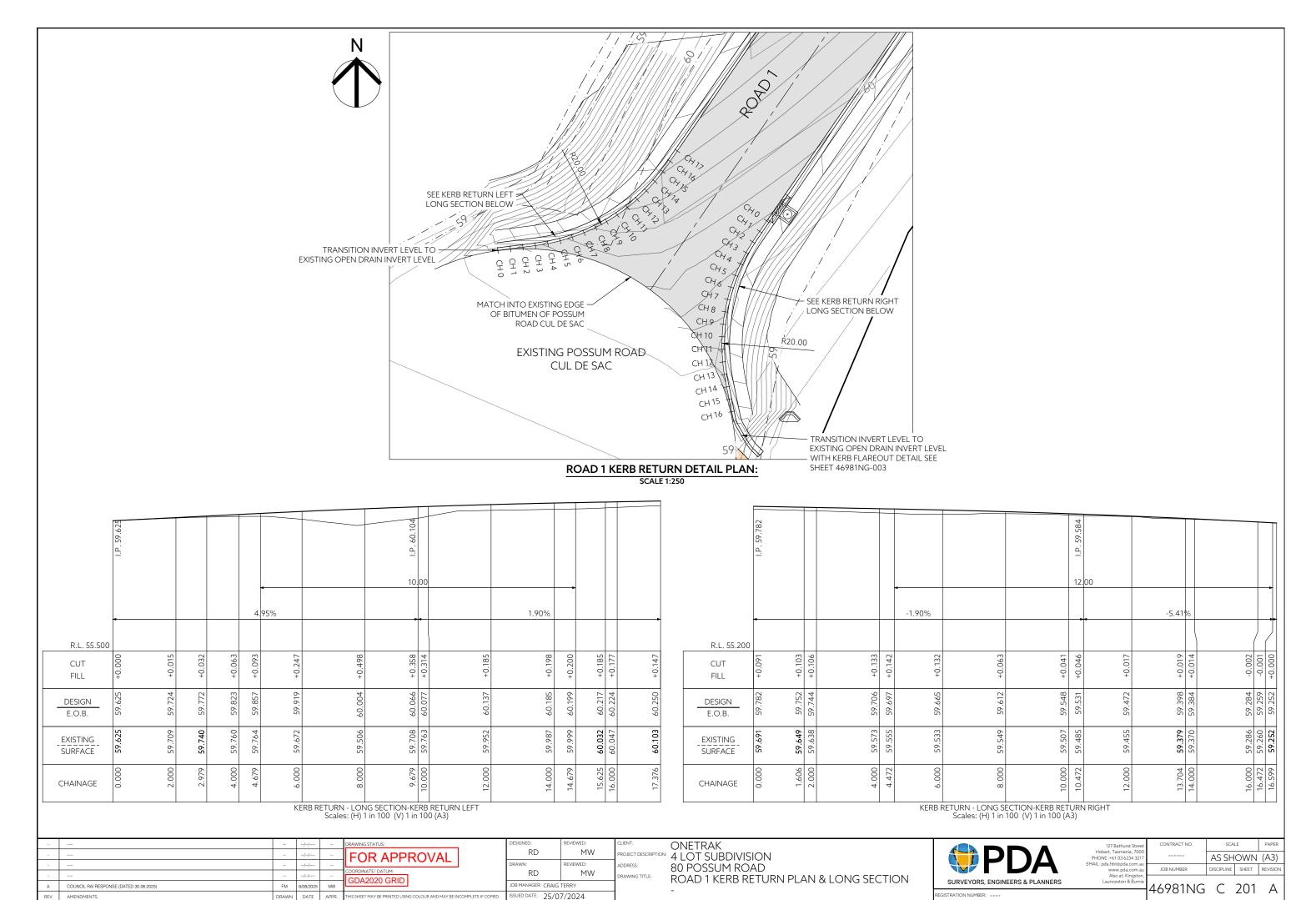
SURVEYORS, ENGINEERS & PLANNERS

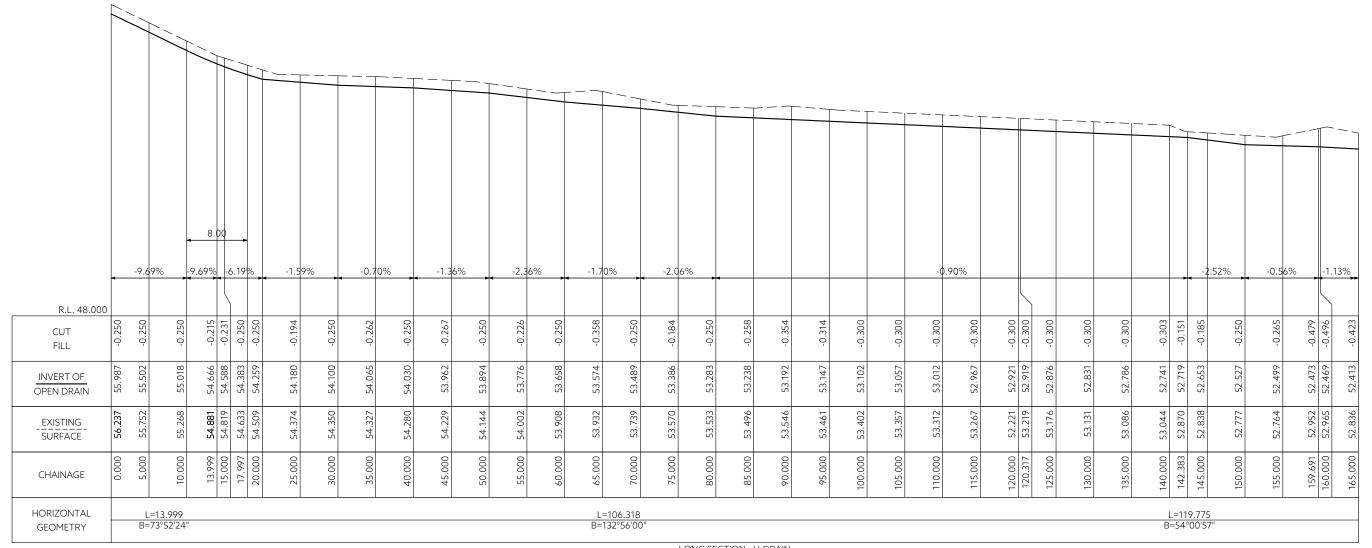
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LONG SECTION - V-DRAIN SCALES: (H) 1:500 (V) 1:100 (A3)

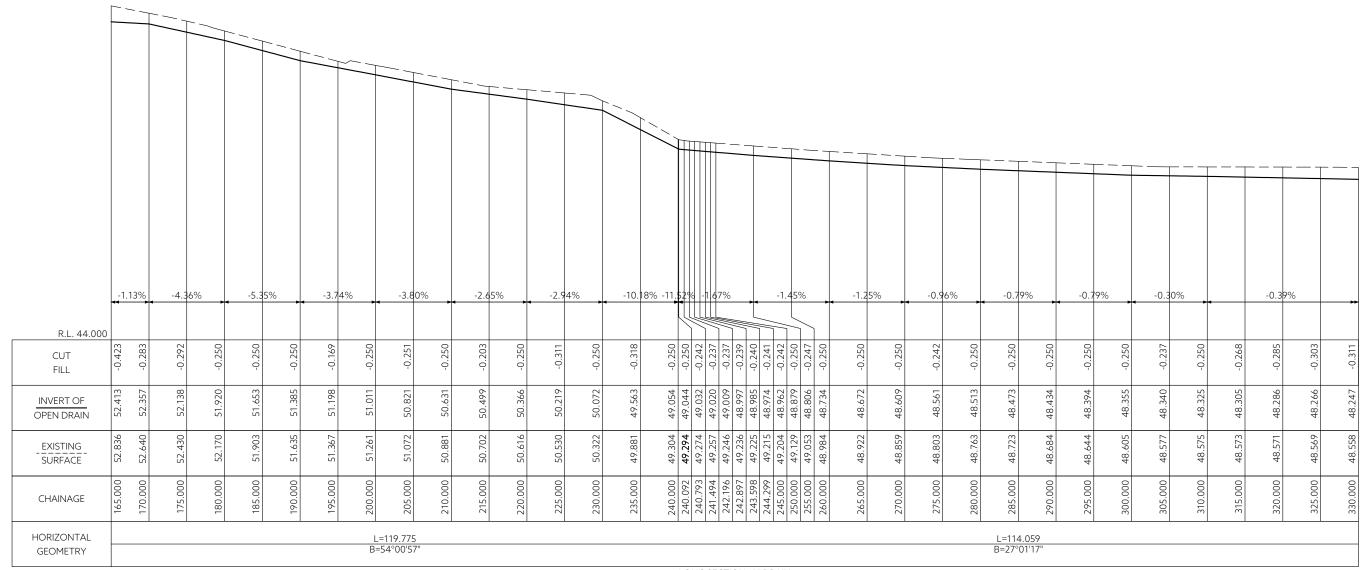
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	JOB MANAGER: CRAIG	TERRY
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CLIENT: ONETRAK
PROJECT DESCRIPTION: 4 LOT SUBDIVISION
ADDRESS: 80 POSSUM ROAD
DRAWING TITLE: V-DRAIN LONG SECTION
SHEET 1 OF 3



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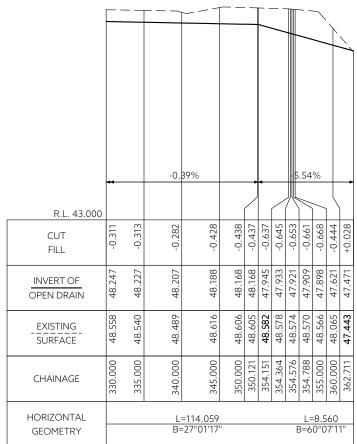
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ONETRAK PROJECT DESCRIPTION: 4 LOT SUBDIVISION ADDRESS: 80 POSSUM ROAD V-DRAIN LONG SECTION SHEET 2 OF 3



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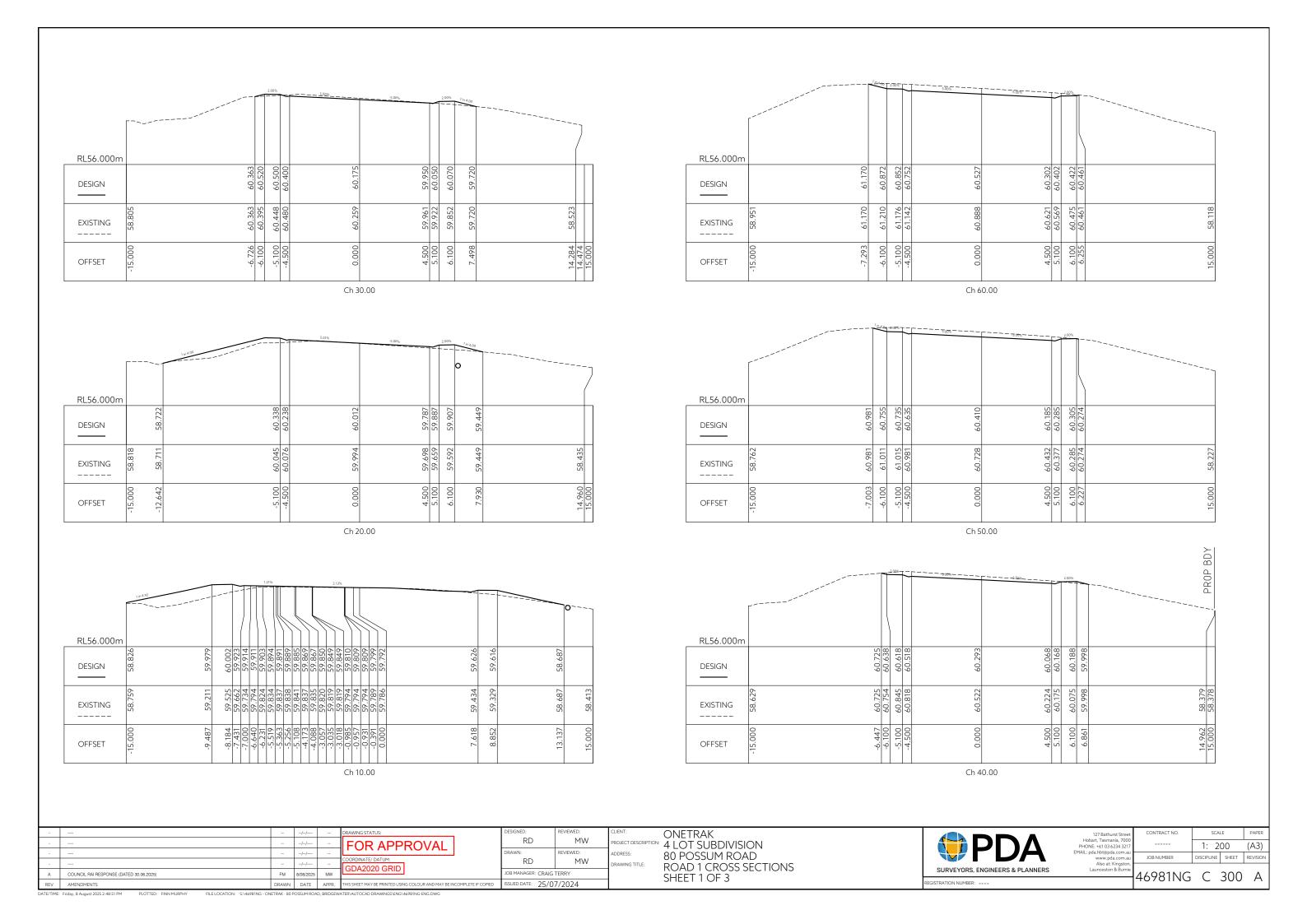
CLIENT: ONETRAK
PROJECT DESCRIPTION: 4 LOT SUBDIVISION
ADDRESS: 80 POSSUM ROAD
DRAWING TITLE: V-DRAIN LONG SECTION
SHEET 3 OF 3

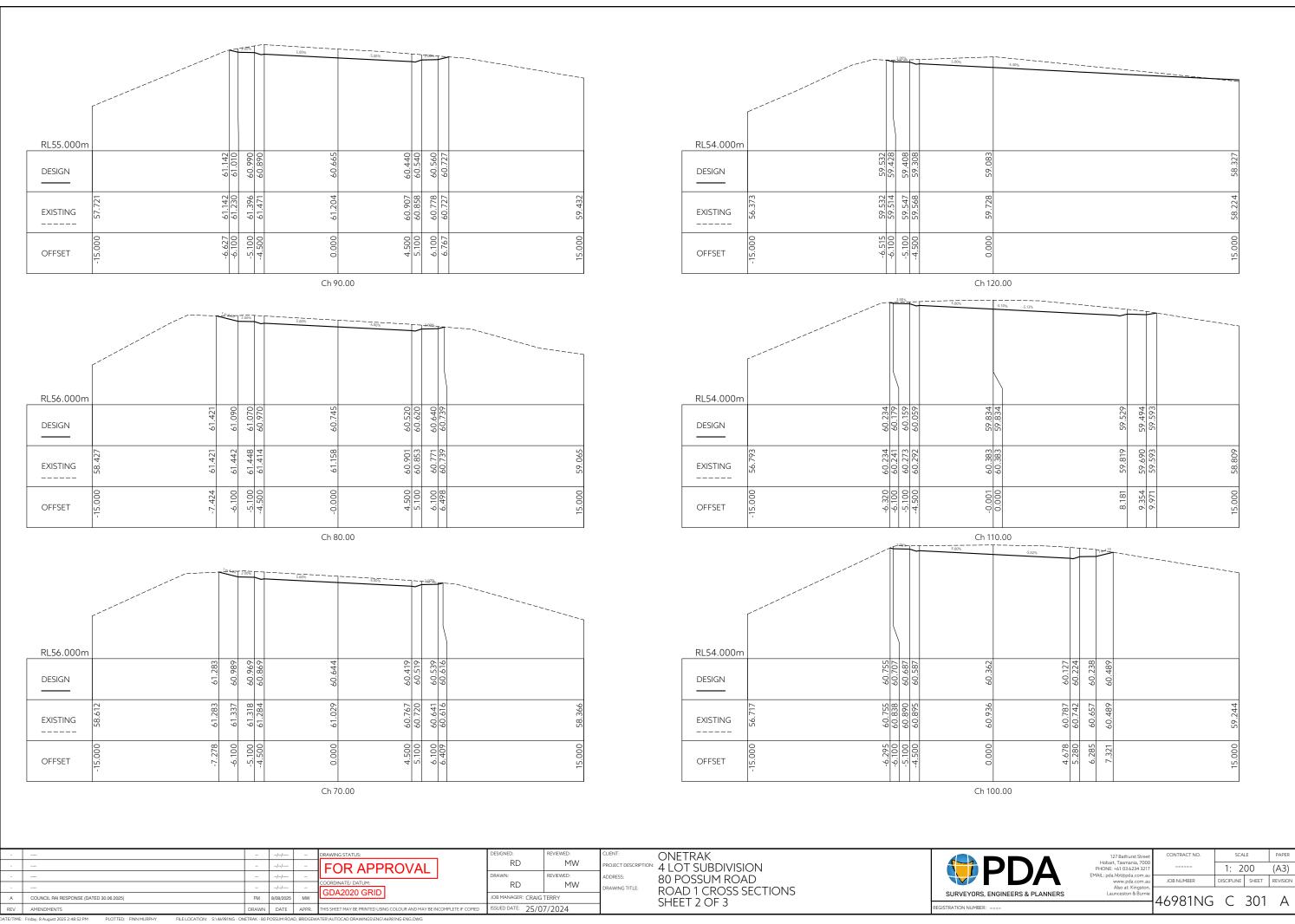


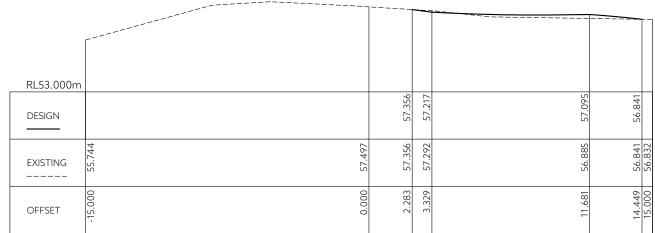
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80 POSSUM ROAD
.E: ROAD 1 CROSS SECTIONS
SHEET 3 OF3

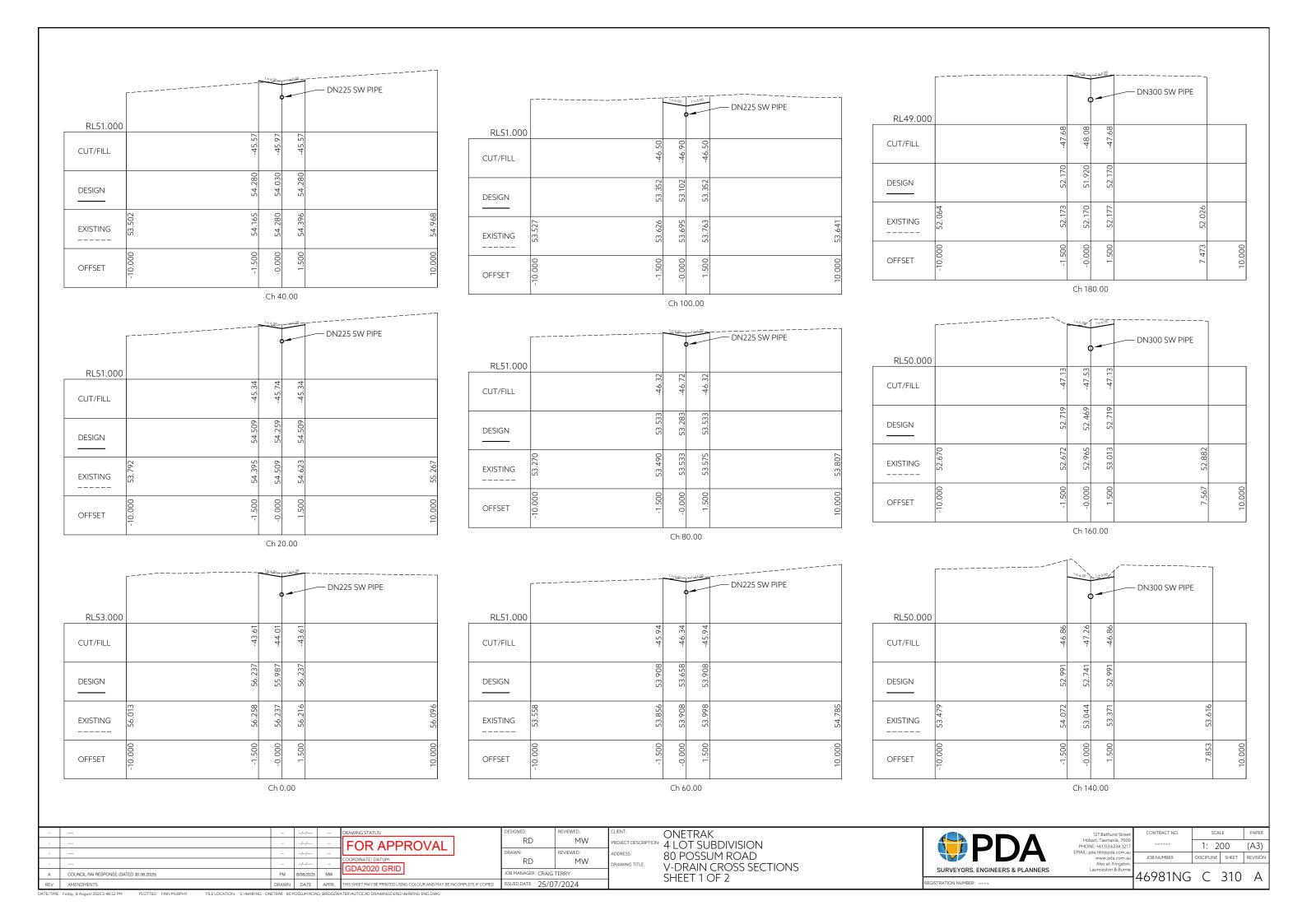
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SURVEYORS, ENGINEERS & PLANNERS	

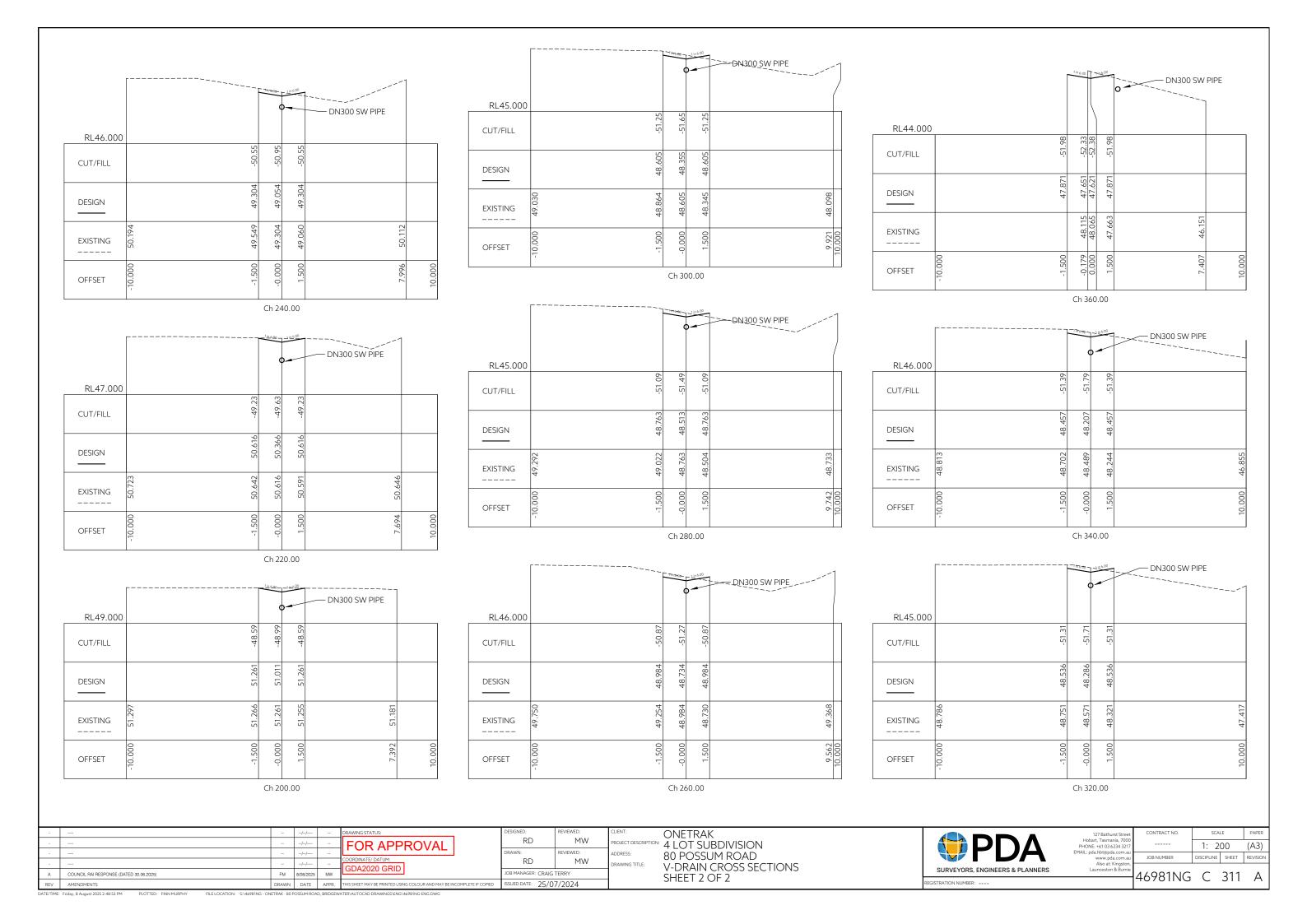
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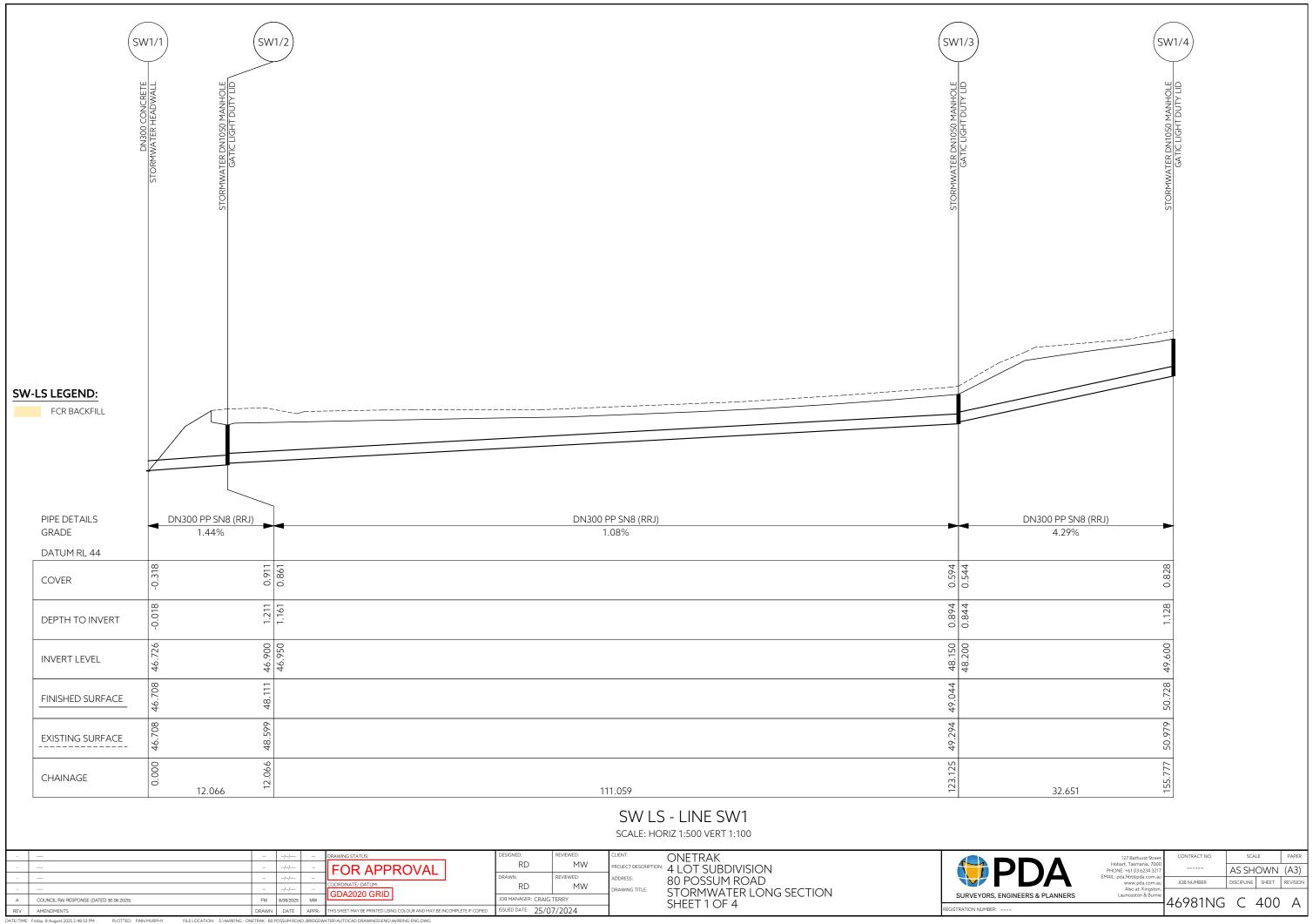
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Hobart, Tasmania, 7000 PHONE: +61 03 6234 3217 EMAIL: pda.hbt@pda.com.au www.pda.com.au			
	JOB NUMBER		
Also at: Kingston, Launceston & Burnie			

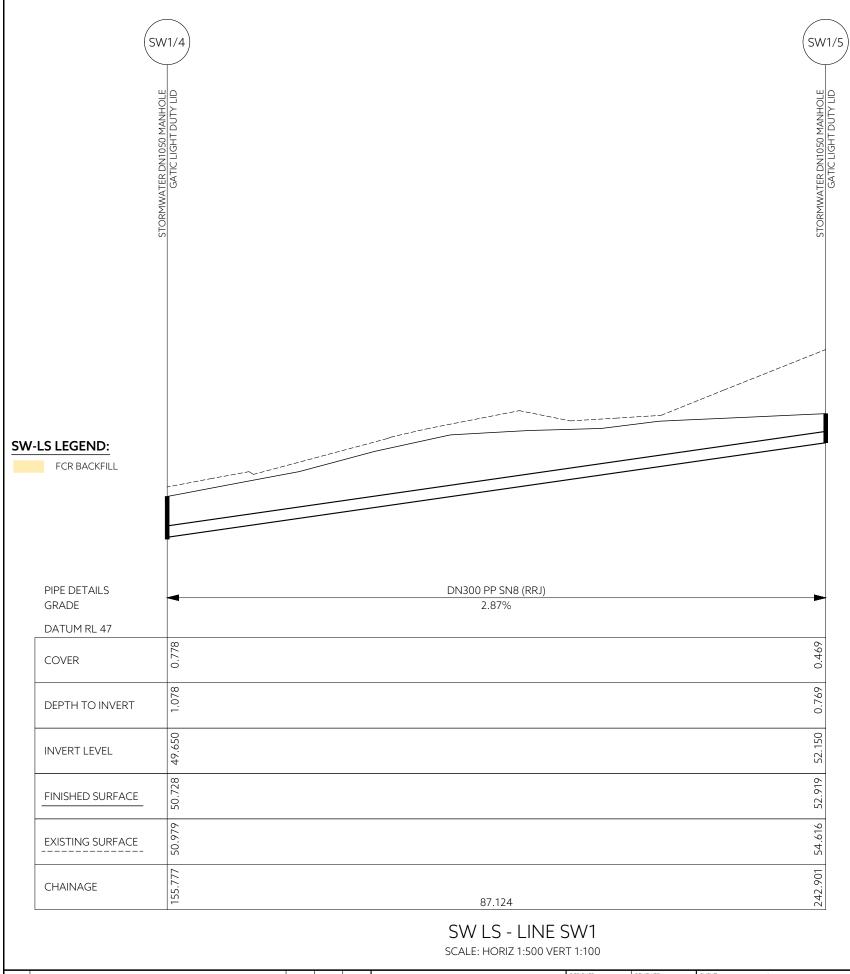
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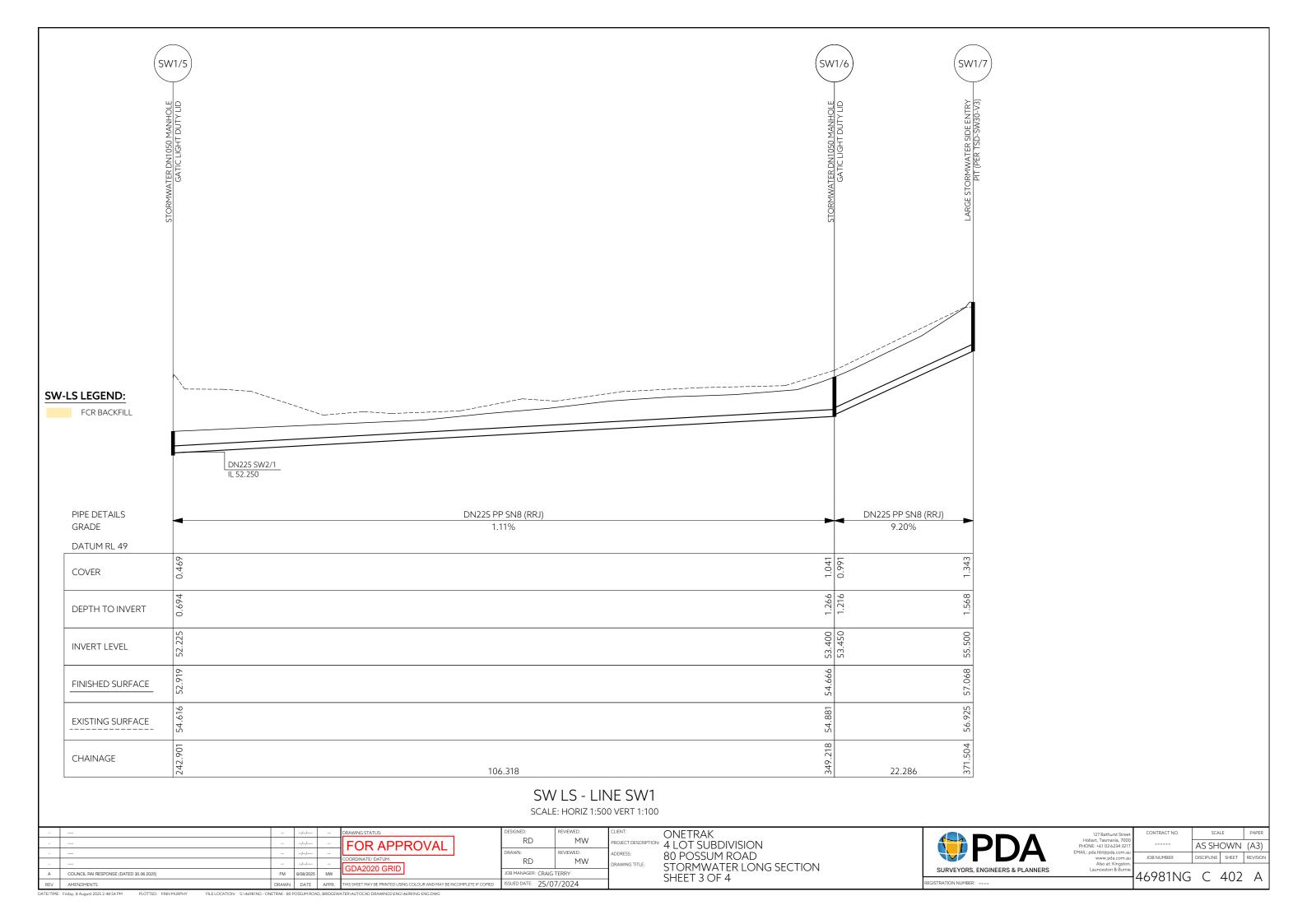
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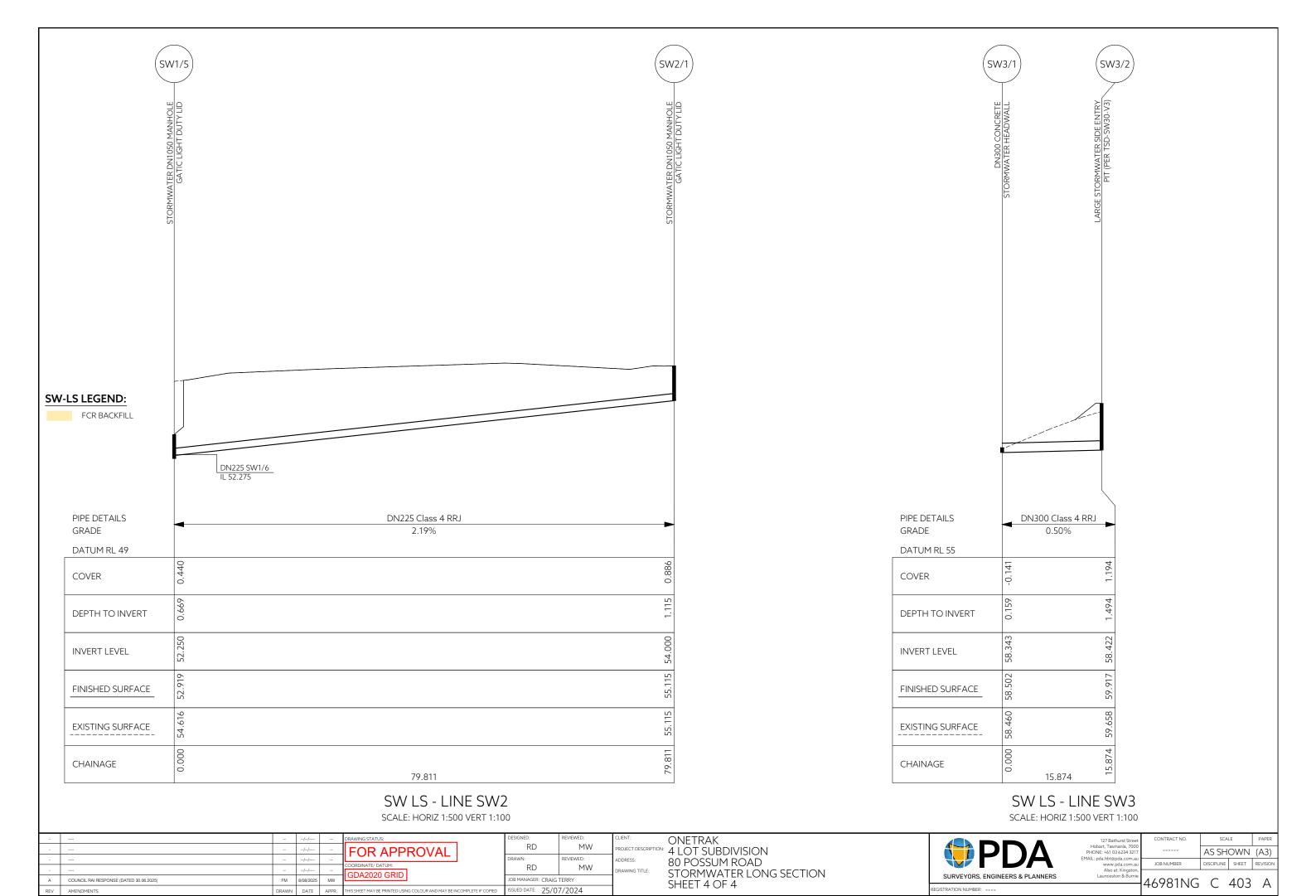
CLIENT: ONETRAK
PROJECT DESCRIPTION: 4 LOT SUBDIVISION
ADDRESS: 80 POSSUM ROAD
DRAWING TITLE: STORMWATER LONG SECTION
SHEET 2 OF 4

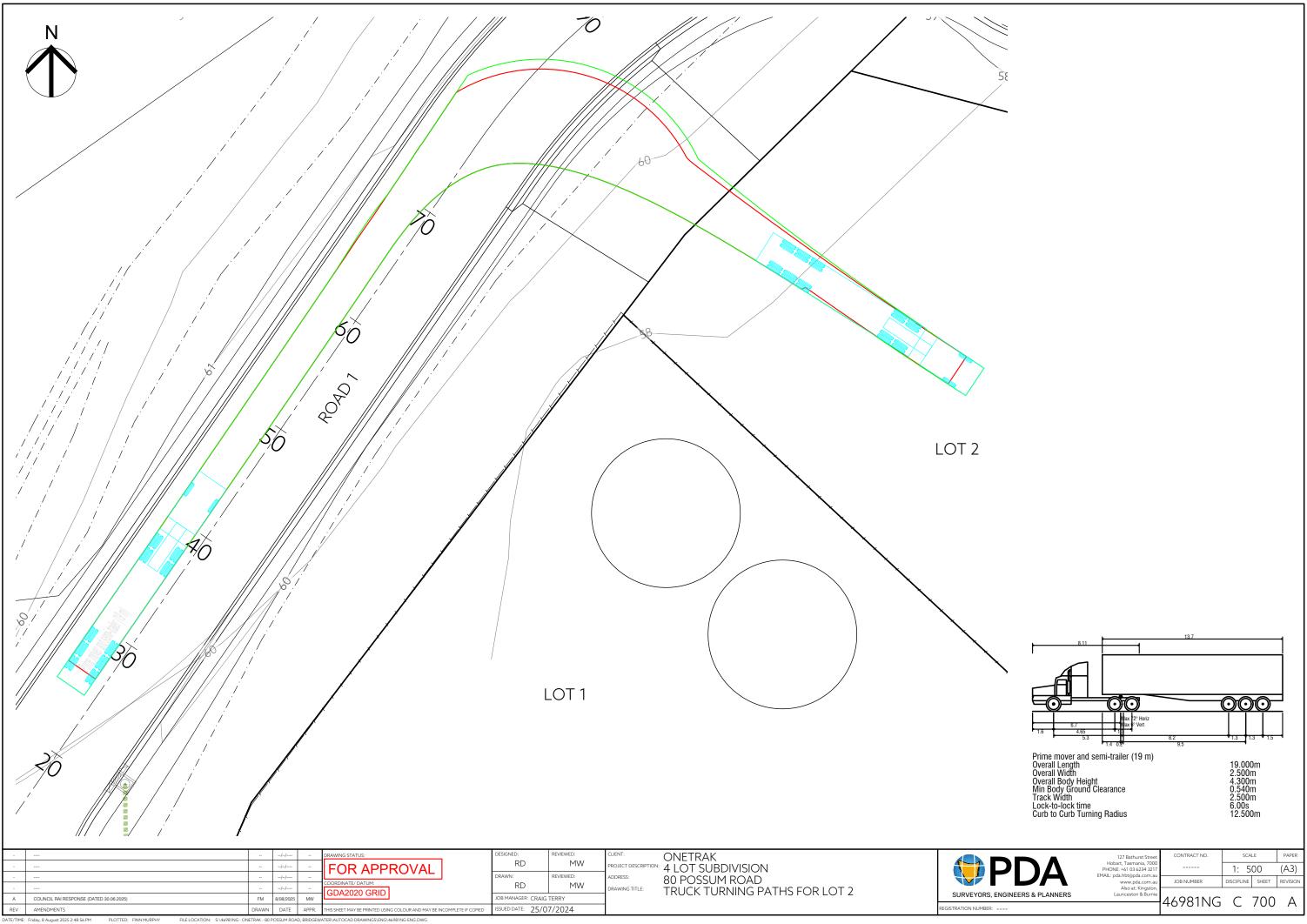


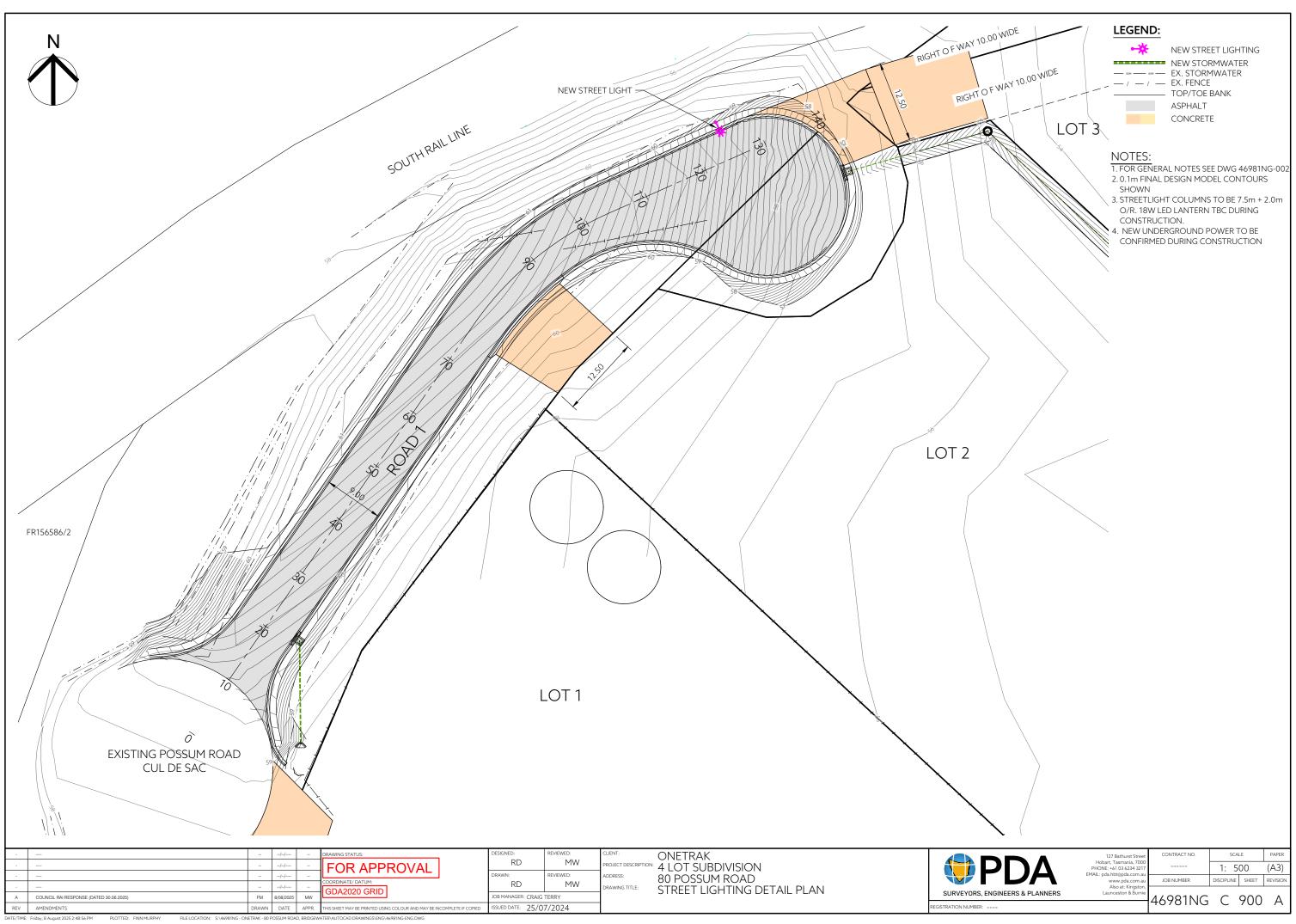
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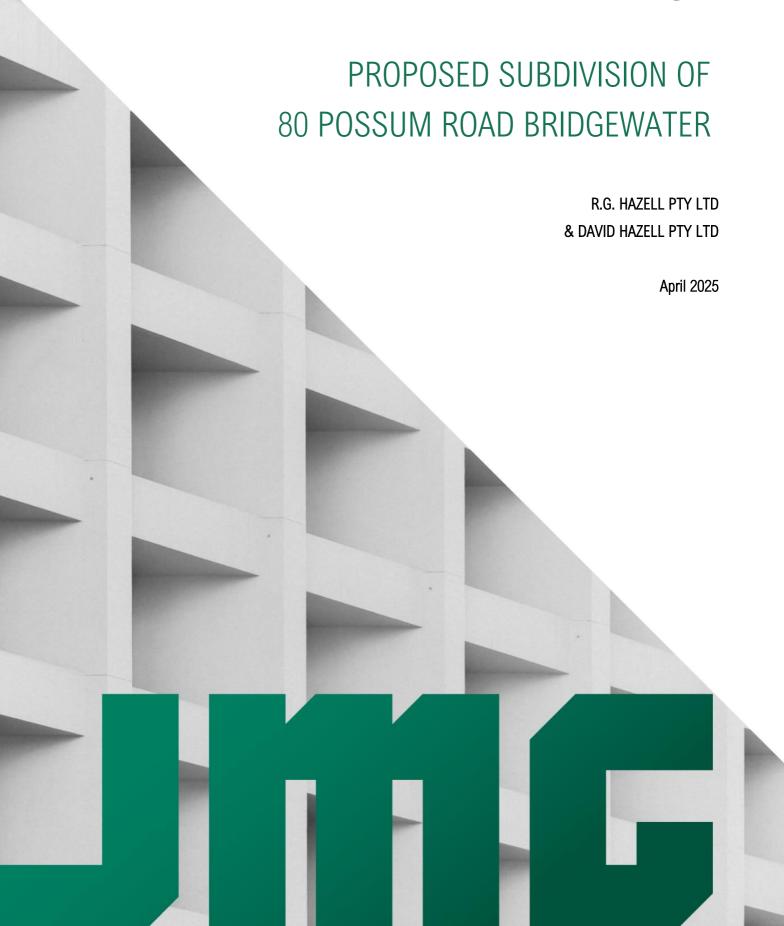












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	Existing Situation	
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Appendix A - Plan of Subdivision

**Appendix B - Stormwater Calculations** 

Appendix C - Concept Stormwater Plan

Appendix D - Existing Department of State Growth DN750 Culvert Profile



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0	15/12/2023	Draft for Client Review	GLA		JMB		CJM		
1	31/07/2024	Revised for new layout	GLA		JMB		CJM		
2	10/09/2024	Revised for State Growth Culvert	GLA		JMB		CJM		
3	15/04/2025	Revised for 1% AEP Detention	GLA	SA.	JMB	Lithans	CJM	1 ml	

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#### 1. Introduction

Johnstone McGee & Gandy Pty Ltd (JMG) have been commissioned to provide a stormwater management report to support the application for subdivision of 80 Possum Road in Bridgewater into four lots together with Road. The proposed subdivision is detailed in the Plan of Subdivision as per PDA drawing 46981NG-1f in Appendix A. The proposal plan includes Right of Ways and Drainage Easements.

### 2. Scope of Report

This report analyses the existing and ultimate development stormwater behaviour of the parent lot. Given that it is zoned General Industrial, the stormwater events to be designed for are the 2% AEP plus Climate Change and the 1% AEP plus Climate Change storms. As the site drains to the existing Department of State Growth stormwater system installed as part of the Brighton Bypass, detention requirements are based on the 1% AEP event at their request.

As this is a subdivision proposal only, a conservative approach has been adopted for the future development of the lots. It is assumed that the entire area of the lots will be impervious with the exception of an allowance of 400m<sup>2</sup> for potential effluent disposal area per lot inclusive of a 100% reserve area.

### 3. Stormwater Requirements

Stormwater for the proposed subdivision needs to cater for the design rain events and comply with Water Sensitive Urban Drainage (WSUD) principles. The two key components are on site detention and water quality treatment.

Onsite detention is designed so that the runoff flow rate for the designed event is no greater than the predeveloped situation. This is achieved by providing the required amount of onsite storage and limiting the outflow rate.

Stormwater quality treatment can be achieved by numerous methods, with "natural" treatment options favoured over those that require replacement of filter elements, etc.

As Brighton Council have advised that they do not wish to have a combined detention facility and also that they do not support open swales passing through multiple lots, the management for detention and stormwater quality is proposed to be undertaken on each lot as part of the individual development applications. While the required detention volume is calculated for the subdivision, the actual detention storage will be provided for each new lot when development occurs, not during the construction of the subdivision.

Drainage from the lots is to an existing culvert which is a Department of State Growth asset installed as part of the Brighton Bypass project. This culvert is a 750mm outlet pipe, eventually flowing via a detention pond and into a tributary of the Jordan River. The detention on each of the new development lots will need to comply with the design assumptions for this outlet pipe and will need Department of State Growth approval for any discharge or connection to their system. The piped network for the subdivision will cater for the 2% AEP event as required for the General Industrial zoning, while the required detention is based on the 1% AEP event.



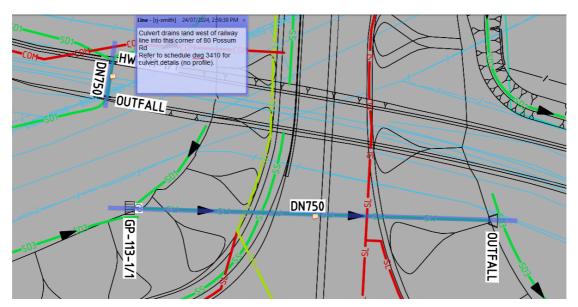
### 4. Existing Situation

It is noted that the proposed Lot 1 has been extensively developed under a previous Planning Permit. The entire lot drains under the Midland Highway offramp through the 750mm culvert which is a Department of State Growth asset. This culvert also picks up discharge under the railway formation and upstream properties as per the below snip from the as-constructed drawings provided below. This culvert discharges via a series of open drains, culverts, and a detention basin, eventually discharging via an unnamed watercourse into the Jordan River. Apart from the previous development on the proposed Lot 1, the remainder of the site is well vegetated with mostly grass cover. Note that although the Department of State Growth as-constructed drawings show the inlet as a grated pit GPP-113-1/1 a site visit confirms that this is in fact a culvert as per the below photo.



Photo of Department of State Growth Culvert Inlet Headwall and 750mm Pipe





Snip of State Growth As-Constructed Stormwater System showing Grated Pit GP-113-1/1 & 750 outlet

### 5. Proposed Ultimate Development

The subdivision design needs to allow for the ultimate development even though details of the developments on each lot will be the subject of future planning applications. For the purposes of analysis and to be conservative, it is assumed that each lot will be developed in a manner that results in the entire lot areas being impervious with the exception of an area of  $400\text{m}^2$  per lot to allow for onsite wastewater treatment and disposal which includes for a 100% backup area (as TasWater sewer disposal does not exist in this area).

The extension to Possum Road (formerly the Midland Highway) will drain partly to the southeast, with Brighton Council requiring kerb and channel although there is no kerb and channel on the existing road. The stormwater will be collected in a pit then piped to the existing open drain on the southeastern side of Possum Road that runs across Lot 1. The northern section of the Possum Road extension will drain from a pit at the low point of the new cul-de-sac head via a new piped system to discharge upstream of the existing Department of State Growth 750mm culvert noted above.

Lots 2, 3, and 4 will need to provide the required detention volume and stormwater quality improvement systems to meet the future individual development needs at the time of development. Lot 1 is the previously developed lot and is not required to provide detention or a stormwater quality system, with the total required detention being shared between Lots 2, 3, & 4 only.

## 6. Proposed Stormwater System

The runoff from each lot is proposed to be directed to a piped network within the drainage easements providing connections for future connection as developments occur. The pipe network is proposed to discharge into the existing Department of State Growth 750mm outlet pipe under the embankment.

The proposed piped network is designed to cater for the 2% AEP + Climate Change event, while the 1% AEP plus Climate Change event will discharge along the southwest of the lots via the existing overland flow path to the existing culvert, which has significant head



available in such an event due to the embankment constructed for the bypass and the natural slope of the proposed Lot 4. Refer Appendix D for a profile of the existing culvert showing the State Growth road above. The 1% AEP + Climate Change event will require overland flow across lot boundaries. The overland flow from the cul-de-sac will need to be directed down the easement on Lot 2 clear of any future building development. The overland flow from the south western extension of Possum Road will run into the existing open drain on Possum Road.

Given the lack of TasWater water mains, it is assumed that each new lot will be collecting roof runoff for onsite use, which would provide some improvement in water quality. Each new lot development will need to separately address the requirements for stormwater quality and onsite detention as part of their individual stormwater systems.

The extension of Possum Road is proposed to be provided with kerb and channel, with an inlet pit on the southern end discharging to the existing open drain across Lot 1, and an inlet pit from the cul-de-sac low point discharging via a new easement across Lot 2 to join the main pipe network.

The proposed concept is shown in Appendix C - Concept Stormwater Plan.

### 7. Analysis

The Department of State Growth have provided drawings and design reports for the existing stormwater system in this area. The design report notes that industrial land has been assumed to be fully developed, with industrial land allowed on the basis of 70% impervious and adopted C value of 0.9 with 30% pervious area with adopted C value of 0.2.

As the actual % impervious areas of the fully developed lots are not known at this stage, a conservative assumption is that all areas except for  $400\text{m}^2$  per lot is impervious. This results in a higher runoff than has been assumed in the Department of State Growth design. The calculations determine how much additional flow this results in for the 1% AEP event. Note that increasing the C value for pervious areas to 0.4 rather than Department of State Growth value of 0.2 results in an increased additional resultant flow, so has been adopted to be conservative.

The development of the lots will need to provide onsite detention to restrict the flow in the design event for the outlet pipe.

The full calculations of the proposed stormwater system are provided in Appendix B, with the important aspects summarised below.

- Time of Concentration = 25 minutes (Bransby-Williams)
- 2% AEP 25-minute intensity = 46.6mm/hr (BoM)
- 1% AEP 25-minute intensity = 53.8mm/hr (BoM)
- Total area = 43,080m<sup>2</sup>
- Pervious Area = 1,600m<sup>2</sup>
- Runoff coefficients C=0.9 impervious, C=0.2 pervious (as per State Growth design basis)
- 1% AEP post development flow = 445.7 l/s (excludes CC allowance)
- Climate Change factor 18.3 % (ARR)
- Detention Volume required = 292m<sup>3</sup> (Boyd's- based on DSG allowance)

The Department of State Growth data shows the 750mm culvert has a slope of 0.5%. As shown on the calculations, this results in a Manning's capacity of 917 l/s. Given the socket end and headwall upstream end of the culvert, to achieve this maximum flow requires a headwater to diameter ratio of 1.6.



### 8. Conclusion

The analysis demonstrates that the required stormwater detention of 98kl per lot for lots 2,3, & 4 can be managed on the proposed lots (note that a reduction in impervious area compared to the calculations may justify less detention volume), with the quality treatment to meet or exceed the State Stormwater Strategy target reductions also being addressed for the individual developments on each lot. The extension of Possum Road will partly drain to the existing open drain on the southeastern side of the existing road, with the northern end of the extension draining via a pit and piped system via easements including overland flow path for larger events. The proposed stormwater management therefore complies with the applicable requirements for the proposed subdivision. Department of State Growth approval will be required for discharge of the proposed stormwater network into their system.



### **APPENDIX A**

# Plan of Subdivision (PDA Dwg 46981NG-1f)





03/04/2025

for DAVID HAZELL

TURNING CIRCLE ADDED

PLAN OF SUBDIVISION

**PLAN OF SUBDIVISION** 

R.G. Hazell Pty. Ltd. David Hazell Pty Ltd

80 Possum Road Bridgewater

**Brighton Council** 

Tasmanian Planning scheme Brighton Local Provisions Schedule

19.0 General Industrial

9 Attenuation Code/Bridgewater Quarry 13 Bushfire-prone Area BRI-S4.0, BRI-S10.0,

Point of interest GDA2020 MGA55 59752E, 5270805N

Schedule of Easements Proposed Rights of Way as shown. Proposed Drainage Easement 6.00 wide

This plan has been prepared only for the purpose of obtaining preliminary subdivision approval from the Council and the information shown hereon should be used for no other purpose. All measurements and areas are subject to final survey.

All lots shown on plan cannot be serviced by water and sewer. On site treatment for

Water tanks are required for firefighting

The Site is covered in its entirety by the Codes listed above and have not been shown for clarity.

<b>PDA</b>	
SURVEYORS ENGINEERS & PLANNERS	:

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r	FAX: +61 03 6234 5085
L	EMAIL: pda.hbt@pda.com.au
ı	www.pda.com.au
ı	Also at: Kingston

1:1500 (A3) JOB NUMBER 46981NG-1f

## **APPENDIX B**

# **Stormwater Calculations**



80 Possum Re	oad Subdivision									
Stormwater I	Management									
JMG Ref:	J230659CS									
Lot No.	Area m2		Pervious area	Impervious area	Drainage easement	Piped Flow per lot for 2% I/s	Cumulative flow I/s	Nominal Slope 1 in	Nominal pipe size	Slope %
1	15000		400	14600		60.06	60.06			
2	9631		400	9231		38.56	98.63	82	225	1.22%
3	9195		400	8795		36.82	135.45	27	300	3.70%
4	9161		400	8761		36.68	172.13	35	300	2.86%
101	234		0	234		0.94				
Total	43221		1600	41621	1595					
Title shows		4.304	На							
Whole site %	pervious		3.70%							
Whole site %	impervious		96.30%							
	es 2% AEP piped drain		nd flow for 1% AE	EP storm events						
DSG require	detention for 1% AEP	event.								
Time of conc										
	and swales & pipes									
	w path < 1,000m									
	with flow length 500	m with 6m fall	= 1.2% n= 0.045 y	ields		30 mins				
Bransby Willia										
L		km								
S		m/km								
Α	4.304	_								
F	92.5									
Tc		Minutes								
Adopt 25 min										
2% AEP		mm/hr	Ex BOM Data Ta							
1% AEP	53.8	mm/hr	Ex BOM Data Ta	b						

Runoff coeffici	ents							
Roofed and sea	aled areas		0.9					
Existing grass/	effluent disposal/swa	les	0.4					
Post developm	nent flow rates							
Event	Coefficient	Intensity	Area ha	Flow I/s	Effective area			
2% AEP	0.4	46.6	0.3195	6.0	3.71385	На		
2% AEP	0.9	46.6	3.9845	167.1				
2% AEP	Totals		4.304	173.1				
1% AEP	0.4	53.8	0.3595	7.7				
1% AEP	0.9	53.8	3.9845	192.9				
1% AEP	Totals		4.344	200.7	total 1% AEP + CC	237.4	for overland flow	
	path is defined by the off ramp, which has	_				ankinent		
Department of	f State Growth Desig	n Basis for Brig	hton Bypass			TRAPEZOIDAL D	RAIN CAPACITY	
	% impervious allowe			70%		Width (m) =	1	
	% pervious allowed			30%		Slope X:1v =	2	
DSG adopted C	value impervious			0.9		Depth (m) =	0.3	
	value pervious			0.2		Slope (%) =	1.22	
•						n Value =	0.03	Grass, some weeds
Increased % in	pervious from subd	ivision develop	ment, so additi	onal flow results		Area A	0.48	
		-				H Radius R	0.204984472	
DSG Allowance	in culvert design					Flow I/s Q	614	Exceeds 237 I/s overland flow
Area		43221	m2			Velocity m/s	1.28	and assumes zero pipe flow
Effective C		0.69				Velocity Head	0.083505088	
25 minute Inte	nsity 1% AEP	53.8	mm/hr	1.49444E-05	m/s			
DSG flow rate				0.446	m3/s			
				445.681	I/s	Detention outflo	w rate	
					·, •	Determient outine	··· · · · · · ·	

Developed su	ubdivision								
Area		43221	m2						
Effective C		0.874				Effective Area =		37778.9 m2	
25 minute Int	ensity 1% AEP	53.8	mm/hr	1.49444E-05				3.77789 Ha	
Revised Flow	Rate			0.565	m3/s				
				564.585	I/s				
Increased flow	w =			118.904	I/s				
Existing Pipe i	is 750 diam. At 0.5% g	rade.							
Mannings Cap	pacity with n=0.012			917	I/s				
Change % of o	capacity			12.967					
The 4 new lot	ts can detain runoff on	site for the des	sign storm to re	strict the flow by 11	L9 I/s min for the 25	minute 1% AEP ev	ent		
Total detention	on volume as per Det	ention tab =		292	m3 over new lots				
			or	97.33	m3 per lot for 3 lot	s (assuming Lot 1 s	tays as is)		
Could be for e	example a 100kl tank p	per lot subject t	o final design fo	r each lot 2 to 4					

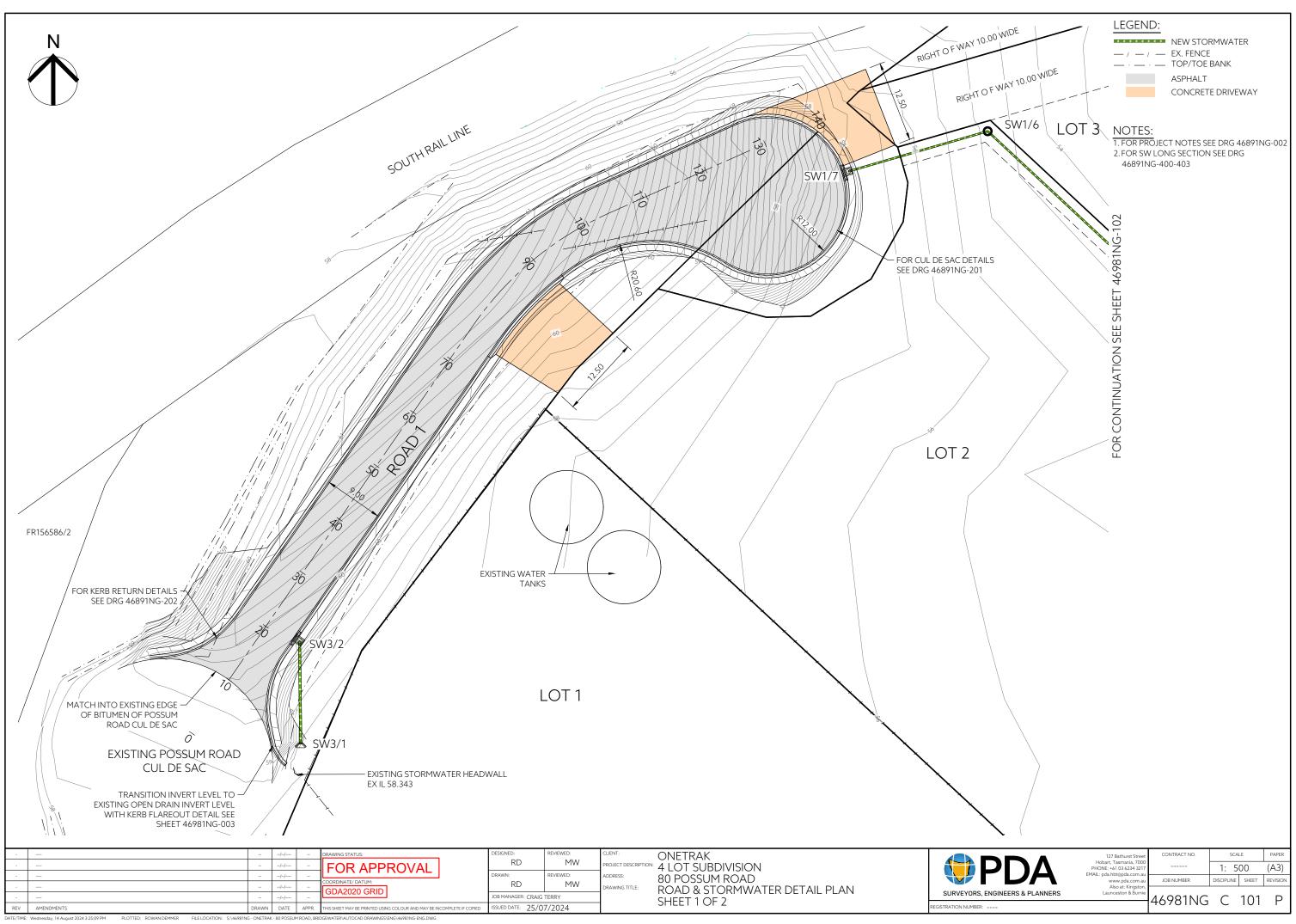
80 Possum Road	Subdivision				
Stormwater Man	agement				
JMG Ref:	J230659CS				
Detention Calcula	tion				
Effective area =	3.77789	На			
Storm Duration	1% AEP	Qi	Qo	V1	Smax
(mins)	Intensity (mm/hr)	(m3/s)	(m3/s)	(m3)	(m3)
5	114	1.196	0.446	359	225
10	88.8	0.932	0.446	559	292
15	72.7	0.763	0.446	687	286
20	61.7	0.647	0.446	777	242
25	53.8	0.565	0.446	847	178
30	47.9	0.503	0.446	905	103
45	36.5	0.383	0.446	1034	-169
60	30	0.315	0.446	1133	-471
90	22.8	0.239	0.446	1292	-1115
120	18.9	0.198	0.446	1428	-1781
180	14.7	0.154	0.446	1666	-3147
270	11.6	0.122	0.446	1972	-5248
360	9.92	0.104	0.446	2249	-7378
540	7.99	0.084	0.446	2717	-11723
720	6.86	0.072	0.446	3110	-16143
1080	5.5	0.058	0.446	3740	-25140
1440	4.65	0.049	0.446	4216	-34291
Tot	al volume required =	292	m3 over new subd	ivision	

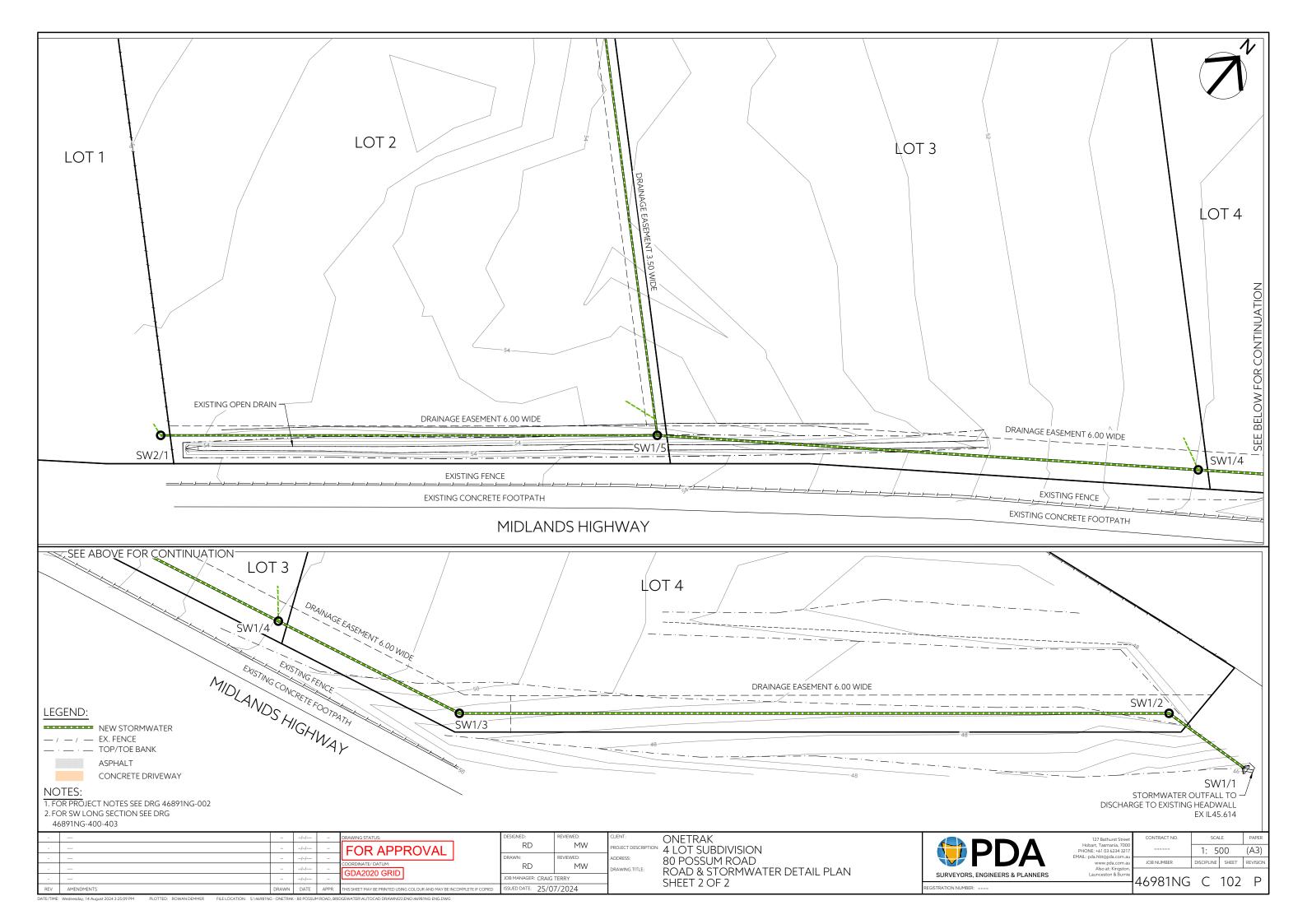
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IFD Design Rainfall Intens	sity (mm/h)							
Issued:	29-Jul-24							
Location Label:	80 Possum	Road						
Requested coordinate:	Latitude		Longitude	147.241				
Nearest grid cell:	Latitude	42.7125 (S)		147.2375 (E	Ξ)			
		Annual Excee	edance Prob	nahility (ΔFP)	<u> </u>			
	Duration	Annual Excee	I		<u>'</u>			
Duration	in min	63.20%	50%	20%	10%	5%	2%	1%
1 min	1	59.4	67.4	94.4	114	135	165	190
2 min	2	51.2	57.8	79	93.9	109	127	141
3 min	3	45.2	51.1	70.2	83.8	97.6	115	129
4 min	4	40.7	46.1	63.7	76.5	89.5	107	123
5 min	5	37.2	42.2	58.6	70.6	83	100	114
10 min	10	27	30.7	43.1	52.5	62.3	76.7	88.8
15 min	15	21.9	24.9	35	42.7	50.7	62.7	72.7
20 min	20	18.8	21.3	29.9	36.4	43.3	53.3	61.7
25 min	25	16.6	18.8	26.4	32.1	38	46.6	53.8
	30	15.6	17	23.8	28.8	34.1	41.6	47.9
30 min	45	12	13.5	18.8	22.6	26.6	32.1	36.5
45 min 1 hour	60	10.2	11.5	15.9	19	20.0	26.6	30.3
1.5 hour								22.8
	90	8.1	9.17	12.6	14.9	17.3	20.4	
2 hour	120	6.9	7.8	10.7	12.6	14.5	17	18.9
3 hour	180	5.5	6.22	8.47	9.97	11.4	13.3	14.7
4.5 hour	270	4.37	4.96	6.74	7.92	9.05	10.5	11.6
6 hour	360	3.7	4.21	5.74	6.74	7.69	8.96	9.92
9 hour	540	2.91	3.32	4.54	5.35	6.12	7.18	7.99
12 hour	720	2.44	2.78	3.83	4.53	5.2	6.14	6.86
18 hour	1080	1.88	2.14	2.98	3.54	4.09	4.88	5.5
24 hour	1440	1.54	1.76	2.46	2.95	3.42	4.11	4.65
30 hour	1800	1.32	1.51	2.11	2.53	2.96	3.56	4.04
36 hour	2160	1.15	1.32	1.85	2.23	2.61	3.15	3.58
48 hour	2880	0.925	1.06	1.49	1.8	2.12	2.56	2.91
72 hour	4320	0.669	0.763	1.07	1.3	1.53	1.85	2.1
96 hour	5760	0.528	0.6	0.839	1.01	1.19	1.43	1.63
120 hour	7200	0.438	0.497	0.691	0.831	0.975	1.16	1.32
144 hour	8640	0.376	0.426	0.588	0.704	0.82	0.976	1.1
168 hour	10080	0.331	0.375	0.514	0.611	0.707	0.837	0.947

# **APPENDIX C**

# **Concept Stormwater Plan**



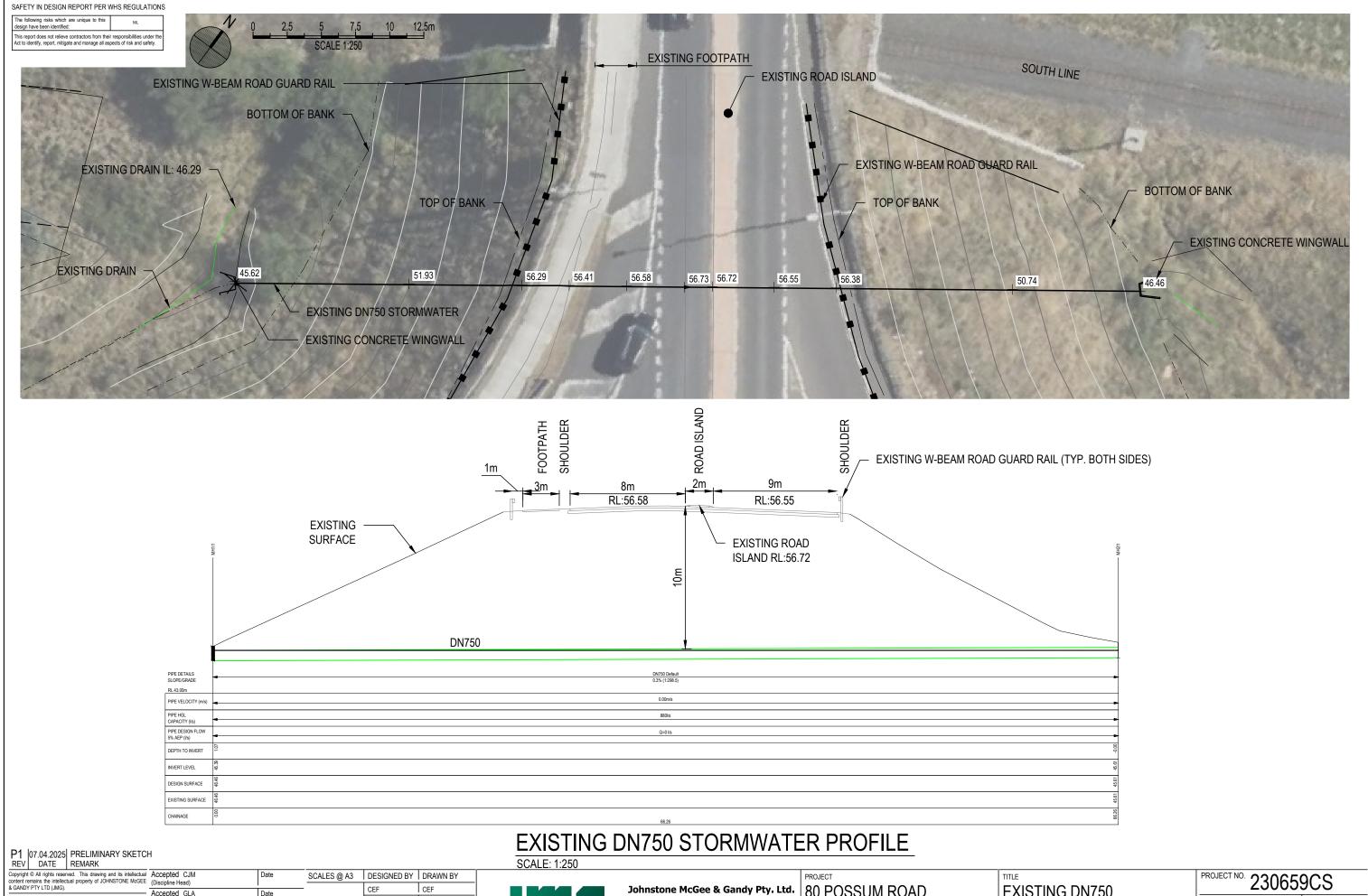




## **APPENDIX D**

# Existing Department of State Growth DN750 Culvert Profile





8 GANDY PTY LTD (JMG).

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80 POSSUM ROAD **BRIDGEWATER** SUBDIVISION

**EXISTING DN750 STORMWATER** PLAN & PROFILE

DWG NO. P1 PLOT DETAILS 230659CS - 3D BASE.DWG





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# BUSHFIRE HAZARD REPORT & BUSHFIRE HAZARD MANAGEMENT PLAN



**SUBDIVSION – ONE LOT INTO SIX LOTS** 

80 POSSUM ROAD BRIDGEWATER 7030

**HAZELL BROS** 

**12 AUGUST 2025 - VERSION 2.0** 

#### **EXECUTIVE SUMMARY**

The subject land is located at 80 Possum Road, Bridgewater (C.T. 159938/4). The development proposal includes a subdivision (one lot into five lots). Lot 1 has an existing building, Lots 2 – 4 vacant, Lot 100 (road). The proposed subdivision is assessed and deemed to comply with the requirements of C13.0 Bushfire-Prone Areas Code of the Tasmania Planning Scheme.

#### **LIMITATIONS**

This report is based on findings concluded from a desktop and field investigation of the subject property. Classification of vegetation has been based on the site inspection does not account for any further modification to the existing vegetation (planting, clearing etc.)

The assessment is based on information provided at the time of the report and location shown on the Bushfire Hazard Management Plan (BHMP). If the location of the proposed development (indicative building area) differs from the location shown on the BHMP a new assessment will be required.

The BAL assessment is based on the Fire Danger Index (FDI) of 50. The FDI will exceed 50 when the Australian Fire Danger Ratings System (AFDRS) level is Extreme or Catastrophic.

The forward of AS3959 – 2018, Construction of buildings in bushfire prone areas states that "It should be borne in mind that the measures contained in this standard cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions."

Due to the unpredictable nature and behaviour of fire, compliance with AS359-2018 does not guarantee a dwelling will survive a bushfire event.

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#### 1.0 INTRODUCTION

#### 1.1 SCOPE

To assess the proposed subdivision against the requirements of C13.0 Bushfire-Prone Areas Code of the Tasmanian Planning Scheme.

#### 1.2 PROPOSAL

Subdivision of one lot into five lots. The subdivision will create four lots that can support building works. This includes Lot 1 - 1.5ha $\pm$ , Lot 2 - 9100m $^2$ , Lot 3 - 9130m $^2$ , Lot 4 - 9161m $^2$ . Lot 100 - 681m $^2$  will be a part road (turning area).

#### 1.3 GENERAL INFORMATION

SITE ADDRESS

80 Possum Road, Bridgewater

**OWNER** 

**Hazell Bros** 

TITLE REFERENCE

C.T. 159938/4

PROPERTY ID NUMBER

3511316

**EXISITING PROPERTY SIZE** 

43080m<sup>2</sup>

**CURRENT USE** 

Industrial

**MUNICPALITY** 

**Brighton Council** 

#### 2.0 SITE DESCRIPTION

#### 2.1 LOCALITY AND PROPOSED SUBDIVISION

The subject land is located at 80 Possum Road, Bridgewater. The site is located at the end of Possum Road. The existing lot is surrounded by large mostly undeveloped lots with grassland and bushland. Developed industrial development exists further towards the south and south – west. A railway line is adjacent the north – west property boundary. The subdivision shall create five lots. Lot 1 will have road frontage to Possum Road (existing property access). Possum Road shall be extended by length of 129m. Two proposed Right of Ways shall be installed at the end of Possum Road to provide access for Lot 2, Lot 3, Lot 4. The proposed plan of subdivision is provided in the appendix of this report. Onetrak currently has a machinery workshop and offices located at the southern end of the existing lot and will be located within Lot 1.

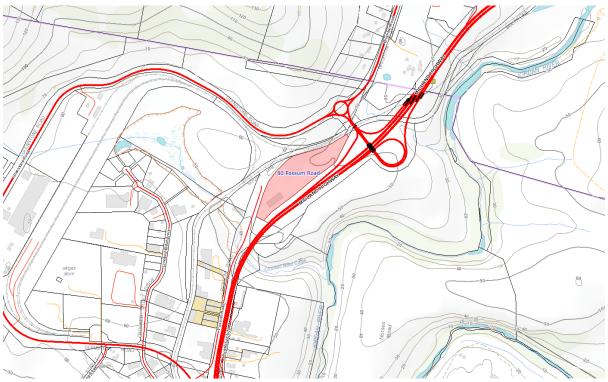


Figure 1: Locality map of the area with proposed subdivision shown (red highlight). Source: Land Information System Tasmania, <a href="http://www.thelist.tas.gov.au">http://www.thelist.tas.gov.au</a>

#### 2.1.2 FIRE HISTORY

Recent bushfire and / or planned burns were identified within 1km of the property boundaries. Data collected from LIST Map 'Fire History Layer' 1.

Ignition date	Fire / Planned burn name	Type	Size	Distance to site
21/1/2003	Broadmarsh-Bluff Rd (TFS)	Bushfire	14345 Ha.	80m
7/2/1967	1967 Fire	Bushfire	198781 Ha.	425m

<sup>&</sup>lt;sup>1</sup> LIST Map Data is incomplete, and majority of fire history is not shown on the LIST.

#### 2.1.2 PLANNING - ZONING & TENURE

The lot is zoned as General Industrial and is privately owned. Zoning and tenure of surrounding lots is shown below (within 100m from the existing property boundaries).

Direction	Zoning	Tenure
North	Utilities	Authority Crown & Public Reserve
East	Utilities & Rural	Public Reserve
South	Utilities	Public Reserve
West	Utilities, Industrial & Environmental Management	Authority Crown & Public Reserve

#### 2.1.3 PLANNING - OVERLAYS

Overlay	Code	Development Response
Bushfire-prone areas	Bushfire-prone Areas	The Bushfire Hazard Report and Bushfire Hazard Management Plan (BHMP) satisfy the requirements of this code.
Attenuation area	Attenuation	The provisions of the BHMP do not conflict with the requirements of this code.
Waterway and coastal protection area	Natural Assets	The provisions of the BHMP do not conflict with the requirements of this code.

#### 2.1.4 PLANNING - THREATENED FLORA AND FAUNA

A threatened flora and fauna search<sup>2</sup> revealed threatened flora and fauna as below.

Common name	Species name	Development response
Eastern barred bandicoot	Perameles gunnii	The fauna point is located on the north-west property boundary, 25m north of the existing property access to proposed Lot 1. This area is not within a proposed Hazard Management Area and no vegetation removal is required. Some vegetation clearing will be required construct the road and turning area near this fauna point.
Variable raspwort	Haloragis heterophylla	Located in proposed lot 2. The HMA requires maintaining a minimal fuel condition which includes mowing the grass to a nominal height of 100mm. If required, further advice should be sought from a suitably qualified ecologist / botanist regarding the impact of the proposed development will on this specie.

<sup>&</sup>lt;sup>2</sup> Threatened species search using Land Information Systems Tasmania. This is not a complete search and other information may be available from other agencies.

Milky	Calocephalus lacteus	As above
beautyheads		
Doublejointed	Austrostipa	As above
speargrass	bigeniculata	

#### 2.2 TOPOGRAPHY AND VEGETATION

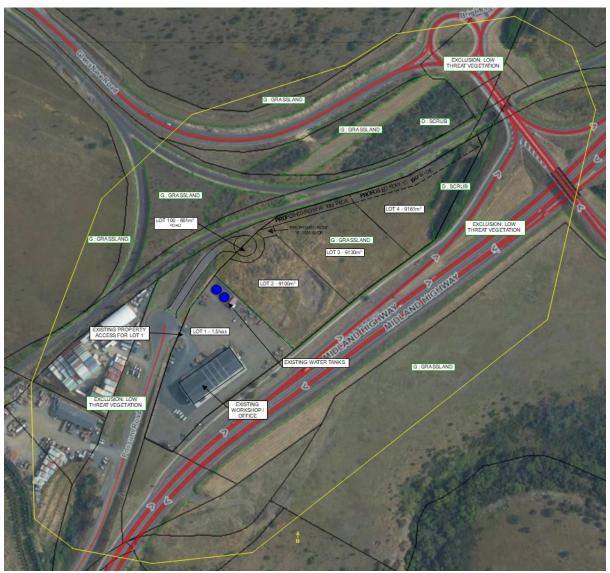


Figure 2: Aerial photo of the area showing the proposed subdivision. The yellow line is approximately 140m from the edge of the existing lot. Green dashed line shows borders between classified vegetation and exclusions shown. Source: Land Information System Tasmania, <a href="http://www.thelist.tas.gov.au">http://www.thelist.tas.gov.au</a>.

TASVEG 4.0 community FAG – Agricultural Land cover the entire existing property and all proposed lots.

TASVEG 4.0 communities within 140m from existing property boundaries is shown below.

Direction	TAS Veg 4.0 Description
North	FAG – Agricultural land, FPE – Permanent easements (modified land) &

	GTL – Lowland Themeda triandra grassland
East	FAG – Agricultural land & FPE - Permanent easements (modified land)
South	FAG – Agricultural land, FPE - Permanent easements (modified land) & NBA – Bursaria acacia woodland
West	FAG – Agricultural land & FUR – Urban areas



Figure 3: Aerial photo of the area showing TAS Veg 4.0 communities surrounding the existing property. Source: Land Information System Tasmania, <a href="http://www.thelist.tas.gov.au">http://www.thelist.tas.gov.au</a>.

Direction, vegetation types, exclusion and effective slope are shown below for proposed lots 1 to 4. Lot 101 (public open space) and Lot 100 (road) have not been assessed as the use of these lots are not for building works.

#### Lot 1 (measured from existing building):

Direction	Existing Vegetation Description	Effective slope
North - east	0-48m: Gravel area with no vegetation.	
	Exclusion: Low threat vegetation as per clauses 2.2.3.2 (e) of AS3959:2018.	
	48-140m: Dense pasture with isolated shrubs. Over storey foliage cover is less than 10%.	0 – 5° downslope
	Classified vegetation: G: Grassland	
South - east	0-20m: Gravel area and hardstand area. Garden area exists near boundary to highway. Vegetation is assessed as low threat.	
	Exclusion: Low threat vegetation as per clauses 2.2.3.2 (e) & (f) of AS3959:2018.	
	20-40m: Concreate pathway, road cutting and narrow strip of grass vegetation. Vegetation is too narrow to increase the severity of a bushfire attack.	
	Exclusion: Low threat vegetation as per clauses 2.2.3.2 (d) & (e) of AS3959:2018.	
	40-80m: Midland highway and road cutting.	
	Exclusion: Low threat vegetation as per clauses 2.2.3.2 & (e) of AS3959:2018.	
	80-105m: Dense pasture, periodically slashed.	-0.4
	Classified vegetation: G: Grassland	0° / Upslope
	105-140m+: Dense pasture, grazing paddock.	
	Classified vegetation: G: Grassland	0° / Upslope
South - west	0-140m+: Gravel and hardstand area on subject lot. Narrow vegetation strip along Possum Road is managed by Brighton Council and kept is minimal fuel condition.	
	Exclusion: Low threat vegetation as per clauses 2.2.3.2 & (e) & (f) of AS3959:2018.	
North - west	0-120m: Gravel and hardstand area on subject lot. Narrow vegetation strip along Possum Road is managed by Brighton Council and kept is minimal fuel condition.	

Exclusion: Low threat vegetation as per clauses 2.2.3.2 & (e) & (f) of AS3959:2018.	
120-140m+: Over storey of wattle trees with height less than 6m. Over storey foliage cover is estimated to be <10%. Dominant grassy under storey with isolated shrubs.	0° / Upslope
Classified vegetation: G: Grassland	

#### Lot 2 (measured from indicative building area):

Direction	Existing Vegetation Description	Effective slope
North - east	0-140m+: Dense pasture with isolated shrubs. Over storey foliage cover is less than 10%.  Classified vegetation: G: Grassland	0 – 5° downslope
South - east	0-30m: Dense pasture with isolated shrubs. Over storey foliage cover is less than 10%.  Classified vegetation: G: Grassland  30-50m: Concreate pathway, road cutting and narrow strip of grass vegetation. Vegetation is too narrow to increase the severity of a bushfire attack.  Exclusion: Low threat vegetation as per clauses 2.2.3.2 (d) & (e) of AS3959:2018.	0° / Upslope
	50-90m: Midland highway and road cutting.  Exclusion: Low threat vegetation as per clauses 2.2.3.2 & (e) of AS3959:2018.  90-140m+: Dense pasture, grazing paddock.  Classified vegetation: G: Grassland	0° / Upslope
South - west	0-20m: Dense pasture.  Classified vegetation: G: Grassland  20-140m+: Gravel and hardstand area on adjacent lot.  Exclusion: Low threat vegetation as per clauses 2.2.3.2 & (e) & (f) of AS3959:2018.	0° / Upslope
North - west	0-40m: Dense pasture.  Classified vegetation: G: Grassland	0° / Upslope

40-60m: Gravel and hardstand area. Narrow vegetation strip along	
Possum Road is managed by Brighton Council and kept is minimal	
fuel condition.	
Exclusion: Low threat vegetation as per clauses 2.2.3.2 & (e) & (f) of AS3959:2018.	
60-70m: Railway line. Vegetation periodically maintained along line. Verges have small wattles and grassy understorey.	
Classified vegetation: G: Grassland	0° / Upslope
70-100m: Wattle trees with height of 6m. Grassy under storey.	
Classified vegetation: D: Scrub	0° / Upslope
100-140m: Over storey of wattle trees with height less than 6m.	
Over storey foliage cover is estimated to be <10%. Dominant grassy	
under storey with isolated shrubs.	
Classified vegetation: G: Grassland	0° / Upslope

#### Lot 3 (measured from indicative building area):

Direction	Existing Vegetation Description	Effective slope
North - east	0-75m: Dense pasture with isolated shrubs. Over storey foliage cover is less than 10%.  Classified vegetation: G: Grassland	0 – 5° downslope
	75-140m: Trees with 8m height. Grassy under storey.  Classified vegetation: D: Scrub	0 – 5° downslope
South - east	0-20m: Dense pasture.	
	Classified vegetation: G: Grassland	0° / Upslope
	20-40m: Concreate pathway, road cutting and narrow strip of grass vegetation. Vegetation is too narrow to increase the severity of a bushfire attack.	
	Exclusion: Low threat vegetation as per clauses 2.2.3.2 (d) & (e) of AS3959:2018.	
	40-80m: Midland highway and road cutting.	
	Exclusion: Low threat vegetation as per clauses 2.2.3.2 & (e) of AS3959:2018.	
	80-140m+: Dense pasture, grazing paddock.  Classified vegetation: G: Grassland	0° / Upslope

South - west	0-140m: Dense pasture.	
	Classified vegetation: G: Grassland	0° / Upslope
North - west	0-40m: Dense pasture.	
	Classified vegetation: G: Grassland	0° / Upslope
	40-50m: Wattle trees. Over storey foliage cover less than 10%.	
	Dominant grassy under storey. Includes railway line.	0° / Upslope
	Classified vegetation: G: Grassland	
	50-100m: Wattle trees with height less than 6m. Foliage cover is 10-	
	30%. Grassy under storey.	
	Classified vegetation: D: Scrub	0° / Upslope
	100-140m: Dense pasture with isolated trees.	
	Classified vegetation: G: Grassland	0° / Upslope

#### Lot 4 (measured from indicative building area):

Direction	Existing Vegetation Description	Effective slope
North - east	0-22m: Dense pasture with isolated shrubs. Over storey foliage cover is less than 10%.  Classified vegetation: G: Grassland	0 – 5° downslope
	22-80m: Trees with 8m height. Grassy under storey.  Classified vegetation: D: Scrub	0 – 5° downslope
	80-140m: Roadway and road reserve. Vegetation is managed with grass kept to short height.	
	Exclusion: Low threat vegetation as per clauses 2.2.3.2 (d) & (e) of AS3959:2018.	
South - east	0-19m: Dense pasture.	
	Classified vegetation: G: Grassland	0° / Upslope
	19-31m: Trees with 8m height. Grassy under storey.	
	Classified vegetation: D: Scrub	0° / Upslope
	15-35m: Concreate pathway, road cutting and narrow strip of grass vegetation. Vegetation is too narrow to increase the severity of a bushfire attack.	

	Exclusion: Low threat vegetation as per clauses 2.2.3.2 (d) & (e) of AS3959:2018.	
	35-75m: Midland highway and road cutting.	
	Exclusion: Low threat vegetation as per clauses 2.2.3.2 & (e) of AS3959:2018.	
	75-140m: Dense pasture.	
	Classified vegetation: G: Grassland	0° / Upslope
South - west	0-140m: Dense pasture.	0° / Upslope
	Classified vegetation: G: Grassland	
North - west	0-20m: Dense pasture with isolated wattle trees. Over storey foliage cover less than 10%.	
	Classified vegetation: G: Grassland	
	20-35m: Railway line.	
	Exclusion: Non – vegetated area as per clause 2.2.3.2 (e).	
	35-75m: Wattle trees with height less than 6m. Foliage cover is 10-30%. Grassy under storey.	0° / Upslope
	Classified vegetation: D: Scrub	
	75-95m: Dense pasture with isolated trees.	
	Classified vegetation: G: Grassland	0° / Upslope
	95-110: Wattle trees with height less than 6m. Foliage cover is 10-30%. Grassy under storey.	
	Classified vegetation: D: Scrub	0° / Upslope
	110-130m: Roadway and road reserve.	
	Exclusion: Low threat vegetation and non – vegetated area as per clause 2.2.3.2 (e) & (f).	
	130-140m: Wattle trees with height less than 8m. Over storey foliage cover less than 10%.	0° / Upslope
	Classified vegetation: G: Grassland	

#### **3.0 BUSHFIRE SITE ASSESSMENT**

#### 3.1 EXISTING BUSHFIRE HAZARD ASSESSMENT

#### 3.2.1 CONSTRUCTION

Lot 1: Existing workshop and office for Onetrak. Steel cladding and metal sheet roof.

Lots 2-4: Vacant.

#### 3.2.2 PROPERTY ACCESS

Lot 1: The lot is hardstand with property access directly from Possum Road.

Lots 2 – 4: No existing property access.

#### 3.2.3 WATER SUPPLY

All lots: No reticulated water supply. Lot 1 has two large tanks (approximately 140,000 litres) used for firefighting.

#### 3.2.4 HAZARD MANAGEMENT AREA

Lot 1: Buildings and hardstand area. A small garden exists between the existing building and the south – east property boundary.

Lots 2 – 4: No existing hazard management area. Grass is periodically cured.

#### 3.2 BUSHFIRE ATTACK LEVEL ASSESSMENT

### Lot 1 (existing building):

	North - east	South - east	South - west	North - west
Vegetation classification as per	Grassland	Grassland	NA	NA
AS3959:2018  Exclusions (where applicable from clause 2.2.3.2 of AS3959 - 2018)				
Distance to classified vegetation (m) from edge of existing building	48	80	>100	>100
Classified vegetation	Grassland	Grassland	NA	NA
Effective slope under the classified vegetation	Down slope >0° to 5°	Upslope / 0°	NA	NA
Minimum separation distance to achieve BAL – 19.	11m	0m	0m	0m
BAL - 19 HMA can be achieved within property boundaries	Yes	Yes	Yes	Yes

#### Lot 2

	North - east	South - east	South - west	North - west
Vegetation classification as per AS3959:2018	Grassland	Grassland	Grassland	Grassland & Scrub
Exclusions (where applicable from clause 2.2.3.2 of AS3959 - 2018)				
Distance to classified vegetation (m) from indicative building area	0	0	0	Grassland – 0 Scrub – 70
Classified vegetation	Grassland	Grassland	Grassland	Grassland
Effective slope under the classified vegetation	Down slope >0° to 5°	Upslope / 0°	Upslope / 0°	Upslope / 0°
Minimum separation distance to achieve BAL – 19.	11m	10m	10m	10m
BAL - 19 HMA can be achieved within property boundaries	Yes	Yes	Yes	Yes

#### Lot 3

	North - east	South - east	South - west	North - west
Vegetation classification as per AS3959:2018	Grassland & Scrub	Grassland	Grassland	Grassland & Scrub
Exclusions (where applicable from clause 2.2.3.2 of AS3959 - 2018)				
Distance to classified vegetation (m) from indicative building area	Grassland – 0 Scrub - 75	0	0	Grassland – 0 Scrub - 50
Classified vegetation	Grassland	Grassland	Grassland	Grassland
Effective slope under the classified vegetation	Down slope >0° to 5°	Upslope / 0°	Upslope / 0°	Upslope / 0°
Minimum separation distance to achieve BAL – 19.	11m	10m	10m	10m
BAL - 19 HMA can be achieved within property boundaries	Yes	Yes	Yes	Yes

#### Lot 4

	North - east	South - east	South - west	North - west
Vegetation classification as per AS3959:2018	Grassland & Scrub	Grassland & Scrub	Grassland	Grassland & Scrub
Exclusions (where applicable from clause 2.2.3.2 of AS3959 - 2018)				
Distance to classified vegetation (m) from indicative building area	Grassland – 0 Scrub - 22	Grassland – 0 Scrub - 19	0	Grassland – 0 Scrub - 35
Classified vegetation	Grassland	Scrub	Grassland	Grassland
Effective slope under the classified vegetation	Down slope >0° to 5°	Upslope / 0°	Upslope / 0°	Upslope / 0°
Minimum separation distance to achieve BAL – 19.	22m	19m	10m	10m
BAL - 19 HMA can be achieved within property boundaries	Yes	Yes	Yes	Yes

If the minimum setback distance between the existing building for lot 1 and indicative building area for lots 2-4 and the classified vegetation is maintained, the bushfire attack level is assessed as BAL -19. The assessment is based on a FDI of 50. The FDI will exceed 50 when the AFDRS is Extreme or Catastrophic.

#### 4.0 PLANNING SCHEME COMPLIANCE

The following bushfire hazard management requirements required to comply with C13.0 Bushfire-Prone Areas Code.

#### C13.5 Use Standards

#### C13.5.1 Vulnerable uses

# Objective: That vulnerable uses can only be located on land within a bushfire-prone area where tolerable risks are achieved through mitigation measures that take into account the specific characteristics of both the vulnerable use and the bushfire hazard.

#### **Acceptable Solutions**

**A1** 

No acceptable solution

#### **Performance Criteria**

#### **P1**

A vulnerable use must only be located in a bushfire-prone area it a tolerable risk from bushfire can be achieved and maintained, having regard to:

- (a) the location, characteristics, nature and scale of the use;
- (b) whether there is an overriding benefit to the community;
- (c) whether there is no suitable alternative lower-risk site;
- (d) the emergency management strategy (vulnerable use) and bushfire hazard management plan;
- (e) other advice, if any, from the TFS

#### **Development response**

Lot 1 is not vulnerable use thus P1 is not applicable.

Lot 2 – 4 are vacant and proposed use is unknown.

Lot 100 is not vulnerable use.

#### **A2**

An emergency management strategy (vulnerable use) is endorsed by the TFS or accredited person.

#### **P2**

No Performance Criterion.

#### **Development Response**

Lot 1 is not vulnerable use thus P1 is not applicable.

Lot 2 – 4 are vacant and proposed use is unknown.

Lot 100 is not vulnerable use.

#### А3

A bushfire hazard management plan that contains appropriate bushfire protection measures that is certified by the TFS or an accredited person.

#### Р3

No Performance Criterion.

#### **Development Response**

Lot 1 is not vulnerable use thus P1 is not applicable.

Lot 2 – 4 are vacant and proposed use is unknown.

Lot 100 is not vulnerable use.

#### C13.5.2 Hazardous uses

#### Objective:

That hazardous uses can only be located on land within a bushfire-prone area where tolerable risks are achieved through mitigation measures that take into account the specific characteristics of both the hazardous use and the bushfire hazard.

#### **Acceptable Solutions**

#### Α1

No acceptable solution

#### **Performance Criteria**

#### **P1**

A hazardous use must only be located in a bushfire-prone area it a tolerable risk from bushfire can be achieved and maintained, having regard to:

- (a) the location, characteristics, nature and scale of the use;
- (b) whether there is an overriding benefit to the community;
- (c) whether there is no suitable alternative lower-risk site;
- (d) the emergency management strategy (vulnerable use) and bushfire hazard management plan;
- (e) other advice, if any, from the TFS

#### **Development response**

Lot 1 – Onetrak does not have a hazardous chemical register. If hazardous chemicals are stored on the lot are of manifest quantity (as defined by the Tasmanian Planning Scheme) compliance to P1 will need to be demonstrated.

Lot 2 – 4 are vacant and proposed use is unknown.

Lot 100 is not hazardous use.

#### **A2**

An emergency management strategy (hazardous use) is endorsed by the TFS or accredited person.

#### **P2**

No Performance Criterion.

#### **Development Response**

Lot 1 – Onetrak does not have a hazardous chemical register. If hazardous chemicals are stored on the property that are of manifest quantity (as defined by the Tasmanian Planning Scheme) compliance to A2 will need to be demonstrated.

Lot 2 – 4 are vacant and proposed use is unknown.

Lot 100 is not hazardous use.

#### А3

A bushfire hazard management plan that contains appropriate bushfire protection measures that is certified by the TFS or an accredited person.

#### Р3

No Performance Criterion.

#### **Development Response**

Lot 1 - Onetrak does not have a hazardous chemical register. If hazardous chemicals are stored on the lot are of manifest quantity (as defined by the Tasmanian Planning Scheme) compliance to A3 will need to be demonstrated.

Lot 2 – 4 are vacant and proposed use is unknown.

Lot 100 is not hazardous use.

#### C13.6 Development Standards for Subdivision

#### C13.6.1 Subdivision: Provision of hazard management areas

#### Objective:

That subdivision provides for hazard management areas that:

- (a) facilitate an integrated approach between subdivision and subsequent buildings on a lot;
- (b) provide for sufficient separation of building areas from bushfire-prone vegetation to reduce radiant heat levels, direct flame attack and ember attack at the building area; and
- (c) provide protection for lots at any stage of a staged subdivision.

#### **Acceptable Solutions**

#### Α1

- (a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of hazard management areas as part of a subdivision; or
- (b) The proposed plan of subdivision:
  - (i) shows all lots that are within or partly within a bushfire-prone area, including those developed at each stage of a stage subdivision.
  - (ii) shows the building area for each lot;
  - (iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to, or greater than, the separation distances required for BAL 19 in Table 2.6 of *Australian Standard* AS 3959:2018 *Construction of buildings in bushfire-prone areas*; and
  - (iv) is accompanied by a bushfire hazard management plan that address all the individual lots that is certified by the TFS or accredited person, showing hazard management areas equal to, or greater than, the separation distances required for BAL 19 in Table 2.6 of *Australian Standard* AS 3959:2018 *Construction of buildings in bushfire-prone areas*; and
- (c) If hazard management areas are to be located on land external to the proposed subdivision the application is accompanied by the written consent of the owner of that land to enter into an agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with the bushfire hazard management plan.

#### **Performance Criteria**

A proposed plan of subdivision shows adequate hazard management areas in relation to the building areas shown on lots within a bushfire-prone area, having regard to:

- (a) the dimensions of hazard management areas;
- (b) a bushfire risk assessment of each lot at any stage of staged subdivision;
- (c) the nature of the bushfire-prone vegetation including type, fuel load, structure and flammability;
- (d) the topography, including site slope;
- (e) any other potential forms of fuel and ignition source;
- (f) separation distances from the bushfire-prone vegetation not unreasonably restricting subsequent development;
- (g) an instrument that will facilitate management of fuels located on land external to the subdivision;
- (h) any advice from the TFS.

#### **Development response**

The Bushfire Hazard Report and BHMP satisfies the requirements of C13.6.1 A1(b) for Lots 1 to 4.

Lot 1 shall continue to be managed as a hazard management area.

Lots 2-4: shall have the Hazard Management Area installed when future building works begin on the subject lot.

#### C13.6.2 Subdivision: Public and firefighting access

#### Objective:

That access roads to, and the layout of roads, tracks and trails, in a subdivision:

- (a) allow safe access and egress for residents, fire fighters and emergency service personnel;
- (b) provide access to the bushfire-prone vegetation that enables both property to defend when under bushfire attack and for hazard management works to be undertaken;
- (c) are designed and constructed to allow for fire appliances to be manoeuvred;
- (d) provide access to water supplies for fire appliances; and
- (e) are designed to allow connectivity, and where needed, offering multiple evacuation points.

#### **Acceptable Solutions**

#### **A1**

- (a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant specific measures for public access in the subdivision for the purposes of fire fighting; or
- (b) A proposed plan of subdivision showing the layout of roads, fire trails and the location of property access to building areas is included in a bushfire hazard management plan that:
- (i) demonstrates proposed roads will comply with Table C13.1, proposed property accesses will comply with Table C13.2 and proposed fire trails will comply with Table C13.3; and
- (ii) is certified by the TFS or an accredited person.

#### **Performance Criteria**

#### **P1**

A proposed plan of subdivision shows access and egress for residents, fire-fighting vehicles and emergency service personnel to enable protection from bushfires, having regard to:

- (a) appropriate design measures, including
  - (i) two way traffic;
  - (ii) all weather construction;
  - (iii) height and width of any vegetation clearances;
  - (iv) load capacity
  - (v) provision of passing bays;
  - (vi) traffic and control devices;
  - (vii) geometry, alignment and slope of roads, tracks and trails;
  - (viii) use of through roads to provide for connectivity;
  - (ix) limits on the length of cul-de-sacs and dead-end roads;
  - (x) provision of turning areas;
  - (xi) provision of parking areas;
  - (xii) perimeter access; and
  - (xiii) fire trails;
- (b) the provision of access to:
  - (i) bushfire-prone vegetation to permit the undertaking of hazard management works; and
  - (ii) fire fighting water supplies; and
- (c) any advice from the TFS.

#### **Development response**

The Bushfire Hazard Report and BHMP satisfies the requirements of C13.6.2 A1(b) for Lots 1 to 4.

Proposed Possum Road extension and turning circle shall comply with Table C13.1. No fire trails are proposed. The road and turning area shall be constructed prior to sealing of final plan.

Existing property access for Lot 1 complies with Table C13.2.

Lot 2 to 4 property access to be designed and constructed to comply with Table C13.2 when future building works are undertaken.

Crossover for Lot 2 - 4 should be a minimum 4m carriageway width. Crossover shall be constructed prior to sealing of final plan.

Lot 100 will form part of the compliant turning circle to Table C13.1

**Table C13.1 Standards for Roads** 

Element		Requirement		
A.	Property access length is 30m or greater; or access is required		the development standards in the zone require a higher standard, the ng apply:	
	for a fire appliance to a fire fighting water point.	(a)	two-wheel drive, all – weather construction	
		(b)	load capacity of at least 20 tonnes, including for bridges and culverts;	
		(c)	minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road;	
		(d)	minimum vertical clearance of 4m;	
		(e)	minimum horizontal clearance of 2m from the edge of the carriageway;	
		(f)	cross falls of less than 3 degrees (1:20 or 5%);	
		(g)	maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;	
		(h)	curves with a minimum inner radius of 10m;	
		(i)	dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width;	
		(j)	dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and	
		(k)	carriageways less than 7m width have 'No Parking' zones on one side indicated by a road sign that complies with <i>Australian Standard AS1743:2018 Road signs-Specifications</i>	

#### **Development response**

Property road extension for Possum Road and turning circle shall comply with Table C13.1 or unless the development standards for general industrial require a higher standard (LGAT Standard Drawings TSD-R06 Table 2). The road shall be constructed prior to sealing of final plan.

**Table C13.2 Standards for Property Access** 

Element		Requirement	
A.	Property access length is less than 30m; or access is not required for a fire appliance to access a firefighting water point	There are no specified design and construction requirements.	
В.	Property access length is 30m or greater; or access is required for a fire appliance to a fire fighting water point.	The following design and construction requirements apply to property access:  (I) all – weather construction  (m) load capacity of at least 20t, including bridges and culverts;  (n) minimum carriageway width of 4m;  (o) minimum vertical clearance of 4m;  (p) minimum horizontal clearance of 0.5m from the edge of the carriageway;  (q) cross falls of less than 3 degrees (1:20 or 5%);  (r) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;  (s) curves with a minimum inner radius of 10m;  (t) maximum gradient of 15 degrees (13.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and  (u) terminate with a turning area for fire appliances provided by one of the following:  (j) a turning circle with a minimum outer radius of 10m; or  (ii) a property access encircling the building; or  (iii) a hammerhead 'T' or 'Y' turning head 4m wide and 8m long.	
C.	Property access length is 200m or greater.	The following design and construction requirements apply to property access:  (a) the requirements for B above; and  (b) passing bays of 2m additional carriageway width and 20m length provided every 200m.	
D.	Property access length is greater than 30m, and access is provided to 3 or more properties	The following design and construction requirements apply to property access:  (a) the requirements for B above; and  (b) passing bays of 2m additional carriageway width and 20m length provided every 100m.	
Deve	elopment response		

Existing property access for lot 1 complies with the requirements of Table C13.2.

Property access for lots 2 to 4 shall comply with the requirements of Table C13.2. Property access and design shall be constructed when future building works are undertaken.

### C13.6.3 Subdivision: Provision of water supply for fire fighting purposes

### Objective:

That an adequate, accessible and reliable water supply for the purposes of fire fighting can be demonstrated at the subdivision stage and allow for protection of life and property associated with the subsequent use and development of bushfire-prone areas.

Accepta	able Solutions	Performance Criteria	
A1		P1	
In areas	serviced with reticulated water by the water corporation:	No Performance Criterion.	
(a)	TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of a water supply for fire fighting purposes;		
(b)	A proposed plan of subdivision showing the layout of fire hydrants, and building areas, is included in a bushfire hazard management plan approved by TFS or accredited person as being compliant with Table E4; or		
(c)	A bushfire hazard management plan certified by the TFS or an accredited person demonstrates that the provision of water supply for fire fighting purposes is sufficient to manage the risks to property and lives in the event of a bushfire		
A2		P2	
In areas that are not serviced by reticulated water by the water corporation:		No Performance Criterion.	
(a)	The TFS or an accredited person certifies that there is insufficient increase in risk from bushfire to warrant provision of a water supply for fire fighting purposes;		
(b)	The TFS or an accredited person certifies that a proposed plan of subdivision demonstrates that a static water supply, dedicated to fire fighting, will be provided and located compliant with Table E5; or		
(c)	A bushfire hazard management plan certified by the TFS or an accredited person demonstrates that the provision of water supply for fire fighting purposes is sufficient to manage the risks to property and lives in the event of a bushfire.		

### **Development response**

The area is not serviced by reticulated water by the water corporation.

Lot 1: Existing static water supply does not comply with C13.6.3 A2 (b). Lot 1 requires the installation of the static water supply compliant to Table C13.5 this will demonstrate compliance to C13.6.3 A2 (b). Static water supply shall be installed prior to sealing of final plan.

Lots 2 to 4 require the installation of the static water supply compliant to Table C13.5 this will demonstrate compliance to C13.6.3 A2 (b). Static water supply shall be installed when future building works are undertaken.

Table C13.5 Static water supply for fire fighting

Element		Requirement
A.	Distance between building area to be protected and water supply.	<ul> <li>The following requirements apply:</li> <li>(a) the building area to be protected must be located within 90m of the fire fighting water point of a static water supply; and</li> <li>(b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.</li> </ul>
В.	Static Water Supplies	<ul> <li>(a) may have a remotely located offtake connected to the static water supply;</li> <li>(b) may be supplied for combined use (fire fighting and other uses) but the specified minimum quantity of fire fighting water must be available at all times;</li> <li>(c) must be a minimum 10,000L per building area to be protected. This volume of water must not be used for any other purpose including fire fighting sprinkler or spray systems;</li> <li>(d) must be metal, concrete or lagged by non-combustible material if above ground; and</li> <li>(e) if a tank can be located so it is shielded in all directions in compliance with section 3.5 of Australian Standard AS 3959:2018 Construction of buildings in bushfire-prone areas, the tank may be constructed of any material provided that the lowest 400mm of the tank exterior is protected by: <ul> <li>(i) metal;</li> <li>(ii) non-combustible material; or</li> <li>(iii) fibre-cement a minimum of 6mm thickness.</li> </ul> </li> </ul>
C.	Fittings, pipework and accessories (including stands and tank supports)	Fittings and pipework associated with a fire fighting water point for a static water supply must:  (a) have a minimum nominal internal diameter of 50mm;  (b) be fitted with a valve with a minimum nominal internal diameter of 50mm;  (c) be metal or lagged by non-combustible materials if above ground  (d) if buried, have a minimum depth of 300mm;  (e) provide a DIN or NEN standard forged Storz 65mm coupling fitted with a suction washer for connection to fire fighting equipment;  (f) ensure the coupling is accessible and available for connection at all times;

		(g)	ensure the coupling is fitted with a blank cap and securing chain
			(minimum 220mm length);
		(h)	ensure underground tanks have either an opening at the top of no
			less than 250mm diameter or a coupling compliant with this Table;
			and
		(i)	if a remote offtake is installed, ensure the offtake is in a position
			that is:
			(1)
			(i) visible;
			(ii) accessible to allow connection by fire fighting equipment;
			(ii) accessible to allow connection by the righting equipment,
			(iii) at a working height of 450 – 600mm above ground level; and
			(iv) protected from possible damage, including damage by vehicles
D.	Signage for static water	The fire f	ighting water point for a static water supply must be identified by
	connections.	a sign pe	rmanently fixed to the exterior of the assembly in a visible location.
		The sign	must:
		(a)	comply with water tank signage requirements with Australian
			Standard AS 2304-2019 Water Storage tanks for fire protection
			systems; or
		(1-1)	
		(a)	comply with the Tasmanian Fire Service Water Supply Guideline
			published by the Tasmania Fire Service.
Ε.	Hardstand	A hardete	and area for a fire appliance must be:
٤.	i iai ustailu	Andrusta	and area for a fine appliance must be.
		(a)	no more than 3m from the fire fighting water point, measured as
		, ,	a hose lay (including the minimum water level in dams, swimming
			pools and the like);
			pools and the interp
		(b)	no closer than 6m from the building area to be protected;
		(c)	a minimum width of 3m constructed to the same standard as the
			carriageway; and
		(4)	connected to the property access by a carriageway equivalent to
1		(u)	connected to the property access by a carriageway equivalent to
		(u)	the standard of the property access.

### Development response

Lots 1 to 4 shall have a static water supply installed that complies with Table C13.5.

Lot 1 static water supply shall be installed prior to sealing of final plan.

Lot 2-4 static water supply shall be installed when future building works are undertaken.

Lots 100 does not require a static water supply (proposed use is not building works).

### 5.0 CONCLUSION

A Bushfire Hazard Report has been completed for the proposed subdivision of one lot into five lots. This will create four lots that will allow buildings to be constructed. Lot 1 has an existing office/workshop. Lots 2 to 4 are vacant. Lot 100 will be part of the proposed extension of Possum Road. The use of Lot 100 does not allow for buildings to be constructed.

All proposed lots are within the Bushfire Prone Areas overlay. The Bushfire Hazard Report and certified BHMP shows compliance to C13.0 Bushfire-Prone Areas Code Tasmanian Planning Scheme.

This Bushfire Hazard Report and BHMP are valid for any building constructed within the '20m x 40m indicative building area' as shown on the BHMP. Any buildings or part of building located outside this area will require a Bushfire Hazard Report and BHMP to comply with the Director's Determination – Bushfire Hazard Areas V1.2 or any subsequent Determination valid at the time of building.

This Bushfire Hazard Report and BHMP does not endorse the removal of any vegetation without the approval from the local government authority.

It is the owners' responsibility to ensure that the requirements of the Bushfire Hazard Report and BHMP are implemented and maintained for the life of the development.

The BHMP is valid for a period of six years.

#### 6.0 REFERENCES

AS3959 – 2018 - Construction of Buildings in Bushfire Prone Areas

Bushfire Information Publications - Tasmania Fire Service.

The LIST - Department of Primary Industries Parks Water & Environment

C13.0 Bushfire-Prone Areas Code, Tasmanian Planning Scheme

### 7.0 APPENDIX

### 7.1 FIELD PHOTOS



Photo 1: Lot 2 – NE direction from the indicative building area.



Photo 2: Lot 2 – SE direction from the indicative building area.



Photo 3: Lot 2 – SW direction from the indicative building area.



Photo 4: Lot 2 – NW direction from the indicative building area.



Photo 5: Lot 3 – NE direction from the indicative building area.



Photo 6: Lot 3 – SE direction from the indicative building area.



Photo 7: Lot 3 – SW direction from the indicative building area.



Photo 8: Lot 3 – NW direction from the indicative building area.



Photo 9: Lot 4-NE direction from the indicative building area.



Photo 10: Lot 4-SE direction from the indicative building area.



Photo 11: Lot 4-SW direction from the indicative building area.



Photo 12: Lot 4-NW direction from the indicative building area.



Photo 13: Lot 1 – Existing use as a Onetrak machinery workshop and administration space. Note existing static water supply use for firefighting purposes.



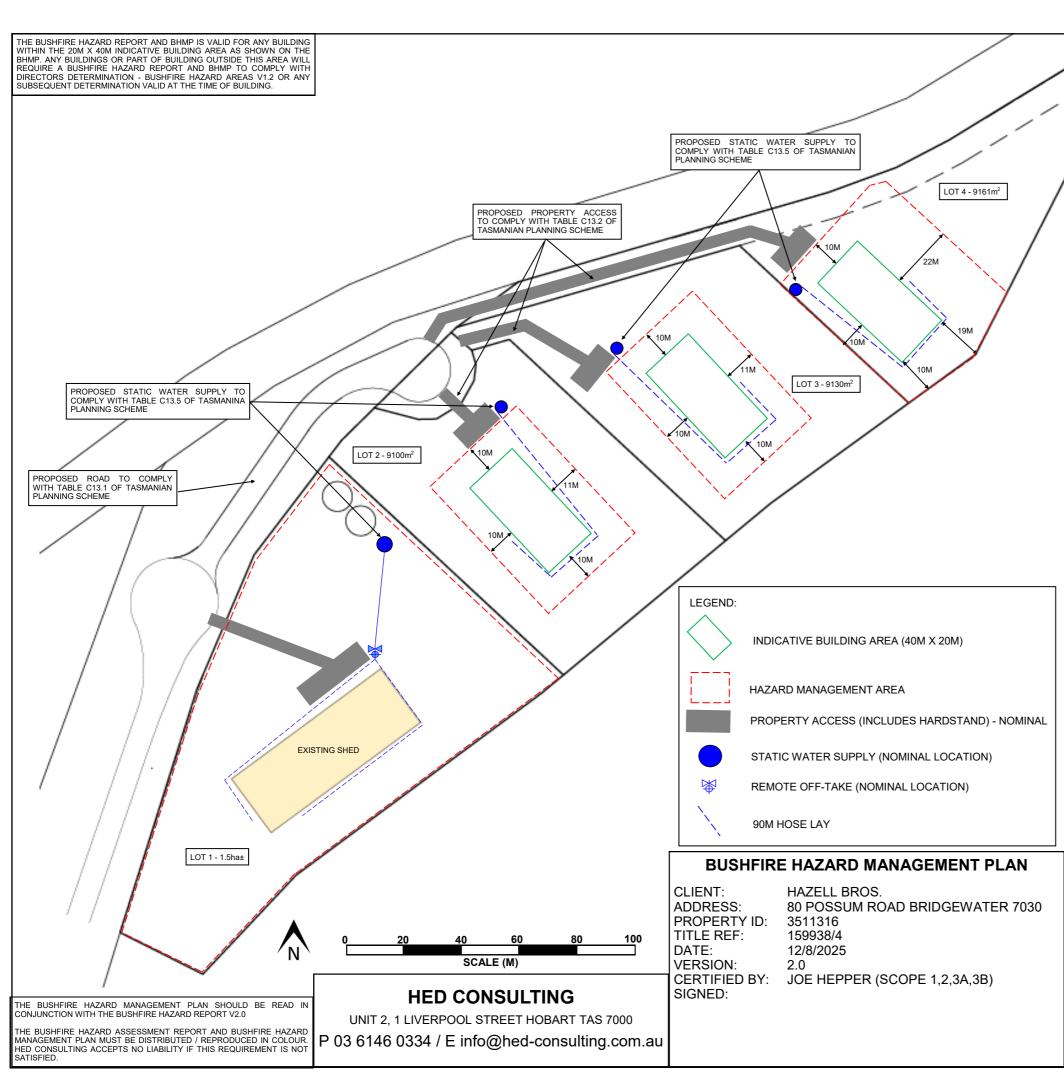
Photo 14: Lot 4 – Example of Classified vegetation D: Scrub (trees) and G: Grassland.



Photo 15: Example of Classified vegetation: D: Scrub on the north – west of the proposed subdivision (north of the railway).



Photo 16: Midland Highway Road reserve and roadway. Vegetation is considered low threat vegetation as per clause 2.2.3.2 (f) of AS3959:2018.



### BUSHFIRE HAZARD MANAGEMENT REQUIREMENTS

### 1. Provisions of hazard management areas

Lot 1: Complies with C13.6.1: A1 (b). HMA to continue to be managed as per section 4 of this BHMP.

Lots 2-4: Shall comply with C13.6.1: A1 (b) of the Tasmanian Planning Scheme. The Hazard Management Area (HMA) shall comply with section 4 of this BHMP and be implemented when future building works are undertaken.

### 2. Public and fire fighting access

Lot 100 and acquired road: Extension of road and turning circle shall comply with C13.6.2: A1 (b) of the Tasmanian Planning Scheme. The road shall be constructed prior to sealing of final plan.

Lot 1: Complies with C13.6.2: A1 (b) of the Tasmanian Planning Scheme.

Lots 2-4: Property access shall comply with C13.6.2: A1 (b) pf the Tasmanian Planning Scheme. Crossover shall be minimum 4m carriageway width and installed prior to sealing of final plan.

#### 3. Provision of water supply for fire fighting purposes

Lot 1: Shall comply with C13.6.3: A2 (b) of Tasmanian Planning Scheme. Static water supply for fire fighting purposes shall be installed prior to sealing of final plan.

Lots 2-4: Shall comply with C13.6.3: A2 (b) of Tasmanian Planning Scheme. Static water supply for fire fighting purposes shall be installed when future building works are undertaken.

#### Hazard Management Area

This area to be maintained and managed as defendable space from a attack. Area to be managed as per below.

- Establish non-flammable areas around the building area. This includes paths, driveways, and maintained lawns (less than 100mm height).
- Non combustible ground cover should be used in garden beds (small rock and pebbles instead of pine bark)
- Remove any ground fuels (eg. leaf litter, bark and branches).
- Flammable materials such as woodpiles, fuels and rubbish shall be stored away from the protected building.
- Non-flammable separated shrubs, hedges and small trees shall be used for landscaping around the protected building.
- Tree canopies must not distribute leaf litter into gutters.
- There must be a horizontal separation between the tree crowns and vertical separation between the ground fuels and trees branches.
- No mass plantings of trees greater than 2m.
- •Slash surrounding pasture periodically to prevent pasture from becoming woody weed infested or regenerating to bushland.

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HC

for DAVID HAZELL

EN/MK

23/05/2025

TURNING CIRCLE ADDED

PLAN OF SUBDIVISION

### **PLAN OF SUBDIVISION**

**Owners** R.G. Hazell Pty. Ltd. David Hazell Pty Ltd

Title References FR 159938/4

Address 80 Possum Road Bridgewater

**Brighton Council** 

Tasmanian Planning scheme Brighton Local Provisions Schedule

19.0 General Industrial

Code Overlay 9 Attenuation Code/Bridgewater Quarry 13 Bushfire-prone Area BRI-S4.0, BRI-S10.0,

3511316

Point of interest GDA2020 MGA55 59752E, 5270805N

Schedule of Easements Proposed Rights of Way as shown. Proposed Drainage Easement 6.00 wide

### NOTES

This plan has been prepared only for the purpose of obtaining preliminary subdivision approval from the Council and the information shown hereon should be used for no other purpose. All measurements and areas are subject to final survey.

All lots shown on plan cannot be serviced by water and sewer. On site treatment for sewer is required.

Water tanks are required for firefighting purposes.

The Site is covered in its entirety by the Codes listed above and have not been shown for clarity.



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1:1500 (A3) JOB NUMBER 46981NG-1g

### **BUSHFIRE-PRONE AREAS CODE**

# CERTIFICATE<sup>1</sup> UNDER S51(2)(d) LAND USE PLANNING AND APPROVALS ACT 1993

### 1. Land to which certificate applies

The subject site includes property that is proposed for use and development and includes all properties upon which works are proposed for bushfire protection purposes.

**Street address:** 80 Possum Road Bridgewater 7030

Certificate of Title / PID: CT 159938/4, PID 3511316

### 2. Proposed Use or Development

Description of proposed Use and Development:

Five – lot subdivision (one lot into five lots)

**Applicable Planning Scheme:** 

Tasmanian Planning Scheme

### 3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Bushfire Hazard Report	HED Consulting	12/8/2025	2.0
Bushfire Hazard Management Plan	HED Consulting	12/8/2025	2.0
Plan of Subdivision 80 Possum Road, Bridgewater for David Hazell	PDA Surveyors, Engineers & Planners	23/5/2025	46981NG- 1g

<sup>&</sup>lt;sup>1</sup> This document is the approved form of certification for this purpose and must not be altered from its original form.

1	Nature	of Co	rtifi	cato
4.	nature	or Ce	rtiti	cate

The following requirements are applicable to the proposed use and development:

E1.4 / C13.4 – Use or development exempt from this Code	
Compliance test Compliance Requirement	
E1.4(a) / C13.4.1(a)	Insufficient increase in risk

E1.5.1 / C13.5.1 – Vulnerable Uses		
Acceptable Solution	Compliance Requirement	
E1.5.1 P1 / C13.5.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
E1.5.1 A2 / C13.5.1 A2	Emergency management strategy	
E1.5.1 A3 / C13.5.1 A2	Bushfire hazard management plan	

E1.5.2 / C13.5.2 – Hazardous Uses	
Acceptable Solution Compliance Requirement	
E1.5.2 P1 / C13.5.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.
E1.5.2 A2 / C13.5.2 A2	Emergency management strategy
E1.5.2 A3 / C13.5.2 A3	Bushfire hazard management plan

$\boxtimes$	E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas		
	Acceptable Solution	Compliance Requirement	
	E1.6.1 P1 / C13.6.1 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
	E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk	
$\boxtimes$	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as 'balance')	
	E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement	

	E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access		
	Acceptable Solution	Compliance Requirement	
	E1.6.2 P1 / C13.6.2 P1	Planning authority discretion required. A proposal cannot be certified as compliant with P1.	
	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk	
$\boxtimes$	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables	

$\boxtimes$	E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes		
	Acceptable Solution	Compliance Requirement	
	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk	
	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table	
	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective	
	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk	
$\boxtimes$	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table	
	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective	

5. Bu	ıshfire H	Hazard Practition	er			
Name:	Joe He	pper		Phone No:	03 6146 0334	4
Postal Address:	1 Liver	pool Street, Hobart	7000	Email Address:	info@hed- consulting.co	m.au
Accreditati	ion No:	BFP – 148		Scope:	1,2,3A,3B	
6. Ce	rtificati	on				
I certify that in accordance with the authority given under Part 4A of the <i>Fire Service Act</i> 1979 that the proposed use and development:  Is exempt from the requirement Bushfire-Prone Areas Code because, having regard to the objective of all applicable standards in the Code, there is considered to be an						
$\boxtimes$	insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measures, or  The Bushfire Hazard Management Plan/s identified in Section 3 of this certificate is/are in accordance with the Chief Officer's requirements and compliant with the relevant <b>Acceptable Solutions</b> identified in Section 4 of this Certificate.					
Signed: certifier	roiovain					
Name:		JOE HEPPER	Da	te: 12/8/202	25	
			Certifica Numb	er: H2/36		
			(for Prac	titioner Use or	nly)	





## 4 LOT SUBDVISION 80 POSSUM ROAD, BRIDGEWATER

TRAFFIC IMPACT ASSESSMENT OCTOBER 2024





## 4 Lot Subdivision 80 Possum Road, Bridgewater

### TRAFFIC IMPACT ASSESSMENT

- Final #2
- October 2024

Traffic & Civil Services ABN 72617648601 1 Cooper Crescent RIVERSIDE

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## **Document history and status**

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### 1. Introduction

### 1.1 Background

A 4-lot General Industrial subdivision at 80 Possum Road is proposed at Bridgewater. This report has been prepared to assess the traffic impact of the proposal.

This TIA has been prepared based on Department of State Growth (DSG) guidelines and responds to Tasmanian Planning Scheme – Brighton Code C3.

### 1.2 Objectives

A Traffic Impact Assessment is a means for assisting in the planning and design of sustainable development that considers:

- Safety and capacity
- Equity and social justice
- Economic efficiency
- The environment and future development.

This TIA considers the impact of the proposal on projected traffic volumes expected by 2034.

### 1.3 Scope of Traffic Impact Assessment (TIA)

This TIA considers in detail the impact of the proposal on Possum Road and the Possum Road / Glenstone Road junction.

### 1.4 References

- RTA Guide to Traffic Generating Development 2002
- Tasmanian Planning Scheme Brighton
- Austroads Guide Road Design Part 4A: Unsignalised & Signalised Intersections 2021
- Guide to Traffic Management Part 6: Intersections, Interchanges & Crossings 2020.
- LGAT Tasmanian Standard Drawings



### 1.5 Statement of Qualifications and Experience

This TIA has been prepared by Richard Burk, an experienced and qualified traffic engineer in accordance with the requirements of the Department of State Growth's guidelines and Council's requirements. Richard's experience and qualifications include:

- 37 years professional experience in road and traffic engineering industry
  - Manager Traffic Engineering at the Department of State Growth until May 2017.
  - Previous national committee membership with Austroads Traffic
     Management Working Group and State Road Authorities Pavement Marking
     Working Group
- Master of Traffic, Monash University, 2004
- Post Graduate Diploma in Management, Deakin University, 1995
- Bachelor of Civil Engineering, University of Tasmania, 1987



Richard Burk

BE (Civil) M Traffic Dip Man. MIE Aust CPEng

Director Traffic and Civil Services Pty Ltd



### 1.6 Glossary of Terms

AADT Annual Average Daily Traffic - The total number of vehicles travelling in both

directions passing a point in a year divided by the number of days in a year.

Acceleration Lane An auxiliary lane used to allow vehicles to increase speed without interfering

with the main traffic stream. It is often used on the departure side of

intersections.

Access The driveway by which vehicles and/or pedestrians enter and/or leave the

property adjacent to a road.

ADT Average Daily Traffic – The average 24-hour volume being the total number of

vehicles travelling in both directions passing a point in a stated period divided

by the stared number of days in that period.

Austroads The Association of Australian and New Zealand road transport and traffic

authorities and includes the Australian Local Government Association.

Delay The additional travel time experiences by a vehicle or pedestrian with

reference to a vase travel time (e.g. the free flow travel time).

DSG Department of State Growth – The Tasmanian Government Department

which manages the State Road Network.

GFA Gross Floor Area

Intersection Kerb The place at which two or more roads meet or cross. A raised border of rigid

material formed at the edge of a carriageway, pavement or bridge.

km/h Kilometres per hour

Level of Service An index of the operational performance of traffic on a given traffic lane,

carriageway or road when accommodating various traffic volumes under different combinations of operating conditions. It is usually defined in terms

of the convenience of travel and safety performance.

m Metres

Median A strip of road, not normally intended for use by traffic, which separates

carriageways for traffic in opposite directions. Usually formed by painted

lines, kerbed and paved areas grassed areas, etc.

Movement A stream of vehicles that enters from the same approach and departs from

the same exit (i.e. with the same origin and destination).

Phase The part of a signal cycle during which one or more movements receive right-

of -way subject to resolution of any vehicle or pedestrian conflicts by priority rules. A phase is identified by at least one movement gaining right-of-way at the start of it and at least one movement losing right-of-way at the end of it.



Sight Distance The distance, measured along the road over which visibility occurs between a

driver and an object or between two drivers at specific heights above the

carriageway in their lane of travel.

Signal Phasing Sequential arrangement of separately controlled groups of vehicle and

pedestrian movements within a signal cycle to allow all vehicle and pedestrian

movements to proceed.

SISD Safe Intersection Sight Distance – The sight distance provides sufficient

distance for a driver of a vehicle on the major road to observe a vehicle on a minor road approach moving into a collision situation and to decelerate to a

stop before reaching the collision point.

Speed Distance travelled per unit time.

85th Percentile The speed at which 85% of car drivers will travel slower and 15% will travel

faster.

A control method that allows a variable sequence and variable duration of signal displays depending on vehicle and pedestrian traffic demands.

Traffic-actuated Control A control method that allows a variable sequence and variable duration of

signal displays depending on vehicle and pedestrian tragic demands.

Trip A one-way vehicular movement from one point to another excluding the

return journey. Therefore, a vehicle entering and leaving a land use is counted

as two trips. (RTA Guide to Traffic generating Developments).

Turning Movement The number of vehicles observed to make a particular turning movement (left

or right turn, or through movement) at an intersection over a specified period.

Turning Movement

Count

A traffic count at an intersection during which all turning movements are

recorded.

Vehicle Actuated Traffic

Signals

Traffic signals in which the phasing varies in accordance with the detected

presence of vehicles on the signal approaches.

vpd vehicles per day – The number of vehicles travelling in both directions passing

a point during a day from midnight to midnight.

vph vehicles per hour – The number of vehicles travelling in both directions

passing a point during an hour.

### 1.7 Site Specific Glossary of Terms

BC Brighton Council

SSA Safe System Assessment



### 2. Site Description

Figures 1 & 2 show the development location at 80 Possum Road.

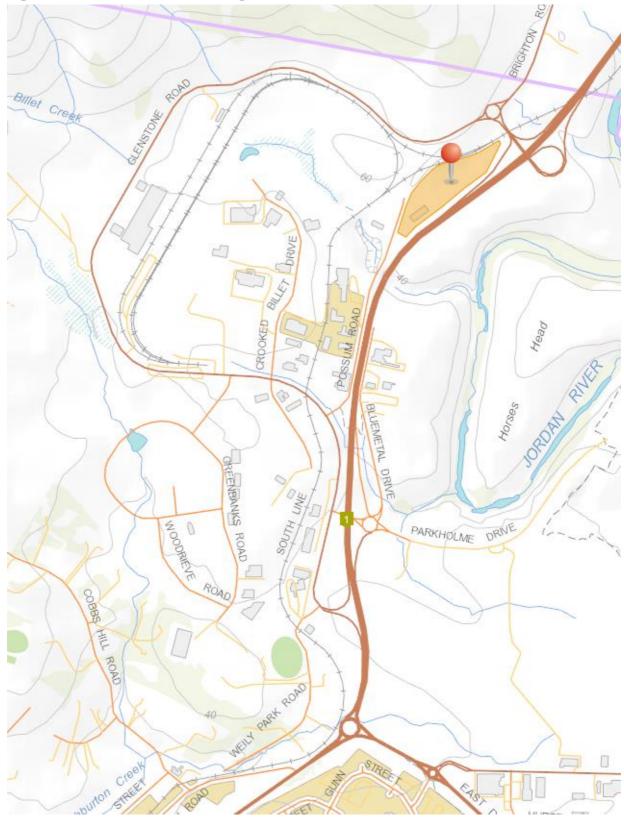
The proposed subdivision site has access to Possum Road and involves a 130m extension for access, see Figure 4. The subdivision site is relatively flat and drains towards Crooked Billet Creek / Jordan River to the East of the site.



Source: The List, DPIPWE



Figure 2 – Road network surrounding 80 Possum Road



Source: The List, DPIPWE



## 3. Proposal, Planning Scheme and Road Owner objectives

### 3.1 Description of Proposed Development

The proposal is to subdivide 80 Possum Road into 4 lots. Figures 3,4 & 5 show the proposed lot layout and access, see Appendix A for the full Plan of Subdivision.

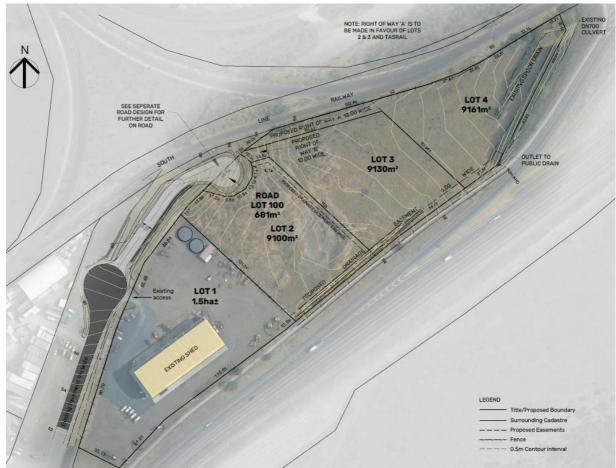


Figure 3 – Proposed subdivision layout at 80 Possum Road, Bridgewater



Figure 4 – Proposed subdivision layout at 80 Possum Road, Bridgewater

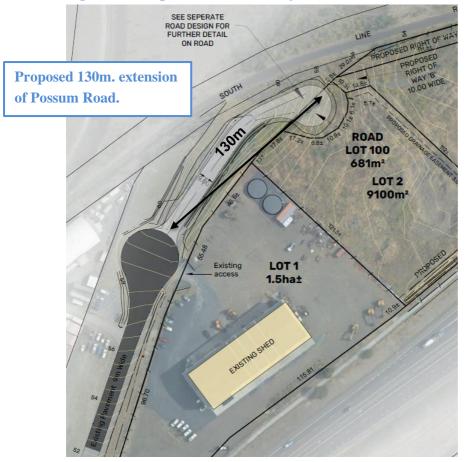
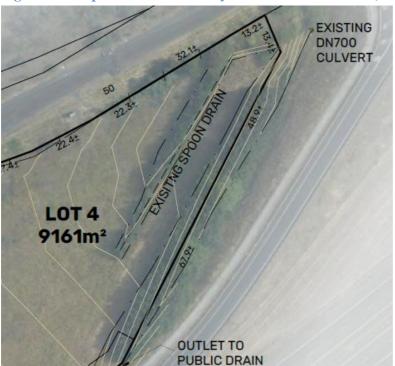


Figure 5 – Proposed subdivision layout at 80 Possum Road, Bridgewater



### **LGAT Guidelines:**

Rural Sealed Road (TSD-R02) AADT is 300-2000 vpd Code S4 Seal width 6.0m.

As Possum Road is 9.0m wide the same width is considered appropriate for the extension.

### **TPS – Brighton:**

Code C13.6.2
Public & Firefighting access

Table C13.1 Standards for Roads

Minimum width for Cul-De-Sac Road is 5.5m with 12m, radius



### 3.2 Council Planning Scheme

The proposed development site zoning is shown in Figure 6 as per the Tasmanian Planning Scheme - Brighton.

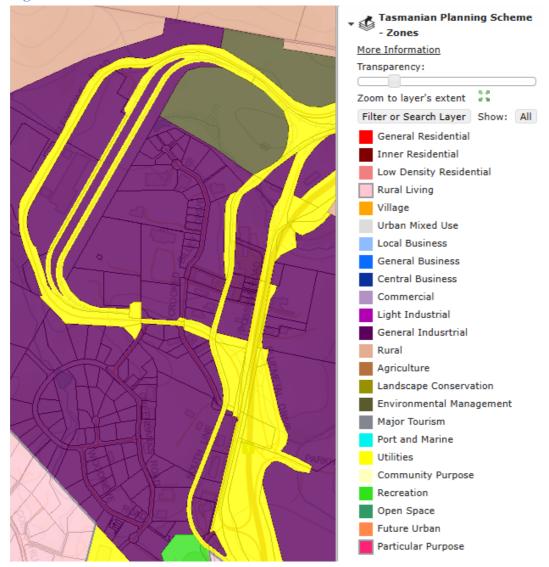


Figure 6 – 80 Possum Road is zoned General Industrial.

Source: The List, DPIPWE

### 3.3 State Road Network Objectives

DSG is the authority responsible for the State Road network impacted by the proposal. DSG objectives are to maintain traffic safety and capacity.

### 3.4 Local Road Network Objectives

Brighton Council (BC) is the authority responsible for the Council Road network impacted by the proposal. BC objectives are to maintain traffic safety and capacity.



### 4. Existing Conditions

### 4.1 Transport Network

The transport system adjacent the proposed development site consists of Midlands Highway, Glenstone Road and Possum Road.

### 4.2 Midlands Highway, Bridgewater

Midlands Hwy is a Category 1 Trunk Road in the State Road Hierarchy. The road has Limited Access status and is part of the Tasmanian 26m Double B Network, see Appendix C.

The highway has dual lane carriageways in each direction separated by median wire rope safety barrier The traffic lanes are 3.5m wide with 2m sealed shoulders. The highway has a 110Km/h Speed Limit and no footpaths.

#### 4.3 Glenstone Road

Glenstone Road is a Category 2 Regional Freight Route in the State Road Hierarchy. The road does not have Limited Access status and is part of the Tasmanian 26m Double B Network, see Appendix C.

Glenstone Road has a speed limit of 70km/h on the approaches to the Possum Road junction, see Figure 7. The road has 3.5m traffic lanes each way , 1.5m sealed shoulders and a 3m wide median turn lane and is well delineated with Edge & Lane lines. Footpaths are provided on the West and East sides and a pedestrian refuge island within the median, see Figure 12-15.



**Figure 7 – Glenstone Road Southern approach to Possum Road.** 



### 4.4 Midlands Highway / Glenstone Road Interchange - North

The existing interchange is within a 110km/h Speed Limit on the Midlands Highway approaches. Figure 8 show the interchange layout and access to Glenstone Road.

Figure 8 – Midlands Highway / Glenstone Road Interchange – North



Source: The List, DPIPWE



### 4.5 Midlands Highway / Glenstone Road Interchange - South

The existing interchange is within an 80km/h Speed Limit on the Midlands Highway approaches. Figure 9 shows the interchange layout and access to Glenstone Road.

Figure 9 – Midlands Highway / Glenstone Road Interchange – South



Source: The List, DPIPWE



### 4.6 Glenstone Road Level Crossing

There is a signalised rail level crossing on Glenstone Road 110m Northwest of the Possum Road junction, see Figure 10. The crossing is well signed and delineated with pavement markings and has boom gates and crossing signals.



Figure 10 – Glenstone Road Level Crossing

Source: The List, DPIPWE

### 4.7 Glenstone Road / Possum Road junction

The existing junction has a partially channelised layout and is situated on a gentle horizontal curve in the road. The Glenstone Road approaches to the junction have an estimated speed environment of 70km/h. Figures 11 - 16 show the nature of the junction.







Figure 12 – Aerial view of Glenstone Road / Possum Road junction



Source: The List, DPIPWE

Figure 13 – Looking right from Possum Road along Glenstone Road



Sight distance right is 200m.



Figure 14 – Looking left from Possum Road along Glenstone Road



Sight distance left is 195m.

Figure 15 – Glenstone Road Southern approach to Possum Road



Pedestrian refuge island on Glenstone Road.

Figure 16 – Glenstone Road Northern approach to Possum Road





### 4.8 #80 Possum Road Access

Possum Road is a sealed No Through Road managed by Brighton Council and functions as a local access road to General Industrial land uses. The road does not have Limited Access status and is part of the Tasmanian 26m Double B Network, see Figure 17 and Appendix C.

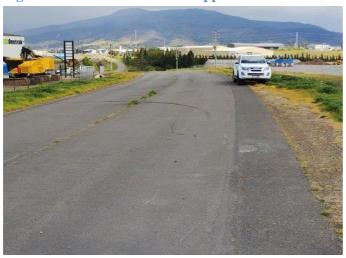
The General Urban Speed Limit of 50km/h applies to Possum Road. The seal width varies from 9.3m where there is kerb and channel along the Southern section to 7.5m wide where there is no kerb and channel along the Northern section. Figures 17 - 19 show the nature of the existing Cul-De-Sac and approaches.





Source: The List, DPIPWE

Figure 18 – #80 Possum Road approach Possum Road



Forward sight distance is 120m.



Figure 19.1 – Possum Road approach to Possum Road Cul-De-Sac



Figure 19.2 – Possum Road Cul-De-Sac approach to #80 Possum Road



Figure 19.3 – Elevation view of entrance to #80 Possum Road





### 4.9 Traffic Activity

Traffic activity from DSG records is summarised as follows, see Appendix E for details:

### **Midlands Highway**

• AADT: 22,900 vpd (2022)

• % CV: 17%

• 3.3% compound annual growth

• Projected AADT: 33,800 vpd (2034).

### **Glenstone Road (Southern end)**

• AADT: 3,390 vpd (2022)

• % CV: 35%

• 0.9% compound annual growth

• Projected AADT: 3,775 vpd (2034) without proposal.

### **Glenstone Road (Northern end)**

• AADT: 1,057 vpd (2022)

• % CV: 29%

• 6.6% compound annual growth

• Projected AADT: 2,275 vpd (2034) without proposal.

### Possum Road (approaching Glenstone Road)

• AADT: 734 vpd (2024) ( TCS estimate)

• % CV: 33%

• 0 % compound annual growth

• Projected AADT:734 vpd (2034) without proposal.

• Peak Hour 122vph i.e 61 vph each way (2034)

### 4.10 Crash History

The Department of State Growth is supplied with reported crashes by Tasmania Police. The Department maintains a crash database from the crash reports which is used to monitor road safety, identify problem areas and develop improvement schemes.

As of the 6<sup>th</sup>October 2024 the 5-year reported crash history records no crashes on Possum Road or at the junction with Glenstone Road. The crash history provides no evidence of a crash propensity in the vicinity of the proposal.

### 4.11 Services

No existing services are disaffected by the proposal.



### 4.12 Road Safety Review

### **Midlands Highway**

No road safety issues were identified.

### Midlands Highway / Glenstone Road Southern interchange

No road safety issues were identified.

### Midlands Highway / Glenstone Road Northern interchange

No road safety issues were identified.

### **Glenstone Road**

No road safety issues were identified.

### **Possum Road**

No road safety issues were identified.

### **Proposed 80 Possum Road access**

No road safety issues were identified.

### 4.13 Sight Distance Criteria

The proposed accesses satisfy sight distance guideline, see Figure 20.

Figure 20– Sight distance summary

Junction / Access		Speed	Ro	ad Fronta	ige Sight D	istance
Major Dd Minor Dd	Limit	Environment	Austroads	Ava	ilable	AS/NZS 2890.1
Major Rd - Minor Rd	(km/h)	(km/h)	SISD (m)	Left(m)	Right(m)	SSD (m)
Glenstone / Possum	70	70	151	195	200	
Proposed Lot accesses						
1	50	50	97	120	120	45
2	50	50	97	120		45
3	50	50	97	120		45
4	50	50	97	120		45

Austroads Junction Compliant

AS/ NZS 2890.1 Property Access Compliant



### 4.14 Austroads Safe System Assessment

Possum Road has been assessed in accordance with the Austroads Safe System assessment framework. This framework involves consideration of exposure, likelihood and severity to yield a risk framework score. High risk crash types and vulnerable road user crash types are assessed for each site and aggregated to provide an overall crash risk. Crash risk is considered in terms of three components:

- Exposure (is low where low numbers of through and turning traffic) i.e.1 out of 4
- Likelihood (is low where the infrastructure standard is high) i.e. 1 out of 4
- Severity (is low where the speed environment is low) i.e. 1 out of 4

The Austroads Safe System Assessment process enables the relative crash risk of an intersection or road link to be assessed. Vulnerable Road users are considered along with the most common crash types.

Crash risk score indicates how well infrastructure satisfies the *safe system objective which is* for a forgiving road system where crashes do not result in death or serious injury.

From safe system assessment, Possum Road is determined to be well aligned with the safe system objective with crash risk scores of 11 / 448. See Figure 21 and Appendix D for the assessment details.

Figure 21 – Austroads Safe System Assessment alignment between crash score and risk

<40/448 Very low risk score

(40-80)/448 Low risk score

(80-180)/448 Moderate to high risk score

>180/448 High risk score



# 5. Traffic Generation and Assignment

This section of the report estimates how traffic generated by the proposal is distributed within the adjacent road network now and ten years future.

### 5.1 Traffic Growth

Assumed background traffic compound annual growth of 0.9 % has been assumed for Glenstone Road based on the historic growth rate for the area.

Assumed background growth on Possum Road is 0% as there is limited future development.

### 5.2 Trip Generation

The following RTA traffic generation rates for General Industrial land use apply:

- Factories 5 vpd / 100m2 GFA and peak operation of 1vph / 100m2 GFA
- Warehouses 4 vpd / 100m2 GFA and peak operation of 0.5vph / 100m2 GFA

With 4\* General Industrial lots a 50:50 mix of factories and warehouses has been assumed to estimate traffic generation summarised in Figure 22.

Figure 22 – Estimated Traffic Generation due to proposal

Lot	Area	Building	AADT	Peak
LOT	(m2)	GFA (m2)	(vpd)	(vph)
1	15,000	1800	81	14
2	9,692	1200	54	9
3	9,227	1100	50	8
4	7,591	900	41	7
Lots 2,3	& 4		144	24

**Existing** 

Proposed

### 5.3 Trip Assignment

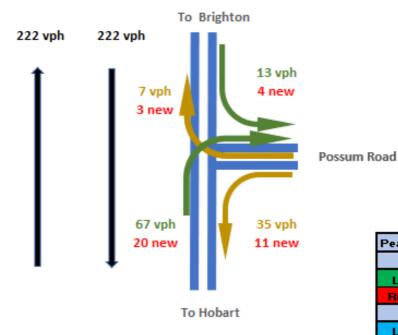
Traffic assignments at the impacted junction is summarised in Figure 23.



Figure 23 – 2034 Traffic Assignment at Glenstone Rd / Possum Rd Junction.

AM Peak - 2034

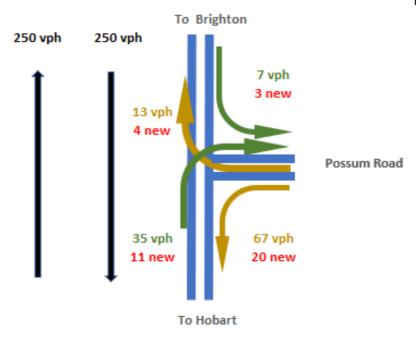
Figures in red are due to the proposal.



Peak Hour	Movem	ents
AM	Turns	TEF
Left In	17	222
Right In	461	
PM	Turns	TEF
Left In	10	250
Right In	46	510

PM Peak - 2034

TEF Total Effected Flow





# 6. Impact on Road Network

### 6.1 Junction warrants

Junction layout requirements are based on Austroads Guidelines which take into account the standard of the road, speed limit, through & side road traffic i.e. Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings -2020.

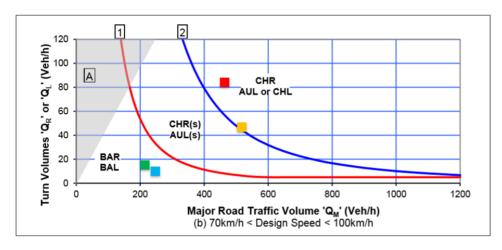
### Glenstone Road / Proposed Road Junction

Figure 24 shows the relevant Austroads junction layout warrant for the Glenstone Road / Possum Road junction. Figure 24 demonstrates that the turning movements warrant:

- Channelised Right (CHR) right turn facility
- Basic Left (BAL) left turn facility.

The current junction layout satisfies the CHR and BAL junction layout.

Figure 24 – Austroads Warrant for Glenstone Rd / Possum Road junction 2034.



Source: Austroads GTM Part 6-2020

Peak Hour	Moven	ents
AM	Turns	TEF
Left In	17	222
Right In	87	461
PM	Turns	TEF
Left In	10	250
Right In	46	510

TEF Total Effected Flow



### 6.2 Impact of traffic generated by the proposal.

### 6.2.1 Midlands Highway

The proposal is estimated to have negligible impact on Midland Hwy / Glenstone Rd interchanges as existing ramps and roundabouts operate at low traffic volumes and the Midlands Hwy has ample capacity to absorb the estimated increase in Glenstone Rd traffic:

- 118 vpd i.e 31vph at the Southern interchange.
- 26 vpd i.e 7 vph at the Northern interchange.

Midland Hwy AADT of 35,000 vpd by 2034 with peak flow of 3,500 vph across 4 lanes would yield peak lane flows of 850 vph. Lane capacity on rural roads is some 2,000 vph.

Accordingly, the existing interchanges & roundabouts are estimated to operate between LOS A & B by 2034. See Appendix B for Austroads Levels of Service definitions.

### 6.2.2 Glenstone Road / Possum Road junction

The proposal is estimated to have a negligible impact on Possum Road and the Glenstone Road junction. The existing and forecast traffic volumes are low and Glenstone Road has ample capacity to absorb the estimated increase in Glenstone Road traffic of:

- 118 vpd i.e 31vph South of Possum Road.
- 26 vpd i.e 7 vph North of Possum Road.

Glenstone Rd projected AADT is 3,775vpd by 2034 with peak hour flow of 500 vph and peak lane flows of 250 vph. Lane capacity on rural roads is some 2,000 vph.

The junction is estimated to continue to operate at Level of Service A by 2034.

### 6.2.3 Possum Road

The proposal is estimated to have a negligible impact on Possum Road The existing and forecast traffic volumes are low and has ample capacity to absorb the estimated increase in traffic of 144 vpd. Currently traffic activity is estimated at 734 vpd.

### 6.3 Tasmanian Subdivision Guideline Considerations

From natural surface contours of the site the proposed 130m extension of Possum Road has a maximum a grade of some 5% which is within Tasmanian Subdivision Guidelines for allowable longitudinal grades.



### 6.4 Transport Planning Considerations

The proposed road standard and guidelines are shown in Figure 4.

Proposed road width is 9m which satisfies rural sealed road width & firefighting criteria.

This width is consistent with the Possum Road width approaching the cul-de-sac.

The minimum Cul-De-Sac of 12m radius is provided for firefighting, see Appendix F.

There are no transport planning issues.

### 6.5 Proposed Lot accesses

LGAT standard drawing TSD-R04 & 05 show truck access standard for rural properties.

LGAT standard drawings are available online at:

https://www.lgat.tas.gov.au/\_\_data/assets/pdf\_file/0027/813735/Tasmanian-Municipal-Standards-Drawings-v3-December-20202.pdf

### 6.6 Impacts on road users.

### 6.6.1 Public Transport

No impact.

### 6.6.2 Delivery Vehicles

Minimal impact. All proposed accesses have sufficient width for Fire fighting vehicles.

### 6.6.3 Pedestrians and Cyclists

Minimal impact.

### 6.6.4 Motorcyclists

Minimal impact.

### 6.7 Other impacts

### 6.7.1 Environmental

No applicable environmental impacts were identified in relation to:

- Noise, vibration or visual impact
- Community severance, pedestrian amenity
- Hazardous loads, air pollution or ecological impacts
- Heritage and Conservation



### 6.7.2 Street Lighting and Furniture

Street lighting may be required in accordance with Council Street Lighting Policy.

### 6.8 Liveability, Safety and Amenity Guidelines

Guidelines for the safety and amenity of a residential areas include:

- Residential precincts need to be bounded by traffic routes and/or natural barriers to minimise conflict.
- Direct vehicular and pedestrian access should be avoided from single dwelling units onto road with over 2,000 vehicles per day.
- Effective street lengths should be less than 200-250m in order to achieve typical vehicle speeds of 40km/h.
- Cyclist and pedestrian demands should be catered for separately using path or cycle networks.

To maximise the liveability, safety and amenity of the local area, road and street network layout should be such that:

- A minimum of 60% of lots should abut residential streets with less than 300vpd passing traffic.
- A minimum of 80% of lots should abut residential streets with less than 600 vpd passing traffic.
- A maximum of 5% of single dwelling lots should abut residential streets with between 1,000-2,000 vpd passing traffic.
- A maximum of 1% of single dwelling lots should abut local streets or collectors with less than 3,000 vpd passing traffic, and
- No single dwelling lot should abut a route with > 3,000 vpd passing traffic.

These guidelines are from TE&M Chapter 2.2: Design of New Urban Networks.

The proposal does not involve residential areas so there will be no impact on liveability, safety and amenity targets described above.



### 6.9 Tasmanian Planning Scheme – Brighton

### Road and Railway Assets Code C3

### C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction.

*Acceptable Solution A1.1* – **Not applicable** as the relevant roads are not Category 1.

Acceptable Solution A1.2 – For a road, excluding a Category 1 road or a limited access road, written consent for a new junction, vehicle crossing, or level crossing to serve the use and development has been issued by the road authority.

Written consent from the road owner, BC, has not been issued. This TIA has been prepared to assist BC with assessing the proposal. **A1.2** is currently not satisfied.

*Acceptable Solution A1.3* – **Not applicable** as no rail network is involved.

Acceptable solution A1.4: Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing will not increase by more than:

- (a) The amounts in Table C3.1
- (b) Allowed by a licence issued under Part IVA of the Roads and Jetties Act 1935 in respect to a limited access road; and

The proposal involves traffic from 4 \* General Industrial lots estimated at 144 vpd.

Table C3.1 allows up to 10 vpd increase for vehicles up to 5.5m in length on major roads. Glenstone Main Road is a major road.

Table C3.1 allows up to 40 vpd increase for vehicles up to 5.5m in length on minor roads. Possum Road is a minor road.

Accordingly, Table C3.1 criteria are not satisfied for Possum Road or Glenstone Main Road. **A1.4** is not Satisfied.

**Performance Criteria P1:** Vehicular traffic to and from the site must minimise any adverse effects on the safety of a junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network, having regard to:

- (a) any increase in traffic caused by the use.
- (b) the nature of the traffic generated by the use.
- (c) the nature of the road.



- (d) the speed limit and traffic flow of the road.
- (e) any alternative access to a road.
- (f) the need for the use.
- (g) any traffic impact assessment; and
- (h) any advice received from the rail or road authority.
- (a) The increase in traffic due to the proposal is estimated at 144 vpd. A suitable right turn facility & BAL junction layout exists at the Glenstone Road / Possum Road junction to cater for the increase is traffic. Possum Road can easily cater for the estimated increase of 144 vpd to 878 vpd by 2034
- (b) The nature of the traffic generated by the use is estimated at 33% commercial vehicles consistent with existing use patterns.
- (c) Glenstone Road and Possum Road are of suitable standard to cope with projected traffic activity in 2034, see Section 6. The proposed road satisfies the LGAT standard for a sealed rural road.
- (d) Possum Road has a speed limit of 50km/h considered suitable for the situation.
- (e) No suitable alternative accesses are available.
- (f) The use is consistent with the Land Use zoning for the area.
- (g) This TIA finds no reason to disallow the proposal due to traffic impacts.
- (h) No specific advice on traffic management has been received from BC.

In summary there are no traffic safety or capacity issues due to the proposal. P1 is satisfied.

Acceptable solution A1.5: Vehicular traffic must be able to enter and leave a major road in a forward direction. A1.5 is satisfied.

# C3.6.1 Habitable buildings for sensitive uses within a road or railway attenuation area

Not applicable as habitable buildings (sensitive uses) are not proposed as part of the General Industrial subdivision.

### C3.7.1 Subdivision for sensitive uses within a road or railway attenuation area



Not applicable as habitable buildings (sensitive uses) are not proposed within a road or railway attenuation area.

### 6.10 Department of State Growth requirements

### DSG review of TIA

These reviews are required to:

- consider proposals and whether the TIA prepared satisfies DSG requirements.
- resolve any issues so the TIA can be finalised.
- enable the TIA endorsement provided by DSG to be communicated to Council as part of the Development application process.

These reviews are usually arranged by the TIA author. The email address for submissions is: <u>Development@stategrowth.tas.gov.au</u>

### Crown landowner consent

This is to provide DSG to opportunity to check alignment of proposals with DSG objectives for the road. If the proposal aligns with DSG objectives Crown Land Consent is issued by DSG. Crown Landowner Consent is required where there is a proposed change in use of property adjacent to a state road. The website for Crown Landowner Consent is: <a href="https://www.transport.tas.gov.au/road/permits/crown\_landownerconsent">https://www.transport.tas.gov.au/road/permits/crown\_landownerconsent</a>

### Access works permits

Developers must obtain an access works permit from DSG for proposed work within a state road reservation. Applications need to include:

- suitably design plans detailing the proposal and services affected.
- relevant design calculations for stormwater management and pavement design
- a traffic impact assessment

The website for access works permit applications is:

https://www.transport.tas.gov.au/road/permits/road-access

### Summary of DGS requirements

DSG has been supplied a copy of this TIA for advice on acceptability and has replied advising it has no comment, see Appendix G.



### 7. Recommendations and Conclusions

This traffic impact assessment has been prepared to assess the proposed 4 lot General Industrial subdivision of 80 Possum Road, Bridgewater. It is estimated the proposal will generate up to 144 vpd once fully developed.

The assessment has reviewed traffic activity at the site, existing road conditions, road safety, crash history, Austroads junction warrants and Tasmanian Planning Scheme – Brighton - Road & Railway Assets Code C3 requirements.

The proposed access site has no recorded crashes over the last 5 years and from traffic safety review and Safe System Assessment, is considered a low crash risk.

The proposal is estimated to increase traffic activity on Possum Road by some 144 vpd to 878 vpd once fully developed at the approach to Glenstone Road.

The existing Glenstone Road / Possum Road junction has a Channelised Right turn facility with ample capacity to cope with the estimated increase in traffic.

The proposed Possum Road extension and Cul-De-Sac for firefighting access are considered suitable.

Evidence is provided to demonstrate the proposal can satisfy the Tasmanian Planning Scheme - Brighton - Code C3.

### Recommendations:

- Install truck accesses to proposed lots in accordance with LGAT standard drawings TSD-R04 & 05 for rural properties.
- Provide street lighting in accordance with Brighton Council policy for General Industrial subdivisions.

DSG has advised it has no comment on this TIA, see Appendix G.

The proposal will have minimal impact on Possum Road which is expected to continue to operate safely and efficiently provided the above recommendations are implemented. Based on the findings of this report the proposal is supported on traffic grounds.



# **Appendices**



# **Appendix A – Proposed Plan of Subdivision**





# **Appendix B – Austroads Level of Service descriptions**

Level of service A A condition of free-flow in which individual drivers are virtually

unaffected by the presence of others in the traffic stream.

Freedom to select desired speeds and to manoeuvre within the traffic stream is extremely high, and the general level of

comfort and convenience provided is excellent.

Level of service B In the zone of stable flow where drivers still have reasonable

freedom to select their desired speed and to manoeuvre within

the traffic stream. The general level of comfort and convenience is a little less than with level of service A.

Level of service C Also in the zone of stable flow, but most drivers are restricted

to some extent in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience declines noticeably at this level.

Level of service D Close to the limit of stable flow and approaching unstable flow.

All drivers are severely restricted in their freedom to select their desired speed and to manoeuvre within the traffic stream. The general level of comfort and convenience is poor, and small increases in traffic flow will generally cause operational

problems.

Level of service E Traffic volumes are at or close to capacity, and there is virtually

no freedom to select desired speeds or to manoeuvre within the traffic stream. Flow is unstable and minor disturbances

within the traffic stream will cause breakdown.

Level of service F In the zone of forced flow, where the amount of traffic

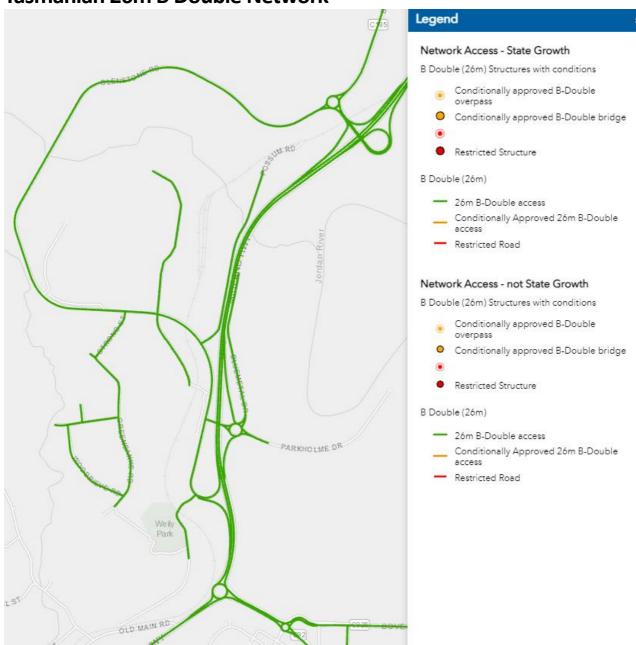
approaching the point under consideration exceeds that which can pass it. Flow breakdown occurs, and queuing and delays

result



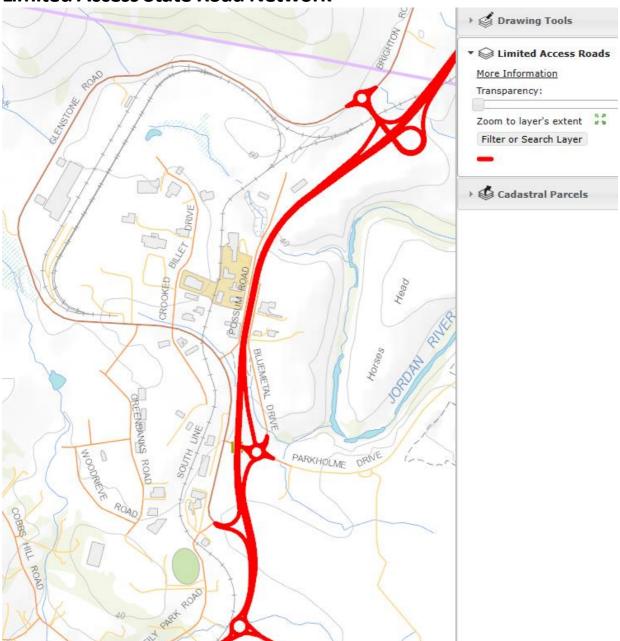
# **Appendix C – State Road Information**

### **Tasmanian 26m B Double Network**



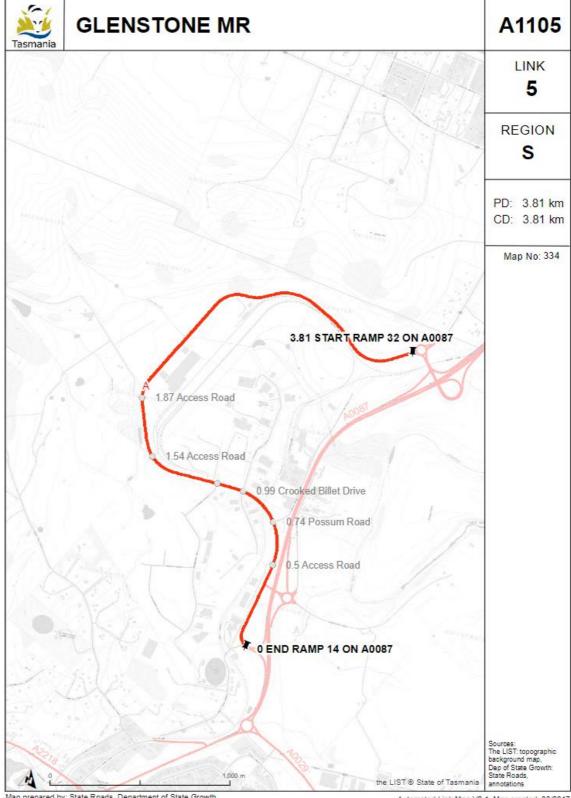


# **Limited Access State Road Network**





# **Department of State Growth Link Maps**



Map prepared by: State Roads, Department of State Growth

Automated Link Map V2.1, Map created: 03/2017



# **Appendix D – Safe Systems Assessment**

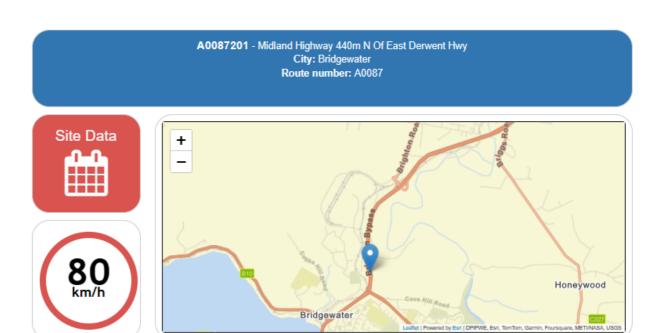
# **Existing situation Possum Road**

Safe System Assessment

		Run-off-road	Head-on	Intersection	Trucks	Pedestrian	Cyclist	Motorcyclist		
Exposure	Justification (AADT 1,000 vpd)	Low traffic activity and no crash history	Low traffic activity and Glenstone Rd (AADT no crash history 2,000 vpd) junction with Possum Rd has low traffic activity a 1 reported property damage crash	pue	26m B Double Access	Virtually no predestrian activity	Very low cyclist activity Low volumes	Low volumes		
	Score / 4	1	I	1	1	T	I	I		
Likelihood	Justification	870m long No Through Road with straight alignment varying in width between 9.3 and 7.5m. Delinaetion provided by kerb & channel & edge line.	870m long No Through Road with straight a lignment varying in width between 9.3 and 7.5m. Delinaetion provided by kerb & channel & edge line.	High standard CHR and 870m long No Through Footpath along BAL junction.  Alignment varying in Glenstone Road width between 9.3 junction and 7.5m. Delinaetion provided by kerb & channel & edge line.	870m long No Through Road with straight alignment varying in width between 9.3 and 7.5m. Delinaetion provided by kerb & channel & edge line.	d at	870m long No Through 870m long No Through Road with straight alignment varying in width between 9.3 and 7.5m. Delinaet provided by kerb & channel & edge line.	870m long No Through Road with straight a lignment varying in width between 9.3 and 7.5m. Delinaetion provided by kerb & channel & edge line.		
	Score /4	1	1	1	1	1	1	1		
Severity	Justification Low speed (50km/h speed limit)	ıt.	Low speed environment	Moderate 70km/h I speed limit on Glenstone Road approaches	Low speed environment	moderate speed for moderate speed for pedestrians cyclists	moderate speed for cyclists	moderate speed for motorcyclists		
	Score /4	1	1	2	1	2	2	2	Total /	/448
Product	Total Score /64	1	1	2	1	2	2	2	11	



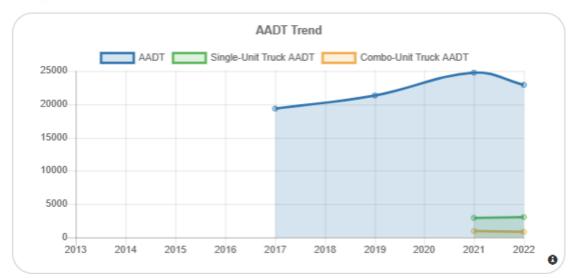
# Appendix E – Traffic Count Data Midlands Hwy - DSG Data

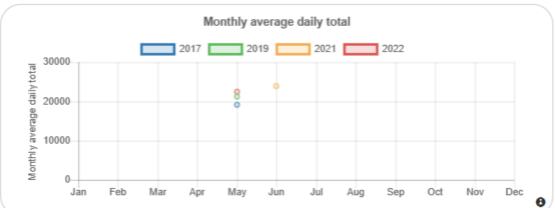


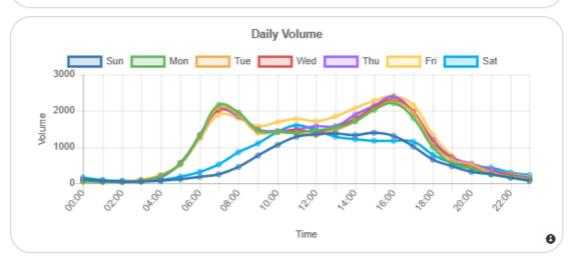
	Traffic S	Statistics by Direction	
Direction	Weekday average total traffic	7-day average traffic	Weekly traffic total
North	12,185	9,464	75,709
South	12,760	9,980	79,836
Total	24,945	19,444	155,545

				Annı	ual Statis	stics				
Data Item	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AADT	-	-	-	-	19,407	-	21,308	-	24,740	22,900
% HV	-	-	-	-	12.5%	-	15.6%	-	15.5%	17.2%
% HV	-	-	-	-	12.5%	-	15.6%	-	15.5%	1/







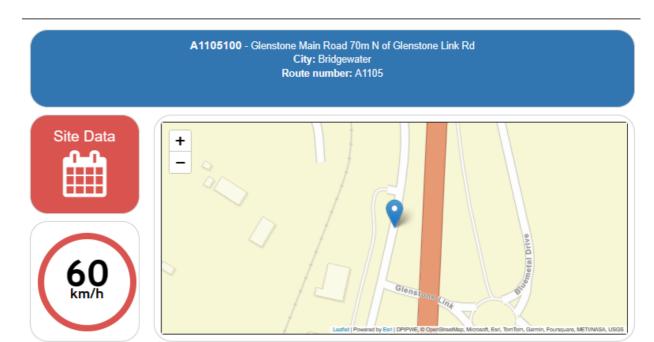


### **Midlands Hwy AADT:**

- 22,900 vpd (2022)
- 2,400 vph (2022)
- 17 % Trucks
- Compound Annual Growth Rate: 3.3%
- 3,400 vph (2034)



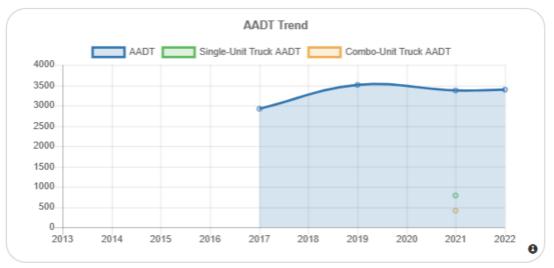
# **Glenstone Road, Southern end - DSG Data**



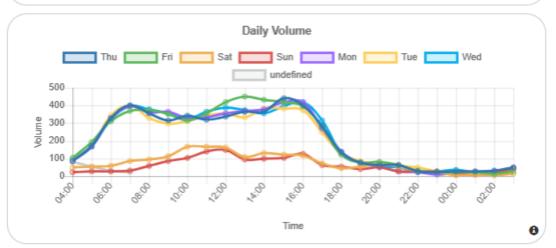
	Traffic S	Statistics by Direction	
Direction	Weekday average total traffic	7-day average traffic	Weekly traffic total
North	2,093	1,765	14,117
South	2,175	1,835	14,683
Total	4,268	3,600	28,800

				Annı	ual Statis	stics				
Data Item	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AADT	-	-	-	-	2,918	-	3,505	-	3,373	3,390
% HV	-	-	-	-	33.8%	-	39.9%	-	35.3%	-









### **Glenstone Road (Sth. End) AADT:**

- 2,918 vpd (2017)
- 3,390 vph (2022)
- 35 % Trucks
- Compound Annual Growth Rate: 0.9%

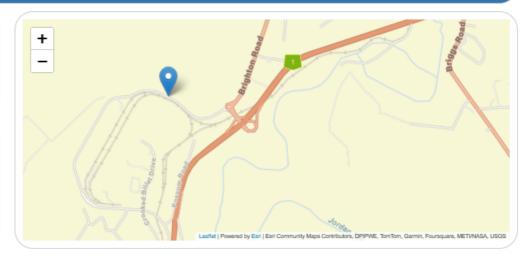


# **Glenstone Road, Northern end - DSG Data**

A1105120 - Glenstone Main Road 630m S of Midland Hwy City: Brighton Route number: A1105



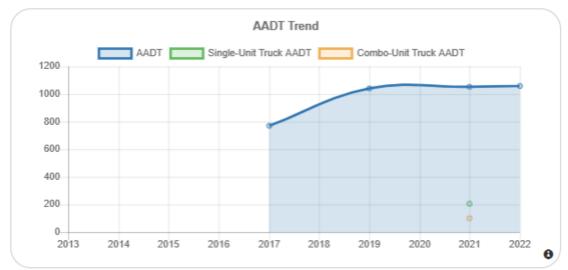




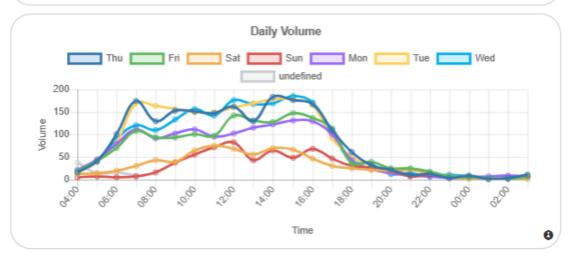
	Traffic S	Statistics by Direction	
Direction	Weekday average total traffic	7-day average traffic	Weekly traffic total
East	752	653	5,221
West	773	667	5,338
Total	1,525	1,320	10,559

				Annı	ual Statis	stics				
Data Item	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AADT	-	-	-	-	772	-	1,041	-	1,052	1,057
% HV	-	-	-	-	35.6%	-	34.4%	-	28.8%	-









### **Glenstone Road (Nth. End) AADT:**

- 772 vpd (2017)
- 1,057 vph (2022)
- 29 % Trucks
- Compound Annual Growth Rate: 6.6%



# Estimated Possum Road Traffic 2024 & 2034 Without proposal

Lat	Area	Building	AADT	Peak
Lot	(Ha)	GFA (m2)	(vpd)	(vph)
19	19.0	3000	135	23
25	1.5	400	18	3
27	1.5	700	32	5
29	3.3	1150	52	9
31	3.4	800	36	6
33	1.5	550	25	4
35	1.4	470	21	4
37	13.0	1500	68	11
39	28.0	4000	180	30
71	6.5	930	42	7
77	8.0	1000	45	8
80	15.0	1800	81	14
	Total		734	122



# **Appendix F - Public & Fire Fighting Access**

Tasmanian Planning Scheme - State Planning Provisions

### C13.6.2 Public and fire fighting access

Objective:	That access roads to, and the lay	out of roads, tracks and trails, in a subdivision:
	<ul> <li>(a) allow safe access and egress personnel;</li> </ul>	s for residents, fire fighters and emergency service
		e-prone vegetation that enables both property to be re attack, and for hazard management works to be
	(c) are designed and constructed	to allow for fire appliances to be manoeuvred;
	(d) provide access to water supp	lies for fire appliances; and
	(e) are designed to allow connect evacuation points.	tivity, and where needed, offering multiple
Acceptable Solutions	•	Performance Criteria
A1		P1
insufficient increas specific measures subdivision for the	ed person certifies that there is an e in risk from bushfire to warrant for public access in the purposes of fire fighting; or	A proposed plan of subdivision shows access and egress for residents, fire-fighting vehicles and emergency service personnel to enable protection from bushfires, having regard to:
	subdivision showing the layout of the location of property access	(a) appropriate design measures, including:
to building areas, is	s included in a bushfire hazard	(i) two way traffic;
management plan	tnat: proposed roads will comply with	(ii) all weather surfaces;
Table C13.1, p	roposed property accesses will able C13.2 and proposed fire	<ul><li>(iii) height and width of any vegetation clearances;</li></ul>
trails will comp	y with Table C13.3 and	(iv) load capacity;
(ii) is certified by the	he TFS or an accredited person.	<ul><li>(v) provision of passing bays;</li></ul>
		(vi) traffic control devices;
		<ul><li>(vii) geometry, alignment and slope of roads, tracks and trails;</li></ul>
		<ul><li>(viii) use of through roads to provide for connectivity;</li></ul>
		<ul><li>(ix) limits on the length of cul-de- sacs and dead-end roads;</li></ul>
		<ul><li>(x) provision of turning areas;</li></ul>
		(xi) provision for parking areas;
		(xii) perimeter access; and
		(xiii) fire trails; and
		(b) the provision of access to:
		bushfire-prone vegetation to permit the undertaking of hazard management works; and
		(ii) fire fighting water supplies; and
		(c) any advice from the TFS.



### Tasmanian Planning Scheme - State Planning Provisions

Table C13.1: Standards for Roads

Ele	ment	Requirement	
A.	Roads.	Unless the development standards in the zone require a higher standard, the following apply:  (a) two-wheel drive, all-weather construction;	
		(b) load capacity of at least 20 tonnes, including for bridges and culverts;	
		<ul><li>(c) minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de- sac road;</li></ul>	
		(d) minimum vertical clearance of 4m;	
		(e) minimum horizontal clearance of 2m from the edge of the carriageway;	
		(f) cross falls of less than 3 degrees (1:20 or 5%);	
		<ul><li>(g) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads;</li></ul>	
		(h) curves have a minimum inner radius of 10m;	
		<ul> <li>dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width;</li> </ul>	
		<ul> <li>(j) dead-end or cul-de-sac roads have a turning circle with a minimum 12m outer radius; and</li> </ul>	
		(k) carriageways less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with Australian Standard AS1743:2018 Road signs- Specifications.	



## Tasmanian Planning Scheme - State Planning Provisions

Table C13.2: Standards for Property Access

Ele	ment	Requirement
A.	Property access length is less than 30m; or access is not required for a fire appliance to access a fire fighting water point.	There are no specified design and construction requirements.
B.	Property access length is 30m or greater; or access is required for a fire appliance to a fire fighting water point.	The following design and construction requirements apply to property access:  (a) all-weather construction;  (b) load capacity of at least 20t, including for bridges and culverts;  (c) minimum carriageway width of 4m;  (d) minimum vertical clearance of 4m;  (e) minimum horizontal clearance of 0.5m from the edge of the carriageway;  (f) cross falls of less than 3 degrees (1:20 or 5%);  (g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;  (h) curves with a minimum inner radius of 10m;  (i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; and  (j) terminate with a turning area for fire appliances provided by one of the following:  (i) a turning circle with a minimum outer radius of 10m; or  (ii) a property access encircling the building; or  (iii) a hammerhead "T" or "Y" turning head 4m wide and 8m long.
C.	Property access length is 200m or greater.	The following design and construction requirements apply to property access:  (a) the requirements for B above; and  (b) passing bays of 2m additional carriageway width and 20m length provided every 200m.
D.	Property access length is greater than 30m, and access is provided to 3 or more properties.	The following design and construction requirements apply to property access:  (a) complies with requirements for B above; and  (b) passing bays of 2m additional carriageway width and 20m length must be provided every 100m.



### Tasmanian Planning Scheme - State Planning Provisions

Table C13.3: Standards for Fire Trails

Element		Requirement
A.	All fire trails.	The following design and construction requirements apply:  (a) all-weather, 4-wheel drive construction;  (b) load capacity of at least 20t, including for bridges and culverts;  (c) minimum carriageway width of 4m;  (d) minimum vertical clearance of 4m;  (e) minimum horizontal clearance of 2m from the edge of the carriageway;  (f) cross falls of less than 3 degrees (1:20 or 5%);  (g) dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;  (h) curves with a minimum inner radius of 10m;  (i) maximum gradient of 15 degrees (1:3.5 or 28%) for sealed fire trails, and 10 degrees (1:5.5 or 18%) for unsealed fire trails;  (j) gates if installed at fire trail entry, have a minimum width of 3.6m, and if locked, keys are provided to TFS; and  (k) terminate with a turning area for fire appliances provided by one of the following:  (i) a turning circle with a minimum outer radius of 10m; or  (ii) a hammerhead "T" or "Y" turning head 4m wide and 8m long.
B.	Fire trail length is 200m or greater.	The following design and construction requirements apply:  (a) the requirements for A above; and  (b) passing bays of 2m additional carriageway width and 20m length provided every 200m.



# Appendix G - DSG Advice on Acceptability

Mon 28/10/2024 9:59 AM

### RE: TIA for proposed 80 Possum Road Subdivision near Glenstone Road



Head, Alex <Alex.Head@stategrowth.tas.gov.au>
To Richard Burk; Development

Hi Richard/Development Brighton,

The Department has no comment from an access/traffic engineering perspective.

Regards,

Alex Head | A/Traffic Engineering Liaison | Traffic Engineering (south)

Traffic Operations | State Roads | Department of State Growth

76 Federal St, North Hobart Tas 7000

Phone: (03) 6165 5205 | alex.head@stategrowth.tas.gov.au

www.transport.tas.gov.au

Courage to make a difference through

### TEAMWORK | INTEGRITY | RESPECT | EXCELLENCE

In recognition of the deep history and culture of this island, I acknowledge and pay my respects to all Tasmanian Aboriginal people; the past, and present custodians of the Land.

From: Richard Burk < richard.burk@trafficandcivil.com.au>

Sent: Wednesday, October 23, 2024 10:35 AM

To: Development < Development@stategrowth.tas.gov.au >

Subject: TIA for proposed 80 Possum Road Subdivision near Glenstone Road

Hello Developments,

Please advise on acceptability of attached TIA

Regards

RICHARD BURK

BE[civit] MTraffic Dip. Man. MIE Aust CPEng

DIRECTOR

Traffic and Civil Services Pty Ltd



