

COUNCIL MEETING - 19 DECEMBER 2022 ATTACHMENTS

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Office use
Application no. _____
Date received: _____
Fee: _____
Permitted/Discretionary



Devonport City Council

Land Use Planning and Approvals Act 1993 (LUPAA)

Tasmanian Planning Scheme - Devonport

Application for Planning Permit

Use or Development Site

Street Address: 139 Mersey Main Road, Spreyton. 7310

Certificate of Title Reference No.: 122596/1

Applicant's Details

Full Name/Company Name: Steven Penton Building Design

Postal Address: PO Box 1218, Devonport Tasmania. 7310

Telephone: 0419 248 910

Email: penton.design@gmail.com

Owner's Details (if more than one owner, all names must be provided)

Full Name/Company Name: _____

Ashley Simpson

Postal Address: 139 Mersey Main Road, Spreyton. 7310

Telephone: 0488 306 323

Email: ashley@shgtrade.com.au

ABN: 47 611 446 016
 PO Box 604
 137 Rooke Street
 Devonport TAS 7310
 Telephone 03 6424 0511
 www.devonport.tas.gov.au
 council@devonport.tas.gov.au

Sufficient information must be provided to enable assessment against the requirements of the planning scheme.

Please provide one copy of all plans with your application.

Assessment of an application for a Use or Development

What is proposed?: _____

Additions to residence and shed - reduction in boundary setbacks

Description of how the use will operate: _____

Use Class (Office use only): _____

Applications may be lodged by email to Council - council@devonport.tas.gov.au
 The following information and plans must be provided as part of an application unless the planning authority is satisfied that the information or plan is not relevant to the assessment of the application:

Application fee	
Completed Council application form	
Copy of the current certificate of title, including title plan and schedule of easements	
Any written permission and declaration of notification required under s.52 of LUPAA	
A site analysis and site plan at an acceptable scale on A3 or A4 paper (1 copy) showing:	
<ul style="list-style-type: none"> • The existing and proposed use(s) on the site 	
<ul style="list-style-type: none"> • The boundaries and dimensions of the site 	
<ul style="list-style-type: none"> • Topography including contours showing AHD levels and major site features 	
<ul style="list-style-type: none"> • Natural drainage lines, watercourses and wetlands on or adjacent to the site 	
<ul style="list-style-type: none"> • Soil type 	
<ul style="list-style-type: none"> • Vegetation types and distribution including any known threatened species, and trees and vegetation to be removed 	
<ul style="list-style-type: none"> • The location, capacity and connection point of any existing services and proposed services 	
<ul style="list-style-type: none"> • The location of easements on the site or connected to the site 	
<ul style="list-style-type: none"> • Existing pedestrian and vehicle access to the site 	
<ul style="list-style-type: none"> • The location of existing and proposed buildings on the site 	
<ul style="list-style-type: none"> • The location of existing adjoining properties, adjacent buildings and their uses 	
<ul style="list-style-type: none"> • Any natural hazards that may affect use or development on the site 	
<ul style="list-style-type: none"> • Proposed roads, driveways, parking areas and footpaths within the site 	
<ul style="list-style-type: none"> • Any proposed open space, common space, or facilities on the site 	
<ul style="list-style-type: none"> • Proposed subdivision lot boundaries (where applicable) 	
<ul style="list-style-type: none"> • Details of any proposed fencing 	
Where it is proposed to erect buildings, a detailed layout plan of the proposed buildings with dimensions at a scale of 1:100 or 1:200 on A3 or A4 paper (1 copy) showing:	
<ul style="list-style-type: none"> • Setbacks of buildings to property (title) boundaries 	
<ul style="list-style-type: none"> • The internal layout of each building on the site 	
<ul style="list-style-type: none"> • The private open space for each dwelling 	
<ul style="list-style-type: none"> • External storage spaces 	
<ul style="list-style-type: none"> • Parking space location and layout 	
<ul style="list-style-type: none"> • Major elevations of every building to be erected 	
<ul style="list-style-type: none"> • The relationship of the elevations to existing ground level, showing any proposed cut or fill 	
<ul style="list-style-type: none"> • Shadow diagrams of the proposed buildings and adjacent structures demonstrating the extent of shading of adjacent private open spaces and external windows of buildings on adjacent sites 	
<ul style="list-style-type: none"> • Materials and colours to be used on roofs and external walls 	
Details of any signage proposed	

Value of use and/or development

\$ 200,000

Notification of Landowner/s (s.52 *Land Use Planning and Approvals Act 1993*)

If land is not in applicant's ownership

I, Steven Penton declare that the owner/s of the land has/have been notified of my intention to make this application.

Applicant's signature:  Date: 04-11-2022

If the application involves land owned or administered by the Devonport City Council

Devonport City Council consents to the making of this permit application.

General Manager's signature: _____ Date: _____

If the application involves land owned or administered by the Crown

Crown consent must be included with the application.

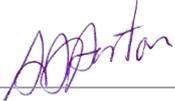
Signature

I apply for consent to carry out the use and development described in this application. I declare that all the information given is true and correct. I also understand that:

- if incomplete, the application may be delayed or rejected; and
- more information may be requested in accordance with s.54 (1) of LUPAA.

PUBLIC ACCESS TO PLANNING DOCUMENTS - DISCRETIONARY PLANNING APPLICATIONS (s.57 of LUPAA)

I understand that all documentation included with a discretionary application will be made available for inspection by the public.

Applicant's signature:  Date: 04-11-2022

PRIVACY ACT

The personal information requested on this form is being collected by Council for processing applications under the *Land Use Planning and Approvals Act 1993* and will only be used in connection with the requirements of this legislation. Council is to be regarded as the agency that holds the information.

Fee & payment options

DD

Pay by Direct Deposit – BSB: 067-402 Account No. 000 000 13 – Please quote your application number.



Pay in Person at Service Tasmania – Present this notice to any Service Tasmania Centre, together with your payment. See www.service.tas.gov.au for opening hours.



Pay by Phone – Please contact the Devonport City Council offices on 64240511 during office hours, Monday to Friday.



Pay by Post – Cheques should be made payable to Devonport City Council and posted to PO Box 604, Devonport, Tasmania, 7310.



RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



SEARCH OF TORRENS TITLE

VOLUME 122596	FOLIO 1
EDITION 5	DATE OF ISSUE 30-Oct-2015

SEARCH DATE : 18-Oct-2022

SEARCH TIME : 05.45 PM

DESCRIPTION OF LAND

City of DEVONPORT

Lot 1 on Sealed Plan 122596

Derivation : Part of Lot 281, 600-0-0 Gtd. to A. Nicholas

Prior CT 115774/7

SCHEDULE 1

M541221 TRANSFER to ASHLEY GARETH SIMPSON Registered
30-Oct-2015 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

E21854 MORTGAGE to Westpac Banking Corporation Registered
30-Oct-2015 at 12.02 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations



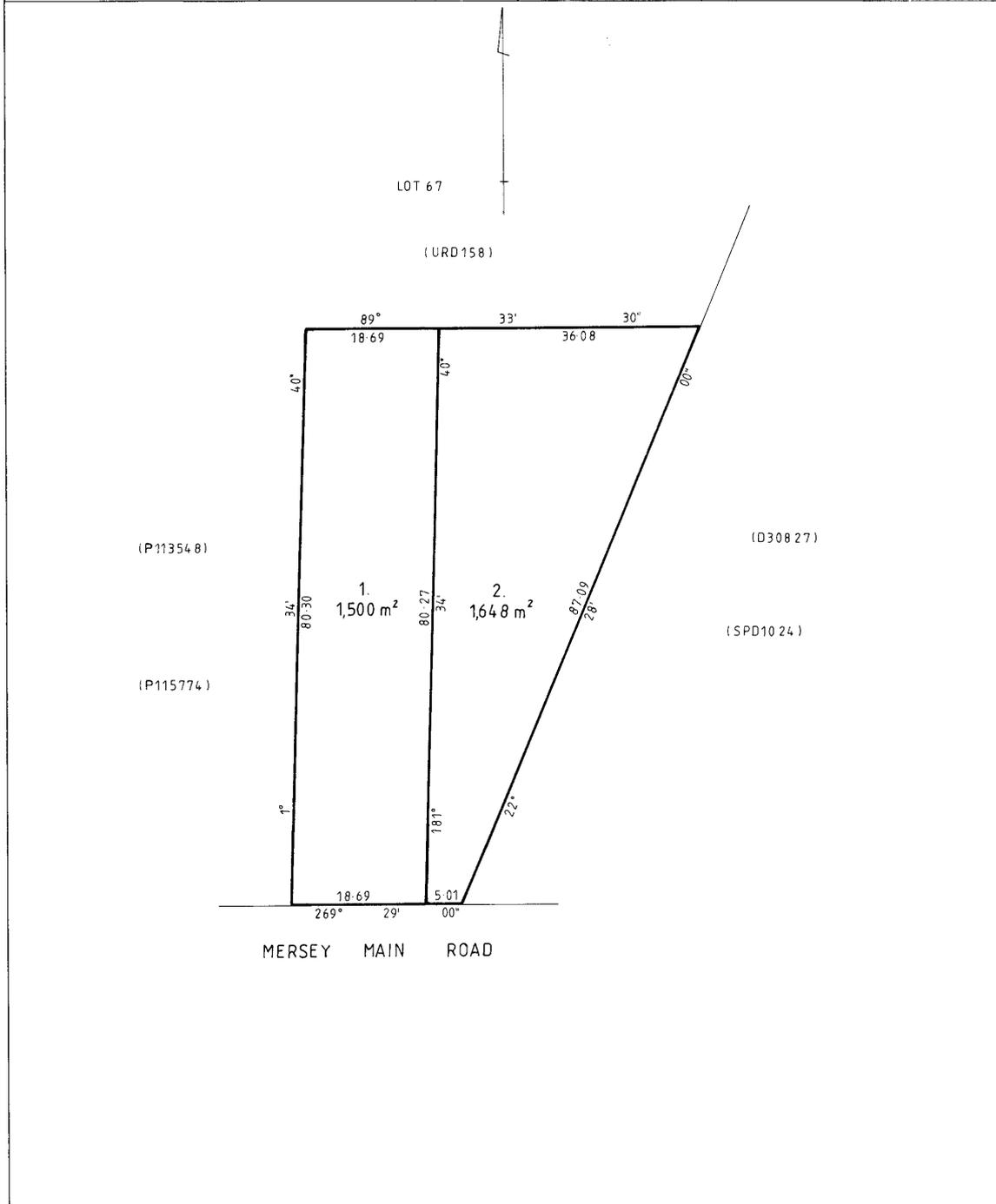
FOLIO PLAN

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



OWNER T.S.BARR & C.M.RALPH FOLIO REFERENCE C.T.115774/7 GRANTEE PART OF LOT 281, 600Ac's, GTD TO ALFRED NICHOLAS	PLAN OF SURVEY BY SURVEYOR K.R.MICHELL OF K.R.MICHELL & ASSOC P/L, 64 BEST ST,DEVONPORT,7310. LOCATION CITY OF DEVONPORT SCALE 1:500 LENGTHS IN METRES		REGISTERED NUMBER SP 122596
			APPROVED EFFECTIVE FROM 14 MAR 1996 Recorder of Titles
MAPSHEET MUNICIPAL CODE No. 108	LAST UPI No.4613038	LAST PLAN No. 0115774	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN



A-148

SCHEDULE OF EASEMENTS

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

REGISTERED NUMBER

SP 122596



SCHEDULE OF EASEMENTS

NOTE:—The Town Clerk or Council Clerk must sign the certificate on the back page for the purpose of identification.

The Schedule must be signed by the owners and mortgagees of the land affected. Signatures should be attested.

EASEMENTS AND PROFITS

Each lot on the plan is together with:—

- (1) such rights of drainage over the drainage easements shewn on the plan (if any) as may be necessary to drain the stormwater and other surplus water from such lot; and
(2) any easements or profits à prendre described hereunder.

Each lot on the plan is subject to:—

- (1) such rights of drainage over the drainage easements shewn on the plan (if any) as passing through such lot as may be necessary to drain the stormwater and other surplus water from any other lot on the plan; and
(2) any easements or profits à prendre described hereunder.

The direction of the flow of water through the drainage easements shewn on the plan is indicated by arrows.

No easements or profit a prendre are created to benefit or burden any Lot shown on the Plan

SIGNED by ROLAND PETER CAMERON SWAN
Solicitor for and on behalf of TERRANCE STEVEN
BARR and CHARLENE MAY RALPH the registered
proprietors of the land comprised in Folio of the Register
Volume 115774 Folio 7 in the presence of:

[Handwritten signature]

[Handwritten signature: Hughes, Town Clerk, Devonport]



SCHEDULE OF EASEMENTS

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980



This is the schedule of easements attached to the plan of
(Insert Subdivider's Full Name)

..... affecting land in

.....
(Insert Title Reference)

Sealed by Devonport City Council on 26th February 1976

Solicitor's Reference
*Council Clerk/Town Clerk
General Manager*

OS-X 3124

4/11/2022 10:07:24 AM

Architectural Drawings

Project Number 2021-24

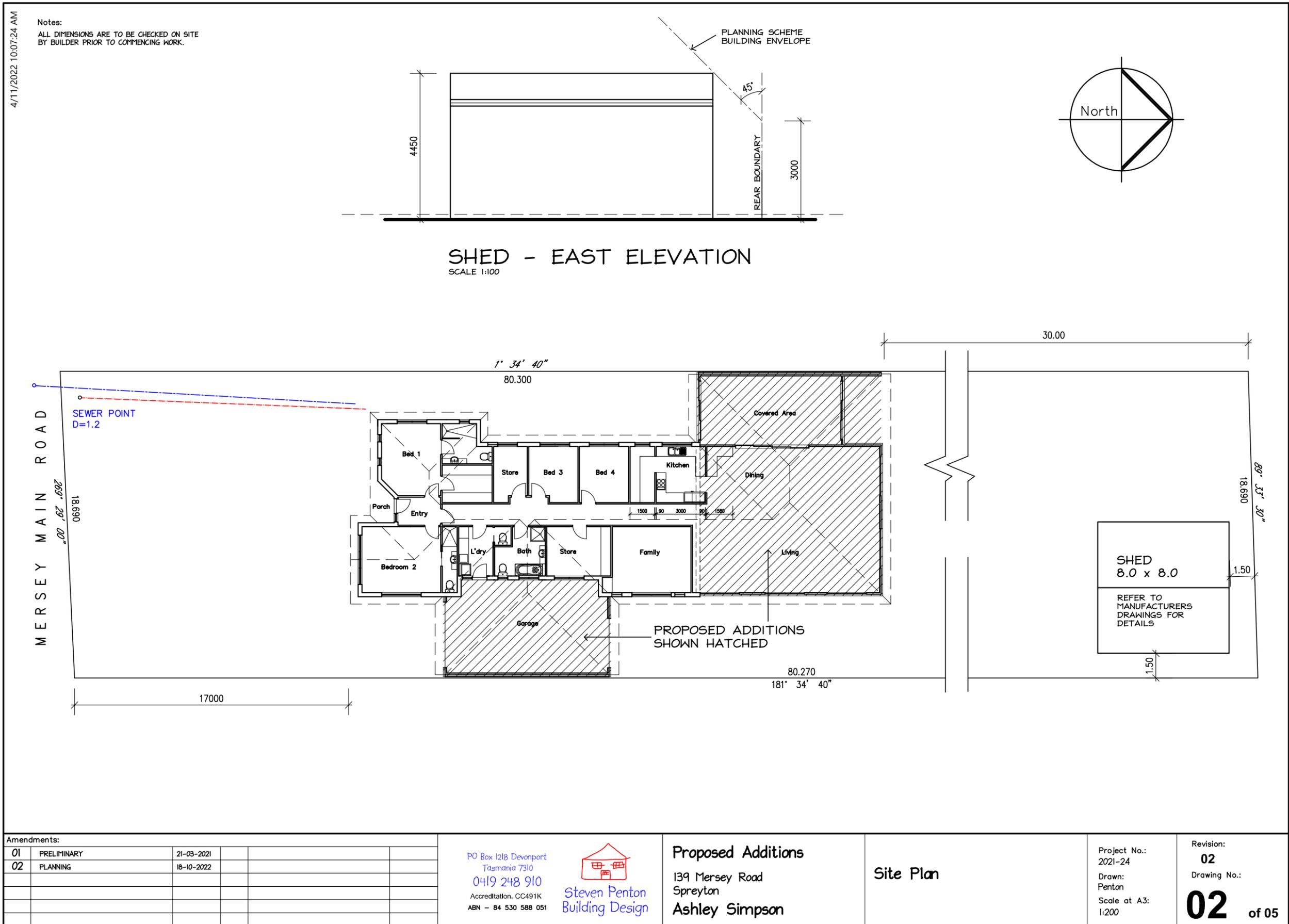
Revision 02 - Planning - 18-10-2022

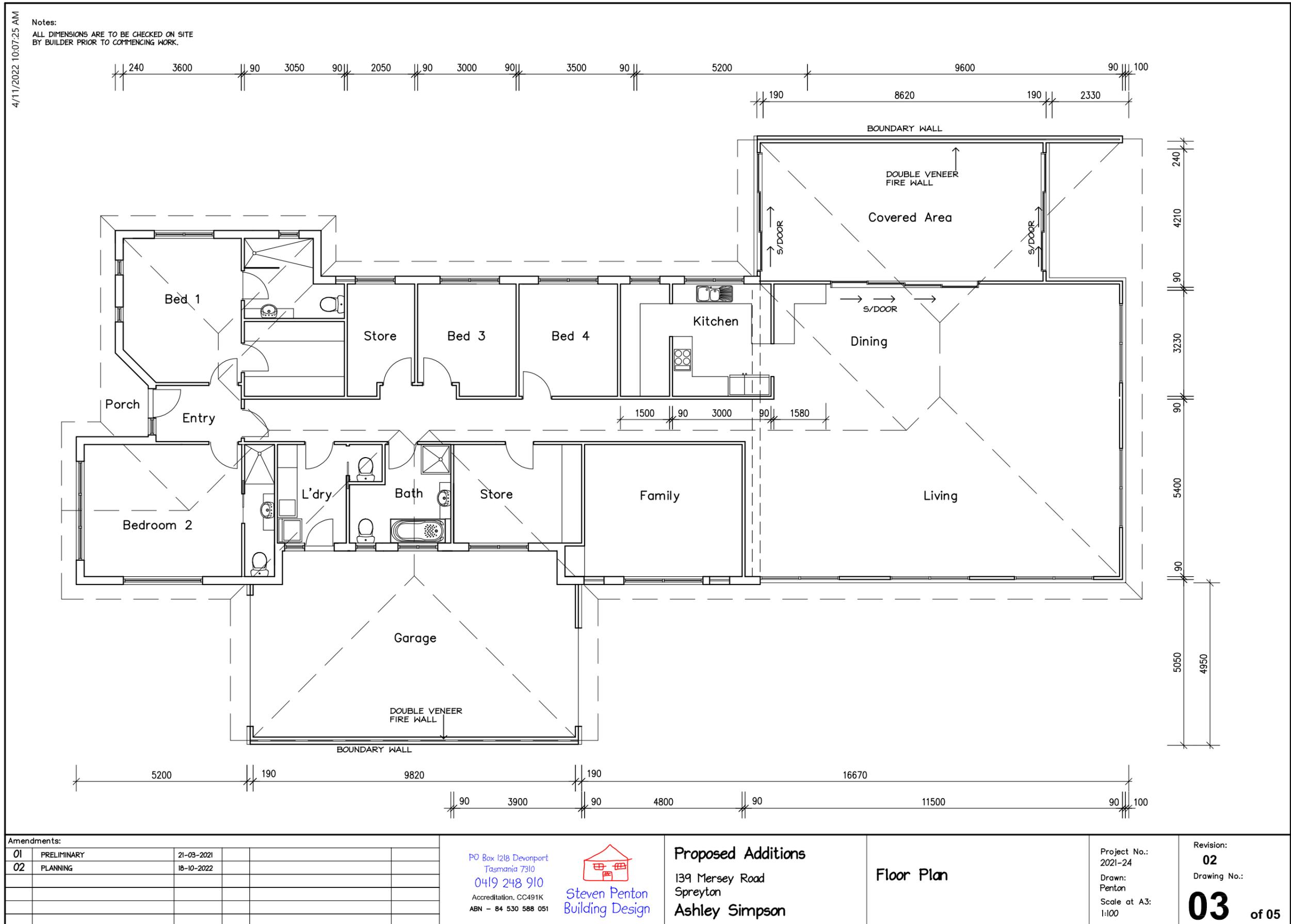
- 01 Cover Sheet
- 02 Site Plan
- 03 Floor Plan
- 04 Elevations 01
- 05 Elevations 02

Proposed Additions and Shed Staged Development 139 Mersey Main Road Spreyton Ashley Simpson

PROJECT INFORMATION	
BUILDING DESIGNER	STEVEN PENTON
ACCREDITATION NUMBER	CC491K
TITLE REFERENCE	PID 1691720 CT 122596/1
FLOOR AREA EXISTING	188 m2
FLOOR AREA ADDITIONS	212 m2
FLOOR AREA SHED	64 m2
SITE AREA	1500 m2
DESIGN WIND SPEED	N2
SOIL CLASSIFICATION	M
CLIMATE ZONE	7
BUSHFIRE RATING	BAL 12.5
ALPINE AREA	NO
CORROSION ENVIRONMENT	LOW

<p>ABN - 84 530 588 051</p>  <p>Tammy Smith Energy</p> <p>Thermal performance assessor - DMN/12/1448 Bushfire practitioner - BFP-126 PO Box 1218 Devonport Tasmania 7310 0419 560 727</p>	 <p>Design Matters National</p> <p>The peak body for the building design profession Member</p>	<p>ABN - 84 530 588 051</p>  <p>Steven Penton Building Design</p> <p>PO Box 1218 Devonport Tasmania 7310 0419 248 910 Accreditation CC491K</p>
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Notes:
ALL DIMENSIONS ARE TO BE CHECKED ON SITE
BY BUILDER PRIOR TO COMMENCING WORK.

EAST ELEVATION

NORTH ELEVATION

Annotations for East Elevation:
 - COLORBOND CUSTOM ORB ROOFING
 - CEMENT SHEET PANEL CLADDING OVER 'GTEK' FIRE WALL SYSTEM
 - APPLIED FINISH TO POLYSTYRENE PANELS
 - ALUMINIUM FRAMED WINDOWS AND DOORS

Annotations for North Elevation:
 - PLANNING SCHEME BUILDING ENVELOPE
 - LINE OF ROOF IF GABLE, SHOWN DASHED

Dimensions:
 - East Elevation: 4920 (height), 3000 (width)
 - North Elevation: 4920 (height), 3000 (width)

Amendments:

Amendment No.	Description	Date
01	PRELIMINARY	21-03-2021
02	PLANNING	18-10-2022

PO Box 1218 Devonport
Tasmania 7310
0419 248 910
Accreditation: CC491K
ABN - 84 530 588 051



**Steven Penton
Building Design**

Proposed Additions
139 Mersey Road
Spreyton
Ashley Simpson

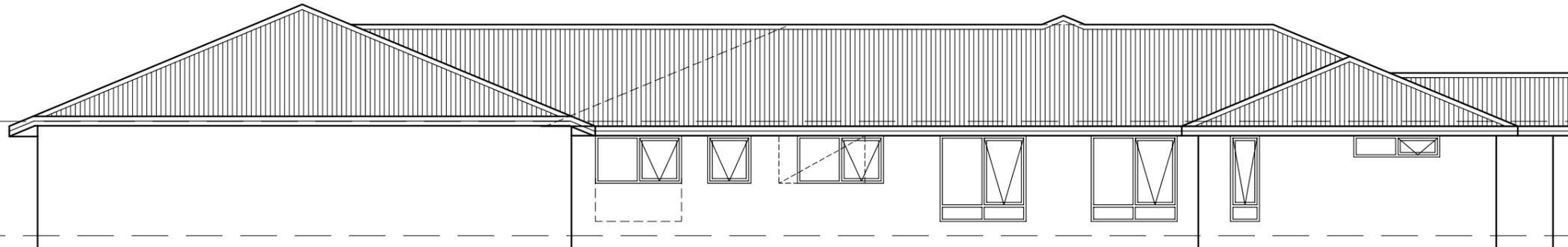
Elevations

Project No.:
2021-24
Drawn:
Penton
Scale at A3:
1:100

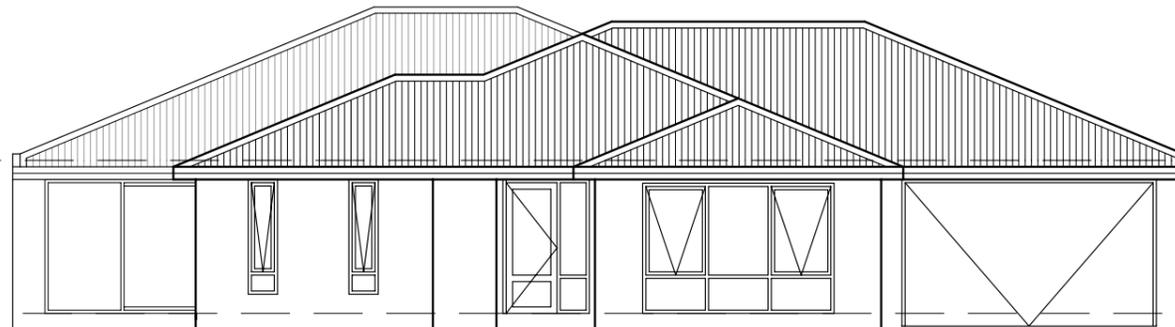
Revision:
02
Drawing No.:
04 of 05

4/11/2022 10:07:25 AM

Notes:
ALL DIMENSIONS ARE TO BE CHECKED ON SITE
BY BUILDER PRIOR TO COMMENCING WORK.



WEST ELEVATION



SOUTH ELEVATION

Amendments:

01	PRELIMINARY	21-03-2021			
02	PLANNING	18-10-2022			

PO Box 1218 Devonport
Tasmania 7310
0419 248 910
Accreditation: CC491K
ABN - 84 530 588 051



Proposed Additions

139 Mersey Road
Spreyton
Ashley Simpson

Elevations 02

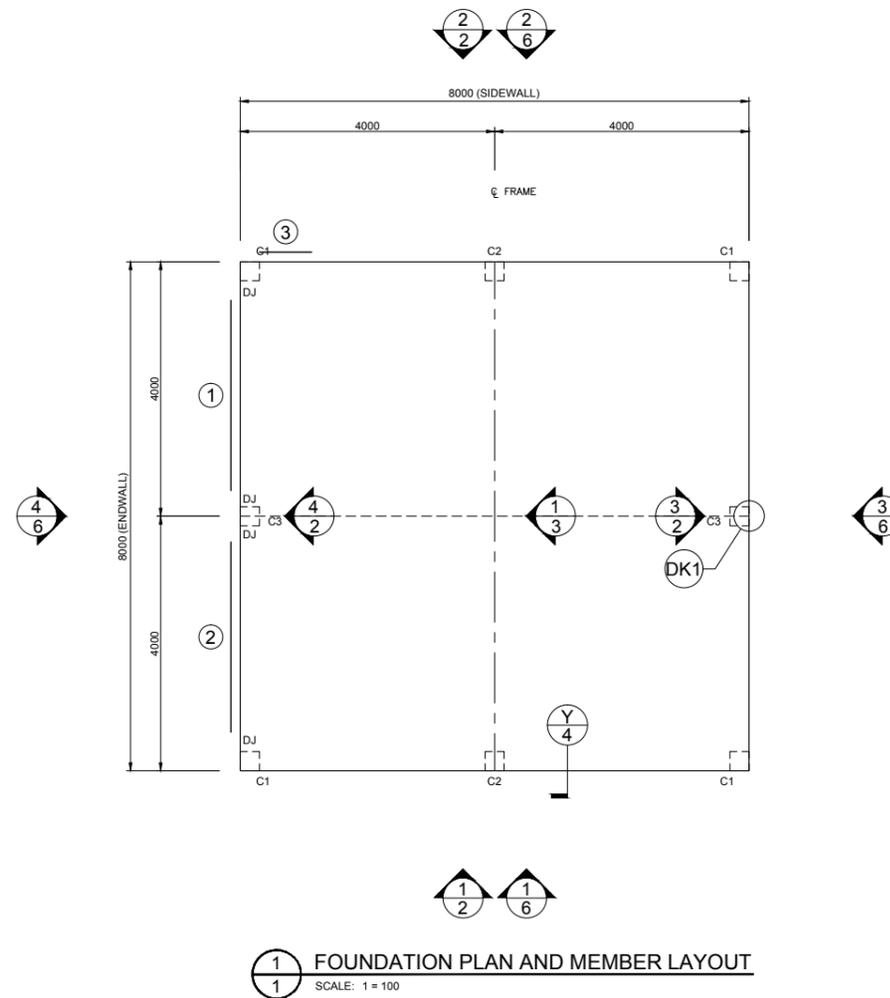
Project No.:
2021-24
Drawn:
Penton
Scale at A3:
1:100

Revision:
02
Drawing No.:

05 of 05

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IF IN DOUBT, ASK.



DO NOT SCALE THIS DRAWING. USE FIGURED DIMENSIONS ONLY. ALL DIMENSIONS TO BE VERIFIED ON SITE.

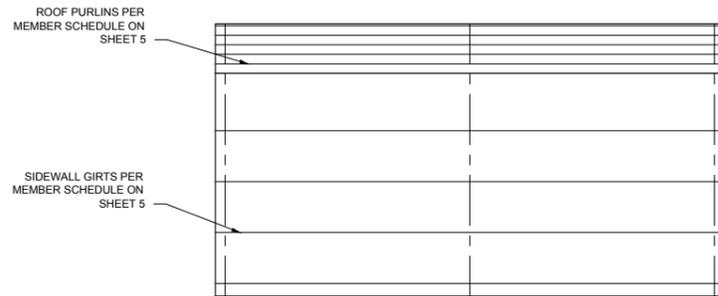
MEMBER LEGEND

C1	C15012
C2	2C15012
C3	C15015

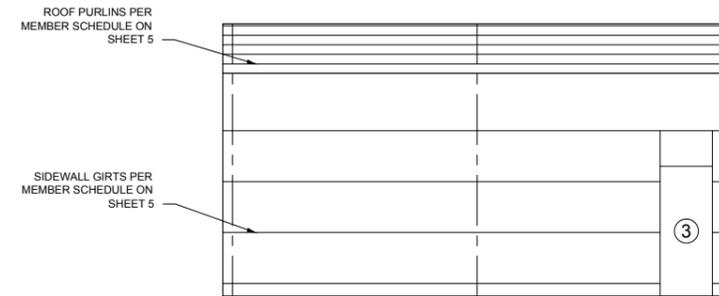
DJ - INDICATES DOOR JAMBS AT THESE LOCATIONS. REFER TO SHEET #4 ON THE DOOR SCHEDULE FOR SIZES

SHEET 1 OF 7	DATE 4/11/2022	CHECKED TM	DRAWN FDS	STEEL BUILDING BY DBS SHEDS PTY LTD (CONTACT) 03 6424 6664 ASHLEY SIMPSON 139 MERSEY MAIN ROAD SPREYTON	FOR AT	 	 Civil & Structural Engineers 50 Punari Street Currajong, Qld 4812 Fax: 07 4725 5850 Email: design@nceng.com.au ABN 341 008 173 56	Mr Timothy Roy Messer BE MIEAust RPEQ Signature <i>T. Messer</i> Date 4/11/2022 Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register
				Registered Chartered Professional Engineer Registered Professional Engineer (Civil & Structural) QLD Registered Certifying Engineer (Structural) N.T. Registered Engineer - (Civil) VIC Registered Engineer - (Civil) TAS		Regn. No. 2558980 Regn. No. 9985 Regn. No. 116373ES Regn. No. PE0002216 Regn. No. CC5648M		

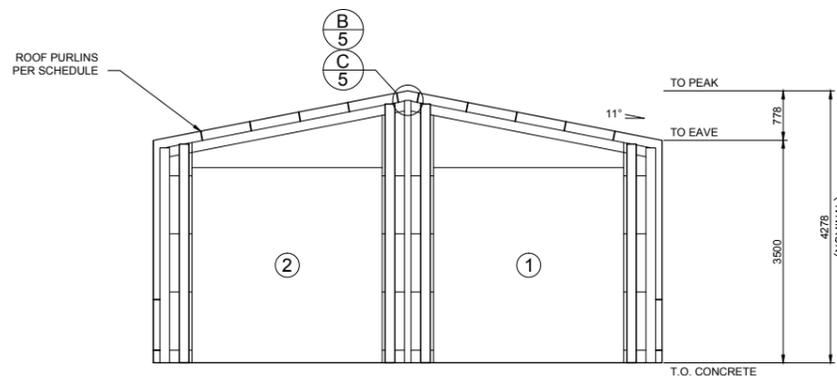
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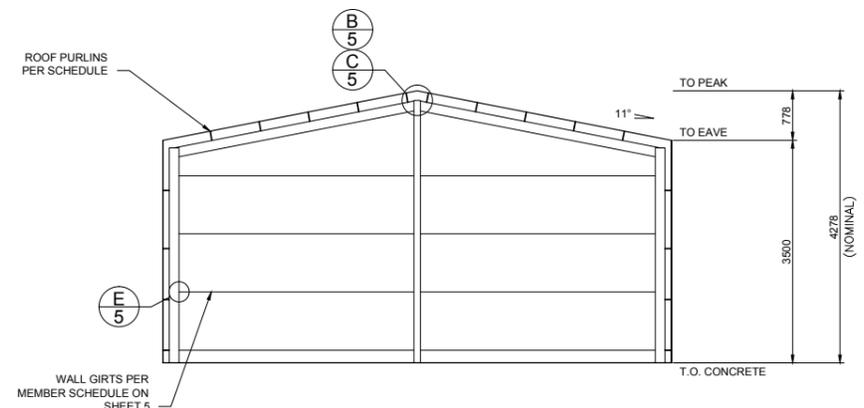
1 SIDEWALL EXTERIOR ELEVATION
SCALE: 1 = 100



2 SIDEWALL EXTERIOR ELEVATION
SCALE: 1 = 100



4 ENDWALL INTERIOR ELEVATION
SCALE: 1 = 100

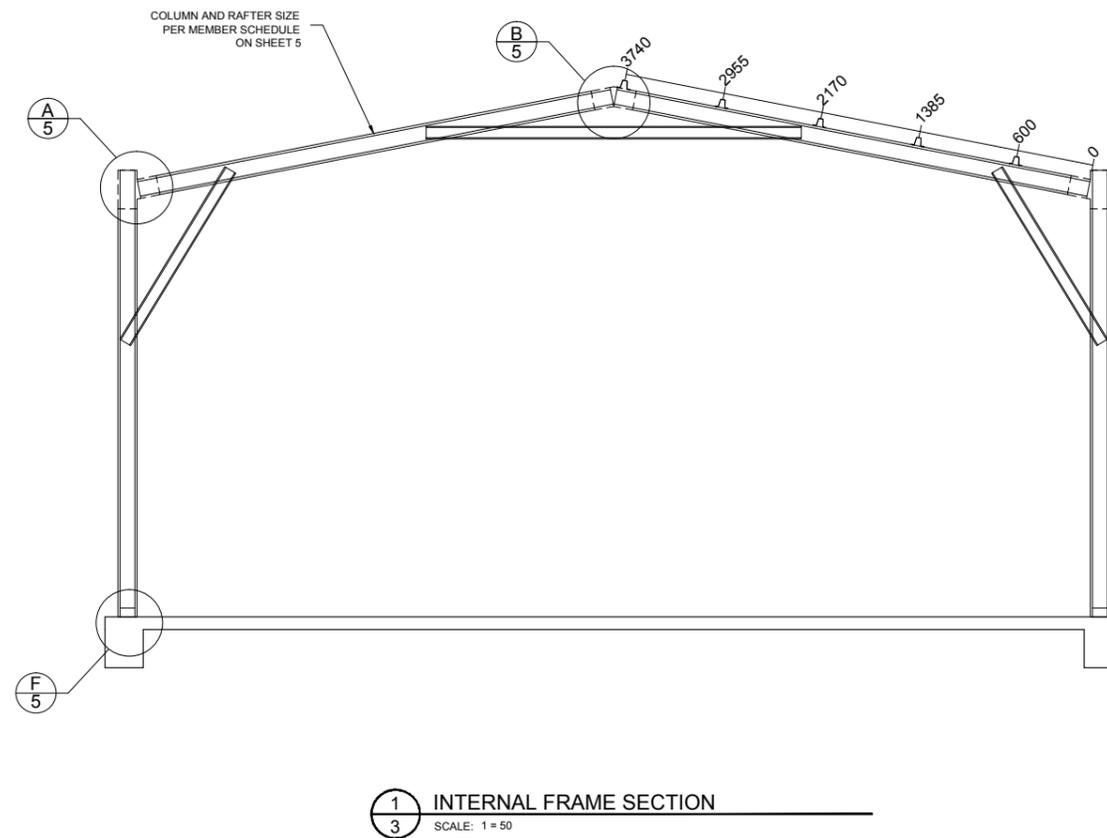


3 ENDWALL INTERIOR ELEVATION
SCALE: 1 = 100

DIAGONAL X BRACING NOT REQUIRED IN THIS BUILDING.
CLADDING DIAPHRAGM SUFFICIENT.

SHEET 2 OF 7	JOB NO. DEPT20566	DATE 4/11/2022	CHECKED TM	DRAWN FDS	STEEL BUILDING BY (CONTACT) DBS SHEDS PTY LTD 03 6424 6664 ASHLEY SIMPSON 139 MERSEY MAIN ROAD SPREYTON				Civil & Structural Engineers 50 Punari Street Currajong, Qld 4812 Fax: 07 4725 5850 Email: design@nceng.com.au ABN 341 008 173 56	Mr Timothy Roy Messer BE MIEAust RPEQ Signature <i>T. Messer</i> Date 4/11/2022 Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register
	NOC 2019				Registered Chartered Professional Engineer Registered Professional Engineer (Civil & Structural) QLD Registered Certifying Engineer (Structural) N.T. Registered Engineer - (Civil) VIC Registered Engineer - (Civil) TAS				Regn. No. 2558980 Regn. No. 9985 Regn. No. 116373ES Regn. No. PE0002216 Regn. No. CC5648M	

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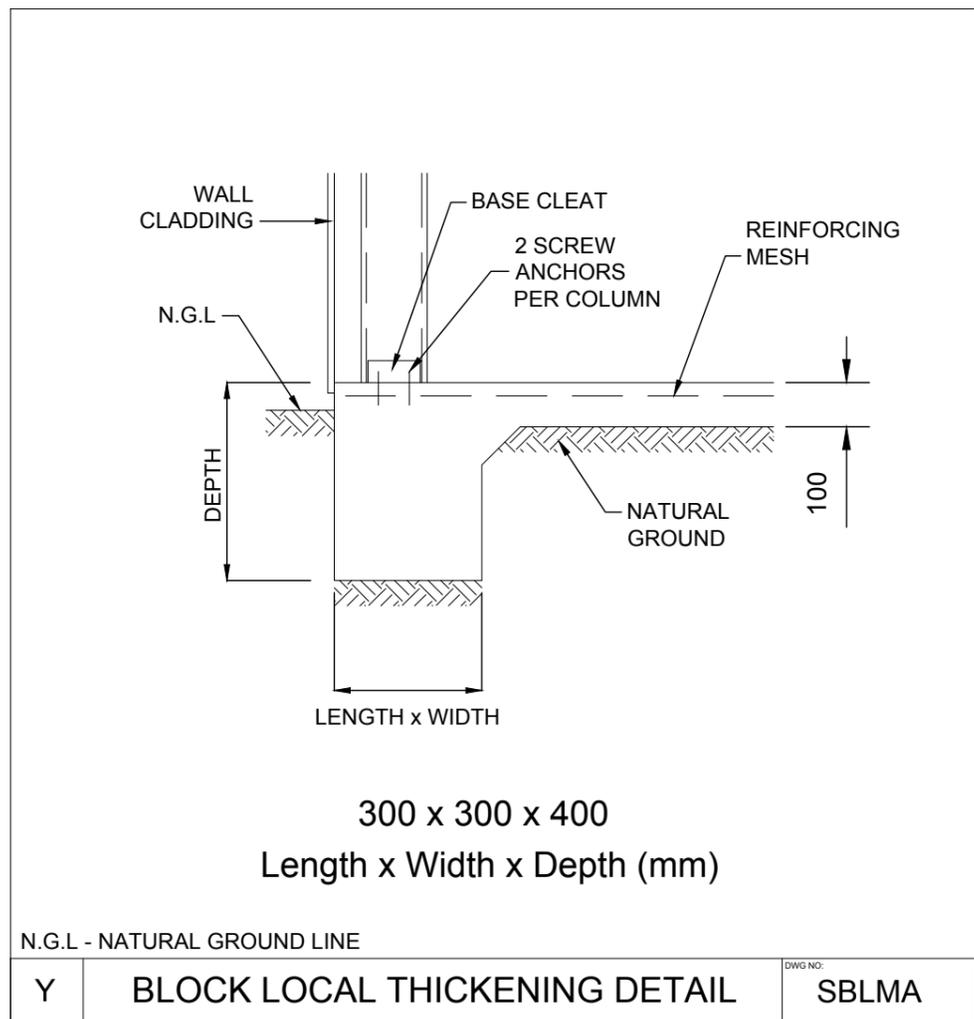
Refer to Sheet #4 for concrete specification.

OF 3 SHEET 7	JOB NO. DEPT20566 NOC 2019	DATE 4/1/2022	CHECKED TM	DRAWN FDS	STEEL BUILDING BY (CONTACT) DBS SHEDS PTY LTD 03 6424 6664 ASHLEY SIMPSON 139 MERSEY MAIN ROAD SPREYTON			 Civil & Structural Engineers 50 Punari Street Currajong, Qld 4812 Fax: 07 4725 5850 Email: design@nceng.com.au ABN 341 008 173 56 Registered Chartered Professional Engineer Registered Professional Engineer (Civil & Structural) QLD Registered Certifying Engineer (Structural) N.T. Registered Engineer - (Civil) VIC Registered Engineer - (Civil) TAS	Mr Timothy Roy Messer BE MIEAust RPEQ Signature <i>T. Messer</i> Date 4/1/2022 Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register
	Regn. No. 2558980 Regn. No. 9985 Regn. No. 116373ES Regn. No. PE0002216 Regn. No. CC5648M								

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STRUCTURAL GENERAL NOTES

- COVERING CODE** : NATIONAL CONSTRUCTION CODE (NCC), LOADING TO AS1170 - ALL SECTIONS. BUILDING SUITABLE AS EITHER A PRIVATE GARAGE CLASS 10A, OR A FARM SHED (CLASS 7 OR 8), UNLESS OTHERWISE SPECIFICALLY NOTED. FOR USE AS A FARM SHED, IT MUST MEET THE FOLLOWING REQUIREMENTS:
 - BE LESS THAN 2000 SQM IN AREA (INCLUSIVE OF ANY MEZZANINE FLOOR AREA).
 - MUST BE LOCATED ON A FARM AND USED IN CONNECTION WITH FARMING PURPOSES.
 - BUILDING IS NOT TO BE OCCUPIED FREQUENTLY NOR FOR EXTENDED PERIODS BY PEOPLE, WITH A MAXIMUM OF 1 PERSON PER 200 SQM OR 2 PERSONS MAXIMUM IN TOTAL WHICHEVER IS THE LESSER.
- DRAWING OWNERSHIP** : THESE DRAWINGS REMAIN THE PROPERTY OF FBHS (AUST) PTY LIMITED. ENGINEERING SIGNATURE AND CERTIFICATION IS ONLY VALID WHEN BUILDING IS SUPPLIED BY A DISTRIBUTOR OF FBHS. DRAWINGS ARE PROVIDED FOR THE DUAL PURPOSE OF OBTAINING BUILDING PERMITS AND AIDING CONSTRUCTION. ANY OTHER USE OR REPRODUCTION IS PROHIBITED WITHOUT WRITTEN APPROVAL FROM FBHS.
- DRAWING SIGNATURE REQUIREMENTS** : THESE DRAWINGS ARE NOT VALID UNLESS SIGNED BY THE ENGINEER. THE ENGINEER ACCEPTS NO LIABILITY OR RESPONSIBILITY FOR DRAWINGS WITHOUT A SIGNATURE. EACH TITLE BLOCK CONTAINS A WATER MARK UNDER THE CUSTOMERS NAME CONTAINING THE DATE OF PRODUCTION OF THE DRAWINGS; THE DRAWINGS ARE TO BE SUBMITTED TO COUNCIL WITHIN 21 DAYS OF THIS DATE. THIS IS TO ENSURE THAT ONLY CURRENT DRAWINGS ARE IN CIRCULATION.
- CONTRACTOR RESPONSIBILITIES** : CERTIFIER AND CONTRACTOR TO CONFIRM (ON SITE) THAT THE WIND LOADINGS APPLIED TO THIS DESIGN ARE TRUE AND CORRECT FOR THE ADDRESS STATED IN THE TITLE BLOCK. CONTRACTOR SHALL VERIFY AND CONFIRM ALL EXISTING CONDITIONS AND DIMENSIONS. ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN DRAWINGS AND EXISTING CONDITIONS PRIOR TO START OF WORK. CONTRACTOR MUST NOT MAKE ANY DEVIATION FROM THE PROVIDED PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM ONE OF THE UNDERSIGNING ENGINEERS. THE ENGINEER / FBHS TAKE NO RESPONSIBILITY FOR CHANGES MADE WITHOUT WRITTEN APPROVAL. CONTRACTOR IS RESPONSIBLE FOR ENSURING NO PART OF THE STRUCTURE BECOMES OVERSTRESSED DURING CONSTRUCTION. BUILDING IS NOT STRUCTURALLY ADEQUATE UNTIL THE INSTALLATION OF ALL COMPONENTS AND DETAILS SHOWN IS COMPLETED IN ACCORDANCE WITH THESE DRAWINGS. THE INDICATED DRAWING SCALES ARE APPROXIMATE. DO NOT SCALE DRAWINGS FOR CONSTRUCTION PURPOSES. FOR FURTHER DIRECTIONS ON CONSTRUCTION THE CONTRACTOR SHOULD CONSULT THE APPROPRIATE INSTRUCTION MANUAL.
- ENGINEERING** : THE ENGINEER / FBHS ARE NOT ACTING AS PROJECT MANAGERS FOR THIS DEVELOPMENT, AND WILL NOT BE PRESENT DURING CONSTRUCTION. THE UNDERSIGNING ENGINEERS HAVE REVIEWED THIS BUILDING FOR CONFORMITY ONLY TO THE STRUCTURAL DESIGN PORTIONS OF THE GOVERNING CODE. THE PROJECT MANAGER IS RESPONSIBLE FOR ADDRESSING ANY OTHER CODE REQUIREMENTS APPLICABLE TO THIS DEVELOPMENT. THESE DOCUMENTS ARE STAMPED ONLY AS TO THE COMPONENTS SUPPLIED BY FBHS. IT IS THE RESPONSIBILITY OF THE PURCHASER TO COORDINATE DRAWINGS PROVIDED BY FBHS WITH OTHER PLANS AND/OR OTHER COMPONENTS THAT ARE PART OF THE OVERALL PROJECT. IN CASES OF DISCREPANCIES, THE LATEST DRAWINGS PROVIDED BY FBHS SHALL GOVERN. NO ALTERATIONS TO THIS STRUCTURE (INCLUDING REMOVAL OF CLADDING) ARE TO BE UNDERTAKEN WITHOUT THE CONSENT OF THE CERTIFYING ENGINEER. OPENINGS SUCH AS WINDOWS AND DOORS NEED TO BE INSTALLED AS PER THE PRODUCT MANUFACTURER'S INFORMATION/DETAILS.
- INSPECTIONS** : NO SPECIAL INSPECTIONS ARE REQUIRED BY THE GOVERNING CODE ON THIS JOB. ANY OTHER INSPECTIONS REQUESTED BY THE LOCAL BUILDING DEPARTMENT SHALL BE CONDUCTED AT THE OWNER'S EXPENSE.
- SOIL REQUIREMENTS** : SITE CLASSIFICATION TO BE A, S OR M ONLY. SOIL SAFE BEARING CAPACITY VALUE INDICATED ON DRAWING SHEET 4 OCCURS AT 100mm BELOW FINISH GRADE, EXISTING NATURAL GRADE, OR AT FROST DEPTH SPECIFIED BY LOCAL BUILDING DEPARTMENT, WHICHEVER IS THE LOWEST ELEVATION. REGARDLESS OF DETAIL Y ON SHEET 4 THE MINIMUM FOUNDATION DEPTH SHOULD BE 100MM INTO NATURAL GROUND OR BELOW FROST DEPTH SPECIFIED BY LOCAL COUNCIL. ROLLED OR COMPACTED FILL MAY BE USED UNDER SLAB, COMPACTED IN 150mm LAYERS TO A MAXIMUM DEPTH OF 900mm. CONCRETE FOUNDATION EMBEDMENT DEPTHS DO NOT APPLY TO LOCATIONS WHERE ANY UNCOMPACTED FILL OR DISTURBED GROUND EXISTS OR WHERE WALLS OF THE EXCAVATION WILL NOT STAND WITHOUT SUPPLEMENTAL SUPPORT, IN THIS CASE SEEK FURTHER ENGINEERING ADVICE.
- CLASS 10a or Class 7 FOOTING DESIGNS** : THE FOUNDATION DOCUMENTED IS ALSO APPROPRIATE FOR CLASS 10a or CLASS 7 BUILDING DESIGNS ON 'M-D', 'H', 'H-D' OR 'B' CLASS SOILS, IF TOTAL SLAB AREA IS UNDER 100m SQUARE AND THE MAXIMUM SLAB DIMENSION (LENGTH AND WIDTH) IS LESS THAN OR EQUAL TO 12m. PLEASE BE AWARE THAT THE SLAB DESIGN FOR H & E CLASS SOILS IN THESE INSTANCES ARE DESIGNED TO EXPERIENCE SOME CRACKING. THIS CRACKING IS NOT CONSIDERED A STRUCTURAL FLAW OR DESIGN ISSUE, AND IS SIMPLY COSMETIC IN NATURE. IF THIS IS A CONCERN TO THE CLIENT IT IS ADVISED THEY DISCUSS OTHER OPTIONS WITH THE RELEVANT DISTRIBUTOR PRIOR TO THE POURING OF THE SLAB.
- CONCRETE REQUIREMENTS** : ALL CONCRETE DETAILS AND PLACEMENT SHALL BE PERFORMED IN ACCORDANCE WITH AS2870 AND AS3600. CONCRETE SHALL HAVE A MIN. 28-DAY STRENGTH OF 20MPa FOR EXPOSURE A1 & B1, 25MPa FOR EXPOSURE A2 & B2 AND 32MPa FOR EXPOSURE C, IN ACCORDANCE WITH SECTION 4, AS3600. CEMENT TO BE TYPE A. MAX AGGREGATE SIZE OF 20mm. SLUMP TO BE 80mm +/- 15mm. SLABS TO BE CURED FOR 7 DAYS BY WATERING OR COVERING WITH A PLASTIC MEMBRANE, AFTER WHICH CONSTRUCTION CAN BEGIN, CARE GIVEN NOT TO OVER-TIGHTEN HOLD DOWN BOLTS. GIVEN ALLOWABLE SOIL TYPES 1 LAYER OF SL72 REINFORCING MESH IS TO BE INSTALLED ON STANDARD SLABS WITH A MINIMUM 30MM COVER FROM CONCRETE SURFACE. CONCRETE REINFORCING TO CONFORM TO AS 1302, AS1303 & AS 1304. ALL REINFORCING COVER TO BE A MINIMUM OF 30mm.
- STRUCTURAL STEEL REQUIREMENTS** : ALL STRUCTURAL STEEL, INCLUDING SHEETING THOUGH EXCLUDING CONCRETE REINFORCING, SHALL CONFORM TO AS 1397 (GAUGE <= 1mm fy = 550MPa, GAUGE > 1mm < 1.5mm fy = 500MPa, GAUGE >= 1.5mm fy = 450MPa). NO WELDING IS TO BE PERFORMED ON THIS BUILDING. ALL STRUCTURAL MEMBERS AND CONNECTIONS DESIGNED TO AS4600. ALL BOLT HOLE DIAMETERS TO STRAIT GENERAL PUNCHINGS.
- FOOT TRAFFIC** : FOR ERECTION AND MAINTENANCE PLEASE NOTE THE FOLLOWING DEFINED FOOT TRAFFIC ZONES:
 - CORRUGATED: WALK ONLY WITHIN 200MM OF SCREW LINES. FEET SPREAD OVER AT LEAST TWO RIBS.
 - MEMBRANE: WALK ONLY IN PANS, OR ON RIBS AT SCREW LINES.



PROJECT DESIGN CRITERIA	
ROOF LIVE LOAD:	0.25 kPa
BASIC WIND SPEED:	VR 45 m/s
SITE WIND SPEED:	VsitB 35.6 m/s
WIND REGION:	Reg A
TOPOGRAPHY FACTOR, Mt:	1
SHIELDING FACTOR, Ms:	0.91
MAX GROUND SNOW LOAD:	N/A
MAX ROOF SNOW LOAD:	N/A
SITE ALTITUDE:	N/A
TERRAIN CATEGORY:	Tcat 2.5
SOIL SAFE BEARING CAPACITY:	100 kPa
RETURN PERIOD:	1:500
LIMITING CPI 1:	-0.5
LIMITING CPI 2:	0.5
IMPORTANCE LEVEL:	2

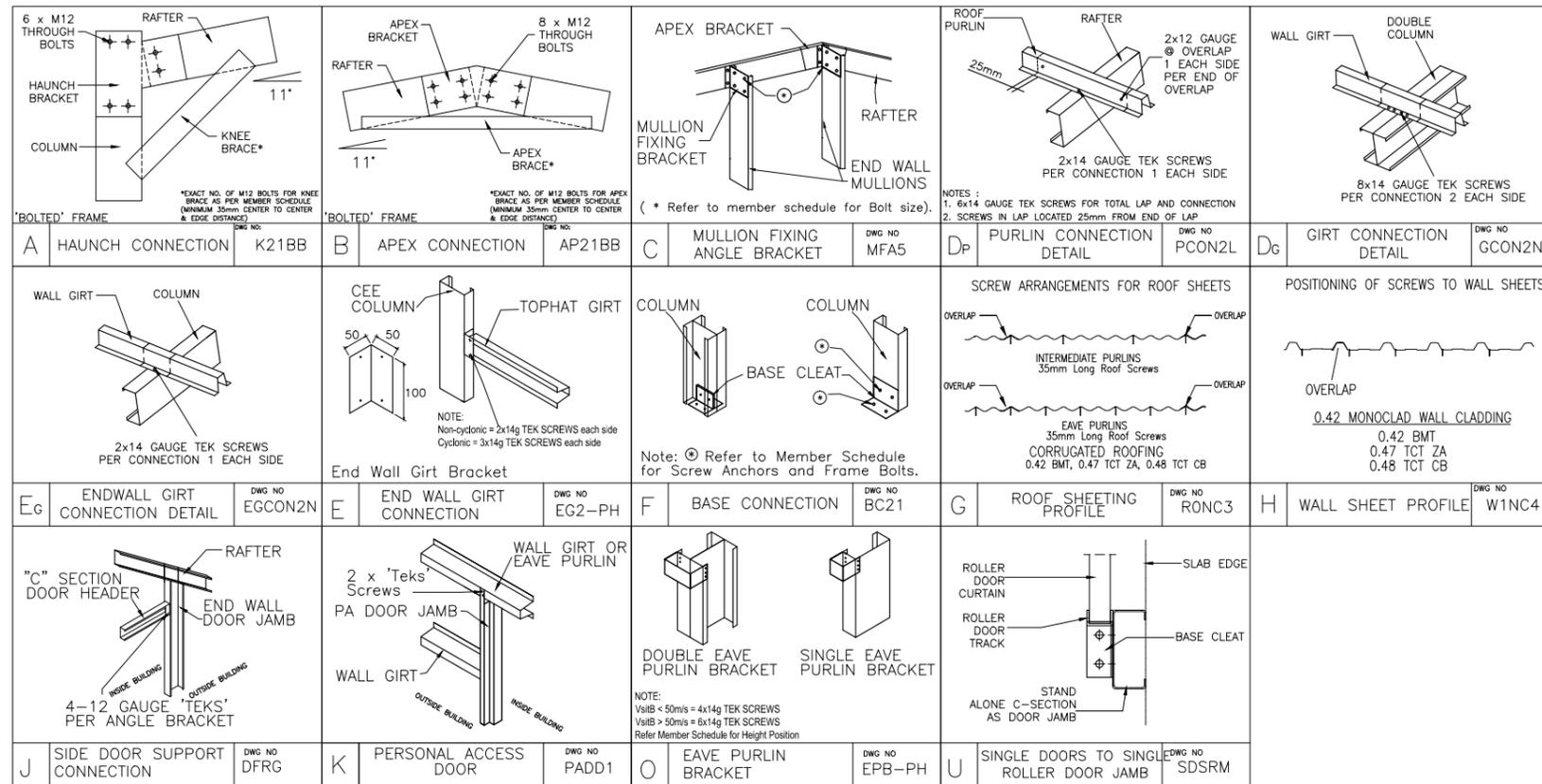
DETAIL KEYS	
DK1	ENDWALL VERTICAL MULLION (SEE DETAIL C/5 FOR TOP CONN. AND F/5 FOR BASE CONN.)
DK2	FLYBRACING PER DETAIL L/5
DK3	X-BRACING IN ROOF ABOVE (SEE DETAIL M/5)
DK4	DOUBLE X-BRACING IN ROOF ABOVE (SEE DETAIL M/5)

SCHEDULE OF OPENINGS							
DOOR	OPENING SIZE	MAX WIDTH	HEIGHT	OPENING TYPE	HEADER GIRT	OPENING JAMBS	WIND RATED
1	2990	3070*	3.10H X 3.05 CB	"SERIES A"	SINGLE	C15012P	NO
2	2990	3070*	3.10H X 3.05 CB	"SERIES A"	SINGLE	C15012P	NO
3	820	2040	EXTERNAL PA DOOR		SINGLE		YES

NOTES: 1) SEE SHEET 5 FOR DOOR OPENING FRAMING INFORMATION.
2) ALL DOOR SCHEDULE MEASUREMENTS ARE ACTUAL DOOR/WINDOW SIZE NOT OPENING SIZE.
* ROLLER DOOR OPENING HEIGHT DEPENDENT ON FINAL BUILD LOCATION.

SHEET 4 OF 7	DATE 4/11/2022	CHECKED TM	DRAWN FDS	STEEL BUILDING BY FOR AT	(CONTACT) DBS SHEDS PTY LTD 03 6424 6664 ASHLEY SIMPSON 139 MERSEY MAIN ROAD SPREYTON	 SHED SAFE	 Civil & Structural Engineers 50 Punari Street Currajong, Qld 4812 Fax: 07 4725 5850 Email: design@nceng.com.au ABN 341 008 173 56	Mr Timothy Roy Messer BE MIEAust RPEQ Signature <i>T. Messer</i> Date 4/11/2022 Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register
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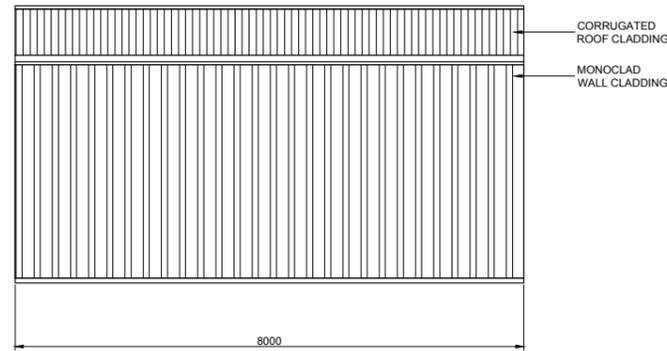
MEMBER AND MATERIAL SCHEDULE

1	END WALL RAFTER	Single C15012
2	C.S. FRAME RAFTER	Single C15019
3	END FRAME COLUMN (C1)	Single C15012
4	C.S. FRAME COLUMN (C2)	Double C15012
5	MULLION (C3)	Single C15015
6	C.S. FRAME KNEE BRACE	Single C10015 @ 1.75 LONG 2 bolts each end
7	KNEE BRACE HEIGHT UP COLUMN	2.13m
8	KNEE BRACE LENGTH UP RAFTER	0.80m
9	C.S. FRAME APEX BRACE	Single C10015 @ 2.95 LONG 2 bolts each end
10	APEX POSITION FROM RAFTER END	1.47m
11	ANCHOR BOLTS (# PER DETS.)	Screw Anchor 12mm x 100 Galv
12	EAVE PURLIN	C10010 (Eave Purlin Bracket 21mm down from top of column)
13	TYP. ROOF PURLIN SIZE	Tophat 64 x 1.0
14	MAIN BLDG. PURLIN SPACING	0.785 m. (5 rows) (Max Allow. 0.839m)
15	MAIN BLDG. PURLIN LENGTH	4.2 m. (0.2m Overlap)
16	TYP. SIDEWALL GIRT SIZE	Tophat 64 x 1.0
17	MAIN BLDG. SIDEWALL GIRT SPACING	0.799 m. (4 rows) (Max Allow. 0.866m)
18	MAIN BLDG. SIDEWALL GIRT LENGTH	4.1 m. (0.1m Overlap)
19	TYP. ENDWALL GIRT SIZE	Tophat 64 x 1.0
20	MAIN BLDG. ENDWALL GIRT SPACING	0.914 m. (4 rows) (Max Allow. 1.080m)
21	MAIN BLDG. ENDWALL GIRT LENGTH	3.88 m. (0.1m Overlap)
22	FRAME SCREW FASTENERS	14-13x22 Hex C/S (SP HD 5/16" Hex Drive)
23	FRAME BOLT FASTENERS	Purlin Assy M12x30 Z/P
24	X-BRACING STRAP AND FASTENERS	Single Bracing Strap Per Roll Light
25	WALL COLOUR	PAPERBARK
26	ROOF COLOUR	NIGHT_SKY
27	ROLLER DOOR COLOUR	NIGHT_SKY
28	P.A. DOOR COLOUR	NIGHT_SKY
29	DOWNPIPE COLOUR	PAPERBARK
30	GUTTER COLOUR	NIGHT_SKY
31	CORNER FLASHING COLOUR	PAPERBARK
32	BARGE FLASHING COLOUR	NIGHT_SKY
33	OPENING FLASHING COLOUR	NIGHT_SKY
34	OPEN BAY HEADER HEIGHT	0.5

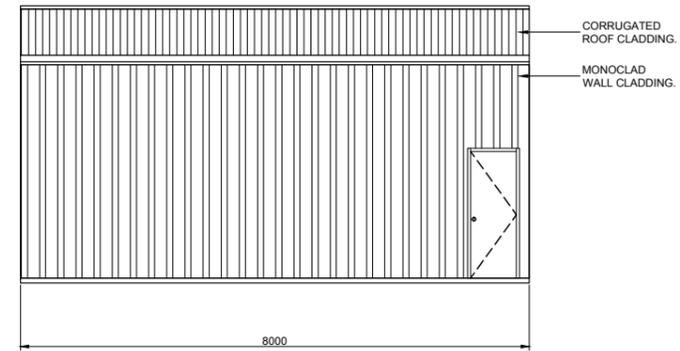
C.S. = CLEARSPAN "L" = LEFT "R." = RIGHT

SHEET 5 OF 7	JOB NO. DEPT20566 NOC 2019	DATE 4/11/2022	CHECKED TML	DRAWN FDS	STEEL BUILDING BY (CONTACT) DBS SHEDS PTY LTD 03 6424 6664 ASHLEY SIMPSON 139 MERSEY MAIN ROAD SPREYTON	FOR AT		Civil & Structural Engineers 50 Punari Street Currajong, Qld 4812 Fax: 07 4725 5850 Email: design@nceng.com.au ABN 341 008 173 56	Mr Timothy Roy Messer BE MIEAust RPEQ Signature <i>T. Messer</i> Date 4/11/2022 Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register
	REGISTERED CHARTERED PROFESSIONAL ENGINEER REGISTERED PROFESSIONAL ENGINEER (CIVIL & STRUCTURAL) QLD REGISTERED CERTIFYING ENGINEER (STRUCTURAL) N.T. REGISTERED ENGINEER - (CIVIL) VIC REGISTERED ENGINEER - (CIVIL) TAS	REGN. NO. 2558980 REGN. NO. 9985 REGN. NO. 116373ES REGN. NO. PE0002216 REGN. NO. CC5648M							

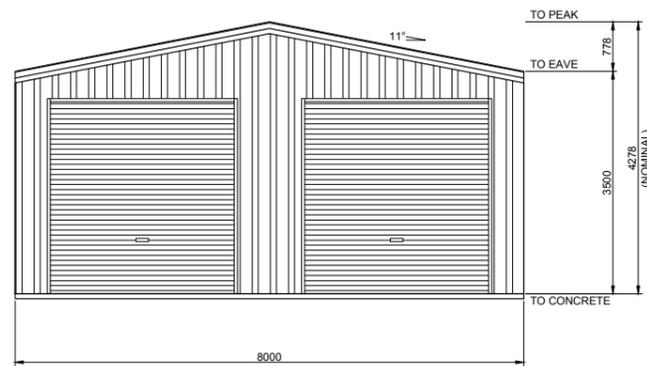
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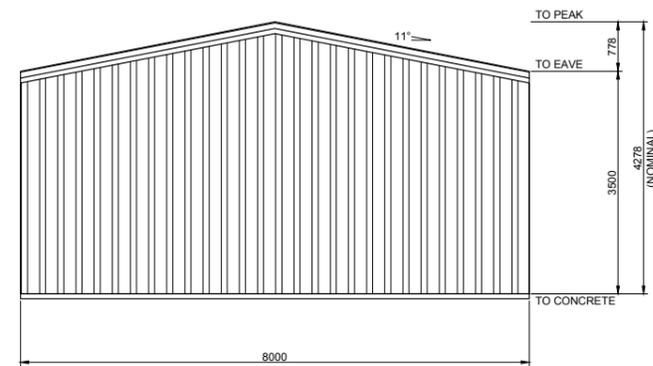
1 SIDEWALL EXTERIOR ELEVATION
6 SCALE: 1 = 100



2 SIDEWALL EXTERIOR ELEVATION
6 SCALE: 1 = 100



4 ENDWALL EXTERIOR ELEVATION
6 SCALE: 1 = 100



3 ENDWALL EXTERIOR ELEVATION
6 SCALE: 1 = 100

BUILDING COLOURS	
WALL	PAPERBARK
ROOF	NIGHT SKY
ROLLER DOOR	NIGHT SKY
P.A. DOOR	NIGHT SKY
DOWNPIPE	PAPERBARK
GUTTER	NIGHT SKY
CORNER FLASHING	PAPERBARK
BARGE FLASHING	NIGHT SKY
OPENING FLASHING	NIGHT SKY

SHEET 6 OF 7	DATE 4/11/2022	CHECKED TM	DRAWN FDS	STEEL BUILDING BY (CONTACT) DBS SHEDS PTY LTD 03 6424 6664 ASHLEY SIMPSON 139 MERSEY MAIN ROAD SPREYTON	FOR AT	 	 Civil & Structural Engineers 50 Punari Street Currajong, Qld 4812 Fax: 07 4725 5850 Email: design@nceng.com.au ABN 341 008 173 56 Registered Chartered Professional Engineer Registered Professional Engineer (Civil & Structural) QLD Registered Certifying Engineer (Structural) N.T. Registered Engineer - (Civil) VIC Registered Engineer - (Civil) TAS	Mr Timothy Roy Messer BE MIEAust RPEQ Signature  Date 4/11/2022 Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register
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NOTES:

BRACING MATERIALS - THE SHED ERECTOR TO SUPPLY SPECIFIC BRACING. SUITABLE RIGID MEMBERS CAPABLE OF TENSION AND COMPRESSION OR OPPOSING CHAINS OR OPPOSING LOAD RATED RATCHET STRAPS TO BE USED. (RIGID BRACING AS SHOWN ON DIAGRAM) ROPE BRACING SUITABLE ONLY FOR SMALLER STRUCTURES IN IDEAL CONDITIONS.

BRACING LOCATION - TEMPORARY BRACING TO BE ERECTED AS CLOSE TO 45 DEGREE ANGLE AND FIXED TO THE TOP OF THE COLUMN OR MULLION TO ACHIEVE THE OPTIMUM EFFECTIVENESS. IF THERE IS NOT ENOUGH SPACE FOR A 45 DEGREE ANGLE, THEN 20 DEGREE ANGLE IS TO BE THE MINIMUM ANGLE ALLOWED (REFER TO DIAGRAM). RIGID TEMPORARY BRACING MEMBER TO BE BOLTED TO HEAVY ANGLE PEGS HAMMERED INTO THE GROUND OR TO A BRACKET, MASONRY ANCHORED TO THE SLAB.

BRACING REMOVAL - TEMPORARY BRACING TO REMAIN IN PLACE UNTIL CLADDING IS FULLY INSTALLED WHERE POSSIBLE. IN NO CASE SHOULD TEMPORARY BRACING BE REMOVED UNTIL ALL PURLINS, GIRTS (AND PERMANENT CROSS BRACING WHERE USED) ARE FIXED.

SITE SAFETY - DUE CONSIDERATION TO BE GIVEN TO SITE SAFETY IN REGARD TO LOCATIONS OF BRACING AND PEGS.

GUIDE APPLICATION - TEMPORARY BRACING AS DESCRIBED IS A MINIMUM REQUIREMENT FOR AN AVERAGE, STANDARD SITE CONDITION. PROVIDE ADDITIONAL BRACING FOR MORE SEVERE AND/OR HIGH EXPOSURE SITE CONDITIONS. ADDITIONAL BRACING TO BE USED AS AND WHERE NECESSARY TO ENSURE THAT ENTIRE FRAME IS RIGID THROUGHOUT CONSTRUCTION. RESPONSIBILITY FOR ENSURING STABILITY OF STRUCTURE REMAINS WITH THE BUILDER.

TILT UP METHOD

FOR STRUCTURES UNDER 9M SPAN, LESS THAN 3M HIGH AND LESS THAN 12M LONG

- A. ASSEMBLE THE FIRST SIDEWALL FRAME (COMPLETE WITH WALL SHEETING, BRACING AND GUTTER) ON THE GROUND AND LIFT ASSEMBLED SIDEWALL FRAME INTO POSITION. FIX OFF TEMPORARY SIDE BRACING TO EACH END (REFER TO DIAGRAM). FIX BASE CLEATS.
- B. ASSEMBLE THE SECOND SIDEWALL FRAME AS PER FIRST SIDEWALL FRAME. LIFT INTO POSITION. FIX OFF TEMPORARY WALL BRACING TO EACH END (REFER TO DIAGRAM) FIX BASE CLEATS.
- C. FIX GABLE END RAFTERS TO COLUMNS TO TIE WALLS. PROP APEX UNTIL ENDWALL MULLION AND APEX TEMPORARY BRACE ARE FIXED OFF. IF NO MULLION IS REQUIRED THEN PROP AND BRACE APEX UNTIL CLADDING IS COMPLETE.
- D. INSTALL REMAINING RAFTERS. AS EACH RAFTER PAIR IS INSTALLED, AT LEAST ONE PURLIN PER 3M OF RAFTER LENGTH IS TO BE INSTALLED TO SECURE RAFTERS.
- E. INSTALL REMAINING PURLINS
- F. INSTALL KNEE AND APEX BRACES IF AND WHERE APPLICABLE.
- G. REPEAT FOR LEANTO'S.

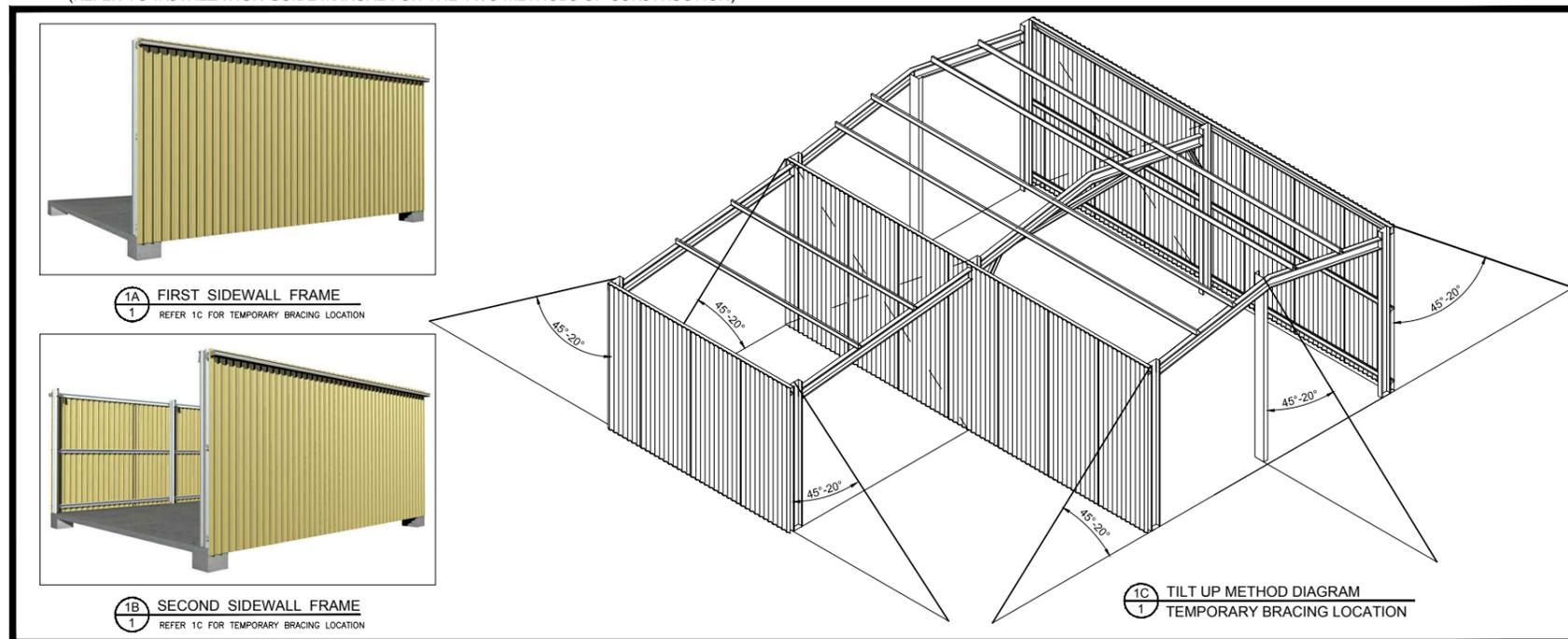
FRAME FIRST METHOD

FOR STRUCTURES OVER 9M SPAN, GREATER THAN 3M HIGH AND GREATER THAN 12M LONG

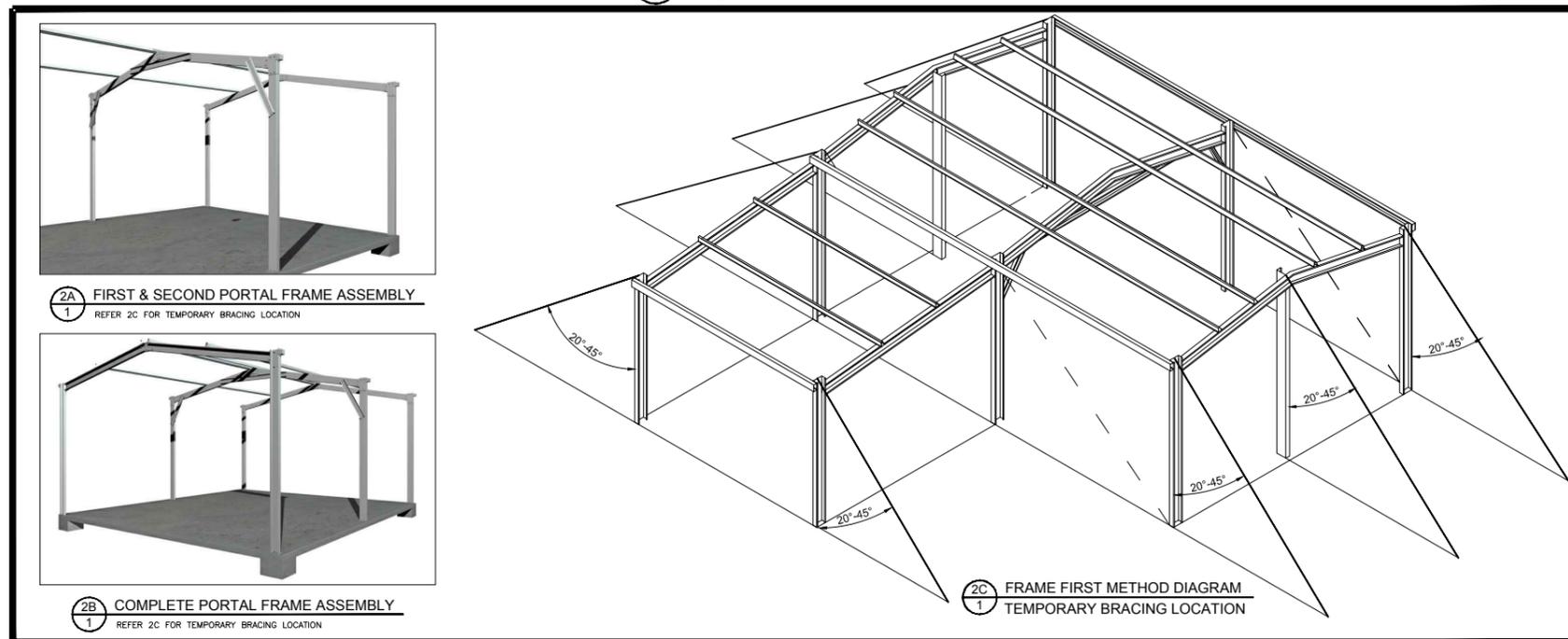
- A. ASSEMBLE PORTAL FRAMES ON THE GROUND (WITH KNEE AND APEX BRACES IF AND WHERE APPLICABLE). LIFT THE FIRST PORTAL FRAME ASSEMBLY INTO POSITION. FIX OFF TEMPORARY END BRACING (REFER TO DIAGRAM). FIX BASE CLEATS.
- B. PROP APEX UNTIL ENDWALL MULLION AND APEX TEMPORARY BRACE ARE FIXED OFF. IF NO MULLION IS REQUIRED THEN PROP AND BRACE APEX UNTIL CLADDING IS COMPLETE.
- C. THE SECOND PORTAL FRAME ASSEMBLY TO BE LIFTED INTO POSITION. FIX EAVE PURLINS AND AT LEAST ONE PURLIN PER 3M OF RAFTER TO SECURE FRAME ASSEMBLY. FIX BASE CLEATS. FIX TEMPORARY SIDEWALL BRACING.
- D. STAND REMAINING PORTAL FRAME ASSEMBLY AS PER STEP C, FIXING TEMPORARY SIDE WALL BRACING TO EVERY SECOND BAY. BRACE OTHER END PORTAL FRAME AS PER FIRST PORTAL FRAME.
- E. INSTALL REMAINING PURLINS AND GIRTS.
- F. REPEAT FOR LEANTO'S.

GUIDE TO THE INSTALLATION OF TEMPORARY BRACING

(REFER TO INSTALLATION GUIDE MANUAL FOR THE TWO METHODS OF CONSTRUCTION)



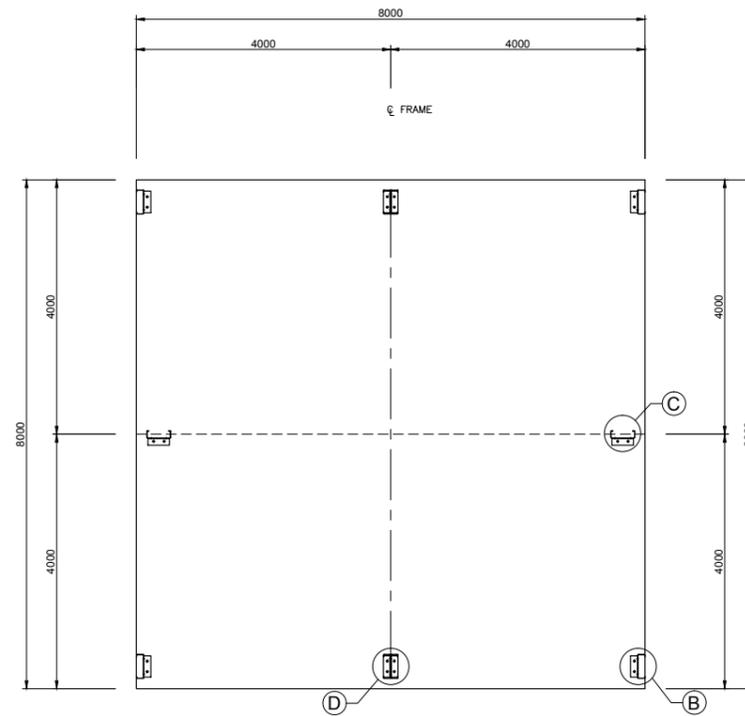
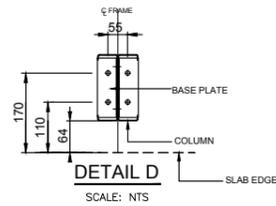
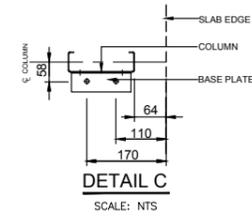
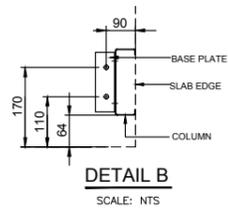
1 TILT UP METHOD DIAGRAM
SCALE: NTS



2 FRAME FIRST METHOD DIAGRAM
SCALE: NTS

SHEET 7 OF 7	JOB NO. DEPT20566 NOC 2019	DATE 4/11/2022	CHECKED TM	DRAWN FDS	STEEL BUILDING BY FOR AT	(CONTACT) DBS SHEDS PTY LTD 03 6424 6664 ASHLEY SIMPSON 139 MERSEY MAIN ROAD SPREYTON	 	 Civil & Structural Engineers 50 Punari Street Currajong, Qld 4812 Fax: 07 4725 5850 Email: design@nceng.com.au ABN 341 008 173 56 Registered Chartered Professional Engineer Registered Professional Engineer (Civil & Structural) QLD Registered Certifying Engineer (Structural) N.T. Registered Engineer - (Civil) VIC Registered Engineer - (Civil) TAS	Mr Timothy Roy Messer BE MIEAust RPEQ Signature <i>T. Messer</i> Date 4/11/2022 Registered on the NPER in the areas of practice of Civil & Structural National Professional Engineers Register
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1 BOLT LAYOUT PLAN
SCALE: 1 = 100

IF YOU HAVE A ROLLER DOOR IN THE GABLE END OF YOUR SHED, CONTACT YOUR DISTRIBUTOR TO SEE IF MULLION NEEDS TO BE ROTATED FOR USE AS A DOOR JAMB.

NOT PART OF COUNCIL APPLICATION DOCUMENTATION

JOB NO. DEPT20566	DATE 4/1/2022	CHECKED TM	DRAWN FDS	STEEL BUILDING BY DBS SHEDS PTY LTD 03 6424 6664	 	<h1>BOLT LAYOUT PLAN</h1>
				FOR ASHLEY SIMPSON 139 MERSEY MAIN ROAD SPREYTON		

CERTIFICATE OF QUALIFIED PERSON-ASSESSABLE ITEM

Section 321

To: Owner/Agent
 Address
 Suburb/Postcode

Form **55**

Qualified person details:

Qualified Person:
 Address: Phone No:
 Fax No:
 Licence No: Email Address:
 Qualifications and insurance details:
(description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)
 Speciality area of expertise:
(description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Details of Work:

Address: Lot No:
 Certificate of title No:
 The assessable item related to this certificate:
(description of the assessable item being certified)
 Assessable item includes -
 - a material;
 - a design
 - a form of construction
 - a document
 - testing of a component, building system or plumbing system
 - an inspection, or assessment, performed

Certificate Details:

Certificate type: *description from Column 1 of Schedule 1 of the Director's Determination - Certificates by Qualified Persons for Assessable Items n)*

This certificate is in relation to the above assessable item, at any stage, as part of - *(tick one)*
 Building work, plumbing work or plumbing installation or demolition work :
 OR
 a building, temporary structure or plumbing installation :

In Issuing this certificate the following matters are relevant -

Documents:

'Fair Dinkum Sheds' Structural Design Drawing (7 in total)
DEPT20566

Relevant
Calculations:

Relevant
calculations:

References:

NCC 2019, AS/NZ4600-2018,
AS1170,AS1170.0,AS1170.1,AS1170.2,AS1170.3,AS1170.4,
AS2870-2011, AS3600-2018

Substance Of Certificate: *(what it is that is being certified)*

Structure plus foundation.

Scope and/or Limitations

Vu (Limit State Design) < or = 35.6 m/s.

I certify the matters described in this certificate.

Qualified Person: *T. Messer*
Mr Timothy Roy Messer

Certificate No: CC5648M

Date: 4/11/2022

CERTIFICATE OF THE RESPONSIBLE DESIGNER

**Section 94
Section 106
Section 129
Section 155**

To : *Owner Name*
 Address
 Suburb/postcode

Form 35

Designer Details:

Name: *Category:* **Structural & Building Designer**
 Business name:
 Business address: *Phone No:*
 Fax No:
 Licence No: *Email Address:*

Details of the proposed work:

Owner/Applicant *Designer's project reference No.*
Address: *Lot No:*

Type of work : **Building work** **Plumbing work** *(X all applicable)*

Description of work :

Steel Portal Frame Structure 8 m Span x 8 m O/A length x 3.5 m eaves height building, consisting of 2 bays at 4 m x 0 m Left Leanto span x 0 m Right leanto span

(new building / alteration / addition / repair / removal / re-erection water / sewerage / stormwater / on-site wastewater management system / backflow prevention / other)

Description of the Design Work (Scope, limitations or exclusions) : *(X all applicable certificates)*

Certificate Type :	Certificate	Responsible Practitioner
	<input checked="" type="checkbox"/> Building design	Architect or Building Services Designer
	<input checked="" type="checkbox"/> Structural design	Structural Engineer
	<input type="checkbox"/> Fire Safety design	Fire Engineer
	<input type="checkbox"/> Civil design	Civil Engineer
	<input type="checkbox"/> Hydraulic design	Building Services Designer
	<input type="checkbox"/> Fire service design	Building Services Designer
	<input type="checkbox"/> Electrical design	Building Services Designer
	<input type="checkbox"/> Mechanical design	Building Services Designer
	<input type="checkbox"/> Plumbing design	Plumber
	<input type="checkbox"/> Other (specify)	

Deemed-to-Satisfy : Performance Solution : *(X the appropriate box)*

Other details :

Design documents provided:

The following documents are provided with this Certificate -
Document description :

Drawing numbers : 1 to 7	Prepared by : Fair Dinkum Sheds	Date : 4/11/2022
Schedules :	Prepared by :	Date :
Specifications :	Prepared by :	Date :
Computations :	Prepared by :	Date :
Performance solution proposals :	Prepared by :	Date :
Test reports :	Prepared by :	Date :

Standards, codes or guidelines relied on in design process :

NCC 2019, AS/NZ4600-2018
 AS1170,AS1170.0,AS1170.1,AS1170.2,AS1170.3,AS1170.4
 AS2870-2011,AS3600-2018
 NCC Building Classification = Class 10

Any other relevant documentation :

[Empty box for additional documentation]

Attribution as designer:

I **Tim Messer** am responsible for the design of that part of the work as described in this certificate;

The documentation relating to the design includes sufficient information for the assessment of the work in accordance with the *Building Act 2016* and sufficient detail for the builder or plumber to carry out the work in accordance with the documents and the Act;

This certificate confirms compliance and is evidence of suitability of this design with the requirements of the National Construction Code.

Designer:	<small>Name : (print)</small> Tim Messer	<small>signed</small> 	<small>Date</small> 4/11/2022
Licence No:	CC5648M (Structural & Building Designer)		

From: Allan Brooks <allan.brooks@pda.com.au>
Sent: Tuesday, 9 August 2022 11:29 AM
To: Devonport City Council
Subject: Additional Information for Subdivision at 158 Caroline street East Devonport

To Planning Authority

I failed to mention that I lodged the owner's consent with DSG at the same time as this lodgement. Understand I will need the owners consent for the stormwater drainage but would like to use this time to address any other request of information the council may require.

Please don't hesitate if anything is required.

Regards,



Allan Brooks MPlanning, BAppSci (ME)
Planner

Phone: +61 (03) 6331 4099 | Mobile: 0448 453 971
allan.brooks@pda.com.au
PO Box 284, 3/23 Brisbane Street, Launceston TAS 7250

From: Allan Brooks
Sent: Tuesday, 9 August 2022 11:21 AM
To: 'council@devonport.tas.gov.au' <council@devonport.tas.gov.au>
Cc: Adrian Eberhardt <Adrian.Eberhardt@pda.com.au>; 'Adrian Bott' <abott@vosconstruction.com.au>
Subject: Subdivision 158 Caroline street, East Devonport

To Planning Authority.

We act for Vos Construction & Joinery PTY LTD for the subdivision of 158 Caroline Street, East Devonport. We hereby attach the following:

- Completed application form
- Title documentation
- Subdivision Plan
- Bushfire Report
- Traffic Impact Assessment
- Geotechnical Report

Can the invoice please be returned in the clients name.

Please let me know if anything further is required

Regards,



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Planner

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www.pda.com.au

Our Ref: 48254AE

9th August 2022

Devonport City Council
PO Box 604
DEVONPORT TAS 7310

Via email: council@devonport.tas.gov.au

Attention: Town Planner

Dear Sir/Madam

RE: SUBDIVISION - 158 Caroline Street, East Devonport

In accordance with instructions from our client Vos Construction & Joinery PTY LTD, we would like to make an application for a planning permit.

To support this application, the following is submitted:

- Proposed Plan of Subdivision;
- Completed Development Application Form;
- Copy of Certificate of Title, Plan of Title and Schedule of Easements;
- Bushfire report
- Traffic Impact Assessment
- Geotechnical Report

Please forward an invoice for the fee as soon as possible to ensure prompt payment. I will provide a copy to our client along with the notification of lodgement in accordance with *Section 52 of the Land Use Planning and Approvals Act 1993*.

If you have any queries about this application, please contact this office directly.

Yours faithfully,

PDA Surveyors

Allan Brooks

PDA Surveyors, Engineers & Planners

OFFICES ALSO AT:

HOBART
127 Bathurst St,
Hobart, TAS 7000
(03) 6234 3217

KINGSTON
6 Freeman St,
Kingston, TAS 7050
(03) 6229 2131

HUONVILLE
10/16 Main Rd,
Huonville, TAS 7109
(03) 6264 1277

DELORAINÉ
16 Emu Bay Rd,
Deloraine, TAS 7304
(03) 6362 2993

BURNIE
6 Queen St,
Burnie, TAS 7320
(03) 6431 4400

DEVONPORT
77 Gunn St,
Devonport, TAS 7310
(03) 6423 6875

SWANSEA
3 Franklin St,
Swansea, TAS 7190
(03) 6130 9099

Office use
Application no. _____
Date received: _____
Fee: _____
Permitted/Discretionary



Devonport City Council

Land Use Planning and Approvals Act 1993 (LUPAA)

Tasmanian Planning Scheme - Devonport

Application for Planning Permit

Use or Development Site

Street Address: 158 Caroline Street, East Devonport

Certificate of Title Reference No.: 174766/1

Applicant's Details

Full Name/Company Name: PDA Surveyors, Engineers & Planners obo

Vos Construction & Joinery PTY LTD

Postal Address: P.O Box 284, Launceston 7250

Telephone: 0448 453 971

Email: allan.brooks@pda.com.au

Owner's Details (if more than one owner, all names must be provided)

Full Name/Company Name: Vos Construction & Joinery PTY LTD

Postal Address: 3 Hudson Fysh Drive, Western Junction 7212

Telephone: _____

Email: abott@vosgroup.com

ABN: 47 611 446 016
 PO Box 604
 137 Rooke Street
 Devonport TAS 7310
 Telephone 03 6424 0511
www.devonport.tas.gov.au
council@devonport.tas.gov.au

Applications may be lodged by email to Council - council@devonport.tas.gov.au
 The following information and plans must be provided as part of an application unless the planning authority is satisfied that the information or plan is not relevant to the assessment of the application:

Application fee	
Completed Council application form	
Copy of the current certificate of title, including title plan and schedule of easements	
Any written permission and declaration of notification required under s.52 of LUPAA	
A site analysis and site plan at an acceptable scale on A3 or A4 paper (1 copy) showing:	
<ul style="list-style-type: none"> • The existing and proposed use(s) on the site 	
<ul style="list-style-type: none"> • The boundaries and dimensions of the site 	
<ul style="list-style-type: none"> • Topography including contours showing AHD levels and major site features 	
<ul style="list-style-type: none"> • Natural drainage lines, watercourses and wetlands on or adjacent to the site 	
<ul style="list-style-type: none"> • Soil type 	
<ul style="list-style-type: none"> • Vegetation types and distribution including any known threatened species, and trees and vegetation to be removed 	
<ul style="list-style-type: none"> • The location, capacity and connection point of any existing services and proposed services 	
<ul style="list-style-type: none"> • The location of easements on the site or connected to the site 	
<ul style="list-style-type: none"> • Existing pedestrian and vehicle access to the site 	
<ul style="list-style-type: none"> • The location of existing and proposed buildings on the site 	
<ul style="list-style-type: none"> • The location of existing adjoining properties, adjacent buildings and their uses 	
<ul style="list-style-type: none"> • Any natural hazards that may affect use or development on the site 	
<ul style="list-style-type: none"> • Proposed roads, driveways, parking areas and footpaths within the site 	
<ul style="list-style-type: none"> • Any proposed open space, common space, or facilities on the site 	
<ul style="list-style-type: none"> • Proposed subdivision lot boundaries (where applicable) 	
<ul style="list-style-type: none"> • Details of any proposed fencing 	
Where it is proposed to erect buildings, a detailed layout plan of the proposed buildings with dimensions at a scale of 1:100 or 1:200 on A3 or A4 paper (1 copy) showing:	
<ul style="list-style-type: none"> • Setbacks of buildings to property (title) boundaries 	
<ul style="list-style-type: none"> • The internal layout of each building on the site 	
<ul style="list-style-type: none"> • The private open space for each dwelling 	
<ul style="list-style-type: none"> • External storage spaces 	
<ul style="list-style-type: none"> • Parking space location and layout 	
<ul style="list-style-type: none"> • Major elevations of every building to be erected 	
<ul style="list-style-type: none"> • The relationship of the elevations to existing ground level, showing any proposed cut or fill 	
<ul style="list-style-type: none"> • Shadow diagrams of the proposed buildings and adjacent structures demonstrating the extent of shading of adjacent private open spaces and external windows of buildings on adjacent sites 	
<ul style="list-style-type: none"> • Materials and colours to be used on roofs and external walls 	
Details of any signage proposed	

Value of use and/or development

\$ _____

Notification of Landowner/s (s.52 *Land Use Planning and Approvals Act 1993*)

If land is not in applicant's ownership

I, Allan Brooks declare that the owner/s of the land has/have been notified of my intention to make this application.

Applicant's signature:  Date: 09/08/2022

If the application involves land owned or administered by the Devonport City Council

Devonport City Council consents to the making of this permit application.

General Manager's signature: _____ Date: _____

If the application involves land owned or administered by the Crown

Crown consent must be included with the application.

Signature

I apply for consent to carry out the use and development described in this application. I declare that all the information given is true and correct. I also understand that:

- if incomplete, the application may be delayed or rejected; and
- more information may be requested in accordance with s.54 (1) of LUPAA.

PUBLIC ACCESS TO PLANNING DOCUMENTS - DISCRETIONARY PLANNING APPLICATIONS (s.57 of LUPAA)

I understand that all documentation included with a discretionary application will be made available for inspection by the public.

Applicant's signature:  Date: 09/08/2022

PRIVACY ACT

The personal information requested on this form is being collected by Council for processing applications under the *Land Use Planning and Approvals Act 1993* and will only be used in connection with the requirements of this legislation. Council is to be regarded as the agency that holds the information.

Fee & payment options



Pay by Direct Deposit – BSB: 067-402 Account No. 000 000 13 – Please quote your application number.



Pay in Person at Service Tasmania – Present this notice to any Service Tasmania Centre, together with your payment. See www.service.tas.gov.au for opening hours.



Pay by Phone – Please contact the Devonport City Council offices on 64240511 during office hours, Monday to Friday.



Pay by Post – Cheques should be made payable to Devonport City Council and posted to PO Box 604, Devonport, Tasmania, 7310.



Planning Report

158 Caroline Street, East Devonport

48254AE | 09/08/2022

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PDA Contributors

Planning	Allan Brooks	09/08/2022
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Revision History

Revision	Description	Date
1	First Issue	09/08/2022

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EXECUTIVE SUMMARY

Council approval is sought for 46 lot and balance subdivision of land at 158 Caroline Street, East Devonport (CT 174766/1).

A permit is sought in accordance with Section 57 of the *Land Use Planning and Approvals Act 1993* and Clause 6.8.1 (b) of the *Tasmanian Planning Scheme - Devonport*

Development Details:

Property Address	158 Caroline Street, East Devonport
Proposal	47 Lot Subdivision
Land Area	12.02ha

CT	174766/1
PID	3604651
Planning Ordinance	Tasmanian Planning Scheme - Devonport
Land Zoning	General Residential, Rural Living & Agricultural
Specific Areas Plans	N/A
Code Overlays	Safeguarding of Airports Code, Bushfire Prone Areas & Landslip Hazard

1. Introduction/Context

Council approval is sought for a 47 lot subdivision at 158 Caroline Street, Ease Devonport (CT 174776/1). In support of the proposal the following associated documents have been provided in conjunction with this planning assessment:

- Subdivision Proposal Plan
- Completed Development Application Form
- Copy of Title
- Bushfire Report
- Geotechnical Report

1.1. The Land

The land is sloped land with a crest of the hill looked at the north east corner. The land is primarily grassland used for grazing with the exception of the southern area which is a steep bank with large vegetation separating the bass highway to the larger grassland area.



Figure 1. Existing aerial image of the subject land (LISTmap, 2022)

1.2. Existing Development

The site is currently vacant.

1.3. Natural Values

There is vegetation at the southern portion of the lot. The majority of this is set to remain.

2. The Proposal

The proposed application to subdivide 1 lot into 47. Each lot will be serviced by the reticulated water and sewer mains. Stormwater is to be drained towards the bass highway through an existing culvert and into Bison Creek. The balance lot will contain all area that is currently zoned rural living and lot 46 contains all area currently zoned agricultural.

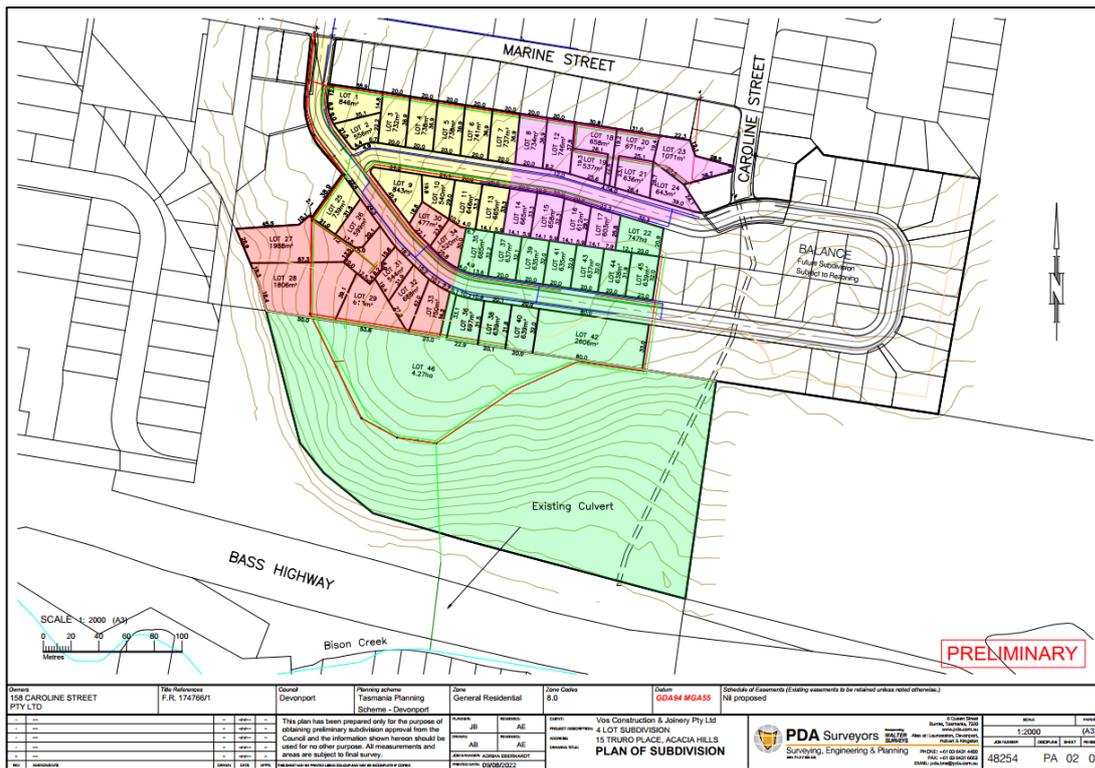


Figure 2. Proposed Plan of Subdivision

3. Planning Assessment

This current proposal for 2 lot Subdivision has been developed in accordance with the *Tasmanian Planning Scheme – Devonport*.

3.1 Zoning

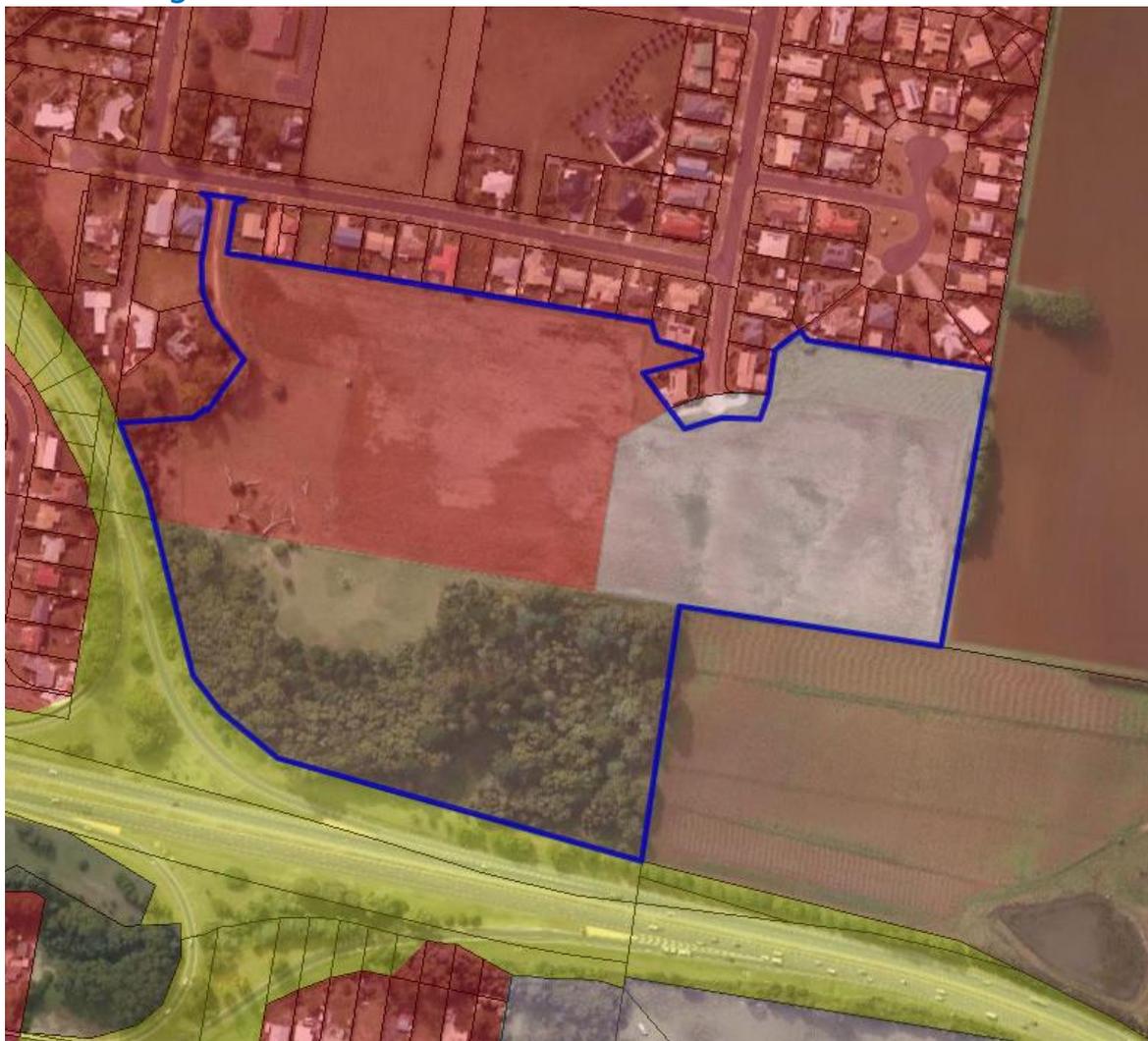


Figure 3. Zoning identification of the subject land and surrounds (LISTmap, 2022)

The subject land is located within the General Residential, Rural Living and Agricultural. Neighbouring lots to the north and east are zoned General residential and lots to the south separated by the bass highway area also general residential. Lots to the east are zoned agricultural.

3.2 Zone Standards – General Residential

8.6 Development standards for Subdivision

8.6.1 Lot design

<p>Objective: That each lot:</p> <ul style="list-style-type: none"> a) Has an area and dimensions appropriate for use and development in the zone; b) Is provided with appropriate access to a road; c) Contains areas which are suitable for residential development. 	
Acceptable Solutions	Performance Criteria
<p>A1 Each lot, or a lot proposed in a plan of subdivision, must:</p> <ul style="list-style-type: none"> a) Have an area no less than 450m² and: <ul style="list-style-type: none"> i. Be able to contain a minimum area of 10m x 15m with a gradient not steeper than 1 in 5 clear of: <ul style="list-style-type: none"> a. all setbacks required by the clause 8.4.2 A1 and A2 and A3, and 8.5.1 A1 and A2; and b. easements of other title restrictions that limit or restrict development; and ii. existing buildings are consistent with the setback required by clause 8.4.2 A1 and A2 and A3, and 8.5.1 A1 and A2; b) be required for public use by the crown, a council or state authority; c) be required for the provisions of Utilities; or d) be for the consolidation of a lot with another lot provided each lot is within the same zone 	<p>P1 Each lot, or proposed in a plan of subdivision, must have sufficient useable area and dimensions suitable for its intended use, having regard to:</p> <ul style="list-style-type: none"> a) the relevant requirements for development of buildings on the lots; b) the intended location of buildings on the lots; c) the topography of the site; d) the presence of any natural hazards; e) adequate provision of private open space; f) the pattern of development existing on established properties in the area; and
<p>Comment: A1 is met: Each lot is larger than 450m² and is able to contain a building area larger than 10mx15m with a gradient not steeper than 1 in 5. There are no easements to restrict development.</p>	
Acceptable Solutions	Performance Criteria

<p>A2 Each lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must have a frontage not less than 12m.</p>	<p>P2 Each lot, or proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must be provided with a frontage or legal connection to a road by right of carriageway, that is sufficient for the intended use, having regard to:</p> <ul style="list-style-type: none"> a) the width of frontage proposed, if any b) the number of other lots which have the land subject to the right of carriageway as their sole or principal mean of access; c) the topography of the site; d) the functionality and useability of the frontage; e) the ability to manoeuvre vehicles on the site; and f) the pattern of development existing on established properties in the area, <p>and is not less than 3.6m wide.</p>
<p>Comment:</p> <p>P2 is met: All but 3 lots have 3 lots smaller than the 12m to meet the acceptable solution. Lots 18,20 & 23 all have 3.6m of access from a road. The area is relatively flat located at the top of the crest. No other lot has a right of way over the access and each access is functional and has the ability to manoeuvre onsite. There is a pattern of internal lots within the area of Devonport.</p>	
<p>Acceptable Solutions</p>	<p>Performance Criteria</p>
<p>A3 Each lot, or a lot proposed in a plan of subdivision, must be provided with a vehicular access from boundary of the lot to a road in accordance with the requirements of the road authority.</p>	<p>P3 Each lot, or proposed in a plan of subdivision, must be provided with reasonable vehicular access to a boundary of a lot or building area on the lot, if any having regard to:</p> <ul style="list-style-type: none"> a) the topography of the site b) the distance between the lot or building area and the carriageway; c) the nature of the road and the traffic; d) the anticipated nature of vehicles likely to access the site; and e) the ability for emergency services to access the site.

Comment:

A3 is met: Each lot will be provided with vehicular from the boundary in accordance with the requirement of the road authority.

Acceptable Solutions	Performance Criteria
<p>A4 Any lot in a subdivision with a new road, must have the long axis of the lot between 30 degrees west of true north and 30 degrees east of true north.</p>	<p>P4 Subdivision must provide for solar orientation of lots adequate to provide solar access for future dwellings, having regard to:</p> <ul style="list-style-type: none"> a) the size, shape and orientation of the lots; b) the topography of the site; c) the extent of overshadowing from adjoining properties; d) any development on the site; e) the location of roads and access to lots; and f) the existing pattern of subdivision in the area.

Comment:

A4 is met: As the subdivision is subject to a new road, lots have been developed to have a long access between 30 degrees west of true north and 30 degrees east of true north.

8.6.2 Roads

Objective:

That the arrangement of new roads within a subdivision provides;

- a) the provisions of safe, convenient and efficient connections to assist accessibility and mobility of the community;
- b) the adequate accommodation of vehicular, pedestrian, cycling and public transport traffic; and
- c) the efficient ultimate subdivision of the entirety of the land and of surrounding land.

Acceptable Solutions	Performance Criteria
<p>A1 The Subdivision includes no new road.</p>	<p>P1 The arrangement and construction of roads within a subdivision must provide an appropriate level of access, connectivity, safety, convenience and legibility for vehicles, pedestrians and cyclists, having regard to:</p> <ul style="list-style-type: none"> a) any relevant road network plan adopted by council;

	<ul style="list-style-type: none"> b) the existing and proposed road hierarchy; c) the need for connecting roads and pedestrian path, to common boundaries with adjoining land, to facilitate future subdivision potential; d) maximising connectivity with the surrounding road, pedestrian, cycling and public transport networks; e) minimise the travel distance between key destinations such as shops and services and public transport routes; f) access to public transport; g) the efficient and safe movement of pedestrians, cyclists and public transport; h) the need to provide bicycle infrastructure on new arterial and collector roads in accordance with the <i>Guide to Road Design Part 6A: Paths for Walking and Cycling 2016</i>; i) the topography of the site; and j) the future subdivision potential of any balance lots on adjoining or adjacent land.
--	---

Comment:

P1 is met: As the subdivision is subject to a new road the performance. The road has been designed to maximise connectivity with entrances from Caroline and Marine Street. A traffic impact assessment has been supplied for more information and recommendations.

10.6.3 Services

Objective:

That the subdivision of land provides services for the future use and development of the land.

Acceptable Solutions

Performance Criteria

A1

Each lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must:

- a) be connected to a full water supply service if the frontage of the lot is

P1

No Performance Criterion.

<p>within 30m of a full water supply service; or:</p> <p>b) be connected to a limited water supply service if the frontage of the lot is within 30m of a limited water supply service,</p> <p>unless a regulated entity advises that the lot is unable to be connected to the relevant water supply service.</p>	
<p>Comment:</p> <p>A1 is met: Each lot is capable of being connected to a water main.</p>	
<p>Acceptable Solutions</p>	<p>Performance Criteria</p>
<p>A2</p> <p>Each lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must have a connection to a reticulated sewerage system.</p>	<p>P2</p> <p>Each lot, or proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must be capable of accommodating an onsite waterwater treatment system adequate for the future use and development of the land.</p>
<p>Comment:</p> <p>A2 is met: Each lot is capable of being connected to a reticulated sewer system.</p>	
<p>Acceptable Solutions</p>	<p>Performance Criteria</p>
<p>A3</p> <p>Each lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must be capable of connecting to a public stormwater system.</p>	<p>P3</p> <p>Each lot, or proposed in a plan of subdivision, must be capable of accommodating an onsite stormwater management system adequate for the future use and development of the land, having regards to:</p> <ul style="list-style-type: none"> a) the size of the lots b) topography of the site c) soil conditions; d) any existing buildings on the site; e) any area of the site covered by impervious surfaces; and f) any watercourse on the land.
<p>Comment:</p>	

A3 is met: Each lot can be connected to a public stormwater system. A new main will connect to the existing culvert on bass highway. This culvert discharges to Bison Creek. Please see attached culvert capacity attached for more details.

3.3 Zone Standards – Rural Living

11.5 Development standards for Subdivision

11.5.1 Lot design

<p>Objective: That each lot:</p> <ul style="list-style-type: none"> a) Has an area and dimensions appropriate for use and development in the zone; b) Is provided with appropriate access to a road; c) Contains areas which are suitable for residential development. 	
Acceptable Solutions	Performance Criteria
<p>A1 Each lot, or a lot proposed in a plan of subdivision, must:</p> <ul style="list-style-type: none"> a) Have an area not less than specified in Table 11.1 and: <ul style="list-style-type: none"> iii. Be able to contain a minimum area of 15m x 20m clear of: <ul style="list-style-type: none"> c. all setbacks required by the clause 11.4.2 A2 and A3; and d. easements of other title restrictions that limit or restrict development; and iv. existing buildings are consistent with the setback required by clause 11.4.2 A1 and A2 and A3; b) be required for public use by the crown, a council or state authority; c) be required for the provisions of Utilities; or d) be for the consolidation of a lot with another lot provided each lot is within the same zone 	<p>P1 Each lot, or proposed in a plan of subdivision, must have sufficient useable area and dimensions suitable for its intended use, having regard to:</p> <ul style="list-style-type: none"> a) the relevant requirements for development of buildings on the lots; b) the intended location of buildings on the lots; c) the topography of the site; d) the presence of any natural hazards; e) adequate provision of private open space; f) the pattern of development existing on established properties in the area, <p>and must be no more than 20% smaller than the applicable lot size required by clause 11.5.1 A1.</p>
<p>Comment: A1 is met: The balance lot is larger than specified in Table 11.1</p>	
Acceptable Solutions	Performance Criteria

<p>A2 Each lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must have a frontage not less than 40m.</p>	<p>P2 Each lot, or proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must be provided with a frontage or legal connection to a road by right of carriageway, that is sufficient for the intended use, having regard to:</p> <ul style="list-style-type: none"> a) the width of frontage proposed, if any b) the number of other lots which have the land subject to the right of carriageway as their sole or principal mean of access; c) the topography of the site; d) the functionality and useability of the frontage; e) the ability to manoeuvre vehicles on the site; and f) the pattern of development existing on established properties in the area, <p>and is not less than 3.6m wide.</p>
<p>Comment: A1 is met: The balance lot has a frontage of more than 40m.</p>	
<p>Acceptable Solutions</p>	<p>Performance Criteria</p>
<p>A3 Each lot, or a lot proposed in a plan of subdivision, must be provided with a vehicular access from boundary of the lot to a road in accordance with the requirements of the road authority.</p>	<p>P3 Each lot, or proposed in a plan of subdivision, must be provided with reasonable vehicular access to a boundary of a lot or building area on the lot, if any having regard to:</p> <ul style="list-style-type: none"> a) the topography of the site b) the distance between the lot or building area and the carriageway; c) the nature of the road and the traffic; d) the anticipated nature of vehicles likely to access the site; and e) the ability for emergency services to access the site.
<p>Comment: A3 is met: The balance lot will be provided with vehicular from the boundary in accordance with the requirement of the road authority.</p>	

11.5.3 Roads

Objective:

That the arrangement of new roads within a subdivision provides;

- d) the provisions of safe, convenient and efficient connections to assist accessibility and mobility of the community;
- e) the adequate accommodation of vehicular, pedestrian, cycling and public transport traffic; and
- f) the efficient ultimate subdivision of the entirety of the land and of surrounding land.

Acceptable Solutions

A1

The Subdivision includes no new road.

Performance Criteria

P1

The arrangement and construction of roads within a subdivision must provide an appropriate level of access, connectivity, safety, convenience and legibility for vehicles, pedestrians and cyclists, having regard to:

- a) any relevant road network plan adopted by council;
- b) the existing and proposed road hierarchy;
- c) maximising connectivity with the surrounding road network
- d) appropriate access to public transport; and
- e) access for pedestrians and cyclists.

Comment:

P1 is met: As the subdivision is subject to a new road the performance. The road has been designed to maximise connectivity with entrances from Caroline and Marine Street. A traffic impact assessment has been supplied for more information and recommendations.

10.6.3 Services

Objective:

That the subdivision of land provides services for the future use and development of the land.

Acceptable Solutions

A1

Each lot, or a lot proposed in a plan of subdivision, excluding for public open space, a riparian or littoral reserve or Utilities, must:

- c) be connected to a full water supply service if the frontage of the lot is within 30m of a full water supply service; or:
- d) be connected to a limited water supply service if the frontage of the

Performance Criteria

P1

No Performance Criterion.

<p>lot is within 30m of a limited water supply service,</p> <p>unless a regulated entity advises that the lot is unable to be connected to the relevant water supply service.</p>	
<p>Comment:</p> <p>A1 is met: Each lot is capable of being connected to a water main.</p>	
<p>Acceptable Solutions</p>	<p>Performance Criteria</p>
<p>A2</p> <p>Each lot, or a lot proposed in a plan of subdivision, excluding within Rural Living Zone C or Rural Living Zone D or for public open space, a riparian or littoral reserve or Utilities, must:</p> <ul style="list-style-type: none"> a) have a connection to a reticulated sewerage system; or b) be connected to a reticulated sewer system if the frontage of each lot is within 30m or a reticulated sewerage system, and can be connected by gravity feed. 	<p>P2</p> <p>Each lot, or proposed in a plan of subdivision, excluding within Rural Living Zone C or Rural Living Zone D or for public open space, a riparian or littoral reserve or Utilities, must be capable of accommodating an onsite waterwater treatment system adequate for the future use and development of the land.</p>
<p>Comment:</p> <p>A2 is met: Each lot is capable of being connected to a reticulated sewer system.</p>	

3.4 Zone Standards – Agricultural

21.5 Development standards for Subdivision

21.5.1 Lot design

<p>Objective:</p> <p>To provide for subdivision that:</p> <ul style="list-style-type: none"> a) relates to public use, irrigation infrastructure or Utilities; and b) protects the long term productivity capacity of agricultural land. 	
<p>Acceptable Solutions</p>	<p>Performance Criteria</p>
<p>A1</p> <p>Each lot, or a lot proposed in a plan of subdivision, must:</p> <ul style="list-style-type: none"> a) be required for public use by the crown, a council or state authority; b) be required for the provisions of Utilities; or 	<p>P1</p> <p>Each lot, or lot proposed in a plan of subdivision, must:</p> <ul style="list-style-type: none"> a) provide for operation of an agricultural use, having regard to:

<p>c) be for the consolidation of a lot with another lot provided each lot is within the same zone</p>	<ul style="list-style-type: none"> i. not materially diminishing the agricultural productivity of the land; ii. the capacity of the new lots for productive agricultural use; iii. any topographical constraints to agricultural use; and iv. current irrigation practices and the potential for irrigation; <p>b) be for the reorganisation of lot boundaries that satisfies all of the following:</p> <ul style="list-style-type: none"> i. Provide for the operation of an agricultural use, having regard to: <ul style="list-style-type: none"> a. Not materially diminishing the agricultural productivity of the land; b. The capacity of the new lots for productive agricultural use; c. Any topographical constraints to agricultural use; and d. Current irrigation practices and potential for irrigation; ii. All new lots must be no less than 1ha in area; iii. Existing buildings are consistent with the setback requirements by clause 21.4.2 A1 and A2; iv. All new lots must be provided with a frontage or legal connection to a road by right of carriageway, that is sufficient for the intended use; and v. It does not create any additional lots; or <p>c) Be for the excision of a use or development existing at the effective date that satisfies all of the following:</p> <ul style="list-style-type: none"> i. The balance lot provides for the operation of an agricultural use, having regard to: <ul style="list-style-type: none"> a. Not materially diminishing the agricultural productivity of the land;
--	--

	<ul style="list-style-type: none"> b. The capacity of the balance lot for productive agricultural use; c. Any topographical constraints to agricultural use; and d. Current irrigation practices and potential for irrigation; <ul style="list-style-type: none"> ii. An agreement under section 71 of the Act is entered into and registered on the title preventing future Residential use if there is no dwelling on the balance lot; iii. Any existing buildings for a sensitive use must meet the setback required by clauses 21.4.2 A2 or P2 in relation to setbacks to new boundaries; and iv. All new lots must be provided with a frontage of legal connection to a road by right of carriageway , that is sufficient for the intended use.
--	--

Comment:

P1 (a) is met: With the whole of the agricultural zone is contained within 1 lot. The subdivision doesn't diminish the potential of the agricultural zoned land.

Acceptable Solutions	Performance Criteria
<p>A2 Each lot, or a lot proposed in a plan of subdivision, must be provided with a vehicular access from boundary of the lot to a road in accordance with the requirements of the road authority.</p>	<p>P2 Each lot, or proposed in a plan of subdivision, is capable of being provided with reasonable vehicular access to a boundary of a lot or building area on the lot, if any, having regard to:</p> <ul style="list-style-type: none"> a) The topography of the site; b) The distance between the lot or building area and the carriageway; c) The nature of the road and the traffic, including pedestrians; and

	d) The pattern of development existing on established properties in the area.
<p>Comment:</p> <p>A1 is met: Lot 40 will have vehicular access from the boundary to the requirements of the road authority.</p>	

3.5 Local Provisions Schedule

N/A site is not within a specific area.

3.6 Codes



Figure 4. Scheme Overlay identification of the subject land and surrounds (LISTmap, 2022)

Code	Comments:
C1.0 Signs Code	N/a
C2.0 Parking and Sustainable Transport Code	As this Code is relevant to this proposal, an assessment is provided below
C3.0 Road and Railway Assets Code	As this Code is relevant to this proposal, please see attached report
C4.0 Electricity Transmission Infrastructure Protection Code	N/A
C5.0 Telecommunications Code	N/A
C6.0 Local Historic Heritage Code	N/A
C7.0 Natural Assets Code	N/A
C8.0 Scenic Protection Code	N/A
C9.0 Attenuation Code	N/A
C10.0 Coastal Erosion Hazard Code	N/A
C11.0 Coastal Inundation Hazard Code	N/A
C12.0 Flood-Prone Areas Hazard Code	N/A
C13.0 Bushfire-Prone Areas Code	As this code is relevant to this proposal, please see attached bushfire report.
C14.0 Potentially Contaminated Land Code	N/A
C15.0 Landslip Hazard Code	As this code is relevant to this proposal, please see attached report.
C16.0 Safeguarding of Airports Code	The airports obstacle limitation area overlay is applied to the site. In compliance with clause C16.4.1 the proposed subdivision is exempt from the safeguarding airports code as the proposed development is not more than the AHD height specified for the site.

C2.0 Parking and Sustainable Transport Code

C2.6.7 Development Standards

C2.6.3 Number of accesses for vehicles

Objective:

That:

- (a) access to land is provided which is safe and efficient for users of the land and all road network users, including but not limited to drivers, passengers, pedestrians and cyclists by minimising the number of vehicle accesses;
- (b) accesses do not cause an unreasonable loss of amenity of adjoining uses; and
- (c) the number of accesses minimise impacts on the streetscape.

Acceptable Solutions

A1

The number of accesses provided for each frontage must:

- (a) be no more than 1; or
 - (b) no more than the existing number of accesses,
- whichever is the greater.

Response:

A1 is met: Each lot has no more than one vehicle access point per road frontage

Conclusion

The planning assessment and supporting documentation provided demonstrate that the development proposal for 47 lot subdivision at 158 Caroline Street, East Devonport meets all applicable requirements of the Tasmanian Planning Scheme – Devonport.

Yours faithfully,



Allan Brooks
PDA Surveyors, Engineers and Planners

Contact

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RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME 174766	FOLIO 1
EDITION 3	DATE OF ISSUE 04-Nov-2021

SEARCH DATE : 09-Aug-2022

SEARCH TIME : 08.18 AM

DESCRIPTION OF LAND

City of DEVONPORT
 Lot 1 on Plan 174766
 Being in part the land described in Conveyance No. 42/9226
 Excepting thereout For Excepted Lands see Plan
 Derivation : Part of Lot 181 Granted to Robert Stewart and
 Part of 150 Acres Granted to Charles Oldaker
 Prior CT 166238/1

SCHEDULE 1

M923709 TRANSFER to VOS CONSTRUCTION & JOINERY PTY LTD
 Registered 04-Nov-2021 at noon

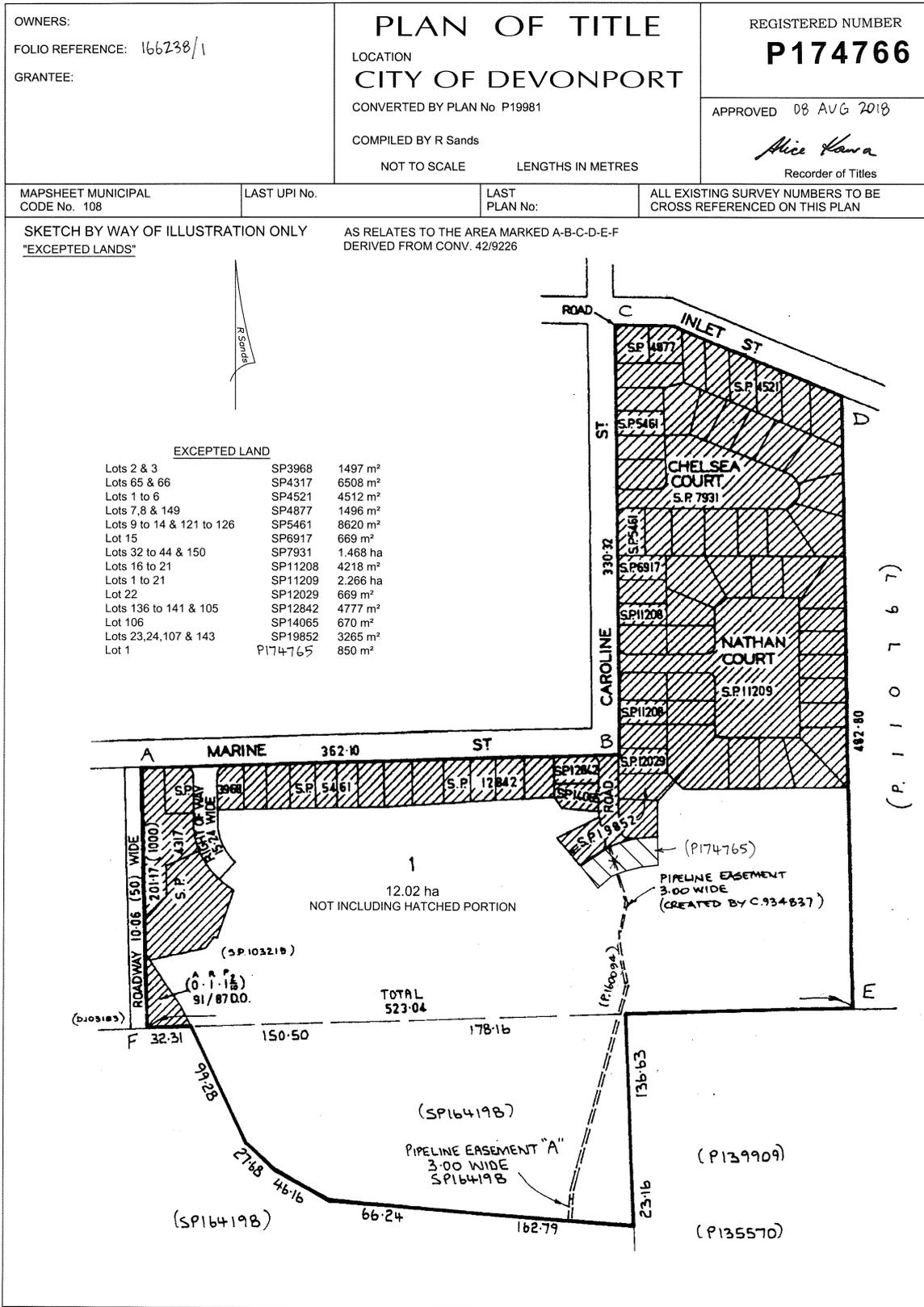
SCHEDULE 2

D27090 Land is limited in depth to 15 metres, excludes minerals and is subject to reservations relating to drains sewers and waterways in favour of the Crown
 BENEFITTING EASEMENT :(appurtenant to the land marked ABCDEF on Plan 174766) a right of way and passage at all times with or without horses cattle carts and carriages in over and upon the Roadway 10.06 (50) wide on Plan 174766
 BURDENING EASEMENT: right of carriageway [appurtenant to Lot 65 and 66 on Sealed Plan 4317) over the land marked Right of Way 15.24 wide on Plan 174766
 C934837 BURDENING EASEMENT: A Pipeline Easement in favour of Tasmanian Water and Sewerage Corporation (North-Western Region) Pty Ltd over the land marked Pipeline Easement 3.00 wide on Plan 174766 Registered 18-Aug-2011 at 12.01 PM
 SP164198 BURDENING EASEMENT: a pipeline easement in favour of Tasmanian Water and Sewerage Corporation (North Western Region) Pty Ltd over the land marked Pipeline Easement 'A' 3.00 wide on Plan 174766
 D27090 FENCING PROVISION in Transfer
 D27150 ADHESION ORDER under Section 110 of the Local Government (Building and Miscellaneous Provisions)

Act 1993 Registered 09-Jul-2013 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations





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Our Ref: 48254

20/09/2022

To whom it may concern,

158 Caroline Street East Devonport is located adjacent to the Bass Highway near the Mersey River Bridge. The land is subject to a proposed subdivision into 46 lots.

The preferred stormwater discharge route is via Lot 46 and discharge through a DN1050 culvert located underneath the Bass Highway. The route for this network will be governed by the geotechnical constraints of the site and the final route will be determined at the detailed design phase with consideration of geotechnical advice. The purpose of this report is to determine if the aforementioned DN1050 culvert will be able to convey the ultimate development of 158 Caroline Street with sufficient allowance made for any future development of the balance land.

This analysis was conducted within DRAINS using ARR 2019 techniques. The subject culvert and upstream catchment was assessed to have a pre-development area of 5.7 Ha and assumed to be 100% pervious. The post-development catchment was assessed to be 12.7 Ha, an increase of 7 Ha from the pre-development scenario. The post-development scenario considers 4.07 Ha to be impervious, thus giving an impervious fraction of 32%. The time of concentration of the site for impervious surfaces was considered to be 5 minutes while for pervious surfaces was assumed to be 10 minutes. The discharge culvert was modelled with a downstream invert of RL16.555, an upstream invert of RL16.952 and a length of 40.248, and a grade of 0.99%.

The indicative DRAINS model indicates that the DN1050 culvert will cater for the AEP 1% stormwater event with an upstream pit water level of 18.165, however with the following limitations. Network effects were not modelled, and it was assumed 100% capture throughout the future subdivision stormwater network was attainable. No upstream networks were modelled from the DN1050 culvert and full capture assumed for this network. DN600 culverts located on the Bass Highway in the Latrobe direction have been assumed to fully cater for their own distinct upstream catchments and have no effect on the DN1050 culvert. It is recommended that modelling be completed at the detailed design phase to confirm the existing DN1050 culvert will cater for the AEP 1% discharge with these limitations are considered. It is further recommended not to install stormwater detention in any circumstances due to the potential to exacerbate ongoing landslide issues in the area.

Yours faithfully,
PDA Surveyors, Engineers & Planners
Per:

Jarryd Field
Senior Design Engineer

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Bushfire Hazard Management Report: Subdivision

Report for: PDA Surveyors

Property Location: 158 Caroline Street, East Devonport

Prepared by: Scott Livingston
Livingston Natural Resource Services
299 Relbia Road
Relbia, 7258

Date: 14th October 2022
Version 2



Summary

Client: PDA Surveyors, Vos Construction & Joinery Pty Ltd

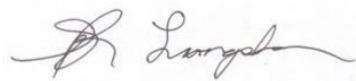
Property identification: Current zoning: General Residential, Agriculture *Tasmanian Planning Scheme- Devonport 2021*

158 Caroline Street, East Devonport, CT 174766/1, PID 3604651

Proposal: A 46 lot + balance & road subdivision in 4 stages is proposed from one existing title at 158 Caroline Street, East Devonport.

Assessment comments: A field inspection of the site was conducted to determine the Bushfire Risk and Attack Level.

Assessment by:



Scott Livingston,
Master Environmental Management,
Natural Resource Management Consultant.
Accredited Person under part 4A of the Fire Service Act 1979:
Accreditation # BFP-105.

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VERSION

This report and BHMP superceded SRL22/33S dated 28/6/2022. The changes remove references to stage 5 which is now treated as a balance lot and removal of cul de sac.

DESCRIPTION

A 46 lot+ balance & road subdivision in 4 stages is proposed from one existing title at 158 Caroline Street, East Devonport. The area is mapped as bushfire prone.

The property is currently within 3 zones under the Tasmanian Planning Scheme- Devonport. The 45 residential lots in stages 1-4 are zoned General Residential, Lot 46 is zoned Agriculture and the balance lot is zoned Rural Living A.

The property has no existing buildings. The northern portion (residential zones) is currently grassland. Proposed lot 46 has forest on the majority of the area, with the hilltop grassland. The forested area has active landslips and retention of the vegetation on steeper slopes is recommended in the Geo Technical report, upper fringes of the forest are outside this retention requirement. The forest is to the south of proposed residential areas and bounded by low threat area except to the east where grassland occurs. Any fire threat will have a limited run (<150 from the south). Land to the north and west is low threat residential or major road infrastructure. Land to the east is grassland on areas occasionally cropped.

The property has frontage to Caroline and Marine Streets, and non accessible frontage to the Bass Hwy and East Devonport interchange roads. The subdivision will be serviced by a reticulated water supply.

See Appendix 1 for maps and site plan, and appendix 2 for photographs.

BAL AND RISK ASSESSMENT

The land is mapped as Bushfire Prone in Planning Scheme Overlays.

VEGETATION AND SLOPE

Stages 1-4

Stage	Lot		North	East	South	West
1	1~8	Vegetation within 100m of lot boundaries	0-100m low threat	0-100m grassland (on lots)	0-100m grassland (on lots)	0->20m grassland (on lots), >20-100m low threat
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°

		Bal Rating at boundary	BAL Low	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL Low			
9~13		Vegetation within 100m of lot boundaries	0-50+m grassland (on lots)50+-100m low threat	0-100m grassland (on lots)	0-100m grassland (on lots)	0->20m grassland (on lots), >20-100m low threat
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL Low			
25		Vegetation within 100m of lot boundaries	0-60+m grassland (on lots ,)60+-100m low threat	0-100m grassland (on lots)	0-80m grassland, 80-100m forest (on lots)	0-100m low threat
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL Low
		Bal Rating with setbacks and HMA	BAL 12.5			
2	27	Vegetation within 100m of lot boundaries	eastern portion: 0-100m grassland (on lots ,) western portion:60+-100m low threat	0-100m grassland (on lots)	0-40m grassland, 40-100m forest (on lots)	0-100m low threat
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL Low
		Bal Rating with setbacks and HMA	BAL 19			
	28	Vegetation within 100m of lot boundaries	eastern portion: 0-100m grassland (on lots), western portion:0-25m	0-100m grassland (on lots)	0-100m forest (on lots)	0-100m low threat

		grassland (on lots)25-100m low threat			
	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL Low
	Bal Rating with setbacks and HMA	BAL 19			
29	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-20m grassland, 20-100m forest (on lots)	0- 50m grassland (on lots) 50-100m low threat
	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
	Bal Rating with setbacks and HMA	BAL 19			
30	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)	0-65m grassland (on lots), 65-100m low threat
	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
	Bal Rating with setbacks and HMA	BAL 12.5			
31	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-80m grassland, 80-100m forest (on lots)	0-100m grassland (on lots)
	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
	Bal Rating with setbacks and HMA	BAL Low			
32, 33	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-60m grassland, 60-100m forest (on lots)	0-100m grassland (on lots)

		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Grassland :Downslope up to 0-5° Forest 10-15°	Downslope up to 0-5°
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL 12.5/ BAL19			
34		Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL Low			
3	8, 12, 18, 19	Vegetation within 100m of lot boundaries	0--100m low threat	0-50+m grassland (on lots), 50+-100m low threat	0-100m grassland (on lots)	0-100m grassland (on lots)
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
		Bal Rating at boundary	BAL Low	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL Low			
	14, 15	Vegetation within 100m of lot boundaries	0-50+m grassland (on lots), 50+-100m low threat	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Upslope flat
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL Low			
	16, 17	Vegetation within 100m of lot boundaries	0-50+m grassland (on lots), 50+-100m low threat	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Upslope flat

		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL Low, BAL 12.5			
20, 21		Vegetation within 100m of lot boundaries	0-60+m grassland (on lots ,)60+-100m low threat	0-100m grassland (on lots)	0-60m grassland, 60-100m forest (on lots)	0-100m grassland (on lots)
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL Low			
23		Vegetation within 100m of lot boundaries	0--100m low threat	0-45m low threat, 45-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)
		Slope (degrees, over 100m)	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°	Upslope flat
		Bal Rating at boundary	BAL Low	BAL 12.5	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL Low			
24		Vegetation within 100m of lot boundaries	0-19m grassland (on lots ,)19-100m low threat	0-40m low threat, 40-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)
		Slope (degrees, over 100m)	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°	Upslope flat
		Bal Rating at boundary	BAL FZ	BAL 12.5	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL Low			
4	22	Vegetation within 100m of lot boundaries	0-50+m grassland (on lots), 50+-100m low threat	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)
		Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Upslope flat
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL 12.5			

35, 37	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m grassland (on lots)
	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Downslope up to 0-5°	Downslope up to 0-5°
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
	Bal Rating with setbacks and HMA	BAL Low			
36, 38	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-60m grassland, 60-100m forest (on lots)	0-100m grassland (on lots)
	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Grassland :Downslope up to 0-5° Forest 10-15°	Downslope up to 0-5°
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
	Bal Rating with setbacks and HMA	BAL 12.5/ BAL19			
39, 41, 43, 44, 45	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-48m grassland, 48-100m forest (on lots)	0-100m grassland (on lots)
	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Grassland :Downslope up to 0-5° Forest 10-15°	Upslope flat
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ
	Bal Rating with setbacks and HMA	BAL 12.5			
40	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-8m grassland, 8-100m forest (on lots)	0-100m grassland (on lots)
	Slope (degrees, over 100m)	Upslope flat	Upslope flat	Grassland :Downslope up to 0-5° Forest 10-15°	Upslope flat
	Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ

		Bal Rating with setbacks and HMA	BAL 12.5/ BAL19				
42		Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland (on lots)	0-100m forest (on lots)	0-100m grassland (on lots)	
		Slope (degrees, over 100m)	Upslope flat	Downslope up to 0-5°	10-15°	Upslope flat	
		Bal Rating at boundary	BAL FZ	BAL FZ	BAL FZ	BAL FZ	
		Bal Rating with setbacks and HMA	BAL 12.5/ BAL19				
4b	46	Vegetation within 100m of lot boundaries	0-100m grassland (on lots)	0-100m grassland	0-100m low threat	0-100m low threat	
					Grassland :Downslope up to 0-5° Forest 10-15°	Downslope up to 0-5°	
			Slope (degrees, over 100m)	Upslope flat	Upslope flat		
			Bal Rating at boundary	BAL FZ	BAL FZ	BAL Low	BAL Low
		Bal Rating with setbacks and HMA	BAL 12.5/ BAL19				

Balance		Vegetation within 100m of lot boundaries	0-100m low threat	0-100m grassland	0-100m low threat	0-100m grassland (on lots)
					Grassland :Downslope up to 5-10° Forest 10-15° to SW	
		Slope (degrees, over 100m)	Upslope flat	Upslope flat		Upslope flat
		Bal Rating at boundary	BAL low	BAL FZ	BAL FZ	BAL FZ
		Bal Rating with setbacks and HMA	BAL19			

BUILDING AREA BAL RATING

Setback distances for BAL Ratings have been calculated based on the vegetation that will exist after development and management of land within the subdivision and have also considered slope gradients.

Where no setback is required for fire protection other Planning Scheme setbacks may need to be applied, other building constraints such as topography have not been considered.

The BAL ratings applied are in accordance with the Australian Standard AS3959-2018, *Construction of Buildings in Bushfire Prone Areas*, and it is a requirement that any habitable building, or building within 6m of a habitable building be constructed to the BAL ratings specified in this document as a minimum.

Bushfire Attack Level (BAL)	Predicted Bushfire Attack & Exposure Level
BAL-Low	Insufficient risk to warrant specific construction requirements
BAL-12.5	Ember attack, radiant heat below 12.5kW/m ²
BAL-19	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 12.5-19kW/m ²
BAL-29	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 19-29kW/m ²
BAL-40	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 29-40kW/m ²
BAL-FZ	Direct exposure to flames radiant heat and embers from the fire front

BUILDING SETBACKS

BAL Rating	Slope	Vegetation Type		
		Grassland	Woodland	Forest
BAL Low	all slopes	50m	100m	100m
BAL 12.5	upslopes and flat	14m	22m	32m
	Downslope 0 - 5°	16m	26m	38m
	Downslope 5 - 10°	19m	32m	46m
	Downslope 10 - 15°	22m	40m	56m
	Downslope 15° - 20°	25m	48m	67m
BAL19	upslopes and flat	10m	15m	23m
	Downslope 0 - 5°	11m	18m	27m
	Downslope 5 - 10°	13m	23m	34m
	Downslope 10 - 15°	15m	28m	41m
	Downslope 15° - 20°	17m	36m	51m

PROPOSED LOT BAL RATING

Vegetation management requirements for lot 46 must be in place prior to sealing of titles for lots 36,38, 40 or 42. The woodland provision can be achieved with the management of the understory and will require limited if any tree removal.

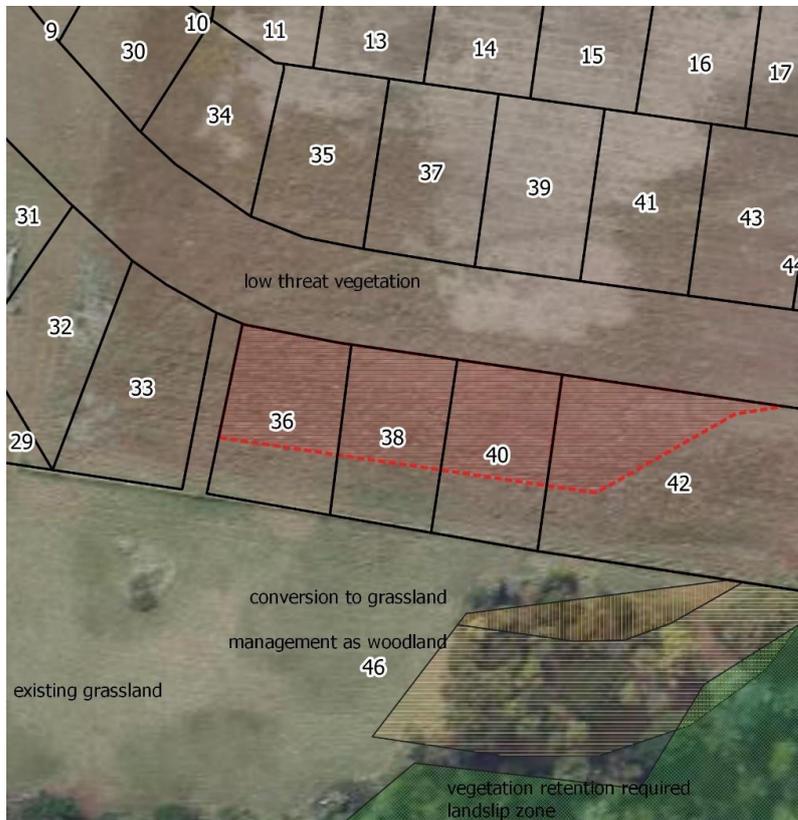


Figure 2: vegetation management Stage 4 lot 46

In the unlikely event a habitable building is constructed on the balance lot without further subdivision all areas within 10m upslope and level and 13m down slopes much be maintained as low threat vegetation.

Balance lot Hazard Management Area

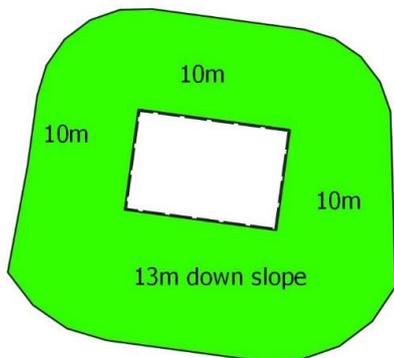


Figure 3: HMA balance lot

Low Threat: managed gardens orchards or lawns maintained to < 100mm in height.

Grassland: may be unmown grass, tree canopy cover must be < 5%

Woodland: must have a grassy understory with only occasional shrubs and a tree canopy cover of less than 30%.

Forest: no hazard management requirements.

The owner of a lot is responsible for hazard management within their lot.



Figure 4: Stages 1-4 Hazard Management

ROADS

Subdivision roads within bushfire prone areas must comply with the relevant elements of Table C13.1 Tasmanian Planning Scheme. Proposed road northern road will link to existing gravel section of Caroline creating a through road, The southern road, will be dead end until further development on the balance lot is likely to create a link to Caroline Street.

Temporary turn heads for the terminus of any staged road with the exception of the short section of the southern road at stage 1 must have compliant 12m radius turn heads, these may be gravelled with no kerb requirement. The stage 1 southern road junction services only 1 lot and the intersection provides adequate turn capability within 30m of the lot.

Table C13.1 Standards for Roads

Element	Requirement
A.	Roads. <p>Unless the development standards in the zone require a higher standard, the following apply:</p> <ul style="list-style-type: none"> (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 have 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 wide have 'No Parking' zones on one side, indicated by a road sign that complies with <i>Australian Standard, AS 1743-2001 Road signs-Specifications</i>.

PROPERTY ACCESS

Access to bushfire prone lots must comply with the relevant elements of Table C13.1 Tasmanian Planning Scheme. No access to water supply points will be required, the majority of lots will have access less than 30m and no specific design or construction requirements apply. If a habitable building is proposed on the balance lot greater than 120m hose lay from a hydrant, access and water supply requirements must be reassessed at building planning.

FIRE FIGHTING WATER SUPPLY

The subdivision will be serviced by a reticulated water supply, additional hydrants will be required to fully service building areas via a 120m hose lay. New hydrants must meet the requirements of Table C13.4 Tasmanian Planning Scheme at all stages of development. If a habitable building is proposed on the balance lot greater than 120m hose lay from a hydrant, access and water supply requirements must be reassessed at building planning.

Table C13.4 Reticulated Water Supply for Fire Fighting

Element		Requirement
A.	Distance between building area to be protected and water supply.	The following requirements apply: (a) the building area to be protected must be located within 120m of a fire hydrant; and (b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.
B.	Design criteria for fire hydrants.	The following requirements apply: fire hydrant system must be designed and constructed in accordance with <i>TasWater Supplement to Water Supply Code of Australia, WSA 03-2011-3.1 MRWA 2nd edition</i> ; and (b) fire hydrants are not installed in parking areas.
C.	Hardstand.	A hardstand area for fire appliances must be provided: (a) no more than 3m from the hydrant, measured as a hose lay; (b) no closer than 6m from the building area to be protected; (c) with a minimum width of 3m constructed to the same standard as the carriageway; and (d) connected to the property access by a carriageway equivalent to the standard of the property access.

CONCLUSIONS

A 46 + balance lot & road subdivision is proposed from one existing title CT 174766/1 at 158 Caroline Street, East Devonport in 4 stages. The area is mapped as bushfire prone.

All lots within the subdivision have building areas at BAL 19 or lower, with hazard management during staging some Lots can achieve BAL Low ratings.

Lots on the eastern and southern portion of the residential development require a setback for their building area for construction to BAL 19 and a larger setback for BAL 12.5 construction.

Staged development of lot requires hazard management areas that must be in place and maintained to preserve the BAL ratings of lots. At the completion of development / sealing of titles all subdivision lots with the exception of Lot 46 and portions of lots 27, 28, 42 and 53 must be managed as low threat vegetation in perpetuity. Lot 46 with the exception of a small area outside the landslip required retained vegetation can remain as per current vegetation, that small area will require management of fuels as either grassland or woodland at or before stage 4 titles are sealed. Lots 27, 28, 42 and 53 may have grassland fuel loads on areas outside their specific hazard management areas for habitable buildings.

The owner of a lot is responsible for hazard management within their lot.

Subdivision roads must comply with the relevant elements of Table C13.1 Tasmanian Planning Scheme, with the exception of the Stage 2 cul de sac which may be constructed to LGAT Residential design standards, meeting performance criteria for C13.6.2 P1

The subdivision will be serviced by a new reticulated supply. New hydrants must meet the requirements of Table C13.4 of the Tasmanian Planning Scheme.

If a habitable building is proposed on the balance lot greater than 120m hose lay from a hydrant, access and water supply requirements must be reassessed at building planning.

REFERENCES

Australian Building Codes Board. (2015). *National Construction Code - Volume 2*. ABCB.

Bushfire Planning Group. (2005). *Guidelines for Development in Bushfire Prone Areas of Tasmania*.

Department of Justice (Tasmania). (2017). *Determination - Requirements for building in bushfire prone areas 2017*.

Department of Premier and Cabinet (Tasmania). (2017). *Building Act 2016*.

Department of Premier and Cabinet (Tasmania). (2017). *Building Regulations 2016*.

Standards Australia Limited. (20018). *AS 3959-2018 Construction of buildings in bushfire prone areas (incorporating Amendments Nos 1, 2 and 3)*.

Tasmanian Planning Commission. (2021). *Tasmanian Planning Scheme*

Tasmanian Planning Commission. (2017). *Planning Directive No. 5.1 - Bushfire-Prone Areas Code*.

APPENDIX 1 – MAPS

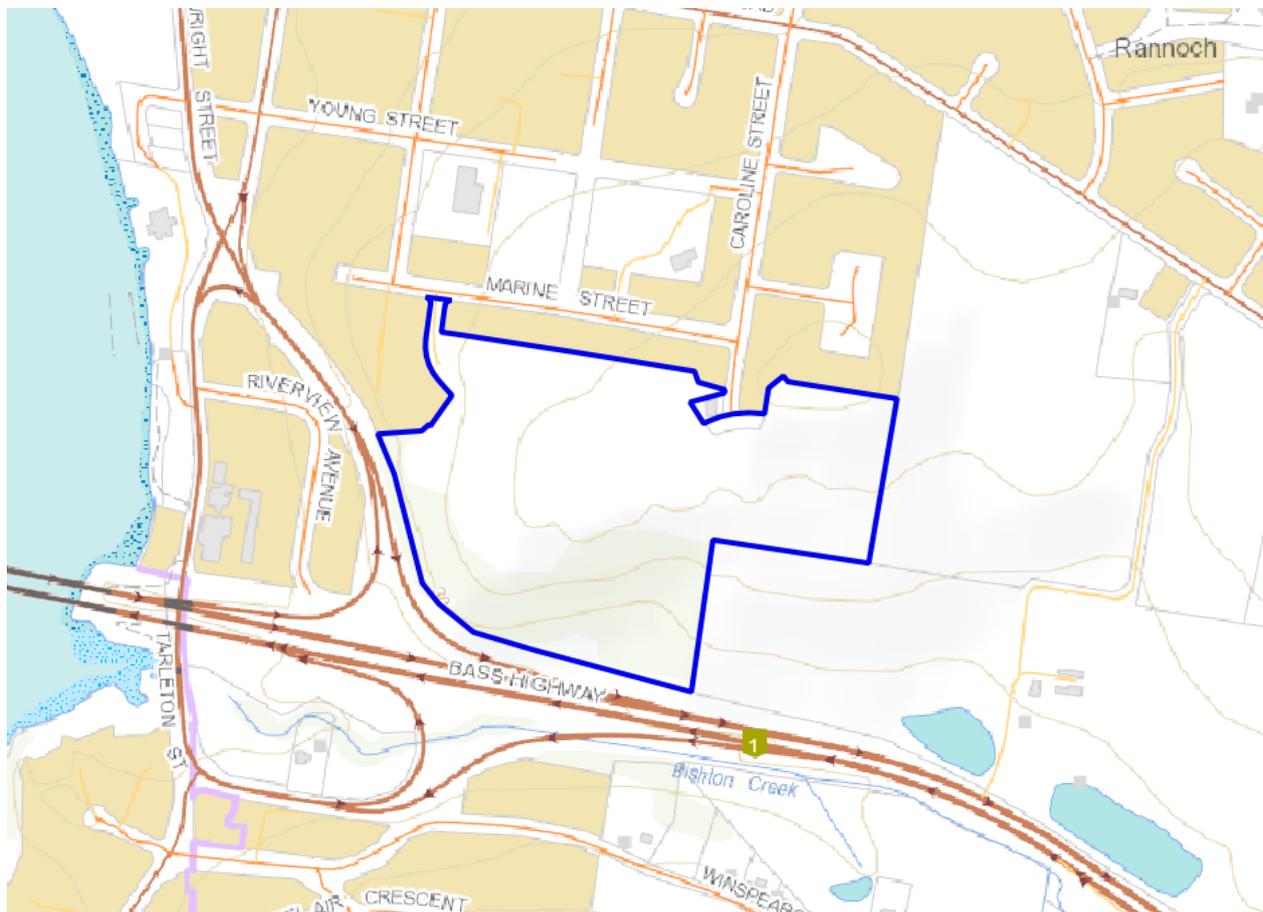


Figure 5: Location existing lot in blue



Figure 6: Aerial Image

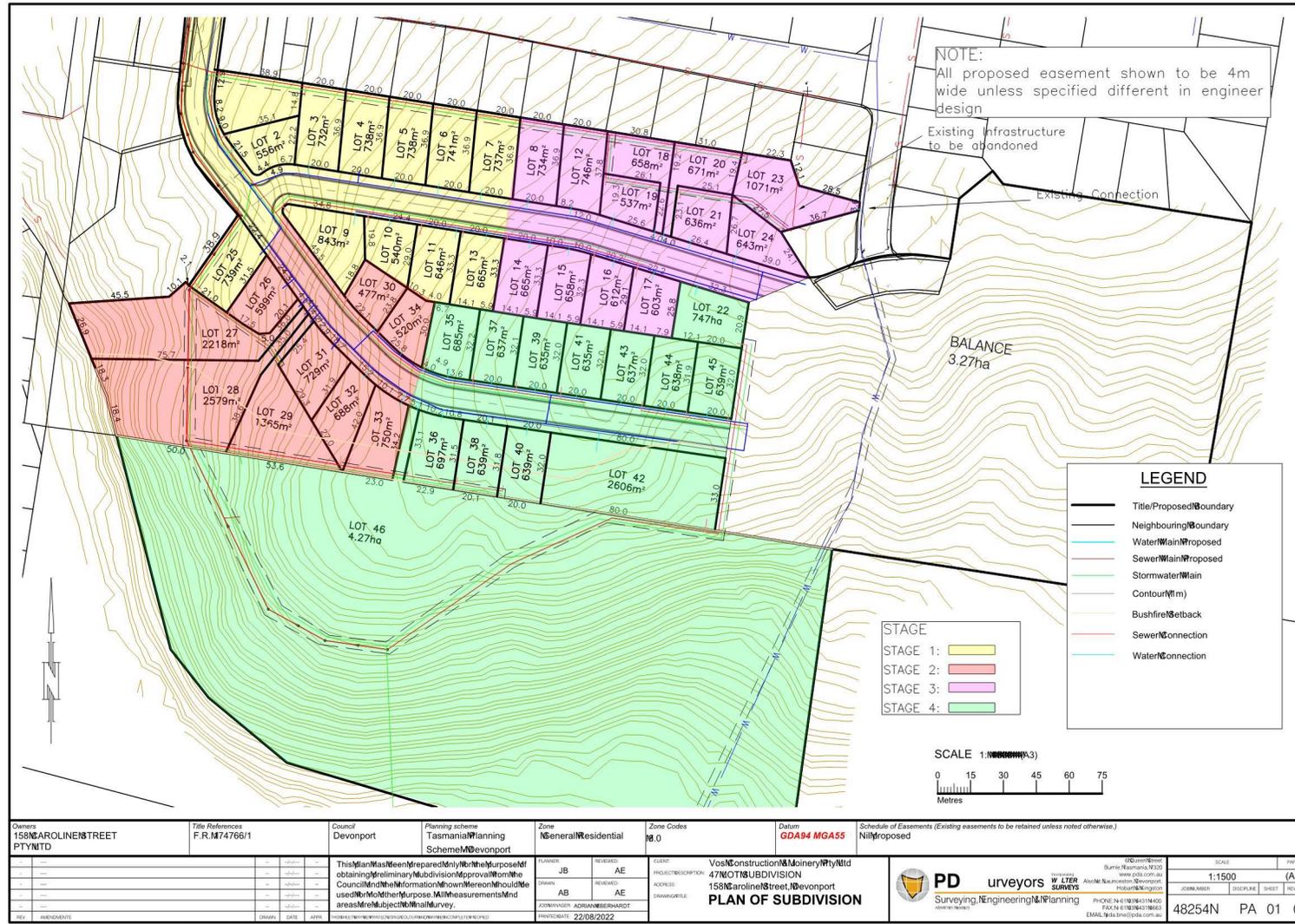


Figure 7: Proposed Subdivision Plan

APPENDIX 2 – PHOTO



Figure 8: south across lots



Figure 9: south across lot 46, vegetation management area



Figure 10: west along lot 46 northern boundary



Figure 11: north east across eastern boundary (classified as grassland)

Bushfire Hazard Management Plan: Subdivision

Construction: BAL Low, BAL 12.5, BAL 19 as shown

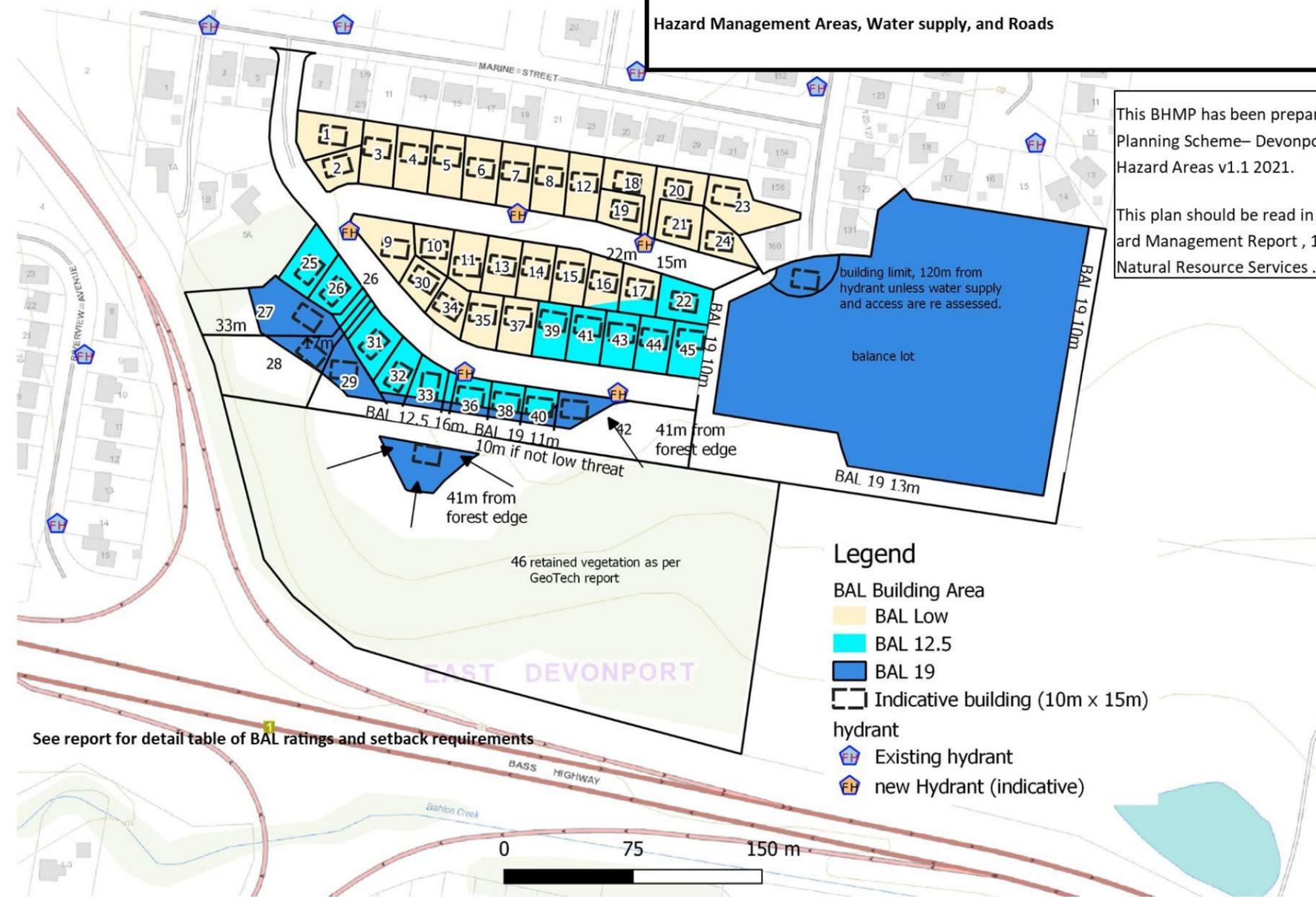
Buildings in Bushfire Prone Area to be built in accordance with the Building Code of Australia and Australian Standard AS3959.

Building setbacks / BAL ratings apply to habitable buildings (Class 1, 2 3, 8 or 9) and class 10a buildings within 6m of a habitable building.

Proposed Development	Subdivision, 46 lots + balance and roads from 1 lot
Plan of Subdivision	PDA Surveyors 48254 P09
Property Owner	Vos Construction & Joinery Pty Ltd
Address	158 Caroline Street, East Devonport
CT	174766/1
PID	3604651

the following must be installed/ compliant prior to sealing of titles for any lot other than a road lot and be maintained in perpetuity:
Hazard Management Areas, Water supply, and Roads

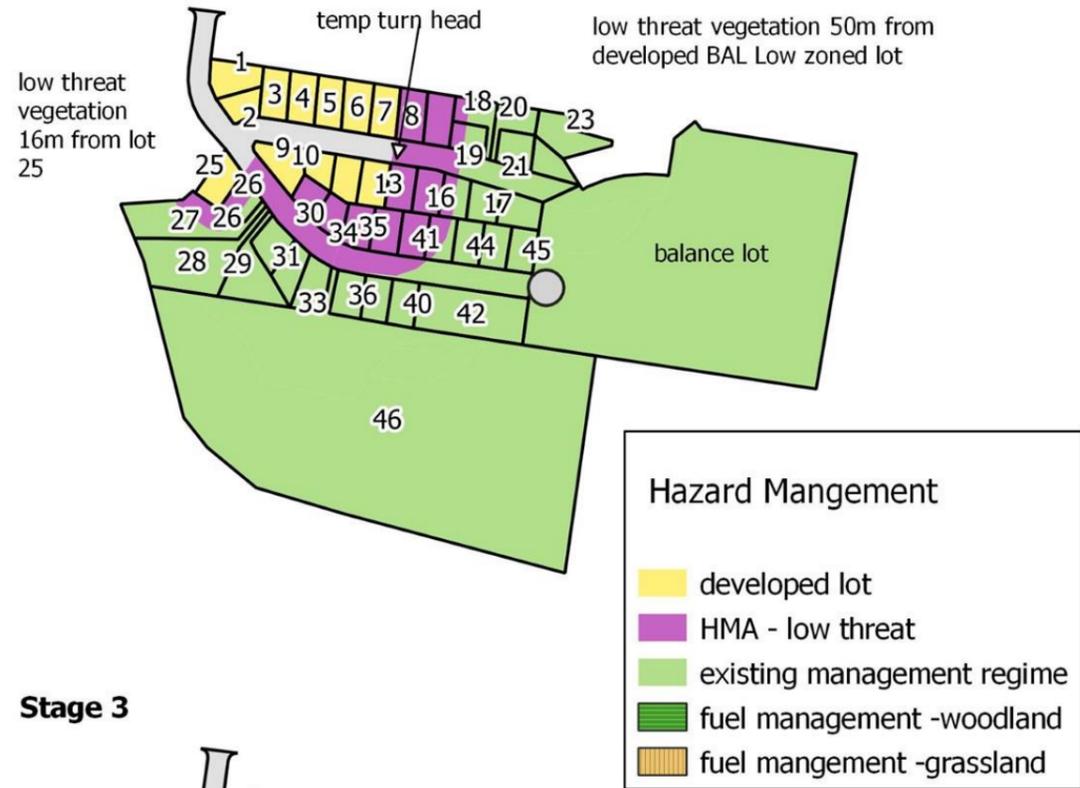
This BHMP has been prepared to satisfy the requirements of the Tasmanian Planning Scheme– Devonport and Director’s Determination for Bushfire Hazard Areas v1.1 2021.
 This plan should be read in conjunction with the report titled: Bushfire Hazard Management Report , 158 Caroline St East Devonport. v2 Livingston Natural Resource Services .



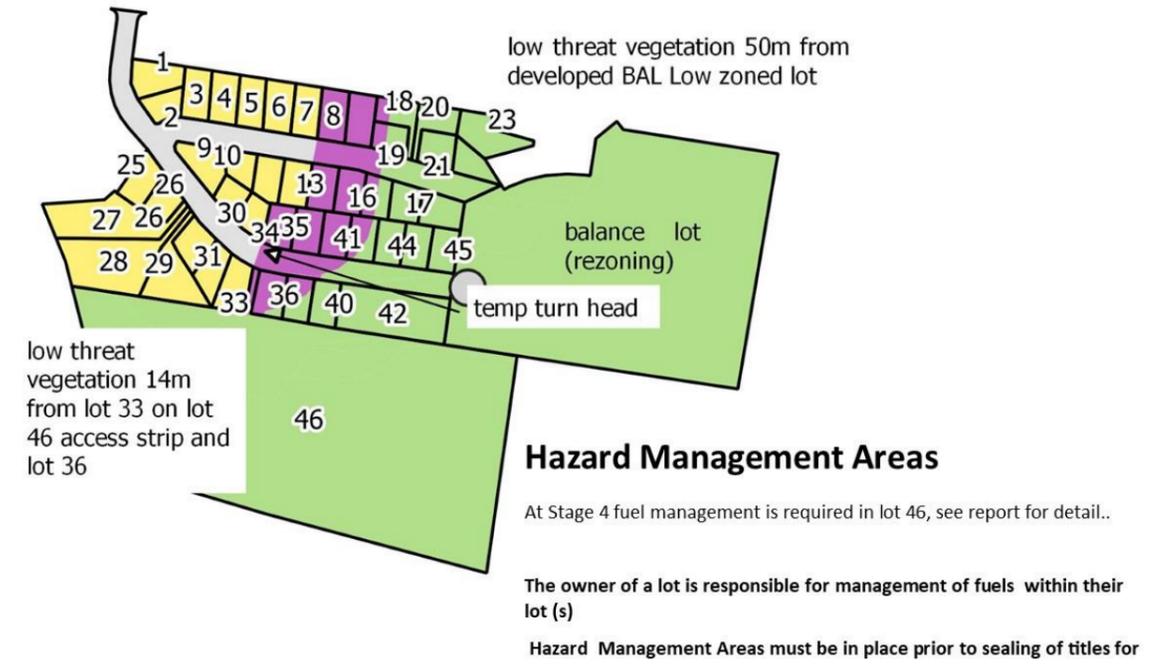
See report for detail table of BAL ratings and setback requirements

Scott Livingston
 Accreditation: BFP – 105: 1, 2, 3A, 3B, 3C
 Date 14/10/2022
 SRL22/33S2

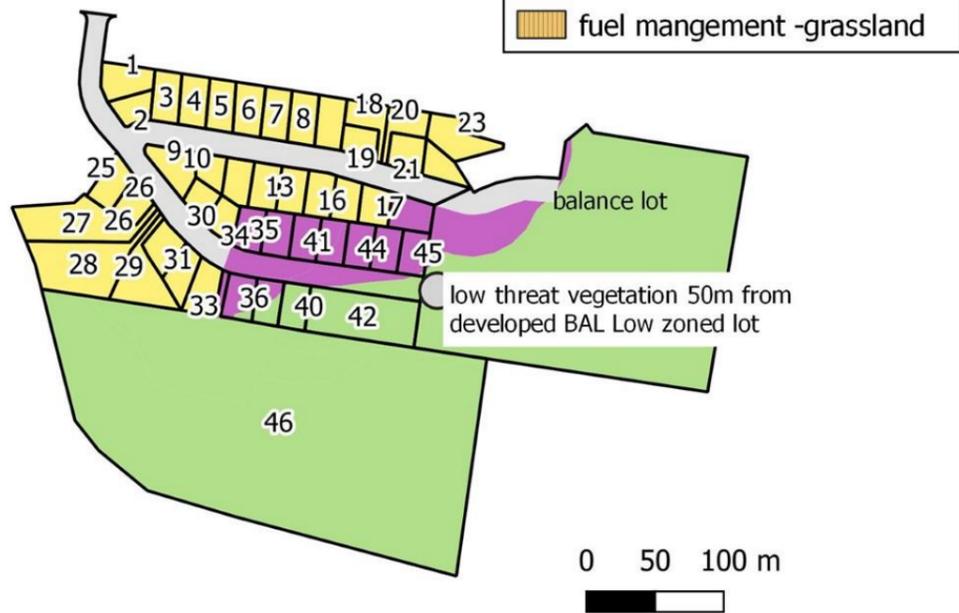
Stage 1



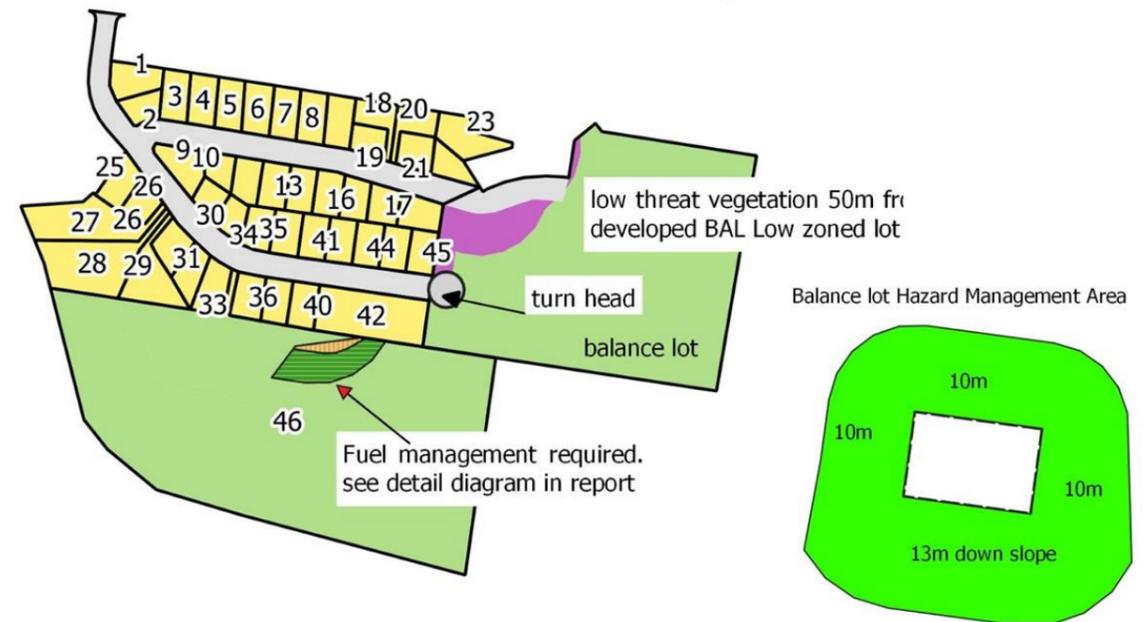
Stage 2



Stage 3



Stage 4



Scott Livingston
 Accreditation: BFP – 105: 1, 2, 3A, 3B, 3C
 Date
 14/10/2022
 SRL22/33S2

Water Supply

A reticulated water supply to the standards below must be in place prior to sealing of titles for any of lot.

Distance between building area to be protected and water supply.

- a. the building area to be protected must be located within 120m of a fire hydrant; and
- b. the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.

Design criteria for fire hydrants.

- a. fire hydrant system must be designed and constructed in accordance with *TasWater Supplement to Water Supply Code of Australia, WSA 03-2011-3.1 MRWA 2nd edition*; and
- b. fire hydrants are not installed in parking areas.

Hardstand. A hardstand area for fire appliances must be provided:

- a. no more than 3m from the hydrant, measured as a hose lay;
- b. no closer than 6m from the building area to be protected;
- c. with a minimum width of 3m constructed to the same standard as the carriageway; and
- d. connected to the property access by a carriageway equivalent to the standard of the property access.

Roads

Roads to the standards below must be in place prior to sealing of titles for a stage. Including temporary turns heads

- 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 have 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 wide have 'No Parking' zones on one side, indicated by a road sign that complies with *Australian Standard, AS 1743-2001 Road signs-Specifications*.

Scott Livingston
Accreditation: BFP – 105: 1, 2, 3A, 3B, 3C
Date 14/10/2022

SRL22/33S2



Page 3 of 3

BUSHFIRE-PRONE AREAS CODE**CERTIFICATE¹ 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:

158 Caroline Street, East Devonport

Certificate of Title / PID:

CT 174766/1, PID 3604651,

2. Proposed Use or Development**Description of proposed Use and Development:**

Subdivision, 46 lots & balance & road from 1 lot

Applicable Planning Scheme:

Tasmanian Planning Scheme -Devonport

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Bushfire Hazard Management Report 158 Caroline Street, East Devonport v2	Scott Livingston	14/10/2022	2
Bushfire Hazard Management Plan 158 Caroline Street, East Devonport v2	Scott Livingston	14/10/2022	2
Plan of Subdivision	PDA surveyors	22/8/2022	PO9

4. Nature of Certificate

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

<input type="checkbox"/>	E1.4 / C13.4 – Use or development exempt from this Code	
	Compliance test	Compliance Requirement

¹ This document is the approved form of certification for this purpose and must not be altered from its original form.

<input type="checkbox"/>	E1.4(a) / C13.4.1(a)	Insufficient increase in risk
--------------------------	----------------------	-------------------------------

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

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

<input checked="" type="checkbox"/>	E1.6.1 / C13.6.1 Subdivision: Provision of hazard management areas	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.1 P1 / C13.6.1 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.6.1 A1 (a) / C13.6.1 A1(a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.1 A1 (b) / C13.6.1 A1(b)	Provides BAL-19 for all lots (including any lot designated as ‘balance’)
<input type="checkbox"/>	E1.6.1 A1(c) / C13.6.1 A1(c)	Consent for Part 5 Agreement

<input checked="" type="checkbox"/>	E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access	
	Acceptable Solution	Compliance Requirement
<input checked="" type="checkbox"/>	E1.6.2 P1 / C13.6.2 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i> <i>Cul de sac head only</i>
<input type="checkbox"/>	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk

<input checked="" type="checkbox"/>	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables All access except cul de sac head
-------------------------------------	--------------------------------	--

<input checked="" type="checkbox"/>	E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective
<input type="checkbox"/>	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk
<input type="checkbox"/>	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective

5. Bushfire Hazard Practitioner

Name:	Scott Livingston	Phone No:	0438 951 021
Postal Address:	299 Relbia Road	Email Address:	scottlivingston.lnrs@gmail.com
Accreditation No:	BFP – 105	Scope:	1, 2, 3A, 3B, 3C

6. Certification

I certify that in accordance with the authority given under Part 4A of the *Fire Service Act 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 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 **Acceptable Solutions** identified in Section 4 of this Certificate.

Signed:
certifier



Name: Scott Livingston **Date:** 14/10/2022

Certificate Number: SRL 22/33S2

(for Practitioner Use only)

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To: Owner /Agent

 Suburb/postcode

Form **55**

Qualified person details:

Qualified person:
 Address: Phone No:
 Fax No:
 Licence No: Email address:

Qualifications and Insurance details: (description from Column 3 of the Director of Building Control's Determination)

Speciality area of expertise: (description from Column 4 of the Director of Building Control's Determination)

Details of work:

Address: Lot No:
 Certificate of title No:

The assessable item related to this certificate: (description of the assessable item being certified)
 Assessable item includes –
 - a material;
 - a design
 - a form of construction
 - a document
 - testing of a component, building system or plumbing system
 - an inspection, or assessment, performed

Certificate details:

Certificate type: (description from Column 1 of Schedule 1 of the Director of Building Control's Determination)

This certificate is in relation to the above assessable item, at any stage, as part of - (tick one)
 building work, plumbing work or plumbing installation or demolition work:
 or
 a building, temporary structure or plumbing installation:

In issuing this certificate the following matters are relevant –

Documents:

- Bushfire Attack Level Assessment & Report

Relevant calculations:

References:

Australian Standard 3959
Building Amendment Regulations 2016
Director of Building Control, Determinations

- Categories of Building Control and Demolition Work (July 2017)
- Requirements for Building in Bushfire Prone Areas. (July 2017)
- Application of Requirements for Building in Bushfire Prone Areas. (Feb 2017)

Director of Building Control (2021) Director’s Determination for Bushfire Hazard Areas v1.1 2021

Substance of Certificate: (what it is that is being certified)

1. Assessment of the site Bushfire Attack Level (BAL) to Australian Standards 3959
Bushfire Hazard Management Plan

Assessed as – BAL Low, BAL 12.5, BAL 19

Proposal is compliant with DTS requirements, tables 1, 2, 3A/3B & 4, Director’s Determination for Bushfire Hazard Areas v1.1 2021.

Scope and/or Limitations

Scope:

This report was commissioned to identify the Bushfire Attack Level for the existing property. All comment, advice and fire suppression measures are in relation to compliance with Director of Building Control, Determination- Requirements for Building in Bushfire Prone Areas, the Building Code of Australia and Australian Standards, AS 3959-20018, Construction of buildings in bushfire-prone areas.

Limitations:

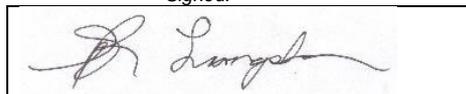
The inspection has been undertaken and report provided on the understanding that;-

1. The report only deals with the potential bushfire risk all other statutory assessments are outside the scope of this report.
2. The report only identifies the size, volume and status of vegetation at the time the site inspection was undertaken and cannot be relied upon for any future development.
3. Impacts of future development and vegetation growth have not been considered.

I certify the matters described in this certificate.

Qualified person:

Signed:



Certificate No:

SRL22/33S2

Date:

14/10/2022



**GEOTECHNICAL INVESTIGATION
AND LANDSLIDE RISK
ASSESSMENT**

Vos Construction & Joinery Pty Ltd

Proposed Subdivision, 158 Caroline Street,
East Devonport

GL21788Ab
28 June 2022

GEOTON Pty Ltd
Geotechnical Consultants

Geoton Pty Ltd ABN 81 129 764 629
PO Box 522 Prospect TAS 7250
Unit 24, 16-18 Goodman Court
Invermay TAS 7248
Tel (+61) (3) 6326 5001
www.geoton.com.au

28 June 2022

Reference No. GL21788Ab

Vos Construction & Joinery Pty Ltd
3 Hudson Fysh Drive
Western Junction TAS 7212

Attention: Mr Adrian Bott

Dear Sir

**RE: Geotechnical Investigation and Landslide Risk Assessment
Proposed Subdivision, 158 Caroline Street, East Devonport**

We have pleasure in submitting herein our report detailing the results of the geotechnical investigation conducted at the above site.

Should you require clarification of any aspect of this report, please contact Matthew Street or the undersigned on (03) 6326 5001.

For and on behalf of

Geoton Pty Ltd



Tony Barriera

Director – Principal Geotechnical Engineer

Geotechnical Investigation and Landslide Risk Assessment

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Geotechnical Investigation and Landslide Risk Assessment

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Figure 1: Site Plan

Figure 2: Hillshade Site Plan

Appendices

Appendix A: Borehole Logs & Explanation Sheets

Appendix B: Laboratory Results

Appendix C: Qualitative Terminology for Use in Assessing Risk to Property

Appendix D: Some Guidelines for Hillside Construction

Appendix E: Certificate Forms

Geotechnical Investigation and Landslide Risk Assessment

1 INTRODUCTION

At the request of Vos Construction & Joinery Pty Ltd, Geoton Pty Ltd has carried out a geotechnical investigation and landslide risk assessment for a proposed residential subdivision at 158 Caroline Street, East Devonport.

It is understood the Council has indicated that the site is partially located within an area of doubtful stability, and as such a landslide risk assessment is required to satisfy the Landslide Hazard Code of the Tasmanian Planning Scheme – Devonport (Section C15.6.1 - Building and works within a landslip hazard area & Section C15.7.1 - Subdivision within a landslip hazard area). Furthermore, we understand that vegetation located within mapped landslide hazard bands (within Lot 46) is proposed to be removed to comply with bushfire setback requirements.

As such, the purpose of the investigation is to provide a Landslide Risk Assessment for the proposed infrastructure and vegetation removal that is located within the mapped landslide hazard bands.

The landslide risk assessment has been conducted in accordance with AS1726:2017 - Geotechnical Site Investigation; and the Australian Geomechanics Society 2007 - Guidelines on Landslide Risk Management.

1.1 Proposed Development

A subdivision plan was provided, prepared by PDA Surveyors, Job No. 48254, dated 15 November 2021. We understand it is proposed that the existing site is to be subdivided into 78 residential Lots, with associated roads and services infrastructure. The proposed sewer and stormwater infrastructure located through the landslide hazard bands are shown on Figure 1. There are two options for the stormwater main discharge point for the subdivision (each option is shown on Figure 1).

1.2 Assessment Methodology

As per the AGS “Guideline for Landslide Susceptibility, Hazard and Risk Zoning for Land Use Planning” (2007a), a landslide risk assessment:

“... takes the outcomes of hazard mapping and assesses the potential damage to persons (annual probability the person most at risk loses his or her life) and to property (annual value of property loss) for the elements at risk, accounting for probability and vulnerability.”

Therefore, the methodology adopted for this assessment was to:

- Develop a landslide inventory for the site, employing the publicly available landslide mapping carried out by the Mineral Resources Tasmania (MRT), in conjunction with aerial photograph interpretation employing current and historical photos, and ground truthing;
- Undertake assessments of the landslides relating to the site in terms of historical likelihood; and

Geotechnical Investigation and Landslide Risk Assessment

- Undertake risk assessments, in terms of both risk-to-property and risk-to-life for critical structures within the site and relevant surrounding areas.

2 BACKGROUND

2.1 Geology

The Mineral Resources Tasmania (MRT) Digital Geological Atlas, 1:25,000 Series, indicates that the proposed area for development is underlain by Cretaceous Period predominantly deeply weathered basalt.

2.2 Landslide Susceptibility

Examination of the Land Information System Tasmania (LIST) Landslide Planning Map – Hazard Bands Overlay, indicates that the steep southern slopes within Lot 46 are within mapped low, medium and medium-active landslide hazard bands. Furthermore, the steep western slopes within Lot 27 and Lot 28 are within a mapped low and medium landslide hazard band. The proposed infrastructure (sewer & stormwater) within Lot 27, 28 & 46 is predominantly only within a mapped low landslide hazard band. The landslide hazard bands are shown on Figure 1.

Examination of the MRT Tasmanian Landslide Map Series, Devonport – Landslide Inventory Map, 1:25,000 scale, indicates that Lot 46 contains two mapped landslides (see Figure 1):

- Landslide ID No.2766 – Possible Soil Slide, activity unknown (eastern portion of Lot 46); and
- Landslide ID No.829 – Earth Slide, **recent or active** (western portion of Lot 46).

Examination of the MRT Tasmanian Landslide Map Series, Devonport – Shallow Slide and Flow Susceptibility Map, indicates that the steep southern slopes within Lot 46 and western slopes within Lot 27 and Lot 28 are within a mapped low to moderate susceptibility source area for shallow landslides.

Examination of the MRT Tasmanian Landslide Map Series, Devonport – Deep Seated Landslide Susceptibility Map, indicates that the steep southern slopes within Lot 46 and western slopes within Lot 27 and Lot 28 are within a mapped susceptibility source area for first time failures. Furthermore, the possible landslide of unknown activity (Landslide ID No.2766) within the eastern portion of Lot 46 is mapped as a susceptibility zone for landslide reactivation.

2.3 MRT Reports

A search of the MRT database was conducted with a review of the reports pertaining to the site and surrounding area previously undertaken. The reports provide a good historical background to the area in addition to their technical content.

A previous MRT report by P.C. Donaldson (1972), titled “Report on the landslip risk at the Land Australia proposed subdivision (MRT Reference UR1972_13) included information relating to Landslide ID No.829 (located within the western portion of Lot 46). Data and findings of this report relevant to this assessment, are summarized in point form below:

Geotechnical Investigation and Landslide Risk Assessment

- The site was examined on 20 April 1972;
- The area forms part of a plateau of weathered basalt. The basalt is deeply weathered to the red basalt soil near the surface and to yellow plastic clay at depth (approximately depth of 5m to 8m);
- The southwestern slopes of the proposed subdivision have failed on several occasions (i.e. Landslide ID No.829);
- The landslide failure was on slopes of 19° to 22°; and
- The remedial measures were obvious for the slip; plant trees and avoid an unnatural influx of water.

2.4 Hillshade

Examination of the Land Information System Tasmania (LIST) Hillshade layer clearly shows the two landslide features within Lot 46. The hillshade layer shows the steep headscarps and the undulating terrain of the displaced mass of the landslides. A hillshade site plan is provided as Figure 2.

3 FIELD INVESTIGATION

The field investigation was conducted on 23 and 24 March 2022 and involved the following:

- Site walk-over and geomorphology mapping of the site and surrounds;
- Drilling of 5 boreholes by 4WD mounted auger rig to refusal depths of 3.0m to 6.6m;
- Carrying out insitu vane shear strength tests and pocket penetrometer readings at regular intervals during the investigation; and
- Obtaining samples of soils for subsequent laboratory characterisation.

The results of the field tests are shown on the borehole logs. The borehole logs are included in Appendix A and their locations are shown on Figure 1 attached. The results of the laboratory testing are shown in Section 4.3 below.

4 SITE CONDITIONS

4.1 Surface Conditions

Landslide ID No.2766 is located within the eastern portion of Lot 46, directly downslope to the south of Lot 42 and Lot 53 and is heavily vegetated. The mapped landside displays classic landslide features including the following:

- Concave amphitheatre shaped slopes forming the headscarp of the landslide. The slopes within the headscarp were approximately 18° to 20°;
- Below the headscarp to the south (on approach to the Bass Highway) was very undulating terrain forming the displaced mass of the landslide; and
- Several tension cracks and vertical steps (up to 0.3m high) were observed within the headscarp indicating recent shallow movement.

Geotechnical Investigation and Landslide Risk Assessment

Landslide ID No.829 is located within the western portion of Lot 46, across slope to the south of Lot 28 and is heavily vegetated. The mapped landside displays classic landslide features including the following:

- Concave amphitheatre shaped slopes forming the headscarp of the landslide. The slopes within the headscarp were approximately 30°;
- Below the headscarp to the south (on approach to the Bass Highway on ramp) was a landslide bench feature forming the displaced mass of the landslide; and
- The toe of the landslide is slightly undulating and is located at the toe of the slope along the Bass Highway on ramp.

Two other discrete shallow landslides (earth slides) were identified directly to the north of Landslide ID No. 829 (see Figure 1). Furthermore, a possible small landslide with subdued features was identified to the west of Landslide ID No.2766.

The remainder of Lot 46 typically consisted of smooth convex slopes. The proposed infrastructure (sewer & stormwater) within Lot 46 is not located though any of the identified landside features and is typically located on gentle convex slopes (see Figure 1).

The proposed option 1 for the stormwater main discharge point for the subdivision is located along the northern boundary of Lot 27. The proposed orientation is directly up and down the slope and is alongside a minor drainage depression. The slopes within this area are typically smooth and uniform.

The proposed option 2 for the stormwater main discharge point for the subdivision is located down the southern slopes of Lot 46 and discharges alongside Bass Highway (see Figure 1). The proposed orientation is directly up and down the slope and is appropriately setback from any identified landslide features. The slopes within this area are typically smooth and convex.

4.2 Subsurface Conditions

The investigation indicated that the soil profile varied slightly across the site.

Borehole BH1 located upslope to the southeast of Landslide ID No.829 encountered topsoil to depths of 0.2m, overlying stiff/very stiff clayey silt to the auger refusal depth of 3.6m on inferred rock/boulder.

Borehole BH2 located across slope to the south of Landslide ID No.829 encountered topsoil to depths of 0.2m, overlying stiff/very stiff clayey silt to depths of 4.6m, underlain by soft/firm silty clay that was moist/wet to the auger refusal depth of 6.6m on inferred cobble/boulder. Minor groundwater seepage and borehole collapse was encountered in BH2 at a depth of 5.5m.

Borehole BH3 located up slope to the east of Landslide ID No.829 encountered topsoil to depths of 0.2m, overlying clayey silt to depths of 2.4m, underlain by silty clay to the auger refusal depth of 5.0m on inferred cobble/boulder. The encountered soils were typically moist/wet and soft from depths of 2.0m to 4.0m. Minor groundwater seepage was encountered in BH3 at a depth of 2.6m.

Borehole BH4 located across slope to the west of Landslide ID No.2766 encountered topsoil to depths of 0.2m, overlying stiff clayey silt to the auger refusal depth of 3.0m on inferred cobble/boulder.

Geotechnical Investigation and Landslide Risk Assessment

Borehole BH5 located along the headscarp of Landslide ID No.2766 encountered topsoil to depths of 0.2m, overlying clayey silt to the auger refusal depth of 4.2m on inferred cobble/boulder. The encountered soils were typically moist/wet and soft from depths of 2.6m to 4.0m.

Full details of soil conditions encountered are presented on the borehole logs.

4.3 Laboratory Testing

The laboratory test results are summarised below with the test certificates provided in Appendix B:

Table 1 - Summary of Laboratory Test Results

Sample	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Linear Shrinkage (%)	Moisture Content (%)	Classification
BH2 3.0-3.3m	60	38	22	13	47.1	MH
BH2 5.0-5.3m	66	27	39	17	29.9	CH

An assessment of the plasticity characteristics of the materials encountered indicates that the clay soils at this site possess a high shrink/swell potential.

Published correlations between Plastic Index and angle of internal friction indicated that the laboratory tested high plasticity silty clay soils would have peak strength angle of internal friction values of between approximately 25° to 30° and a residual value of about 17°.

5 DISCUSSION

Based on the subsurface conditions, site observations and desktop study we consider that the existing thick vegetation on the steeper southern and western slopes of Lot 46 (including the mapped landslide features) is required to remain in place. The acceptable vegetation removal boundary is shown on Figure 1. The vegetation is required to remain in place due to the following reasons:

- Landslide ID No.829 is a recent/active landslide and any reactivation is likely to impact on the Bass Highway on ramp. Furthermore, any reactivation of Landslide ID No.829 and the other two discrete landslides may result in landslide regression thus impacting on Lot 28 and Lot 29;
- Both Landslide ID No.829 and Landslide ID No.2766 have distinct landslide features;
- The subsurface soil profile contained soft saturated soils at depth; and
- Several tension cracks and vertical steps (up to 0.3m high) were observed within the headscarp of Landslide ID No.2766.

The slopes where vegetation removal is permitted (as shown on Figure 1) are typically gentle smooth convex slopes.

Geotechnical Investigation and Landslide Risk Assessment

6 LANDSLIDE RISK ASSESSMENT

The landslide hazard of the site will be discussed in two parts:

- The pre-existing landslide hazard prior to development; and
- The incremental landslide hazard due to the proposed development.

6.1 Potential Pre-existing Landslide Hazard Scenarios

Based on the desk study, geological and geomorphological settings of the site, the following possible landslide scenarios are identified for the site.

- Reactivation of Landslide ID Nos.829 or No.2766 affecting the proposed subdivision development;
- Shallow/small-scale landslide occurs within the Cretaceous Period deeply weathered basalt affecting the proposed subdivision development; and
- Deep-seated/large-scale landslide occurs within the Cretaceous Period deeply weathered basalt and/or rock affecting the proposed subdivision development.

The qualitative likelihood, consequence and risk terms used in this report for risk to property are given in Appendix C. The risk terms are defined by a matrix that brings together different combinations of likelihood and consequence. Risk matrices help to communicate the results of risk assessment, rank risks, set priorities and develop transparent approaches to decision making. The notes attached to the tables and terms and the comments on response to risk in Appendix C are intended to help explain the risk assessment and management process.

The findings of the investigation relevant to assessing the above landslide scenarios are as follows:

- Vegetation is to be maintained on the steeper slopes as shown on Figure 1. In particular vegetation is to remain in place within the mapped landslide features;
- Vegetation removal is permitted in the areas shown on Figure 1;
- The proposed infrastructure is to be appropriately setback from the identified landslide features (see Figure 1 and Section 7.5 below); and
- The building envelopes are appropriately setback from the identified landslide features.

Accordingly, the likelihoods estimated for the possible landslide scenarios are summarised in Table 2 as follows:

Geotechnical Investigation and Landslide Risk Assessment

Table 2: Summary of Landslide Hazards

Possible Landslide Scenarios	Indicative Annual Probability (pa)	Indicative Recurrence Interval (yrs)	Descriptor (AGS 2007c)
Reactivation of Landslide ID Nos.829 or No.2766 affecting the proposed subdivision development	10 ⁻⁴	10,000	Unlikely
Shallow/small-scale landslide occurs within the Cretaceous Period deeply weathered basalt affecting the proposed subdivision development	10 ⁻⁴	10,000	Unlikely
Deep-seated/large-scale landslide occurs within the Cretaceous Period deeply weathered basalt and/or rock affecting the proposed subdivision development	10 ⁻⁵	100,000	Rare

6.2 Incremental Landslide Hazards

The alterations to the site as a result of the proposed subdivision development can generally be classified into two categories:

- Disturbance to the site due to the proposed development; and
- Introduction of additional water into the ground affecting the groundwater regime.

It is considered that the proposed subdivision development would not adversely impact on the site and immediate surroundings nor significantly increase the pre-existing landslide hazard, provided that the development adheres to the principles of good hillside practice and the recommendations provided in Section 7 below (including the vegetation removal recommendations).

Geoton understands that the stormwater and wastewater collected onsite will be discharged to the existing town infrastructure, and thus no additional water will be introduced into the ground within the subdivision.

6.3 Landslide Consequences

The proposed lots are considered as the elements at risk in this assessment.

The landslide consequences for different scenarios are summarised in Table 3 as follows.

Geotechnical Investigation and Landslide Risk Assessment

Table 3: Summary of Consequences for Different Landslide Scenarios

Possible Landslide Scenarios	Assessed Landslide Consequences	Descriptor (AGS 2007c)
Reactivation of Landslide ID Nos.829 or No.2766 affecting the proposed subdivision development	The landslide may displace the footing system of structures within the proposed lots causing medium damage	Medium
Shallow/small-scale landslide occurs within the Cretaceous Period deeply weathered basalt affecting the proposed subdivision development	The landslide may cause limited damage to part of the structure within the proposed lots causing minor damage	Minor
Deep-seated/large-scale landslide occurs within the Cretaceous Period deeply weathered basalt and/or rock affecting the proposed subdivision development	The landslide may significantly displace the footing system of structures within the proposed lots causing major damage	Major

6.4 Landslide Risk to Property

Based on the outcomes of the landslide hazards and landslide consequences assessments detailed above. The assessed landslide risks to property (being the proposed house sites) are summarised in Table 4 as follows.

Table 4: Summary of Assessed Landslide Risks to Property (AGS 2007c)

Possible Landslide Scenarios	Assessed Landslide Hazards	Assessed Landslide Consequences	Qualitative Landslide Risk to Property
Reactivation of Landslide ID Nos.829 or No.2766 affecting the proposed subdivision development	Unlikely	Medium	Low
Shallow/small-scale landslide occurs within the Cretaceous Period deeply weathered basalt affecting the proposed subdivision development	Unlikely	Minor	Low
Deep-seated/large-scale landslide occurs within the Cretaceous Period deeply weathered basalt and/or rock affecting the proposed subdivision development	Rare	Major	Low

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According to Table C10 of AGS 2007d, the acceptable qualitative risk to property criteria suggested by AGS is LOW, given that the importance level of the elements at risk is determined according to Appendix A, AGS 2007c.

6.5 Landslide Risk to Life

The person most at risk is considered to be the resident living in each of the dwellings that will be constructed within the proposed building envelopes.

The landslide risk to life for the identified person most at risk is calculated in Table 5 as follows.

Table 5: Landslide Risk to Life for Person Most at Risk

Possible Landslide Scenarios	Adopted Annual Landslide Probability, P(H)	Spatial Probability of Landslide Impacting Buildings at Risk, P(S:H)	Temporal Spatial Probability of Person Most at Risk at Buildings at Risk, P(T:S)	Vulnerability of Person Most at Risk, V(D:T)	Risk to Life, R(LoL)
Reactivation of Landslide ID Nos.829 or No.2766 affecting the proposed subdivision development	10 ⁻⁴	1.0 (Spatial Probability has been considered in the landslide hazards)	0.67 (16hrs/day)	0.05 (Building suffers medium damage, but is highly unlikely to collapse, may cause injury, but death is highly unlikely)	3.3 x 10 ⁻⁶
Shallow/small-scale landslide occurs within the Cretaceous Period deeply weathered basalt affecting the proposed subdivision development	10 ⁻⁴			0.005 (Building suffers minor damage, but is highly unlikely to collapse, may cause injury, but death is highly unlikely)	3.3 x 10 ⁻⁷
Deep-seated/large-scale landslide occurs within the Cretaceous Period deeply weathered basalt and/or rock affecting the proposed subdivision development	10 ⁻⁵			0.5 (Building suffers major damage but is unlikely to collapse, may cause injury but death is unlikely)	3.3 x 10 ⁻⁶
Total: 6.9 x 10⁻⁶					

The tolerable risk to life criteria for the person most at risk suggested by AGS is 10⁻⁵, given that the development is a new development located on an existing slope. Acceptable risks are

Geotechnical Investigation and Landslide Risk Assessment

usually considered to be one order of magnitude lower than the tolerable risks, which in this case is 10^{-6} .

Therefore, subject to compliance with the recommendations within Section 7 of this report, the corresponding quantitative risk posed by landslide to life by the proposed subdivision development is assessed as TOLERABLE.

7 RECOMMENDATIONS

7.1 General

The outcomes of the assessments for landslide risk to property (Section 6.3) and landslide risk to life (Section 6.4) only apply if the principles of good hillside practice and the recommendations provided herein are adhered to.

An information sheet entitled "Some Guidelines for Hillside Construction" adapted from the Journal of the Australian Geomechanics Society, volume 42, Number 1, dated March 2007, is presented in Appendix D.

Therefore, provided the development of the site is in accordance with the recommendations within our report, we consider that a tolerable level of risk can be achieved for the development of each lot in accordance with section C15.7.1 (Subdivision within a landslip hazard area) and C15.6.1 (Building and works within a landslip hazard area) of the Landslide Hazard Code of the Tasmanian Planning Scheme - Devonport. An Engineering Certificate addressing the Landslide Hazard Code is provided in Appendix E.

7.2 Buildings

- Individual geotechnical assessments should be undertaken for each lot.

7.3 Cuts and Fills

- No cut or fill is permitted within the identified landslide features as shown on Figure 1; and
- Proposed cuts and fill greater than 1.5m in height within the Low and Medium landslide hazard bands (excluding the mapped landslide features) should be reviewed by an experienced geotechnical practitioner.

7.4 Drainage

- All stormwater, including stormwater from cut-off drains, must be piped to the Council town stormwater system; and
- No uncontrolled discharge of water onto the ground surface or through absorption trenches is permitted within the landslide hazard bands (as shown on Figure 1) without a further geotechnical assessment.

Geotechnical Investigation and Landslide Risk Assessment

7.5 Infrastructure

- No services trenches are to be located within the identified landslide features as shown on Figure 1. All services should be setback a minimum of 5m from the identified landslide features (see Figure 1);
- All service trenches to be run up and down slope at every opportunity. No cross-slope trenches >1m deep in areas with ground slopes greater than 13° without specific geotechnical design and specification (would include issues such as minimum grade for base of trench, backfill in short sections across the slope and subsoil drain requirements);
- If any groundwater seepage is encountered in service trench excavations subsoils drains will be required to be installed with the drains discharging to the stormwater system;
- The proposed infrastructure (sewer & stormwater) orientation through Lot 46 is considered acceptable provided it is appropriately setback from the landslide features as per above;
- The proposed stormwater main discharge point through Lot 27 (Option 1) is appropriately orientated up and down the slope and is considered an acceptable location in relation to slope stability.
- The proposed stormwater main discharge point down the southern slopes of Lot 46 (Option 2) is appropriately orientated up and down the slope and is considered an acceptable location in relation to slope stability.

7.6 Vegetation and Erosion Control

- Maintain vegetation as per Vegetation removal boundary shown on Figure 1. Any required clearing of vegetation in this area should be done during the summer, done incrementally and revegetated immediately.

8 LIMITATIONS

Although the borehole data provides an indication of subsurface conditions at the site, variations in soil conditions may occur in areas of the site not specifically covered by the field investigation.

The findings contained in the report are the result of discrete/specific sampling methodologies used in accordance with normal practices and standards, with some variations as indicated in the report. To the best of our knowledge, they represent a reasonable interpretation of the general condition of the site at the locations where boreholes were drilled. Under no circumstances, however, can it be considered that these findings represent the actual state of the site at all points within the site.

Geotechnical Investigation and Landslide Risk Assessment

9 REFERENCES

AS 1726 – 2017 Geotechnical site investigation

Australian Geomechanics Society (2007) – Practice Note Guidelines for Landslide Risk Management 2007, Australian Geomechanics Journal, Vol 42, No. 1

ELVIS - Elevation and Depth - Foundation Spatial Data (Version 0.3.2).

<http://elevation.fsdf.org.au/>

Land Information System Tasmania (LIST). <https://maps.thelist.tas.gov.au/listmap/app/list/map>

Mineral Resources Tasmania (2013) – Tasmanian Information on Geoscience and Exploration Resources (TIGER) System. <http://www.mrt.tas.gov.au/portal/database-searches>

Stevenson P.C. (1972) – Report on the landslip risk at the Land Australia proposed subdivision, East Devonport, *MRT UR1972_13*



Geotechnical Consultants - Limitations of report

These notes have been prepared to assist in the interpretation and understanding of the limitations of this report.

Project specific criteria

The report has been developed on the basis of unique project specific requirements as understood by Geoton and applies only to the site investigated. Project criteria are typically identified in the Client brief and the associated proposal prepared by Geoton and may include risk factors arising from limitations on scope imposed by the Client. The report should not be used without further consultation if significant changes to the project occur. No responsibility for problems that might occur due to changed factors will be accepted without consultation.

Subsurface variations with time

Because a report is based on conditions which existed at the time of subsurface exploration, decisions should not be based on a report whose adequacy may have been affected by time. For example, water levels can vary with time, fill may be placed on a site and pollutants may migrate with time. In the event of significant delays in the commencement of a project, further advice should be sought.

Interpretation of factual data

Site assessment identifies actual subsurface conditions only at those points where samples are taken and at the time they are taken. All available data is interpreted by professionals to provide an opinion about overall site conditions, their likely impact on the proposed development and recommended actions. Actual conditions may differ from those inferred to exist, as it is virtually impossible to provide a definitive subsurface profile which includes all the possible variabilities inherent in soil and rock masses.

Report Recommendations

The report is based on the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until earthworks and/or foundation construction is almost complete and therefore the report recommendations can only be regarded as preliminary. Where variations in conditions are encountered, further advice should be sought.

Specific purposes

This report should not be applied to any project other than that originally specified at the time the report was issued.

Interpretation by others

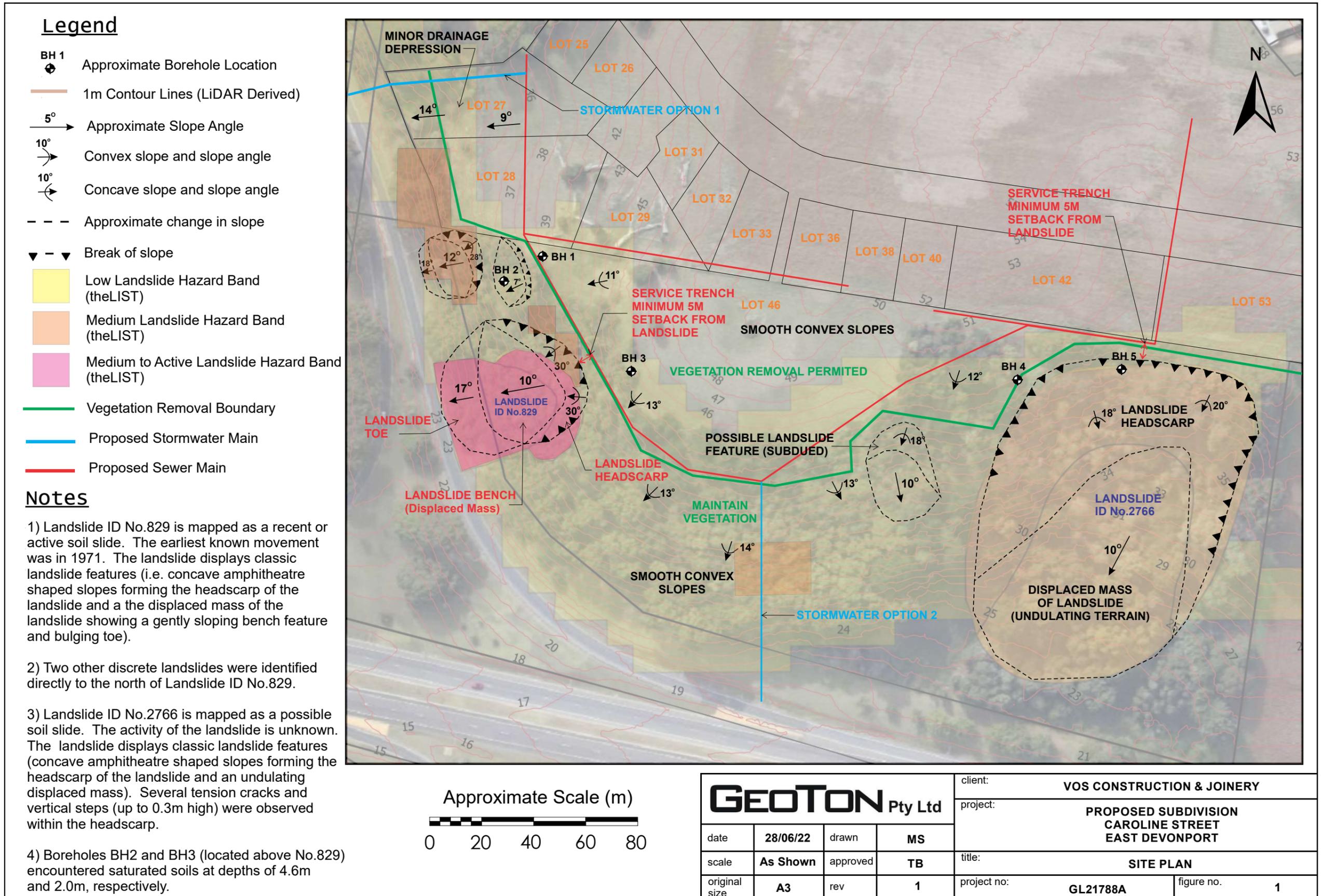
Geoton will not be responsible for interpretations of site data or the report findings by others involved in the design and construction process. Where any confusion exists, clarification should be sought from Geoton.

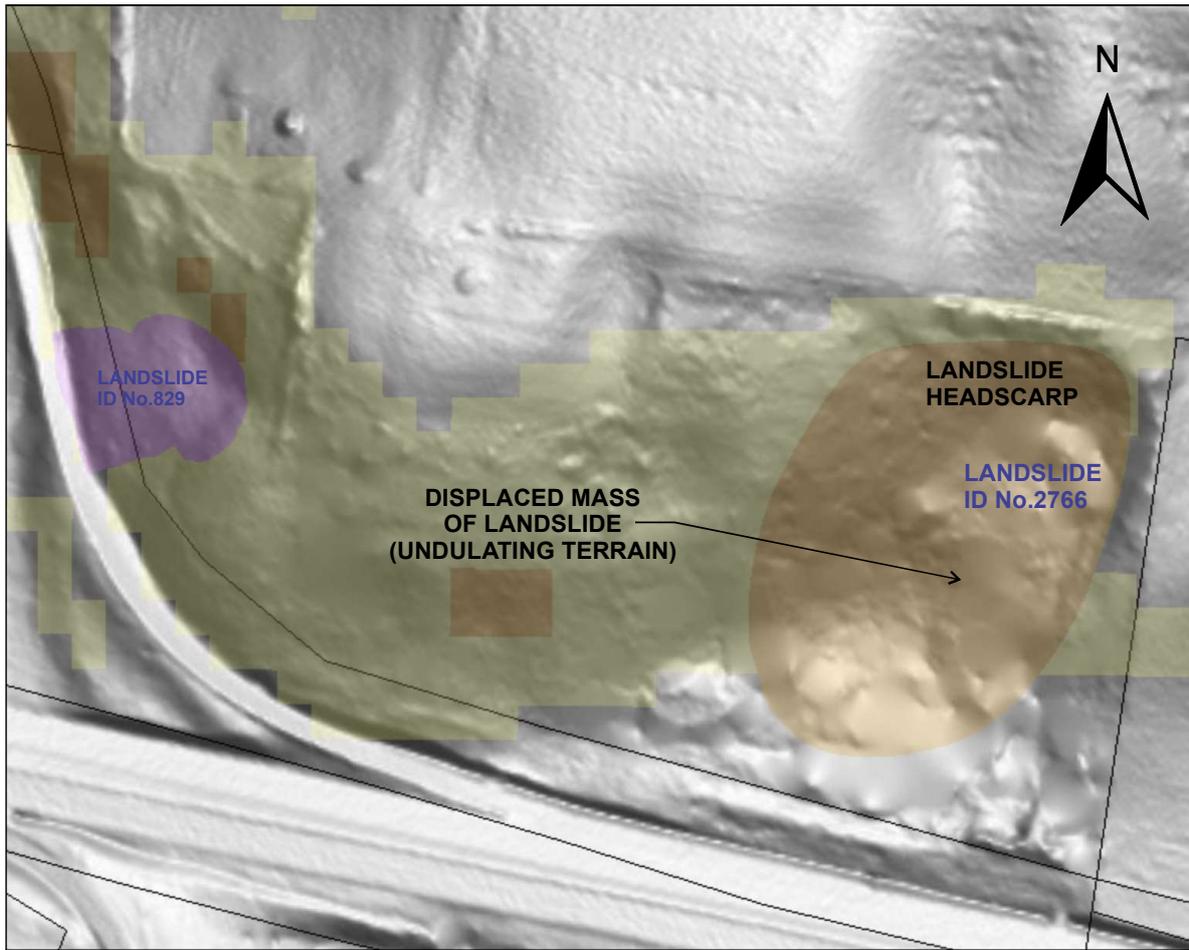
Report integrity

The report as a whole presents the findings of the site assessment and the report should not be copied in part or altered in any way.

Geoenvironmental issues

This report does not cover issues of site contamination unless specifically required to do so by the client. In the absence of such a request, Geoton take no responsibility for such issues.





Legend

- Low Landslide Hazard Band (theLIST)
- Medium Landslide Hazard Band (theLIST)
- Medium to Active Landslide Hazard Band (theLIST)

Approximate Scale (m)



GEOTON Pty Ltd				client: VOS CONSTRUCTION & JOINERY	
				project: PROPOSED SUBDIVISION CAROLINE STREET EAST DEVONPORT	
date	28/06/22	drawn	MS	title: HILLSHADE SITE PLAN	
scale	As Shown	approved	TB		
original size	A4	rev		project no: GL21788A	figure no. 2

Appendix A

Borehole Logs



ENGINEERING BOREHOLE LOG

Geotechnical Consultants
 PO Box 522 Prospect TAS 7250
 Unit 24, 16-18 Goodman Court, Invermay TAS
 T (03) 6326 5001

Borehole no. BH1
 Sheet no. 1 of 1
 Job no. GL21788A

Client :		Vos Construction & Joinery Pty Ltd				Date :		24/3/22			
Project :		Landslide Risk Assessment				Logged By :		MS			
Location :		Caroline Street Subdivision, East Devonport									
Drill model :		Drilltech Auger		Easting:		Slope: 90°		RL Surface :			
Hole diameter :		150mm		Northing:		Bearing: -		Datum :			
Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations	
AD N					1.00	MH	TOPSOIL - Clayey Silt, brown Clayey SILT - high plasticity, red/brown W<PL	D/M	F		
					2.00		W≈PL Becoming yellow/brown	M	VSt		V-110kPa
					3.00		With some gravel/cobbles Weak rock fabric W<PL	D/M	M		V-refusal
					4.00		Borehole BH1 terminated at 3.6m Auger refusal on inferred rock/boulder				V-refusal
					5.00						
					6.00						
					7.00						
					8.00						



ENGINEERING BOREHOLE LOG

Geotechnical Consultants
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 Unit 24, 16-18 Goodman Court, Invermay TAS
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Borehole no. BH2
 Sheet no. 1 of 1
 Job no. GL21788A

Client :		Vos Construction & Joinery Pty Ltd				Date :		24/3/22	
Project :		Landslide Risk Assessment				Logged By :		MS	
Location :		Caroline Street Subdivision, East Devonport							
Drill model :		Drilltech Auger		Easting:		Slope: 90°		RL Surface :	
Hole diameter :		150mm		Northing:		Bearing: -		Datum :	

Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations	
AD N							TOPSOIL - Clayey Silt, brown	D/M	F		
						MH	Clayey SILT - high plasticity, red/brown W<PL	D/M	St		
					1.00		Becoming yellow/brown mottled red/brown		VSt	V-108kPa V-refusal	
					2.00		W≈PL	M		V-refusal	
					3.00		With cobbles				
				D			W>PL			Liquid Limit = 60% Plastic Limit = 38% Plasticity Index = 22%	
					4.00						
				U63						Tube refusal - cobbles	
					5.00		CH	Silty CLAY - high plasticity, brown/grey, trace cobbles, easy drilling penetration	M/W	F/S	Liquid Limit = 66% Plastic Limit = 27% Plasticity Index = 39% Groundwater seepage at 5.5m, borehole collapse
				D				With cobbles			
				6.00							
				7.00			Borehole BH2 terminated at 6.6m Auger refusal on inferred cobble/boulder				
				8.00							



ENGINEERING BOREHOLE LOG

Geotechnical Consultants
 PO Box 522 Prospect TAS 7250
 Unit 24, 16-18 Goodman Court, Invermay TAS
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Borehole no. BH3
 Sheet no. 1 of 1
 Job no. GL21788A

Client :		Vos Construction & Joinery Pty Ltd				Date :		24/3/22	
Project :		Landslide Risk Assessment				Logged By :		MS	
Location :		Caroline Street Subdivision, East Devonport							
Drill model :		Drilltech Auger		Easting:		Slope: 90°		RL Surface :	
Hole diameter :		150mm		Northing:		Bearing: -		Datum :	

Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations
AD N	█	█	█		1.00	MH	TOPSOIL - Clayey Silt, brown Clayey SILT - high plasticity, red/brown, trace cobbles W≈PL	D/M	F	V-88kPa F V-50kPa V-30kPa Groundwater seepage at 2.6m pp-340kPa
					2.00		Becoming moist/wet, W>PL	M/W	S	
					3.00	CH	Silty CLAY - high plasticity, brown/ orange, easy drilling penetration W>PL	M/W	S	
					4.00		Becoming grey mottled yellow/orange			
			U63		5.00		Decrease in moisture, W≈PL trace cobbles	M	St	
					6.00		Borehole BH3 terminated at 5.0m Auger refusal on inferred cobble/boulder			
					7.00					
					8.00					



ENGINEERING BOREHOLE LOG

Geotechnical Consultants
 PO Box 522 Prospect TAS 7250
 Unit 24, 16-18 Goodman Court, Invermay TAS
 T (03) 6326 5001

Borehole no. BH4
 Sheet no. 1 of 1
 Job no. GL21788A

Client :		Vos Construction & Joinery Pty Ltd				Date :		24/3/22		
Project :		Landslide Risk Assessment				Logged By :		MS		
Location :		Caroline Street Subdivision, East Devonport								
Drill model :		Drilltech Auger		Easting:		Slope: 90°		RL Surface :		
Hole diameter :		150mm		Northing:		Bearing: -		Datum :		
Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations
AD N					1.00	MH	TOPSOIL - Clayey Silt, brown Clayey SILT - high plasticity, red/brown W<PL Becoming orange/brown W≈PL	D/M M	F St	V-92kPa
					2.00		Slight increase in moisture, W>PL With cobbles			V-82kPa
					3.00					
					4.00		Borehole BH4 terminated at 3.0m Auger refusal on inferred cobble/boulder			
					5.00					
					6.00					
					7.00					
					8.00					



ENGINEERING BOREHOLE LOG

Geotechnical Consultants
 PO Box 522 Prospect TAS 7250
 Unit 24, 16-18 Goodman Court, Invermay TAS
 T (03) 6326 5001

Borehole no. BH5
 Sheet no. 1 of 1
 Job no. GL21788A

Client :		Vos Construction & Joinery Pty Ltd				Date :		24/3/22	
Project :		Landslide Risk Assessment				Logged By :		MS	
Location :		Caroline Street Subdivision, East Devonport							
Drill model :		Drilltech Auger		Easting:		Slope: 90°		RL Surface :	
Hole diameter :		150mm		Northing:		Bearing: -		Datum :	

Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations
AD N					1.00	MH	TOPSOIL - Clayey Silt, brown Clayey SILT - high plasticity, red/brown W<PL	D/M	F	V-90kPa V-74kPa Tube refusal - cobbles
					2.00		Becoming orange/brown W≈PL	M		
					3.00		trace cobbles	M/W	S	
				U63	4.00		Becoming moist/wet, W>PL easy drilling penetration			
					5.00		Borehole BH5 terminated at 4.2m Auger refusal on inferred cobble/boulder			
					6.00					
					7.00					
					8.00					

GEOTON Pty Ltd

Investigation Log Explanation Sheet

METHOD – BOREHOLE

TERM	Description
AS	Auger Screwing*
AD	Auger Drilling*
RR	Roller / Tricone
W	Washbore
CT	Cable Tool
HA	Hand Auger
DT	Diatube
B	Blank Bit
V	V Bit
T	TC Bit

* Bit shown by suffix e.g. ADT

METHOD – EXCAVATION

TERM	Description
N	Natural exposure
X	Existing excavation
H	Backhoe bucket
B	Bulldozer blade
R	Ripper
E	Excavator

SUPPORT

TERM	Description
M	Mud
N	Nil
C	Casing
S	Shoring

PENETRATION

1	2	3	4	
				No resistance ranging to Refusal

WATER

Symbol	Description
	Water inflow
	Water outflow
	17/3/08 water on date shown

NOTES, SAMPLES, TESTS

TERM	Description
U ₅₀	Undisturbed sample 50 mm diameter
U ₆₃	Undisturbed sample 63 mm diameter
D	Disturbed sample
N	Standard Penetration Test (SPT)
N*	SPT – sample recovered
N _c	SPT with solid cone
V	Vane Shear
PP	Pocket Penetrometer
P	Pressumeter
B _s	Bulk sample
E	Environmental Sample
R	Refusal
DCP	Dynamic Cone Penetrometer (blows/100mm)
PL	Plastic Limit
LL	Liquid Limit
LS	Linear Shrinkage

CLASSIFICATION SYMBOLS AND SOIL DESCRIPTION

Based on AS 1726:2017

MOISTURE

TERM	Description
D	Dry
M	Moist
W	Wet

CONSISTENCY/DENSITY INDEX

TERM	Description
VS	very soft
S	soft
F	firm
St	stiff
VSt	very stiff
H	hard
Fr	friable
VL	very loose
L	loose
MD	medium dense
D	dense
VD	Very dense



Soil Description Explanation Sheet (1of 2)

DEFINITION

In engineering terms, soil includes every type of uncemented or partially cemented inorganic or organic material found in the ground. In practice, if the material can be remoulded or disintegrated by hand in its field condition or in water it is described as a soil. Other materials are described using rock description terms.

CLASSIFICATION SYMBOL AND SOIL NAME

Soils are described in accordance with the AS 1726: 2017 as shown in the table on Sheet 2.

PARTICLE SIZE DEFINITIONS

NAME	SUBDIVISION	SIZE (mm)
BOULDERS		>200
COBBLES		63 to 200
GRAVEL	Coarse	19 to 63
	Medium	6.7 to 19
	Fine	2.36 to 6.7
SAND	Coarse	0.6 to 2.36
	Medium	0.21 to 0.6
	Fine	0.075 to 0.21
SILT		0.002 to 0.075
CLAY		<0.002

MOISTURE CONDITION

Coarse Grained Soils

Dry Non-cohesive and free running.

Moist Soil feels cool, darkened in colour. Soil tends to stick together.

Wet As for moist but with free water forming when handling.

Fine Grained Soils

Moist, dry of Plastic Limited – w < PL

Hard and friable or powdery.

Moist, near Plastic Limit – w ≈ PL

Soils can be moulded at a moisture content approximately equal to the plastic limit.

Moist, wet of Plastic Limit – w > PL

Soils usually weakened and free water forms on hands when handling.

Wet, near Liquid Limit - w ≈ LL

Wet, wet of Liquid Limit - w > LL

CONSISTENCY TERMS FOR COHESIVE SOILS

TERM	UNDRAINED STRENGTH s_u (kPa)	FIELD GUIDE
Very Soft	≤12	Exudes between the fingers when squeezed in hand
Soft	12 to 25	Can be moulded by light finger pressure
Firm	25 to 50	Can be moulded by strong finger pressure
Stiff	50 to 100	Cannot be moulded by fingers
Very Stiff	100 to 200	Can be indented by thumb nail
Hard	>200	Can be indented with difficulty by thumb nail
Friable	–	Can be easily crumbled or broken into small pieces by hand

RELATIVE DENSITY OF NON-COHESIVE SOILS

TERM	DENSITY INDEX (%)
Very Loose	≤15
Loose	15 to 35
Medium Dense	35 to 65
Dense	65 to 85
Very Dense	> 85

DESCRIPTIVE TERMS FOR ACCESSORY SOIL COMPONENTS

DESIGNATION OF COMPONENT	IN COARSE GRAINED SOILS		IN FINE GRAINED SOILS	TERM
	% Fines	% Accessory coarse fraction	% Sand/ gravel	
Minor	≤5	≤15	≤15	Trace
	>5, ≤12	>15, ≤30	>15, ≤30	With
Secondary	>12	>30	>30	Prefix

SOIL STRUCTURE

ZONING		CEMENTING	
Layer	Continuous across the exposure or sample.	Weakly cemented	Easily disaggregated by hand in air or water.
Lens	Discontinuous layer of different material, with lenticular shape.	Moderately cemented	Effort is required to disaggregate the soil by hand in air or water.
Pocket	An irregular inclusion of different material.		

GEOLOGICAL ORIGIN

WEATHERED IN PLACE SOILS

Extremely Weathered material	Material is weathered to such an extent that it has soil properties. Structure and/or fabric of parent rock material retained and visible.
Residual soil	Structure and/or fabric of parent rock material not retained and visible.

TRANSPORTED SOILS

Aeolian soil	Carried and deposited by wind.
Alluvial soil	Deposited by streams and rivers.
Colluvial soil	Soil and rock debris transported downslope by gravity.
Estuarine soil	Deposited in coastal estuaries, and including sediments carried by inflowing rivers and streams, and tidal currents.
Fill	Man-made deposit. Fill may be significantly more variable between tested locations than naturally occurring soils.
Lacustrine soil	Deposited in freshwater lakes.
Marine soil	Deposited in a marine environment.



Soil Description Explanation Sheet (2 of 2)

SOIL CLASSIFICATION INCLUDING IDENTIFICATION AND DESCRIPTION

FIELD IDENTIFICATION PROCEDURES (Excluding particles larger than 63 mm and basing fractions on estimated mass)				GROUP SYMBOL	PRIMARY NAME	
COARSE GRAINED SOIL More than 65% of soil excluding oversize fraction is larger than 0.075 mm	GRAVEL More than half of coarse fraction is larger than 2.36 mm	CLEAN GRAVEL (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate particle sizes	GW	GRAVEL	
		Predominantly one size or a range of sizes with some intermediate sizes missing	GP	GRAVEL		
		GRAVEL FINES WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML and MH below)	GM	Silty GRAVEL	
		Plastic fines (for identification procedures see CL, CI and CH below)	GC	Clayey GRAVEL		
	SAND More than half of coarse fraction is smaller than 2.36 mm	CLEAN SAND (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate sizes	SW	SAND	
		Predominantly one size or a range of sizes with some intermediate sizes missing	SP	SAND		
		SAND FINES WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML and MH below)	SM	Silty SAND	
		Plastic fines (for identification procedures see CL, CI and CH below)	SC	Clayey SAND		
FINE GRAINED SOIL More than 35% of soil excluding oversize fraction is smaller than 0.075 mm	IDENTIFICATION PROCEDURES ON FRACTIONS <0.075 mm					
		DRY STRENGTH	DILATANCY	TOUGHNESS		
	SILT & CLAY (low to medium plasticity, LL ≤ 50)	None to Low	Slow to Rapid	Low	ML	SILT
		Medium to High	None to Slow	Medium	CL, CI	CLAY
		Low to Medium	Slow	Low	OL	ORGANIC SILT
	SILT & CLAY (high plasticity, LL > 50)	Low to Medium	None to Slow	Low to Medium	MH	SILT
		High to Very High	None	High	CH	CLAY
		Medium to High	None to Very Slow	Low to Medium	OH	ORGANIC CLAY
	Highly Organic Soil	Readily identified by colour, odour, spongy feel and frequently by fibrous texture.			Pt	PEAT

• LL – Liquid Limit.

COMMON DEFECTS IN SOILS

TERM	DEFINITION	DIAGRAM	TERM	DEFINITION	DIAGRAM
PARTING	A surface or crack across which the soil has little or no tensile strength. Parallel or sub parallel to layering (e.g. bedding). May be open or closed.		SOFTENED ZONE	A zone in clayey soil, usually adjacent to a defect in which the soil has a higher moisture content than elsewhere.	
FISSURE	A surface or crack across which the soil has little or no tensile strength, but which is not parallel or sub parallel to layering. May be open or closed. May include desiccation cracks.		TUBE	Tubular cavity. May occur singly or as one of a large number of separate or inter-connected tubes. Walls often coated with clay or strengthened by denser packing of grains. May contain organic matter.	
SHEARED SEAM	Zone in clayey soil with roughly parallel near planar, curved or undulating boundaries containing closely spaced, smooth or slickensided, curved intersecting fissures which divide the mass into lenticular or wedge-shaped blocks.		TUBE CAST	An infilled tube. The infill may be uncemented or weakly cemented soil or have rock properties.	
SHEARED SURFACE	A near planar curved or undulating, smooth, polished or slickensided surface in clayey soil. The polished or slickensided surface indicates that movement (in many cases very little) has occurred along the defect.		INFILLED SEAM	Sheet or wall like body of soil substance or mass with roughly planar to irregular near parallel boundaries which cuts through a soil mass. Formed by infilling of open defects.	

Appendix B

Laboratory Test Results



TEST RESULTS

AS 1289 3.1.2, 3.2.1, 3.3.1, 3.4.1, 2.1.1

23/16-18 Goodman Court, Invermay, Tas, 7248

Ph (03) 6334 0834

ACN 623 420 226

Client Geoton		Job No RE001/22/45L					
Project GL21788A		Report No RE001/22/45L/AA					
Location Caroline Street Subdivision East Devonport							
Sampled By Client - Tested As Received		Date Received 4/4/22		Date Tested 6/4/22			
Sample Number	Sample Description & Client Sample ID	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Linear Shrinkage %	Cracking / Curling / Crumbling
L22/299							
a	Air Dried, Dry Sieved BH 2 3.0-3.3m Red/Brown Silty Clay	47.1	60	38	22	13	curling cracking
b	BH 2 5.0-5.3m Brown Silty Clay	29.9	66	27	39	17	curling cracking

Accredited for compliance with ISO/IEC 17025 - Testing

B. Cuthbertson

WORLD RECOGNISED ACCREDITATION Laboratory Accreditation No 20328

Approved Signatory
Brett Cuthbertson

Date of Issue
7/4/22

Appendix C

Qualitative Terminology for Use in Assessing Risk to Property

QUALITATIVE TERMINOLOGY FOR USE IN ASSESSING RISK TO PROPERTY

QUALITATIVE MEASURES OF LIKELIHOOD

Approximate Annual Probability		Implied Indicative Landslide Recurrence Interval		Description	Descriptor	Level
Indicative Value	Notional Boundary					
10 ⁻¹	5x10 ⁻²	10 years	20 years	The event is expected to occur over the design life.	ALMOST CERTAIN	A
10 ⁻²		100 years		The event will probably occur under adverse conditions over the design life.	LIKELY	B
10 ⁻³	5x10 ⁻³	1000 years	200 years	The event could occur under adverse conditions over the design life.	POSSIBLE	C
10 ⁻⁴	5x10 ⁻⁴	10,000 years	2000 years	The event might occur under very adverse circumstances over the design life.	UNLIKELY	D
10 ⁻⁵	5x10 ⁻⁵	100,000 years	20,000 years	The event is conceivable but only under exceptional circumstances over the design life.	RARE	E
10 ⁻⁶	5x10 ⁻⁶	1,000,000 years	200,000 years	The event is inconceivable or fanciful over the design life.	BARELY CREDIBLE	F

Note: (1) The table should be used from left to right; use Approximate Annual Probability or Description to assign Descriptor, not *vice versa*.

QUALITATIVE MEASURES OF CONSEQUENCES TO PROPERTY

Approximate Cost of Damage		Description	Descriptor	Level
Indicative Value	Notional Boundary			
200%	100%	Structure(s) completely destroyed and/or large scale damage requiring major engineering works for stabilisation. Could cause at least one adjacent property major consequence damage.	CATASTROPHIC	1
60%		Extensive damage to most of structure, and/or extending beyond site boundaries requiring significant stabilisation works. Could cause at least one adjacent property medium consequence damage.	MAJOR	2
20%	40%	Moderate damage to some of structure, and/or significant part of site requiring large stabilisation works. Could cause at least one adjacent property minor consequence damage.	MEDIUM	3
5%	10%	Limited damage to part of structure, and/or part of site requiring some reinstatement stabilisation works.	MINOR	4
0.5%	1%	Little damage. (Note for high probability event (Almost Certain), this category may be subdivided at a notional boundary of 0.1%. See Risk Matrix.)	INSIGNIFICANT	5

- Notes:**
- (2) The Approximate Cost of Damage is expressed as a percentage of market value, being the cost of the improved value of the unaffected property which includes the land plus the unaffected structures.
 - (3) The Approximate Cost is to be an estimate of the direct cost of the damage, such as the cost of reinstatement of the damaged portion of the property (land plus structures), stabilization works required to render the site to tolerable risk level for the landslide which has occurred and professional design fees, and consequential costs such as legal fees, temporary accommodation. It does not include additional stabilisation works to address other landslides which may affect the property.
 - (4) The table should be used from left to right; use Approximate Cost of Damage or Description to assign Descriptor, not *vice versa*

Geoton Pty Ltd (adapted from Australian Geomechanics Vol 42 No 1 March 2007)

1

QUALITATIVE TERMINOLOGY FOR USE IN ASSESSING RISK TO PROPERTY (CONTINUED)

QUALITATIVE RISK ANALYSIS MATRIX – LEVEL OF RISK TO PROPERTY

LIKELIHOOD		CONSEQUENCES TO PROPERTY (With Indicative Approximate Cost of Damage)				
	Indicative Value of Approximate Annual Probability	1: CATASTROPHIC 200%	2: MAJOR 60%	3: MEDIUM 20%	4: MINOR 5%	5: INSIGNIFICANT 0.5%
A – ALMOST CERTAIN	10 ⁻¹	VH	VH	VH	H	M or L (5)
B - LIKELY	10 ⁻²	VH	VH	H	M	L
C - POSSIBLE	10 ⁻³	VH	H	M	M	VL
D - UNLIKELY	10 ⁻⁴	H	M	L	L	VL
E - RARE	10 ⁻⁵	M	L	L	VL	VL
F - BARELY CREDIBLE	10 ⁻⁶	L	VL	VL	VL	VL

- Notes:**
- (5) For Cell A5, may be subdivided such that a consequence of less than 0.1% is Low Risk.
 - (6) When considering a risk assessment it must be clearly stated whether it is for existing conditions or with risk control measures which may not be implemented at the current time.

RISK LEVEL IMPLICATIONS

Risk Level		Example Implications (7)
VH	VERY HIGH RISK	Unacceptable without treatment. Extensive detailed investigation and research, planning and implementation of treatment options essential to reduce risk to Low; may be too expensive and not practical. Work likely to cost more than value of the property.
H	HIGH RISK	Unacceptable without treatment. Detailed investigation, planning and implementation of treatment options required to reduce risk to Low. Work would cost a substantial sum in relation to the value of the property.
M	MODERATE RISK	May be tolerated in certain circumstances (subject to regulator's approval) but requires investigation, planning and implementation of treatment options to reduce the risk to Low. Treatment options to reduce to Low risk should be implemented as soon as practicable.
L	LOW RISK	Usually acceptable to regulators. Where treatment has been required to reduce the risk to this level, ongoing maintenance is required.
VL	VERY LOW RISK	Acceptable. Manage by normal slope maintenance procedures.

- Note:**
- (7) The implications for a particular situation are to be determined by all parties to the risk assessment and may depend on the nature of the property at risk; these are only given as a general guide

Appendix D

Some Guidelines for Hillside Construction

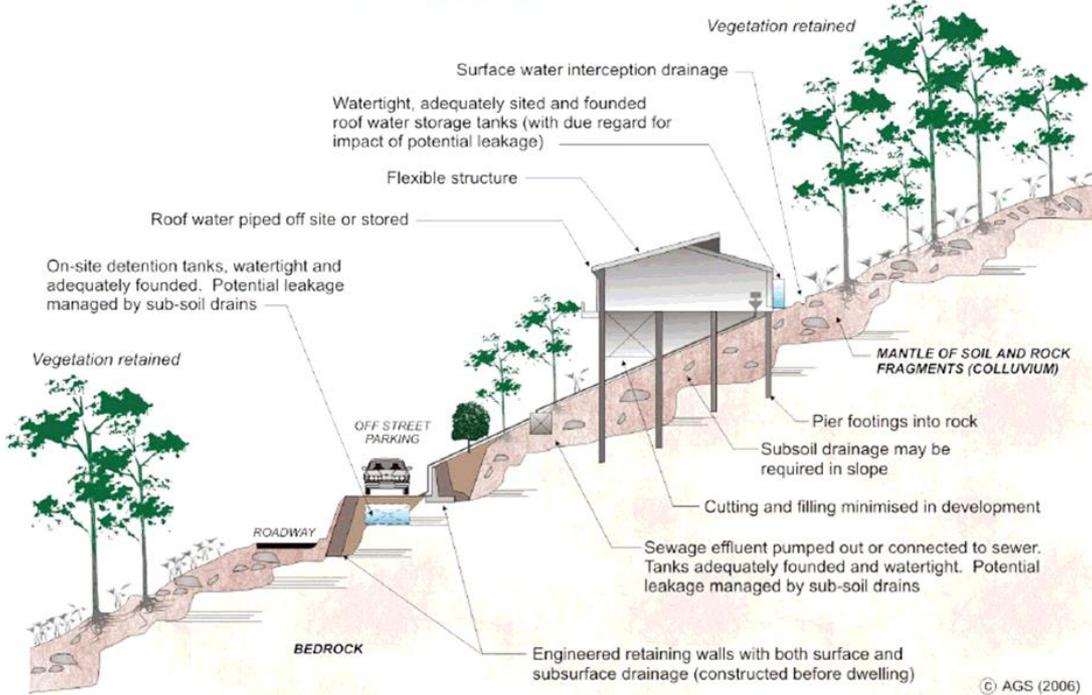
PRACTICE NOTE GUIDELINES FOR LANDSLIDE RISK MANAGEMENT 2007

APPENDIX - SOME GUIDELINES FOR HILLSIDE CONSTRUCTION

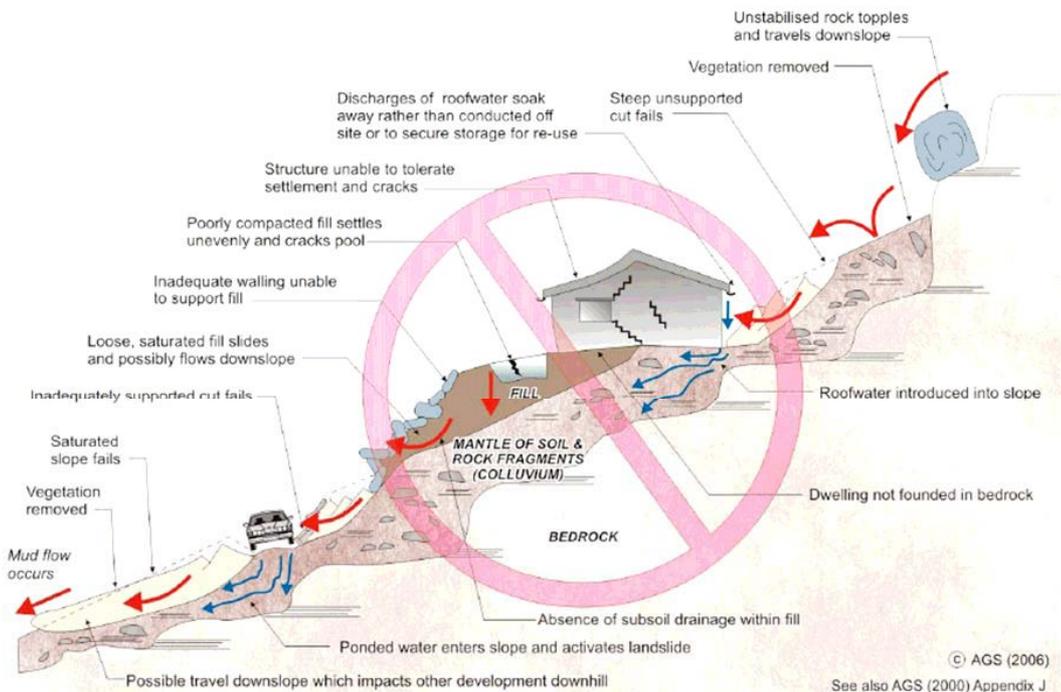
ADVICE	GOOD ENGINEERING PRACTICE	POOR ENGINEERING PRACTICE
GEOTECHNICAL ASSESSMENT	Obtain advice from a qualified, experienced geotechnical practitioner at early stage of planning and before site works.	Prepare detailed plan and start site works before geotechnical advice.
PLANNING		
SITE PLANNING	Having obtained geotechnical advice, plan the development with the risk arising from the identified hazards and consequences in mind.	Plan development without regard for the Risk.
DESIGN AND CONSTRUCTION		
HOUSE DESIGN	Use flexible structures which incorporate properly designed brickwork, timber or steel frames, timber or panel cladding. Consider use of split levels. Use decks for recreational areas where appropriate.	Floor plans which require extensive cutting and filling. Movement intolerant structures.
SITE CLEARING	Retain natural vegetation wherever practicable.	Indiscriminately clear the site.
EARTHWORKS	Retain natural contours wherever possible.	Indiscriminatory bulk earthworks.
CUTS	Minimise depth. Support with engineered retaining walls or batter to appropriate slope. Provide drainage measures and erosion control.	Large scale cuts and benching. Unsupported cuts. Ignore drainage requirements
FILLS	Minimise height. Strip vegetation and topsoil and key into natural slopes prior to filling. Use clean fill materials and compact to engineering standards. Batter to appropriate slope or support with engineered retaining wall. Provide surface drainage and appropriate subsurface drainage.	Loose or poorly compacted fill, which if it fails, may flow a considerable distance including onto property below. Block natural drainage lines. Fill over existing vegetation and topsoil. Include stumps, trees, vegetation, topsoil, boulders, building rubble etc in fill.
ROCK OUTCROPS & BOULDERS	Remove or stabilise boulders which may have unacceptable risk. Support rock faces where necessary.	Disturb or undercut detached blocks or boulders.
RETAINING WALLS	Found on rock where practicable. Provide subsurface drainage within wall backfill and surface drainage on slope above. Construct wall as soon as possible after cut/fill operation.	Construct a structurally inadequate wall such as sandstone flagging, brick or unreinforced blockwork. Lack of subsurface drains and weepholes.
FOOTINGS	Found within rock where practicable. Use rows of piers or strip footings oriented up and down slope. Design for lateral creep pressures if necessary. Backfill footing excavations to exclude ingress of surface water.	Found on topsoil, loose fill, detached boulders or undercut cliffs.
SWIMMING POOLS	Engineer designed. Support on piers to rock where practicable. Provide with under-drainage and gravity drain outlet where practicable. Design for high soil pressures which may develop on uphill side whilst there may be little or no lateral support on downhill side.	
DRAINAGE		
SURFACE	Provide at tops of cut and fill slopes. Discharge to street drainage or natural water courses. Provide general falls to prevent blockage by siltation and incorporate silt traps. Line to minimise infiltration and make flexible where possible. Special structures to dissipate energy at changes of slope and/or direction.	Discharge at top of fills and cuts. Allow water to pond on bench areas.
SUBSURFACE	Provide filter around subsurface drain. Provide drain behind retaining walls. Use flexible pipelines with access for maintenance. Prevent inflow of surface water.	Discharge roof runoff into absorption trenches.
SEPTIC & SULLAGE	Usually requires pump-out or mains sewer systems; absorption trenches may be possible in some areas if risk is acceptable. Storage tanks should be water-tight and adequately founded.	Discharge sullage directly onto and into slopes. Use absorption trenches without consideration of landslide risk.
EROSION CONTROL & LANDSCAPING	Control erosion as this may lead to instability. Revegetate cleared area.	Failure to observe earthworks and drainage recommendations when landscaping.
DRAWINGS AND SITE VISITS DURING CONSTRUCTION		
DRAWINGS	Building Application drawings should be viewed by geotechnical consultant	
SITE VISITS	Site Visits by consultant may be appropriate during construction/	
INSPECTION AND MAINTENANCE BY OWNER		
OWNER'S RESPONSIBILITY	Clean drainage systems; repair broken joints in drains and leaks in supply pipes. Where structural distress is evident see advice. If seepage observed, determine causes or seek advice on consequences.	

PRACTICE NOTE GUIDELINES FOR LANDSLIDE RISK MANAGEMENT 2007

EXAMPLES OF GOOD HILLSIDE PRACTICE



EXAMPLES OF POOR HILLSIDE PRACTICE



Appendix E

Certificate Forms



Engineering Certificate

To:	Vos Construction & Joinery Pty Ltd	Owner /Agent
	3 Hudson Fysh Drive	Address
	Western Junction Tas	Suburb/postcode
	7212	

Certifier details:

From:	Geoton Pty Ltd	
Address:	PO Box 522	Phone No: (03) 6326 5001
	Prospect Tas	Fax No:
	7250	
Accreditation No: <i>(if applicable)</i>	CC6220 P	Email address: tbarriera@geoton.com.au
Or qualifications and Insurance details:	Tony Barriera – BEng, MSc, CPEng, NER – IEAust 471929 Civil, Geotechnical Certain Underwriters at Lloyd's- ENG 21 000330	<i>(description from Column 4 of the Director of Building Control's determination)</i>
Speciality area of expertise:	Geotechnical Engineering Landslide Risk Assessments	<i>(description from Column 5 of the Director of Building Control's determination)</i>

Details of work:

Address:	158 Caroline Street	Lot No: 1
	East Devonport Tas	Certificate of title No: 174766/1
	7310	
The work related to this certificate:	Landslide Risk Assessment	<i>(description of the work or part work being certified)</i>

Certificate details:

Certificate type:	Geotechnical	<i>(description from Column 2 of the Director of Building Control's determination)</i>
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In issuing this certificate the following matters are relevant –

Documents:	Geoton Pty Ltd, Report Reference No. GL21788Ab, dated 28/06/2022.
Relevant calculations:	Refer to report
References:	Australian Geomechanics Society – Practice Note Guidelines for Landslide Risk Management, 2007



Substance of Certificate:

Findings and recommendations of report (Report Reference No. GL21788Ab).

From the Tasmanian Planning Scheme (TPS) the site is partially mapped within Medium, Medium Active and Low landslide hazard bands. As such, a landslide risk assessment is required to determine if a tolerable risk can be achieved and maintained for the type, scale and intended life of use of the development.

The landslide risk assessment was conducted in accordance with Australian Geomechanics Society (AGS) – Practice Note Guidelines For Landslide Risk Management, 2007. Our report concluded that the qualitative landslide risk for the site is at worst a LOW risk provided the development of the site is in accordance with the recommendations within our report. In our experience, regulating authorities allow developments to proceed with VERY LOW to LOW risk.

Therefore, provided the development of the site (proposed 78 lot subdivision) is in accordance with the recommendations within our report, then we consider that a tolerable level of risk can be achieved for the development of the site in accordance with section C15.6.1 (Building and works within a landslip hazard area) & section C15.7.1 (Subdivision within a landslip hazard area) of the Landslide Hazard Code of the TPS - Devonport. That is, the level of likely risk from exposure to the natural hazard (landslide) is considered to be tolerable for the proposed development.

Scope or Limitations

The report provides a qualitative landslide risk assessment which identifies the landslide risks at the site and provides recommendations to maintain, improve and possibly reduce the risk of landslides so as not cause or contribute to the risk of landslides on the site and lands in the locality.

The site is within an area of inherent doubtful slope stability and landslides are a natural ongoing geological process. There will be always some level of landslide risk within an area of inherent doubtful slope stability. The recommendations of the report are provided to maintain, improve and possibly reduce the risk of landslides on the site and lands in the locality.

The recommendations for the design of the proposed works are in accordance with prevailing geological conditions described in the report for the site, assessed landslide risks and recommended good hillside practices.

I certify the matters described in this certificate.

Certifier:	<i>Signed:</i> 	<i>Date:</i> 28/06/2022	<i>Certificate No.</i> GL21788Ab
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Voss Construction & Joinery Pty Ltd

**158 Caroline St, Devonport
Traffic Impact Assessment**

February 2022





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1. Introduction

1.1 Background

Midson Traffic were engaged by Voss Construction and Joinery Pty Ltd to prepare a traffic impact assessment for a proposed 49 lot residential subdivision development at 158 Caroline Street, Devonport.

1.2 Traffic Impact Assessment (TIA)

A traffic impact assessment (TIA) is a process of compiling and analysing information on the impacts that a specific development proposal is likely to have on the operation of roads and transport networks. A TIA should not only include general impacts relating to traffic management, but should also consider specific impacts on all road users, including on-road public transport, pedestrians, cyclists and heavy vehicles.

This TIA has been prepared in accordance with the Department of State Growth (DSG) publication, *Traffic Impact Assessment Guidelines*, August 2020. This TIA has also been prepared with reference to the Austroads publication, *Guide to Traffic Management*, Part 12: *Traffic Impacts of Developments*, 2019.

Land use developments generate traffic movements as people move to, from and within a development. Without a clear understanding of the type of traffic movements (including cars, pedestrians, trucks, etc), the scale of their movements, timing, duration and location, there is a risk that this traffic movement may contribute to safety issues, unforeseen congestion or other problems where the development connects to the road system or elsewhere on the road network. A TIA attempts to forecast these movements and their impact on the surrounding transport network.

A TIA is not a promotional exercise undertaken on behalf of a developer; a TIA must provide an impartial and objective description of the impacts and traffic effects of a proposed development. A full and detailed assessment of how vehicle and person movements to and from a development site might affect existing road and pedestrian networks is required. An objective consideration of the traffic impact of a proposal is vital to enable planning decisions to be based upon the principles of sustainable development.

This TIA also addresses the relevant clauses in C2.0, *Parking and Sustainable Transport Code*, and C3.0, *Road and Railway Assets Code*, the Tasmanian Planning Scheme – Devonport, 2021.

1.3 Statement of Qualification and Experience

This TIA has been prepared by an experienced and qualified traffic engineer in accordance with the requirements of Council's Planning Scheme and The Department of State Growth's, *Traffic Impact Assessment Guidelines*, August 2020, as well as Council's requirements.

The TIA was prepared by Keith Midson. Keith's experience and qualifications are briefly outlined as follows:

- 26 years professional experience in traffic engineering and transport planning.
- Master of Transport, Monash University, 2006
- Master of Traffic, Monash University, 2004



- Bachelor of Civil Engineering, University of Tasmania, 1995
- Engineers Australia: Fellow (FIEAust); Chartered Professional Engineer (CPEng); Engineering Executive (EngExec); National Engineers Register (NER)

1.4 Project Scope

The project scope of this TIA is outlined as follows:

- Review of the existing road environment in the vicinity of the site and the traffic conditions on the road network.
- Provision of information on the proposed development with regards to traffic movements and activity.
- Identification of the traffic generation potential of the proposal with respect to the surrounding road network in terms of road network capacity.
- Review of the parking requirements of the proposed development. Assessment of this parking supply with Planning Scheme requirements.
- Traffic implications of the proposal with respect to the external road network in terms of traffic efficiency and road safety.

1.5 Subject Site

The subject site is located at 158 Caroline Street, Devonport. The site is currently a large vacant lot located immediately north of the Bass Highway.

The subject site and surrounding road network is shown in Figure 1.



Figure 1 Subject Site & Surrounding Road Network

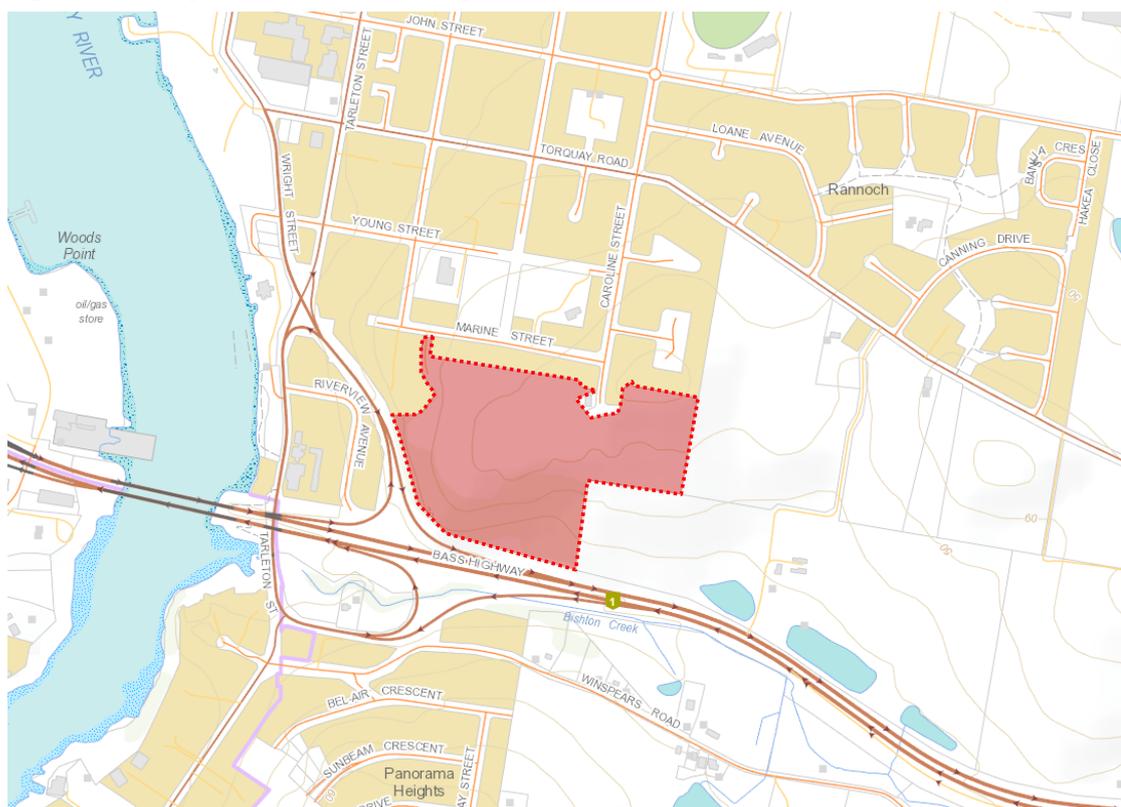


Image Source: LIST Map, DPIPWE

1.6 Reference Resources

The following references were used in the preparation of this TIA:

- Tasmanian Planning Scheme – Devonport, 2021 (Planning Scheme)
- Austroads, *Guide to Traffic Management, Part 12: Traffic Impacts of Developments*, 2019
- Austroads, *Guide to Road Design, Part 4A: Unsignalised and Signalised Intersections*, 2021
- Department of State Growth, *Traffic Impact Assessment Guidelines*, 2020
- Roads and Maritime Services NSW, *Guide to Traffic Generating Developments*, 2002 (RMS Guide)
- Roads and Maritime Services NSW, *Updated Traffic Surveys*, 2013 (Updated RMS Guide)
- Australian Standards, AS2890.1, *Off-Street Parking*, 2004 (AS2890.1:2004)



2. Existing Conditions

2.1 Transport Network

For the purposes of this report, the transport network consists of Marine Street and Caroline Street. Other roads such as Tarleton Street and Bass Highway were considered in the broader context of the surrounding network but were not assessed in detail.

2.1.1 Marine Street

Marine Street connects between David Street and Caroline Street, providing local connectivity for a small residential catchment area, including the subject site. Marine Street carries a relatively low traffic volume, in the order of 200 vehicles per day. The General Urban Speed Limit of 50-km/h applies to Marine Street. It has a sealed pavement width of approximately 7.5 metres with wider road verges. A footpath has been constructed on the northern side of Marine Street for approximately half its length.

Marine Street near the subject site is shown in Figure 2.

Figure 2 Marine Street



2.1.2 Caroline Street

Caroline Street connects between Marine Street at its southern end and Upper Drew Street at its northern end. It provides connectivity for residential and rural properties along its length. Caroline Street carries a relatively low traffic volume near the subject site, estimated to be in the order of 200 vehicles per day.

The General Urban Speed Limit of 50-km/h applies to Caroline Street. Caroline Street connects to Marine Street at a T-junction with Caroline Street having priority. The intersection is shown in Figure 3



Figure 3 Caroline Street/ Marine Street Junction



2.2 Road Safety Performance

Crash data can provide valuable information on the road safety performance of a road network. Existing road safety deficiencies can be highlighted through the examination of crash data, which can assist in determining whether traffic generation from the proposed development may exacerbate any identified issues.

Crash data was obtained from the Department of State Growth for a 5+ year period between 1st January 2017 and 31st January 2022 for the full length of Marine Street and Caroline Street between Torquay Road and Marine Street.

No crashes were reported during this time.

3. Proposed Development

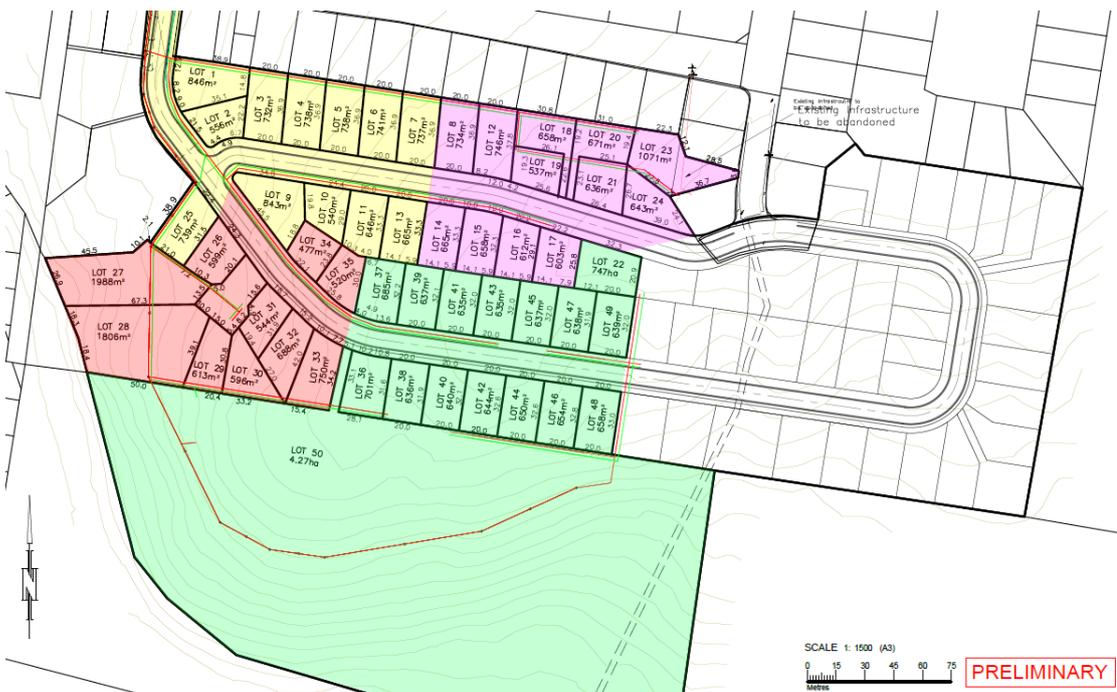
3.1 Development Proposal

The development proposal is a 49-lot residential subdivision and balance of land. Access will be provided at two locations: the termination of Caroline Street; and Marine Street.

The eastern side of the site is a proposed rezoning of land to General Residential. This land is likely to be subdivided at a future stage with an indicative layout provided in Figure 2.

The proposed development is shown in Figure 4.

Figure 4 Proposed Development Plans





4. Traffic Impacts

4.1 Trip Generation

Traffic generation rates were sourced from the RMS Guide. The RMS Guide (and RMS updated surveys) states the following traffic generation rates for residential developments:

- Daily vehicle trips 7.4 per dwelling
- Weekday peak hour vehicle trips 0.78 per dwelling

Based on these rates, the traffic generation from the subdivision when fully developed (with all dwellings occupied within the subdivision) is likely to be in the order of 363 vehicles per day, with a peak of 38 vehicles per hour.

It is noted that the land located at the eastern end of the site is proposed to be rezoned and is likely to be subdivided at a future stage. When considering the potential of the fully developed land, the traffic generation is likely to reach 637 vehicles per day with a peak of 67 vehicles per hour.

4.2 Trip Assignment

Traffic will access the site at two locations. The subdivision is located at the western end of the subject site and therefore the Marine Street access is likely to carry a higher traffic volume than the Caroline Street access.

A distribution of 70%/ 30% has been assumed for traffic utilising the new Marine Street junction and the existing Caroline Street junction. This equates to:

- New Marine Street junction: 254 vehicles per day, peak of 27 vehicles per hour
- Existing Caroline Street junction: 109 vehicles per day, peak of 11 vehicles per hour

Note that at a future stage of the subdivision the balance of land at the eastern end of the site is likely to be subdivided. When this occurs, the distribution of traffic at the two accesses is likely to be relatively even. A separate TIA will be required for the future subdivision of the balance of land.

4.3 Access Impacts

The Acceptable Solution A1.2 of Clause C3.5.1 of the Planning Scheme states: "*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*".

Council (as road authority) have not provided written consent for the new road junction at Marine Street. The Acceptable Solution A1.2 of Clause C3.5.1 of the Planning Scheme is not met.

The Performance Criteria P1 of Clause C3.5.1 of the Planning Scheme states:



"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".*

The following is relevant with respect to the development proposal:

- a. Increase in traffic. The increase in traffic at the Marine Street access will be approximately 254 vehicles per day. The peak traffic generation at the access will be approximately 27 vehicles per hour. The new road junction access to the site can cater for the relatively small peak hour traffic generation with a high level of service.
- b. Nature of traffic. The traffic generation will be residential in nature. This is consistent with traffic currently utilising Marine Street.
- c. Nature of road. Marine Street is a collector road that carries relatively low traffic volumes.
- d. Speed limit and traffic flow of road. The posted speed limit of Marine Street is 50-km/h. Traffic volumes are estimated to be in the order of 200 vehicles per day.
- e. Alternative access. The site is serviced by two accesses, including the existing access at Caroline Street. The two accesses to the site will ensure a good level of service once the subject site is fully subdivided.
- f. Need for use. The junction is required to provide access to the lots associated with the subdivision.
- g. Traffic impact assessment. This report documents the findings of a traffic impact assessment.
- h. Road authority advice. No written advice was received by Council (as road authority). Council provided advice that the development requires a TIA to accompany the development application.

Based on the above assessment, the development meets the requirements of Performance Criteria P1 of Clause C3.5.1 of the Planning Scheme. Specifically, the new junction with Marine Street will generate 254 vehicle movements per day (two-way movements), with a peak of 27 vehicle per hour. The traffic generation will not have any significant adverse impacts on the capacity of the junction or the surrounding road network.



4.4 Sight Distance

The availability of sufficient sight distance at an access or junction of a road is critical for road safety. Austroads defines Safe Intersection Sight Distance (SISD) as follows:

"SISD 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 (e.g. in the worst case, stalling across the traffic lanes) and to decelerate to a stop before reaching the collision point.

Is viewed between two points to provide inter-visibility between drivers and vehicles on the major road and minor road approaches. It is measured from a driver eye height of 1.1 m above the road to points 1.25m above the road which represents drivers seeing the upper part of cars.

Assumes that the driver on the minor road is situated at a distance of 5.0 m (minimum of 3.0 m) from the lip of the channel or edge line projection of the major road. SISD allows for a 3 second observation time for a driver on the priority legs of the intersection to detect the problem ahead (e.g. car from minor road stalling in through lane) plus the SSD.

Provides sufficient distance for a vehicle to cross the non-terminating movement on two-lane two-way roads, or undertake two-stage crossings of dual carriageways, including those with design speeds of 80-km/h or more.

Should also be provided for drivers of vehicles stored in the centre of the road when undertaking a crossing or right-turning movement.

Enables approaching drivers to see an articulated vehicle, which has properly commenced a manoeuvre from a leg without priority, but its length creates an obstruction.

Is measured along the carriageway from the approaching vehicle to the conflict point, the line of sight having to be clear to a point 5.0 m (3.0 m minimum) back from the holding line or stop line on the side road".

The Austroads SISD requirements are applicable to new road junctions. For a 50-km/h frontage road, the Austroads SISD requirement is 97 metres. The available sight distance exceeds 100 metres in both directions from the proposed junction along Marine Street, thus meeting Austroads SISD requirements (noting that full sight distance is available to the cul-de-sac termination of Marine Street to the west of the junction, and full sight distance is available to the Caroline Street junction to the east).

4.5 Pedestrian Impacts

The proposed development is likely to generate a relatively small amount of pedestrian activity associated with the residential lots. Whilst there is a general lack of pedestrian specific infrastructure, there is sufficient nature strip area to cater for the general pedestrian needs associated with the development.



4.6 Road Safety Impacts

No significant adverse road safety impacts are foreseen for the proposed development. This is based on the following:

- The relatively small peak hour traffic generation of 27 vehicles per hour will not have any significant impact on the traffic efficiency and general operation of the new intersection with Marine Street and the surrounding road network.
- The existing road safety performance of the network in the vicinity of the subject site does not indicate that there are any current road safety deficiencies that may be exacerbated by the proposed development. Noting specifically that no crashes have been reported in Marine Street or Caroline Street in the past five years.
- Adequate sight distances is available at the access for the prevailing vehicle speeds on Marine Street in accordance with Austroads requirements.

4.7 Internal Road Network Assessment

The subdivision will create a circular internal road that will connect to the southern termination of Caroline Street and a new access on Marine Street.

Council relies on the design criteria of LGAT Tasmanian Standard Drawings and Subdivision Guidelines, 2013. The requirements for residential subdivision roads are reproduced in Table 1. The following standards are applicable for the internal road network:

- Road design should be in accordance with Austroads Guidelines.
- LGAT Standard Drawings and Tasmanian Subdivision Guidelines.

Table 1 LGAT Standard Drawings – Road Requirements, Residential

ROAD TYPES	ROAD TYPE	ROAD LENGTH / NUMBER OF TENEMENTS	MINIMUM ROAD WIDTH	MINIMUM RESERVATION WIDTH	MINIMUM FOOTPATH REQUIREMENTS
1 – Arterial	Detail design required				
2 – Sub Arterial					
3 – Collector	Through Road	Any length	11.0m	20.0m	Both Sides
4 – Local	Through Road	Any length	8.9m	18.0m	One Side Only
	Cul-De-Sac	Length > 150m	8.9m	18.0m	One Side Only
	Cul-De-Sac	Length ≤ 150m and / or No. of equiv. tenements ≤ 15	6.9m	15.0m	One Side Only



The appropriate road design for the internal roads within the subdivision is a road reservation width of 18 metres with a sealed road width of 8.9 metres. The road reservation width of 18 metres is available on the subdivision plans.

The layout of the internal road network will ensure a low-speed environment, with good connectivity to the external road network.

The junction with the internal subdivision road with Caroline Street should be a T-junction with the internal road having priority. The junction of the internal road with Marine Street should be a T-junction with Marine Street having priority.



5. Conclusions

This traffic impact assessment (TIA) investigated the traffic and parking impacts of a proposed 49-lot residential subdivision development at 158 Caroline Street, Devonport.

The key findings of the TIA are summarised as follows:

- The proposed development is likely to generate 363 vehicles per day, with 38 vehicles per hour during peak periods on Marine Street and Caroline Street.
- It is noted that the land located at the eastern end of the site is proposed to be rezoned and is likely to be subdivided at a future stage. When considering the potential of the fully developed land, the traffic generation is likely to reach 637 vehicles per day with a peak of 67 vehicles per hour. Future stages of the development will be subject of a separate TIA.
- Traffic generation will be split across the two accesses. The new access in Marine Street will carry approximately 254 vehicles per day with a peak of 27 vehicles per hour. The existing Caroline Street junction will carry approximately 109 vehicles per day with a peak of 11 vehicles per hour.
- The available sight distance at the new junction on Marine Street meets the Austroads SISD sight distance requirements.

Based on the findings of this report and subject to the recommendations above, the proposed development is supported on traffic grounds.



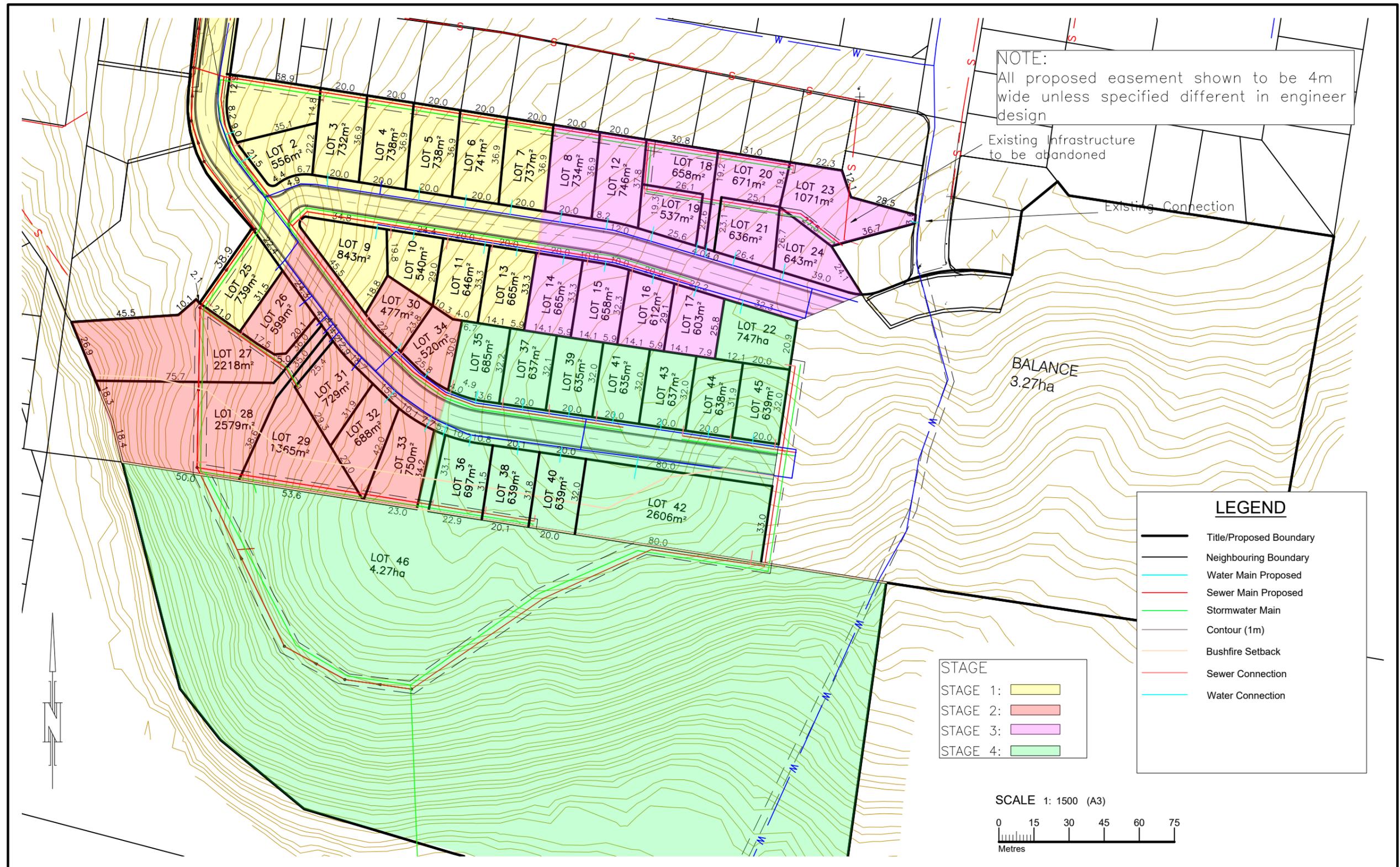
Midson Traffic Pty Ltd ABN: 26 133 583 025
28 Seaview Avenue
Taroona TAS 7053
T: 0437 366 040 E: admin@midsontraffic.com.au W: www.midsontraffic.com.au

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Document Status

Revision	Author	Review	Date
0	Keith Midson	Zara Kacic-Midson	9 February 2022



NOTE:
All proposed easement shown to be 4m wide unless specified different in engineer design

Existing Infrastructure to be abandoned
Existing Connection

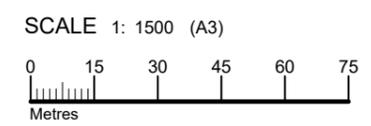
BALANCE
3.27ha

LEGEND

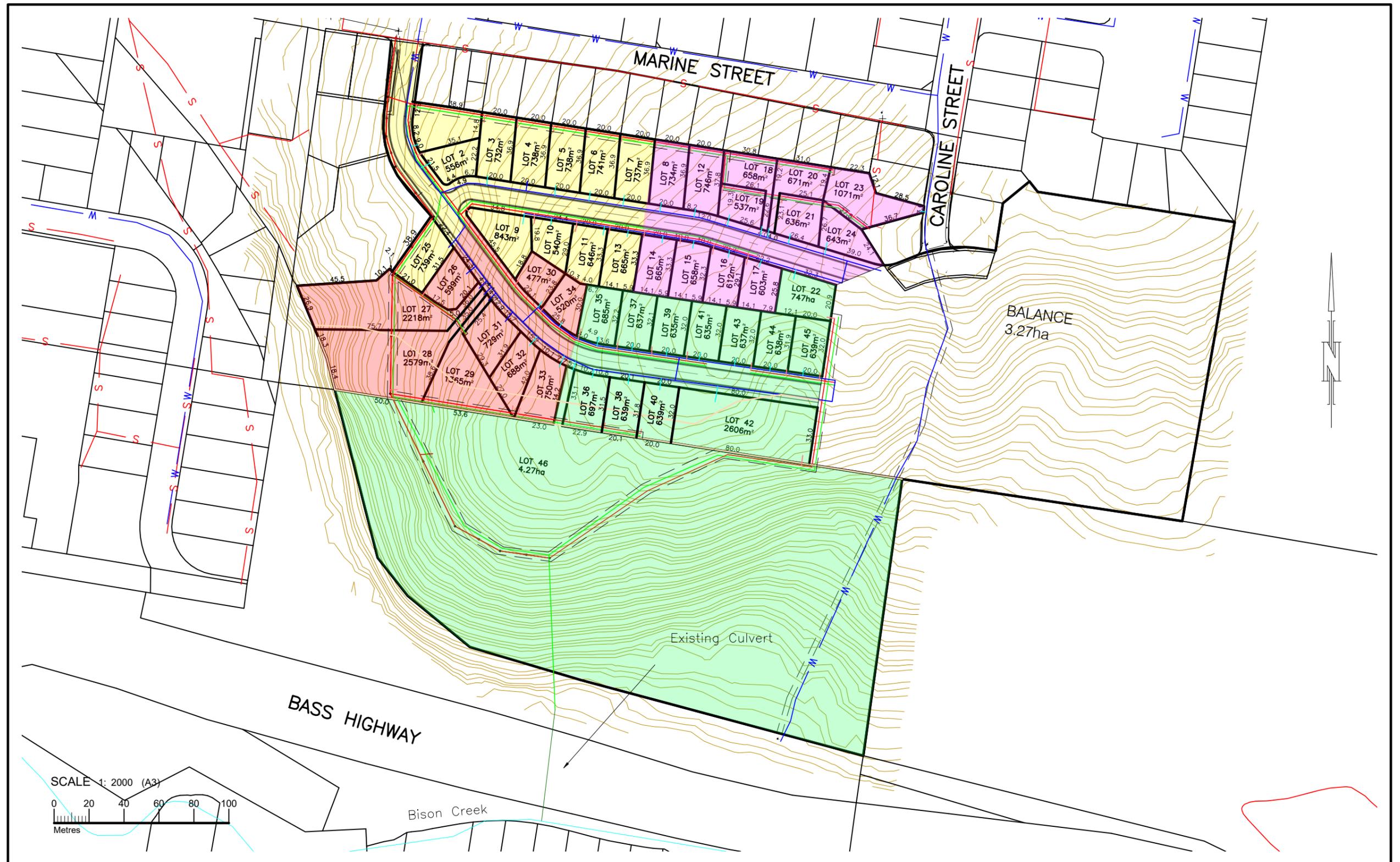
- Title/Proposed Boundary
- Neighbouring Boundary
- Water Main Proposed
- Sewer Main Proposed
- Stormwater Main
- Contour (1m)
- Bushfire Setback
- Sewer Connection
- Water Connection

STAGE

- STAGE 1:
- STAGE 2:
- STAGE 3:
- STAGE 4:



Owners 158 CAROLINE STREET PTY LTD	Title References F.R. 174766/1	Council Devonport	Planning scheme Tasmania Planning Scheme - Devonport	Zone General Residential	Zone Codes 8.0	Datum GDA94 MGA55	Schedule of Easements (Existing easements to be retained unless noted otherwise.) Nil proposed	
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.			PLANNER: JB	REVIEWED: AE	CLIENT: Vos Construction & Joinery Pty Ltd 47 LOT SUBDIVISION 158 Caroline Street, Devonport PLAN OF SUBDIVISION			
DATE/TIME: Tuesday, 13 September 2022 12:57:52 PM			DRAWN: AB		REVIEWED: AE		ADDRESS: 158 Caroline Street, Devonport	
PLOTTED: ALLAN.BROOKS			JOB MANAGER: ADRIAN EBERHARDT		DRAWING TITLE: PLAN OF SUBDIVISION		PHONE: +61 03 6431 4400 FAX: +61 03 6431 6663 EMAIL: pda.bne@pda.com.au	
FILE LOCATION: V:\BURNIE JOBS\48254E - 158 CAROLINE STREET, EAST DEVONPORT\AUTOCAD DRAWINGS\48254 P09.DWG			PRINTED DATE: 22/08/2022		SCALE: 1:1500 (A3)		PAPER: (A3)	
REV AMENDMENTS			DATE		JOB NUMBER: 48254		DISCIPLINE: PA	
SHEET: 01			DATE: 09		SCALE: 1:1500 (A3)		PAPER: (A3)	



Owners 158 CAROLINE STREET PTY LTD		Title References F.R. 174766/1		Council Devonport		Planning scheme Tasmania Planning Scheme - Devonport		Zone General Residential		Zone Codes 8.0		Datum GDA94 MGA55		Schedule of Easements (Existing easements to be retained unless noted otherwise.) Nil proposed	
- -		- -		- -		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.		PLANNER: JB REVIEWED: AE		CLIENT: Vos Construction & Joinery Pty Ltd 47 LOT SUBDIVISION 158 Caroline Street, Devonport PLAN OF SUBDIVISION		 PDA Surveyors Surveying, Engineering & Planning <small>ABN 71 217 808 325</small>		6 Queen Street Burnie, Tasmania, 7320 www.pda.com.au Also at: Launceston, Devonport, Hobart & Kingston PHONE: +61 03 6431 4400 FAX: +61 03 6431 6663 EMAIL: pda.bne@pda.com.au	
REV AMENDMENTS		DRAWN DATE APPR.		THIS SHEET MAY BE PRINTED USING COLOUR AND MAY BE INCOMPLETE IF COPIED		JOB MANAGER: ADRIAN EBERHARDT		PRINTED DATE: 22/08/2022		SCALE 1:2000		PAPER (A3)			
DATE/TIME: Tuesday, 13 September 2022 12:57:52 PM		PLOTTED: ALLAN.BROOKS		FILE LOCATION: V:\BURNIE JOBS\48254AE - 158 CAROLINE STREET, EAST DEVONPORT\AUTOCAD DRAWINGS\48254 P09.DWG		JOB NUMBER: 48254		DISCIPLINE: PA		SHEET: 02		REVISION: 09			



DEVONPORT CITY COUNCIL
ABN: 47 611 446 016
PO Box 604 Devonport TAS 7310 – 137 Rooke Street, Devonport
Telephone 03 6424 0511
Email council@devonport.tas.gov.au Web www.devonport.tas.gov.au

Submission Date
28/11/2022

I/We
Ms. Stephanie Crane

Of
Fetteresso 5A Marine Street
East Devonport, Tasmania 7310
Australia

Email Address
ricksteff@hotmail.com

Phone Number
0415348701

Development Application Number
PA2022.0145

Address of Development
158 Caroline Street
East Devonport 7310
Australia

Details of representation
Attention General Manager. My name is Stephanie Crane and I own Fetteresso , the Heritage Listed property at 5A Marine Street, East Devonport. 7310. Our land adjoins Lot 25 and 27 and across the right of way. The legal right of way to my property comes off Marine Street, it is the only access I have to my house. I am concerned about future access during the construction period of the road system. (Time line unknown to me) My elderly mother lives with me and I need to think of medical service vehicle access also, this access needs to be available for us to use at all times. Also what systems will be put in place to counter noise, dust omission's ect whilst the construction is ongoing? These are my concerns that I have at present against the granting of the Planning permit PA2022.0145. Happy to speak to anyone regarding this matter. Regards Stephanie Crane

Upload Supporting Documentation such as photos, plans, sketches etc (optional)
• [IMG20221128102519.jpg](#)

Consent
 I agree that all the information i have provided is accurate and is truthful.

Privacy Consent



	<p>DEVONPORT CITY COUNCIL ABN: 47 611 446 016 PO Box 604 Devonport TAS 7310 – 137 Rooke Street, Devonport Telephone 03 6424 0511 Email council@devonport.tas.gov.au Web www.devonport.tas.gov.au</p>
---	---

I agree to the privacy policy of the Devonport City Council.



		<p><i>The City with Spirit</i></p>
---	---	------------------------------------

From: Tony Jamieson <jamo_t@msn.com> on behalf of Tony Jamieson <tjamieso@iinet.net.au>
Sent: Monday, 28 November 2022 3:53 PM
To: Devonport City Council
Subject: Representation - PA2022.0145 - Tony Jamieson
Attachments: Screenshot (3).png

Dear Alex

Having viewed the proposed plans and map, I noticed that the sewer on this current proposed plan is not shown as where the actual sewer is. Our question is will this affect us?

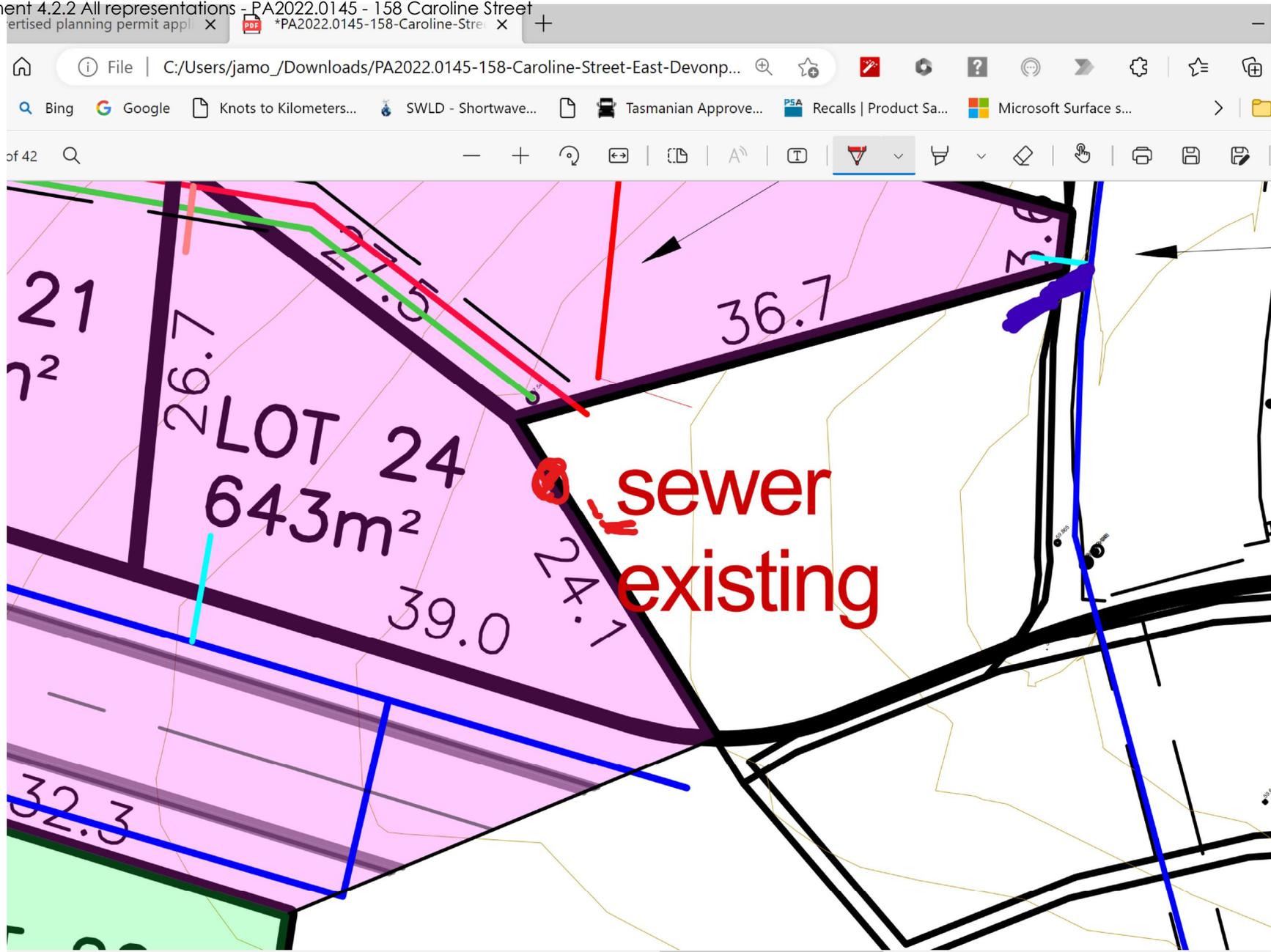
We have been at this residence continuously since 1985 and have seen a number of proposals to develop the land since then, and all have shown the services, roads and crossovers to be in different places.

Thankyou in advance for addressing our concerns

Regards

Tony Jamieson
160 Caroline Street
East Devonport

0427877044



From: Fraser Mearns <fmearns@harvestmoon.com.au>
Sent: Monday, 28 November 2022 10:37 PM
To: Devonport City Council
Subject: Representation - PA2022.0145 - Fraser & Barbara Mearns - 158 Caroline Street

Dear Sir,

We refer to the Application for Planning Permit PA2022.0145 for a 47 lot subdivision at 158 Caroline Street, East Devonport.

We are in the process of purchasing an adjacent property at 19 Marine Street. This property is set into the natural slope below the proposed subdivision and backed by a retaining wall approximately 1.5 metres high.

Our property settlement date for 19 Marine Street is 5th December 2022 so we are currently unable to fully assess the nature of the retaining wall's construction. The rear wall of the house is approximately 2 metres from the back fence which sits atop the retaining wall.

Our concern is that earthworks utilising heavy machinery to install sewerage and stormwater pipes in the proposed close proximity to our boundary fence could challenge the structural integrity of the retaining wall, and therefore the house itself. As this appears to be the only house built so close to the fence line, and set so low into the slope, we wonder if any consideration was given to how the proposed installation of water service pipes could impact the integrity of the retaining wall?

Yours sincerely,
Fraser and Barbara Mearns
19 Marine Street
East Devonport

The General Manager
Devonport City Council
PO Box 604
Devonport TAS 7310

Please see attached petition re
PA 2022, 0145 - Application for Planning
Permit.

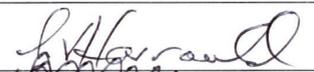
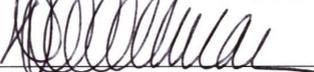
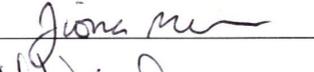
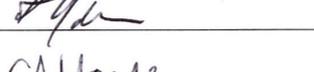
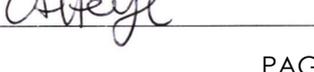
For feedback or queries please
contact Laurence V. Harroul
18 Nathan Court East Devonport.
0412 613 613

L V Harroul

Response to Planning Application PA20220148
47 lot subdivision at 158 Caroline Street East Devonport

We, the undersigned, object to the above proposed development on the following grounds and request that the Council reject the proposal:

- **Destruction of agricultural land:** At this time of global concerns about food security it is untenable to be considering converting agricultural land to housing.
- **Increased vehicle traffic:** the proposal indicates an increase in vehicle traffic volume of at least threefold. Also, the proposal does not appear to take into account the change in traffic due to the QuayLink redevelopment of East Devonport.
- **Little access to public transport:** given the lack of public transport in the area adding an extra 47 households will have a significant impact.
- **Water supply:** water pressure in the area is poor. While it meets the minimum requirements specified by TasWater the increased load based on 47 new households (in the initial proposal) will likely impact the existing properties.
- **Current property values:** this has the potential to significantly impact the value of the existing properties especially as there is no restriction on building height.

Name	Address	Phone	Signature
LAWRENCE HARROLD	18 NATHAN CRT EAST DEVONPORT 7310	0412 613 613	
DANITA NEEDLEMAN	18 NATHAN CRT EAST DEVONPORT 7310	0401 001 265	
MADÉLINE MINSLON	6 MARINE ST, EAST DEVONPORT 7310	0400208323	
STEPHEN MINSLON	" " " " " "	0429925852	
DATE HOOPER	1 marine st east Devonport 7310	04 731 39753	
Rod Grieve	5A Marine St east Devonport 7310	0419767183	
B L	9A MARINE ST EAST DEVONPORT 7310	040751455	
Jason Close	13 Marine ST East Devonport 7310	0447182096	
Taylor Close	13 Marine Street East Devonport 7310	0438167250	
FIONA MUIR	15 MARINE STREET EAST DEVONPORT 7310	0439557160	
LYN WRIGLEY	17 MARINE ST. EAST DEVONPORT 7310	0499009942	
ALLAN MOUNSON	17 MARINE ST EAST DEVONPORT	0427151942	
COURTNEY HOYE	19 MARINE ST EAST DEVONPORT	0439 007 790	

Response to Planning Application PA20220148
47 lot subdivision at 158 Caroline Street East Devonport

We, the undersigned, object to the above proposed development on the following grounds and request that the Council reject the proposal:

- **Destruction of agricultural land:** At this time of global concerns about food security it is untenable to be considering converting agricultural land to housing.
- **Increased vehicle traffic:** the proposal indicates an increase in vehicle traffic volume of at least threefold. Also, the proposal does not appear to take into account the change in traffic due to the QuayLink redevelopment of East Devonport.
- **Little access to public transport:** given the lack of public transport in the area adding an extra 47 households will have a significant impact.
- **Water supply:** water pressure in the area is poor. While it meets the minimum requirements specified by TasWater the increased load based on 47 new households (in the initial proposal) will likely impact the existing properties.
- **Current property values:** this has the potential to significantly impact the value of the existing properties especially as there is no restriction on building height.

Name	Address	Phone	Signature
Cathy Page	19 Marine Street, East Devonport	0460534722	Cathy
Matthew Bicanic	27 Marine St, East Devonport	0439613108	M Bicanic
Nichelle Clements	29 Marine St East Devonport	0419 418 264	Nichelle Clements
Judy Munday	20 Nathan Lint East Devonport	0400854689	Judy Munday
Lorna Watt	156 CAROLINE ST EAST DEVONPORT	0431 501389	L. Watt
Abdul	31 Marine St East Devonport	0417485757	Abdul
IAN ANDERSON	20 Marine St - East Devonport	0408141812	I. Anderson
Craig Odgers	17 Nathan Ct East Devonport		Craig Odgers

Office use
Application no. _____
Date received: _____
Fee: _____
Permitted/Discretionary



Devonport City Council

Land Use Planning and Approvals Act 1993 (LUPAA)

Tasmanian Planning Scheme - Devonport

Application for Planning Permit

Use or Development Site

Street Address: 57A Berrigan Road, Miandetta TAS 7310

Certificate of Title Reference No.: FR141199/1

Applicant's Details

Full Name/Company Name: Jana Rockliff of Veris Australia Pty Ltd

Postal Address: 100 Best Street, Devonport TAS 7310

Telephone: 03 6421 3509

Email: j.rockliff@veris.com.au

Owner's Details (if more than one owner, all names must be provided)

Full Name/Company Name: ANN-TAS Pty Ltd (Contact: David Calgaro)

Postal Address: 19-21 Huon Place, Bella Vista NSW 2153

Telephone: 02 8226 8508

Email: david@annsca.com

ABN: 47 611 446 016
 PO Box 604
 137 Rooke Street
 Devonport TAS 7310
 Telephone 03 6424 0511
www.devonport.tas.gov.au
council@devonport.tas.gov.au

Applications may be lodged by email to Council - council@devonport.tas.gov.au
 The following information and plans must be provided as part of an application unless the planning authority is satisfied that the information or plan is not relevant to the assessment of the application:

Application fee	
Completed Council application form	
Copy of the current certificate of title, including title plan and schedule of easements	
Any written permission and declaration of notification required under s.52 of LUPAA	
A site analysis and site plan at an acceptable scale on A3 or A4 paper (1 copy) showing:	
<ul style="list-style-type: none"> • The existing and proposed use(s) on the site 	
<ul style="list-style-type: none"> • The boundaries and dimensions of the site 	
<ul style="list-style-type: none"> • Topography including contours showing AHD levels and major site features 	
<ul style="list-style-type: none"> • Natural drainage lines, watercourses and wetlands on or adjacent to the site 	
<ul style="list-style-type: none"> • Soil type 	
<ul style="list-style-type: none"> • Vegetation types and distribution including any known threatened species, and trees and vegetation to be removed 	
<ul style="list-style-type: none"> • The location, capacity and connection point of any existing services and proposed services 	
<ul style="list-style-type: none"> • The location of easements on the site or connected to the site 	
<ul style="list-style-type: none"> • Existing pedestrian and vehicle access to the site 	
<ul style="list-style-type: none"> • The location of existing and proposed buildings on the site 	
<ul style="list-style-type: none"> • The location of existing adjoining properties, adjacent buildings and their uses 	
<ul style="list-style-type: none"> • Any natural hazards that may affect use or development on the site 	
<ul style="list-style-type: none"> • Proposed roads, driveways, parking areas and footpaths within the site 	
<ul style="list-style-type: none"> • Any proposed open space, common space, or facilities on the site 	
<ul style="list-style-type: none"> • Proposed subdivision lot boundaries (where applicable) 	
<ul style="list-style-type: none"> • Details of any proposed fencing 	
Where it is proposed to erect buildings, a detailed layout plan of the proposed buildings with dimensions at a scale of 1:100 or 1:200 on A3 or A4 paper (1 copy) showing:	
<ul style="list-style-type: none"> • Setbacks of buildings to property (title) boundaries 	
<ul style="list-style-type: none"> • The internal layout of each building on the site 	
<ul style="list-style-type: none"> • The private open space for each dwelling 	
<ul style="list-style-type: none"> • External storage spaces 	
<ul style="list-style-type: none"> • Parking space location and layout 	
<ul style="list-style-type: none"> • Major elevations of every building to be erected 	
<ul style="list-style-type: none"> • The relationship of the elevations to existing ground level, showing any proposed cut or fill 	
<ul style="list-style-type: none"> • Shadow diagrams of the proposed buildings and adjacent structures demonstrating the extent of shading of adjacent private open spaces and external windows of buildings on adjacent sites 	
<ul style="list-style-type: none"> • Materials and colours to be used on roofs and external walls 	
Details of any signage proposed	

Value of use and/or development

\$ _____

Notification of Landowner/s (s.52 *Land Use Planning and Approvals Act 1993*)

If land is not in applicant's ownership

I, Jana Rockliff of Veris Australia Pty Ltd declare that the owner/s of the land has/have been notified of my intention to make this application.

Applicant's signature:  Date: 14/09/2022

If the application involves land owned or administered by the Devonport City Council

Devonport City Council consents to the making of this permit application.

General Manager's signature: _____ Date: _____

If the application involves land owned or administered by the Crown

Crown consent must be included with the application.

Signature

I apply for consent to carry out the use and development described in this application. I declare that all the information given is true and correct. I also understand that:

- if incomplete, the application may be delayed or rejected; and
- more information may be requested in accordance with s.54 (1) of LUPAA.

PUBLIC ACCESS TO PLANNING DOCUMENTS - *DISCRETIONARY* PLANNING APPLICATIONS (s.57 of LUPAA)

I understand that all documentation included with a discretionary application will be made available for inspection by the public.

Applicant's signature:  Date: 14/09/2022

PRIVACY ACT

The personal information requested on this form is being collected by Council for processing applications under the *Land Use Planning and Approvals Act 1993* and will only be used in connection with the requirements of this legislation. Council is to be regarded as the agency that holds the information.

Fee & payment options

DD

Pay by Direct Deposit – BSB: 067-402 Account No. 000 000 13 – Please quote your application number.



Pay in Person at Service Tasmania – Present this notice to any Service Tasmania Centre, together with your payment. See www.service.tas.gov.au for opening hours.



Pay by Phone – Please contact the Devonport City Council offices on 64240511 during office hours, Monday to Friday.



Pay by Post – Cheques should be made payable to Devonport City Council and posted to PO Box 604, Devonport, Tasmania, 7310.

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME 141199	FOLIO 1
EDITION 5	DATE OF ISSUE 11-Nov-2021

SEARCH DATE : 12-Sep-2022

SEARCH TIME : 10.51 AM

DESCRIPTION OF LAND

City of DEVONPORT
 Lot 1 on Plan 141199
 Derivation : Part of Lot 278 Gtd to J Thomas
 Prior CT 136132/1

SCHEDULE 1

M925509 TRANSFER to ANN-TAS PTY LTD Registered 11-Nov-2021
 at noon

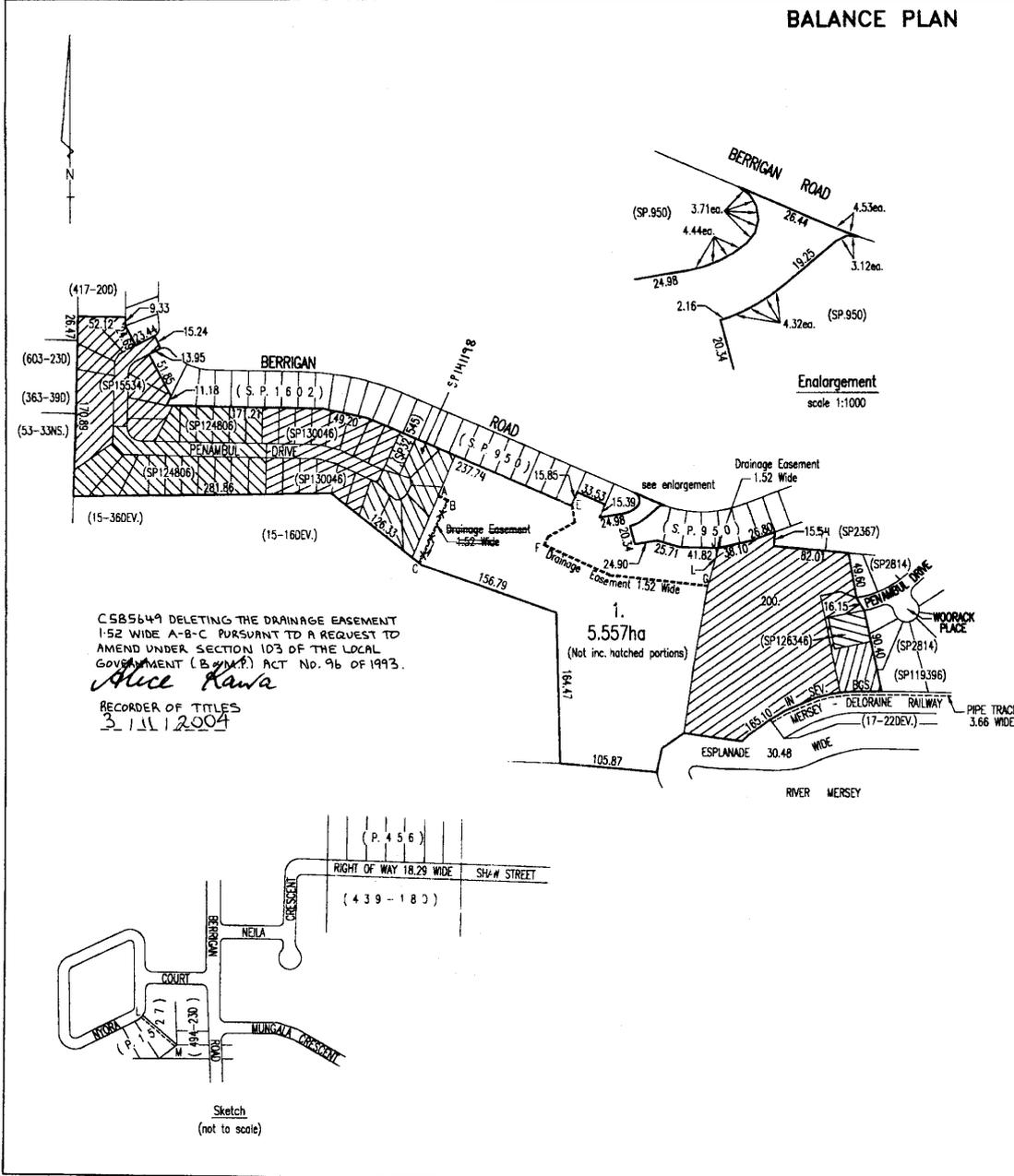
SCHEDULE 2

Reservations and conditions in the Crown Grant if any
 BENEFITING EASEMENT: Right of Carriageway over the Right of
 Way 18.29 wide on Plan No.141199
 BENEFITING EASEMENT: Right of Drainage over the Drainage
 Easement marked L.M. on Plan No.141199
 BURDENING EASEMENT: Right of Drainage [appurtenant to Lots 167
 to 170 on Sealed Plan No. 950) over the Drainage
 Easement marked E.F.G. on Plan No.141199
 BURDENING EASEMENT: Right of Drainage [appurtenant to Lots 99
 to 104 on Sealed Plan No. 950) over the Drainage
 Easement marked J.L. on Plan No.141199
 A155232 FENCING CONDITION in Transfer

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

OWNER Dallas (Tas) Pty Ltd		PLAN OF TITLE		Registered Number	
FOLIO REFERENCE CT.Vol 136132 fol 1				P 141199	
GRANTEE Part of Lot 278, 500 Acres gtd to Jocelyn Thomas		LOCATION CITY OF DEVONPORT		APPROVED - 5 MAY 2004 <i>Alice Kawa</i> Recorder of Titles	
FIRST SURVEY PLAN No. P.6879		COMPILED BY K.R.Michell & Assoc. P/L		SCALE 1:4000 LENGTHS IN METRES	
MAPSHEET MUNICIPAL CODE No. 108 (4493-1Z)	LAST UPI No FTF 22	LAST PLAN No.	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN		





303721 Submission report

Residential subdivision
57a Berrigan Road,
Devonport
ANNTAS
September 2022

DEVELOP
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1. SUMMARY

This report is in support of a Development Application in accordance with Section 57 of the Land Use Planning and Approvals Act 1993 for residential subdivision at 57A Berrigan Road, Miandetta. The subject site is owned by ANN-TAS Pty Ltd. This application is made on behalf of the owner and with their consent.

The proposal is for a residential subdivision to create 48 residential lots and associated infrastructure (road, services), a lot for potential future development which is currently impacted by existing powerlines and threatened vegetation (Lot 51) as well as a Balance land comprising three future residential lots which are currently required for bushfire hazard management. The subdivision is proposed to be undertaken in two stages.

Devonport City Council is the approving authority for the application.

An assessment of the proposed development against the provisions of the *Tasmanian Planning Scheme – Devonport* has been undertaken. Those provisions relevant to the development are discussed in this report.

The proposal is consistent with the above-mentioned requirements and is considered appropriate for approval.

2. PROPOSAL DESCRIPTION

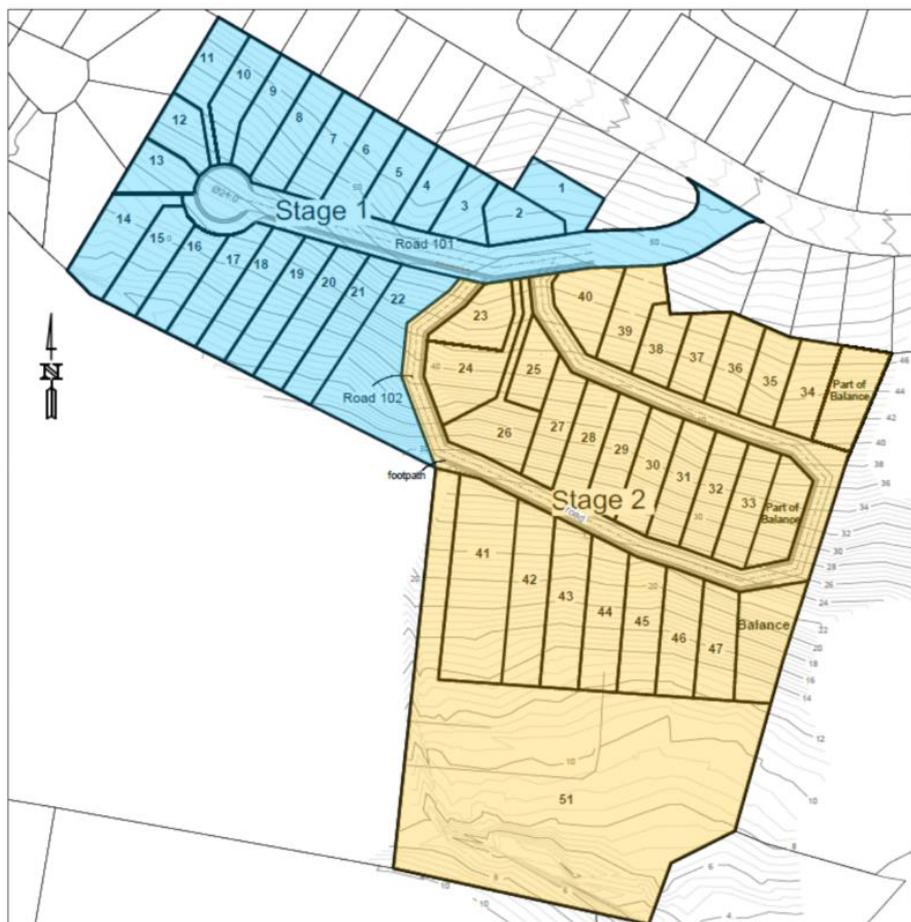
The proposal is illustrated in attached plan 303721_D06_Rev5 for a 49-lot residential subdivision and associated infrastructure. The subject site has unique features like topography and natural values, which have been integrated into the proposed design.

The western side of the property will be accessed via a double lane road ending in a cul-du-sac. Due to the steepness of the site, it is proposed to access the lots south of the cul-du-sac (lots 14 to 17) via a 5m wide laneway similar to the design of adjoining subdivision to the west (Penambul Drive).

The eastern side of the subdivision will be accessed via a one-way loop road. Provisions are made to provide road connectivity to the adjoining property to the east if this land will be developed. A footpath is proposed on one side of the road with the loop road providing for a mountable footpath to allow sufficient area for access and manoeuvring in an emergency situation.

Lot 51 comprises the existing power lines and a threatened vegetation community. Future lots along the eastern boundary are joined to this development lot as they cannot comply with required bushfire setbacks without a formal permission or the clearance of the adjoining property to the east. It is envisaged that these lots, which are naturally created through the subdivision layout, can be subdivided when the clearing of the adjoining property has occurred.

All lots are capable of connecting into existing or proposed services infrastructure. The proposal is staged into 2 stages with a third stage being undertaken as separate DA when the adjoining property to the east has been cleared.



3. SITE DESCRIPTION

The subject site is described in the following table:

Location	FR141199/1 - 57a Berrigan Road, Miandetta
Ownership	ANN-TAS Pty Ltd
Site Area (ha) and Road Frontages	5.76ha with about 64m frontage to Berrigan Road
Encumbrances	Taswater drainage easement (x2), private drainage easement, TasNetworks Transmission line easement
Existing Use	vacant
Local Government Authority	Devonport City Council
Surrounding Land	The proposed site is surrounded by residential land comprising residential developments to the north and west and vacant residential land to the south-west, south and east. The subject site is also in close proximity to the utilities zone comprising a TasWater sewerage plant.
Flora and Fauna	The subject site comprises of cleared land or regrowth land on the northern half of the area. There is some threatened vegetation identified south of the transmission line and a small area containing burrowing crayfish.
Topography	The subject site slopes towards the south with areas of considerably steep slopes.
Planning Scheme Designations	General Residential Zone Overlays: Bushfire-Prone Areas, Priority Vegetation, Waterway Protection area, Electricity Transmission Infrastructure Code
Referral requirements	TasWater, TasNetworks

4. DEVELOPMENT ASSESSMENT

4.1. Tasmanian Planning Scheme - Devonport

The site is subject to assessment under the *Tasmanian Planning Scheme – Devonport*.

The proposal has been assessed against the provisions of the following Sections:

- 8.0 General Residential Zone
- C2.0 Parking and Sustainable Transport Code
- C3.0 Road and Railway Assets Code
- C4.0 Electricity Transmission Infrastructure Protection Code
- C7.0 Natural Assets Code
- C13.0 Bushfire-Prone Areas Code

4.1.1. General Residential Zone

The proposal is consistent with the Zone Purpose Statements providing for residential development where full infrastructure services are available or can be achieved through extension.

Those Clauses relevant to the proposal are addressed below:

Clause 8.2 Use Table

PROPOSAL RESPONSE

The proposed development is for residential use which is permitted in this zone.

Clause 8.6.1 Lot design

PROPOSAL RESPONSE

Each proposed lot on the plan of subdivision is in excess of 450m² with lot sizes ranging from 472m² to 1.21ha. All proposed lots are capable of accommodating a 10m x 15m building envelope clear of all required setbacks, easements or other title restrictions. However, the uniqueness and steepness of the site required an innovative design with building envelopes on steeper slopes than 1:5. The proposed lots have been designed to allow building envelopes down / up slopes envisioning building designs as shown in below picture.



The lots have been designed in corporation with engineering advice to ensure that properties can be build on and accessed of proposed road network. The proposal is therefore considered compliant with A1 and P1 of this clause.

All lots except lots 1, 9 to 15 and 51 comply with the acceptable solution A2 of this clause. Lot 1 results in the reduced frontage due to existing surrounding residential developments. Lots 9 to 15 have reduced frontages as a result of the topography of the land and the efficient use of the land for road infrastructure and residential development. The design of the proposed cul-du-sac is similar to the solution in the adjoining residential area (Penambul Drive). Therefore, the proposed lots are consistent with the pattern of existing established developments in the area. The proposed widths of these lots range from 3.6m to 10m. Due to the steepness of the site, accesses to all lots have been overseen by an engineering consultant to ensure that all lots are accessible. The proposal is therefore considered compliant with A2 or P2 of this clause.

The steepness of the site limits the location of road infrastructure complying with required Municipality Road Standards. In consultation with Council and an engineering consultant the proposed one-way loop road has been agreed on. The loop road will have a road surface of 5m to ensure the safe and efficient use of all users. The one sided footpath will be mountable to comply with bushfire requirements. The proposal is compliant with A3 of this clause.

Except for lots 1,12,13 and 51 all lots have their long axis between 30° west of true north and 30° east of true north complying with the acceptable solution A4 of this clause. The four (4) mentioned lots not complying with the acceptable solution are required to make efficient use of the land and proposed infrastructure. The lots are consistent with existing pattern of subdivision in the area providing sufficient usable area for development. The proposal is therefore considered compliant with A4 or P4 of this clause.

Clause 8.6.2 Roads

PROPOSAL RESPONSE

The proposal incorporates the construction of a new road ending in a cul-du sac to provide access to the western side as well as a one-way ring road to provide access to the eastern side of the property. The road has been designed sensitive to the existing topography of the site incorporating a future road connection point to the residential zoned property to the east. There is no road network strategy available; however, the proposed road has been discussed with Council planning and engineering department in detail and has been agreed on in principle. The proposal is considered compliant with P1 of this clause.

Clause 8.6.3. Services

PROPOSAL RESPONSE

Each lot on the proposed plan of subdivision is capable of being connected to reticulated services compliant with A1, A2 and A3 of this clause. Please refer to enclosed engineering design for more detail.

4.1.2. C2.0 Parking and Sustainable Transport Code

The proposed subdivision provides for future residential lots of sufficient size to accommodate on-site parking spaces. Future residential developments will have to address the Code in detail at the time of development. The subdivision layout has been overseen by our consulting engineer Chris Martin and found feasible in regard to property accesses. The proposed subdivision is considered compliant with the requirements of this Code.

4.1.3. C3.0 Road and Railway Assets Code

The proposed development requires to upgrade the current vehicle access point to a road junction to provide access to the subject land. A Traffic Impact Assessment has been undertaken in the early stages of the subdivision with a different design and lot amount. However, the intersection in question and the impact on the existing road network will be comparable with the new design (subject to this DA) having less lots and therefore will generate less traffic as expected in enclosed report.

Based on the RMS Technical Direction the following table compares the traffic volume assumed in enclosed report to proposed development to demonstrate that provided report can be considered adequate to address the planning

scheme:

	60 lot subdivision (previous design)	51 lot subdivision (current design)
Daily	642 vehicle movements	535 vehicle movements
AM Peak	60 vehicle movements	51 vehicle movements
PM Peak	57 vehicle movements	49 vehicle movements

The assessment of the proposal against the planning scheme undertaken within the Traffic Impact Assessment is considered adequate for the amended layout and therefore the proposal is considered to comply with P1 and A1.5.

4.1.4. C4.0 Electricity Transmission Infrastructure Protection Code

The proposed subdivision complies with the acceptable solution C4.7.1 A1 by creating lots with a minimum building envelop of 10 x 15m entirely outside of the inner protection zone of the Transmission line.

4.1.5. C7.0 Natural Assets Code

The proposed development is designed sensitive to existing threatened flora and fauna identified on site and therefore considered compliant with the requirements of this Code. Please refer to enclosed Natural Values Assessment undertaken by Sally Scrivens and Astrid Ketelaar of RMCG for further information.

4.1.6. C13.0 Bushfire-Prone Areas Code

The proposed development complies with the requirements set out by the Bushfire-Prone Areas Code. Please refer to enclosed bushfire report prepared by Michael Tempest from RMCG for further information.

5. CONCLUSION

The application is made pursuant to Section 57 of the Land Use Planning and Approvals Act 1993 and the *Tasmanian Planning Scheme - Devonport*, in particular the provisions relating to residential subdivision in the General Residential Zone.

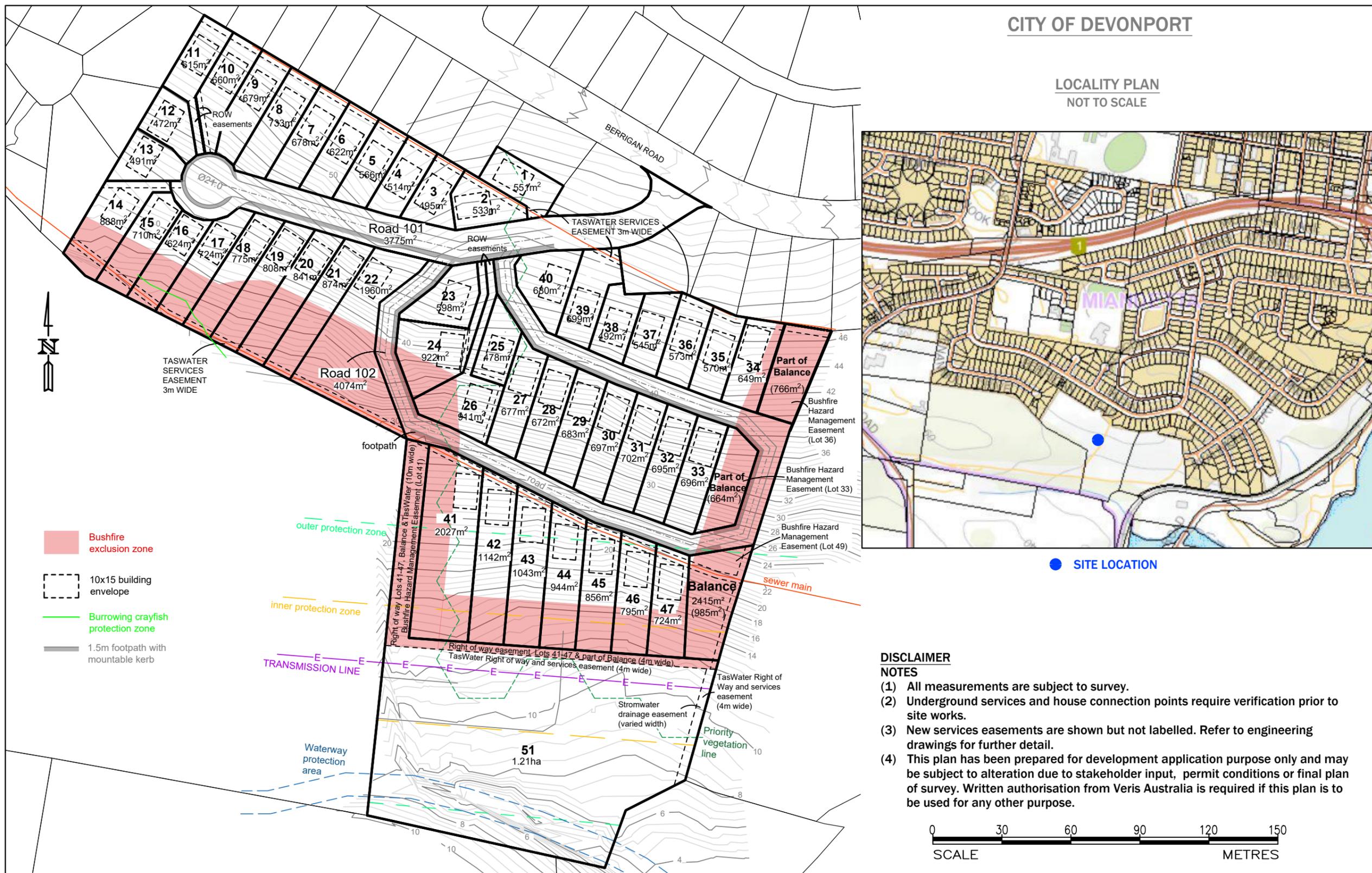
The proposal will allow for the creation of 49 residential lots, two road lots, a balance lot comprised of three future residential lots currently not suitable for habitable building developments due to bushfire as well as a potential future development lot containing the transmission line and threatened vegetation.

It is therefore requested that the application will be recommended for approval.

—
Devonport
100 Best Street
Devonport TAS 7310

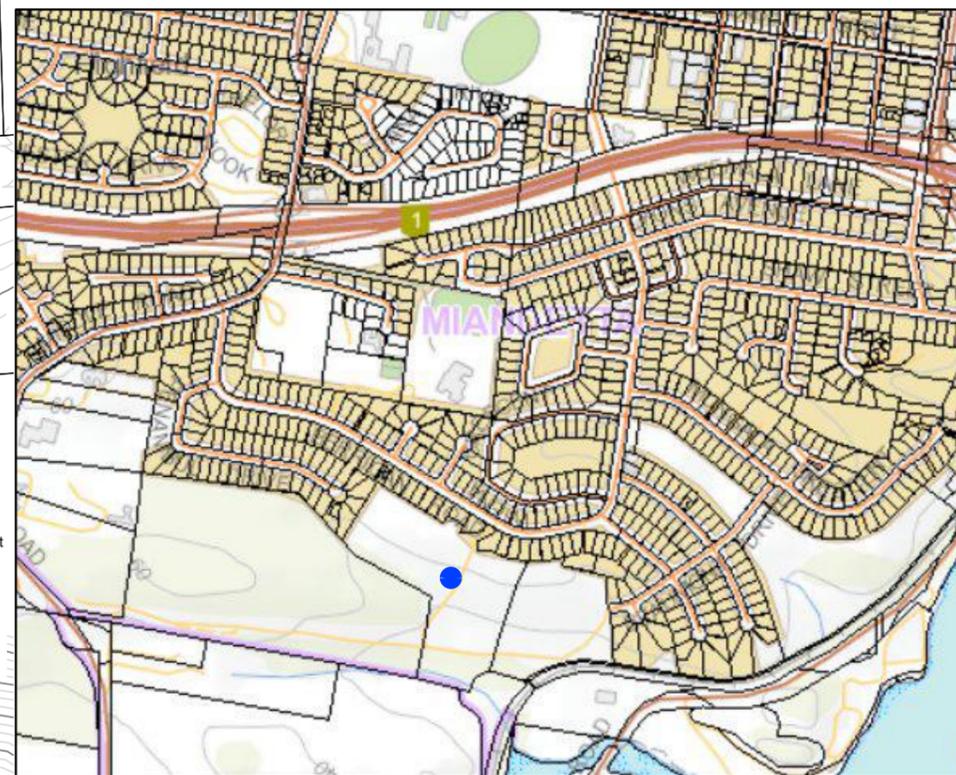
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CITY OF DEVONPORT

LOCALITY PLAN
NOT TO SCALE



● SITE LOCATION

DISCLAIMER

NOTES

- (1) All measurements are subject to survey.
- (2) Underground services and house connection points require verification prior to site works.
- (3) New services easements are shown but not labelled. Refer to engineering drawings for further detail.
- (4) This plan has been prepared for development application purpose only and may be subject to alteration due to stakeholder input, permit conditions or final plan of survey. Written authorisation from Veris Australia is required if this plan is to be used for any other purpose.



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Devonport TAS 7310
03 6421 3500
devonport@veris.com.au
veris.com.au
ABN 25 098 991 210

NO	DATE	DRN	CHKD	DESCRIPTION
6	01/11/22	JR	JR	Add TasWater easements
5	31/08/22	JR	JR	Add footpath
4	15/07/22	JR	JR	Amend cul-du sac design for bushfire compliance

This plan is not intended for attachment to sale contract documents

OUR REF: 303721_D06_Rev6
CONTOUR INTERVAL: 0.5m
DATUM: AHD
SCALE: 1:1500 ORIGINAL SHEET SIZE: A3
DATE OF SURVEY:
DRAWING No:303721_D06 REV 06 SHEET No: 1 OF 3

ANNTAS
PLAN OF SUBDIVISION

57A Berrigan Road, Devonport

CITY OF DEVONPORT

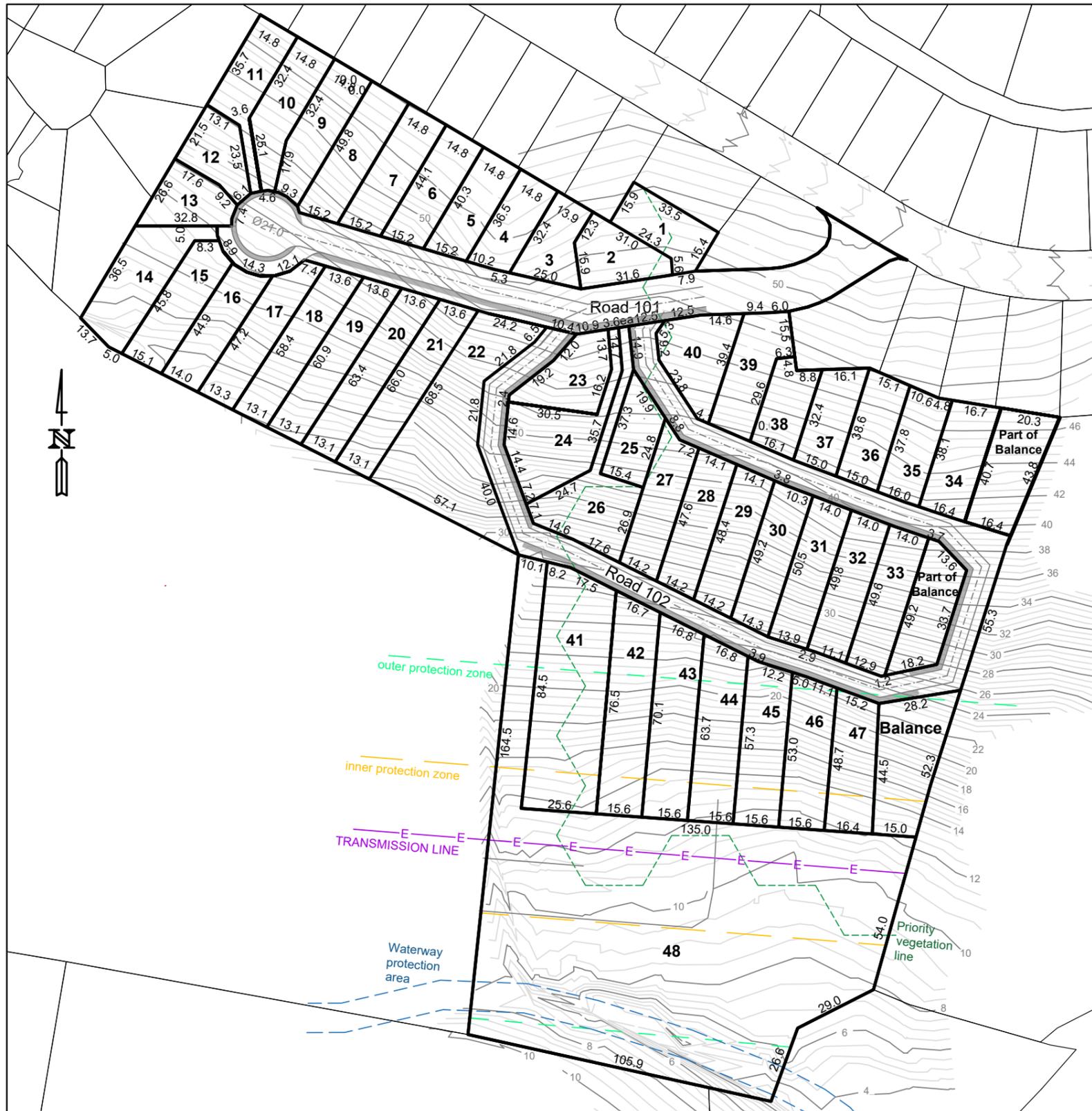
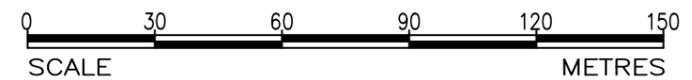
LOCALITY PLAN
NOT TO SCALE



● SITE LOCATION

DISCLAIMER
NOTES

- (1) All measurements are subject to survey.
- (2) Underground services and house connection points require verification prior to site works.
- (3) Boundary dimensions around cul-du-sac have been simplified and are considered sufficient for planning purposes
- (4) This plan has been prepared for development application purpose only and may be subject to alteration due to stakeholder input, permit conditions or final plan of survey. Written authorisation from Veris Australia is required if this plan is to be used for any other purpose.



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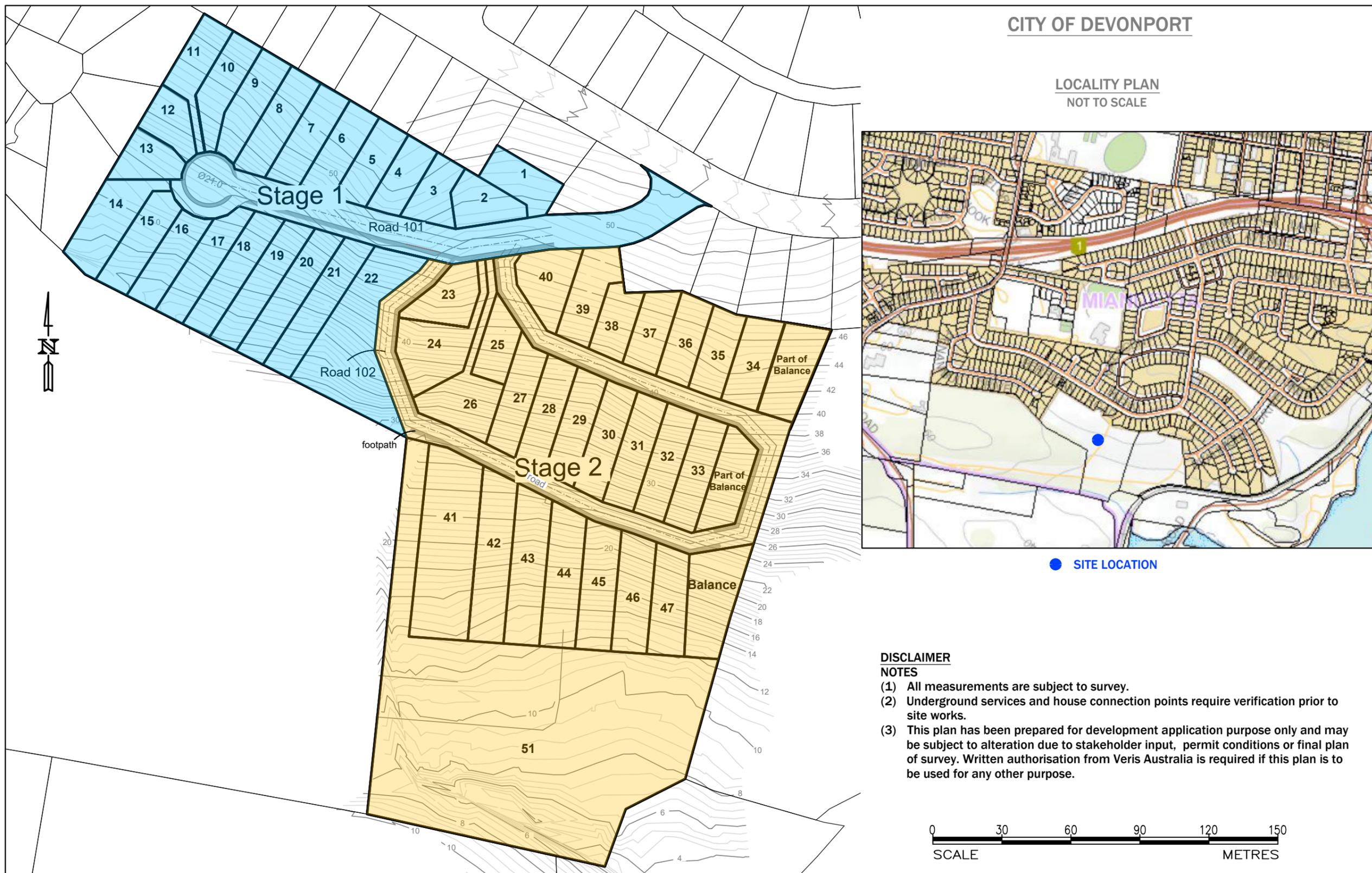
NO	DATE	DRN	CHKD	DESCRIPTION
5	31/08/22	JR	JR	Add footpath
4	15/07/22	JR	JR	Amend cul-du sac design for bushfire compliance

This plan is not intended for attachment to sale contract documents

OUR REF: 303721_D06_Rev5
CONTOUR INTERVAL: 0.5m
DATUM: AHD
SCALE: 1:1500 ORIGINAL SHEET SIZE: A3
DATE OF SURVEY:
DRAWING No:303721_D06 REV 05 SHEET No: 2 OF 3

ANNTAS
PLAN OF SUBDIVISION

57A Berrigan Road, Devonport



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 devonport@veris.com.au
 veris.com.au
 ABN 25 098 991 210

NO	DATE	DRN	CHKD	DESCRIPTION
5	31/08/22	JR	JR	Add footpath
4	15/07/22	JR	JR	Amend cul-du sac design for bushfire compliance

This plan is not intended for attachment to sale contract documents

OUR REF: 303721_D06_Rev5
CONTOUR INTERVAL: 0.5m
DATUM: AHD
SCALE: 1:1500 ORIGINAL SHEET SIZE: A3
DATE OF SURVEY:
DRAWING No:303721_D06 REV 05 SHEET No: 3 OF 3

ANNTAS
PLAN OF SUBDIVISION

57A Berrigan Road, Devonport



30 SEPTEMBER 2022

Bushfire Hazard Management Report: 57a Berrigan Road

Report for: ANN-Tas Pty Ltd

Property Location: 57a Berrigan Road, Miandetta

Prepared by: Michael Tempest
RMCG
Level 2, 102-104 Cameron Street
Launceston, TAS 7250

Level 2, 102-104 Cameron Street, Launceston Tasmania 7250
(03) 6334 1033 — rm@rmcg.com.au
rmcg.com.au — ABN 73 613 135 247 — RM Consulting Group Pty Ltd
Victoria — Tasmania — ACT — NSW

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Executive summary

SUMMARY	
Client:	ANN-Tas Pty Ltd
Property identification:	57a Berrigan Road, Miandetta Current zoning: General Residential CT 141199/1 PID 2293505
Proposal:	A 49-lot subdivision (including balance lot) is proposed.
Assessment comments:	A field inspection of the site was conducted to determine the Bushfire Risk and Attack Level.
Conclusion:	<p>The area is mapped as bushfire-prone under the <i>Tasmanian Planning Scheme - Devonport</i>. There is sufficient area on the subject land and adjacent titles to provide the proposed lots with sufficient area to allow for future construction of dwellings and associated buildings (within 6m) to BAL 19 or BAL 12.5 standards. Once a stage is developed, the entirety of that stage, including hazard management areas, must be maintained in a low fuel state. Management of the land is the responsibility of the proponent until a lot is sold. It then becomes the responsibility of the lot owner.</p> <p>The portion of the balance lot adjacent to Lot 49 must be managed by the owner of Lot 49. Similarly, the owner of Lot 33 must manage the balance lot adjacent to Lot 33 and Lot 36 must manage the balance lot adjacent to Lot 36. These balance areas cannot be built on habitable buildings until such time as land to the east is converted to HMA condition. To demonstrate this, the BHMP must be attached to future titles to show available building area and unavailable building areas. The access panhandle for Lot 51 must be managed in a low fuel state by the owner of Lot 43. Lot 51 is not considered a residential lot and cannot currently be built on for residential purposes. Any future proposal to construct a dwelling on this title would need to comply Performance Solutions under the Building Act 2016</p> <p>Where access to a lot is greater than 30m, as expected for Lot 11, it must be constructed to the standards set out in Element B of Table C13.2 of the <i>Bushfire-Prone Area Code</i> of the Planning Scheme. Road 101 within the subdivision must be constructed to the standards set out in Table C13.1. Road 102 will be developed to meet the Performance Solutions of Clause 13.6.2 of the Code. The civil design must conform to the requirements of this report and should be verified by Council prior to construction.</p> <p>A reticulated water supply that is compliant with all elements of Table C13.4 of the <i>Bushfire-Prone Area Code</i> of the Planning Scheme must be installed to service each lot before dwellings are constructed.</p>
Assessment by:	 <hr/> <p>Michael Tempest Senior Consultant Accredited Person under Part 4A of the Fire Service Act 1979, Accreditation # BFP-153</p>

1 Introduction

It is a requirement under the *Land Use Planning and Approval Act* that a proposed subdivision that occurs either wholly or partially within a bushfire-prone area is assessed by an accredited person who will provide a Bushfire Hazard Management Report and a Bushfire Hazard Management Plan.

1.1 SCOPE

This report has been commissioned to provide a Bushfire Attack Level (BAL) for all proposed residential lots within the proposed subdivision. All advice is compliant with the *Bushfire-Prone Areas Code of the Tasmanian Planning Scheme - Devonport* (the Planning Scheme) and the Australian Standard, AS3959-2018, *Construction of Buildings in Bushfire-prone Areas*.

1.2 PROPOSAL

The proposal is to complete 49-lot residential lots, one non-residential lots (lot 51), a balance lots, and two road lots through a subdivision of an existing title (CT 141199/1) at 57a Berrigan Road, Miandetta. The subdivision is proposed to be conducted in 2-Stages. The balance lot is expected to be subdivided in future under a separate development application and is not included in this assessment. The land is zoned as General Residential. The subject title and all adjacent land are mapped as bushfire-prone under the Planning Scheme.

1.3 LIMITATIONS

This report only deals with potential bushfire risk and does not consider any other potential statutory, building, or planning requirements. This report classifies type of vegetation at time of inspection and cannot be relied upon for future development outside of the assessed area.

2 Site description

The existing title is approximately 5.7ha in area and at the time of the site visit was primarily unmanaged. In bushfire terms, the onsite vegetation would be described as forest and scrub. The land has a southerly to south westerly aspect. The title is accessible via Berrigan Road in the central north of the title. Transmission lines pass over the southern portion of the title and land underneath these lines appears to be periodically managed (vegetation classed as scrub at the time of the site visit). A gravel access track runs adjacent to this easement across the title.

The proposal will see the title developed into a total of 49 lots (including the balance lot) under 2 Stages of development. All lots excluding the balance lot and Lot 51 will be residential lots. Lot 51 is in the southernmost portion of the title and will retain an existing threatened vegetation community, the transmission line easement, and gravel access track. The balance lot is comprised of three sections of land along the eastern boundary. As they are non-residential lots, the balance lot and Lot 51 are exempt from requiring specific bushfire requirements. See Appendix 2 for site maps and Appendix 3 for the subdivision site plan.

2.1 SURROUNDING AREA

All adjacent land is mapped as bushfire-prone and zoned as General Residential under the Planning Scheme.

Adjacent titles to the north west and north east are developed (titles approx. 700m²) and contain existing dwellings. To the east and west are a 3.4ha title and a 13.2ha title respectively, both of which are covered in native vegetation (predominantly forest, and scrub underneath transmission lines). To the south east is a small (approx. 1.6ha) title owned by TasWater, which is also covered in native vegetation (forest). Adjacent to the south is a 29.5ha title, of primarily cleared land, the southern half of which is zoned as Light Industrial.

Land to the north east and north west is classed as low threat, managed land. Land to the east and west is classed as forest and scrub, and land to the south is classed as grassland and forest.

Bushfire threat occurs from the east, south, and west. The prevailing wind is from the west.

3 Bushfire site assessment

The land is mapped within a bushfire-prone area under the Planning Scheme. A Bushfire Attack Level assessment has been conducted using Method 1 of AS 3959-2018.

The Fire Danger Index (FDI) is a measure of the probability of a bushfire starting, its rate of speed, intensity, and the difficulty of suppression; this is according to combinations of air temperature, relative humidity, wind speed, and both the long and short-term effects of drought. The FDI for Tasmania is **50** (Clause 2.2.2).

Because of the size and zoning of the proposed lots, the new lots will be managed as low threat vegetation. This excludes Lot 51, which contains a threatened vegetation community that will not be cleared. This area will therefore remain as forest vegetation, while the vegetation under the transmission line on this lot will remain as scrub vegetation. Because of this, the adjacent vegetation and slope was assessed for each stage, rather than for individual lots (see Table 3-1). As the stages will be developed in numerical order, Stage 1 has been assessed as low threat vegetation for Stage 2. Existing vegetation within the subdivision has been assessed as forest and scrub but vegetation within each stage area will be required to be managed in a low fuel state when that Stage of the subdivision occurs (excluding Lot 51).

Table 3-1: Vegetation and slope assessments from lots within each Stage

STAGE		NORTH	EAST	SOUTHEAST	SOUTH WEST	WEST
1	Slope	Upslope	Flat	Downslope >5-10°	Upslope	Upslope/ Flat
	Veg	Managed Land	Forest	Forest	Forest	Managed Land
	Distance from Stage boundary	0-100m	0-100m	0-100m	0-100m	0-100m
	BAL	NBPV*	19 & 12.5	19 & 12.5	19 & 12.5	NBPV
STAGE		NORTH	EAST	SOUTH		WEST
2	Slope	Upslope	Flat	Downslope >5-10°		Upslope/ Flat
	Veg	Managed Land	Forest	Scrub (S) and Forest (F)		Forest
	Distance from Stage boundary	0-100m	0-100m	0-20m (S), 20-100m (F)		0-100m
	BAL	NBPV	19 & 12.5	19 & 12.5		19 & 12.5

* No bushfire-prone vegetation

4 Bushfire protection measures

4.1 BAL REQUIREMENTS FOR CONSTRUCTION

The BAL ratings applied are in accordance with the Australian Standard AS3959-2018, *Construction of Buildings in Bushfire-prone Areas*. The applicable BAL ratings for the proposed subdivision are **BAL 19 & BAL 12.5**.

Table 4-1: BAL levels

BUSHFIRE ATTACK LEVEL (BAL)	PREDICTED BUSHFIRE ATTACK & EXPOSURE LEVEL
BAL-Low	Insufficient risk to warrant specific construction requirements.
BAL-12.5	Ember attack, radiant heat below 12.5kW/m ² .
BAL-19	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 12.5-19kW/m ² .
BAL-29	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 19-29kW/m ² .
BAL-40	Increasing ember attack and burning debris ignited by windborne embers together with increasing heat flux between 29-40kW/m ² .
BAL-FZ	Direct exposure to flames radiant heat and embers from the fire front.

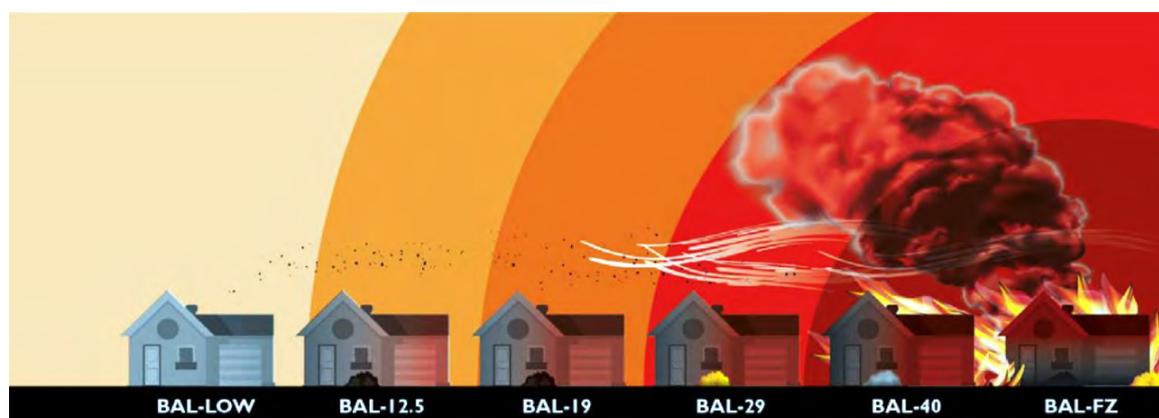


Figure 4-1: BAL diagram

The minimum construction requirement for future dwellings within the proposed subdivision is either **BAL 19** or **BAL 12.5**, depending on the lot. It is a requirement that any habitable building, or building within 6m of a habitable building, be constructed to the BAL ratings specified in this document as a minimum.

4.2 HAZARD MANAGEMENT AREA

Hazard management areas (HMA) are the areas between a habitable building, associated buildings (within 6m), and bushfire-prone vegetation which provide access to a fire front for firefighting. The HMA must be maintained in a low fuel state at all times.

At the time of the site visit, the subject title was classed as forest and scrub. Setback distances to bushfire-prone vegetation for the specified BAL Ratings (BAL 19 & BAL 12.5) have been calculated based on the vegetation that will exist after development and management of land within the current Stage and previous Stage of the subdivision and have also considered slope gradients. Distances are in accordance with AS 3959-2018 Table 2.6. Management of the land is the responsibility of the proponent until a lot is sold. It then becomes the responsibility of the lot owner.

The portion of the balance lot adjacent to Lot 49 must be managed by the owner of Lot 49. Similarly, the owner of Lot 33 must manage the balance lot adjacent to Lot 33 and Lot 36 must manage the balance lot adjacent to Lot 36. The access panhandle for Lot 51 must be managed in a low fuel state by the owner of Lot 43.

Once a stage is developed, the entirety of that stage must be maintained in a low fuel state. Where possible, the setbacks identified in Table 4-3 are proposed to be located on the balance area of the subject land adjacent to each stage of the development to maximise the building areas for individual lots. Where this is not feasible, setbacks are from the title boundary. These setback areas must also be maintained in a low fuel state. Where multiple Stage 1 setbacks overlay the balance land, the greatest setback has been identified as the setback required.

Where no setback is required for bushfire protection, other Planning Scheme setbacks may need to be applied.

BAL Rating: **BAL 19 & BAL 12.5**

Table 4-2: BAL setbacks

BAL	SETBACK	SCRUB	FOREST
19	Upslope and flat	19m	23m
	Downslope >5-10°	24m	34m
12.5	Upslope and flat	27m	32m
	Downslope >5-10°	35m	46m

Table 4-3: Hazard management setbacks for each Stage

STAGE	BAL	SETBACK				
		NORTH	EAST	SOUTHEAST	SOUTHWEST	WEST
1	12.5	No Setback Requirements	32m	46m	32m	No Setback Requirements
	19	No Setback Requirements	23m	34m	23m	No Setback Requirements
2	12.5	No Setback Requirements	32m	35m	35m	32m
	19	No Setback Requirements	23m	24m	24m	23m



Figure 4-2: Stage 1 BAL 19 & BAL 12.5 construction areas

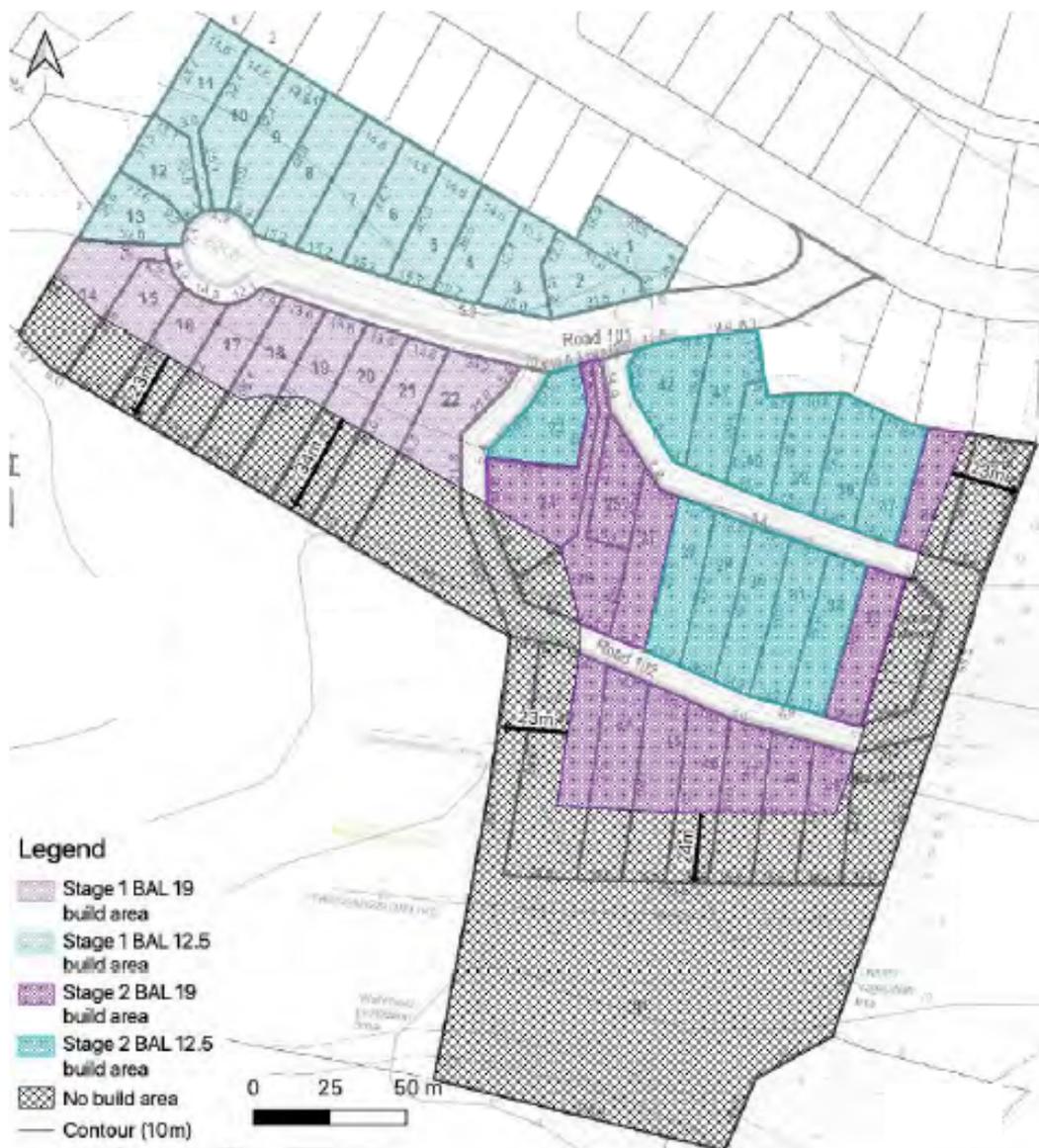


Figure 4-3: Stage 2 BAL 19 & BAL 12.5 construction areas

A dwelling can be located anywhere within the BAL 19 or BAL 12.5 areas identified on Figure 4-2 and 4-3. Table 4-3 provides the no build setbacks required to be managed as low threat vegetation from Stage boundaries.

All lots within active and previous Stage of the subdivision, as well as their associated hazard management areas, must be maintained as managed land.

All lots within the active and previous Stage of the subdivision (excluding Lot 51) must be managed in a low fuel condition by the lot owner:

- Lawns maintained to a height of <100mm
- Occasional trees with no canopy connection
- Trees must not overhang the dwelling
- Remove tree branches <2m above the ground
- Minimise fuel on the ground.

Landscaping advice for bushfire-prone lots:

- Maintain a clear area of low-cut lawn or pavement adjacent to the house
- Keep areas under fences, fence posts, gates, and trees raked and cleared of fuel
- Utilise non-combustible fencing and retaining walls
- Break up the canopy of trees and shrubs with defined garden beds
- Organic mulch should not be used in bushfire-prone areas and non-flammable material should be used as ground cover e.g., scoria, pebbles, recycled crushed bricks
- Plant trees and shrubs where there is a wind break in the direction from which fires are likely to approach.

Maintenance Schedule for Hazard Management Area:

- Cut lawns to less than 100mm and maintain
- Prune larger trees to establish and maintain horizontal and vertical canopy separation
- Minimise storage of flammable liquids
- Maintain road access to the dwelling and water connection point
- Remove fallen limbs, leaf, & bark, including from roofs, gutters, and around buildings.

4.3 ACCESS

Unless the development standards in the zone require a higher standard, the following applies to all roads within the proposed subdivision:

- a) Two-wheel drive, all-weather construction
- b) Load capacity of at least 20t, including bridges and culverts
- c) Minimum carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac
- d) Minimum vertical clearance of 4m
- e) Minimum horizontal clearance of 2m from edge of the carriage way
- 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 have a minimum inner radius of 10m
- i) Dead-end or cul-de-sac roads are not more than 200m in length unless carriageway length 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 wide have 'No parking' zones on one side, indicated by a road sign that complies with *Australian Standard AS1743–2001 Road Signs Specifications*.

There is sufficient area within proposed road 101 to provide roads to the above standards. The proposed cul-de-sac has a 10.5m radius with an adjacent 1.5m wide mountable footpath. Proposed road 102 is a one-way road 5m in width with a mountable curb and adjacent 1.5m wide footpath (see Appendix 3 for proposed footpath location and example road cross section). A 'no parking' area will be marked along the road adjacent to the footpath to ensure access to the extra width provided by the footpath is available for manoeuvring around stationary vehicles, if required. In an emergency situation, there is some risk of a vehicle collision on the one-way road due to poor visibility and/or panicked people making errors in judgement. Furthermore, if a larger appliance were deployed and needed to park in the road reserve, it would potentially obstruct the road. By incorporating the adjoining footpath, the road design will achieve sufficient width for an appliance to pull over without blocking the entire road carriageway. This will also support the ability for vehicles to navigate around obstructions during evacuation, if necessary (per comms with Tas Fire 29/08/22). Because of this it is considered that the proposed road design is adequate to meet the performance criteria of the Planning Scheme (C13.6.2 P1).

If access to a future dwelling on any lot is proposed to be greater than 30m, then it must be constructed to the following standards:

- a) All-weather construction
- b) Load capacity of at least 20 tonnes, including for bridges and culverts
- c) Minimum carriageway width of 4m
- d) Minimum vertical clearance of 4m
- e) Minimum horizontal clearance of 0.5m
- f) Cross falls of $<3^{\circ}$
- g) Dips $<7^{\circ}$
- h) Curves with a minimum inner radius of 10m
- i) Maximum gradient of 15° for sealed roads and 10° for unsealed road; 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
 - ii. A property access encircling the building; or
 - iii. A hammerhead "T" or "Y" turning 4m wide and 8m long.

The final location of dwellings on the lots will determine if the above access requirements are needed, however, it is considered likely that some lots will have an access length of greater than 30m (e.g., Lot 11). The access handle on Lot 11 and adjacent easement over lot 10 will accommodate a 4m wide access road and 0.5m hazard management strip on each side of the access road. Lot 24 and Lot 26 may be accessed from the one-way ring road (Road 102); however, each lot also has a 4m wide access handle from Road 101 which provide right-of-way for the other lot. A shared access can also be established for these lots, which will be greater than 30m and must therefore meet the above standards.

4.4 WATER SUPPLY

The lots are required to be connected to a reticulated water supply as part of the Planning Scheme requirements for the General Residential zone. As part of this installation, fire hydrants must be installed that are within 120m as the hose lays of all areas of each lot. See Figure 4-4 for proposed locations of hydrants. These may be moved at the discretion of the developer, as long as they are still within 120m of the entire building area of each lot.

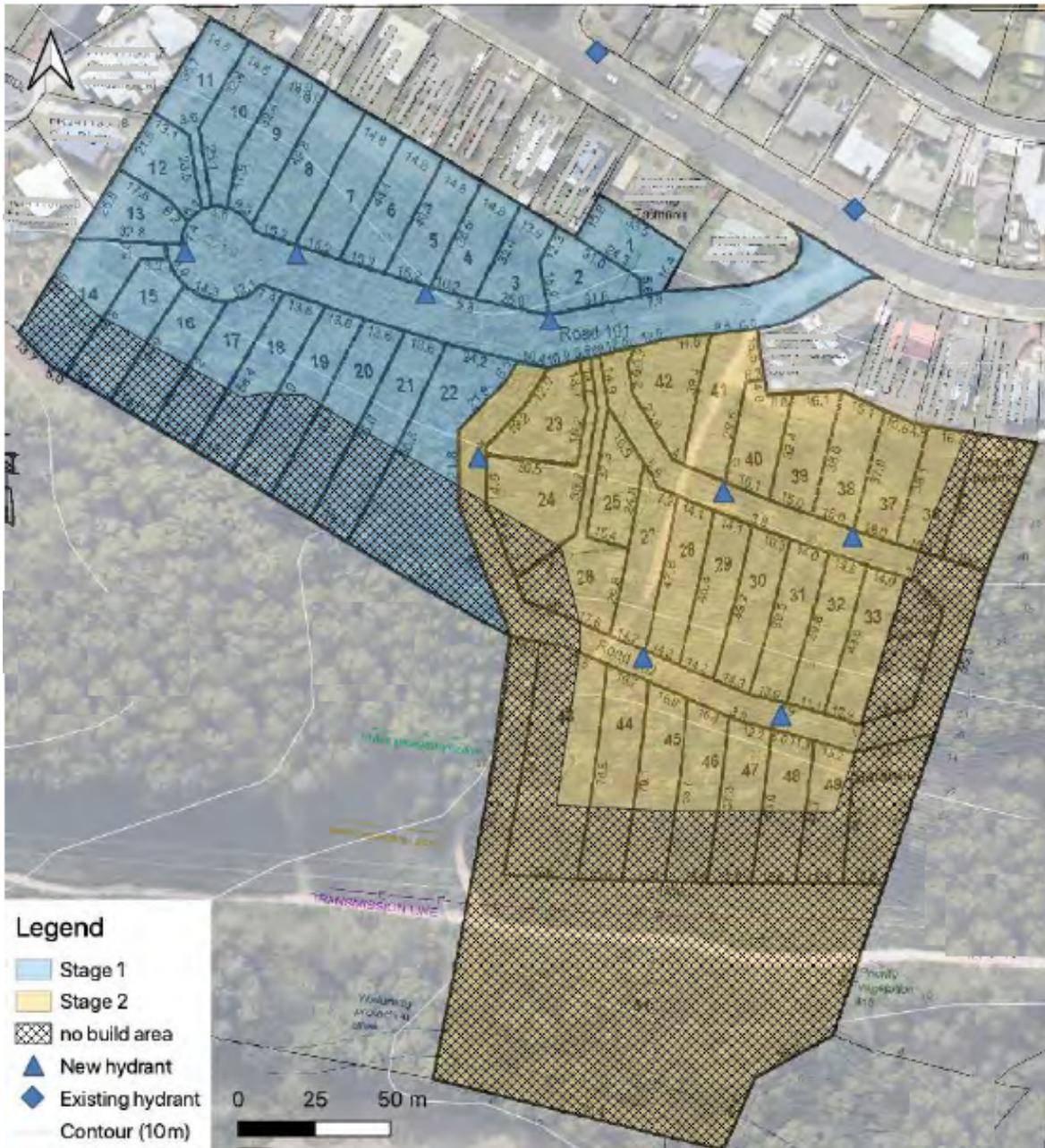


Figure 4-4: Existing hydrants and potential location of new hydrants

5 Statutory compliance

The applicable bushfire requirements are specified in the *Bushfire-Prone Areas Code* of the Planning Scheme.

Table 5-1: Compliance schedule

C 13.6 DEVELOPMENT STANDARDS FOR SUBDIVISION	ACCEPTABLE SOLUTION	COMPLIANCE
C13.6.1 Provision of Hazard Management Areas	A1.b	<ul style="list-style-type: none"> ▪ BAL 19 or BAL 12.5 Setback Standards (AS 3959-2018) from the development boundaries for all lots. The entirety of each active and completed Stage of the subdivision must be managed as the hazard management area, including bushfire setback zone, but excluding Lot 51 ▪ The Bushfire Hazard Management Plan (BHMP) must be attached to future subdivision titles to show the available building areas for each lot.
	P1	<ul style="list-style-type: none"> ▪ Lot 51 cannot be built on for a residential use. When the title is issued for this Lot, the BHMP must be attached to show there is no building area for a residential use. If a dwelling was proposed on this lot in the future it would need to be proposed through a Performance Solution associated with the Building Act 2016. ▪ The Balance Lot cannot be developed with habitable buildings until such time as land to the east is converted to HMA condition. ▪ The section of the Balance Lot adjacent to Lot 33 must be maintained by the owner of Lot 33 in a low fuel state. This must be implemented via a Part 5 Agreement or Vegetation Management Easement. ▪ The section of the Balance Lot adjacent to Lot 36 must be maintained by the owner of Lot 36 in a low fuel state. This must be implemented via a Part 5 Agreement or Vegetation Management Easement. ▪ The section of the Balance Lot adjacent to Lot 49 must be maintained by the owner of Lot 49 in a low fuel state. This must be implemented via a Part 5 Agreement or Vegetation Management Easement. ▪ The panhandle for Lot 51 must be maintained in a low fuel state by the owner of Lot 43. This must be implemented via a Part 5 Agreement or Vegetation Management Easement.
C13.6.2 Public and firefighting access	A1.b	<ul style="list-style-type: none"> ▪ Property access compliant with Element B of Table C13.2 where lot access is greater than 30m, Lot 11 is likely to be the only lot where this is required. ▪ The cul-de-sac must be marked as a no parking area ▪ Road 101 within the subdivision must be compliant with Table C13.1.

C13.6 DEVELOPMENT STANDARDS FOR SUBDIVISION	ACCEPTABLE SOLUTION	COMPLIANCE
	P1	<ul style="list-style-type: none"> ▪ Road 102 will be developed as a 5m wide one way road. It will have a 1.5m footpath on one side with a mountable curb. This side will also have no parking signs. These measures will ensure there is sufficient space for emergency vehicles to navigate the road and will also allow for resident vehicles to egress the site in an emergency.
C1.6.3. Provision of water supply for firefighting purposes	A1.b	<ul style="list-style-type: none"> ▪ A reticulated water supply must be installed that is compliant with Table C13.4 that services each lot.

6 Conclusions

The area is mapped as bushfire-prone under the *Tasmanian Planning Scheme - Devonport*. There is sufficient area on the subject land and adjacent titles to provide the proposed lots with sufficient area to allow for future construction of dwellings and associated buildings (within 6m) to BAL 19 or BAL 12.5 standards. Once a stage is developed, the entirety of that stage, including hazard management areas, must be maintained in a low fuel state. Management of the land is the responsibility of the proponent until a lot is sold. It then becomes the responsibility of the lot owner.

The portion of the balance lot adjacent to Lot 49 must be managed by the owner of Lot 49. Similarly, the owner of Lot 33 must manage the balance lot adjacent to Lot 33 and Lot 36 must manage the balance lot adjacent to Lot 36. These balance areas cannot be built on habitable buildings until such time as land to the east is converted to HMA condition. To demonstrate this, the BHMP must be attached to future titles to show available building area and unavailable building areas. The access panhandle for Lot 51 must be managed in a low fuel state by the owner of Lot 43. Lot 51 is not considered a residential lot and cannot currently be built on for residential purposes. Any future proposal to construct a dwelling on this title would need to comply Performance Solutions under the Building Act 2016

Where access to a lot is greater than 30m, as expected for Lot 11, it must be constructed to the standards set out in Element B of Table C13.2 of the *Bushfire-Prone Area Code* of the Planning Scheme. Road 101 within the subdivision must be constructed to the standards set out in Table C13.1. Road 102 will be developed to meet the Performance Solutions of Clause 13.6.2 of the Code. The civil design must conform to the requirements of this report and should be verified by Council prior to construction.

A reticulated water supply that is compliant with all elements of Table C13.4 of the *Bushfire-Prone Area Code* of the Planning Scheme must be installed to service each lot before dwellings are constructed.

7 References

Devonport Council (2020). *Tasmanian Planning Scheme - Devonport*.

Standards Australia (2009). *AS 3959-2018 Construction of Buildings in Bushfire-Prone Areas*.

Appendix 1: Photos

All photos taken by Michael Tempest and Sally Scrivens 16/11/2021.



Figure A1-1: View west of managed land to the north and west of Stage 1



Figure A1-2: Example of forest vegetation to the east of Stage 1



Figure A1-3: Example of forest vegetation to the south of Stage 1



Figure A1-4: Example of forest vegetation to the east of Stage 2



Figure A1-5: View west in the south of Stage 2. Note scrub vegetation under the powerlines and forest vegetation further south (right hand side of photo, Lot 51, vegetation to be retained).



Figure A1-6: Scrub vegetation under transmission lines.



Figure A1-7: Example of forest vegetation to the west of Stage 2.

Appendix 2: Maps



Figure A2-1: Location



Map Name: Aerial Image
Project: Subdivision
Client: Annsca
Date: 01/07/2022

BaseMap image by LIST Ortho
Cadastral and contours from LIST
(C) State of Tas



Figure A2-2: Aerial image

Appendix 3: Site plans

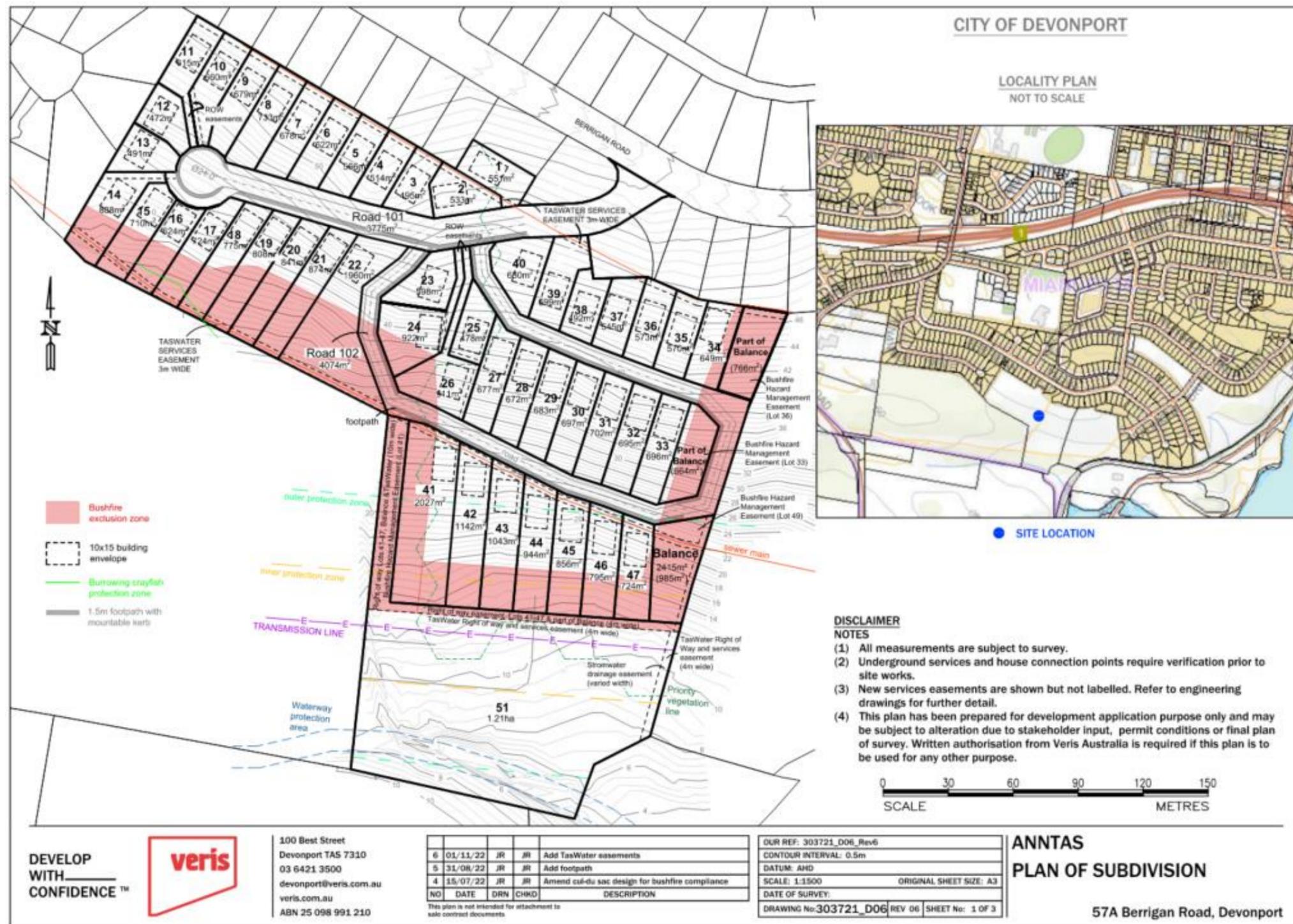


Figure A3-1: Site plan

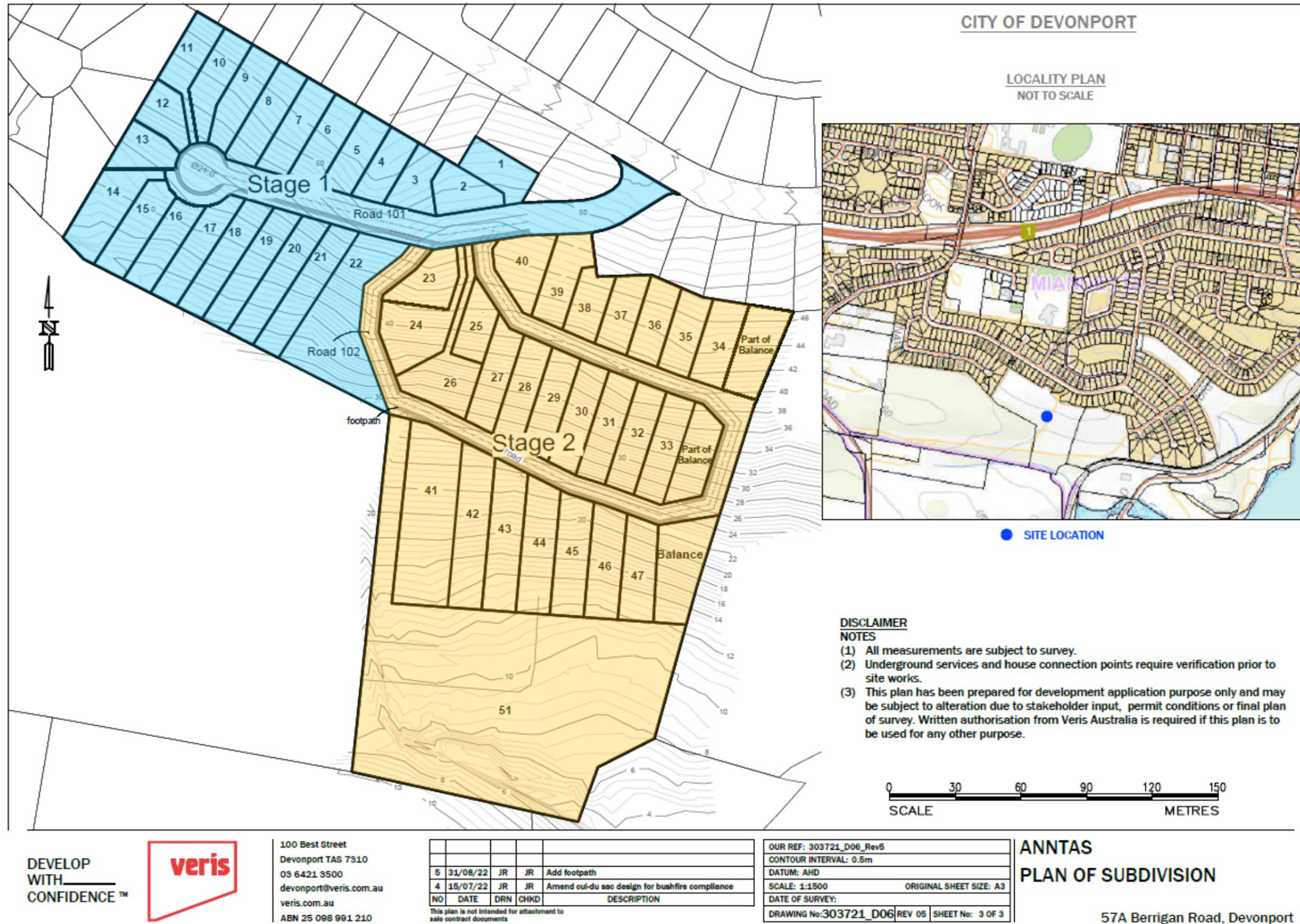


Figure A3-2: Staging plan

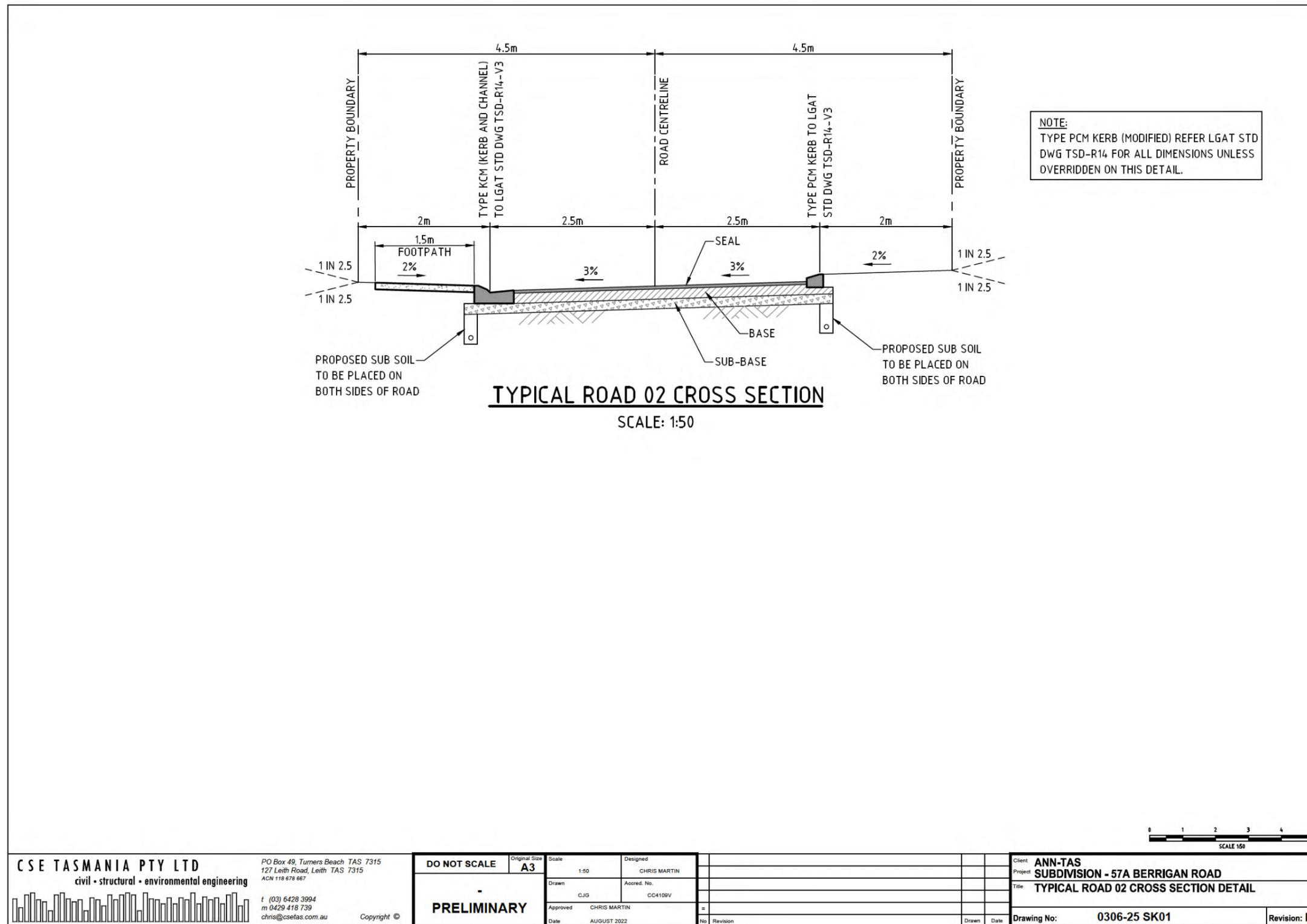


Figure A3-3: Proposed typical cross section of one way road 102.

Appendix 4: Bushfire Hazard Management Plan

Bushfire Hazard Management Plan: 57a Berrigan Rd Miandetta (CT 14119/1, PID 2293505) Summary

1.0 HAZARD MANAGEMENT AREA

Hazard management areas (HMA) include the areas to protect the buildings as well as the access and water supplies. Vegetation in the hazard management area is to be managed and maintained in a minimum fuel condition. All areas area of each developed stage must be managed in a low fuel state. See the table to the right for minimum setback requirements for the HMA for each stage of the development. Refer to the Bushfire Hazard Management Area section of the Bushfire Hazard Management Report for Hazard Management Area minimum fuel requirements.

HMA Maintenance Schedule:

- Remove fallen limbs and leaf and bark litter, including from roofs, gutters, and around buildings
- Cut grass to less than 100mm and maintain
- Prune larger trees to establish and maintain horizontal and vertical canopy separation
- Maintain road access to the building and water connection point.

2.0 ACCESS

Refer to Table 5-1 of the Bushfire Hazard Management Report where proposed site access is described. The proposed access will support firefighter access to buildings and water points.

3.0 WATER SUPPLY

Refer to Table 5-1 of the Bushfire Hazard Management Report for water supply requirements.

4.0 CONSTRUCTION: **BAL 12.5 & BAL 19**

Buildings in Bushfire-Prone Areas are to be built in accordance with the Building Code of Australia and Australian Standard AS5939.

NOTE: It should be borne in mind that the measures contained in this Bushfire Management Plan 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

It is important to prepare your Bushfire Survival Plan, read your Community Protection Plan and know your Nearby Safer Place. These can be obtained from your Council or the Tasmanian Fire Service. For more information, visit www.fire.tas.gov.au

STAGE	BAL	SETBACK				
		NORTH	EAST	SOUTHEAST	SOUTHWEST	WEST
1	12.5	No Setback Requirements	32m	46m	32m	No Setback Requirements
	19	No Setback Requirements	23m	34m	23m	No Setback Requirements
2	12.5	No Setback Requirements	32m	35m	35m	32m
	19	No Setback Requirements	23m	24m	24m	23m

- The Subdivision is a 51-Lot Subdivision from 1 existing title as described on: Plan of Subdivision, Veris, 15/07/2022. See Appendix 3 of Bushfire Report for Site Plans.
- This BHMP must be read in conjunction with the Bushfire Hazard Management Report: 57a Berrigan Road, Michael Tempest, 2 September 2022.
- This BHMP has been prepared to satisfy the requirements of the Bushfire-Prone Area Code of the Planning Scheme.

Michael Tempest
 Accreditation: BFP – 153 : 1, 2, 3A, 3B, 3C
 Plan No: MT22/95SV2 Date 12/09/2022

Bushfire Hazard Management Plan: 57a Berrigan Road, Miandetta (CT 141199/1, PID 2293505) Stage 1

1.0 HAZARD MANAGEMENT AREA

Hazard management areas (HMA) include the areas to protect the buildings as well as the access and water supplies. Vegetation in the hazard management area is to be managed and maintained in a minimum fuel condition. See the table below for minimum setback requirements for the HMA on each lot. Refer to the Bushfire Hazard Management Area section of the Bushfire Hazard Management Report for Hazard Management Area minimum fuel requirements.

HMA Maintenance Schedule:

- Remove fallen limbs and leaf and bark litter, including from roofs, gutters, and around buildings
- Cut grass to less than 100mm and maintain
- Prune larger trees to establish and maintain horizontal and vertical canopy separation
- Maintain road access to the building and water connection point.

2.0 ACCESS

Refer to Table 5-1 of the Bushfire Hazard Management Report where proposed site access is described. The proposed access will support firefighter access to buildings and water points.

3.0 WATER SUPPLY

Refer to Table 5-1 of the Bushfire Hazard Management Report for water supply requirements. The map to the right shows potential locations for water supply for each lot. These locations can be altered at the proponent's discretion, as long as the final location is still compliant with Table 5-1.

4.0 CONSTRUCTION: BAL 19 & BAL 12.5

Buildings in Bushfire-Prone Areas are to be built in accordance with the Building Code of Australia and Australian Standard AS5939.

LOT	BAL	SETBACKS
1-13	12.5	No setback requirements. All lots must be managed in a low fuel state.
14-17	19	23m from southern boundary
18	19	23m from western half of southern boundary 34m from eastern half of southern boundary
19-22	19	34m from southern boundary
Balance	NA	46m from eastern boundary of Stage 1 lots.



- The Subdivision is a 51-Lot Subdivision from 1 existing title as described on: Plan of Subdivision, Veris, 15/07/2022. See Appendix 3 of Bushfire Report for Site Plans.
- This BHMP must be read in conjunction with the Bushfire Hazard Management Report: 57a Berrigan Road, Michael Tempest, 2 September 2022.
- This BHMP has been prepared to satisfy the requirements of the Bushfire-Prone Area Code of the Planning Scheme.

Michael Tempest
Accreditation: BFP – 153 : 1, 2, 3A, 3B, 3C
Plan No: MT22/95SV2 Date 12/09/2022

NOTE: It should be borne in mind that the measures contained in this Bushfire Management Plan 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

It is important to prepare your Bushfire Survival Plan, read your Community Protection Plan and know your Nearby Safer Place. These can be obtained from your Council or the Tasmanian Fire Service. For more information, visit www.fire.tas.gov.au

Bushfire Hazard Management Plan: 57a Berrigan Road, Miandetta (CT 141199/1, PID 2293505) Stage 2

1.0 HAZARD MANAGEMENT AREA

Hazard management areas (HMA) include the areas to protect the buildings as well as the access and water supplies. Vegetation in the hazard management area is to be managed and maintained in a minimum fuel condition. See the table below for minimum setback requirements for the HMA on each lot. Refer to the Bushfire Hazard Management Area section of the Bushfire Hazard Management Report for Hazard Management Area minimum fuel requirements.

HMA Maintenance Schedule:

- Remove fallen limbs and leaf and bark litter, including from roofs, gutters, and around buildings
- Cut grass to less than 100mm and maintain
- Prune larger trees to establish and maintain horizontal and vertical canopy separation
- Maintain road access to the building and water connection point.

2.0 ACCESS

Refer to Table 5-1 of the Bushfire Hazard Management Report where proposed site access is described. The proposed access will support firefighter access to buildings and water points.

3.0 WATER SUPPLY

Refer to Table 5-1 of the Bushfire Hazard Management Report for water supply requirements. The map to the right shows potential locations for water supply for each lot. These locations can be altered at the proponent's discretion, as long as the final location is still compliant with Table 5-1.

LOT	BAL	SETBACKS
23	12.5	No setback requirements. All lots must be managed in a low fuel state.
24 & 26	19	18m from adjoining southern eastern boundary corner
25 & 27	19	No setback requirements. All lots must be managed in a low fuel state.
28-32	12.5	No setback requirements. All lots must be managed in a low fuel state.
33	19	Must manage adjacent area of Balance Lot in low fuel state
36	19	7m from eastern boundary Must manage adjacent area of Balance Lot in low fuel state
37-42	12.5	No setback requirements. All lots must be managed in a low fuel state.
43	19	13m from western boundary Must manage Panhandle of Lot 51 in a low fuel state
44-49	19	24m from southern boundary
49	19	24m from southern boundary Up to 4m from eastern boundary Must manage adjacent area of Balance Lot in low fuel state
51	NA	Not to be developed. Panhandle to be managed by Lot 43
Balance	NA	Not to be developed. To be managed in a low fuel state by adjacent titles.



- The Subdivision is a 51-Lot Subdivision from 1 existing title as described on: Plan of Subdivision, Veris, 15/07/2022. See Appendix 3 of Bushfire Report for Site Plans.
- This BHMP must be read in conjunction with the Bushfire Hazard Management Report: 57a Berrigan Road, Michael Tempest, 2 September 2022.
- This BHMP has been prepared to satisfy the requirements of the Bushfire-Prone Area Code of the Planning Scheme.

NOTE: It should be borne in mind that the measures contained in this Bushfire Management Plan 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

Michael Tempest
Accreditation: BFP – 153 : 1, 2, 3A, 3B, 3C
Plan No: MT22/95SV2 Date 12/09/2022

It is important to prepare your Bushfire Survival Plan, read your Community Protection Plan and know your Nearby Safer Place. These can be obtained from your Council or the Tasmanian Fire Service. For more information, visit www.fire.tas.gov.au

BUSHFIRE-PRONE AREAS CODE

CERTIFICATE¹ 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:

57a Berrigan Road, Miandetta

Certificate of Title / PID:

CT 141199/1 / PID 2293505

2. Proposed Use or Development

Description of proposed Use and Development:

49-Lot subdivision

Applicable Planning Scheme:

Tasmanian Planning Scheme - Devonport

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Bushfire Hazard Management Report: 57a Berrigan Road	Michael Tempest	30/09/2022	3

¹ This document is the approved form of certification for this purpose and must not be altered from its original form.

4. Nature of Certificate

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

<input type="checkbox"/>	E1.4 / C13.4 – Use or development exempt from this Code	
	Compliance test	Compliance Requirement
<input type="checkbox"/>	E1.4(a) / C13.4.1(a)	Insufficient increase in risk

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

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

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

<input checked="" type="checkbox"/>	E1.6.2 / C13.6.2 Subdivision: Public and fire fighting access	
	Acceptable Solution	Compliance Requirement
<input checked="" type="checkbox"/>	E1.6.2 P1 / C13.6.2 P1	<i>Planning authority discretion required. A proposal cannot be certified as compliant with P1.</i>
<input type="checkbox"/>	E1.6.2 A1 (a) / C13.6.2 A1 (a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.2 A1 (b) / C13.6.2 A1 (b)	Access complies with relevant Tables

<input checked="" type="checkbox"/>	E1.6.3 / C13.1.6.3 Subdivision: Provision of water supply for fire fighting purposes	
	Acceptable Solution	Compliance Requirement
<input type="checkbox"/>	E1.6.3 A1 (a) / C13.6.3 A1 (a)	Insufficient increase in risk
<input checked="" type="checkbox"/>	E1.6.3 A1 (b) / C13.6.3 A1 (b)	Reticulated water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A1 (c) / C13.6.3 A1 (c)	Water supply consistent with the objective
<input type="checkbox"/>	E1.6.3 A2 (a) / C13.6.3 A2 (a)	Insufficient increase in risk
<input type="checkbox"/>	E1.6.3 A2 (b) / C13.6.3 A2 (b)	Static water supply complies with relevant Table
<input type="checkbox"/>	E1.6.3 A2 (c) / C13.6.3 A2 (c)	Static water supply consistent with the objective

5. Bushfire Hazard Practitioner

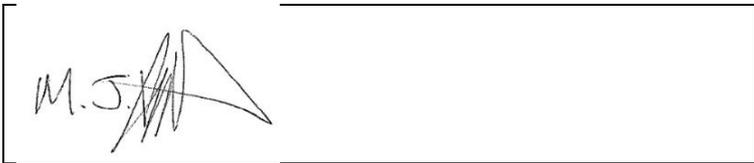
Name:	Michael Tempest	Phone No:	0467 452 155
Postal Address:	Level 2, 102-104 Cameron Street Launceston TAS 7250	Email Address:	michaelt@rmcg.com.au
Accreditation No:	BFP – 153	Scope:	1, 2, 3A, 3B, 3C

6. Certification

I certify that in accordance with the authority given under Part 4A of the *Fire Service Act 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 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 **Acceptable Solutions** identified in Section 4 of this Certificate.

Signed:
certifier



Name: Michael Tempest **Date:** 30/09/2022

Certificate Number: MT22/95SV3
(for Practitioner Use only)

This report has been prepared by:

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Document review and authorisation

Project Number: #1442

Doc Version	Final/Draft	Date	Author	Project Director review	BST QA review	Release approved by	Issued to
1.0	Final	02/09/2022	M. Tempest	A. Ketelaar	M. McIntosh	A. Ketelaar	Annsca
2.0	Final	12/09/2022	M. Tempest	A. Ketelaar	B. Gravenor	A. Ketelaar	Annsca
3.0	Final	30/09/2022	M. Tempest	A. Ketelaar	E. Kelly	A. Ketelaar	Annsca

RMCG

DATE: 27 JUNE 2022

Flora and Fauna Report: 57a Berrigan Road

Report for: Annsca

Property Location: 57a Berrigan Road, Miandetta

Prepared by: Sally Scrivens and Astrid Ketelaar
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Executive Summary

RMCG has been engaged to undertake a flora and fauna assessment of 57a Berrigan Road, Miandetta, where a multi-lot subdivision is proposed. A field inspection was undertaken on the 16 November 2021 and it was found that the subject title contains approximately 0.7ha of a threatened vegetation community, *Eucalyptus ovata* forest and woodland (DOV), along the southern boundary, which is also a mapped 'priority vegetation area' under the Planning Scheme. Vegetation in the west of the title is also within a priority vegetation area, however, this area is almost entirely regenerating cleared land (FRG). No future development is expected to be facilitated within or immediately adjacent to the threatened vegetation community as a result of the proposed subdivision. The proposal is therefore unlikely to have an unnecessary or unacceptable impact on priority vegetation.

No threatened flora species were identified on the subject title or are considered to be at greater than low risk of being impacted as a result of the proposed subdivision and subsequent development. Additionally, no threatened fauna dens or nests were identified within the subject title; however, potential habitat was identified for the central north burrowing crayfish and swift parrot, with crayfish burrows observed in the west of the title. The title may overlap some species' ranging boundaries; however, the proposal is considered to have minimal impact on these species.

Providing the recommendations, as outlined in this report, are followed, the proposed subdivision and future development facilitated by the subdivision are considered unlikely to have an unnecessary or unacceptable impact on priority vegetation and adequately address the performance criteria of C7.7.2 Subdivision within a priority vegetation area under the Natural Assets Code of the *Tasmanian Planning Scheme - Devonport*.

Recommendations

- The threatened *Eucalyptus ovata* forest and woodland community should be marked as a machinery exclusion zone during works to avoid any impacts as a result of accessing the site to facilitate the proposed subdivision and any future development
- Any disturbance of burrowing crayfish, including their burrows and chimneys, must be avoided. If any disturbance is unavoidable to burrowing crayfish as a result of the proposed subdivision or future development of the area, a permit must be obtained.
- Prevent biosecurity incursions and further weed incursions by implementing strict washdown guidelines for all machinery and equipment used during the proposed subdivision and any future development
- Weed control of the title prior to and following works to prevent further establishment of weeds throughout the area, particularly surrounding, on the margins of, and within, the threatened *E. ovata* forest and woodland community. Non-invasive hand control techniques are required within the *E. ovata* community.
- Approvals will be required if any disturbance to the *E. ovata* community is unavoidable.

1 Introduction

RMCG have been engaged to undertake a flora and fauna assessment of CT 141199/1, 57a Berrigan Road, Miandetta, where a 51-lot subdivision is proposed (see Appendix 4 for site plan). The title is zoned General Residential under the *Tasmanian Planning Scheme - Devonport* (the Planning Scheme).

As the title is partially mapped as a 'priority vegetation area' under the Planning Scheme, the subdivision must be assessed against the Natural Assets Code (C7):

C7.7 Development Standards for Subdivision

C7.7.2 Subdivision within a priority vegetation area

Objective: That

- a) works associated with subdivision will not have an unnecessary or unacceptable impact on priority vegetation; and
- b) future development likely to be facilitated by subdivision is unlikely to lead to an unnecessary or unacceptable impact on priority vegetation.

P1.2 Works associated with subdivision within a priority vegetation area must minimise adverse impacts on priority vegetation, having regard to:

- a) the design and location of any works, future development likely to be facilitated by the subdivision, and any constraints such as topography or land hazards;
- b) any particular requirements for the works and future development likely to be facilitated by the subdivision;
- c) the need to minimise impacts resulting from bushfire hazard management measures through siting and fire-resistant design of any future habitable buildings;
- d) any mitigation measures implemented to minimise the residual impacts on priority vegetation;
- e) any on-site biodiversity offsets; and
- f) any existing cleared areas on the site.

A field inspection was undertaken on 16 November 2021 to confirm or otherwise the findings of an initial desktop study and to determine the natural values of the site. This information was then used to assist in determining the proposed lot layout. This report summarises the findings of the desktop and field assessment and provides recommendations regarding the proposed subdivision.

2 Methods

The desktop assessment was undertaken using a number of sources, including;

- Natural Values Atlas (NVA)
- Forest Practices Authority Biodiversity Values Database (BVD)
- Forest Practices Authority Habitat Context Assessment Tool
- LIST map
- Google imagery

The NVA and BVD cover known flora and fauna sightings within 5km of the site and fauna species whose predicted range boundaries overlay the site. The FPA Habitat Context Assessment Tool maps areas as high, medium, low, or negligible mature habitat availability. This mapping is based on aerial photographs of mature crown density and senescence. Generally, the higher mapped categories have a greater likelihood of trees containing hollows.

The desktop assessment was followed by a site visit on the 16 November 2021, conducted by Sally Scrivens and Michael Tempest of RMCG. The entire title was closely inspected with a wandering meander technique. An additional site visit was conducted on 4 May 2022 to identify the extent of burrowing crayfish within the drainage line in the west of the title.

The field assessment focused on identification of vegetation communities and a threatened species risk assessment based on habitat suitability. Dominant flora species were recorded on site to assist in ground-truthing the TASVEG mapping and determining habitat suitability for threatened species.

All the impacted and surrounding area have been assessed; however, no survey can guarantee that all flora will be recorded in a single site visit due to limitations on seasonal and annual variation in abundance and the presence of material for identification. However, given the threatened flora recorded in the greater area and the timing of the survey, additional surveys are not considered necessary.

All mapping and Grid References in this report use GDA 94, Zone 55, with eastings and northings expressed as 6 & 7 digits respectively.

Flora taxonomy nomenclature used is consistent with *Census of Vascular Plants of Tasmania*, Tasmanian Herbarium 2015, *From Forest to Fjaeldmark*, Descriptions of Tasmania's Vegetation (Edition 2) Harris & Kitchener, 2005, and *Little Book of Common Names for Tasmanian Plants*, Wapstra et al. 2007.

3 Vegetation Communities and General Habitat Description

The subject title is approximately 5.7ha in area. The title has a southerly aspect with elevations on the title ranging from approximately 50m above sea level (ASL) in the north of the title to 10m ASL in the south of the title, where an unnamed tributary of Horsehead Creek flows in an easterly direction. A 5m buffer either side of the watercourse is mapped as a 'waterway and coastal protection area' under the Planning Scheme. A 120m wide strip through the south of the title is mapped as an 'electricity transmission corridor', the central 50m of which is classed as an 'inner protection area', and the entire title is mapped as being within a bushfire-prone area. There is no published soil mapping available for the subject title. Underlying geology is mapped as dolerite (Jd) (Mineral Resources Tasmania 2010). The average annual rainfall at Devonport (Site 091111) is 946mm (BOM 2021). An area through the centre of the title was previously burnt as part of a planned burn across the title and adjacent land in 2017 (DPIPWE 2021).

Surrounding titles are all within the General Residential zone, with those along the northern and north eastern boundaries (each approx. 750m² in area) developed for residential use and containing dwellings. Adjacent titles to the east, south, and west are larger (3.4ha, 29.5ha, and 13.2ha, respectively), undeveloped titles, with those to the east and west primarily vegetated, while to the south is primarily cleared land. There is also an approximate 0.8ha block of TasWater owned land to the southeast which is primarily vegetated.

TASVEG 4.0 maps the majority of the vegetation on the subject title as regenerating cleared land (FRG). 1ha of land on the southern boundaries is mapped as *Eucalyptus obliqua* wet forest (undifferentiated) (WOU) and

0.2ha in the north of the title, associated with the title access from Berrigan Road, is mapped as urban areas (FUR). None of these communities are listed as a threatened vegetation community under the *Nature Conservation Act 2002*, however, the eastern and southern portions of the title are mapped as priority vegetation areas under the Planning Scheme.

The site visit confirmed that the majority of the title has previously been disturbed (FRG) and it contains a variety of regenerating vegetation on rocky dolerite outcrops. Canopy species include *Eucalyptus obliqua*, *E. amygdalina*, *E. ovata*, and *E. viminalis*. Understorey species include *Cassinia aculeata* dollybush, *Leptospermum scoparium* common teatree, *Exocarpos cupressiformis* common native-cherry, *Acacia melanoxylon* blackwood, *Lomandra longifolia* sagg, *Pteridium esculentum* bracken, *Lepidosperma sp.* swordssedge, *Acaena novae-zelandiae* common buzzy, *Diplarrena moraea* white flag-iris, *Goodenia ovata* hop native-primrose, and *Pimelea nivea* bushmans bootlace. Several weeds were also observed within this area, with some, such as gorse and Spanish heath widespread throughout the area. Weeds are discussed further in the 'Disturbance' section.

Vegetation in the south of the title has a canopy dominated by *Eucalyptus ovata* with an understorey containing blackwood, *Melaleuca ericifolia* coast paperbark, *Melaleuca squarrosa* scented paperbark, *Leptospermum lanigerum* woolly teatree, dollybush, and bracken. This vegetation in the south of the title is best described as *Eucalyptus ovata* forest and woodland (DOV). DOV is listed as a threatened community under both the State *Nature Conservation Act 2002* and the Commonwealth *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*. There is an existing gravel vehicle track immediately to the north of the community, beyond which is an approximate 40m wide strip of managed vegetation under electricity transmission lines. As this area is classed as an 'inner protection area' under the Planning Scheme, no future residential building areas can be within this area. This provides an approximate 40m buffer between the DOV community and future residential development, minimising the risk of the subdivision and subsequent development from impacting on the community. While no direct impacts to the community are expected as a result of the proposed development, the community should be marked as a machinery exclusion zone during works to avoid any impacts as a result of accessing the site to facilitate the proposed subdivision and any future development. Approvals will be required if any disturbance to the population is unavoidable.

Vegetation under the transmission lines is dominated by woolly teatree, coast paperbark, scented paperbark, and swordssedge. Spanish heath is common on both sides of the track. The vegetation under the transmission lines is best described as a permanent easement (FPE).

Several existing tracks are present in the title including from Berrigan Road, which bisects the title down to a perpendicular track through the southern portion of the title which extends across adjacent titles to the east and west. There is also an existing track adjacent to the south western boundary that continues across the eastern half of the title. The vegetation to the south of this track in the east, and north of the easement, is dominated by tall, narrow (small diameter) *Eucalyptus obliqua* with *Eucalyptus amygdalina* as a canopy sub-dominant. The common understorey species include common native-cherry, swordssedge, white flag-iris, and bracken. While the structure and composition of this community indicates it has previously been disturbed, it is indicative of *Eucalyptus obliqua* dry forest (DOB). This community extends into the western portion of the title, south of the track to the property boundary. A small drainage line runs through the south western corner of the title and the area immediately surrounding the drainage line is dominated by coast paperbark and swordssedge. The slope immediately north of the drainage line also contains *Bedfordia sp.* blanketleaf, *Acacia verticillata* prickly moses, *Bursaria spinosa* prickly box, *Acacia mucronata* caterpillar wattle, *Coprosma quadrifida* native currant. Some of these species are more indicative of *Eucalyptus obliqua* forest with broadleaf shrubs (WOB), however, distinguishing the boundary between the two communities is not considered necessary for this assessment as neither DOB or WOB are listed as a threatened vegetation community. The drainage line passes under the existing vehicle track in the south of the title through a culvert and the banks and base of the drainage line have been concreted in this area.

4 Threatened Flora Risk Assessment

According to the Natural Values Atlas, no threatened flora records have been recorded within 500m of the subject title. However, 12 threatened flora species have been recorded within a 5km radius of the title. Based on the availability of potentially suitable habitat on the title and location of existing records, nine of these 12 species are considered to be at medium risk of occurring on the title, as discussed below. The remaining three species are considered to be at low risk of occurring on the subject title. See Table 4-1 for risk assessment and Appendix 1 for habitat preferences. All 12 species were looked for, with none found on the title.

Showy willowherb, hairy brooklime, fragrant hempbush, lanceleaf beardheath, and slender waterpepper are all associated with wet areas, riparian habitat, or riverbanks. The approximate 80m stretch of the drainage line in the west of the title is considered to potentially provide suitable habitat for these species, however, the drainage line itself did not contain any vegetation and the vegetation immediately surrounding it was limited to coast paperbark, swordspurge, and *Juncus spp.* rush. As the site visit coincided with an appropriate time to survey for these species (FPA 2017) and none of the species were observed, these five species are considered to be at low risk of being impacted by the proposed works. The watercourses and associated riparian areas in the south of the title were not assessed for these species as the watercourses are within the threatened vegetation community that will not be impacted by the proposed development.

Curved riceflower, slender curved riceflower, and spike centauray are known to occur in a range of habitats including wet and dry sclerophyll forest and disturbed areas. The entire title is therefore considered to provide potentially suitable habitat for the species', however, the species' were not observed on the subject title. The retained vegetation in the south of the title will continue to provide potentially suitable habitat for the three species. The powerline easement may also provide potentially suitable habitat for the species', depending on how it is managed. The proposed development is therefore considered to present a low risk of impacting on these species'.

Lemon dogwood is known to occur in dry sclerophyll forest associated with dolerite outcrops, riparian areas, and open forest. While the subject title provides potentially suitable habitat for this species, it was not observed onsite, despite being able to be identified year round (FPA 2017). The proposal is therefore considered to pose a low risk of impacting on this species.

Table 4-1: Risk assessment for threatened flora listed in NVA as being recorded within 5km of the subject title

THREATENED FLORA SPECIES				PRELIMINARY RISK ASSESSMENT OF LIKELY PRESENCE	FINAL RISK ASSESSMENT OF POTENTIAL IMPACT ¹
SPECIES NAME		NVA RECORD	STATUS S*/N ⁺		
LATIN	COMMON				
<i>Brunonia australis</i>	Blue pincushion	Within 5km	r	Occurs on alluvial soils in grassy woodland/dry sclerophyll forest dominated by <i>E. amygdalina</i> . No suitable habitat. Low risk.	Low risk
<i>Epilobium pallidiflorum</i>	Showy willowherb	Within 5km	r-	Occurs in wet places. Potential suitable habitat. Medium risk.	Low risk

¹ See text for explanatory information

THREATENED FLORA SPECIES				PRELIMINARY RISK ASSESSMENT OF LIKELY PRESENCE	FINAL RISK ASSESSMENT OF POTENTIAL IMPACT ¹
SPECIES NAME		NVA RECORD	STATUS S*/N ⁺		
LATIN	COMMON				
<i>Gratiola pubescens</i>	Hairy brooklime	Within 5km	r	Occurs in damp or swampy ground. Potential suitable habitat. Medium risk.	Low risk
<i>Gynatrix pulchella</i>	Fragrant hempbush	Within 5km	r	Riparian shrub along drainage channels. Potential suitable habitat. Medium risk.	Low risk
<i>Leucopogon affinis</i>	Lanceleaf beardheath	Within 5km	r	Occurs in a broad range of habitats, including riverbanks. Potential suitable habitat. Medium risk.	Low risk
<i>Limonium australe</i> var. <i>australe</i>	Yellow sea-lavender	Within 5km	r	Occurs in saltmarsh. No suitable habitat. Low risk.	Low risk
<i>Persicaria decipiens</i>	Slender waterpepper	Within 5km	v	Occurs on the banks of rivers and streams. Potential suitable habitat. Medium risk.	Low risk
<i>Pimelea curviflora</i>	Curved riceflower	Within 5km	p	Occurs in a range of vegetation types including wet and dry sclerophyll forest and can densely colonise disturbed sites. Suitable habitat. Medium risk.	Low risk
<i>Pimelea curviflora</i> var. <i>gracilis</i>	Slender curved riceflower	Within 5km	r	Occurs in a range of vegetation types including wet and dry sclerophyll forest and can densely colonise disturbed sites. Suitable habitat. Medium risk.	Low risk
<i>Pomaderris intermedia</i>	Lemon dogwood	Within 5km	r	Occurs in dry sclerophyll forest associated with dolerite outcrops, riparian areas, and open forest. Suitable habitat. Medium risk.	Low risk
<i>Schenkia australis</i>	Spike centaury	Within 5km	r	Occurs in a range of habitats including wet and dry sclerophyll forest. Potential suitable habitat. Medium risk.	Low risk
<i>Tetratheca ciliata</i>	Northern pinkbells	Within 5km	r	Occurs on sandy soils in heathlands or heathy woodlands dominated by <i>E. amygdalina</i> . No suitable habitat. Low risk.	Low risk

* refers to listing status under the Tasmanian Threatened Species Act 1995: r = rare, v = vulnerable, p = pending

⁺ refers to listing status at the federal level under the Environment Protection and Biodiversity Conservation Act 1999

5 Threatened Fauna Risk Assessment

The Forest Practices Biodiversity Values Database and the Tasmanian Natural Values Atlas identified 23 threatened fauna species with potential to occur onsite. The closest raptor nests (grey goshawk) in the vicinity are approximately 780m away from the subject title to the southwest. The closest eagle nests to the subject title are over 4km away.

Of the 23 species identified in the Natural Values Atlas and Biodiversity Values Database, one species (central north burrowing crayfish) is considered to be at high risk, and another species (swift parrot) is considered to be at medium risk, of occurring on the title based on potentially suitable habitat and proximity of previous records, as discussed below. It is likely that the title is included in some species' ranging boundaries, such as the quolls, wedge-tailed eagle, eastern barred bandicoot, and Tasmanian devil, however, the proposed works are considered to present a low risk to these species. All other species are considered to be at low risk of occurring on the title. See Table 5-1 for risk assessment and Appendix 1 for habitat preferences.

The central north burrowing crayfish is associated with watercourses and poorly drained areas and has previously been recorded on Horsehead Creek approximately 560m to the south west and Washerwomans Creek approximately 460m to the east. In the south western corner of the title, adjacent to the drainage line, along the south western portion of Lots 14-18, evidence of burrowing crayfish (burrows and chimneys) was observed during the site visits. It should be assumed that all burrowing crayfish within the range of a threatened species of burrowing crayfish be considered as likely to be the listed species (pers. comms. Holly Barlow, Conservation Assessments, DPIPWE, 06/10/2021). Subdivision works and subsequent development should therefore avoid impacting on the area. There is a 23m bushfire exclusion zone along the title boundary that ensures no future dwellings will directly impact on the burrowing crayfish habitat. In addition, a 'burrowing crayfish protection zone' has been mapped on the site plan adjacent to the drainage line on Lots 16-18, where crayfish burrows were observed on 04/05/2022, to further assist in minimising potential impacts on the species. However, it is noted that the TasWater services easement also passes along this south western portion of the title boundary. A permit will be required from the Tasmanian Department of Natural Resources and Environment if any disturbance to the population is unavoidable.

The swift parrot requires hollows for nesting and breeding and flowering *Eucalyptus globulus* or *E. ovata* within 10km of their nest for foraging. Nest trees are eucalypts which generally have a large trunk (>70cm diameter at breast height (DBH)) and contain dead wood (signs of advanced senescence) (FPA 2014). The eucalypts within the subject title were typically less than 70cm DBH and showed negligible signs of senescence, with no hollows observed. While the trees within the *E. ovata* community were not all closely examined for potential hollows, the Forest Practices Authority Habitat Context Assessment Tool indicates that the entire subject title has negligible mature habitat availability, indicating a low likelihood of hollow bearing trees. The subject title is therefore unlikely to provide suitable nesting and breeding habitat for the swift parrot. However, the swift parrot has previously been recorded within 5km of the subject title, the area is considered to be within the breeding range of the species, and there is vegetation in the surrounding landscape that may provide suitable nesting habitat for the species. The *E. ovata* on the subject title may therefore provide an important foraging resource for the species. The proposed subdivision should therefore avoid any impacts on this community to minimise potential impacts to the swift parrot.

There is an observation record of the Australasian bittern within the powerline easement of the subject title, however, the record has a location variance of 5000m. As the species is associated with swamps and the recorded location is not very accurate, the actual observation of the species is expected to be elsewhere in the landscape and not on the subject title.

Table 5-1: Risk assessment for threatened fauna species (excluding marine and shore species) listed in the NVA as being recorded within 5km and/or with range boundaries (Forest Practices Biodiversity Values Database) that overlay the subject title.

THREATENED FAUNA SPECIES					PRELIMINARY RISK ASSESSMENT OF LIKELY PRESENCE	FINAL RISK ASSESSMENT OF POTENTIAL IMPACT ²
SPECIES NAME		NVA RECORD	STATUS S*/N+	FPA ^x RANGE CLASS		
LATIN	COMMON					
<i>Accipiter novaehollandiae</i>	Grey goshawk	Record within 500m.	e	PR	Prefer wet forest with a blackwood/myrtle understory adjacent to a fresh waterbody. No suitable habitat. Low risk.	Low risk
<i>Alcedo azurea diemenensis</i>	Azure kingfisher	Record within 5km. Within 500m based on RB.	e/EN	CR	Require large rivers/streams for foraging and steep banks for breeding. No suitable habitat. Low risk.	Low risk
<i>Antipodia chaostola</i>	Chaostola skipper	Within 5km based on RB.	e/EN		Inhabits dry forest/woodland supporting particular <i>Gahnia sp.</i> No suitable habitat and outside of range boundaries. Low risk.	Low risk
<i>Aquila audax subsp. fleayi</i>	Tasmanian wedge-tailed eagle	Record within 5km. Within 500m based on RB.	e/EN	PR	Potential foraging habitat is a wide variety of forest and non-forest habitats. Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10ha) of eucalypt or mixed forest. Foraging habitat only. Low risk.	Low risk
<i>Astacopsis gouldi</i>	Giant freshwater crayfish	Record within 5km. Within 500m based on RB.	v/VU	PR	Inhabits streams containing shelter. No suitable habitat. Low risk.	Low risk
<i>Botaurus poeciloptilus</i>	Australasian bittern	Record within 500m.	EN		Occurs in swamps. No suitable habitat and outside of range boundaries. Low risk.	Low risk
<i>Catadromus lacordaire</i>	Green-lined ground beetle	Within 5km based on RB.	v		Occur in grasslands and woodlands associated with wetlands. Key habitat elements include patches of stones, coarse woody debris and/or cracking soils. No suitable habitat and outside of range boundaries. Low risk.	Low risk

² See text for explanatory information

THREATENED FAUNA SPECIES					PRELIMINARY RISK ASSESSMENT OF LIKELY PRESENCE	FINAL RISK ASSESSMENT OF POTENTIAL IMPACT ²
SPECIES NAME		NVA RECORD	STATUS S*/N+	FPA ^x RANGE CLASS		
LATIN	COMMON					
<i>Dasyurus maculatus</i>	Spotted-tail quoll	Record within 5km. Within 500m based on RB.	r/VU	CR	Potential foraging habitat is a wide variety of habitats. Require structurally complex areas for denning. Marginally suitable habitat. Low risk.	Low risk
<i>Dasyurus viverrinus</i>	Eastern quoll	Within 500m based on RB.	EN	CR	Occur in a range of habitats but prefer dry forest and native grassland mosaics bound by agricultural land. Marginally suitable habitat. Low risk.	Low risk
<i>Engaeus granulatus</i>	Central north burrowing crayfish	Record within 500m.	e/EN	KR	Potential habitat includes streams and poorly drained areas. Suitable habitat. High risk.	Low risk if population excluded from works area. Permit required if disturbance expected.
<i>Galaxiella pusilla</i>	Eastern dwarf galaxias	Within 500m based on RB.	v/VU	PR	Inhabit slow flowing or still waterbodies that generally contain dense aquatic vegetation. Marginally suitable habitat. Low risk.	Low risk
<i>Haliaeetus leucogaster</i>	White-bellied sea-eagle	Record within 5km. Within 500m based on RB.	v	PR	Potential foraging habitat is any large waterbody. Prefers tall eucalypts in tracts of over 10ha for nesting. No suitable habitat. Low risk.	Low risk
<i>Hirundapus caudacutus</i>	White-throated needletail	Record within 5km.	VU		Aerial species. Outside of range boundaries. Low risk.	Low risk
<i>Lathamus discolor</i>	Swift parrot	Record within 5km. Within 500m based on RB.	e/CR	N & W breeding areas	Potential foraging habitat is flowering <i>E. globulus</i> or <i>E. ovata</i> . Nest in hollows. Potential suitable habitat. Medium risk.	Low risk
<i>Limnodynastes peroni</i>	Striped marsh frog	Within 500m based on RB.	e	PR	Requires permanent non-flowing water bodies with abundant aquatic vegetation. No suitable habitat. Low risk.	Low risk
<i>Litoria raniformis</i>	Green and gold frog	Record within 5km. Within 500m based on RB.	v/VU	PR	Associated with waterbodies with vegetation in or around them. Marginally suitable habitat. Low risk.	Low risk

THREATENED FAUNA SPECIES					PRELIMINARY RISK ASSESSMENT OF LIKELY PRESENCE	FINAL RISK ASSESSMENT OF POTENTIAL IMPACT ²
SPECIES NAME		NVA RECORD	STATUS S*/N ⁺	FPA ^x RANGE CLASS		
LATIN	COMMON					
<i>Perameles gunnii</i>	Eastern barred bandicoot	Record within 5km. Within 500m based on RB.	VU	PR	Occurs within open forest with a grassy understory or in areas with dense, low vegetation. Marginally suitable habitat. Low risk.	Low risk
<i>Prototroctes maraena</i>	Australian grayling	Record within 5km.	v/VU	PR	Occurs in mid to lower reaches of streams and rivers. No suitable habitat. Low risk.	Low risk
<i>Pseudemoia pagenstecheri</i>	Tussock skink	Within 500m based on RB.	v		Prefers grasslands and grassy woodlands with >20% native grass cover. No suitable habitat and outside of range boundaries. Low risk.	Low risk
<i>Pteropus poliocephalus</i>	Grey-headed flying-fox	Record within 5km.	VU		Requires fruits for foraging and exposed branches near water for roosting. Marginally suitable habitat and outside of range boundaries. Low risk.	Low risk
<i>Sarcophilus harrisii</i>	Tasmanian devil	Record within 5km. Within 500m based on RB.	e/EN	PR	Broad range of potential habitat, though shelter is required for denning. Marginally suitable habitat. Low risk.	Low risk
<i>Thylacinus cynocephalus</i>	Thylacine	Record within 5km.	x/EX		NA – species extinct	Low risk
<i>Tyto novaehollandiae</i>	Masked owl	Record within 5km. Within 500m based on RB.	e/VU	CR	Require trees with large (>15cm) hollows. No suitable habitat. Low risk.	Low risk

* refers to listing status under the Tasmanian Threatened Species Act 1995: r = rare, v = vulnerable e = endangered, x = extinct

⁺ refers to listing status at the federal level under the Environment Protection and Biodiversity Conservation Act 1999: VU = Vulnerable, EN = Endangered, CR = Critically Endangered, EX = extinct

^x refers to range boundaries as specified in the Forest Practices Biodiversity database: PR = Potential Range, CR = Core Range, KR = Known Range

6 Disturbance

The Natural Values Atlas records a number of weeds of significance (declared weeds) and priority weeds as being present within 5km (Table 6-1 and Table 6-2). Several weeds, including garden escapees, were recorded throughout the title, primarily within the regenerating vegetation and the margins of the vehicle tracks. Weeds observed include gorse, Spanish heath, Montpellier broom, English broom, blackberry, *Crataegus monogyna* hawthorn, blue periwinkle, arum lily, *Euphorbia lathyris* caper spurge, *Reseda luteola* weld, *Grevillea spp.*, and *Hakea spp.* Gorse and Spanish heath are widespread throughout the title. The highest infestation of weeds is along the northern boundary of the title, adjacent to the existing residential development.

There is a risk of increased weed incursion in the area as a result of works and soil disturbance. Weed control of the works area prior to and following works is recommended to prevent further establishment of weeds throughout the area, particularly surrounding, on the margins of, and within, the threatened *E. ovata* forest and woodland community. Non-invasive hand control techniques are required within the *E. ovata* community. Strict washdown and disinfection protocols (as per DPIWE 2004) should be adhered to for any vehicles and machinery accessing the site during works to prevent the further establishment of weeds in the area.

The declared weeds (English broom, Spanish heath, Montpellier broom, blackberry and gorse) are subject to Statutory Weed Management Plans under the *Tasmanian Weed Management Act 1999*. English broom, Spanish heath, Montpellier broom, and blackberry are considered to have widespread infestations in the municipality (Zone B) and are therefore subject to containment management measures (DPIPWE 2011). This includes preventing the spread of the weeds outside of the municipal boundaries and to specified areas within the municipality. Gorse is considered to have localised infestations within the municipality (Zone A) and is therefore subject to eradication management measures (DPIPWE 2011). This includes implementing an integrated control program for eradication and prevention of future occurrences. It is an obligation of all landholders to actively control or eradicate any declared weeds on their property.

Table 6-1: Tasmanian Management Act Weeds within 5000m

SPECIES	COMMON NAME
<i>Amaranthus albus</i>	Tumble pigweed
<i>Asparagus asparagoides</i>	Bridal creeper
<i>Asphodelus fistulosus</i>	Onion weed
<i>Bassia scoparia</i>	Copper saltbush
<i>Carduus pycnocephalus</i>	Slender thistle
<i>Chrysanthemoides monilifera subsp. monilifera</i>	Boneseed
<i>Cirsium arvense var. arvense</i>	Creeping thistle
<i>Cortaderia sp.</i>	Pampas grass
<i>Cytisus scoparius</i>	English broom
<i>Echium plantagineum</i>	Paterson's curse
<i>Erica lusitanica</i>	Spanish heath
<i>Erica scoparia</i>	Twig heath
<i>Foeniculum vulgare</i>	Fennel

SPECIES	COMMON NAME
<i>Genista monspessulana</i>	Montpellier broom
<i>Hypericum perforatum subsp. veronense</i>	Perforated st johns-wort
<i>Ilex aquifolium</i>	Holly
<i>Lepidium draba</i>	Hoary cress
<i>Myriophyllum aquaticum</i>	Parrotfeather
<i>Rubus sp.</i>	Blackberry
<i>Salix sp.</i>	Willow
<i>Senecio jacobaea</i>	Ragwort
<i>Ulex europaeus</i>	Gorse
<i>Xanthium spinosum</i>	Bathurst burr

Table 6-2: Priority Weeds within 5000m

SPECIES	COMMON NAME
<i>Billardiera heterophylla</i>	Bluebell creeper
<i>Pittosporum undulatum</i>	Sweet pittosporum
<i>Polygala myrtifolia</i>	Myrtleleaf milkwort
<i>Verbascum thapsus</i>	Great mullein
<i>Watsonia meriana var. bulbifera</i>	Bulbil watsonia

7 Biosecurity Risks

According to the Natural Values Atlas, no biosecurity risks, including *Phytophthora cinnamomi*, have been identified within 1km of the subject title. Washdown and disinfection protocols (as per DPIWE, 2004) must be adhered to for any vehicles and machinery accessing the site during works to prevent the spread of *Phytophthora* to the area.

8 Geo-conservation Sites

According to the Natural Values Atlas, there are no geo-conservation sites within 1000m of the subject title. Therefore, no geo-conservation sites are considered at risk of being impacted by the proposed subdivision.

9 Acid Sulfate Soils

According to the Natural Values Atlas, there are no acid sulfate soils found within the subject title. Therefore, no disturbance of potential acid sulfate soils as a result of the proposed subdivision is expected.

10 Conclusion and Recommendations

The subject title contains approximately 0.7ha of a threatened vegetation community, *Eucalyptus ovata* forest and woodland (DOV), along the southern boundary, which is also a mapped 'priority vegetation area' under the Planning Scheme. Vegetation in the west of the title is also within a priority vegetation area, however, this area is almost entirely regenerating cleared land (FRG). No future development is expected to be facilitated within or immediately adjacent to the threatened vegetation community as a result of the proposed subdivision. The proposal is therefore unlikely to have an unnecessary or unacceptable impact on priority vegetation.

No threatened flora species were identified on the subject title or are considered to be at greater than low risk of being impacted as a result of the proposed subdivision and subsequent development. Additionally, no threatened fauna dens or nests were identified within the subject title; however, potential habitat was identified for the central north burrowing crayfish and swift parrot, with crayfish burrows observed in the west of the title. The title may overlap some species' ranging boundaries; however, the proposal is considered to have minimal impact on these species.

Providing the recommendations, as outlined in this report, are followed, the proposed subdivision and future development facilitated by the subdivision are considered unlikely to have an unnecessary or unacceptable impact on priority vegetation and adequately address the performance criteria of C7.7.2 Subdivision within a priority vegetation area under the Natural Assets Code of the *Tasmanian Planning Scheme - Devonport*.

Recommendations

- The threatened *Eucalyptus ovata* forest and woodland community should be marked as a machinery exclusion zone during works to avoid any impacts as a result of accessing the site to facilitate the proposed subdivision and any future development
- Any disturbance of burrowing crayfish, including their burrows and chimneys, must be avoided. If any disturbance is unavoidable to burrowing crayfish as a result of the proposed subdivision or future development of the area, a permit must be obtained.
- Prevent biosecurity incursions and further weed incursions by implementing strict washdown guidelines for all machinery and equipment used during the proposed subdivision and any future development
- Weed control of the title prior to and following works to prevent further establishment of weeds throughout the area, particularly surrounding, on the margins of, and within, the threatened *E. ovata* forest and woodland community. Non-invasive hand control techniques are required within the *E. ovata* community.
- Approvals will be required if any disturbance to the *E. ovata* community is unavoidable.

11 References

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Appendix 1: Threatened Species Habitat

Table A1-1: Preferred habitat for threatened flora previously recorded within 5km of the subject title from NVA accessed 03/11/2021

SPECIES NAME	COMMON NAME	PREFERRED HABITAT
<i>Brunonia australis</i>	Blue pincushion	Typically occurs in grassy woodlands and dry sclerophyll forests dominated by black peppermint (<i>Eucalyptus amygdalina</i>) or less commonly white gum (<i>Eucalyptus viminalis</i>) or stringybark (<i>Eucalyptus obliqua</i>). Elevations of between 10 and 350 metres. Sandy and gravelly alluvial soils with a particular preference for ironstone gravels.
<i>Epilobium pallidiflorum</i>	Showy willowherb	Occurs in wet places (e.g. natural wetlands amongst forest, margins of <i>Melaleuca ericifolia</i> swamp forest, scrubby-sedgy <i>E. ovata</i> woodland on heavy soils, etc.) mostly in the north and north-west of the State.
<i>Gratiola pubescens</i>	Hairy brooklime	Most commonly located in permanently or seasonally damp or swampy ground, including the margins of farm dams.
<i>Gynatrix pulchella</i>	Fragrant hempbush	Occurs as a riparian shrub, found along rivers and drainage channels, sometimes extending onto adjacent floodplains (including old paddocks), predominantly in the north of the State.
<i>Leucopogon affinis</i>	Lanceleaf beardheath	Occurs in a broad range of habitats including tall scrub, mainly on stabilised dune sands and hinterlands, lagoon margins, and gullies and riverbanks in wet eucalypt forest, probably restricted to the Bass Strait islands. Observations near Devonport, Latrobe and Arthur River require confirmation.
<i>Limonium australe</i> <i>var. australe</i>	Yellow sea-lavender	Occurs in succulent or graminoid saltmarsh close to the high water mark, typically near small brackish streams.
<i>Persicaria decipiens</i>	Slender waterpepper	Occurs on the banks of rivers and streams, mostly in the north of the State, including King Island. The species may colonise farm dams.
<i>Pimelea curviflora</i>	Curved riceflower	No habitat information listed. Assumed as below for slender curved riceflower.
<i>Pimelea curviflora</i> <i>var. gracilis</i>	Slender curved riceflower	Occurs in a range of vegetation types from wet and dry sclerophyll forest to hardwood plantations. Understories vary from open and grassy to densely shrubby. It can densely colonise disturbed sites such as firebreaks, log landings and tracks.
<i>Pomaderris intermedia</i>	Lemon dogwood	Occurs in heathland and heathy woodland on eastern Bass Strait islands but extends to mainly dry sclerophyll forest on mainland Tasmania, most often associated with rock outcrops (dolerite), riparian areas and open forest.

SPECIES NAME	COMMON NAME	PREFERRED HABITAT
<i>Schenkia australis</i>	Spike centaury	Recorded from rainforest, wet sclerophyll forest, dry sclerophyll forest and heathland in the east and north of the State. It has also been recorded from forest sites which were cleared for pasture. Several recent sites are from windswept coastal heathland/scrub.
<i>Tetratheca ciliata</i>	Northern pinkbells	Occurs from near-coastal areas in the State's north at elevations below 70 m, ranging from Rocky Cape in the west to Tomahawk/Boobyalla in the east, and an outlying site near Liffey about 60 km inland and 320 m above sea level. It has been recorded from heathlands and heathy woodlands on sandy well-drained soils, the woodland dominated by <i>Eucalyptus amygdalina</i> .

Table A1-2: Preferred habitat for threatened fauna previously recorded within 5km or with range boundaries within 5km of the subject title from NVA and BVD accessed 03/11/2021

SPECIES NAME	COMMON NAME	PREFERRED HABITAT
<i>Accipiter novaehollandiae</i>	Grey goshawk	Potential habitat is native forest with mature elements below 600 m altitude, particularly along watercourses. Significant habitat may be summarised as areas of wet forest, rainforest and damp forest patches in dry forest, with a relatively closed mature canopy, low stem density, and open understorey in close proximity to foraging habitat and a freshwater body (i.e. stream, river, lake, swamp, etc.). Forest types used; blackwood swamp forest, <i>Leptospermum</i> or <i>Melaleuca</i> swamp forest, riparian blackwood and tea-tree scrub communities, wet eucalypt forest with blackwood/ myrtle understorey and rainforest.
<i>Alcedo azurea subsp. diemenensis</i>	Azure kingfisher	Potential habitat for the azure kingfisher comprises potential foraging habitat and potential breeding habitat. Potential foraging habitat is primarily freshwater (occasionally estuarine) waterbodies such as large rivers and streams with well-developed overhanging vegetation suitable for perching and water deep enough for dive-feeding. Potential breeding habitat is usually steep banks of large rivers (a breeding site is a hole (burrow) drilled in the bank).
<i>Antipodia chaostola</i>	Chaostola skipper	Potential habitat is dry forest and woodland supporting <i>Gahnia radula</i> (usually on sandstone and other sedimentary rock types) or <i>Gahnia microstachya</i> (usually on granite-based substrates).
<i>Aquila audax subsp. fleayi</i>	Tasmanian wedge-tailed eagle	Potential habitat comprises potential nesting habitat and potential foraging habitat. Potential foraging habitat is a wide variety of forest (including areas subject to native forest silviculture) and non-forest habitats. Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10ha) of eucalypt or mixed forest. Nest trees are usually amongst the largest in a locality. They are generally in sheltered positions on leeward slopes, between the lower and mid sections of a slope and with the top of the tree usually lower than the ground level of the top of the ridge, although in some parts of the State topographic shelter is not always a significant factor (e.g. parts of the northwest and Central Highlands). Nests are usually not constructed close to sources of disturbance and nests close to disturbance are less productive. More than one nest may occur within a territory but only one is used for breeding in any one year. Significant habitat is all native forest and native non-forest vegetation within 500 m or 1 km line of sight of known nest sites (where the nest tree is still present).

SPECIES NAME	COMMON NAME	PREFERRED HABITAT
<i>Astacopsis gouldi</i>	Giant freshwater crayfish	Potential habitat is freshwater streams of all sizes. Characteristics of potential habitat include a combination of well-shaded flowing and still waters, deep pools, decaying logs and undercut banks. Riparian vegetation needs to be native and predominantly intact to provide shade, nutrient, energy and structural inputs into streams. Smaller juveniles inhabit shallow fast-flowing streams favouring habitats with rocks or logs that are large enough to be stable but not embedded in finer substrates, but overlie coarser substrates and/or have a distinct cavity underneath. Perennial headwater streams have substantially higher juvenile densities than non-perennial headwater streams.
<i>Botaurus poiciloptilus</i>	Australasian bittern	Found in shallow and vegetated freshwater or brackish swamps.
<i>Catadromus lacordaire</i>	Green-lined ground beetle	Potential habitat is open, grassy/sedgy, low altitude grasslands and woodlands associated with temporary and permanent wetlands and low-lying plains, flats and ephemeral drainages adjacent to rivers and streams. Key habitat elements that need to be present include sheltering sites such as patches of stones, coarse woody debris and/or cracking soils.
<i>Dasyurus maculatus</i>	Spotted-tailed quoll	Potential habitat is coastal scrub, riparian areas, rainforest, wet forest, damp forest, dry forest and blackwood swamp forest (mature and regrowth), particularly where structurally complex areas are present, and includes remnant patches in cleared agricultural land or plantation areas. Significant habitat for the spotted-tailed quoll is all potential denning habitat within the core range of the species. Potential denning habitat for the spotted tailed quoll includes 1) any forest remnant (>0.5ha) in a cleared or plantation landscape that is structurally complex (high canopy, with dense understorey and ground vegetation cover), free from the risk of inundation, or 2) a rock outcrop, rock crevice, rock pile, burrow with a small entrance, hollow logs, large piles of coarse woody debris and caves.
<i>Dasyurus viverrinus</i>	Eastern quoll	Potential habitat includes rainforest, heathland, alpine areas and scrub. However, it seems to prefer dry forest and native grassland mosaics which are bounded by agricultural land. Potential range is the whole of mainland Tasmania and Bruny Island.
<i>Engaeus granulatus</i>	Central north burrowing crayfish	Potential habitat includes any poorly-drained habitats such as streams (of any class and disturbance history), seepages (e.g. springs in forest or pasture, outflows of farm dams), low-lying flat swampy areas and vegetation (e.g. buttongrass and heathy plains, marshy areas, boggy areas of pasture), drainage depressions, ditches (artificial and natural, including roadside ditches, pasture drains, etc.). Significant habitat for the central north burrowing crayfish is all native vegetation within the immediate catchments where the species is known to occur.
<i>Galaxiella pusilla</i>	Eastern dwarf galaxias	Potential habitat for the dwarf galaxiid is slow flowing waters such as swamps, lagoons, drains or backwaters of streams, often with aquatic vegetation. It may also be found in temporary waters that dry up in summer for as long as 6-7 months, especially if burrowing crayfish burrows are present (although these will usually be connected to permanent water). Habitat may include forested swampy areas but does not include blackwood swamp forest. Juveniles congregate in groups at the water surface in pools free of vegetation. Significant habitat for the dwarf galaxiid is all potential habitat and a 30m streamside reserve within the core range.

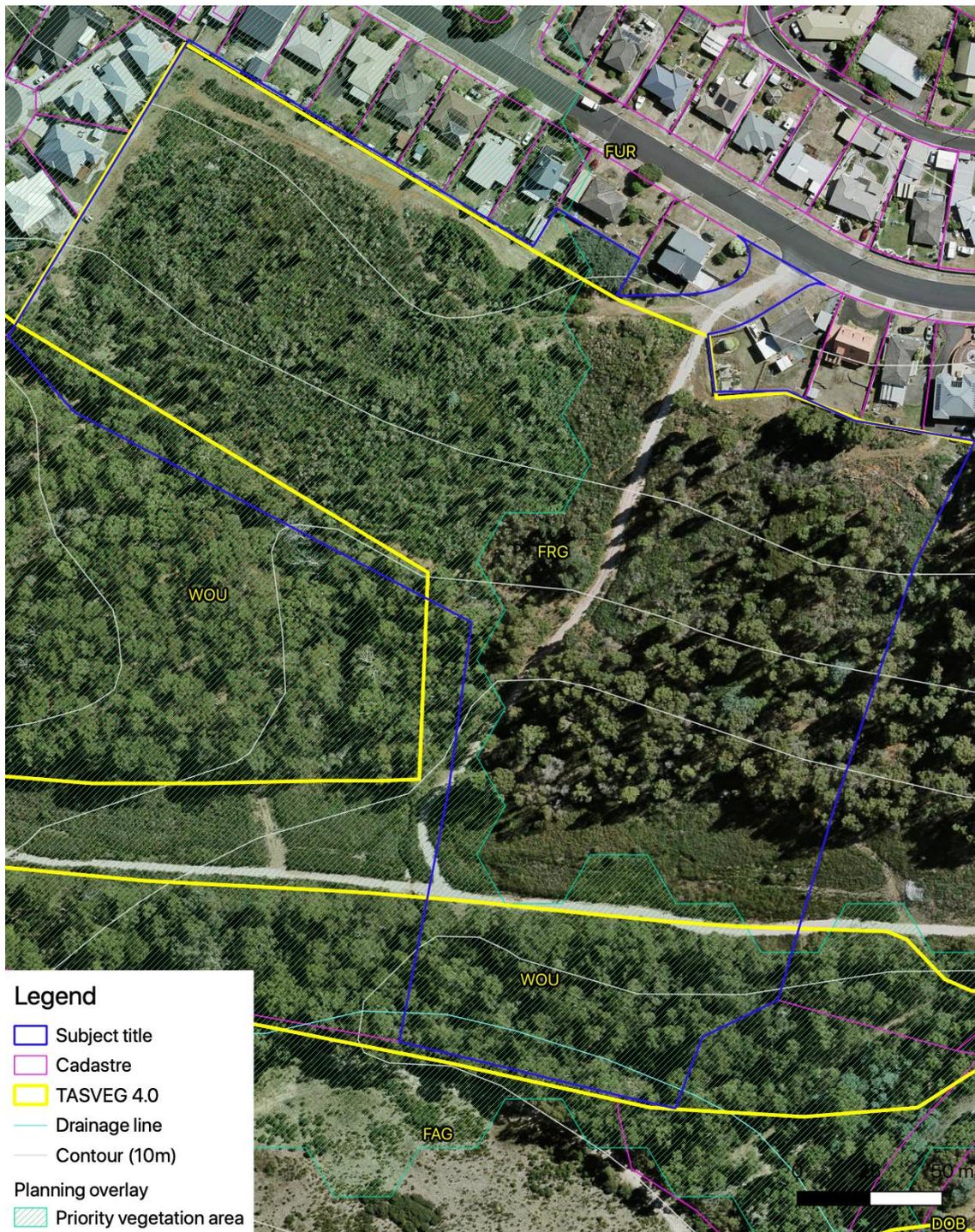
SPECIES NAME	COMMON NAME	PREFERRED HABITAT
<i>Haliaeetus leucogaster</i>	White-bellied sea eagle	Potential habitat comprises potential nesting habitat and potential foraging habitat. Potential foraging habitat is any large waterbody (including sea coasts, estuaries, wide rivers, lakes, impoundments and even large farm dams) supporting prey items (fish). Potential nesting habitat is tall eucalypt trees in large tracts (usually more than 10 ha) of eucalypt or mixed forest within 5 km of the coast (nearest coast including shores, bays, inlets and peninsulas), large rivers (Class 1), lakes or complexes of large farm dams. Scattered trees along river banks or pasture land may also be used. Significant habitat for the white-bellied sea eagle is all native forest and native non-forest vegetation within 500 m or 1 km line of sight of known nest sites (where nest tree still present).
<i>Hirundapus caudacutus</i>	White-throated needletail	Almost exclusively aerial, occurring over most types of habitat. No specific habitat requirements documented for perching.
<i>Lathamus discolor</i>	Swift parrot	Potential breeding habitat for the swift parrot comprises potential foraging habitat and potential nesting habitat and is based on definitions of foraging and nesting trees (see Table A in swift parrot habitat assessment Technical Note). Potential foraging habitat comprises <i>E. globulus</i> or <i>E. ovata</i> trees that are old enough to flower.
<i>Limnodynastes peroni</i>	Striped marsh frog	Potential habitat for the striped marsh frog is natural and artificial coastal and near-coastal wetlands, lagoons, marshes, swamps and ponds (including dams), with permanent freshwater and abundant marginal, emergent and submerged aquatic vegetation. Significant habitat for the striped marsh frog is high quality potential habitat.
<i>Litoria raniformis</i>	Green and gold frog	Potential habitat is permanent and temporary waterbodies, usually with vegetation in or around them. Potential habitat includes features such as natural lagoons, permanently or seasonally inundated swamps and wetlands, farm dams, irrigation channels, artificial water holding sites such as old quarries, slow flowing stretches of streams and rivers and drainage features.
<i>Perameles gunnii</i>	Eastern barred bandicoot	Potential habitat is open vegetation types including woodlands and open forests with a grassy understorey, native and exotic grasslands, particularly in landscapes with a mosaic of agricultural land and remnant bushland. Significant habitat is dense tussock grass sedge swards, piles of coarse woody debris and denser patches of low shrubs (especially those that are densely branched close to the ground providing shelter) within the species' core range.
<i>Prototroctes maraena</i>	Australian grayling	All streams and rivers in their lower to middle reaches. Areas above permanent barriers that prevent fish migration are not potential habitat.
<i>Pseudemoia pagenstecheri</i>	Tussock skink	Potential habitat for the tussock skink is grassland and grassy woodland (including rough pasture with paddock trees), generally with a greater than 20% cover of native grass species, especially where medium to tall tussocks are present.
<i>Pteropus poliocephalus</i>	Grey-headed flying-fox	Requires foraging resources and roosting sites. It is a canopy-feeding frugivore and nectarivore, which utilises vegetation communities including rainforests, open forests, closed and open woodlands, <i>Melaleuca</i> swamps and <i>Banksia</i> woodlands. It also feeds on commercial fruit crops and on introduced tree species in urban areas. The primary food source is blossom from <i>Eucalyptus</i> and related genera but in some areas it also utilises a wide range of

SPECIES NAME	COMMON NAME	PREFERRED HABITAT
		rainforest fruits. The species roosts in aggregations of various sizes on exposed branches. Roost sites are typically located near water, such as lakes, rivers or the coast. Roost vegetation includes rainforest patches, stands of <i>Melaleuca</i> , mangroves and riparian vegetation, but colonies also use highly modified vegetation in urban and suburban areas
<i>Sacophilus harrisii</i>	Tasmanian Devil	Potential habitat for the Tasmanian devil is all terrestrial native habitats, forestry plantations and pasture. Devils require shelter (e.g. dense vegetation, hollow logs, burrows or caves) and hunting habitat (open understorey mixed with patches of dense vegetation) within their home range (427km ²). Significant habitat for the Tasmanian devil is a patch of potential denning habitat where three or more entrances (large enough for a devil to pass through) may be found within 100m of one another, and where no other potential denning habitat with three or more entrances may be found within a 1km radius, being the approximate area of the smallest recorded devil home range (Pemberton 1990). Potential denning habitat for the Tasmanian devil is areas of burrow-able, well-drained soil, log piles or sheltered overhangs such as cliffs, rocky outcrops, knolls, caves and earth banks, free from risk of inundation and with at least one entrance through which a devil could pass.
<i>Thylacinus cynocephalus</i>	Thylacine	Species extinct.
<i>Tyto novaehollandiae</i>	Masked owl	Potential habitat for the masked owl is all areas with trees with large hollows (>15cm entrance diameter). In terms of using mapping layers, potential habitat is considered to be all areas with at least 20% mature eucalypt crown cover (PI type mature density class 'a', 'b', or 'c'). From on ground surveys this is areas with at least 8 trees per hectare over 100cm dbh. Remnants and paddock trees in agricultural areas may also constitute potential habitat. Significant habitat for the masked owl is any areas within the core range of native dry forest with trees over 100cm dbh with large hollows (>15cm entrance diameter). Such areas usually have no regrowth component or just a sparse regrowth component. In terms of using mapping layers for an initial desktop assessment prior to an on-ground survey. Significant habitat may occur in all areas within the core range classified as dry forest (TASVEG dry Eucalypt forest and woodland) with at least 20% mature eucalypt crown cover (PI type mature density class 'a', 'b', or 'c') that is classified as mature (Growth Stage class 'M'). From on ground surveys this is areas with at least 8 trees per hectare over 100cm dbh and more than half of the canopy cover is comprised of mature trees. Remnants and paddock trees in agricultural areas may also constitute significant habitat.

Appendix 2: Maps



Figure A2-1: Location



Map Name: Aerial
 Project: Subdivision
 Client: Annsca
 Date: 02/12/2021

BaseMap image by LIST Ortho
 Cadastre, contours, drainage, Planning overlay, and
 vegetation from LIST
 (C) State of Tas



NOTE: only the priority vegetation area overlay is shown

Figure A2-2: Aerial image



Figure A2-3: Observed Natural Values based on site visit conducted 16/11/2021

Appendix 3: Photos

All photos taken by Sally Scrivens or Michael Tempest 16 November 2021



Figure A3-1: View south of the regenerating cleared land in the north of the title



Figure A3-2: View south into *Eucalyptus ovata* forest and woodland community (DOV) from vehicle track.



Figure A3-3: View southeast along the drainage line in the west of the title



Figure A3-4: View south into the *Eucalyptus obliqua* forest and woodland community in the eastern portion of the title



Figure A3-5: View north into the easement in the southern portion of the title

Appendix 4: Site Plan

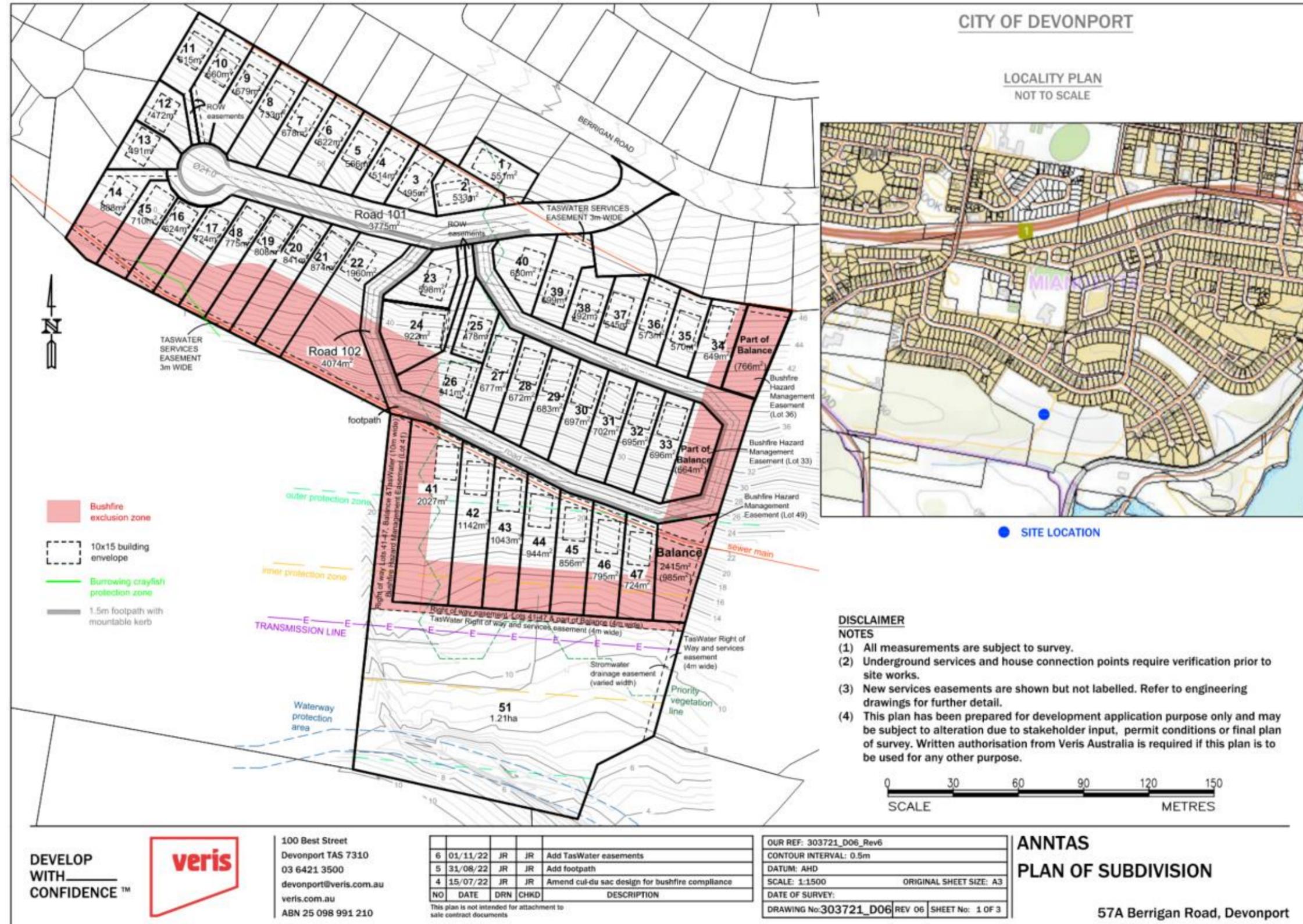


Figure A4-1: Site plan

FLORA AND FAUNA REPORT: 57A BERRIGAN ROAD

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Document review and authorisation

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57A Berrigan Road Devonport

Traffic Impact Assessment

Prepared for
ANN-TAS

Client representative
David Calgaro

Date
7 December 2021

Rev00



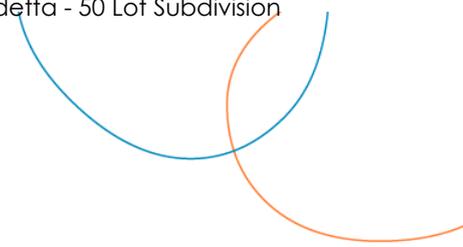
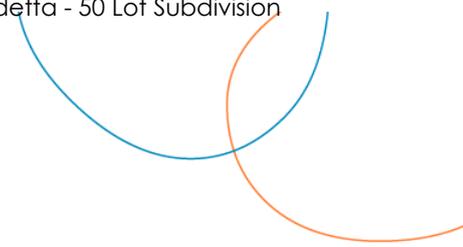


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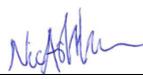
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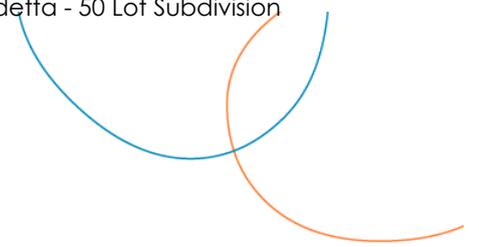
Appendices

- Appendix A** — Site Plans
- Appendix B** — Existing SIDRA
- Appendix C** — Post Development SIDRA
- Appendix D** — 10-years Post Development SIDRA

Prepared by — Nicholas Ashlin		Date — 7 December 2021
Reviewed by — Leenah Ali-Lavroff		Date — 7 December 2021
Authorised by — Ross Mannering		Date — 7 December 2021

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00	Report for issue	NA	LAL	RM	07/12/2021

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1. Introduction

A 60 lot residential subdivision is proposed at 57A Berrigan Road, Devonport. To support the Development Application, a Traffic Impact Assessment (TIA) is required.

ANN-TAS have engaged pitt&sherry to prepare a TIA for the proposed development.

This report has been prepared in accordance with the Department of State Growth's (DSG's) *Framework for Undertaking Traffic Impact Assessments* and the *Tasmanian Planning Scheme – Devonport* (the Planning Scheme).

2. Existing conditions

2.1 Site location

The site is located at 57A Berrigan Road and is currently vacant. Under the Planning Scheme, the site has a land use classification of 8.0 General Residential.

Surrounding land uses generally include 8.0 General Residential, 26.0 Utilities, 27.0 Community Purpose, 18.0 Light Industrial, 28.0 Recreation and 29.0 Open Space.

The Bass Highway is located approximately 0.7km north of the site while the Devonport CBD is located approximately 2km north-east of the site.

Figure 1 shows the location of the site in the local context.



Figure 1: Site in local context (Aerial Source: <https://maps.thelist.tas.gov.au/listmap/app/list/map>)

2.2 Surrounding road network

2.2.1 Berrigan Road

Berrigan Road (shown in Figure 2 and Figure 3) is a Devonport City Council (Council) owned two-way link road¹ configured with a single lane in each direction. Berrigan Road operates in a half-loop and spans from Middle Road to Forbes Street, both south of the Bass Highway. The road is primarily utilised to provide access to residential lots and access roads within the Miandetta area.

Berrigan Road has an average width of approximately 9.5m and features footpaths along both sides of the road. On-street parking on both sides of the road is permitted.

Berrigan Road is subject to the Tasmanian Urban Speed Limit of 50km/h, although a speed limit of 40km/h is applicable during school hours in the vicinity of the site. Berrigan Road carries approximately 3,100 vehicles per day² at the Middle Road/ Berrigan Road intersection.

¹ Based on theLIST Road Centrelines Transport Class.

² Daily traffic volumes calculated using collected peak hour traffic data and assuming a peak to daily ratio of 10%.



Figure 2: Berrigan Road – facing east



Figure 3: Berrigan Road – facing west

2.2.2 Middle Road

Middle Road is a Council owned two-way collector road³ configured with a single lane in each direction. Middle Road predominantly operates in a north-east south-west direction and connects Stony Rise Road and Forbes Street, the latter of which provides a connection to Devonport’s CBD.

Middle Road is approximately 11m wide in the vicinity of its intersection with Berrigan Road and features footpaths on both sides of the road. On-street parking is typically permitted on both sides of the road, although is prohibited on the northern side of Middle Road at the Middle Road/ Berrigan Road intersection.

Middle Road has a speed limit of 60km/h and carries approximately 9,400 vehicles per day⁴ at the Middle Road/ Berrigan Road intersection.

2.3 Middle Road/ Berrigan Road intersection

The Middle Road/ Berrigan Road intersection is a give-way T-intersection that features a pedestrian median along the Berrigan Road approach.

2.4 Traffic volumes

Council provided traffic data for both Middle Road and Berrigan Road completed in 2017 and 2018, respectively. The provided traffic data showed that the AM peak hour on Berrigan Road occurred between 8:00am and 9:00am and the PM peak hour occurred between 2:00pm and 3:00pm, although both were subject to variability. Based on the provided traffic data and noting the operating hours of the nearby Miandetta Primary School, it was identified that the AM peak hour of the Middle Road/ Berrigan Road intersection occurred between 8:00am and 9:00am and the PM peak hour occurred between 2:30pm and 3:30pm.

Traffic counts were undertaken by pitt&sherry staff during the identified AM and PM peak hours on Wednesday November 17th, 2021.

A summary of the existing weekday AM and PM peak hour traffic volumes are shown in Figure 4 and Figure 5.

³ Based on the LIST Road Centrelines Transport Class.

⁴ Daily traffic volumes calculated using collected peak hour traffic data and assuming a peak to daily ratio of 10%.

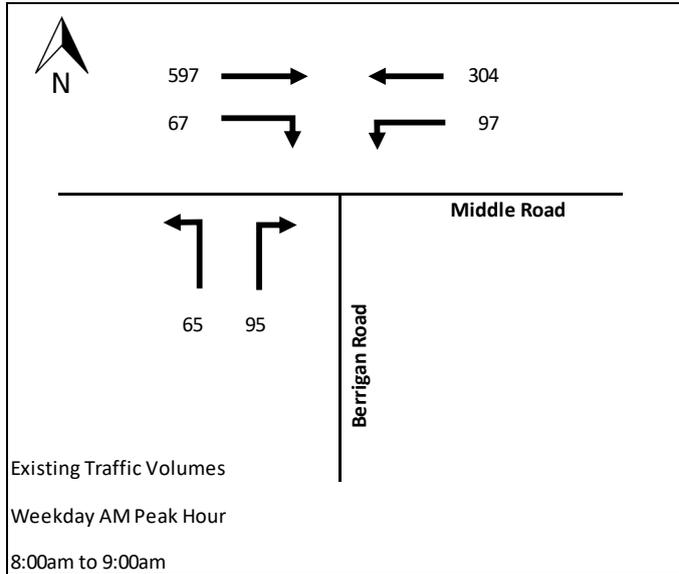


Figure 4: Existing traffic volumes – AM peak hour

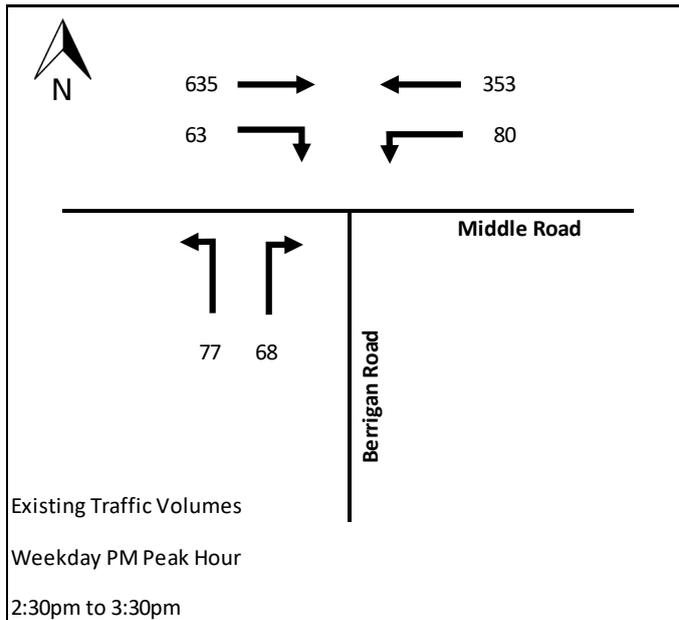


Figure 5: Existing traffic volumes – PM peak hour

2.5 Intersection operation

2.5.1 Traffic modelling software

The operation of the intersections has been modelled using SIDRA Intersection 9.0 traffic modelling software. SIDRA Intersection rates the performance of the intersections based on the vehicle delay and the corresponding Level of Service (LOS). It is generally accepted that LOS D or better is an acceptable level of operation. Table 1 shows the criteria that SIDRA Intersection adopts in assessing the LOS.

Table 1: SIDRA Intersection Level of Service (LOS) criteria

LOS	Delay per Vehicle (secs)		
	Signals	Roundabout	Sign Control
A	10 or less	10 or less	10 or less
B	10 to 20	10 to 20	10 to 15
C	20 to 35	20 to 35	15 to 25
D	35 to 55	35 to 50	25 to 35
E	55 to 80	50 to 70	35 to 50
F	Greater than 80	Greater than 70	Greater than 50

2.5.2 Intersection Layouts

The geometry of the Middle Road/ Berrigan Road intersection used for the SIDRA 9.0 traffic model was developed with reference to aerial photography obtained from theLIST, as well as measurements gathered during the site visit. The aerial photography and site visit informed the width and length of trafficable lanes and the speed limits.

The geometry of the Middle Road/ Berrigan Road intersection used in the SIDRA 9.0 model is shown below in Figure 6.

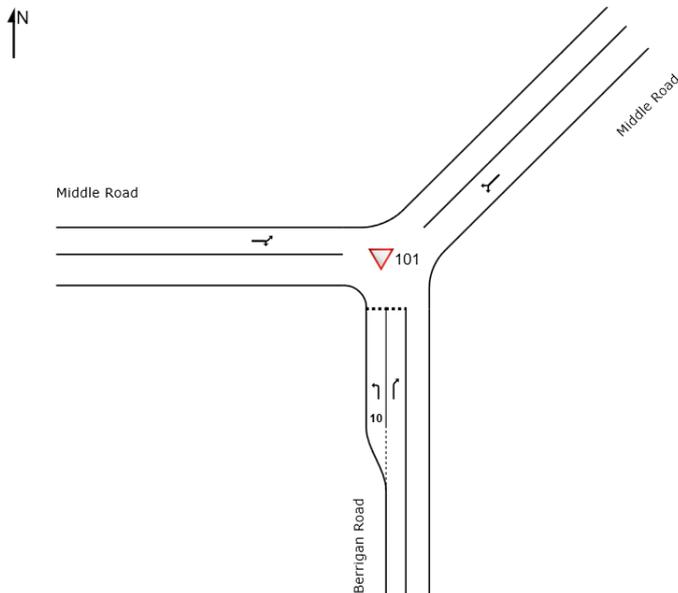


Figure 6: Geometric Layout – Middle Road/ Berrigan Road intersection

2.5.3 Traffic modelling results

Middle Road/ Berrigan Road

The LOS for each approach for the Middle Road/ Berrigan Road intersection is shown in Figure 7 and Figure 8. A summary of the traffic modelling results at the intersection is shown in Table 2. Full results are included in Appendix B.

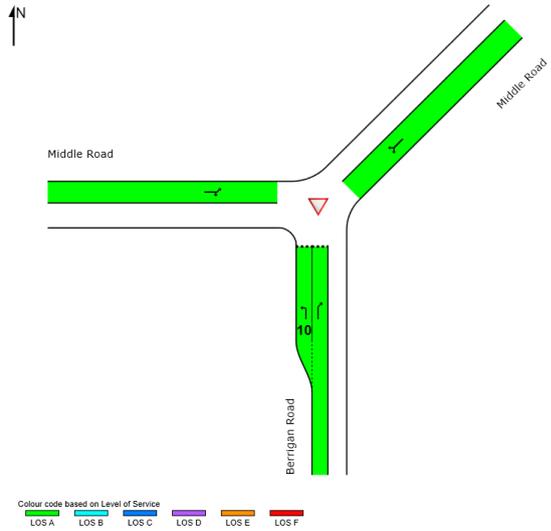


Figure 7: Middle Road/ Berrigan Road – existing weekday AM peak hour LOS

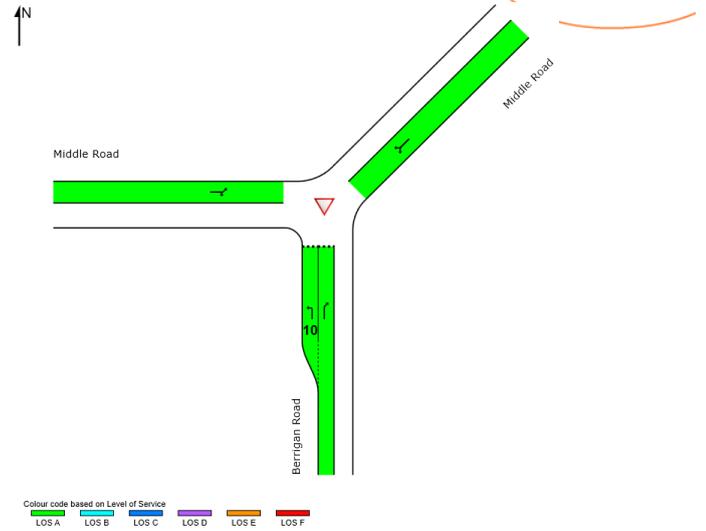
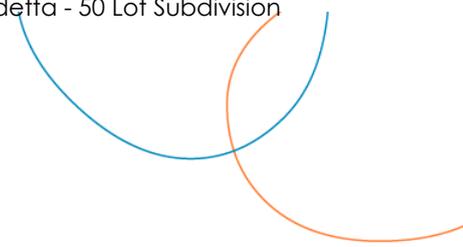


Figure 8: Middle Road/ Berrigan Road – existing weekday AM peak hour LOS

Table 2: Existing operation – SIDRA results

Intersection	Peak Hour	Leg	Degree of Saturation	Average delay (secs)	95% Back of Queue (m)	Level of Service
Middle Road/ Berrigan Road intersection	AM	South – Berrigan Road	0.13	6	2	A
		North-east – Middle Road	0.34	5	13	A
		West – Middle Road	0.34	5	4	A
		All Vehicles	0.49	5	13	A
	PM	South – Berrigan Road	0.10	6	2	A
		North-east – Middle Road	0.38	5	15	A
		West – Middle Road	0.36	5	4	A
		All Vehicles	0.38	5	15	A

Based on the results presented in Table 2, the modelled Middle Road/ Berrigan Road intersection currently operates well with minimal queues and delays experienced on all approaches. This aligns with observations made on site regarding the operation of the intersection.



2.6 Public transport

Merseylink Buses provide the main mode of public transport in Devonport and operate bus services 172, 173 and 174 within close proximity of the study area. All three bus services connect the site to Devonport and operate approximately once every hour between 7:00am and 3:30pm.

Three separate bus stops are located along Berrigan Road, the closest of which is approximately 0.3km from the proposed site. Another bus stop for school children is located at the Miandetta Primary School turning circle.

2.7 Pedestrian and cycling facilities

As previously discussed, pedestrian footpaths are located on both sides of Berrigan Road and Middle Road and were observed to typically have good sight distance at the intersections with the various adjoining local roads.

No on-street cycling facilities are located on either road, however, in Tasmania, cyclists are able to ride on the footpath. Furthermore, given the width of Berrigan Road and Middle Road, it's assumed that cyclists have sufficient room to utilise both roads should it be preferred.

2.8 Road safety

DSG have provided crash data along Berrigan Road in the vicinity of the proposed site. The data provided was for the most recent 5-year period. A summary of the crash data is included in Table 3.

Table 3: Crash history summary

Location	Crash Type	Crash Severity	Count
Berrigan Road	169 – Other on path	Property Damage Only	1
	171 – Left off carriageway into object or parked vehicle	Minor	1
	181 – Off right bend into object/ parked vehicle		1

The crash history provided shows that 3 crashes have occurred along Berrigan Road in the vicinity of the proposed site during the most recent 5-year period, 1 of which resulted in property damage only and 2 of which resulted in minor injury for persons involved.

Overall, the crashes along Berrigan Road in the vicinity of the site appear to be isolated incidents and do not indicate that there is a high crash risk along Berrigan Road.

3. Development proposal

3.1 Overview

A 60 lot subdivision is proposed at 57A Berrigan Road, Devonport. All lots of the subdivision are proposed to be accessed from Berrigan Road via the access located between 57 and 59 Berrigan Road.

Figure 9 shows a snapshot of the proposed development with the detailed plan attached in Appendix A.

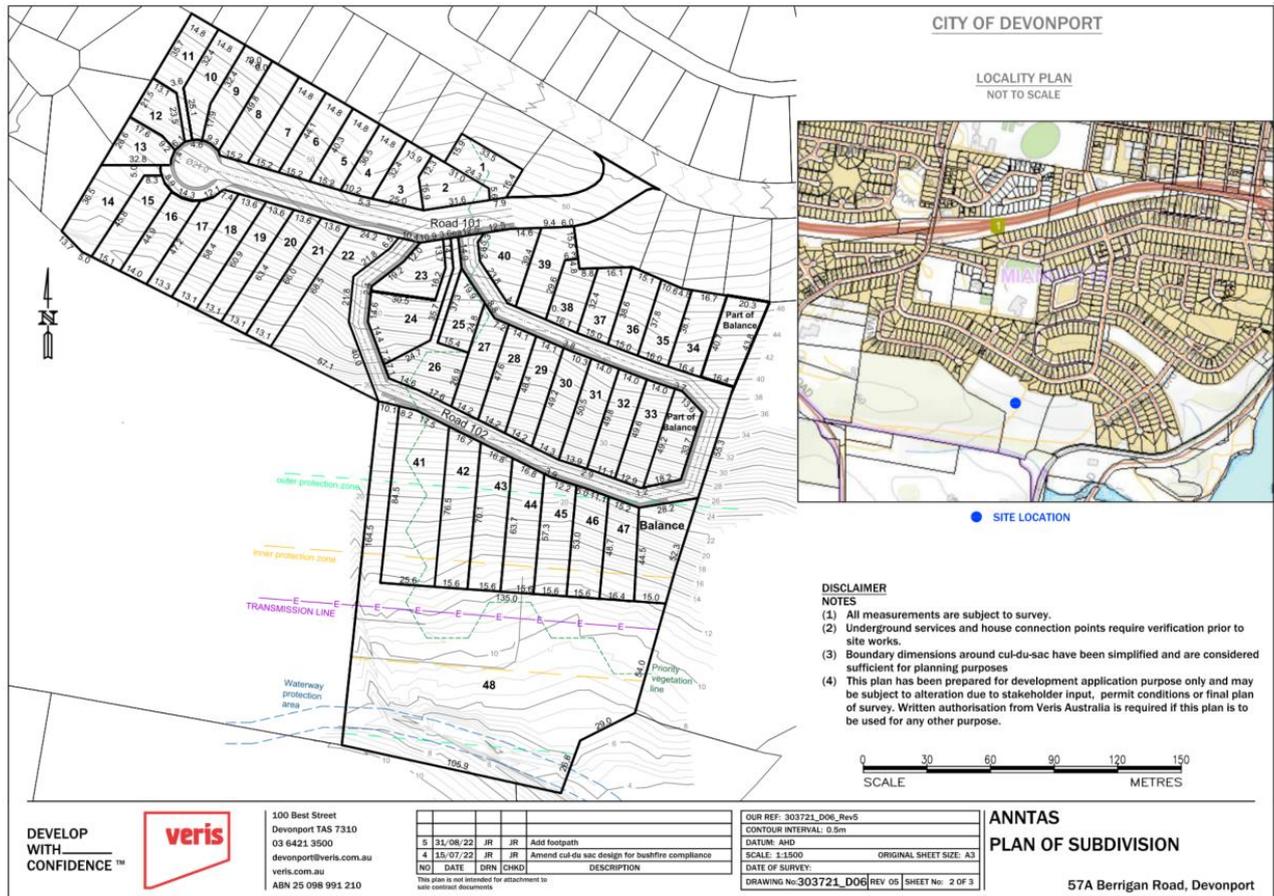


Figure 9: Subdivision plan

4.1 Traffic impact assessment

4.1.1 Traffic generation rates

Traffic generation rates for the proposed development have been sought from the NSW Roads and Maritime Services *RMS Guide to Traffic Generating Developments 2002 Technical Direction TDT2013/04a* (RMS Technical Direction). It has been assumed for the purpose of the traffic analysis that each lot would have one dwelling.

The RMS Technical Direction specifies the following generation rates for low density residential dwellings:

- Daily 10.7 trips per dwelling
- AM Peak Hour 0.99 trips per dwelling; and
- PM Peak Hour 0.95 trips per dwelling.

Based on the generation rates outlined above, the traffic movements expected to be generated by the proposed development following its completion, during weekday peak hours is as follows:

- Daily 642 vehicle movements
- Weekday AM Peak Hour 60 vehicle movements; and
- Weekday PM Peak Hour 57 vehicle movements.

4.1.2 Directional split of traffic

The directional split of traffic (i.e. ratio between inbound and outbound traffic movements) that has been adopted for the residential dwellings is as follows:

- AM Peak Hour 25% in/ 75% out; and
- PM Peak Hour 60% in/ 40% out.

4.1.3 Traffic distribution and assignment

The distribution of the traffic generated by the development is based on a number of factors including:

- The location of major distribution roads around the site
- The location of traffic generating developments; and
- Existing traffic patterns.

Based on the above, the expected distribution of movements to and from the proposed development are shown in Figure 10.

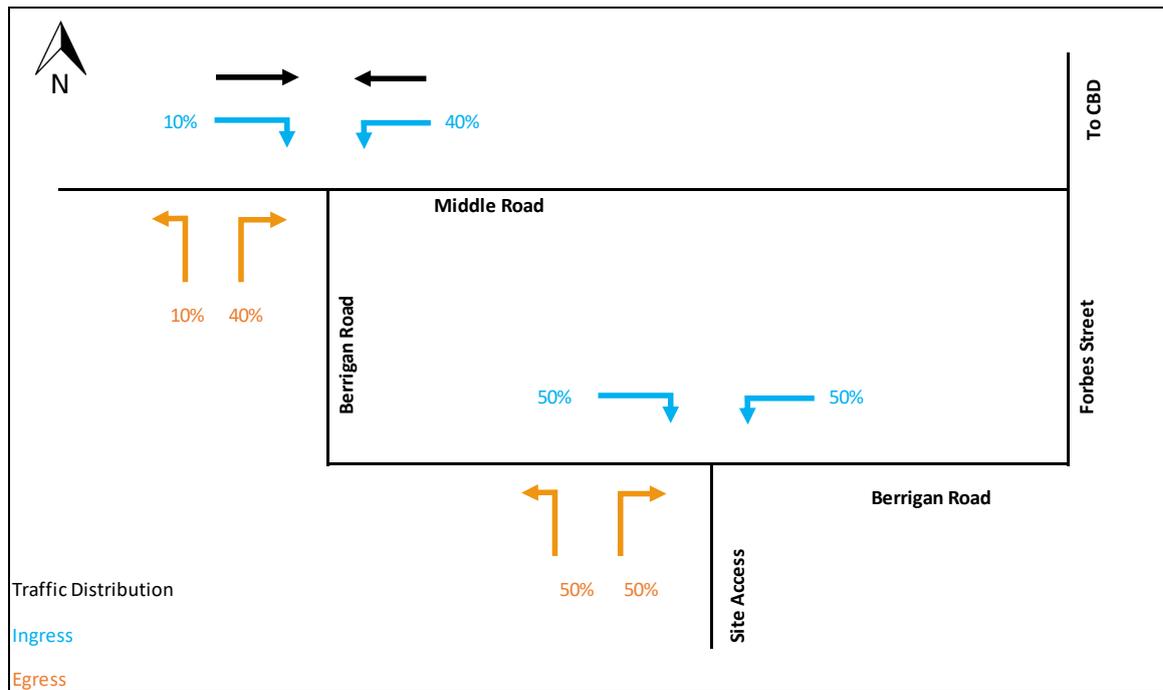


Figure 10: Traffic distribution

4.1.4 Post development (2021) impact

Traffic Volumes

The traffic impact of the proposed development on the Middle Road/ Berrigan Road intersection has been estimated for the year 2021. The expected post development traffic volumes for the weekday AM and PM peak hours are shown in Figure 11 and Figure 12.

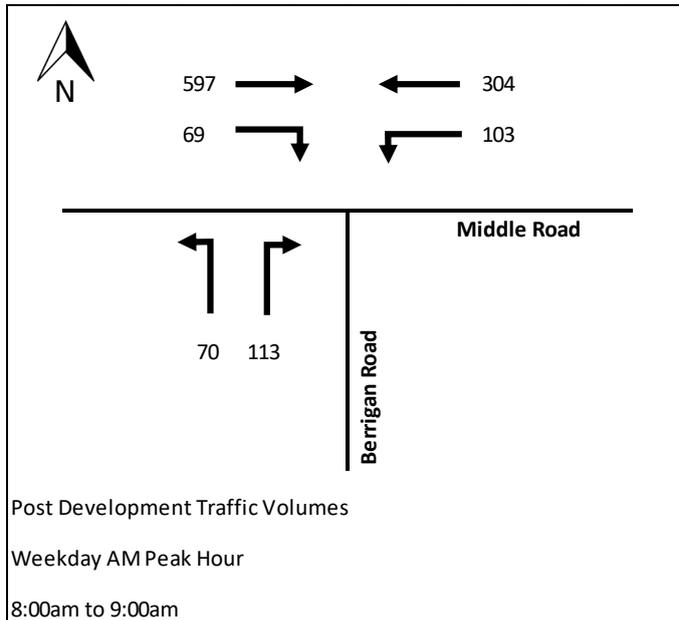


Figure 11: Post development traffic volumes – AM peak hour

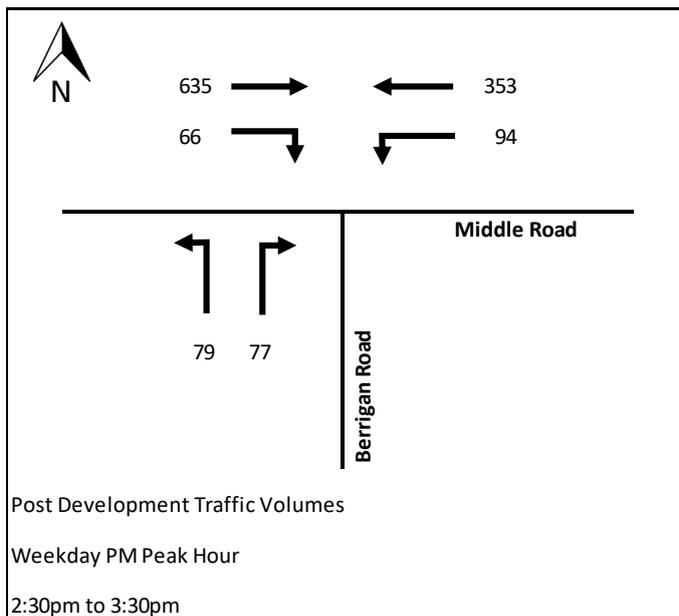


Figure 12: Post development traffic volumes – PM peak hour

Traffic Impacts

The LOS for each approach of the Middle Road/ Berrigan Road intersection post completion of the proposed development is shown in Figure 13 and Figure 14. A summary of the SIDRA Intersection results for degree of saturation, average delay and 95th percentile queue is provided in Table 4. Full results are presented in Appendix C.

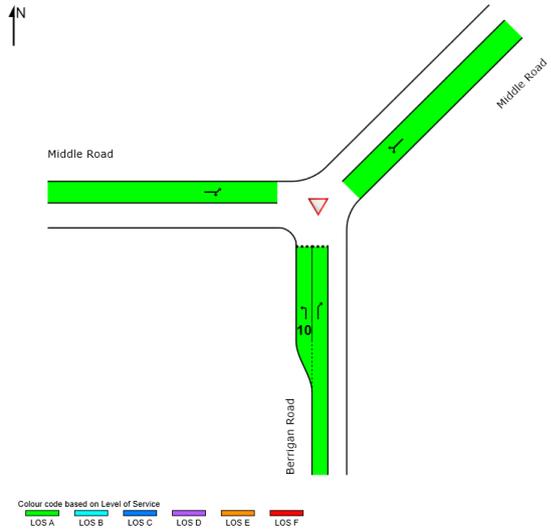


Figure 13: Middle Road/ Berrigan Road – post development weekday AM peak hour LOS

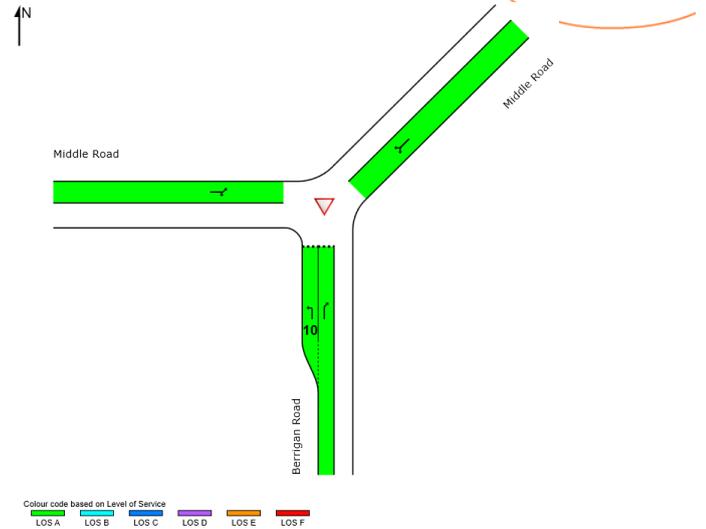


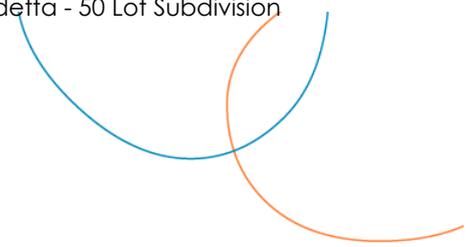
Figure 14: Middle Road/ Berrigan Road – post development weekday PM peak hour LOS

Table 4: Post development – SIDRA results

Intersection	Peak Hour	Leg	Degree of Saturation	Average delay (secs)	95% Back of Queue (m)	Level of Service
Middle Road/ Berrigan Road intersection	AM	South – Berrigan Road	0.16	6	3	A
		North-east – Middle Road	0.34	5	13	A
		West – Middle Road	0.34	5	4	A
		All Vehicles	0.34	5	13	A
	PM	South – Berrigan Road	0.12	6	2	A
		North-east – Middle Road	0.38	5	16	A
		West – Middle Road	0.37	5	5	A
		All Vehicles	0.38	5	16	A

Traffic Impact Discussion

As evidenced in Table 4, the Middle Road/ Berrigan Road intersection is expected to continue to operate well with minimal queues and delays post completion of the proposed development. All approaches are expected to continue operating at LOS A during the AM and PM peak hours.



4.1.5 10-years post development (2031) impact

Traffic Volumes

The traffic impact of the proposed development on the Middle Road/ Berrigan Road intersection has also been estimated for the year 2031. In order to represent future growth on the road network, a compounding growth rate of 2% per year has been applied to the existing traffic volumes.

It is noted that the traffic volumes from the development have not been increased beyond 2021 as the number of lots is not expected to increase. The expected 10-year post development traffic volumes for the weekday AM and PM peak hours, assuming development is completed in 2021, are shown in Figure 15 and Figure 16.

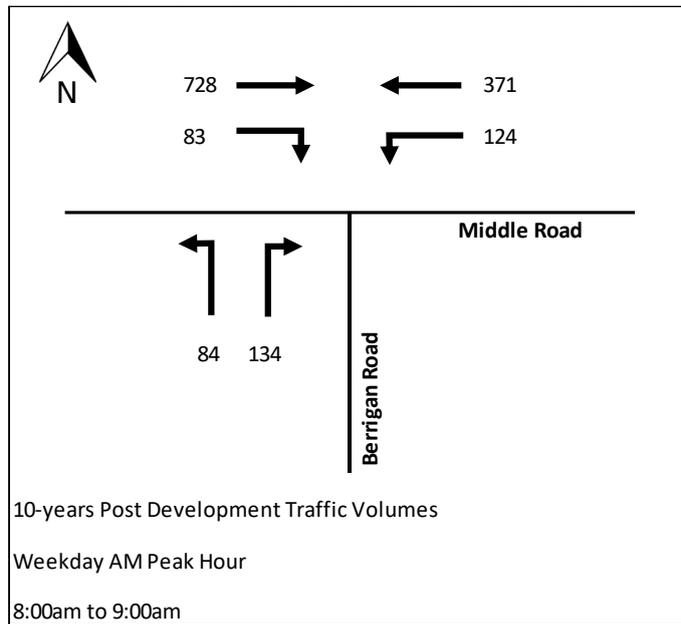


Figure 15: 10-years post development traffic volumes – AM peak hour

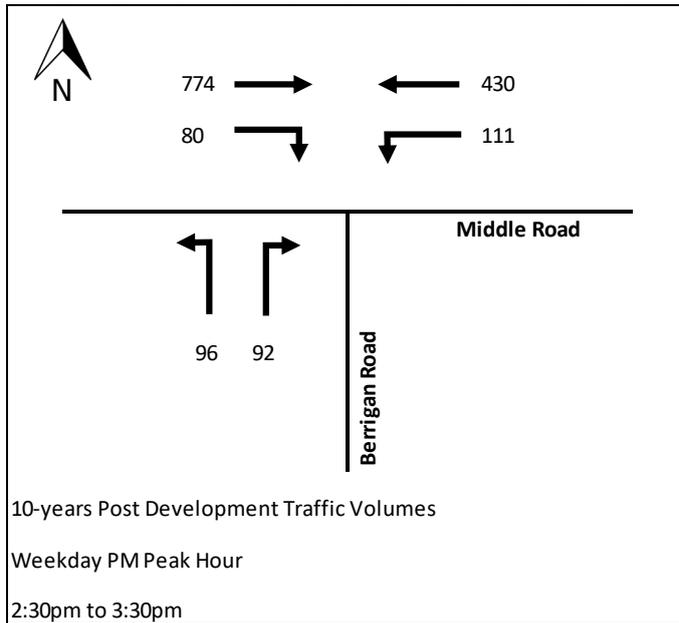


Figure 16: 10-years post development traffic volumes – PM peak hour

Traffic Impacts

The LOS for each approach of the Middle Road/ Berrigan Road intersection post completion of the proposed development is shown in Figure 17 and Figure 18. A summary of the SIDRA Intersection results for degree of saturation, average delay and 95th percentile queue is provided in Table 5. Full results are presented in Appendix D.

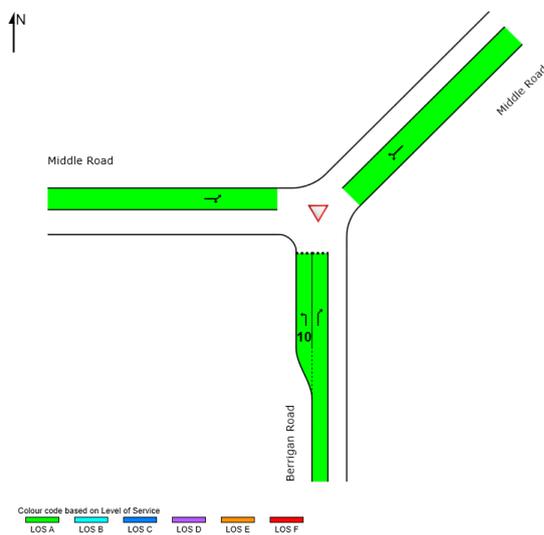


Figure 17: Middle Road/ Berrigan Road – post development weekday AM peak hour LOS

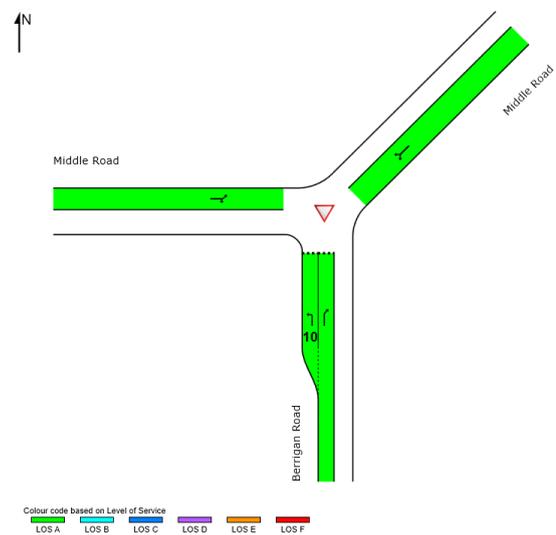


Figure 18: Middle Road/ Berrigan Road – post development weekday PM peak hour LOS

Table 6: Parking dimension requirements

Angle of car spaces to manoeuvring space	Combined access and manoeuvring width	Car park widths	Car park lengths
Parallel	3.6m	2.3m	6.7m
45 degrees	3.5m	2.6m	5.4m
60 degrees	4.9m	2.6m	5.4m
90 degrees	6.4m	2.6m	5.4m
90 degrees	5.8m	2.8m	5.4m
90 degrees	5.2m	3.0m	5.4m
90 degrees	4.8m	3.2m	5.4m

Parking provided for the proposed development will need to comply with the above parking dimensions.

4.3 Road layout assessment

The proposed access road to all of the 60 lots is required to comply with the *Local Government Association (LGAT) Standard Drawings*. The minimum LGAT road and reservation width requirements for a local through road is shown in Table 7.

Table 7: Local through road requirements

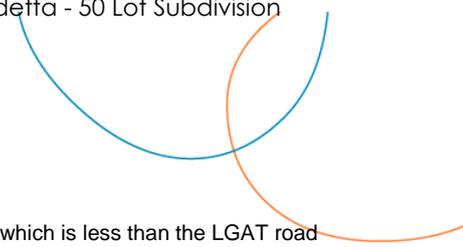
Road Type	Minimum Road Width	Minimum Reservation Width	Minimum Footpath Requirements
Local Through Road	8.9m	18.0m	One Side Only

A snapshot of the subdivision plan with defined road names to assist with Section 4.3 is shown below in Figure 19.



Figure 19: Subdivision plan snapshot with road labels

The proposed Main Access Road reservation width of 18.0m meets the LGAT standard requirements.



The proposed Loop Road reservation has been measured to be approximately 8.9m which is less than the LGAT road and reservation requirements. However, it is understood that the Loop Road has been designed as a one-way lane and that Council have advised the client's engineer that the proposed road reservation width will be sufficient.

It is noted that no vehicle turning heads have been provided where the internal access roads terminate south of Lot 34 and Lot 49, respectively. This will result in vehicles using the driveways of these lots, or lots on the southern side of the road, to turn around until the adjacent properties are developed and the roads extended.

4.4 Rubbish collection

Rubbish collection is understood to be kerbside. All roads within the subdivision will need to be designed to support the rubbish truck turning paths.

4.5 Sight distance assessment

As discussed and shown in Figure 9, access to the proposed development is to be via the site access off Berrigan Road.

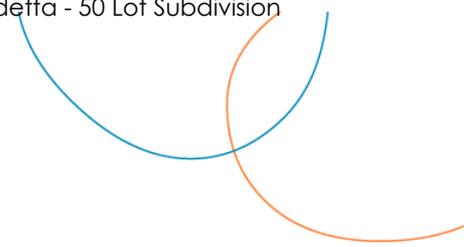
The Safe Intersection Sight Distance (SISD) to the site access for vehicles travelling along Berrigan Road has been assessed with respect to the *AUSTROADS Guide to Road Design – Part 4A: Unsignalised and Signalised Intersections* (Austroads Guide). The SISD was measured at the site access from a point 5m back from the edge of the kerb and at a height of 1.25m in accordance with the Austroads Guide.

The SISD requirements and the observed available sight distance at the site access are shown below in Table 8.

Table 8: Sight distance assessment

Direction of Vehicle on Berrigan Road	Speed	Sight Distance Requirement	Available Sight Distance	Meets Requirements
		Austroads		
Eastbound	50km/h	97m (desirable 2s reaction time)	145m	Yes
Westbound	50km/h		117m	Yes

Based on the above, the sight distance at the site access complies with the requirements of the Austroads Guide.

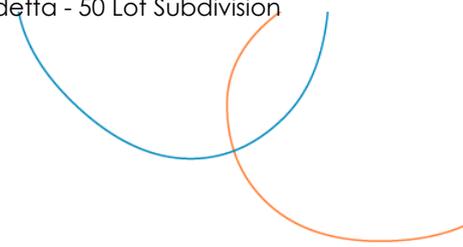


5. Planning scheme assessment

5.1 Parking and sustainable transport code

The proposed development has been assessed against the Planning Scheme's Parking and Sustainable Transport Code, shown below.

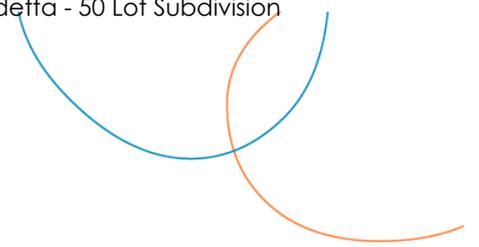
C2.6.3 Number of accesses for vehicles	
Objective:	
That:	
<ul style="list-style-type: none"> a) access to land is provided which is safe and efficient for users of the land and all road network users, including but not limited to drivers, passengers, pedestrians and cyclists by minimising the number of vehicle accesses; b) accesses do not cause an unreasonable loss of amenity of adjoining uses; and c) the number of accesses minimise impacts on the streetscape. 	
Acceptable Solution/ Performance Criteria	Comment
<p>Acceptable Solution A1</p> <p>The number of accesses provided for each frontage must:</p> <ul style="list-style-type: none"> a) be no more than 1; or b) no more than the existing number of accesses, <p>whichever is the greater.</p>	<p>Complies with Acceptable Solution A1</p> <p>Each frontage is currently accessed via the access road from Berrigan Road and as such, is no more than 1.</p>



5.2 Road and Railways Asset Code

The proposed development has been assessed against the Planning Scheme's Road and Railways Asset Code, shown below.

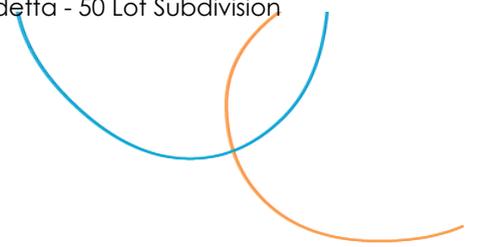
C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction	
Objective:	
To minimise any adverse effects on the safety and efficiency of the road or rail network from vehicular traffic generated from the site at an existing or new vehicle crossing or level crossing or new junction.	
Acceptable Solution/ Performance Criteria	Comment
<p>Acceptable Solution A1.4</p> <p>Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than:</p> <ul style="list-style-type: none"> a) the amounts in Table C3.1; or b) allowed by a licence issued under Part IVA of the Roads and Jetties Act 1935 in respect to a limited access road. <p>Performance Criteria P1</p> <p>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:</p> <ul style="list-style-type: none"> 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. 	<p>Satisfies Performance Criteria P1</p> <p>As the proposed development is expected to produce 642 vehicle movements per day post completion, it is unable to comply with Acceptable Solution A1.4. It does however satisfy Performance Criteria P1 as follows:</p> <ul style="list-style-type: none"> a) Based on the SIDRA modelling results presented in this report, the traffic generated by the proposed development is not expected to result in any safety or operational issues in the road network surrounding the site. b) The proposed development is expected to generate predominantly light vehicle traffic which are already catered for on the surrounding road network. c) Based on observations made on site and SIDRA modelling results presented in this report, all intersections in the vicinity of the site currently operate well. Modelled intersections are also expected to continue to operate well post completion of the development and 10-years post completion of the development. d) Berrigan Road and Middle Road have speed limits of 50km/h and 60km/h, respectively. These speed limits are consistent with safe and efficient access to the proposed development. e) There are currently no alternative accesses available for the proposed development. f) The proposed development will offer additional housing in Devonport. g) This TIA has been prepared for the proposed development and identifies that the proposed development is not expected to have any major impacts on the safety and operation of the surrounding road network. h) Devonport City Council own and maintain the local road network in the vicinity of the site. No written advice has been received from the Council at this stage.
<p>Acceptable Solution A1.5</p> <p>Vehicular traffic must be able to enter and leave a major road in a forward direction.</p>	<p>Complies with Acceptable Solution A1.5</p> <p>Vehicular traffic is proposed to enter and leave Berrigan Road in a forward direction.</p>



6. Conclusion

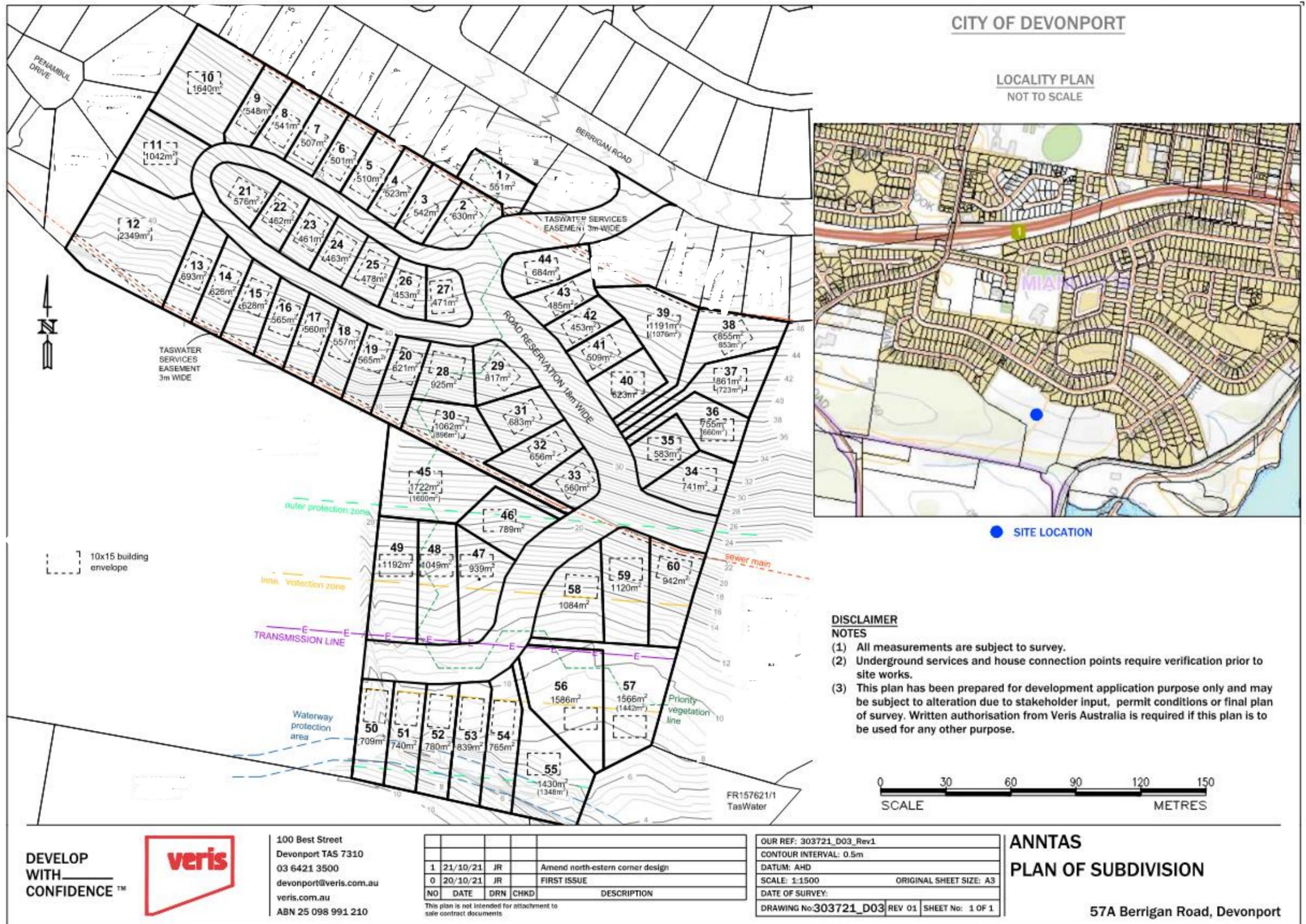
An assessment of the traffic impacts associated with the proposed development of a 60-lot residential subdivision at 57A Berrigan Road has been undertaken with reference to Department of State Growth's *Framework for Undertaking Traffic Impact Assessments* and the Tasmanian Planning Scheme - Devonport. This assessment includes an examination of road safety, traffic generation, distribution and operation, road layout and sight distances from the proposed access. The results of the assessment may be summarised as follows:

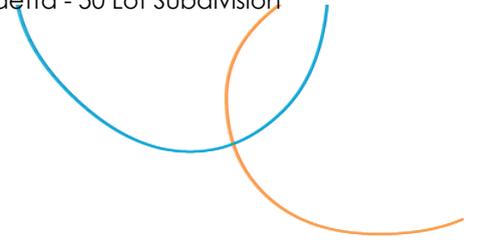
- The crash history showed that 3 crashes have occurred along Berrigan Road in the vicinity of the site in the most recent 5-year period. All crashes were of minor consequence and did not indicate any obvious crash patterns
- The increased traffic generated by the proposed development is expected to have minimal effect on the surrounding road network. SIDRA analysis undertaken as part of the TIA showed that no change to the intersection LOS at any of the 3 approaches to the Middle Road/ Berrigan Road intersection would be expected to occur post development and 10-years post development
- The proposed Main Access Road reservation meets the LGAT standard requirements
- The proposed Loop Road reservation is currently less than the LGAT standard requirements. However, it is understood that the Loop Road has been designed as a one-way lane and that Council have advised the Client's engineer that the proposed road reservation width will be sufficient; and
- The available sight distances at the preferred site access location along Berrigan Road were assessed. Sight distances both to the east and west met the requirements of the Austroads Guide.



Site Plans

Appendix A





Existing SIDRA Results

Appendix B

MOVEMENT SUMMARY

▼ Site: 101 [Middle Road/ Berrigan Road Existing AM Peak Hour
(Site Folder: Existing)]

Existing AM Peak Hour
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Berrigan Road														
1	L2	65	2.0	68	2.0	0.043	5.4	LOS A	0.2	1.4	0.38	0.55	0.38	37.0
3a	R1	95	2.0	100	2.0	0.132	6.5	LOS A	0.3	2.4	0.55	0.77	0.55	36.0
Approach		160	2.0	168	2.0	0.132	6.0	LOS A	0.3	2.4	0.48	0.68	0.48	36.4
NorthEast: Middle Road														
24a	L1	97	2.0	102	2.0	0.339	5.2	LOS A	1.8	13.2	0.22	0.51	0.22	38.9
26a	R1	304	2.0	320	2.0	0.339	5.1	LOS A	1.8	13.2	0.22	0.51	0.22	38.9
Approach		401	2.0	422	2.0	0.339	5.1	NA	1.8	13.2	0.22	0.51	0.22	38.9
West: Middle Road														
10a	L1	597	2.0	628	2.0	0.339	4.9	LOS A	0.5	3.8	0.06	0.53	0.06	39.2
12	R2	67	2.0	71	2.0	0.339	5.9	LOS A	0.5	3.8	0.06	0.53	0.06	40.8
Approach		664	2.0	699	2.0	0.339	5.0	NA	0.5	3.8	0.06	0.53	0.06	39.4
All Vehicles		1225	2.0	1289	2.0	0.339	5.1	NA	1.8	13.2	0.17	0.54	0.17	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▼ Site: 101 [Middle Road/ Berrigan Road Existing PM Peak Hour
(Site Folder: Existing)]

Existing PM Peak Hour
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Berrigan Road														
1	L2	77	2.0	81	2.0	0.053	5.6	LOS A	0.2	1.7	0.41	0.57	0.41	36.8
3a	R1	68	2.0	72	2.0	0.102	6.8	LOS A	0.3	1.8	0.57	0.79	0.57	35.6
Approach		145	2.0	153	2.0	0.102	6.1	LOS A	0.3	1.8	0.49	0.67	0.49	36.2
NorthEast: Middle Road														
24a	L1	80	2.0	84	2.0	0.376	5.2	LOS A	2.1	14.9	0.23	0.52	0.23	38.9
26a	R1	353	2.0	372	2.0	0.376	5.1	LOS A	2.1	14.9	0.23	0.52	0.23	38.9
Approach		433	2.0	456	2.0	0.376	5.1	NA	2.1	14.9	0.23	0.52	0.23	38.9
West: Middle Road														
10a	L1	635	2.0	668	2.0	0.356	4.8	LOS A	0.5	3.6	0.05	0.54	0.05	39.3
12	R2	63	2.0	66	2.0	0.356	5.9	LOS A	0.5	3.6	0.05	0.54	0.05	40.9
Approach		698	2.0	735	2.0	0.356	4.9	NA	0.5	3.6	0.05	0.54	0.05	39.5
All Vehicles		1276	2.0	1343	2.0	0.376	5.1	NA	2.1	14.9	0.16	0.54	0.16	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

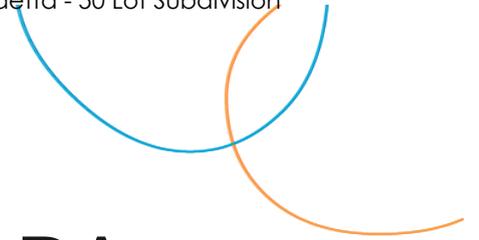
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Post Development SIDRA Results

Appendix C

MOVEMENT SUMMARY

▼ Site: 101 [Middle Road/ Berrigan Road PD AM Peak Hour (Site Folder: Post Development)]

Post Development AM Peak Hour
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Berrigan Road														
1	L2	70	2.0	74	2.0	0.046	5.4	LOS A	0.2	1.5	0.38	0.55	0.38	37.0
3a	R1	113	2.0	119	2.0	0.158	6.6	LOS A	0.4	2.9	0.56	0.78	0.56	35.9
Approach		183	2.0	193	2.0	0.158	6.1	LOS A	0.4	2.9	0.49	0.69	0.49	36.3
NorthEast: Middle Road														
24a	L1	103	2.0	108	2.0	0.343	5.2	LOS A	1.9	13.4	0.23	0.51	0.23	38.9
26a	R1	304	2.0	320	2.0	0.343	5.1	LOS A	1.9	13.4	0.23	0.51	0.23	38.9
Approach		407	2.0	428	2.0	0.343	5.1	NA	1.9	13.4	0.23	0.51	0.23	38.9
West: Middle Road														
10a	L1	597	2.0	628	2.0	0.341	4.9	LOS A	0.6	4.0	0.07	0.53	0.07	39.2
12	R2	69	2.0	73	2.0	0.341	6.0	LOS A	0.6	4.0	0.07	0.53	0.07	40.8
Approach		666	2.0	701	2.0	0.341	5.0	NA	0.6	4.0	0.07	0.53	0.07	39.4
All Vehicles		1256	2.0	1322	2.0	0.343	5.2	NA	1.9	13.4	0.18	0.55	0.18	38.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

▼ Site: 101 [Middle Road/ Berrigan Road PD PM Peak Hour (Site Folder: Post Development)]

Post Development PM Peak Hour
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Berrigan Road														
1	L2	79	2.0	83	2.0	0.055	5.6	LOS A	0.2	1.7	0.41	0.57	0.41	36.8
3a	R1	77	2.0	81	2.0	0.117	6.9	LOS A	0.3	2.1	0.58	0.79	0.58	35.5
Approach		156	2.0	164	2.0	0.117	6.2	LOS A	0.3	2.1	0.50	0.68	0.50	36.2
NorthEast: Middle Road														
24a	L1	94	2.0	99	2.0	0.384	5.2	LOS A	2.2	15.6	0.23	0.51	0.23	38.8
26a	R1	353	2.0	372	2.0	0.384	5.1	LOS A	2.2	15.6	0.23	0.51	0.23	38.8
Approach		447	2.0	471	2.0	0.384	5.1	NA	2.2	15.6	0.23	0.51	0.23	38.8
West: Middle Road														
10a	L1	635	2.0	668	2.0	0.369	4.9	LOS A	0.6	4.5	0.06	0.53	0.06	39.2
12	R2	66	2.0	69	2.0	0.369	6.1	LOS A	0.6	4.5	0.06	0.53	0.06	40.8
Approach		701	2.0	738	2.0	0.369	5.0	NA	0.6	4.5	0.06	0.53	0.06	39.4
All Vehicles		1304	2.0	1373	2.0	0.384	5.2	NA	2.2	15.6	0.17	0.54	0.17	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

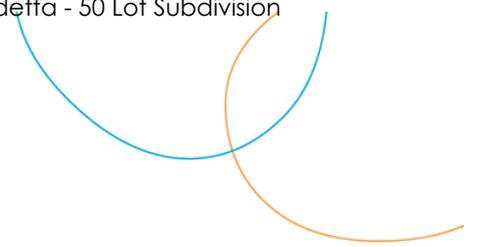
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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10-years Post Development SIDRA Results

Appendix D

pitt&sherry

MOVEMENT SUMMARY

▼ Site: 101 [Middle Road/ Berrigan Road 10-years PD AM Peak Hour (Site Folder: 10-years Post Development)]

10-years Post Development AM Peak Hour
 Site Category: (None)
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Berrigan Road														
1	L2	84	2.0	88	2.0	0.059	5.7	LOS A	0.3	1.9	0.42	0.58	0.42	36.8
3a	R1	134	2.0	141	2.0	0.239	8.3	LOS A	0.7	4.7	0.68	0.86	0.76	33.6
Approach		218	2.0	229	2.0	0.239	7.3	LOS A	0.7	4.7	0.58	0.75	0.63	34.8
NorthEast: Middle Road														
24a	L1	124	2.0	131	2.0	0.423	5.4	LOS A	2.6	18.2	0.28	0.51	0.28	38.6
26a	R1	371	2.0	391	2.0	0.423	5.3	LOS A	2.6	18.2	0.28	0.51	0.28	38.5
Approach		495	2.0	521	2.0	0.423	5.3	NA	2.6	18.2	0.28	0.51	0.28	38.5
West: Middle Road														
10a	L1	728	2.0	766	2.0	0.415	4.9	LOS A	0.7	5.3	0.08	0.52	0.08	39.1
12	R2	83	2.0	87	2.0	0.415	6.1	LOS A	0.7	5.3	0.08	0.52	0.08	40.7
Approach		811	2.0	854	2.0	0.415	5.0	NA	0.7	5.3	0.08	0.52	0.08	39.3
All Vehicles		1524	2.0	1604	2.0	0.423	5.4	NA	2.6	18.2	0.22	0.55	0.22	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: C:\Users\nashlin\Desktop\P.21.1972\SIDRA\SIDRA Modelling.sip9

MOVEMENT SUMMARY

▼ Site: 101 [Middle Road/ Berrigan Road 10-years PD PM Peak Hour (Site Folder: 10-years Post Development)]

10-years Post Development PM Peak Hour

Site Category: (None)

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Berrigan Road														
1	L2	96	2.0	101	2.0	0.072	5.9	LOS A	0.3	2.3	0.46	0.61	0.46	36.5
3a	R1	92	2.0	97	2.0	0.184	8.7	LOS A	0.5	3.4	0.70	0.86	0.73	33.1
Approach		188	2.0	198	2.0	0.184	7.3	LOS A	0.5	3.4	0.58	0.73	0.60	34.8
NorthEast: Middle Road														
24a	L1	111	2.0	117	2.0	0.472	5.4	LOS A	3.0	21.4	0.29	0.52	0.29	38.5
26a	R1	430	2.0	453	2.0	0.472	5.3	LOS A	3.0	21.4	0.29	0.52	0.29	38.4
Approach		541	2.0	569	2.0	0.472	5.3	NA	3.0	21.4	0.29	0.52	0.29	38.4
West: Middle Road														
10a	L1	774	2.0	815	2.0	0.437	4.9	LOS A	0.7	5.2	0.07	0.53	0.07	39.2
12	R2	80	2.0	84	2.0	0.437	6.1	LOS A	0.7	5.2	0.07	0.53	0.07	40.8
Approach		854	2.0	899	2.0	0.437	5.0	NA	0.7	5.2	0.07	0.53	0.07	39.3
All Vehicles		1583	2.0	1666	2.0	0.472	5.4	NA	3.0	21.4	0.21	0.55	0.21	38.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

Delay Model: SIDRA Standard (Geometric Delay is included).

Queue Model: SIDRA Standard.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: C:\Users\nashlin\Desktop\P.21.1972\SIDRA\SIDRA Modelling.sip9



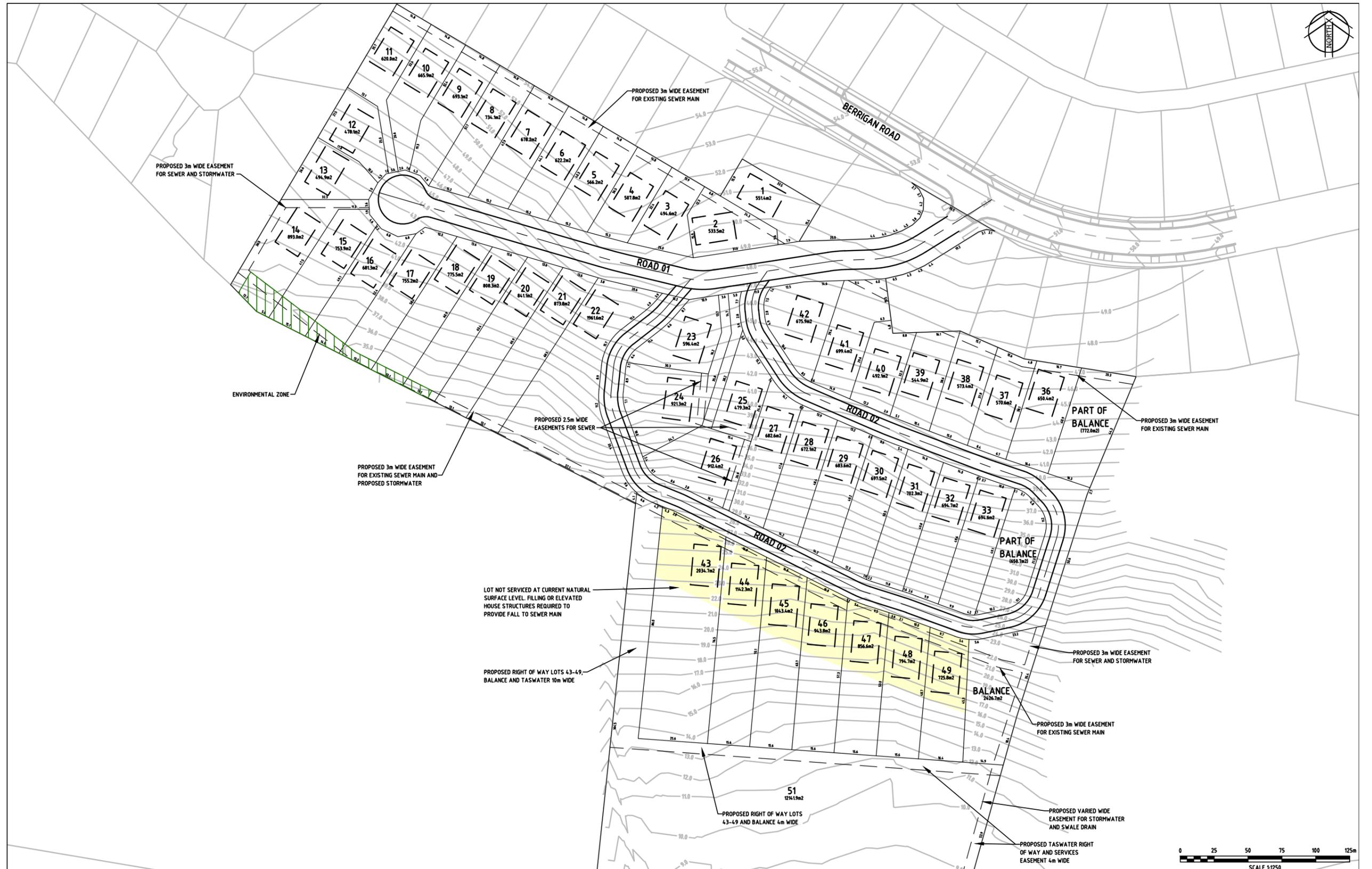
57A Berrigan Road, Devonport – Traffic Impact Assessment

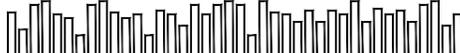
**Pitt & Sherry
(Operations) Pty Ltd**
ABN 67 140 184 309

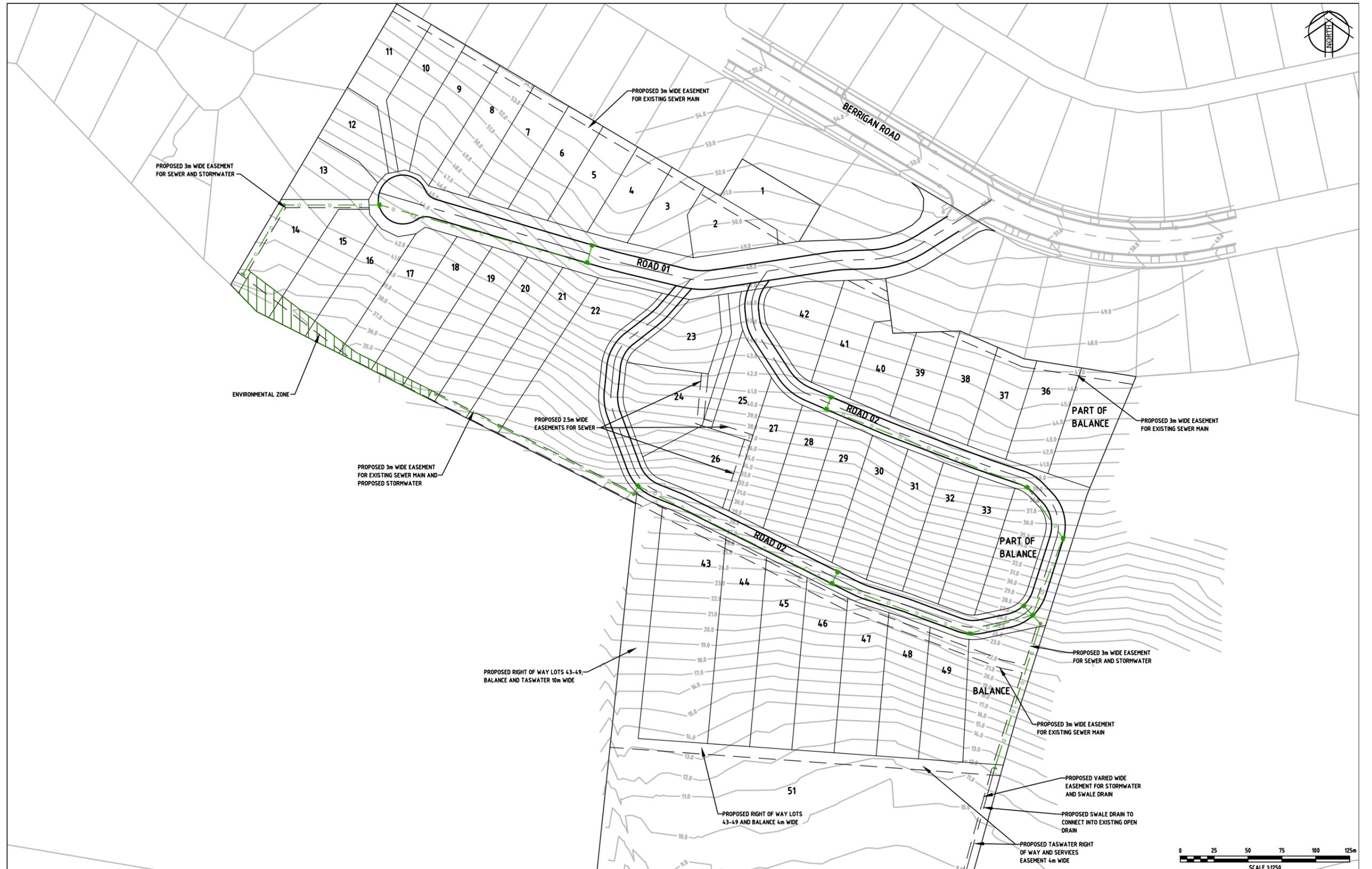
Phone 1300 748 874
info@pittsh.com.au
pittsh.com.au

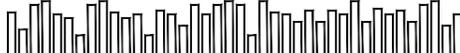
Located nationally —
Melbourne
Sydney
Brisbane
Hobart
Launceston
Newcastle
Devonport

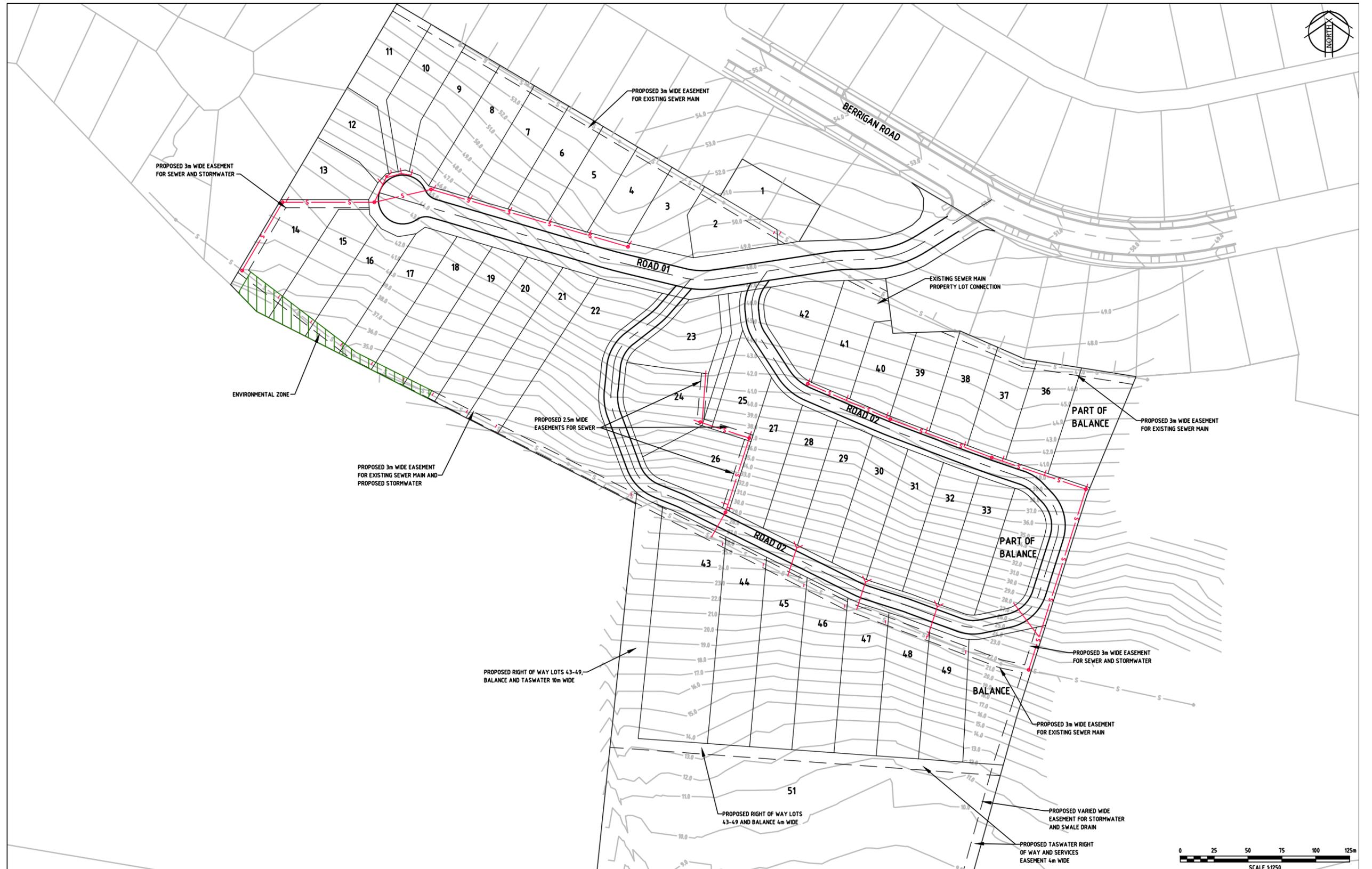




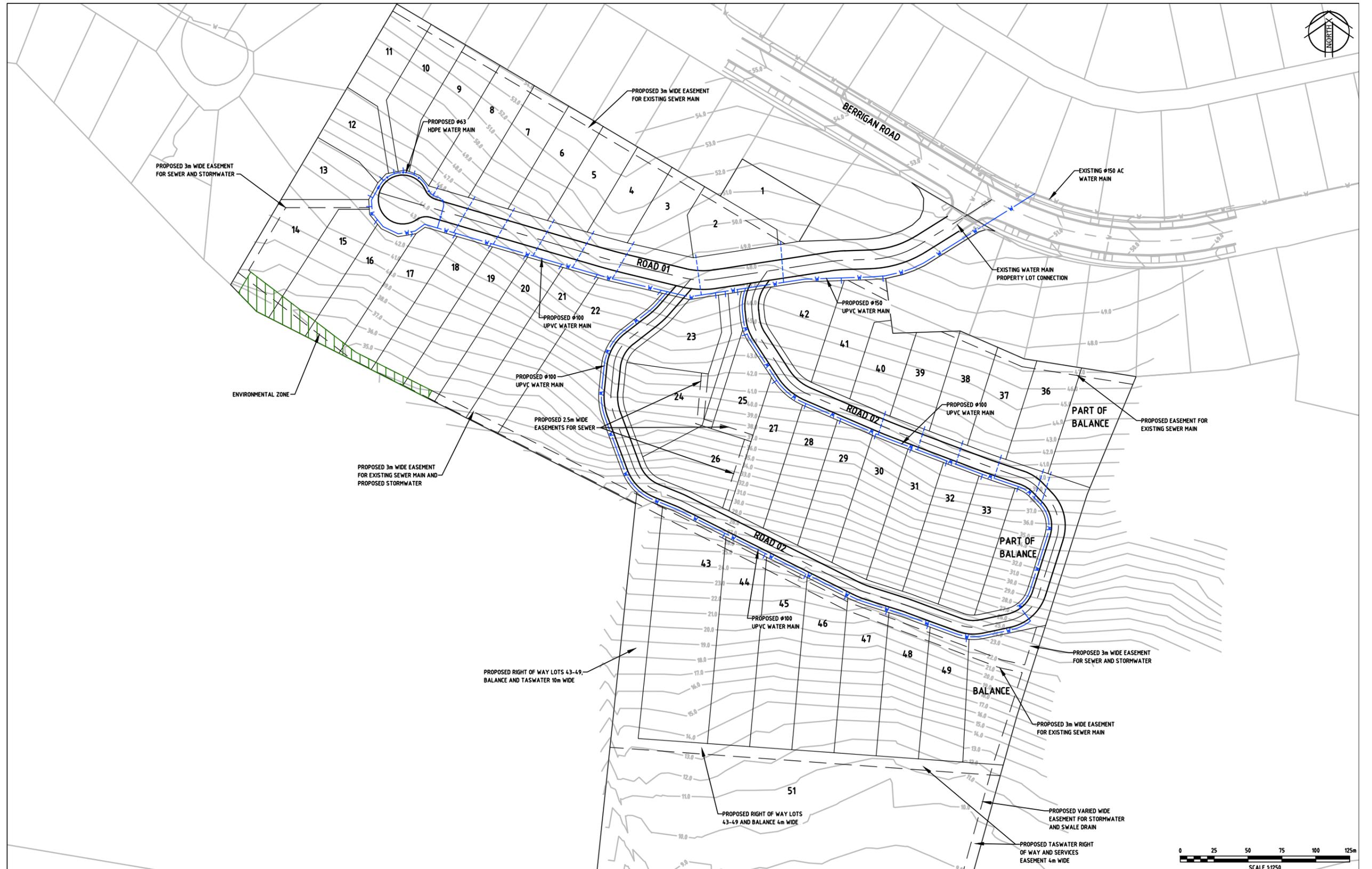
CSE TASMANIA PTY LTD civil • structural • environmental engineering 	PO Box 49, Turners Beach TAS 7315 127 Leith Road, Leith TAS 7315 ACN 118 678 667 m 0429 418 739 chris@csetas.com.au Copyright ©	DO NOT SCALE Original Size A3	Scale 1:1250	Designed CHRIS MARTIN	Client ANN-TAS Project SUBDIVISION - 57A BERRIGAN ROAD Title PRELIMINARY LOT LAYOUT PLAN
		PRELIMINARY	Drawn C.J.G.	Accred. No. CC4109V	
		Date JUNE 2022	No Revision	Drawn Date	Drawing No: 0306-25 P01 Revision: P1



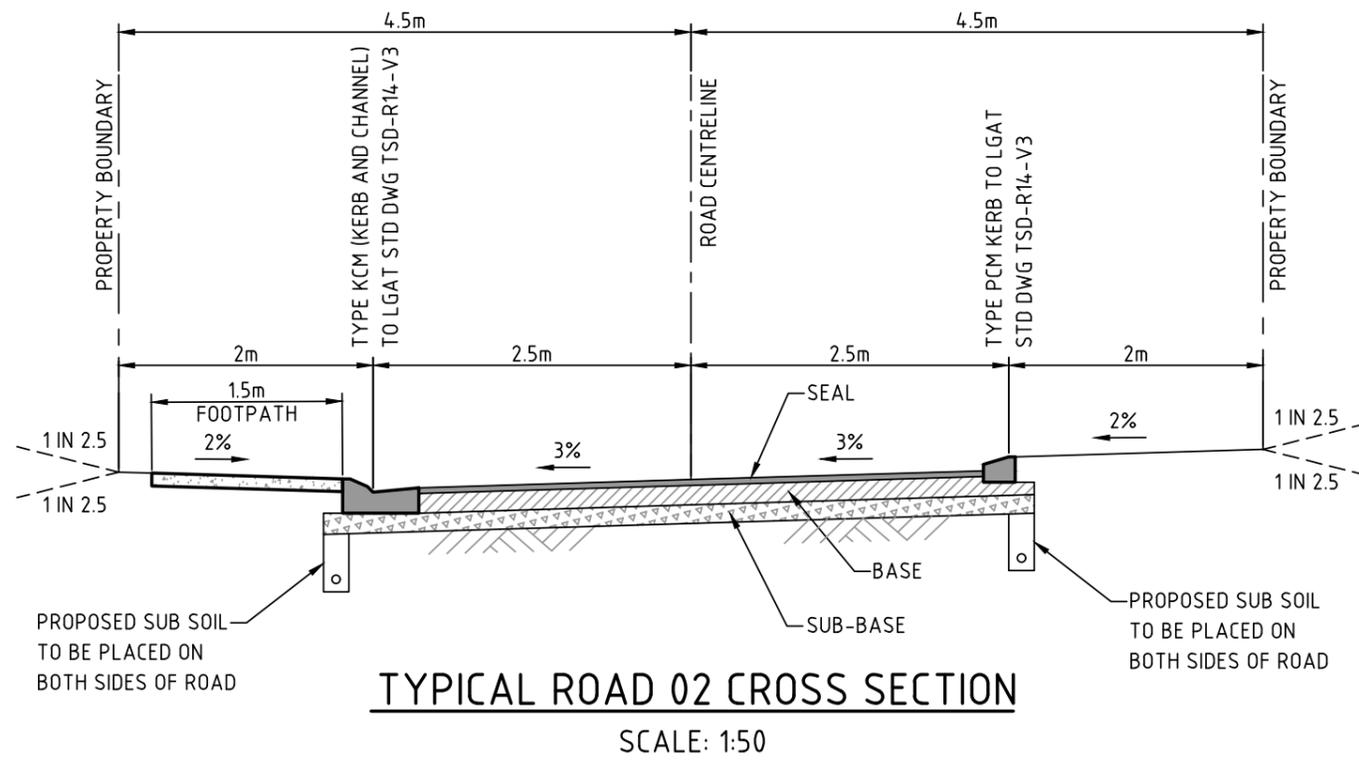
CSE TASMANIA PTY LTD civil • structural • environmental engineering 	PO Box 49, Turners Beach TAS 7315 127 Leith Road, Leith TAS 7315 ACN 118 678 667 m 0429 418 739 chris@csetas.com.au Copyright ©	DO NOT SCALE Original Size A3	Scale 1:1250	Designed CHRIS MARTIN	Client ANN-TAS Project SUBDIVISION - 57A BERRIGAN ROAD Title PRELIMINARY STORMWATER LAYOUT PLAN
		PRELIMINARY	Drawn C/JG Accred. No. CC4109V	Approved CHRIS MARTIN	
		Date JUNE 2022	No Revision	Drawn Date	Revision: P1



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		PRELIMINARY	Drawn C/JG	Accred. No. CC4109V	Approved CHRIS MARTIN	
						Revision: P1



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		PRELIMINARY	Drawn C/JG	Accred. No. CC4109V	Approved CHRIS MARTIN	
						Revision: P1



NOTE:
TYPE PCM KERB (MODIFIED) REFER LGAT STD DWG TSD-R14 FOR ALL DIMENSIONS UNLESS OVERRIDDEN ON THIS DETAIL.



CSE TASMANIA PTY LTD
civil • structural • environmental engineering

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PRELIMINARY	Drawn CJG	Accred. No. CC4109V	
	Approved CHRIS MARTIN		
	Date AUGUST 2022		

No	Revision	Drawn	Date

Client ANN-TAS	Project SUBDIVISION - 57A BERRIGAN ROAD
Title TYPICAL ROAD 02 CROSS SECTION DETAIL	
Drawing No: 0306-25 SK01	Revision: P0

From: Gordon Greig <gordon_greig@hotmail.com>
Sent: Friday, 25 November 2022 4:48 PM
To: Devonport City Council
Subject: Representation - PA2022.0167 - Gordon and Carol Greig
Attachments: 57A Berrigan Road PA2022.0167 concerns.pdf

Attention General Manager
Reference PA2022.0167 – 57A Berrigan Road Miandetta

Hi there, please find attached a document with some concerns regarding the planning permit document for 57A Berrigan Road Miandetta.

In this document I have listed 4 types of concerns:

1. Incorrect information within planning permit document
2. Bushire mitigation
3. Sewer line corridor
4. Overhanging trees on fence line

Please review the attached document and provide feedback / comments.

Regards

Gordon and Carol Greig

To

General Manager

Devonport City Council

Reference:- PA2022.0167

I am writing to you with some concerns regarding the planning application for 57A Berrigan Road (PA2022.0167).

Our names are Carol and Gordon Greig, and our home is at 55 Berrigan Road Miandetta

Our concerns in general terms are:

1. Incorrect information within planning permit document
2. Bushfire mitigation
3. Sewer line corridor
4. Overhanging trees on fence line

1- Incorrect Information

Concern

The picture on page 6 shows a lot design. The written text is clearly not in the English language. How are we meant to interpret / understand / provide comment on a planning application proposal when we are unable to understand what the message is that is being delivered.

Request

Please provide a picture with English text that will clearly convey the intended message

Clause 8.6.1 Lot design

PROPOSAL RESPONSE

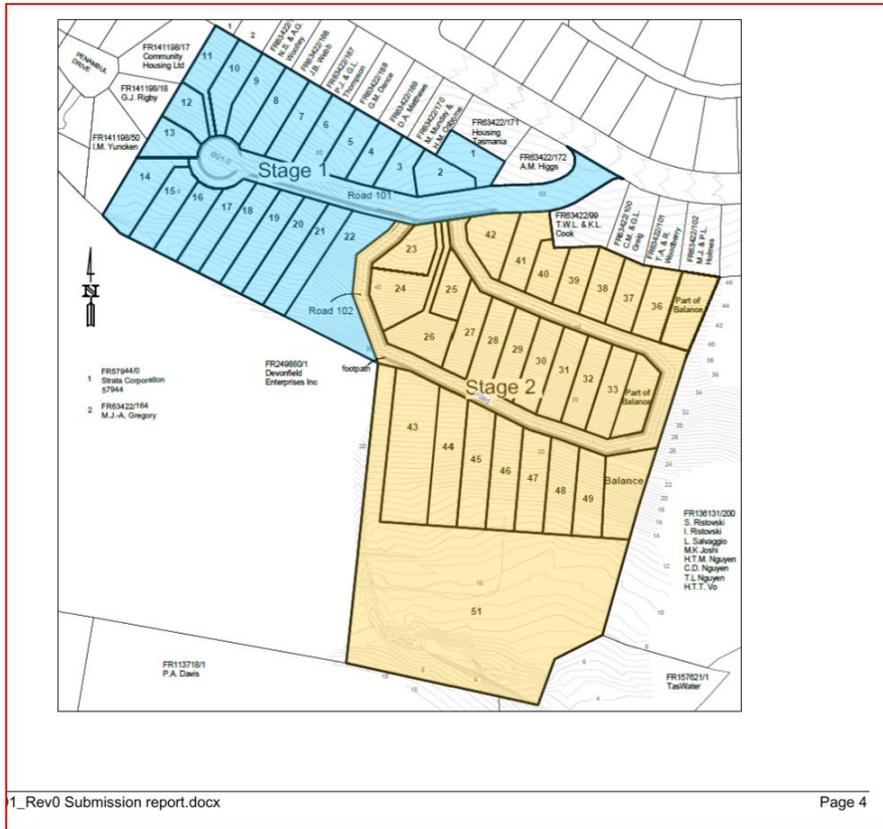
Each proposed lot on the plan of subdivision is in excess of 450m² with lot sizes ranging from 472m² to 1.21ha. All proposed lots are capable of accommodating a 10m x 15m building envelope clear of all required setbacks, easements or other title restrictions. However, the uniqueness and steepness of the site required an innovative design with building envelopes on steeper slopes than 1:5. The proposed lots have been designed to allow building envelopes down / up slopes envisioning building designs as shown in below picture.

303721_R01_Rev0 Submission report.docx Page 6

Concern

The report contains several maps of the proposal with differing lot numbers

As you can see from the map from page 4 the lot numbers behind our home are 38 and 37.



The map on “Plan of Subdivision” shows the lot number behind our home as Lot 36 and Lot 35 – why are the lot number different.



The map with Figure 4.3 shows the lot number behind our home being lot 37 and lot 38 – why are they different again.

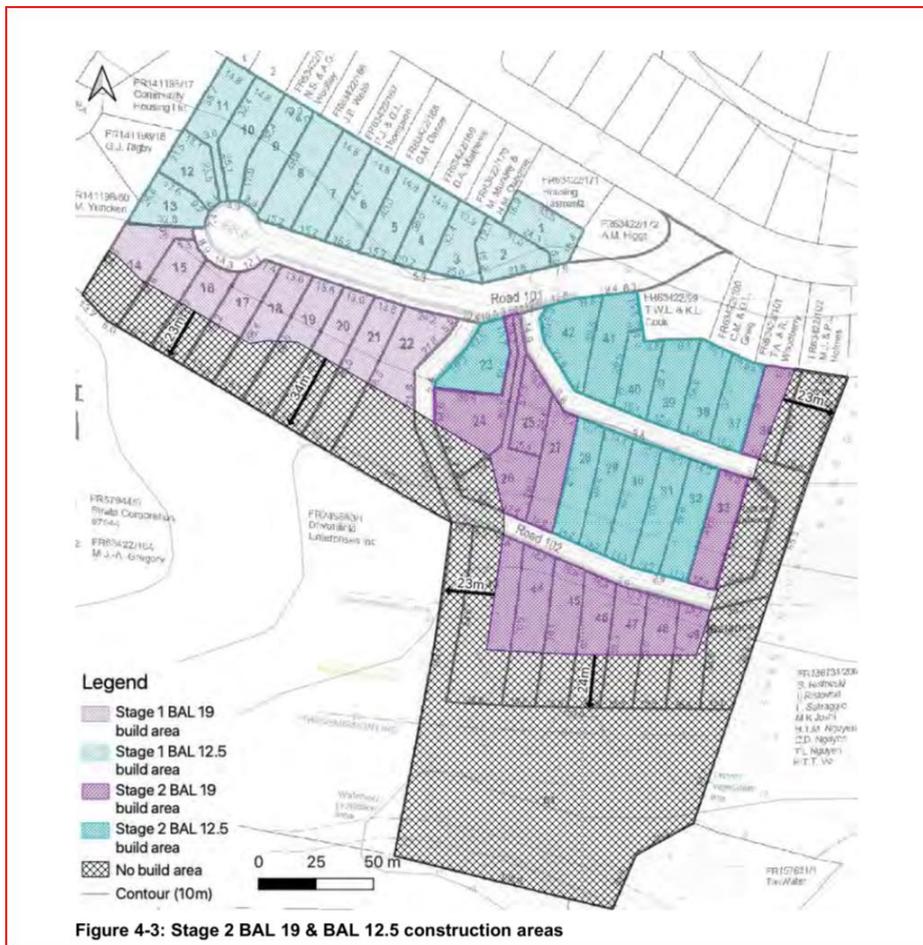
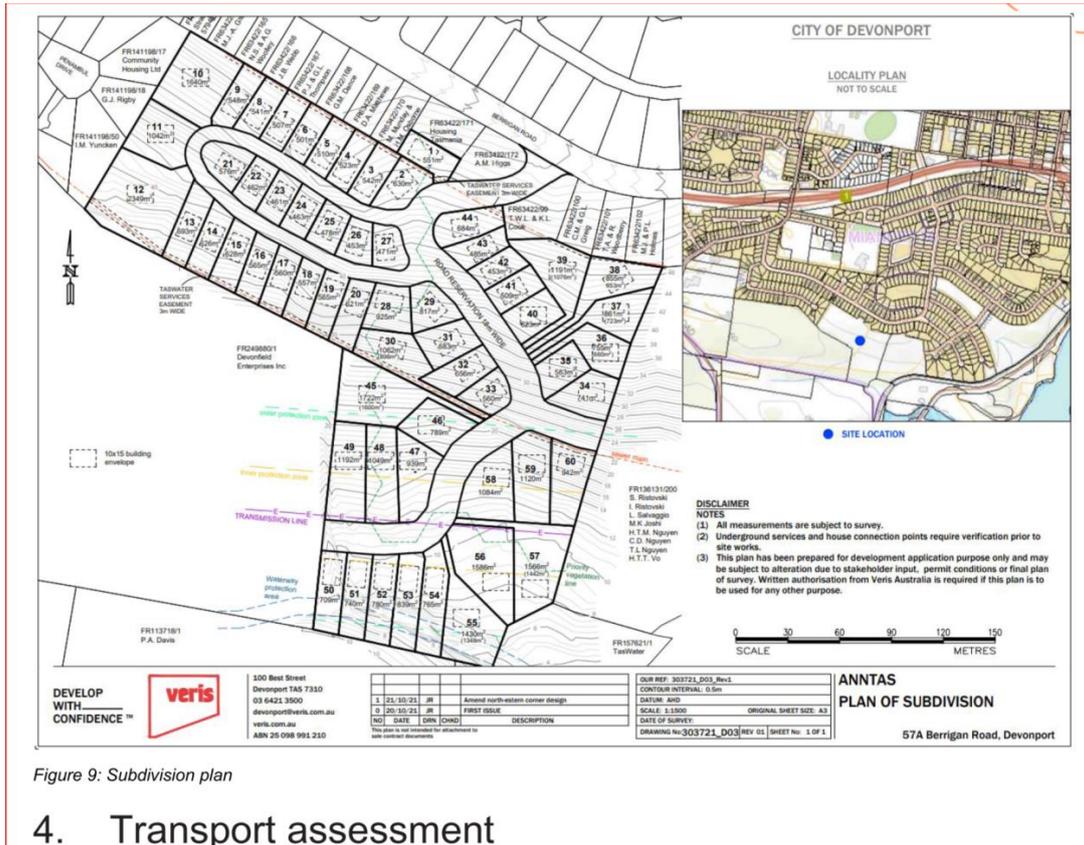


Figure 4-3: Stage 2 BAL 19 & BAL 12.5 construction areas

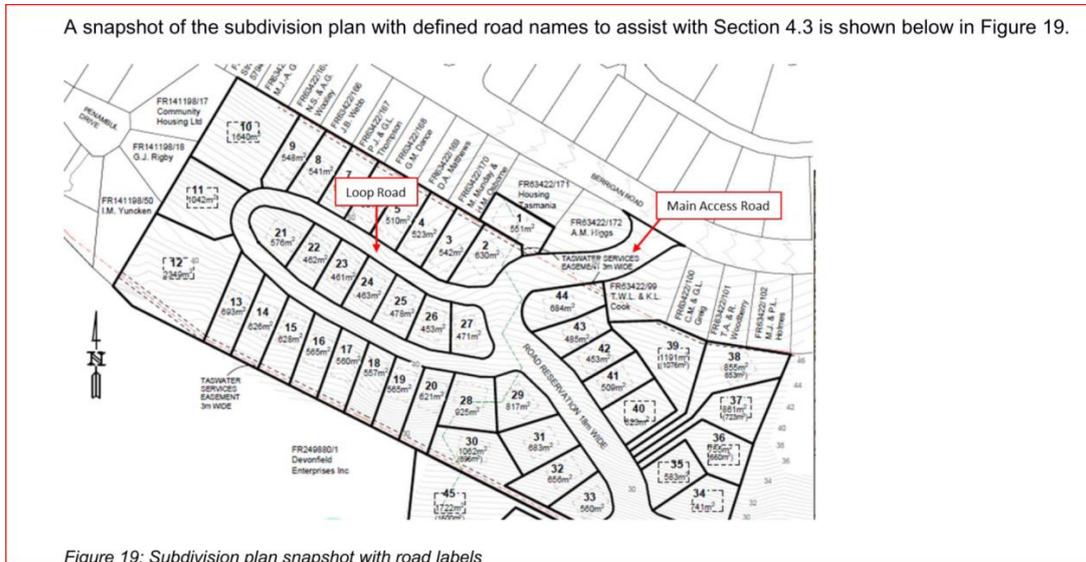
The map contained with figure 9 show the lots behind our home have changed again in that they are now one block being Lot 39. How are meant to fully understand this proposal when the information supplied is varying so much



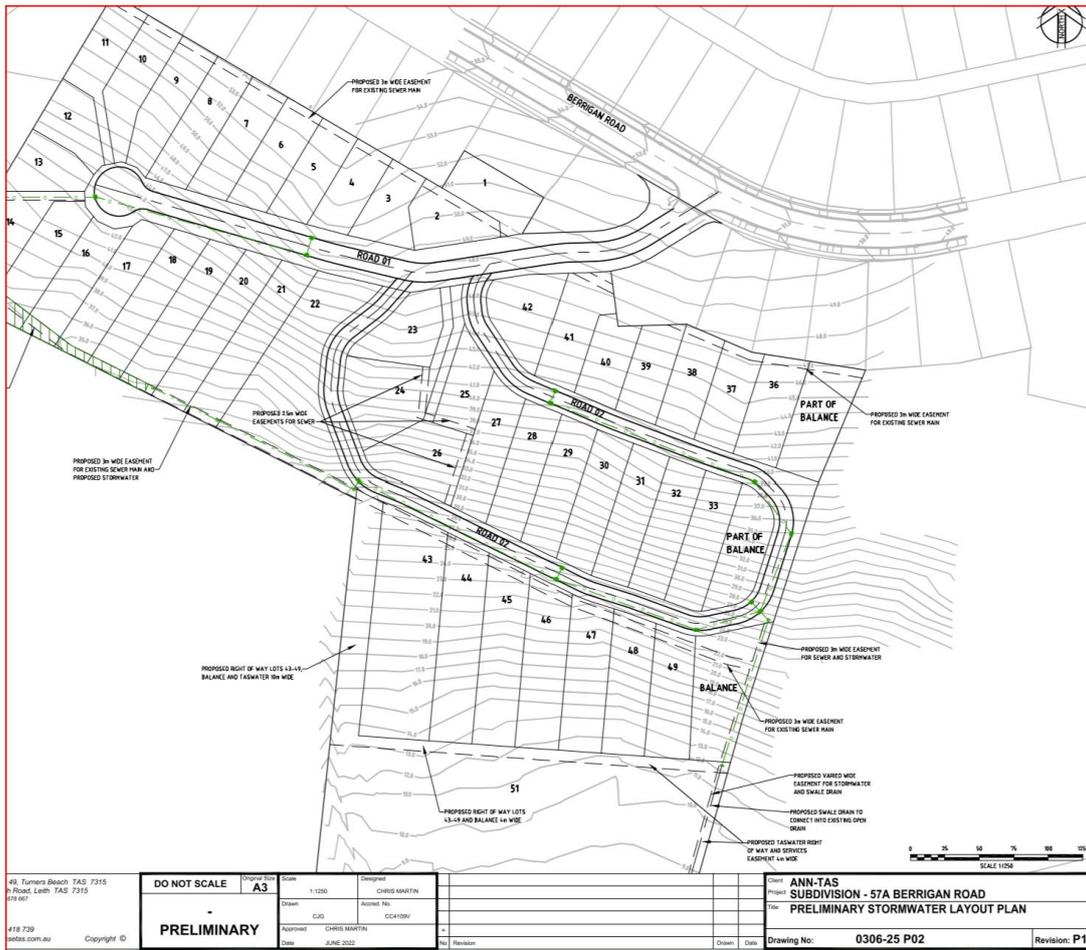
The same map is being used for the traffic assessment in Figure 19.

It is difficult to accurately make comment when different lot layouts, road designs are submitted with a single planning permit application

Please request the planning permit be resubmitted with the same map being used for all reports.



The Preliminary stormwater layout plan shown 2 blocks behind our home Lot 37 and 38.
 Please supply information showing the correct lot layout (whichever layout that is)



Request

Please supply information showing the final lot layout arrangement as there are many differing lot layout arrangements provided with this Planning Permit PA2022.0167 57A Berrigan Road.

In my view the whole Planning Permit document should be resubmitted with the correct information provided to nearby residents again in order for us to provide comment.

2- Bushfire Mitigation

Concern

Over the last few years there has been zero bushfire mitigation carried out by the previous landowners behind our home and our adjoining neighbour's homes.

Should a bushfire start at the bottom of the hill near Horsehead Creek there is a strong possibility that, with the right conditions, a bushfire could rapidly spread uphill and threaten our homes. On our fence line there are several large trees that should be removed to reduce possibility of damage to our home and our neighbour's homes. These trees are currently overhanging the fence line and drop branches in our property and our neighbour's property. Should the worst happen, these trees could fall over and damage our houses and possibly injure someone in a worst-case scenario.

Additionally, please investigate providing a larger fire break in the area behind our home and our neighbour's homes



Request

Provide a larger fire break behind our home and our neighbour's home
Remove trees on fence line

3- Sewer line

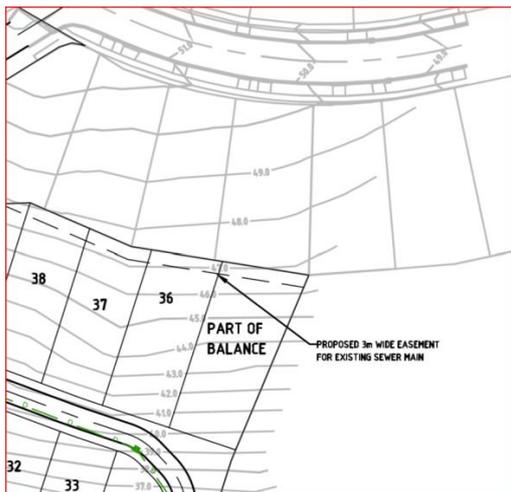
Concern

The proposed 3m wide easement for the existing sewer line currently has trees growing along it.

The sewer has overflowed already at the inspection man-hole behind our property.

Will there be enough access to the sewer line inspection man-hole within the current design.

Will the existing large trees over the sewer line be a concern or hinderance to the existing infrastructure or future maintenance of that infrastructure



Request

Please look at access arrangements for the existing sewer line for future repairs / maintenance activities.

Please review the location of existing trees to ensure they do not impose a threat to the existing sewer line.

4- Overhanging Trees on Fence Line

Concern

As mentioned previously we have several overhanging trees on our fence line as well as our neighbours fence line.

There is a potential threat for these to damage our homes and in worst case scenario injure a person.

These trees have been dropping branches onto our properties for years. The previous land owners had arranged to remove these trees as part of a bushfire mitigation plan however that did not happen prior to the change of land ownership



Request

Please discuss with the current landowner to remove all the trees along the fence line

This would reduce the potential for a person becoming injured, remove a bushfire hazard and remove a potential damage mechanism to the sewer line.

Regards

Gordon and Carol Greig

From: Glennis Bygraves <glennisbygraves@gmail.com>
Sent: Monday, 5 December 2022 8:01 PM
To: Devonport City Council
Subject: Representation - PA2022.0167 - Glennis Bygraves
Attachments: Objection to subdivision PA2022.0167.docx

Dear Sir/Madam,

Please find attached objection to subdivision PA2022.0167, 57a Berrigan Road, Miandetta.

Could you please confirm receipt of this objection.

Regards,

Glennis

The General Manager
Devonport City Council
PO Box 604
Devonport Tasmania 7310

3rd December 2022

OBJECTION: SUBDIVISION PA2022.0167 (57a Berrigan Road, Miandetta)

Dear Sir,

I, along with a growing number of Devonport residents, am concerned at the amount of bushland that is being destroyed by urban development, including this proposed subdivision. I realise that housing is required, but the bushland that is being targeted is an extremely important wildlife corridor, leading from the Mersey River to Kelcey Tier Reserve. On the back of the two other major developments in the area (the subdivision near Harvey Norman and the Devonfield subdivision), this area, which was a haven for a myriad of wildlife, will be left an unappealing condensed urban sprawl. Developers wanting to make extravagant profits are making blocks smaller, cramming in as many dwellings as possible, regardless of environmental impact or aesthetics of the area. This subdivision will completely fragment what is left of the wildlife corridor, and the compaction of so many houses, along with the loss of habitat, will make the area unsafe for wildlife.

It is also appalling that no major concern has been given for the welfare of the endangered Northern Burrowing Crayfish. This application will have the crayfish habitat on lots 16,17,18 and possibly 19. Although this land cannot be built on, the crayfish habitat will be in the owner's back yards! The crayfish and their habitat will be subject to domestic pets, chemical run off, trampling, and all the other aspects of backyard usage. It is completely unacceptable that developers are allowed to include this particular strip of habitat as part of subdivision blocks. There is also the issue of the TasWater easement directly in the crayfish habitat. Work in this area would have catastrophic effects on the crayfish and their habitat. This area should be omitted from any building lots and left undisturbed, allowing unhindered access for Council to monitor crayfish welfare. Council has a duty of care to protect this species for future generations.

There is also the issue of priority vegetation. It seems that priority vegetation is only recognised until a developer want to develop the land. Then it suddenly is no longer of value and only superficial allowances are made for its preservation. Small fragmented areas of vegetation do not benefit wildlife. Species such as the endangered swift parrot would be highly unlikely to enter such a dangerous urbanised area.

Why does Council not value our green spaces or our threatened species? Why does Council go against its own environmental strategy, which states fragmentation and decline of biodiversity areas of concern? Why is Council not protecting our natural resources? Why does Council allow developers to continually destroy bushland that is considered of VALUE to the residents of Devonport? With our climate crisis, forest regeneration is now a priority, so why is Council so determined to develop all of our inner city green spaces? Areas such as these can never be regained. Attitudes are changing and Council also needs to change to reflect residents growing awareness of the importance of large intact green spaces, which are crucial to the health of our environment, our city, and ourselves.

Glennis Bygraves
glennisbygraves@gmail.com

From: Angela Tyson <angela.tyson@bigpond.com>
Sent: Tuesday, 6 December 2022 9:24 AM
To: Devonport City Council
Subject: Objection to Subdivision - PA22.0167 - Angela Tyson
Attachments: Berrigan Road Subdivision.docx

Dear Sir/Madam

Please find attached my objection to subdivision PA22.0167, 57a Berrigan Road Miandetta.

Regards,

Angela Tyson

angela.tyson@bigpond.com

The General Manager
Devonport City Council
PO Box 604
Devonport Tas. 7310

5th December 2022

Objection to subdivision PA2022.0167 57a Berrigan Road, Miandetta

Dear Sir/Madam,

I would like to voice my objection to the proposed subdivision at 57a Berrigan Road, Miandetta. I am a Devonport Council and Wildcare volunteer and donate my time and labour to various natural reserves in and around Devonport. I, and many others, believe it is of the utmost importance to preserve the few natural areas in our city. These remnant bushlands are an oasis in otherwise unremarkable urban areas, and the flora and fauna contained within once lost, are lost forever. I am not anti-development but I do not believe in development that comes at such a precious cost.

I am appalled at the grossly inadequate concessions that have been made for the critically endangered Central North Burrowing Crayfish, and the removal of priority vegetation including Eucalyptus Ovata.

The recently released government 2021 State Of The Environment Report is a staggering picture of loss and devastation. It found that Tasmania has 1920 native species, of which 533 are endemic and 458 extinct or threatened. These are the worst environmental results in our history. Council's attitude to natural assets and development needs to change. To truly be called a living city, we also need to be a green city, but all I can see in our future is "concrete grey".

I have outlined my objections below, including supporting evidence from the Tasmanian Government Threatened Species Link web site, detailing the effects of a subdivision which can occur well outside of its actual footprint.

I have become incredibly disillusioned with Council and the failure in its duty of care of our native flora and fauna. I wonder why I continue to volunteer my time with Council when such hypocrisy exists. Council claim to value biodiversity but are willing to circumvent environmental issues to enable their "development at all cost" attitude. Engaeus Granulatus is an incredibly unique endangered species which will not survive such human intervention and the blame lies solely with Devonport City Council, who are allowing destruction like this to continue. Council's lack of foresight, and failure to value natural assets is truly astounding.

Angela Tyson, Devonport

Ratepayer, Friend of Don Reserve, Wildcare Friend of Devonport Reserves

1. Engaeus Granulatus (Central North Burrowing Crayfish)

The Central North Burrowing Crayfish, as council is aware, is an EPBC listed endangered species, and is critically endangered on the IUCN Red List. It is endemic to Tasmania, and occurs only within a small area between the Mersey River and Port Sorell (see map). This species is found nowhere else in the world and we are lucky enough to have them in our back yard.



*"Much of its original habitat has been cleared, and the species now occurs in small isolated and fragmented populations within its original range amounting to less than 100 ha. The main threats to the Central North Burrowing Crayfish include activities which destroy or dry out its habitat, including residential development and inappropriate agricultural and forestry activities." **

I was stunned to see that the crayfish habitat has been included in the backyards of lots 16, 17 and 18. Although structures cannot be built in this area, the dangers to the species is of extreme concern. The crayfish will be subjected to all the dangers of human interference including trampling, weed killer run off, domestic pets and all the other facets of backyard usage. The chimneys built by the species can be easily crushed and the soil compacted by foot and bike traffic. It is imperative that vegetation is not removed from the crayfish habitat. This leads to drying out of the soil, erosion, sediment input into waterway and changes in water table levels and drainage. In all probability, the new owners of these building lots will not have the knowledge or desire to protect the species. It is inconceivable that these owners will have the fate of these creatures in their hands.

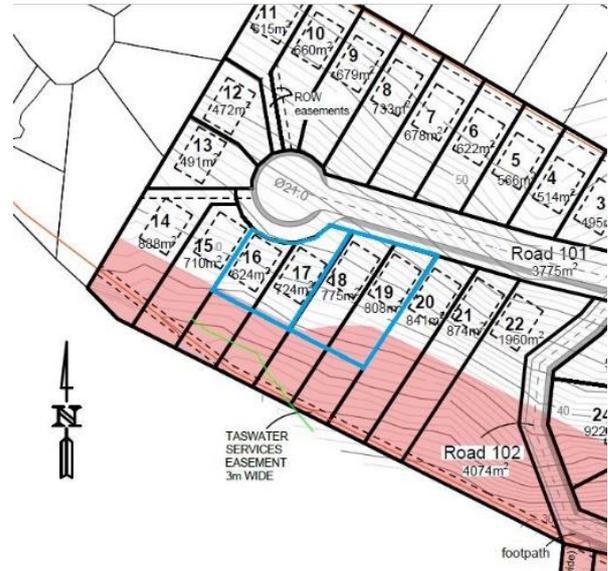
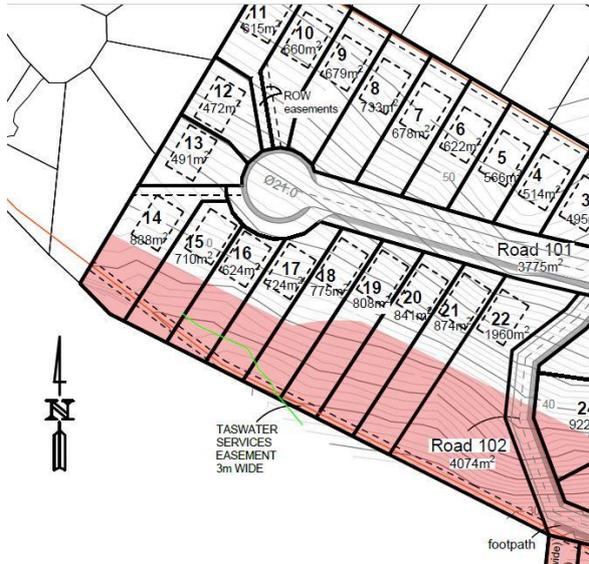
There is also the issue of the TasWater services easement. Work in this area would certainly have catastrophic effects for the species.

The flora and fauna study attached to the planning application states that crayfish burrows were observed in this area on 4th May 2022. There is no doubt that the crayfish are present, and I believe that this subdivision will ultimately destroy the colony.

Although these crayfish are on private property, the owner and Council have a duty of care to protect them for future generations. This area needs to be exempt from building lots completely if they have any chance of survival.

* (Ref: Tasmania Government Threatened Species Link)

Revising boundaries to exclude the crayfish habitat will at least give the species a chance of survival. The developer has crammed as many lots as possible to maximise profits with no thought of environmental impacts or aesthetics of the area. Removing a small area from the building lots will not stop the developer from making a lucrative profit.



- Bushfire exclusion zone
- 10x15 building envelope
- Burrowing crayfish protection zone
- 1.5m footpath with mountable kerb

Revised boundaries – 2 blocks replacing 4 to protect crayfish

The following is an extract from the Tasmanian Government Threatened Species Link, which details the hazards and destruction caused by subdivisions in sensitive areas:

Subdivision

Subdivision activities can have a wide range of impacts on threatened species. 'Subdivision' includes all activities associated with the subdivision of land for residential or other development purposes. THE EFFECTS OF A SUBDIVISION CAN OCCUR WELL OUTSIDE THE ACTUAL FOOTPRINT OF THE ACTIVITY.

- General points to consider

- *Subdivision is a significant threatening process for many threatened plants and animals, and is a major cause of habitat loss.*
- *Direct impacts to threatened species of a subdivision can include the partial or total removal of native vegetation, altered drainage works, introduction of weeds and diseases, and damage to waterways.*
- *Subdivision of a property also involves the potential for on-going impacts after subdivision works are completed. These indirect impacts may extend well beyond the footprint of the subdivided property.*
- *Additional impacts include predation and disturbance of threatened fauna from an increase in domestic animals, the escape of non-native plants (from gardens, nature strips, etc) into adjacent bushland, on-going noise disturbance to adjacent areas, competition and predation from exotic animals such as rats and mice, and the pollution of waterways through refuse and contaminated run-off.*
- *Housing developments adjacent to native bush can also lead to an increase in burning through deliberate lighting of fires, as well as inadvertent ignition.*

The following is an extract from the Tasmanian Government Threatened Species Link, which details the hazards and destruction in particular of the Central North Burrowing Crayfish.

Cutting or clearing trees or vegetation

- *Removal of vegetation can lead to drying out of soil, erosion, sediment input into waterways, and changes in water table levels and drainage.*
- *To avoid impacts on crayfish populations and their habitat – do not clear trees or other vegetation in areas of burrowing crayfish habitat.*
- *To avoid permanent habitat loss - do not convert habitat (e.g. to plantation, pasture or cropping land).*

Use of heavy machinery and vehicles

- *Use of heavy machinery (cars, trucks, earth-moving equipment, etc) within burrowing crayfish habitat can crush burrows and crayfish, and lead to severe damage to degradation of habitat through damaging vegetation and compaction of soil.*
- *To protect crayfish populations and their habitat – restrict use of heavy machinery through and within areas of habitat.”*

What to avoid

- Habitat drying out
- Crushing crayfish or their burrows
- Changes in the water table

Helping the species

- *Consider the needs of the whole habitat. Preserving a threatened species' habitat is the best way to manage both the species and the environment in which it lives.*
- *In the areas where the species occurs, consider revegetation and fencing where streamside vegetation is degraded, and to protect waterways from erosion.*

Subdivision

- *Note that a number of activities associated with and following on from the subdivision of a property can lead to the drying out and loss of habitat*

To prevent drying out of habitat – avoid activities which alter the hydrology in areas of habitat, including removal of native vegetation, earthworks, construction and changes to drainage.

Continued ...

Changing water flow / quality

- Any activity which affects the level of the water table (including planting lots of vegetation at the site) can have major impacts on burrowing crayfish habitat. Remember that **some activities can affect the level of the water table for a substantial distance around the site of the activity.**
- To prevent loss of burrowing crayfish habitat - avoid activities which have an impact on water table levels in areas of burrowing crayfish habitat.
- Activities which result in a major deterioration in water quality can also damage burrowing crayfish habitat.
- **Activities which can effect water quality include drainage works, earthworks, roading** and stock access (all of which can lead to increased sediment reaching waterways), and the entry of chemicals into the waterway (e.g. fertiliser, herbicides and pesticides).
- To avoid impacts on crayfish populations and habitat – ensure weed control operations and the application of fertiliser do not lead to entry of chemicals into burrowing crayfish habitat.
- **Activities which result in changes in drainage patterns or water flow which can damage burrowing crayfish habitat. Activities which can effect drainage patterns and water flow include roadworks and associated drainage works and removal of vegetation.**
- To avoid impacts on crayfish populations and habitat – avoid activities which alter drainage patterns or water flow in and around areas of habitat.

2. Eucalyptus Ovata – Fodder trees for endangered swift parrots

Within the subdivision area is priority vegetation, including *Eucalyptus ovata*, a fodder tree for the also critically endangered swift parrot.

Sadly, the swift parrot population has been in heavy decline. Recent studies have estimated that the swift parrot population may be less than 750 individuals. Swift parrots need to have reliable food sources (flowering eucalypts), a source which is being constantly threatened by native forest logging and urban development.

Any priority vegetation remaining will be isolated in an incredibly urbanised area, cut off from its ecosystem. Whether the Swift parrots will enter such an urbanised area, full of noise and activity, is unknown but unlikely. There is also the added danger of predation from pets, the most worrisome being household cats. This is an added burden the swift parrots do not need.

I volunteer my time to help preserve the swift parrots in our region and once again, I am wondering why. I have allowed Council to install nest boxes on my property at Tugrah, and I donate my time to observe and document the activity around these boxes. Yet Council, hypocritically, is considering either removing or isolating a known food source. Any food source for these parrots, no matter how small, is of significant value, and needs to be in its current bushland setting, not surrounded by numerous housing lots.

3. Bushland Fragmentation

This particular area of land is a natural wildlife corridor linking Kelsey Tier Reserve to the Mersey River and is frequented by a diverse range of birds and animals.

Unprecedented pressure is being exerted on wildlife like never before, with urbanisation, agricultural activity, infrastructure development and global warming. The amount of habitat where wild nature can flourish is decreasing, compromising the ability of many species to survive. Native animals have less room to migrate, disperse, reproduce, feed and generally thrive. Fragmentation of habitat is now one of the key drivers of the disappearance of species and the decline in species abundance. Halting habitat fragmentation by conserving LARGE intact bushland areas is vital to the continuing health and biodiversity of our city. Native animals need the ability to travel safely, protected by these large bush land corridors.

The amount of bush land remaining after this development is not enough to buffer these animals from human interference, domestic animals, noise, pollution and all the other facets of urban living. This may be a seemingly small area of bush land to lose, but cumulatively, destruction of these green pockets combine to make a significant impact.

Councils own Environmental Strategy 2019-2024 details fragmentation as an area of concern as well as the decline of biodiversity health. This application goes directly against this environmental strategy with its failure to protect our natural resources. There is nothing “sensitive” about this development.

Extract from DCC Environmental Strategy 2019-2024

Focus Area	Issues of Concern	Opportunities
Biodiversity	Invasive species – weeds, cats, dogs, biosecurity	Dog/cat/animal control Weed control Education
	Waste – litter, dumping green waste	Compliance, education, green waste bins
	Climate change	Monitoring impact
	Urban development encroaching on natural habitat / fragmentation	Bushland conservation / revegetation Sensitive development
	Illegal clearing of vegetation Planting non-native species in reserves Unauthorised tracks through reserves Bushfires	Compliance, education
	Native animal / plant diseases	Reporting, biosecurity
	Decline in biodiversity health	Monitoring Bushland conservation - revegetation, weed control Wildlife corridors Planting natives in Council reserve's and private gardens
Waterways & Coasts	Stormwater, sewerage, agricultural run-off	Use natural pesticides Gross pollutants traps
	Pollution – plastics, litter	Regular beach clean ups – community involvement More bins near waterways / beaches Promotion/education re impact on marine life
	Climate change – sea level rise, erosion, and flooding	
	Uncontrolled animals (dogs) disturbing habitat Uncontrolled vehicular access on beaches Vandalism	Signage, education, compliance

From: Petra Wilden <petrawilden22@gmail.com>
Sent: Tuesday, 6 December 2022 2:10 PM
To: Devonport City Council
Subject: Submission - PA2022.0167 - Petra Wilden

5/12/2022

The General Manager
Devonport City Council
Concerning: PA2022.0167
Proposed Use or Development: 50 Lot Subdivision
Address of the Land: [57a Berrigan Road, Miandetta](#)

I'm writing to formally **oppose** the 50 lot subdivision proposed on [57a Berrigan Road, Miandetta](#). The planning application seeks to destroy a thriving ecosystem, used by many threatened species to:

- create 48 residential lots and associated infrastructure (road, services),
- a lot for potential future development which is currently impacted by existing power lines and threatened vegetation (Lot 51).

Do the parties involved with this application mean with 'potential future development' of this site, that after the 48 residential lots are developed, this threatened ecosystem, Eucalyptus ovata forest and woodland, will be so degraded that then will be the time to destroy that lot too? To already mention potential future development of this block is the same as saying the development **will likely have** an unnecessary or unacceptable impact on priority Vegetation. So the claim mentioned by 'RMCG' who did the Flora and Fauna report of: 'The proposal is therefore unlikely to have an unnecessary or unacceptable impact on priority vegetation', totally will not hold up in reality.

- as well as a Balance land comprising three future residential lots which are currently required for bushfire hazard management. Again, just wait till the area is developed, so eventually we can also destroy the 'Balance land' later on.

I understand the Council needs to find areas for human development, but this should not be done in the few areas of natural bushland left close to the city. Enough of these areas have already been destroyed. The Council needs to find a better balance, a sustainable balance, that includes having thriving ecosystems within a thriving city. This part of the Miandetta greenbelt is an amazing asset of the 'Living City' that could be sensibly developed with just walking paths for access to all people of Devonport, to support recreation, conservation, education/admiration of biodiversity, restoring mental health, and tourist attraction.

The 'Bio-Connectivity in Devonport' report made for the Council that will be part of your open space strategy, found that many of the city's existing public open spaces do not yet provide quality habitat for biodiversity. This shows a great need to start focussing on your own Environment Strategy and start delivering on goal 1.2.1: **Support the conservation and maintenance of biodiversity including coastal vegetation and preservation of areas of remnant vegetation**. So I want to urge the Council to not support this application and find other areas for development, in this time of Climate urgency there should be no room for changing a carbon sink/credit/off set into a huge carbon source.

RMCG also mentions no threatened flora species were identified on the subject title or are considered to be at greater than low risk of being impacted as a result of the proposed subdivision and subsequent development. This is absolute rubbish, the ecosystem here at the moment is providing habitat for many endangered species, these creatures are at any time hard to find, including their nests let alone during a few hours of documentation by RMCG. If this project will go ahead it can only have a huge impact on all species that call this beautiful bushland home and the ones that travel through on many occasions.

Another very important aspect that needs to be taken in consideration is that the subject site slopes towards the south with areas of considerably steep slopes. Southern slopes are damp and receive the least

sun, this means great for ecosystems, not great for humans. Southern facing houses need more active heating as there is no passive heating from the sun. Houses built with no sunlight coming in are a waste of resources, as you continuously need to heat them to be comfortable. In a time of material and builder shortages and therefore expensive house prices, the price to build on steep slopes adds another big price on top of already high prices for houses.

We're living at a time of massive biodiversity loss and climate urgency, we need to reverse this not add to this. I'm not writing this submission for myself, but also for the many many other concerned residents, who don't even know about this application.

As well as finding suitable spaces for housing development, the Council needs to show it is looking after and will protect connecting areas of healthy ecosystems, on which we all depend. I haven't come across developers that have knowledge on the myriad of benefits flora and fauna provide for human health, ecosystem health, climate control etc, this has been proven over and over recently with developments hugely impacting on priority vegetation, so the Council needs to lead in this knowledge and not approve this absurd development..

Yours sincerely,
Petra Wilden

From: sharlene broughton <sharlenebroughton@hotmail.com>
Sent: Tuesday, 6 December 2022 2:55 PM
To: Devonport City Council
Subject: Submisison - PA2022.0167 - Sharlene Broughton

Dear Whom it may concern,

I'm writing to formally **oppose** the 50 lot subdivision proposed on [57a Berrigan Road, Miandetta](#).

The planning application seeks to destroy a thriving ecosystem, used by many threatened species to:

- create 48 residential lots! and associated infrastructure (road, services),
- a lot for potential future development which is currently impacted by existing power lines and threatened vegetation (Lot 51). Do the parties involved with this application mean with potential future development of this site, that after the 48 residential lots are developed, this threatened ecosystem will be so degraded that then will be the time to destroy that lot!
- as well as a Balance land comprising three future residential lots which are currently required for bushfire hazard management. Again, just wait till the area is developed, so eventually we can also destroy the 'Balance land'!

The sentence in the second dot point: 'a lot for **potential** future development which is currently impacted by existing power lines and threatened vegetation (Lot 51)', is actually a threatened vegetation community, Eucalyptus ovata forest and woodland. To already mention potential future development of this block is the same as saying the development **will likely have** an unnecessary or unacceptable impact on priority Vegetation. So the claim mentioned by RMCG of: 'The proposal is therefore unlikely to have an unnecessary or unacceptable impact on priority vegetation', totally will not hold up in reality.

I haven't come across developers that have knowledge on the myriad of benefits flora and fauna provide for human health, ecosystem health, climate control etc, this has been proven over and over recently with developments hugely impacting on priority vegetation.

RMCG also mentions no threatened flora species were identified on the subject title or are considered to be at greater than low risk of being impacted as a result of the proposed subdivision and subsequent development. This is absolute rubbish, the ecosystem here at the moment is providing habitat for many endangered species, these creatures are at any time hard to find, including their nests let alone during a few hours of documentation by RMCG. The proposal will have a huge impact on all species that call this beautiful bushland home and the ones that travel through on many occasions.

Another very important aspect that needs to be taken in consideration is that the subject site slopes towards the south with areas of considerably steep slopes. Southern slopes are damp and receive the least sun, this means great for ecosystems, not great for humans. Southern facing houses need more active heating as there is no passive heating from the sun. Houses built with no sunlight coming in are a waste of resources, as you continuously need to heat them to be comfortable. In a time of material and builder shortages and therefore expensive house prices, the price to build on steep slopes adds another big price on top of already high prices for houses.

I understand the Council needs to find areas for human development, but not in areas of natural bushland. Enough of these areas have already been destroyed, the Council needs to set aside areas that have thriving ecosystems and see it as a very important asset of the 'Living City' that attracts tourists who come to Tasmania to experience the natural beauty.

The 'Bio-Connectivity in Devonport' report that will be part of the open space strategy, found that many of the city's existing public open spaces do not yet provide quality habitat for biodiversity. This shows a great need to start focussing on your own Environment Strategy and start delivering on goal 1.2.1: **Support the**

conservation and maintenance of biodiversity including coastal vegetation and preservation of areas of remnant vegetation. So please find other areas for development, in this time of Climate urgency there should be no room for changing a carbon sink into a huge source.

We're living at a time of massive biodiversity loss and climate urgency, we need to reverse this not add to this. I'm not writing this submission for myself, but also for the many many other concerned residents, who don't even know about this application. As well as finding suitable spaces for housing development, the Council needs to show it is looking after and will protect connecting areas of healthy ecosystems, on which we all depend.

Sharlene Broughton

Get [Outlook for Android](#)

From: Deborah Matthews <debramatthews5@gmail.com>
Sent: Tuesday, 6 December 2022 4:01 PM
To: Devonport City Council
Subject: OBJECTION TO: PA2022.0167 APPLICATION FOR PLANNING PERMIT 57A BERRIGAN ROAD MIANDETTA

General Manager
Devonport City Council

Dear sir

I strongly object to this Application for a 50 lot subdivision at 57A Berrigan Road Miandetta.

1. One of the requirements of the Land Use Planning and Approvals Act 1993, states that "all discretionary planning permit applications are subject to a mandatory public notification process". This has not happened. Whilst there has been a small billboard placed on site at 57A Berrigan Road for several weeks, at no time has there been a mandatory written notification placed on this board or anywhere on this site. This is contrary to the Act, so does not follow the correct legal process.

2. The Flora and Fauna Report : undertaken by RMCG to assess the flora and fauna of the Application site, clearly states that there are burrowing 'crayfish burrows observed in the west of the title'. It recommends that 'any disturbances of borrowing crayfish, including their burrows and chimneys, must be avoided. If any disturbance is unavoidable as a result of the proposed subdivision or future development of the area, a permit must be obtained'.

My objection is that this area of crayfish burrows and crayfish population is clearly marked at the lower section of proposed blocks nos.14, 15, 16, 17, 18 and 19.

My question is;

How is the Proponent planning, in writing, to protect these areas when trucks and heavy machinery will be operating over all the site and over the small creek, that supports this crayfish population?

How can the crayfish population be protected and sustained once the creek is drained?

How is each future property owner going to be made aware of the crayfish population on their properties, and how will they be made accountable for that population by the Proponent?

At the moment, a solitary white post with an orange tape attached is the only protection afforded to the crayfish and their burrows by the Proponent. Disgraceful protection of a threatened species!

Your sincerely
Deborah Matthews

From: Geoff Davis <gdavisplanning@bigpond.com>
Sent: Tuesday, 6 December 2022 4:52 PM
To: Devonport City Council
Subject: Representation - PA2022.0167 - Geoff Davis
Attachments: Devonport Council rep Berrigan rd.docx

Dear Sir,
Please find attached representation.
thank you
Patricia Davis

General Manager

Devonport City Council

council @devonport.tas.gov.au

Representation PA 2022.0167 -57aBerrigan Road Miandetta

I am the owner of the land to the south of 57a Berrigan Road (26-70 Stony Rise Road).

The land that adjoins 57a Berrigan Road to the south is zoned for future residential development.

I make the following representation.

The proposed road network makes no allowance for the future development of adjoining properties. The proposed road design will only service the proposed development in isolation to surrounding land. Looking at the plan it appears there is no strategic consideration for the development of surrounding properties.

I request that the proposed subdivision makes adequate provision for access to the southern adjoining land at 26-70 Stony Rise Road.

Patricia Davis

14 Illawong Crescent

Taroona 7053

Phone 0408396548

tricia davis3@bigpond.com

From: no-reply@mg.devonport.tas.gov.au on behalf of Devonport City Council <no-reply@mg.devonport.tas.gov.au>
Sent: Tuesday, 6 December 2022 5:41 PM
To: FlowAdmin@devonport.tas.gov.au
Subject: Submission of Representation - PA 2022.0167
Attachments: Submission of a Representation - PA 2022.0167.pdf

Hello,

A new Submission of Representation has been made and is ready to be entered into TRIM. Please see the attached PDF for the Representation and any attachments that have been made.

Development Application Number: PA 2022.0167

Address of Development: 57A Berrigan Road, Miandetta

Submitter: Andrew and Sandra Murphy

Thank You



DEVONPORT CITY COUNCIL
ABN: 47 611 446 016
PO Box 604 Devonport TAS 7310 – 137 Rooke Street, Devonport
Telephone 03 6424 0511
Email council@devonport.tas.gov.au Web www.devonport.tas.gov.au

Submission Date
06/12/2022

I/We
Andrew and Sandra Murphy

Of
99 Mersey Main Road
Spreyton, Tasmania 7310
Australia

Email Address
sandraelizabethmurphy@gmail.com

Phone Number
487501208

Development Application Number
PA 2022.0167

Address of Development
57A Berrigan Road
Miandetta 7310
Australia

Details of representation
We are appalled at the apparent lack of concern by DCC on limiting the effects of climate change. They seem insistent on clearing all native land and filling it with concrete, bricks and grass. We as a world are starting to see devastating effects of climate change already, I notice a large area at stony rise has been cleared and nothing is left standing. Where do the native animals go? What will replace the carbon neutralising trees etc? Will it be the same as the DCC “living” city project, which actually has very little “living components to it. I also note a large subdivision at Kelsey tier road -and another at Ambleside
Maybe it is time for council to consider allowing limited building with conditions attached ie existing trees must remain standing, wildlife must be provided with corridors, creeks etc must be left running . We are very aware of the need for housing , however there is a greater need for us to learn how to coexist with wildlife and protect our planet for future generations- oh and a total ban on Norfolk pines would be appreciated as well

Consent
 I agree that all the information i have provided is accurate and is truthful.

Privacy Consent
 I agree to the privacy policy of the Devonport City Council.



From: Sarah Kersey <skersey2@bigpond.com>
Sent: Tuesday, 6 December 2022 6:14 PM
To: Devonport City Council
Subject: Representation - PA2022.0167 - Sarah Kersey

The General Manager
Devonport City Council
Concerning: PA2022.0167
Proposed Use or Development: 50 Lot Subdivision Address of the Land: 57a Berrigan Road, Miandetta

I am a rate paying resident and very concerned about the negative impacts of yet another project which destroys yet more healthy woodland by cramming 50 houses onto a southerly sloping area.

My concerns include ;

1. Loss of habitat and vegetation cover is continuing at a rampant rate. A cursory study does not allow for species who are passing through and rely on this area for nesting etc. These species are being impacted over and over each time more habitat is lost, it is death by a thousand cuts.
2. We demand that you take into account the impacts this has on climate change, each small area of vegetation loss leading to more and more warming of the ground, and subsequent drying.
3. The known health benefits of native bush must not be ignored. Also, the stupidity of building on south facing slopes in our climate means more energy required to warm.
4. Houses covering the whole block and concrete driveways don't allow rainfall to penetrate leading to greater runoff leading to damaging fast water flows, affecting the endangered freshwater giant lobster.
5. Watercourses are prime wildlife habitats and must be protected from private owners with dogs, cats, vegetation clearing and garden plant escapees .

I urge the council to take seriously your own report and Environment Strategy and start delivering on goal 1.2.1: Support the conservation and maintenance of biodiversity including coastal vegetation and preservation of areas of remnant vegetation.

We must start valuing the bushland we have close to the city and the benefits it brings.

Please do not let developers with their deep pockets get their hands on this precious area . We are losing these spaces at a far too greater rate ! And once they're gone , they're lost . Future generations will not thank us .

Thanks for your time.

Sarah Kersey

Sent from my iPhone

From: no-reply@mg.devonport.tas.gov.au on behalf of Devonport City Council <no-reply@mg.devonport.tas.gov.au>
Sent: Tuesday, 6 December 2022 6:46 AM
To: FlowAdmin@devonport.tas.gov.au
Subject: Submission of Representation - PA2022.0167
Attachments: Submission of a Representation - PA2022.0167.pdf; 2022-1.JPG; 2022.JPG

Hello,

A new Submission of Representation has been made and is ready to be entered into TRIM. Please see the attached PDF for the Representation and any attachments that have been made.

Development Application Number: PA2022.0167

Address of Development: 57a Berrigan Road, Miandetta - 50 Lot Subdivision, Devonport

Submitter: Elizabeth Latham

Thank You



DEVONPORT CITY COUNCIL
ABN: 47 611 446 016
PO Box 604 Devonport TAS 7310 – 137 Rooke Street, Devonport
Telephone 03 6424 0511
Email council@devonport.tas.gov.au Web www.devonport.tas.gov.au

Submission Date
06/12/2022

I/We
Elizabeth Latham

Of
71 Stony Rise Road
Devonport, Tas 7310
Australia

Email Address
eslatham@bigpond.net.au

Phone Number
03 64246187

Development Application Number
PA2022.0167

Address of Development
57a Berrigan Road, Miandetta - 50 Lot Subdivision
Devonport 7310
Australia

Details of representation
I wish to put in an objection to the development of land at 57a Berrigan Road, Miandetta .Devonport.
This scrub/bush land is an important part of the green belt stretching from the Mersey River to Kelcey Tier and is an important part of the local ecosystem supporting many Birds ,Animals and plants including the Northern Burrowing Crayfish, Swift Parrots and the Grey (White Morph) Goshawk which has successfully breed nearby and hunts regularly in this area and many many others.
It also supports at least 3 Apiarists in the area and with Bees being an essential part of human life need to be fully supported with areas to forage.
I understand the need for more housing but there are other areas in the Devonport area which can be developed the old showground, the Tootals site in Tasman Street, etc,
I hear the applicants are from Sydney not even Tasmanian and have they even seen the land or understand the importance of these areas to the Community and the greater well being of the State and the World with the need to protect it from further degradation from climate change.
Please consider your decision carefully and see past the money making aspect and protect our Bush and to use a quote from one of the Councils own pages "Leave nothing but Footprints, take nothing but memories and kill NOTHING but time." and protect this and surrounding bushland from wanton destruction.

Upload Supporting Documentation such as photos, plans, sketches etc (optional)





- [2022-1.JPG](#)
- [2022.JPG](#)

Consent

- ✓ I agree that all the information i have provided is accurate and is truthful.

Privacy Consent

- ✓ I agree to the privacy policy of the Devonport City Council.

DEVONPORT







From: Horst Schroeder <horstschroeder1941@hotmail.com>
Sent: Tuesday, 6 December 2022 8:03 PM
To: Devonport City Council
Subject: Representation - PA2022.0167 - Horst Schroeder

6/12/2022

The General Manager
Devonport City Council
Concerning: PA2022.0167
Proposed Use or Development: 50 Lot Subdivision
Address of the Land: [57a Berrigan Road, Miandetta](#)

I'm writing to formally **oppose** the 50 lot subdivision proposed on [57a Berrigan Road, Miandetta](#).

The planning application seeks to destroy a thriving ecosystem, used by many threatened species to:
create 48 residential lots and associated infrastructure (road, services),

The claim mentioned by 'RMCG' who did the Flora and Fauna report of: 'The proposal is unlikely to have an unnecessary or unacceptable impact on priority vegetation', will not hold up in reality.

I understand the Council needs to find areas for human development, but this should not be done in the few areas of natural bushland left close to the city. Enough of these areas have already been destroyed. The Council needs to find a better balance, a sustainable balance, that includes having thriving ecosystems within a thriving city. This part of the Miandetta greenbelt is an asset of the 'Living City' that could be sensibly developed with just walking paths for access to all people of Devonport, to support recreation, conservation, education/admiration of biodiversity, restoring mental health, and tourist attraction.

I want to urge the Council to not support this application and find other areas for development, in this time of Climate urgency there should be no room for changing a carbon sink/credit/off set into a huge carbon source.

RMCG also mentions no threatened flora species were identified on the subject title or are considered to be at greater than low risk of being impacted as a result of the proposed subdivision and subsequent development. This is simply not true, the ecosystem here at the moment is providing habitat for many species.

Another very important aspect that needs to be taken in consideration is that the subject site slopes towards the south. Southern facing houses need more active heating and this is not desirable in these times of an energy crisis.
We're living at a time of massive biodiversity loss and climate urgency, we need to reverse this not add to this.

Yours sincerely,
Horst Schroeder

From: pellison@iinet.net.au
Sent: Wednesday, 7 December 2022 7:05 AM
To: Devonport City Council
Subject: Representation - PA2022.0167 - Patricia Ellison
Attachments: Representation by P Ellison on PA2022.0167.doc

The General Manager, Devonport City Council

Please find attached my representation on PA 2022.0167.

Would you please acknowledge receipt of my email.

Thank you,

Patricia Ellison

PO Box 3088
Ulverstone, Tas 7315

6th December 2022

The General Manager
Devonport City Council
PO Box 604
Devonport Tas 7310

council@devonport.tas.gov.au

**Representation from Patricia Ellison on
Application PA2022.0167**

I am writing to lodge a formal objection to Application PA2022.0167, which will involve the removal of native bush for the development of a 50-lot subdivision at 57a Berrigan Road, Miandetta. I raise the following points in support of my objection for your consideration.

1. This area of bushland forms part of an essential connecting corridor and flyway for wildlife moving between the Mersey River and the Kelcey Tier Greenbelt, in particular, the critically endangered Swift Parrot, which is known to feed and nest in the Kelcey Tier Green Belt. And it also provides homes for many native animal and plant species. To allow this proposal to proceed would continue at a local level the habitat destruction and land clearing for urban sprawl, which have been identified as a major threat to nature and our environment in the ‘State of the Environment Report, 2021’.
2. The flora and fauna report carried out on the developer’s behalf is, in my opinion, inadequate to do justice to this area, as it involved only one visit to the area and relied heavily on data from the Natural Values Atlas, which does not guarantee comprehensive coverage of all the natural values to be found in an area.
3. To allow this proposal to proceed would, in my opinion, be incompatible with Goal Number 1 of Devonport’s Strategic Plan 2009-2030 ‘Living Lightly on our Environment’ which states that the Council will ‘preserve our natural geography and landscapes for future generations’ in order to ensure Devonport’s environmental viability. This area also provides a valuable historical record of the native vegetation which covered the Devonport area some 200 years ago and, if preserved, would give opportunities for both residents of the City and visitors to connect with nature.
4. This development also appears to be incompatible with Council’s environment strategy and the acknowledged need to ‘support the conservation and maintenance of

biodiversity including coastal vegetation and preservation of areas of remnant vegetation’.

5. The southerly aspect of the land, including areas of considerably steep slopes, makes development of this area for housing questionable, and I suggest is a further reason for leaving it as a conservation area for biodiversity.

Considering the points I have raised above, I reiterate my objection to Application PA2022.0167. I strongly urge Council to consider purchasing all remaining areas of remnant bushland with the Municipality, including that at 57a Berrigan Road, Miandetta. With well-maintained and cared-for reserves close at hand, Devonport would be in an excellent position to promote itself as an ecotourism destination, a place for visitors to linger in before venturing off to explore the rest of Tasmania.

Patricia Ellison

From: no-reply@mg.devonport.tas.gov.au on behalf of Devonport City Council <no-reply@mg.devonport.tas.gov.au>
Sent: Wednesday, 7 December 2022 10:48 AM
To: FlowAdmin@devonport.tas.gov.au
Subject: Submission of Representation - PA2022.0167
Attachments: Submission of a Representation - PA2022.0167.pdf

Hello,

A new Submission of Representation has been made and is ready to be entered into TRIM. Please see the attached PDF for the Representation and any attachments that have been made.

Development Application Number: PA2022.0167

Address of Development: 57A BERRIGAN ROAD, MIANDETTA, DEVONPORT

Submitter: Deborah kerr

Thank You



DEVONPORT CITY COUNCIL

ABN: 47 611 446 016

PO Box 604 Devonport TAS 7310 – 137 Rooke Street, Devonport

Telephone 03 6424 0511

Email council@devonport.tas.gov.au Web www.devonport.tas.gov.au

Submission Date

07/12/2022

I/We

Deborah kerr

Of

141 Upper George St
Devonport, Tasmania 7310
Australia

Email Address

deborahkerr1@bigpond.com

Phone Number

0484763920

Development Application Number

PA2022.0167

Address of Development

57A BERRIGAN ROAD, MIANDETTA
DEVONPORT 7310
Australia

Details of representation

I am writing to formally oppose the 50 Lot subdivision development proposal.

This Greenbelt area is one of Devonport's most important assets. Having natural bushland close to the city is something we all enjoy and is highly valued. It should be protected for many reasons particularly now with the urgent threat of a changing climate.

We need to focus on maintaining our greenbelt areas and not destroying more of them which results in huge impacts on the species that depend on them.

Please do not allow this senseless, backward thinking act that will further degrade our beautiful city.

Kind regards

Deborah kerr

Consent

I agree that all the information i have provided is accurate and is truthful.

Privacy Consent

I agree to the privacy policy of the Devonport City Council.



The City with Spirit

From: Julia Butler-Ross <julia.butler.ross@gmail.com>
Sent: Wednesday, 7 December 2022 2:37 PM
To: Devonport City Council
Subject: Representation - PA2022.0167 - Julia Butler-Ross
Attachments: 57A Berrigan Rd Subdivision proposal.docx

Please find attached an email copy of the letter I handed in to Council this morning in regards to yet another subdivision that involves the destruction of a valuable and healthy forest. A forest community is much more than just plants and should be rigorously defended as an essential resource in the fight against the climate change.

Yours sincerely,

Julia Butler-Ross

Julia Butler-Ross
53 Surrey St
Devonport TAS 7310

Matthew Atkins
General Manager
Devonport City Council
PO Box 604
DEVONPORT TAS 7310

4th December, 2022

Dear Matthew **RE: Application No PA2022.0167-57A Berrigan Rd Miandetta**

I am representing myself in regards to this proposed subdivision. I am deeply concerned that developing this regenerated forest will have a significant effect on the natural values of the current bushland environment as it now stands.

This block lies alongside the proposed Devonfield development application and contributes to the natural values of the existing forest community. The larger the area of forest the better it can provide resilience and varied habitats for migratory species such as the swift parrot and dense shelter for small birds and animals such as bandicoots and echidna. The bush block is known habitat for threatened species such as the grey goshawk and swift parrot.

Any natural forest is so much more than just plants - it is filled to overflowing with myriad interdependent species. This proposed development, along with its Devonfield neighbour, will without doubt cause huge local extinction because many species cannot relocate, will die fighting for territory, or simply lose their highly specific niches.

The small amount of remnant bush proposed in the development is inadequate to support native biodiversity and will be seriously impacted by the huge amount of disturbance of building roads, utilities etc.

It is common knowledge that in order to reduce the catastrophic effects of climate change, we have to start reinstating forests as rapidly as possible, so it makes no sense to cut down healthy forests.

Viable bushland is getting very rare near cities, but properly managed, and left intact, could provide a recreational/educational resource for residents of Devonport and the many tourists who visit the city and want to be part of the Tasmanian experience.

The Mersey River, Kelcey Tier, Miandetta Park, Hillcrest Reserve and Don Reserve form a beautiful Green Belt around the city. The native forest currently growing at both the Devonfield and 57A Berrigan Rd, will add to the amenity of Devonport's 'Living City' aspirations.

I urge DCC to uphold their Environment Strategy (goal 1.2.1) and support the community's wish to keep this block of bushland in its entirety.

Yours sincerely,

Julia Butler-Ross

From: philip.milner@bigpond.com
Sent: Wednesday, 7 December 2022 2:47 PM
To: Devonport City Council
Subject: Representation - PA2022.0167 - Phillip Milner
Attachments: PA2022 0167 57a Berrigan Road Objection.pdf

General Manager
Devonport City Council,

Dear Sir,

Please find attached my letter of objection to PA2022.0167, proposed 50 lot subdivision at the property identified as 57a Berrigan Road, Miandetta.

Yours Sincerely
Philip Milner

Philip Milner
philip.milner@bigpond.com

The General Manager
Devonport City Council
RE: PA2022 0167
Proposal: 50 Lot Subdivision
Address of the land: 57a Berrigan Road, Miandetta

Dear Sir,

I am writing to formally object to the 50 lot subdivision proposed for the parcel of land identified as 57a Berrigan Road, Miandetta.

My objection relates to the inadequate assessment of the potential impacts of the proposed project on threatened fauna as well as the continual and on-going loss of remnant vegetation from within the Devonport municipality, as this is another example of this serious issue.

The RMCG report which forms part of this proposal has given inadequate assessment of the likely impact on threatened species of fauna, particularly the Central North Burrowing Crayfish *Engaeus granulatus*, a nationally listed threatened species, the Swift Parrot *Lathamus discolor* also a nationally listed threatened species, and the Grey Goshawk *Accipiter novaehollandiae* a threatened species under the Tasmanian Act.

The confirmation that the Central North Burrowing Crayfish is present on the property and the confirmed records of the Swift Parrot in the vicinity is adequate justification for this project to be referred to the Commonwealth Department of Conservation for independent assessment under the Environment Protection and Biodiversity Conservation Act 1999. Further justification for the referral of this project to the EPBC Act is the failure of the Devonport Council to ensure the conservation and the on-going integrity of habitat for the Crayfish in the nearby previously developed subdivision of Harris Road. This Berrigan Road subdivision will result in further impact on the species.

The Devonport City Environment Strategy 2019 – 2024 is an interesting and enlightening read but it is quite clear that the application and implementation of the strategy by the Council is sadly lacking, particularly in regard to the retention of the important remnant vegetation in and around the city. This subdivision proposal is another example of the Council's inadequate consideration of environmental values.

A truly vibrant living city has little to do with shiny new buildings and end to end housing subdivisions but it is largely about the quality and integrity of the natural environment both within and around the city. There is sufficient already cleared land around the city for residential housing developments and there is no justification for the clearing any of the remaining remnant natural vegetation for that purpose.

Yours Sincerely
Philip Milner Vegetation Consultant (retired)

From: no-reply@mg.devonport.tas.gov.au on behalf of Devonport City Council <no-reply@mg.devonport.tas.gov.au>
Sent: Wednesday, 7 December 2022 2:59 PM
To: FlowAdmin@devonport.tas.gov.au
Subject: Submission of Representation - PA2022.0167
Attachments: Submission of a Representation - PA2022.0167.pdf; Objection-to-PART-of-57a-Berrigan-Road.pdf; Alternative-suggestion-57a-Berrigan-Rd.jpg

Hello,

A new Submission of Representation has been made and is ready to be entered into TRIM. Please see the attached PDF for the Representation and any attachments that have been made.

Development Application Number: PA2022.0167

Address of Development: 57A Berrigan Road, Miandetta

Submitter: Jennifer Rowlands

Thank You



DEVONPORT CITY COUNCIL

ABN: 47 611 446 016

PO Box 604 Devonport TAS 7310 – 137 Rooke Street, Devonport

Telephone 03 6424 0511

Email council@devonport.tas.gov.au Web www.devonport.tas.gov.au

Submission Date

07/12/2022

I/We

Jennifer Rowlands

Of

97 Stony Rise Rd
Stony Rise, Tasmania 7310
Australia

Email Address

jennifer.rowlands@bigpond.com

Phone Number

0448559806

Development Application Number

PA2022.0167

Address of Development

57A Berrigan Road
Miandetta 7310
Australia

Details of representation

I wish to object to the proposed development, as I understand that it will negatively impact on the green area leading all the way from Kelcey Tier to the river. The development will cause 'a break' in this strip. Please see also my attached letter and image, which contains a proposed alternative compromise.

Upload Supporting Documentation such as photos, plans, sketches etc (optional)

- [Objection-to-PART-of-57a-Berrigan-Road.pdf](#)
- [Alternative-suggestion-57a-Berrigan-Rd.jpg](#)

Consent

- I agree that all the information i have provided is accurate and is truthful.

Privacy Consent

- I agree to the privacy policy of the Devonport City Council.



The City with Spirit

Jennifer Rowlands 97 Stony Rise Devonport 7310 Phone: 0448 559 806

7 December 2022

Regarding:

57a Berrigan Road Miandetta, PA2022.0167, Location: FR141199/1

Attention: General Manager, Devonport City Council.

Dear General Manager, Councillors, and The Planning Team,

Thank you for the opportunity to present to you not only an objection, but an alternative to part of the abovenamed proposed development at 57a Berrigan Rd Miandetta.

My letter is in two parts. The first proposing alternative suggestion for above development. The second is a genuine question to the Manager and *each* Councillor to which I require a genuine reply.

As you're aware I had previously lodged an objection to the proposed Devonfield/Middle Road development, which was approved by you on 26 September 2022.

Therefore, I'm not going into detail all the reasons for objecting part of this development.

The reasons are the same: habitat for *all* wildlife, maintaining healthy green/wild places near built-up urban/city areas for mental health, and halting urban sprawl.

However, although I object to the development in its entirety, I propose an alternative which is a compromise.

Proposal: Only develop lots 1 to 12, 34 to 40, and 23 to 33 (omitting 24 and 26). Reduce the block sizes of 27 to 33 to the sizes of 23 and 25. See attached image.

This will ensure that the 'green strip' leading all the way from Kelcey Tier through to Horsehead Creek (via Stony Rise bushland and Devonfield's bushland) will remain intact, forming an unbroken vital green line to the river.

It's not just about the endangered species, but rather undisturbed established bushland. However, reducing the number of dwellings will also ensure less disturbance to the burrowing crayfish sites as an added bonus.

A genuine enquiry to all decision-makers:

I, along with many others who have objected to *any* proposed developments resulting in removal of established bushland, have invested countless hours of their own time, carefully researching, sharing their knowledge and expertise, giving reasonable and well-thought-out alternative suggestions, and providing images. These have all concluded that the developments will negatively impact **biodiversity, conservation, and mental health**.

However, Council have not demonstrated they have done the same to prove otherwise.

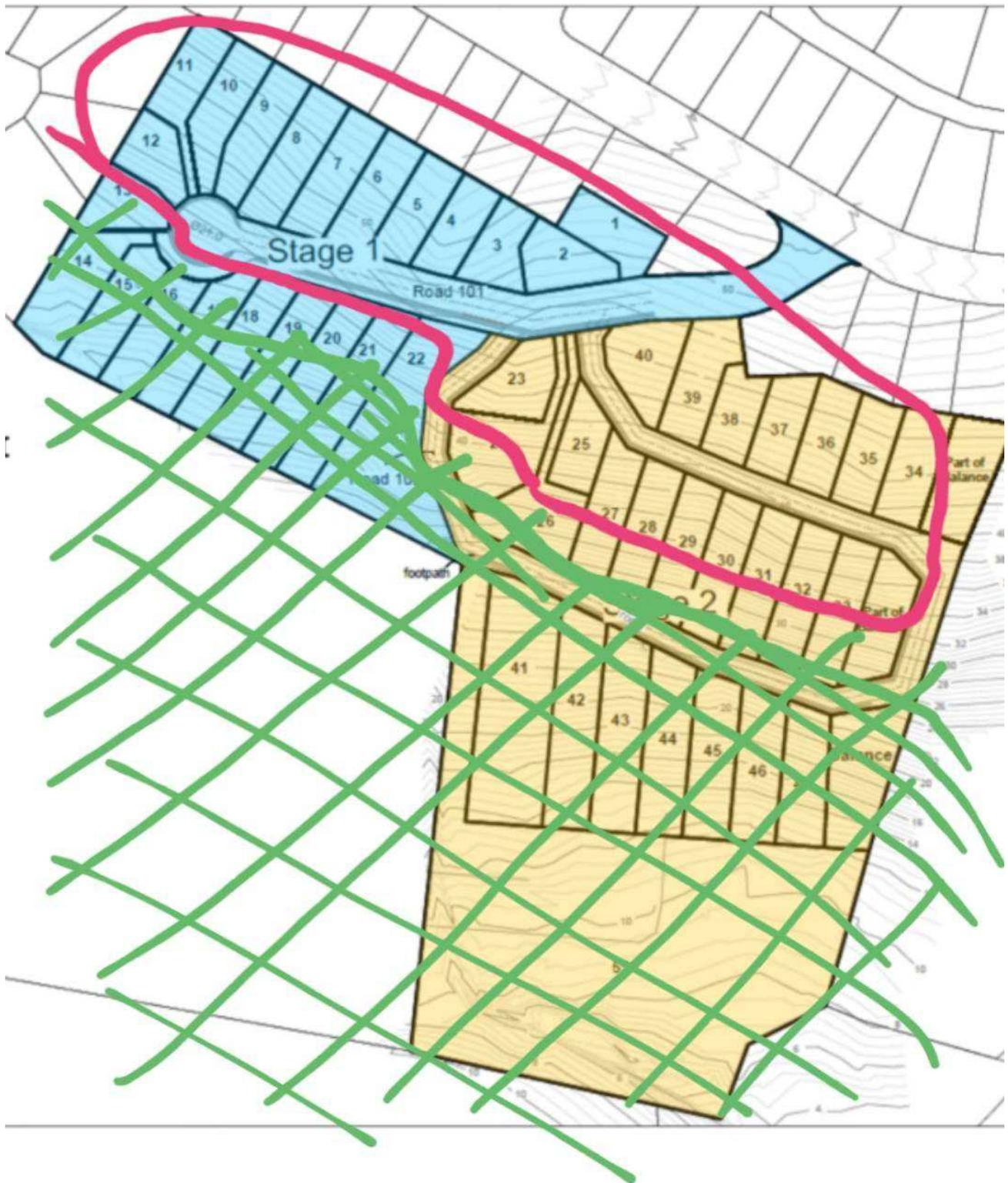
Therefore, it is with a completely open mind that I request you to invest equal time and research to demonstrate to me and others that the proposed developments (both the abovenamed and Devonfield/Middle Road) are really GREAT ideas.

The rumours I keep hearing that Devonport Council are interested in '*profit before people*' I know aren't true, nor do I believe that well-educated citizens such as yourselves are '*climate deniers*' either.

There simply must be other reasons I'm just not aware of as to why housing developments need to be at the expense of established bushland, and not proposed for already-cleared land.

I'm very much looking forward to hearing from you all benefits of the two mentioned housing developments.

Kind regards, Jennifer Rowlands.



From: Pam Crisp <pcrisp@sbsc.tas.edu.au>
Sent: Wednesday, 7 December 2022 2:36 PM
To: Devonport City Council
Subject: Miandetta Park - Pamela Crisp

--
Pamela Crisp
52 Mungala Crescent
Devonport Tas 7310
0466 106 042

Dear General Manager of the Devonport City Council'

It has recently been brought to my attention that the Devonport Council has put forward plans to develop Miandetta green strips into housing.

This is simply not right. The reason many people have decided to build and/or live in Miandetta is because of the quiet and peaceful atmosphere that this area provides.

One of the reasons to preserve this strip is also because it is home to many native species, some of which are already on the endangered lists.

These include: the rare, freshwater crayfish found in several locations, ring-tailed possums, striped bandicoots as well as wallabies, paddymelons, bettongs, and other species of bandicoot, and brush-tail possums.

We have many breeds of birds, including: rosellas, cockatoos, galas, blue wrens, honey eaters, owls, plovers, ravens, wattle birds, (including the rare Golden Wattle bird), many of which have breeding grounds in this area. We also have sea birds, such as herons and pelicans.

Various reptiles like blue tongued lizards, rock lizards, (and yes, snakes - which usually disappear before you even know that they are there).

We also have frogs, the population of which has already been decimated with the destruction of their breeding pond in the park a couple of years ago, and we know that the frog situation across the world is getting more and more tenuous.

It was only recently that it was announced that Australia had the worst record in the world when it comes to the extinction of its native animals. This is nothing to be proud of.

It would be easy to dismiss this letter as being another "conservationist's ramblings" but it has also been proven that having green areas in cities and towns also contribute to the health and wellbeing of the people who live there, particularly in the area of mental health which is seriously on the rise.

The trail that leads from Miandetta through to Quoiba is also used by walkers, with or without dogs, families, golfers, runners, cross country runners (including Reece High School), frisby players, and many other activities.

Then there is a higher level of noise pollution to take into account. (Yes, we do have the railroad track running along the edge of the park, but there are usually only half a dozen a day).

Then there is the issue of the high voltage power lines that also run through the edge of the park, where the new blocks will be put, something that living in close proximity to, has also been proven to be detrimental to people's health.

In years past the residents of Miandetta Park were told (by a then Council member) that there would be no further development taking place at this locale.

There has been some development of the park in Mungala Crescent years ago when the street was extended and new housing blocks added, but we were assured by the council then that there would be no more. Is this promise going to be refuted as well? There are several blocks of land there that have still not been sold, more than a decade later, due to their poor planning.

I know that there is a housing crisis, but there are many areas in Devonport that could be used that will have a much lesser impact on the people, the environment, and keep green areas for everyone's use and wellbeing.

Thank you for reading

Pamela Crisp.

Pam Crisp

Administration Support

A: 127 James Street, Devonport TAS 7310

T: 03 6424 7622

E: pcrisp@sbsc.tas.edu.au

W: www.sbsc.tas.edu.au

This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this e-mail. Please notify the sender immediately by e-mail if you have received this e-mail by mistake and delete this e-mail from your system.

From: Gail Warren <moralmary@icloud.com>
Sent: Wednesday, 7 December 2022 3:10 PM
To: Devonport City Council
Subject: Representation - PA2022.0167 - Gail Warren

The General Manager Devonport City Council concerning PA 2022.0169 I am opposing the 50 lot subdivision proposed for 57a Berrigan Road Miandetta on the grounds that this planning application seeks to destroy a thriving ecosystem. My objections are as follows: This development would cause unnecessary and unsustainable impact and destruction of this part of the Miandetta green belt especially in times of massive biodiversity loss and climate urgency. A development of housing in southern slopes is unsustainable due to inability to have passive heating plus higher building costs because of heights so a waste of resources. Developers do not have interests in such sustainability or protecting healthy ecosystems but Councils do have a responsibility towards wellbeing for all. This area could be an asset to the open space plan of our living city and support recreation, conservation and tourism. A more sustainable housing development area should be found. Yours sincerely, Gail Warren.
Sent from my iPhone

-----Original Message-----

From: Andrew Mansell <mansellfinearts@gmail.com>
Sent: Wednesday, 7 December 2022 8:54 PM
To: Matthew Atkins <matkins@devonport.tas.gov.au>
Subject: Concerning: PA2022.0167

7/12/2022

The General Manager
Devonport City Council

Proposed Use or Development: 50 Lot Subdivision Address of the Land: 57a Berrigan Road, Miandetta

I'm writing to formally oppose the 50 lot subdivision proposed on 57a Berrigan Road, Miandetta.

The planning application seeks to destroy a thriving ecosystem, used by many threatened species to:

- create 48 residential lots and associated infrastructure (road, services),
- a lot for potential future development which is currently impacted by existing power lines and

threatened vegetation (Lot 51).

Do the parties involved with this application mean with 'potential future development' of this site, that after the 48 residential lots are developed, this threatened ecosystem, Eucalyptus ovata forest and woodland, will be so degraded that then will be the time to destroy that lot too? To already mention potential future development of this block is the same as saying the development will likely have an unnecessary or unacceptable impact on priority Vegetation. So the claim mentioned by 'RMCG' who did the Flora and Fauna report of: 'The proposal is therefore unlikely to have an unnecessary or unacceptable impact on priority vegetation', totally will not hold up in reality.

- as well as a Balance land comprising three future residential lots which are currently required for bushfire hazard management. Again, just wait till the area is developed, so eventually we can also destroy the 'Balance land' later on.

I understand the Council needs to find areas for human development, but this should not be done in the few areas of natural bushland left close to the city. Enough of these areas have already been destroyed. The Council needs to find a better balance, a sustainable balance, that includes having thriving ecosystems within a thriving city. This part of the Miandetta greenbelt is an amazing asset of the 'Living City' that could be sensibly developed with just walking paths for access to all people of Devonport, to support recreation, conservation, education/admiration of biodiversity, restoring mental health, and tourist attraction.

The 'Bio-Connectivity in Devonport' report made for the Council that will be part of your open space strategy, found that many of the city's existing public open spaces do not yet provide quality habitat for biodiversity. This shows a great need to start focussing on your own Environment Strategy and start delivering on goal 1.2.1: Support the conservation and maintenance of biodiversity including coastal vegetation and preservation of areas of remnant vegetation. So I want to urge the Council to not support this application and find other areas for development, in this time of Climate urgency there should be no room for changing a carbon sink/credit/off set into a huge carbon source.

RMCG also mentions no threatened flora species were identified on the subject title or are considered to be at greater than low risk of being impacted as a result of the proposed subdivision and subsequent development. This is absolute rubbish, the ecosystem here at the moment is providing habitat for many endangered species, these

creatures are at any time hard to find, including their nests let alone during a few hours of documentation by RMCG. If this project will go ahead it can only have a huge impact on all species that call this beautiful bushland home and the ones that travel through on many occasions.

Another very important aspect that needs to be taken in consideration is that the subject site slopes towards the south with areas of considerably steep slopes. Southern slopes are damp and receive the least sun, this means great for ecosystems, not great for humans. Southern facing houses need more active heating as there is no passive heating from the sun. Houses built with no sunlight coming in are a waste of resources, as you continuously need to heat them to be comfortable. In a time of material and builder shortages and therefore expensive house prices, the price to build on steep slopes adds another big price on top of already high prices for houses. We're living at a time of massive biodiversity loss and climate urgency, we need to reverse this not add to this. I'm not writing this submission for myself, but also for the many many other concerned residents, who don't even know about this application.

As well as finding suitable spaces for housing development, the Council needs to show it is looking after and will protect connecting areas of healthy ecosystems, on which we all depend. I haven't come across developers that have knowledge on the myriad of benefits flora and fauna provide for human health, ecosystem health, climate control etc, this has been proven over and over recently with developments hugely impacting on priority vegetation, so the Council needs to lead in this knowledge and not approve this absurd development.

Kind regards
Andrew Mansell



Submission to Planning Authority Notice

Council Planning Permit No.	PA2022.0167	Council notice date	23/09/2022
TasWater details			
TasWater Reference No.	TWDA 2022/01562-DCC	Date of response	18/11/2022
TasWater Contact	Anthony Cengia	Phone No.	0474 933 293
Response issued to			
Council name	DEVONPORT COUNCIL		
Contact details	council@devonport.tas.gov.au		
Development details			
Address	57A BERRIGAN RD, MIANDETTA	Property ID (PID)	2293505
Description of development	Staged 49 Lot Subdivision		
Schedule of drawings/documents			
Prepared by	Drawing/document No.	Revision No.	Date of Issue
Veris	303721 Drawing D06 Sheet 1		01/11/2022
Veris	303721 Drawing D06 Sheets 2 & 3		31/08/2022
Conditions			
SUBMISSION TO PLANNING AUTHORITY NOTICE OF PLANNING APPLICATION REFERRAL			
Pursuant to the <i>Water and Sewerage Industry Act 2008 (TAS)</i> Section 56P(1) TasWater imposes the following conditions on the permit for this application:			
CONNECTIONS, METERING & BACKFLOW			
1. A suitably sized water supply with metered connection and sewerage connection to each lot of the development, excluding lot 51 & Balance lot must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.			
2. Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.			
3. Prior to commencing construction of the subdivision/use of the development, any water connection utilised for construction/the development must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.			
ASSET CREATION & INFRASTRUCTURE WORKS			
4. Plans submitted with the application for Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.			
5. Prior to applying for a Permit to Construct new infrastructure the developer must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. The application for Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing the hydraulic servicing requirements for water and sewerage to TasWater's satisfaction.			
6. Prior to works commencing, a Permit to Construct must be applied for and issued by TasWater. All infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.			



7. In addition to any other conditions in this permit, all works must be constructed under the supervision of a suitably qualified person in accordance with TasWater’s requirements.
 8. Prior to the issue of a Consent to Register a Legal Document all additions, extensions, alterations or upgrades to TasWater’s water and sewerage infrastructure required to service the development, are to be completed generally as shown on, and in accordance with, the plans listed in the schedule of drawings/documents, and are to be constructed at the expense of the developer to the satisfaction of TasWater, with live connections performed by TasWater.
 9. After testing to TasWater’s requirements, of newly created works, the developer must apply to TasWater for connection of these works to existing TasWater infrastructure, at the developer’s cost.
 10. At practical completion of the water and sewerage works and prior to TasWater issuing a Consent to a Register Legal Document the developer must obtain a Certificate of Practical Completion from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:
 - a. Written confirmation from the supervising suitably qualified person certifying that the works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved.
 - b. A request for a joint on-site inspection with TasWater’s authorised representative must be made.
 - c. Security for the twelve (12) month defects liability period to the value of 10% of the works must be lodged with TasWater. This security must be in the form of a bank guarantee.
 - d. Work As Constructed drawings and documentation must be prepared by a suitably qualified person to TasWater’s satisfaction and forwarded to TasWater.

Upon TasWater issuing a Certificate of Practical Completion, the newly constructed infrastructure is deemed to have transferred to TasWater.
 11. After the Certificate of Practical Completion has been issued, a 12-month defects liability period applies to this infrastructure. During this period all defects must be rectified at the developer’s cost and to the satisfaction of TasWater. A further 12-month defects liability period may be applied to defects after rectification. TasWater may, at its discretion, undertake rectification of any defects at the developer’s cost. Upon completion, of the defects liability period the developer must request TasWater to issue a “Certificate of Final Acceptance”. TasWater will release any security held for the defect’s liability period.
 12. The developer must take all precautions to protect existing TasWater infrastructure. Any damage caused to existing TasWater infrastructure during the construction period must be promptly reported to TasWater and repaired by TasWater at the developer’s cost.
 13. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater.
 14. A construction management plan must be submitted with the application for TasWater Engineering Design Approval. The construction management plan must detail how the new TasWater infrastructure will be constructed while maintaining current levels of services provided by TasWater to the community. The construction plan must also include a risk assessment and contingency plans covering major risks to TasWater during any works. The construction plan must be to the satisfaction of TasWater prior to TasWater’s Engineering Design Approval being issued.
- FINAL PLANS, EASEMENTS & ENDORSEMENTS**
15. Prior to the Sealing of the Final Plan of Survey, a Consent to Register a Legal Document must be obtained from TasWater as evidence of compliance with these conditions when application for



sealing is made.

Advice: Council will refer the Final Plan of Survey to TasWater requesting Consent to Register a Legal Document be issued directly to them on behalf of the applicant.

16. Pipeline easements to TasWater’s satisfaction, must be created over any existing or proposed TasWater infrastructure and be in accordance with TasWater’s standard pipeline easement conditions.
17. The Plan of Subdivision Council Endorsement Page is to note, pursuant to Section 83 of the Local Government (Building and Miscellaneous Provisions) Act 1993, that for lots 43 to 49, & Balance lot TasWater cannot guarantee sanitary drains will be able to discharge via gravity into TasWater’s sewerage system.
18. The Plan of Subdivision Council Endorsement Page is to note, pursuant to Section 83 of the Local Government (Building and Miscellaneous Provisions) Act 1993, that for lot 51 TasWater cannot provide a sewerage connection.
19. Prior to the issue of a TasWater Consent to Register a Legal Document, the applicant must submit a .dwg file, prepared by a suitably qualified person to TasWater’s satisfaction, showing:
 - a. the exact location of the existing sewerage infrastructure,
 - b. the easement protecting that infrastructure.

The developer must locate the existing TasWater infrastructure and clearly show it on the .dwg file. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the developers cost.

DEVELOPMENT ASSESSMENT FEES

20. The applicant or landowner as the case may be, must pay a development assessment fee of \$1,220.97 and a Consent to Register a Legal Document fee of \$239.90 to TasWater, as approved by the Economic Regulator and the fees will be indexed, until the date paid to TasWater.
The payment is required within 30 days of the issue of an invoice by TasWater.
21. In the event Council approves a staging plan, a Consent to Register a Legal Document fee for each stage, must be paid commensurate with the number of Equivalent Tenements in each stage, as approved by Council.

Advice

General

For information on TasWater development standards, please visit <https://www.taswater.com.au/building-and-development/technical-standards>

For application forms please visit <https://www.taswater.com.au/building-and-development/development-application-form>

Service Locations

Please note that the developer is responsible for arranging to locate the existing TasWater infrastructure and clearly showing it on the drawings. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the developers cost to locate the infrastructure.

- (a) A permit is required to work within TasWater’s easements or in the vicinity of its infrastructure.
Further information can be obtained from TasWater.
- (b) TasWater has listed a number of service providers who can provide asset detection and location services should you require it. Visit www.taswater.com.au/Development/Service-location for a list of



<p>companies.</p> <p>(c) Sewer drainage plans or Inspection Openings (IO) for residential properties are available from your local council.</p> <p>Advice to Planning Authority (Council) and developer on fire coverage</p> <p>TasWater cannot provide a supply of water for the purposes of firefighting to the all of lot 51 on the plan.</p>			
<p>Declaration</p>			
<p>The drawings/documents and conditions stated above constitute TasWater’s Submission to Planning Authority Notice.</p>			
<p>TasWater Contact Details</p>			
Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au

	ENFORCEMENT POLICY			
POLICY TYPE	DOCUMENT CONTROLLER	RESPONSIBLE MANAGER	POLICY ADOPTED	REVIEW DUE
Council	Executive Manager	General Manager	Date	Month Yr
PURPOSE	<p>To ensure enforcement is carried out in the public interest and is transparent, fair, efficient, and consistent.</p> <p>This Enforcement Policy defines the standards and expectations set by Council, to exercise its duties, functions and responsibilities involved in carrying out any enforcement in the Devonport Municipal area.</p>			
SCOPE	<p>The Policy applies to Council's responsibility for administration and enforcement of legislation including, but not limited to:</p> <ul style="list-style-type: none"> • <i>Local Government Act 1993</i> • <i>Building Act 2016</i> and associated regulations • <i>Dog Control Act 2000</i> and associated regulations • <i>Environmental Management and Pollution Control Act 1994</i> and associated regulations • <i>Food Act 2003</i> and associated regulations and guidelines • <i>Land Use Planning and Approvals Act 1993</i> • <i>Local Government (Highways) Act 1982</i> • <i>Public Health Act 2000</i> • <i>Litter Act 2007</i> • <i>Weed Management Act 1999</i> • <i>Traffic Act 1925</i> • <i>Road Rules 2019</i> • <i>Urban Drainage Act 2013</i> • Council By-laws <p>Specific provisions within legislation that require Council to ensure or take reasonable steps to ensure that legislation is complied with and enforced include:</p> <ul style="list-style-type: none"> • Section 41 of the <i>Building Act 2016</i> • Section 20A of the <i>Environmental Management and Pollution Control Act 1994</i> • Section 97 of the <i>Food Act 2003</i> • Section 48 and 63A of the <i>Land Use Planning and Approvals Act 1993</i>. This creates an offence for a Council that fails to take reasonable steps to enforce a planning scheme. • Section 27 of the <i>Public Health Act 2000</i> <p>The enforcement of relevant legislation aims to:</p> <ul style="list-style-type: none"> • Ensure protection of both public and private property; • Minimise legal action; 			

	<ul style="list-style-type: none"> • Increase the public's confidence in Council; and • Protect public safety and to promote community health and well-being.
DEFINITIONS	<p>For the purposes of this Policy, the following definitions apply:</p> <p>Authorised Officer – means a person appointed by the General Manager, Minister of the Crown or the Council for the purpose of administering and enforcing legislation. For the purposes of this policy an Authorised Officer includes Environmental Health Officer (or a Medical Officer of Health) as defined under the <i>Public Health Act 2000</i>.</p> <p>Relevant to law 'Authorised Person' has the same meaning as Authorised Officer.</p> <p>Council Officer – means an employee of a council appointed under section 21 of the <i>Environmental Management and Pollution Control Act 1994</i>.</p> <p>Council – means Devonport City Council.</p> <p>Enforcement – means to make people obey something, or to compel obedience to a law, regulation or command.</p> <p>Legislation – means any statute, regulation or Council By-law for which Council has administration and enforcement functions and powers.</p>
POLICY	<p>Council's enforcement of legislation will be consistent, prompt and impartial having regard to the following principals which are to be considered when determining if it is appropriate to embark on enforcement action in a particular circumstance including:</p> <ul style="list-style-type: none"> • To provide consistency in enforcement action in matters of non-compliance; • To ensure transparency, procedural fairness and natural justice principles are applied; and • To ensure that enforcement action is proportionate to the alleged offence in each case. <p>Council's enforcement actions will be underpinned by the following principles:</p> <ol style="list-style-type: none"> 1. Proportionality <ol style="list-style-type: none"> 1.1 Enforcement action will be undertaken within a priority hierarchy with specific reference to the public interest. 2. Public Interest <ol style="list-style-type: none"> 2.1 Public interest or benefits will be weighed up against the cost to the Council of enforcement action. In considering the public interest, Council will have regards to whether the unlawful activity: <ul style="list-style-type: none"> • Impacts a significant number of people; • Will disadvantage the community; • Has attracted public attention and/or no resolution is proposed or is likely;

	<ul style="list-style-type: none">• Creates public health and safety hazards and/or exposure of legal liability to the Council; and• Is consistent or inconsistent with the environment in which the activity is being undertaken. <p>3. Consistency</p> <p>3.1 Council will take a consistent approach in similar matters to achieve acceptable outcomes. While decisions on enforcement require the use of judgement and discretion to assess varying circumstance, officers will:</p> <ul style="list-style-type: none">• Follow standard operating procedures wherever possible;• Ensure fair, equitable and non-discriminatory treatment; and• Record any deviation from standard operating procedures and the reasons. <p>4. Transparency</p> <p>4.1 Council will be open and transparent about compliance actions where there is a requirement to do so. When remedial action is required, Council will explain why action is necessary and will provide advice on the process for seeking a review of, or how to appeal, against a decision.</p> <p>5. Natural Justice</p> <p>5.1 Natural justice and procedural fairness will be afforded to any person to whom a complaint relates.</p> <p>6. Independence</p> <p>6.1 Authorised Officers will investigate compliance issues impartially and undertake enforcement action in a manner that is free from undue influence.</p> <p>7. Nature of Allegation</p> <p>7.1 Council will only become involved in what an Authorised Officer would reasonably consider to be neighbour and civil dispute, (usually, but not always characterised by multiple and personal complaints about other parties) where it can be established by objective and independent evidence that an issue of concern giving rise to Council enforcement processes exists. In the absence of such evidence, Council will not be in a position to undertake any enforcement action or be a party to the dispute.</p> <p>7.2 Where it is established that Council should become involved, the Authorised Officer will use their discretion to ascertain whether a full property audit should be conducted in relation to all parties in the dispute.</p> <p>7.3 Where there are complaints of a private nuisance occurring from one private property to another and, despite legislation enabling the Council's involvement, the Council will only exercise its discretion to</p>
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	<p>become involved where, in the opinion of the Authorised Officer, the nuisance:</p> <ul style="list-style-type: none"> • Has a potential impact greater than one or two properties; • Has a potential major impact upon the health, welfare or safety of any person or for any structure on a property; and • Has a potential impact upon Council infrastructure or service delivery or in the circumstances of any previous Council involvement it is appropriate to do so. <p>It will otherwise be a matter for parties to exercise their own civil rights in relation to a private nuisance.</p> <p>8. Resources</p> <p>8.1 Council must also give consideration to the resources that can be directed towards implementing Council's Enforcement Policy. Budgetary and Officer resources that can be utilised in areas implementing the Enforcement Policy are limited. There are also a limited number of Council employees with the appropriate delegations as Authorised Officers allowing them to carry out enforcement action.</p>	
LEGISLATION AND RELATED DOCUMENTS	<p><i>Local Government Act 1993</i> <i>Building Act 2016</i> and associated regulations <i>Dog Control Act 2000</i> and associated regulations <i>Environmental Management and Pollution Control Act 1994</i> and associated regulations <i>Food Act 2003</i> and associated regulations and guidelines <i>Land Use Planning and Approvals Act 1993</i> <i>Local Government (Highways) Act 1982</i> <i>Public Health Act 2000</i> <i>Litter Act 2007</i> <i>Weed Management Act 1999</i> <i>Traffic Act 1925</i> <i>Road Rules 2019</i> <i>Urban Drainage Act 2013</i> Council By-laws Delegation register</p>	
ATTACHMENTS (IF APPLICABLE)	<p>Detail any documents or related information that is attached as an appendix to the Policy.</p>	
STRATEGIC REFERENCE	<p>5.6.5 Ensure compliance with all relevant legislative requirements, standards policies and procedures</p>	
MINUTE REFERENCE	<p>If a Council Policy, insert the resolution number where the policy was approved. If a Management Policy insert 'N/A'</p>	
OFFICE USE ONLY	<p>Update Register</p>	<p>Training/Communication</p>
	<p>Advise Document Controller</p>	<p>Advise HR / MCO</p>

	Management Sign Off: Date:
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DRAFT



DEVONPORT CITY COUNCIL

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30 November 2022

State Planning Office
Department of Premier and Cabinet
GPO Box 123
HOBART TAS 7001

Email: yoursay.planning@dpac.tas.gov.au

Dear Sir/Madam,

Draft Tasmanian Planning Policies

Thank you for the opportunity to provide comment on the draft Tasmanian Planning Policies (TPPs) recently made available for public exhibition.

Council notes the statement provided in the Foreword section of the draft TPPs which details that the TPPs are to *'provide consistent, high level planning policy direction that will guide planning outcomes delivered through Regional Land Use Strategies (RLUS) and the Tasmanian Planning Scheme (TPS).'*

The establishment of this high-level strategic policy direction is generally supported.

Notwithstanding the above, a review of the policy content included with the suite of seven draft TPPs (and which cover a broad range of land use planning related matters) does reveal a prescriptive nature of both policy content and direction and which seems to go beyond the 'high level policy direction' indicated.

With regard to content of the draft TPPs, it is further noted that the prepared Supporting Report (which accompanies the exhibition of the draft TPPs) includes a list of criteria that has been used to guide the range and content of the draft TPPs. These criteria include a guiding instruction that the TPPs *'cannot address issues that are too specific or that deliver detailed, predetermined outcomes.'*

Despite this guiding instruction, it is apparent that a number of specific issues are addressed within the suite of draft TPPs, and for which a predetermined outcome has seemingly been set or otherwise implied. The specific requirements relating to rural-residential settlements in section 1.4.3(6) of the draft TPPs are offered as a general example.

Whilst Council remains supportive of the purpose behind the TPPs and their intended function within the Tasmanian Planning System – the current policy content is considered overly prescriptive, where policy settings seem too rigid and inflexible and with outcomes already implied. These circumstances may unreasonably frustrate the preparation and amending of Regional Land Use Strategies, considerations for the Tasmanian Planning Scheme (including amending the State Planning Provisions and the preparation and amendment of Local Provisions Schedules), and also the pursuit of local strategic planning initiatives.

Council makes the suggestion that a focus on high level strategic policy direction should be held by TPPs and one that affords Regional Land Use Strategies, the Tasmanian Planning Scheme, and local strategic planning initiatives a level of flexibility to evolve, respond and adapt to changing circumstances.

Thank you again for the opportunity to provide comment.

Yours sincerely,

Matthew Atkins
GENERAL MANAGER



The City with Spirit

Current and Previous Minutes Resolution - December 2022					
Meeting Date	Res No.	Item	Status	Assignees	Action Taken
23/05/2022	22/92	Disposal of portion of Public Land - Mersey Bluff	In progress	Executive Coordinator	Crown to progress Deed of Surrender process for the section of land leased by Council from Crown
28/11/2022	22/242	Responses to questions raised at prior meetings	Completed	Governance Trainee	Actioned as per resolution
28/11/2022	22/243	Questions on notice from the public	Completed	Governance Trainee	Actioned as per resolution
28/11/2022	22/244	Mersey Ferry Service	In progress	Executive Coordinator	Matter further discussed at December 2022 Workshop
28/11/2022	22/245	PA2022.0168 - 19 North Caroline Street East Devonport - Residential (Respite Centre)	Completed	Planning Administration Officer	Planning Permit issued to applicant and letters to representor
28/11/2022	22/246	PA2022.0177 - 110 Duncans Road Melrose - Residential (Single Dwelling and Outbuilding)	Completed	Planning Administration Officer	Issued corrected Planning Permit to applicant and representor
28/11/2022	22/247	Meeting Arrangements	Completed	Executive Coordinator	Meeting and Workshop Schedule noted and advertised in The Advocate 3/12/2022
28/11/2022	22/248	Appointments to Committees, Bodies, Authorities, Panels and Working Groups	Completed	Executive Coordinator	Report received and appointments noted
28/11/2022	22/249	Request for Commemorative Plaque/Signage - Devonport Oval	In progress	Executive Coordinator	Notified Devonport Football Club that request has been approved.
28/11/2022	22/250	Unconfirmed Minutes - Annual General Meeting - 24 October 2022	Completed	Executive Coordinator	Unconfirmed minutes noted and agreed to notice of motion to extend the concession parking for those ratepayers who have paid rates for 50 years or more, to be reviewed annually as part of budget deliberations
28/11/2022	22/251	Tender Report Contract CT0310 Tugrah Rd Traffic Management	Completed	Infrastructure Manager	Contract executed
28/11/2022	22/252	Devonport E-Scooter Trial	Not yet started	Executive Manager	

28/11/2022	22/253	Naming of Public Open Space	Not yet started	Executive Manager	
28/11/2022	22/254	Certificate of Election - 2022 Local Government Elections	Completed	Executive Coordinator	Report received and noted
28/11/2022	22/255	Workshops and Briefing Sessions held since the last Council Meeting	Completed	Executive Coordinator	Report received and noted
28/11/2022	22/256	Mayor's Monthly Report	Completed	Executive Coordinator	Report received and noted
28/11/2022	22/257	General Manager's Report	Completed	Executive Coordinator	Report received and noted
28/11/2022	22/258	Elected Members Expense Report	Completed	Executive Coordinator	Report received and noted
28/11/2022	22/259	Unconfirmed Minutes Devonport City Council Audit Panel	In progress	Executive Coordinator	Unconfirmed minutes noted. Formally notified Central Coast Council that the shared panel arrangement will cease, and commence advertising for two independent members for the panel
28/11/2022	22/260	Community Services Report - September and October 2022	Completed	Executive Coordinator	Report received and noted
28/11/2022	22/261	General Management, People & Finance and Corporate Services Report - September and October 2022	Completed	Executive Coordinator	Report received and noted
28/11/2022	22/262	Convention and Arts Report - September and October 2022	Completed	Executive Coordinator	Report received and noted



7 December 2022

Councillor Alison Jarman
Mayor
City of Devonport

council@devonport.tas.gov.au

Dear Mayor

Re : Mersey Slipway, Port of Devonport

Thank you for your letter of 22 November 2022 seeking an update on the future of the Mersey Slipway within the Port of Devonport.

We understand the importance of this asset and share your interest in seeing it operating again as possible. At the same time, we note there are issues specific to this site which have been external to our control that are continuing to contribute to the delay in returning this asset to service.

By way of a brief history, the previous tenant vacated the property in October 2022. His departure followed a period of several years during which time TasPorts worked fruitlessly to secure contemporary lease arrangements, understanding the tenant was seeking to sell the business. Ultimately no sale eventuated and the tenant made the decision to close the business.

The vacated site has a number of environmental issues relating to the previous tenant’s operation and these have been reported to Tasmania’s environment protection body, the EPA. TasPorts is seeking these issues be fully understood and rectified prior to seeking a new slipway operator.

The negotiation of any new lease at the Mersey Slipway site would require appropriate due diligence on potential new operators by TasPorts to ensure any future business operations comply with all regulatory standards including safety and environmental controls.

Once is work is complete, TasPorts will move quickly to communicate a way forward for the Mersey Slipway and we will keep you informed of developments as they occur.

Yours sincerely

Anthony Donald
Chief Executive Officer

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