



LOCAL PROVISION SCHEDULE AMENDMENT & COMBINED PLANNING PERMIT REQUEST PDPSPAMEND-2022/028417

PROPOSAL: Rezoning from Rural Living to a Particular Purpose Zone - Clarence Lifestyle Village and Consolidation of Two Lots (2 Piper Rd & 647 East Derwent Highway), 54 Residential (Retirement Village) Units, Demolition of existing dwelling & Outbuilding at 647 East Derwent Highway and Associated Works.

LOCATION: 2 Piper Road, Geilston Bay 647 East Derwent Highway & 657 East Derwent Highway, Risdon

RELEVANT PLANNING SCHEME: Tasmanian Planning Scheme – Clarence

ADVERTISING EXPIRY DATE: 31/08/2026

The relevant plans and documents can be inspected at the Council offices, 38 Bligh Street, Rosny Park, during normal office hours until 31/08/2026. In addition plans and documents can also be viewed and downloaded at www.ccc.tas.gov.au until 31/08/2026.

Any person may make representations about the application to the Chief Executive Officer, by writing to PO Box 96, Rosny Park, 7018 or by electronic mail to clarence@ccc.tas.gov.au. Representations must be received by Council on or before 31/08/2026.

To enable Council to contact you if necessary, would you please also include a day time contact number in any correspondence you may forward.

Any personal information submitted is covered by Council's privacy policy, available at www.ccc.tas.gov.au or at the Council offices.

Clarence City Council



APPLICATION FOR DEVELOPMENT / USE OR SUBDIVISION

The personal information on this form is required by Council for the development of land under the Land Use Planning and Approvals Act 1993. We will only use your personal information for this and other related purposes. If this information is not provided, we may not be able to deal with this matter. You may access and/or amend your personal information at any time. How we use this information is explained in our [Privacy Policy](#), which is available at www.ccc.tas.gov.au or at Council offices.

Proposal:

Extension to Clarence Lifestyle Village - 53 additional units & works

Location:

Address 2 Piper Road, 647 & 657 East Derwent Highway, adjacent road reserve

Suburb/Town Risdon & Geilston Bay Postcode 7017/7015

Current
Owners/s:

Applicant:

Personal Information Removed

Tax Invoice for
application fees to
be in the name of:
(if different from
applicant)

Is the property on the Tasmanian Heritage Register?

Yes

☐

No

☒

(If yes, we recommend you discuss your proposal with Heritage Tasmania prior to lodgement as exemptions may apply which may save you time on your proposal)

If you had pre-application discussions with a Council Officer, please give their name

Current Use of Site: Residential Retirement Village

Does the proposal involve land administered or owned by the Crown or Council?

Yes

☒

No

☐

Declaration:

- *I have read the Certificate of Title and Schedule of Easements for the land and am satisfied that this application is not prevented by any restrictions, easements or covenants.*
- *I authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation. I agree to arrange for the permission of the copyright owner of any part of this application to be obtained. I have arranged permission for Council's representatives to enter the land to assess this application*
- *I declare that, in accordance with Section 52 of the Land Use Planning and Approvals Act 1993, that I have notified the owner of the intention to make this application. Where the subject property is owned or controlled by Council or the Crown, their signed consent is attached. Where the application is submitted under Section 43A, the owner's consent is attached.*
- *I declare that the information in this declaration is true and correct.*

Acknowledgement:

- *I acknowledge that the documentation submitted in support of my application will become a public record held by Council and may be reproduced by Council in both electronic and hard copy format in order to facilitate the assessment process; for display purposes during public consultation; and to fulfil its statutory obligations. I further acknowledge that following determination of my application, Council will store documentation relating to my application in electronic format only.*

Applicant's
Signature:

Personal Information Removed

**PLEASE REFER TO THE DEVELOPMENT/USE AND SUBDIVISION CHECKLIST
ON THE FOLLOWING PAGES TO DETERMINE WHAT DOCUMENTATION MUST
BE SUBMITTED WITH YOUR APPLICATION.**

Clarence City Council

APPLICATION FOR PLANNING SCHEME AMENDMENT



Clarence... a brighter place

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Amendment
Details:

Type of Amendment:

Change to Maps



Change to Ordinance



Description of Amendment:

Rezoning and Specific Area Plan

Personal Information Removed

Applicant:

Declaration:

Applicant's
Signature:

PLEASE SEE CHECKLIST OVER PAGE /...

38 Bligh Street, Rosny Park, Tasmania • Address correspondence to: General Manager, PO Box 96, Rosny Park 7018 • Dc: 70402
Telephone (03) 6217 9550 • Facsimile (03) 6245 8700 • Email clarence@ccc.tas.gov.au • Website www.ccc.tas.gov.au

Clarence City Council

PLANNING SCHEME AMENDMENT CHECKLIST



To ensure that we can process your application as quickly as possible, please read the following checklist carefully and ensure that you have provided all the necessary information. If you are unclear on any aspect of your application, please contact our Development Appraisal Officers on 62179550 to discuss or arrange an appointment concerning your proposal.

All requests for Amendments require the following to be provided at the time of submitting the application. However, upon assessment, it may be necessary for additional information to be further requested.

- ☐ A completed Application for Planning Scheme Amendment form. Please ensure that this form is completely filled out with the applicant's correct address and contact details, is signed and dated.
- ☐ 2 copies of a written submission supporting the amendment including:
 - Detailed description of the requested amendment identifying the extent of its application.
 - Consideration of the Objectives of the Land Use Planning and Approvals Act 1993.
 - Consideration of the relevant provisions of the Planning Scheme such as the Intents, Development Principles, Objectives and detailed provisions of the zone.
 - Strategic impact of the proposal such as alternative uses, flow on development and cumulative impacts.
- ☐ A current copy of the Certificate of Title of all properties involved (if applicable) containing the:
 - Search Pages.
 - Plans, Sealed Plans or Diagrams.
 - Any Schedules of Easements, Covenants, Council Notifications, and Conditions of Transfer.
- ☐ Application fees. (please phone 62179550 to determine what fees apply)

SEARCH OF TORRENS TITLE

VOLUME 115696	FOLIO 1
EDITION 5	DATE OF ISSUE 24-Aug-2018

SEARCH DATE : 09-Jun-2022

SEARCH TIME : 11.21 AM

DESCRIPTION OF LAND

City of CLARENCE

Lot 1 on Plan 115696

Derivation : Part 435ac Gtd. to C. P. Davis, E. P. Wilson & A.
G. Webster & Part of 2560ac Gtd. to T. G. Gregson.

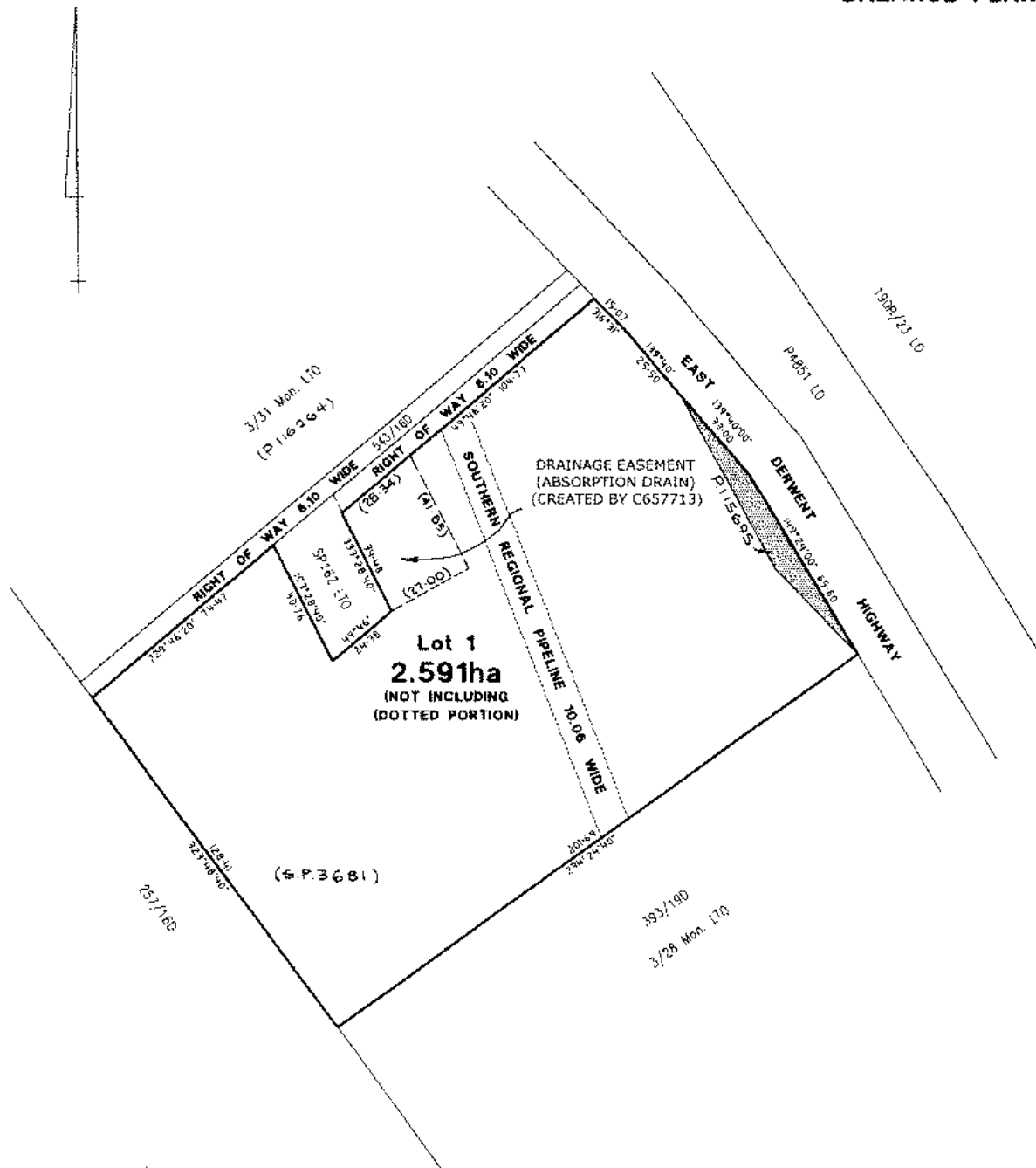
Prior CT 251551/1

SCHEDULE 1M699167 TRANSFER to CLARENCE LIFESTYLE VILLAGE PTY LTD
Registered 24-Aug-2018 at 12.01 PMSCHEDULE 2Reservations and conditions in the Crown Grant if any
Benefiting easement: a right of carriageway over the lands
marked 'RIGHT OF WAY 6.10 WIDE' on P.115696C657713 BURDENING EASEMENT: A right of drainage together with
the right to drain effluent and sewerage (appurtenant
to Lot 1 on SP61125) over the Drainage Easement
(Absorption Drain) shown on the said land within
described Registered 06-Sep-2005 at 12.02 PME144907 MORTGAGE to Commonwealth Bank of Australia
Registered 24-Aug-2018 at 12.02 PMUNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

OWNER DOREEN MAVIS SARGENT FOLIO REFERENCE CT 3496/44 GRANTEE Part of 435-0-0 Granted to CHARLES PERCY DAVIS, EDMUND PHILIP WILSON & ALEXANDER GEORGE WEBSTER PART of 2560 Ac Gtd to Thomas George Gregson	PLAN OF SURVEY BY SURVEYOR OFFICE OF THE SURVEYOR-GENERAL LOCATION CITY OF CLARENCE SCALE 1:1250 LENGTHS IN METRES	REGISTERED NUMBER P115696 APPROVED EFFECTIVE FROM 26 MAY 1985 <i>Michael D. Smith</i> Recorder of Titles	
MAPSHEET MUNICIPAL CODE No 14	LAST UPI No 0940	LAST PLAN No 3/28 Mon.	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN

BALANCE PLAN



94/2274

SEARCH OF TORRENS TITLE

VOLUME 226109	FOLIO 1
EDITION 8	DATE OF ISSUE 07-Apr-2014

SEARCH DATE : 09-Jun-2022

SEARCH TIME : 11.21 AM

DESCRIPTION OF LAND

City of CLARENCE

Lot 1 on Plan 226109

Derivation : Part of 2,560 Acres Gtd. to T.G. Gregson, and
Part of 435 Acres Gtd. to E.P. Wilson & Ors.

Prior CT 2879/77

SCHEDULE 1D97605 TRANSFER to CLARENCE LIFESTYLE VILLAGE PTY LTD
Registered 07-Aug-2013 at 12.02 PMSCHEDULE 2Reservations and conditions in the Crown Grant if any
D121092 MORTGAGE to Commonwealth Bank of Australia
Registered 07-Apr-2014 at noonUNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

SEARCH OF TORRENS TITLE

VOLUME 61125	FOLIO 1
EDITION 10	DATE OF ISSUE 12-Dec-2021

SEARCH DATE : 09-Jun-2022

SEARCH TIME : 11.22 AM

DESCRIPTION OF LAND

City of CLARENCE

Lot 1 on Sealed Plan 61125 (formerly being SP162)

Derivation : Part of 435 Acres Gtd. to E.P. Wilson & Ors.

Prior CT 2095/98

SCHEDULE 1

M928318 TRANSFER to TAYLA NICOLE CHICK and JULIAN JAMES
CLAPTON Registered 12-Dec-2021 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

SP 61125 EASEMENTS in Schedule of Easements

SP 61125 FENCING COVENANT in Schedule of Easements

C657713 BENEFITING EASEMENT: A right of drainage together
with the right to drain effluent and sewerage over
the Drainage Easement (Absorption Drain) shown on D.
61125 Registered 06-Sep-2005 at 12.02 PM

E287990 MORTGAGE to Commonwealth Bank of Australia
Registered 12-Dec-2021 at 12.02 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

226109

ANNEXURE TO CERTIFICATE OF TITLE

REGISTERED NUMBER

226109

VOL.

2879

FOL.

77

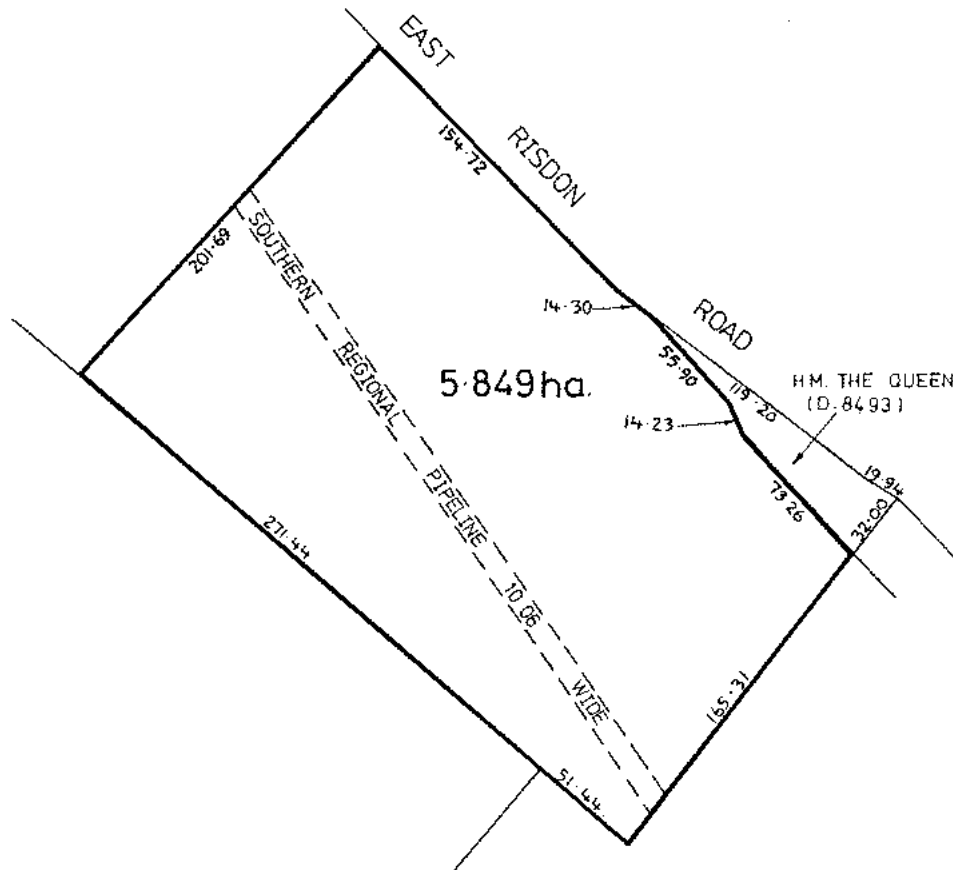


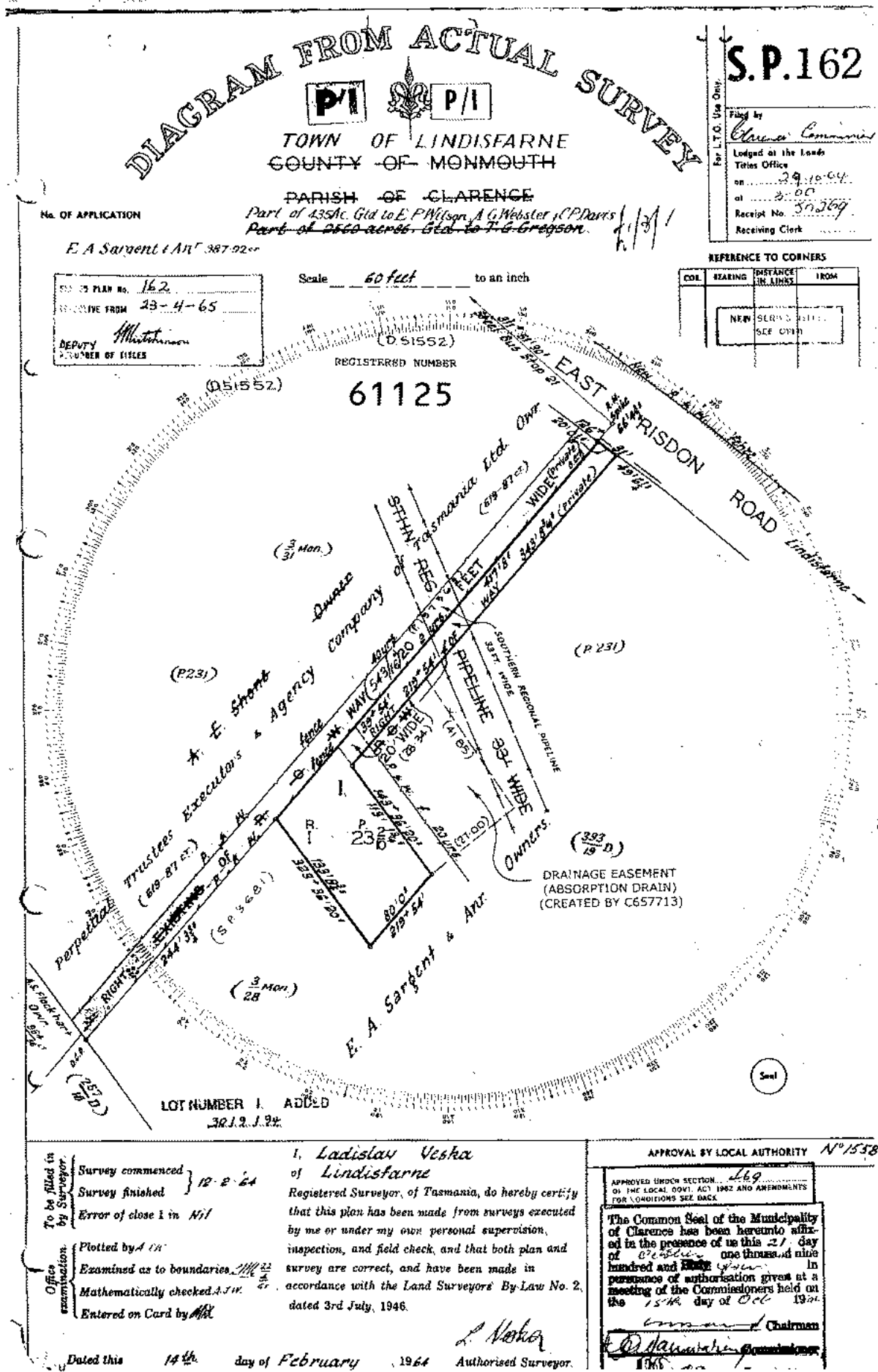
Recorder of Titles

Lot 1 of this plan consists of all the land comprised in the above-mentioned cancelled folio of the Register

TWN. LINDISFARNE
MEAS. IN METRES
393/190.

Alk.







Sheet / of / Sheets

SCHEDULE OF EASEMENTS

Office use only

PLAN No.

S.P.162

This is the schedule of easements attached to the plan of ... L. 2004.....

.... 23. 2/10. perches comprising part of the land in

C/T regd. Volume 987 Folio 92 Sealed by
(insert title reference)

John M. Sargent on *15th October 1965*

D. M. Sargent
Council Clerk/Town Clerk

EASEMENTS:

The said lot is

TOGETHER WITH a right of carriage way over the strip of land 20 feet wide coloured green on the said Survey Diagram and marked

"~~Existing~~ Right-Of-Way 20 feet wide"

SUBJECT TO a right of carriage way over the strip of land coloured yellow on the said Survey Diagram and marked "Right-Of-Way" ~~over area~~ *as appurtenant to the land comprised in Certificate of Title Vol. 987 Fol. 92 excepting the Road 23 2/10 perches and the Right of Way 20 feet wide coloured green shown on this Plan.*

COVENANTS:

The owner of the said lot covenants with Eldred Alfred Sargent and Doreen Mavis Sargent that the said Eldred Alfred Sargent and Doreen Mavis Sargent shall not be required to fence

INTERPRETATION:

The words "shall not be required to fence" shall imply the covenant implied by the use of those words in accordance with Section 27F of the Real Property Act 1886

SIGNED by the said ELDRÉD ALFRED SARGENT
and DOREEN MAVIS SARGENT the registered
proprietors of the land comprised in
Certificate of Title registered Volume
987 Folio 92 both in the presence of :

E. A. Sargent

D. M. Sargent

John M. Sargent
Solicitor
Hogart.

WRITE ON THIS SIDE OF THE PAPER ONLY



Plan of Subdivision

Owner(s):
Clarence Lifestyle Village Pty Ltd

Title References:
CT 226109/1 (2 Piper Road, Geilston Bay)
CT 115696/1 (647 East Derwent Highway, Risdon)

Council:
Clarence City Council

Planning Scheme:
Tasmanian Planning Scheme - Clarence

Zone:
Particular Purpose - Clarence Lifestyle Village

- Overlays:
- Flood Prone Hazard Areas
 - Waterway and Coastal Protection Area
 - Bushfire Prone Areas
 - Road Attenuation Area

- Easements
- Benefitting Right of Way for CT 115696/1 (647 East Derwent Highway), over the access strip forming part of 657 East Derwent Highway, to be expunged.
 - The drainage easement created by C657713, is to be expunged.

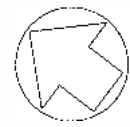
NOTES

This plan has been prepared for the sole purpose of obtaining planning approval. Dimensions have been compiled from Sealed Plan(s):

- SP115696
- SP226109

Subject to final survey.

CONCEPT PLAN OF SUBDIVISION (CONSOLIDATION)
SCALE: 1:750



REV	DESCRIPTION	BY	CHK	DATE	REV	DESCRIPTION	BY	CHK	DATE

DATE	21 MAY 2025	SCALE	AS SHOWN	SIZE	A1
ENGINEER					
STATUS					

PROJECT	CLARENCE LIFESTYLE VILLAGE 2 PIPER ROAD, GEILSTON BAY
---------	--

DRAWING TITLE	CONCEPT PLAN OF SUBDIVISION
PROJECT NO	
DWG NO	
REV	



INDICATIVE DWELLING LAYOUT
SCALE: 1:200

REV	DESCRIPTION	BY	CHK	DATE	REV	DESCRIPTION	BY	CHK	DATE



121 Sandy Bay Road, Sandy Bay TAS 7005
Phone (03) 6240 9911 www.jsaengineers.com.au

CHECKED	SCALE	SIZE	PROJECT
ENGINEER	AS SHOWN	A1	CLARENCE LIFESTYLE VILLAGE
STATUS			647 EAST DERWENT HIGHWAY, RISDON

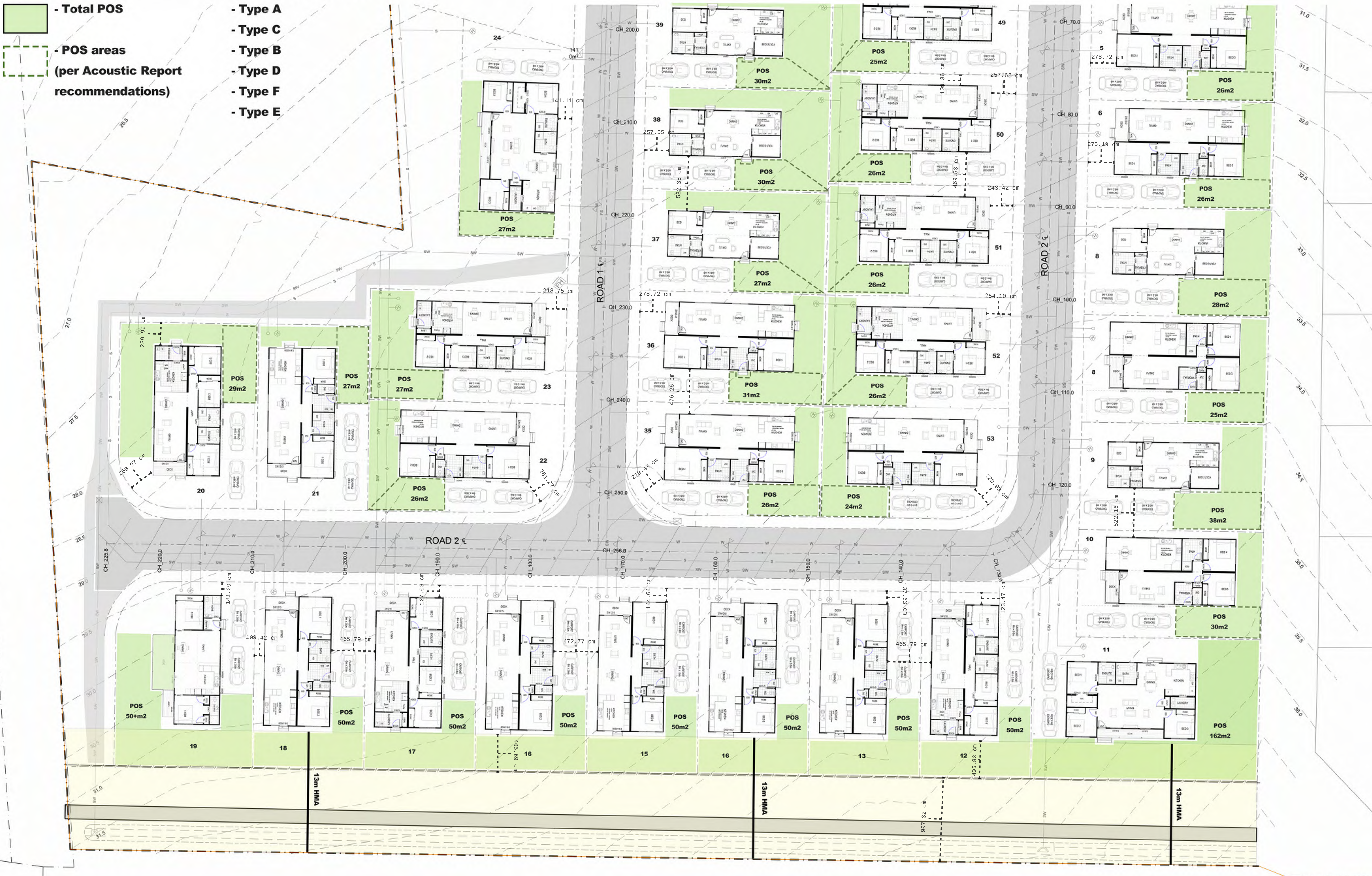
DRAWING TITLE	PROJECT NO	DWG NO	REV
INDICATIVE DWELLING LAYOUT			

Legend:

- Total POS
- POS areas (per Acoustic Report recommendations)

Dwelling Types Shown:

- Type A
- Type C
- Type B
- Type D
- Type F
- Type E



INDICATIVE DWELLING LAYOUT
SCALE: 1:200



REV	DESCRIPTION	BY	CHK	DATE	REV	DESCRIPTION	BY	CHK	DATE



121 Sandy Bay Road, Sandy Bay TAS 7005
Phone (03) 6240 9911 www.jsaengineers.com.au

CHECKED	SCALE	SIZE	PROJECT
ENGINEER	AS SHOWN	A1	CLARENCE LIFESTYLE VILLAGE
STATUS			647 EAST DERWENT HIGHWAY, RISDON

PROJECT
CLARENCE LIFESTYLE VILLAGE
647 EAST DERWENT HIGHWAY,
RISDON

11-Jul-18 8:56:04 AM

Figure 3: Type A

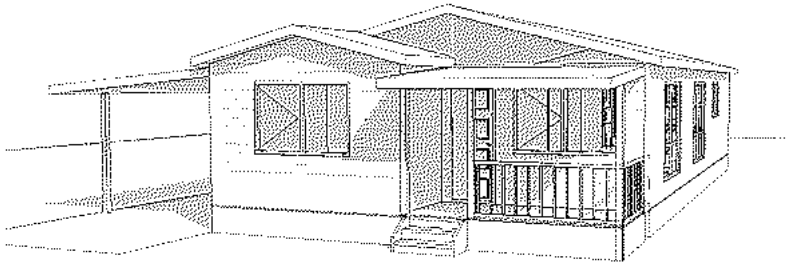


Figure 4: Type B

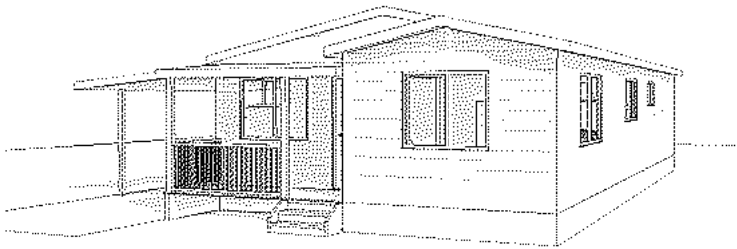
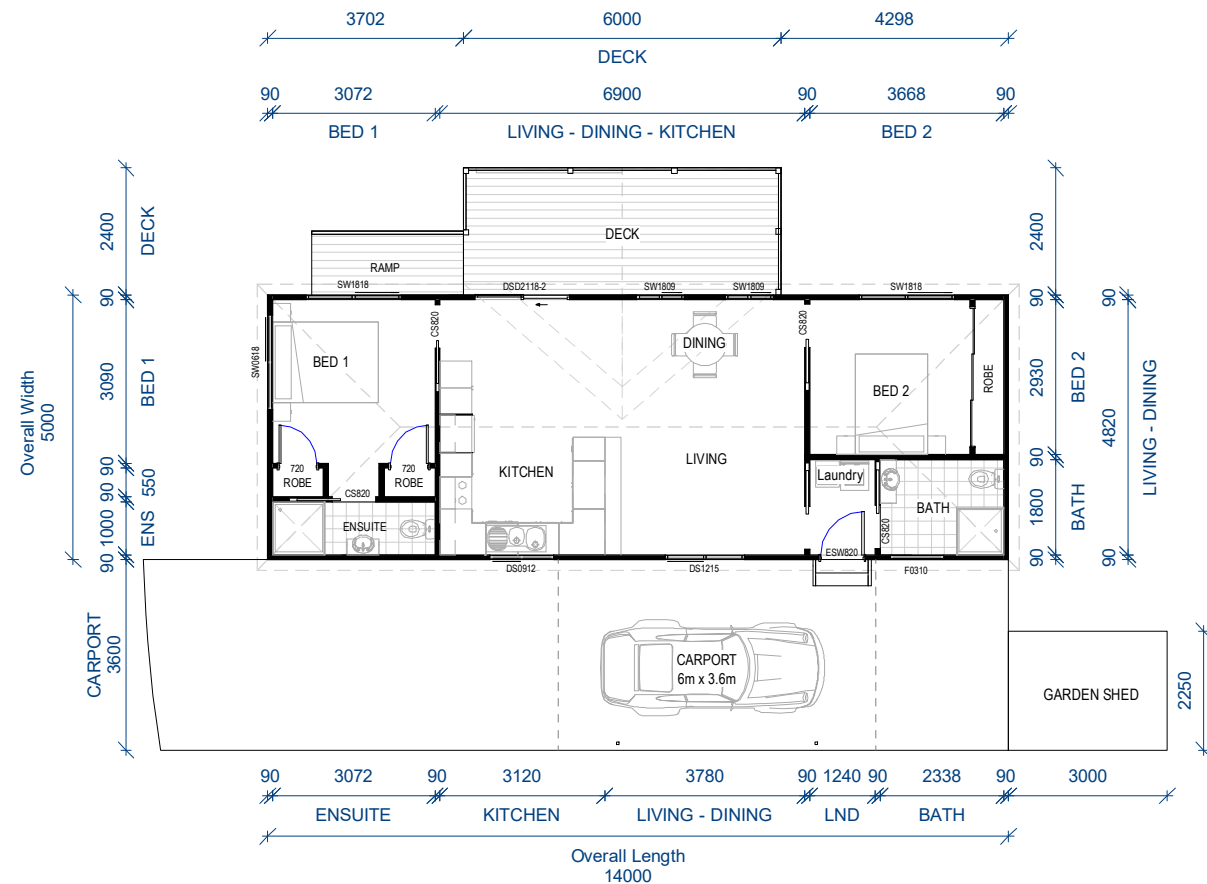
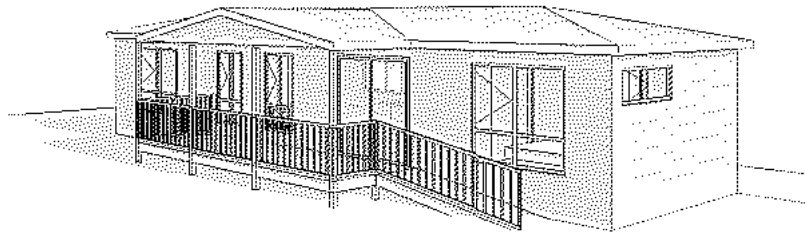
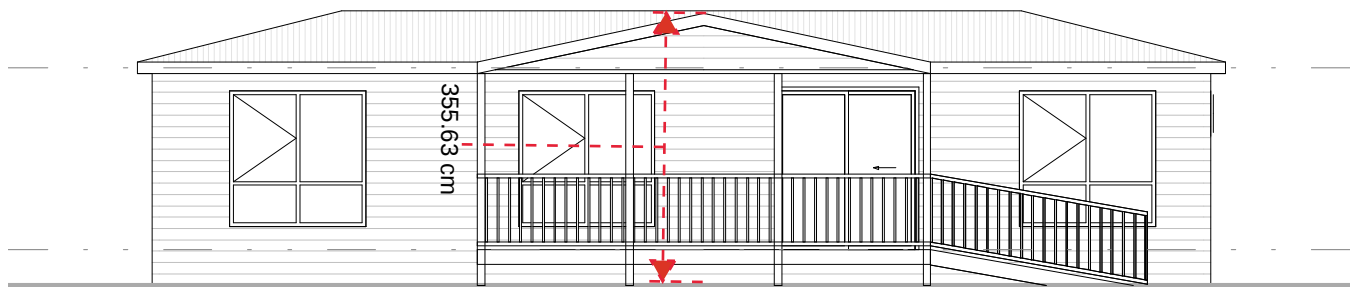
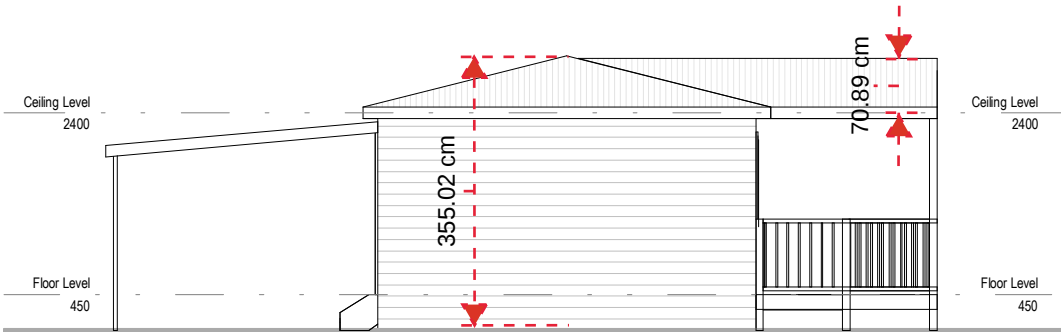


Figure 5: Type C

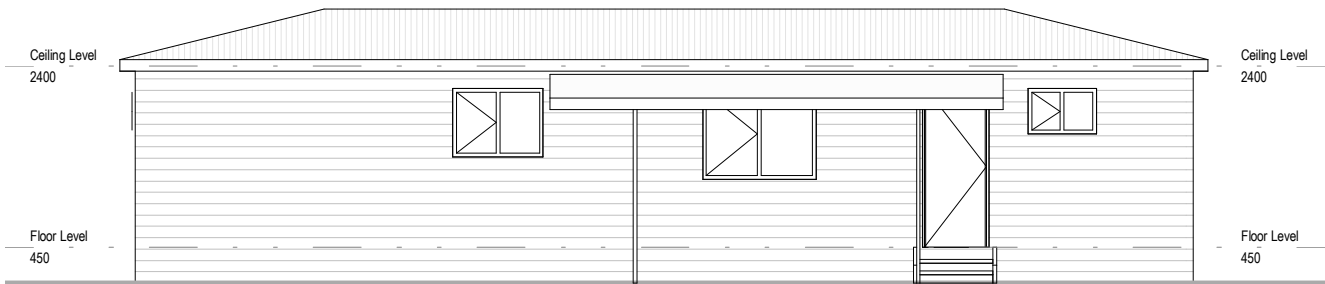




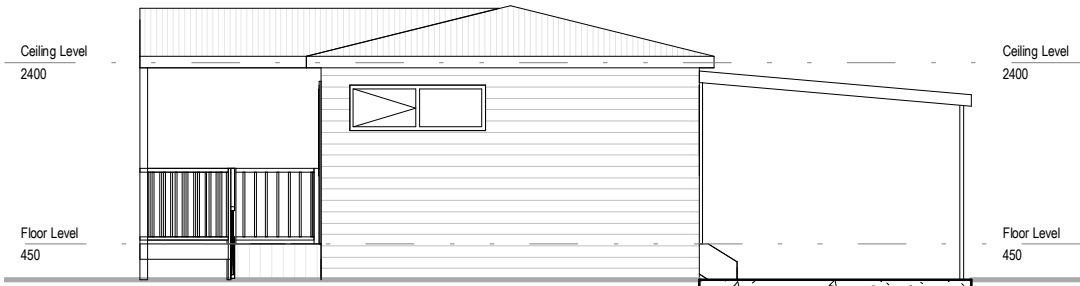
Elevation A
1 : 100



Elevation B
1 : 100



Elevation C
1 : 100



Elevation D
1 : 100



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Builders Licence: 0438 051 268

CAMBRIDGE DESIGN
CLARENCE LIFESTYLE VILLAGE
625 EAST DERWENT HIGHWAY
RISDON

Figure 6: Type D

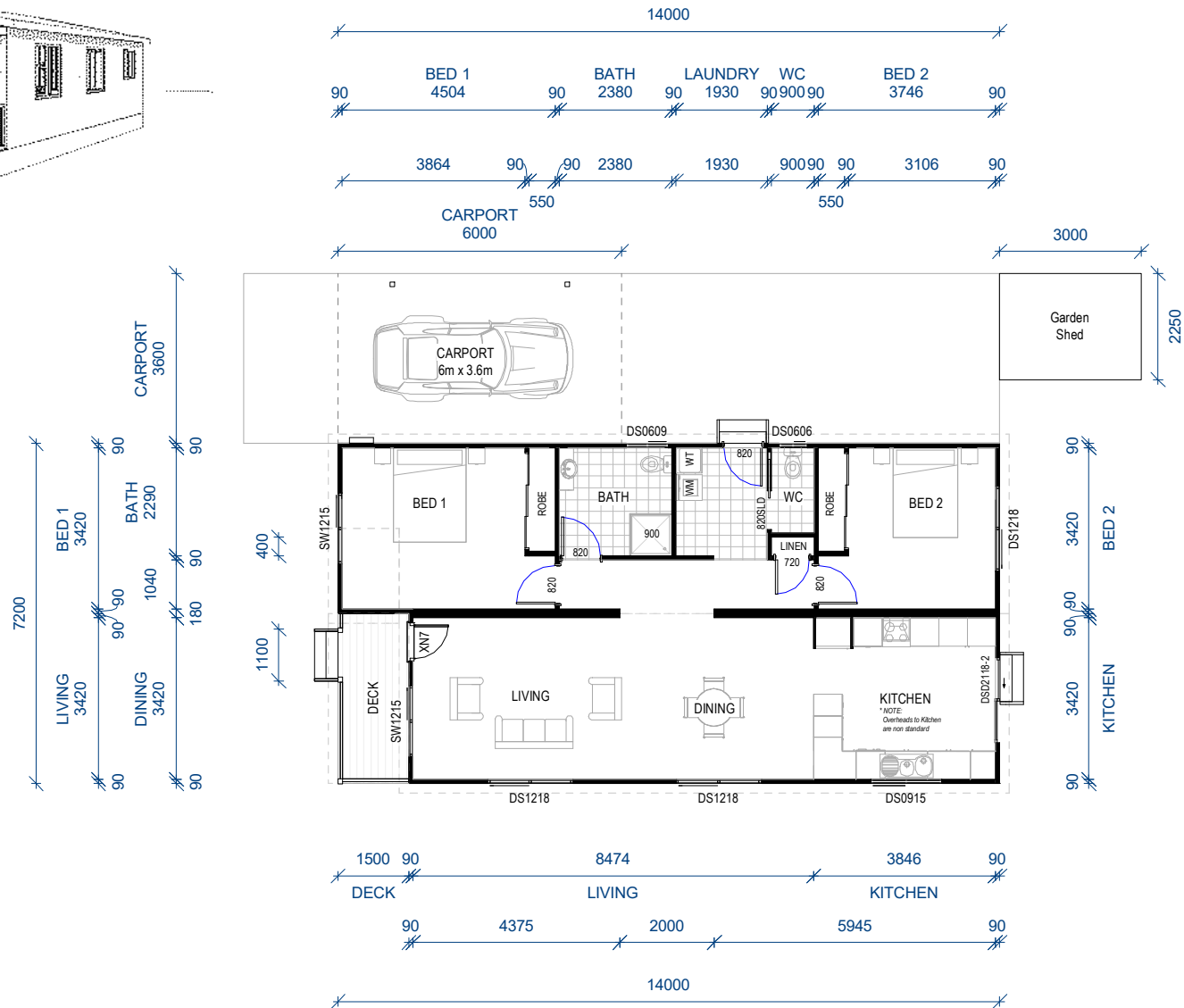
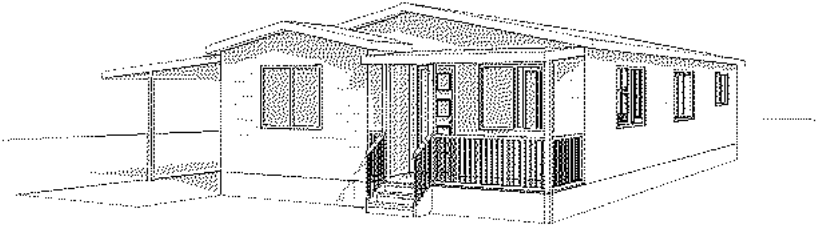


Figure 7: Type E

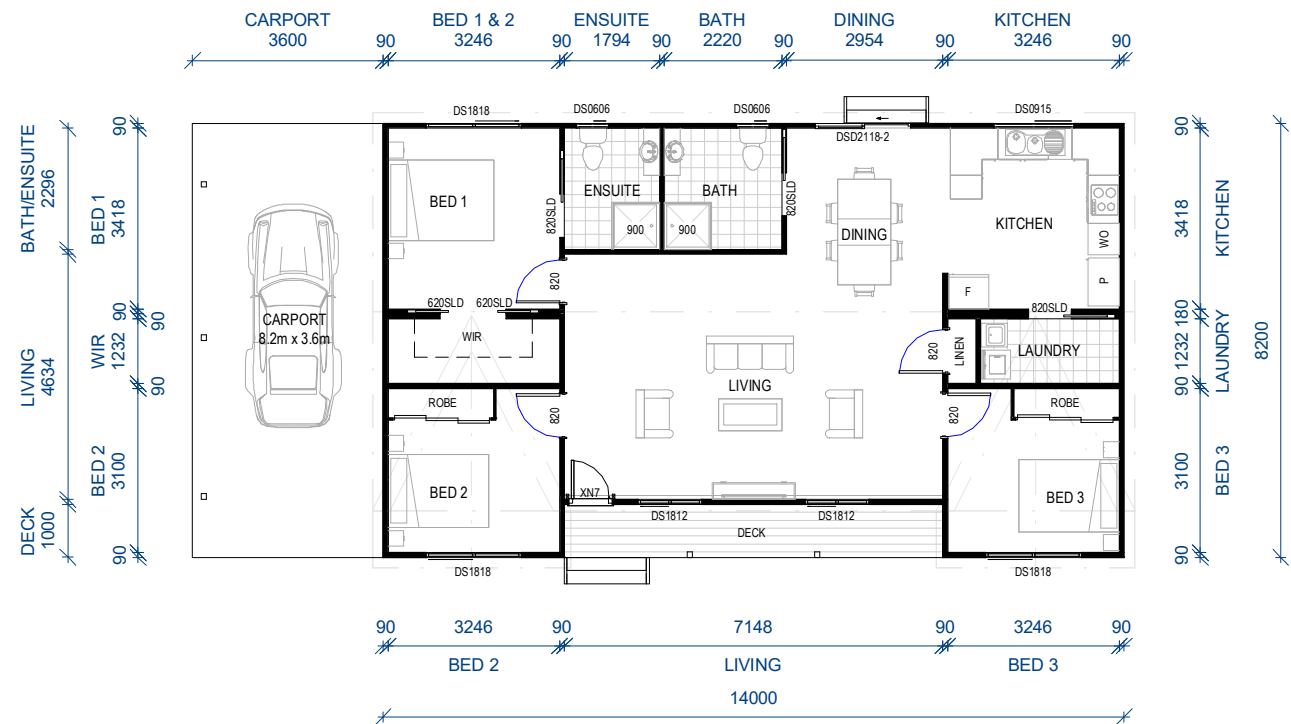
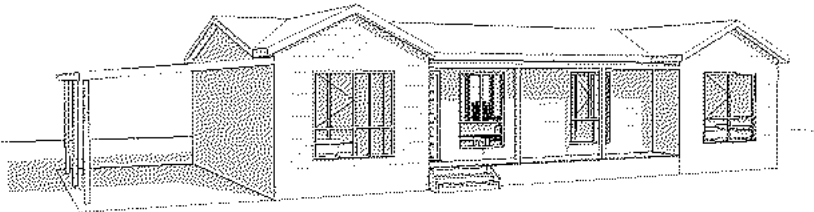
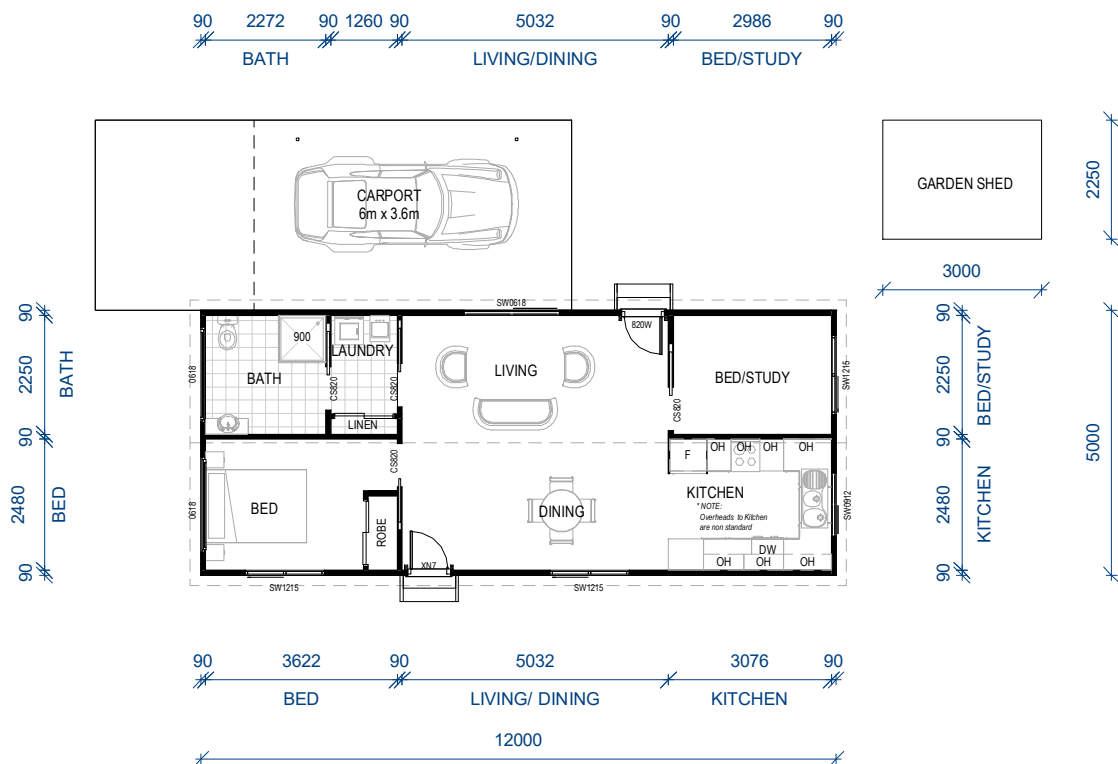
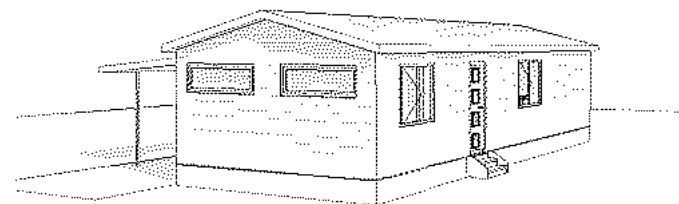
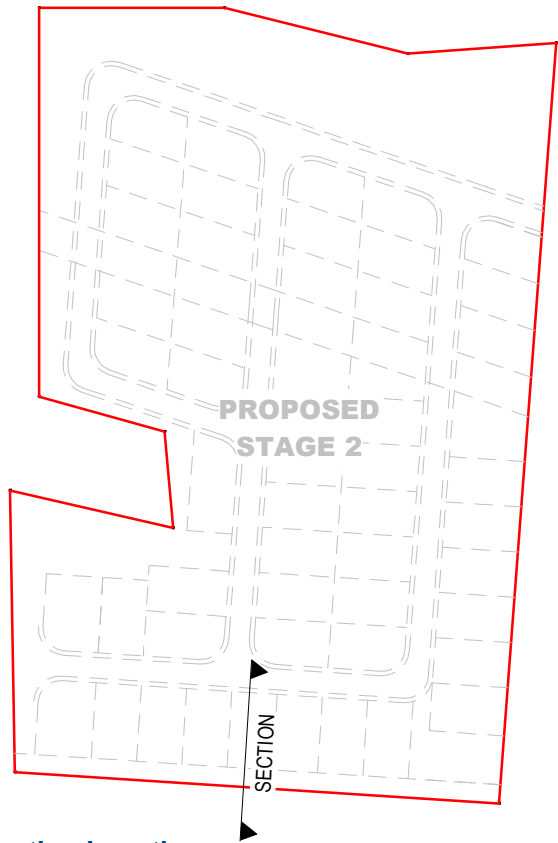


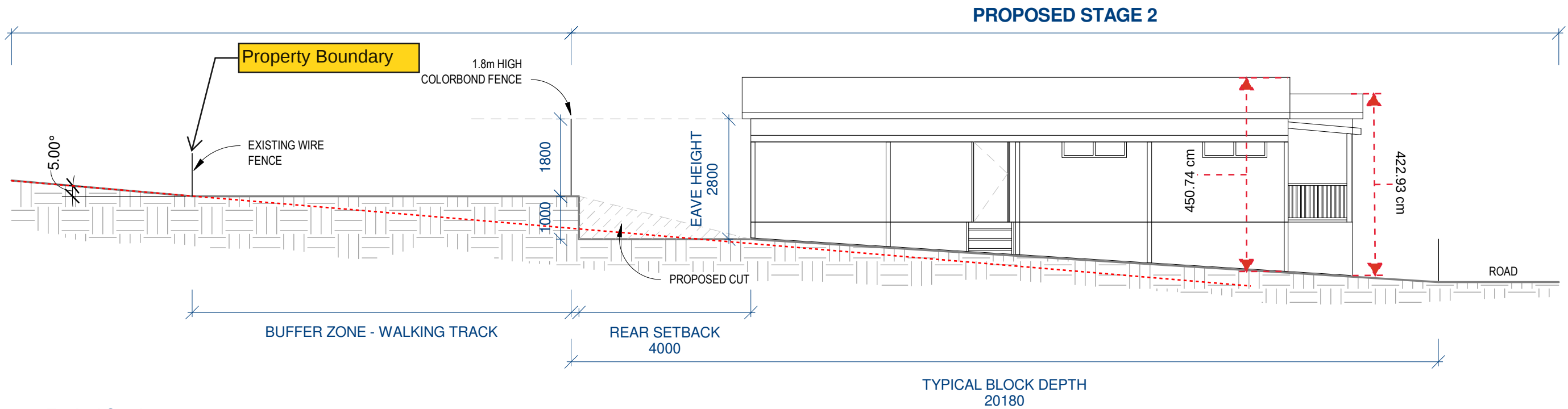
Figure 8: Type F





Section Location

1 : 2000



Typical Section

1 : 100



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ABN: 37 691 741

CLARENCE LIFESTYLE VILLAGE
625 EAST DERWENT HIGHWAY
RISDON

NOTES:

LEGEND

- Soft and Hard Landscaping (Combination)

- Potential for Taller vegetation plantings**

- Bushfire HMA

- Internal easement/pathway extension

- Indicative Service Easement

** - Subject to BHMP Requirements / BAL Rating



CONCEPT LANDSCAPING PLAN
SCALE: 1:400

REV	DESCRIPTION	BY	CHK	DATE	REV	DESCRIPTION	BY	CHK	DATE

CHECKED	SCALE	SIZE	PROJECT
DESIGNER	AS SHOWN	A1	CLARENCE LIFESTYLE VILLAGE
STATUS			647 EAST DERWENT HIGHWAY, RISDON, 7017

DRAWING TITLE	PROJECT NO	DWG NO	REV

Attention: Phil Gartrell

CLARENCE LIFESTYLE VILLAGE — NOISE IMPACT ASSESSMENT

Clarence Lifestyle Village is proposing to redevelop an existing lot at 647 East Derwent Highway, Risdon. Part of the site is within the Road and Railway Attenuation Zone, and thus a noise assessment has been requested by the Department of State Growth. This letter presents the results of such a survey, completed by NVC in June / July 2023.

1. BACKGROUND

The proposed site is an existing lot located at 647 East Derwent Highway, Risdon, and is shown by the white outline in Figure 1.1. The proposal includes the expansion of the existing lifestyle village, providing 54 additional dwellings. The lot is adjacent the East Derwent Highway, with an existing multi-residential development owned by Clarence Lifestyle Village to the south-east, and a caravan park to the north-west. A residential dwelling protrudes into the lot on the site's north-western boundary.

The magenta cross-hatching adjacent the highway indicates the Road and Railway Attenuation zone, with the portion of the lot within the attenuation zone indicated by the yellow overlay.

The site is a gently sloping block that slopes down to the highway. The East Derwent Highway in the vicinity of site features a moderate gradient from the south-east down to the north-west. The speed limit immediately adjacent site is 100km/h, slowing to 70km/h further to the north-west.



FIGURE 1.1: SITE AND SURROUNDINGS

Figure 1.2 shows the proposed site layout, with the yellow overlay showing the attenuation zone across the site. As seen by the figure, seven of the proposed dwellings are within the attenuation zone (dwelling numbers 1, 27, 28, 30, 31, 44 and 45).

It is noted that the Road and Railway Attenuation Zone depicted on LISTmap¹ and the Proposed Site Plan² differ slightly, though the dwellings that are sited within the attenuation zone are consistent across both images.

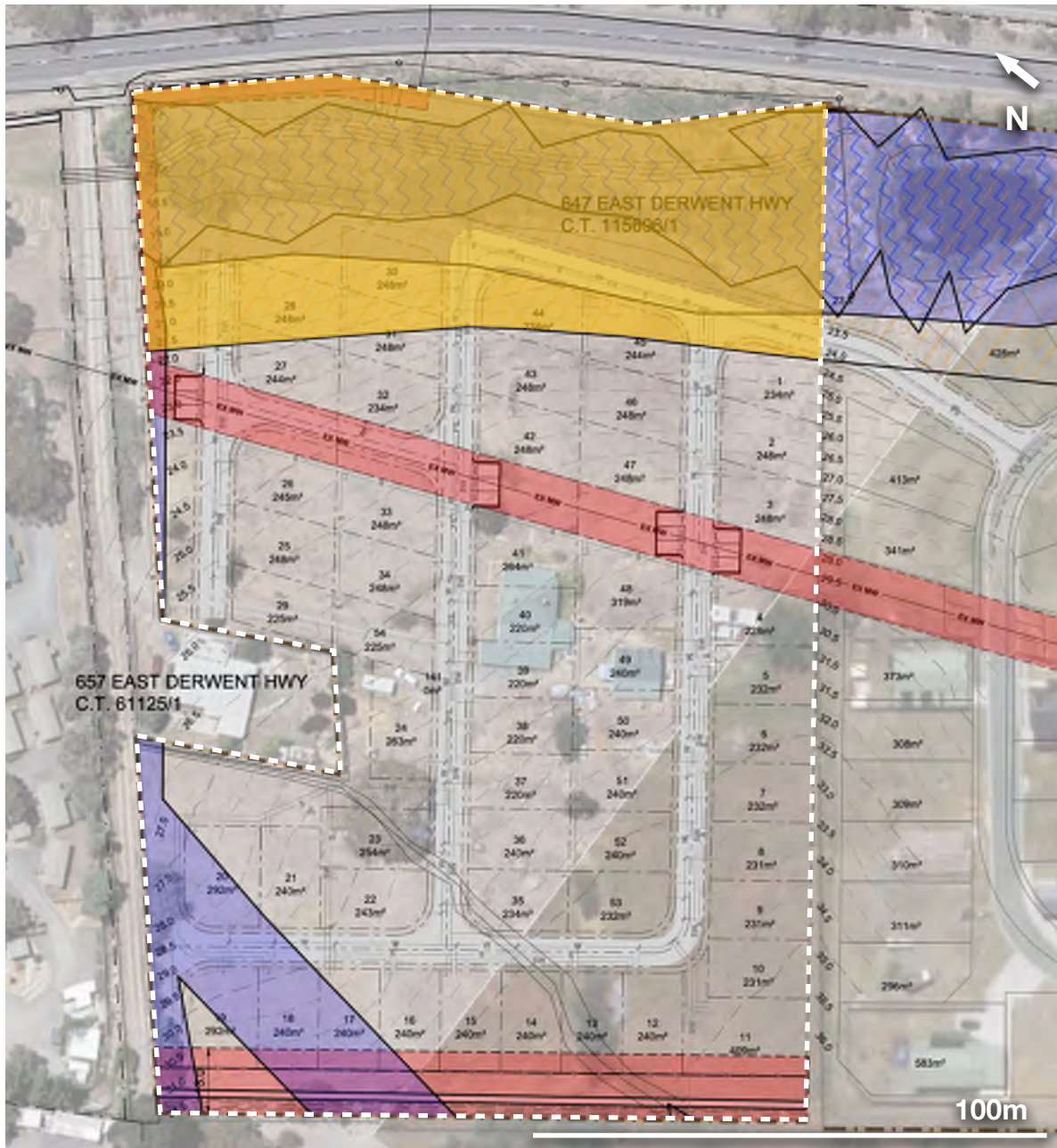


FIGURE 1.2: PROPOSED SITE LAYOUT

¹ 'LISTmap', Land Tasmania, Department of Natural Resources and Environment Tasmania

² 'Proposed Site Plan', Proj. No. 17E9-118, Dwg. No. C02, JSA Consulting Engineers

2. CRITERIA

The Tasmanian Planning Scheme contains, under section C3.0, the Road and Railways Assets Code. Specifically relevant is clause C3.6.1 - *Habitable buildings for sensitive uses within a road or railway attenuation area*, the objective of which is:

"To minimise the effects of noise, vibration, light and air emissions on sensitive uses within a road or railway attenuation area, from existing and future major roads and the rail network."

To satisfy this objective, the Scheme provides Acceptable Solutions under A1, and a secondary Performance Criteria under P1.

"A1 *Unless within a building area on a sealed plan approved under this planning scheme, habitable buildings for a sensitive use within a road or railway attenuation area, must be:*

(a) within a row of existing habitable buildings for sensitive uses and no closer to the existing or future major road or rail network than the adjoining habitable building;

...

(c) located or designed so that external noise levels are not more than the level in Table C3.2 measured in accordance with Part D of the Noise Measurement Procedures Manual, 2nd edition, July 2008.

P1 *Habitable buildings for sensitive uses within a road or railway attenuation area, must be sited, designed or screened to minimise adverse effects of noise, vibration, light and air emissions from the existing or future major road or rail network, having regard to:*

(a) the topography of the site;

..."

Relevant to this clause, Table C3.2 states acceptable noise levels within a road or railway attenuation area as:

"Roads: The arithmetic average of the A-weighted L10 sound pressure levels for each of the one-hour periods between 6:00am and midnight on any day [L10 (18-hour)] of 63 dB(A)."

In Table 1 of the Noise EPP³, a list of Acoustic Environmental Indicator levels are given for which the environmental values specified in the Noise EPP *"...will be protected for the majority of the human population where the acoustic environment indicator levels are not exceeded..."* A section of that table is reproduced here in Table 2.1.

TABLE 2.1: ACOUSTIC ENVIRONMENTAL INDICATOR LEVELS - TAS NOISE EPP

Specific Environment	Critical Health Effect	LAeq dBA	Time hrs	LAmix dBA
Outdoor living area	Serious annoyance, daytime and evening	55	16	-
	Moderate annoyance, daytime and evening	50	16	-
Outside bedrooms	Sleep disturbance, window open (outdoor values)	45	8	60

Therefore, the adopted project criterion is as follows:

63 dBA L10_(18-hour) at the facade of the worst affected residential dwelling

If the above cannot be demonstrated, the following criteria apply:

50 dBA Leq_(16-hour) at private outdoor space during the day time

45 dBA Leq_(8-hour) at the residential facade during the night time

If the above cannot be demonstrated, the following criteria apply:

40 dBA Leq_(16-hour) internally during the day and night time⁴

Private outdoor space to be located so as to minimise noise levels

³ Tasmanian Environmental Protection Policy (Noise) 2009 (the Noise EPP)

⁴ 'Recommended design sound levels and reverberation times for building interiors', Standards Australia, 2016

3. NOISE MEASUREMENTS

Unattended noise measurements were made on site between the 23rd and the 30th June 2023 to quantify noise emissions from the East Derwent Highway. Measurements used a Svan Type 1 sound level meter, logging in A-weighted decibels with a *Fast* response time. The data set comprised overall levels, one-third octave spectra and full statistical data at 10 minute intervals, with spectra and overall level data also recorded at 1s intervals. The measurements were made at location A (see Figure 1.1), which was selected as it was the only appropriate location providing adequate security of the noise logging equipment. This location was near the edge of the attenuation zone, nominally 62m from the road verge.

The overall noise level trend across the measurement period is shown by the noise spectrogram in Figure 3.1. As can be seen by the figure, the ambient noise during the night time is significantly quieter than the day time, which is largely controlled by noise emissions from tyres contacting the road, with some low-frequency content from heavy vehicles passing.

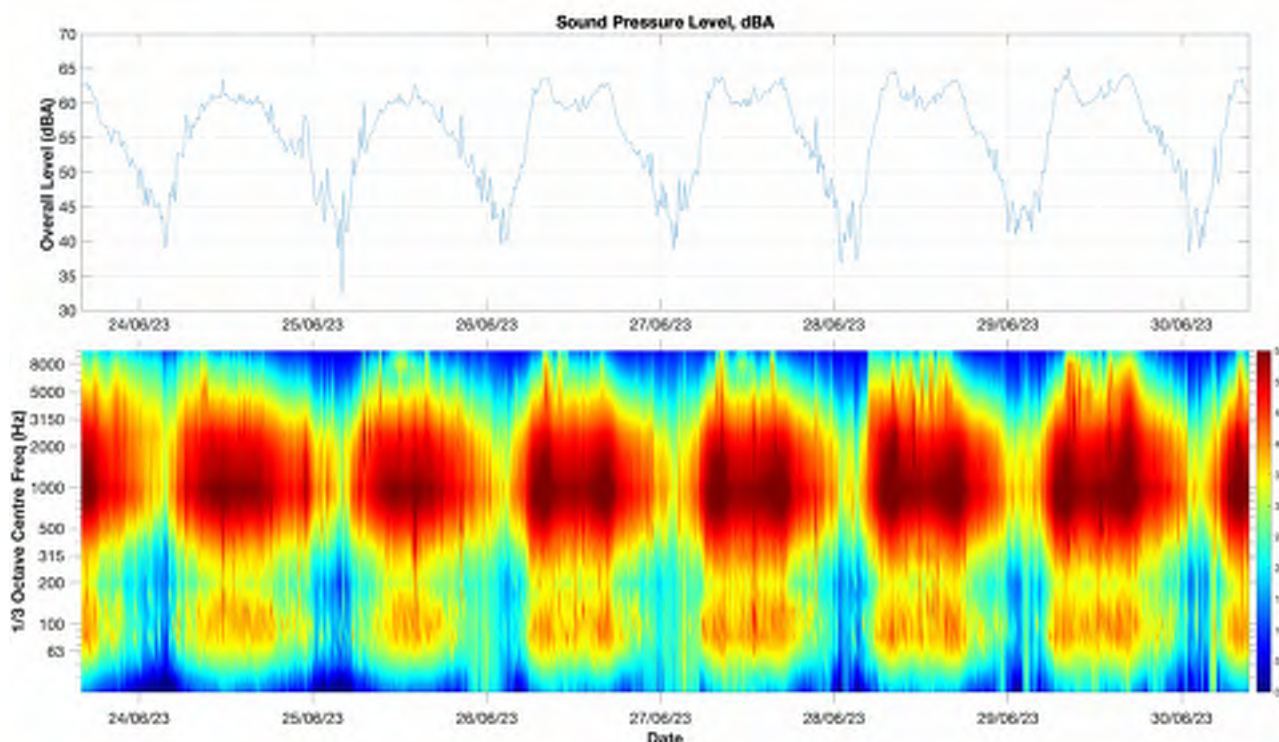


FIGURE 3.1: MEASURED NOISE SPECTROGRAM

Table 3.1 presents a summary of the measured noise levels.

TABLE 3.1: SUMMARY OF MEASURED NOISE LEVELS

Time Period	Sound Pressure Level, dBA		
	L10	L90	LEQ
Day Time (6AM - 10PM)	62	51	59
Night Time (10PM - 6AM)	49	33	47

The measured L10_(18-hour) at location A is 65 dBA. It is noted that assessment for intrusive or dominant characteristics was carried out as per the Tasmanian Noise Measurement Procedures Manual, with no adjustment required.

As noted previously, noise emissions from vehicles on the the East Derwent Highway are controlled by mid-high frequency noise, typical of high speed tyre noise. There is also significant low frequency content around the 80 - 125Hz one-third octave bands, typical of engine noise from heavy vehicles. Figure 3.2, below, shows the measured day time Leq spectrum at location A.

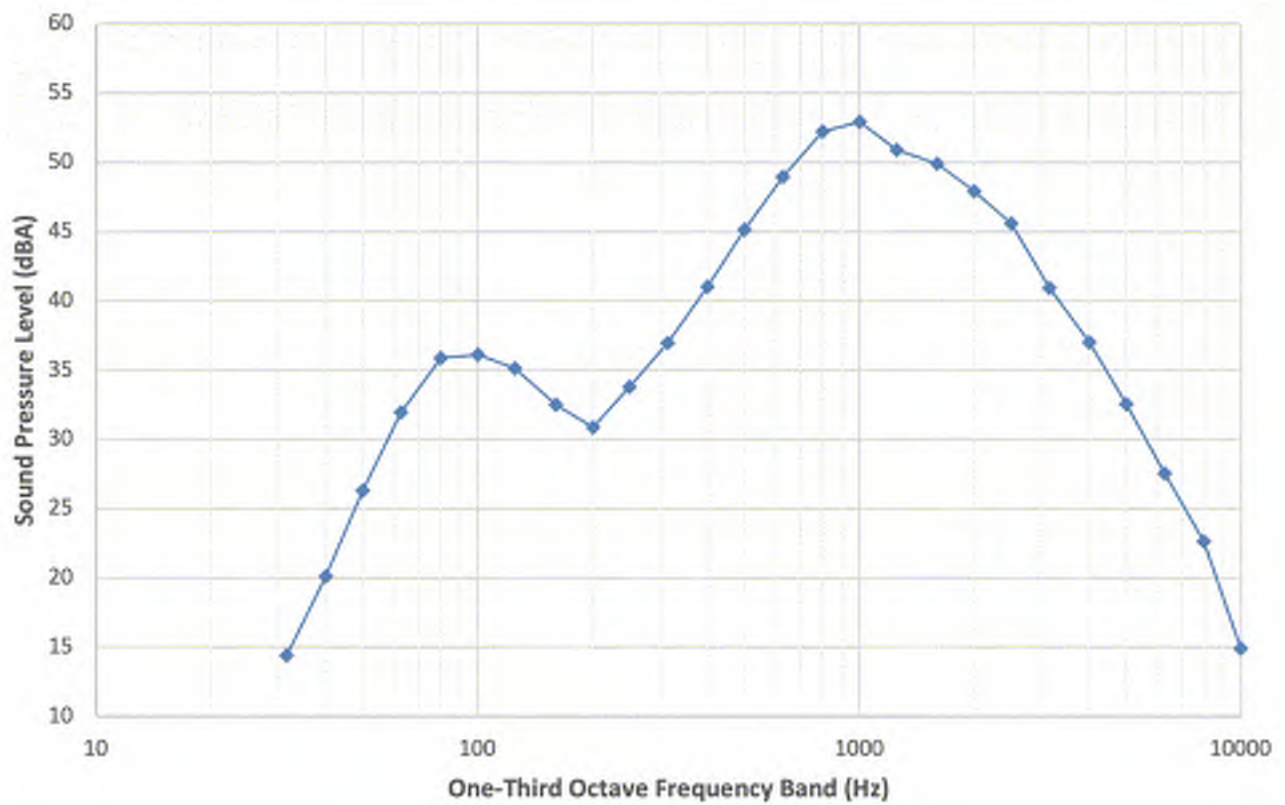


FIGURE 3.2: MEASURED ONE-THIRD OCTAVE SPECTRUM, LEQ - LOCATION A

4. NOISE PREDICTIONS

Traffic noise levels across the site have been predicted using *iNoise*⁵ software, which implements the ISO9613 algorithms for environmental noise. The predictions account for geometric divergence, barrier attenuation, atmospheric absorption, reflections/screening from buildings, and ground absorption. The following assumptions have been made in the predictions:

- 1m topographical contours (from LIDAR data) have been used for the site and surrounding area.
- The primary source of vehicular noise (particularly at high speeds) is the tyres, and so the source is modelled as 0.5m above the road surface.
- The vehicle sound power spectrum used is from the measured data at location A.
- Vehicle numbers were obtained from the Department of State Growth, and are based on traffic count measurements at the eastern end of the East Derwent Highway (station A0029190) in June 2021. The noise model uses the numbers extrapolated to 2041.
 - Traffic flow is modelled as an 18-hour period from 0600 to 0000 hours, as per the DIER guidelines. DSG traffic flow data showed that 98% of traffic flow occurred within this period.
- The ground has been assumed to have a ground factor of 0 (100% reflective) on the highway surface, and a ground factor of 0.5 (50% reflective) elsewhere.
- The building façades and barrier construction are modelled with a reflection factor of 0.8 (80% reflective).
 - Note that no buildings have been modelled on the proposed development.
- As per the Tasmanian Noise Measurement Procedures Manual, noise levels across the site are predicted at 1.2m above ground level.
- The model has been validated against the measurements made at location A using current traffic flow data, and has been demonstrated to be predicting noise levels within 1dB of the measured levels. The model is thus predicting traffic noise accurately.

The results are shown in Figure 4.1 via coloured noise contours. Two contours are shown, defining acceptable and unacceptable levels respectively; ≤ 63 dBA $L_{10(18\text{-hour})}$ in green, and > 63 dBA $L_{10(18\text{-hour})}$ in red. As seen in Figure 4.1, the dwellings within the attenuation zone are all predicted to experience traffic noise levels exceeding the 63 dBA $L_{10(18\text{-hour})}$ criterion.

⁵ iNoise V2022.1 Pro, DGMR Software

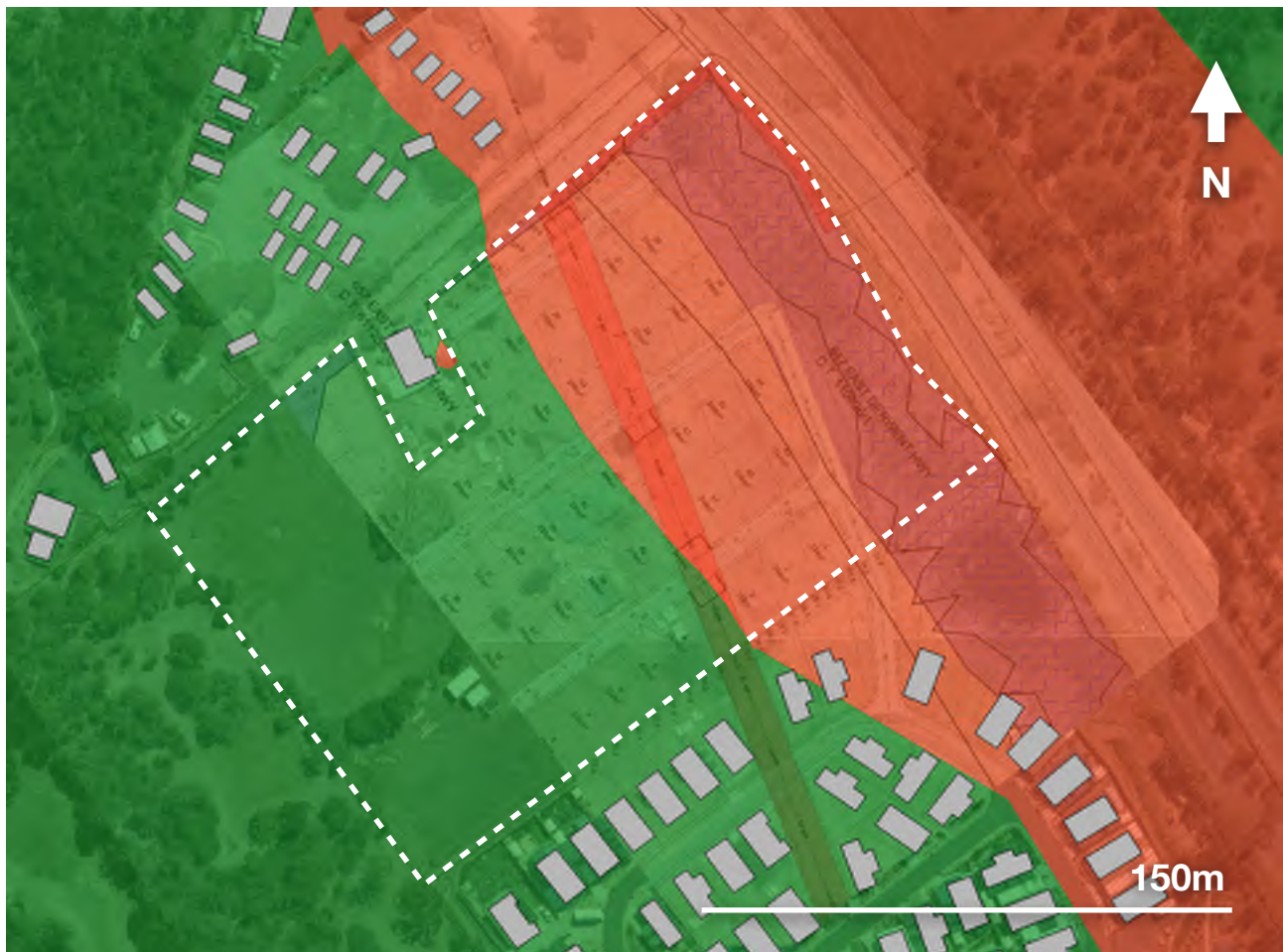


FIGURE 4.1: PREDICTIVE NOISE CONTOURS - 1.2M ABOVE GROUND

5. RECOMMENDATIONS

Given the lot slopes down toward the highway and the elevated location of the highway's road surface (see Figure 5.1, below), mitigating vehicle noise emissions via a barrier on the boundary adjacent the highway would be impractical, as it would require an extremely tall barrier to block line of sight.

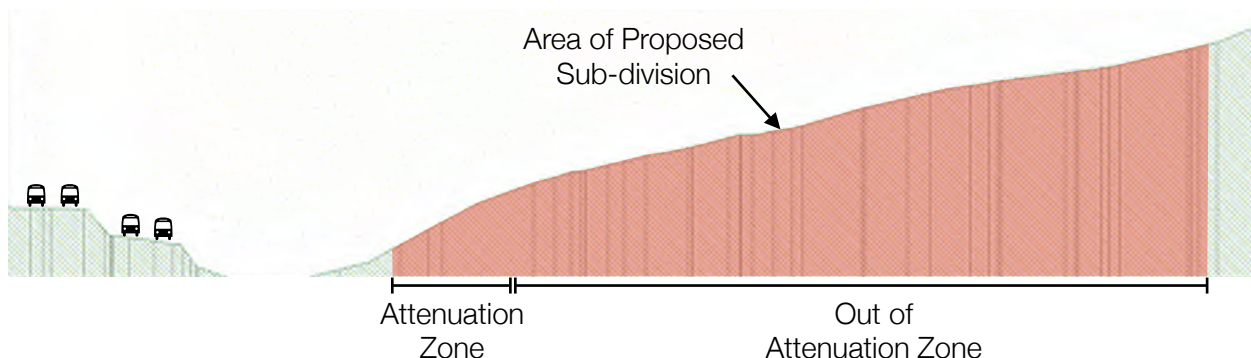


FIGURE 5.1: CROSS-SECTION OF SITE - VIEWED FROM NORTH-WEST

Therefore, to protect the residential amenity of resident's, facade treatment is required to maintain internal noise levels that are acceptable.

The following is recommended:

- The facades of all dwellings on the affected dwellings are required to achieve a minimum sound isolation of Rw 37. Examples of appropriate facade construction include:
 - Weatherboard external cladding or brick veneer on an insulated stud wall, with a 10mm fixed plasterboard internal lining.
 - 4mm float, 12mm air gap, 6.5mm acoustic glazing (6.5mm VLam Hush or equivalent) double glazing.
- All operable windows are to be awning or casement type, with full perimeter seals fitted.
- Private outdoor space is to be provided for each dwelling located on the opposite side of the dwelling to the worst-affected facade (generally to the west of the respective dwellings).
 - Private outdoor space to be screened from line of sight to the highway by a solid object with a minimum height of 2m. This may be achieved by a barrier / fence or positioning of the dwelling.
 - It is recommended that all barriers constructed comprise the following details:
 - A minimum surface mass of 15kg/m². Examples of appropriate construction include 20mm thick, ship-lapped timber, 12mm fixed cement sheet, or commercial noise barrier products.
 - A minimum height of 2m.
 - No gaps, including between the barrier and the ground.

Figure 5.2, below, shows example layouts in which private outdoor space (green regions) is screened from the highway by dwellings (white rectangles) and barriers / fences (broken white lines).



FIGURE 5.2: EXAMPLE DWELLING LAYOUTS

6. ASSESSMENT

Given the topography of the site and the surrounding area, mitigating vehicle noise emissions on the East Derwent Highway using acoustic barriers alone is not feasible. As the site slopes down to a point lower than the highway (from west to east), mitigation via a barrier alone would require it to be immediately adjacent the eastern site boundary and unfeasibly tall to provide adequate screening. Therefore, facade treatment (as outlined in section 5) is appropriate to control internal noise levels, with private outdoor space to be located on the least affected side of each residential dwelling (generally to the west / south-west of the respective dwellings) to provide an appropriate level of amenity within habitable outdoor areas.

Following the implementation of the recommendations outlined in section 5, noise levels internally are predicted to satisfy the criterion outlined in section 2.

Therefore:

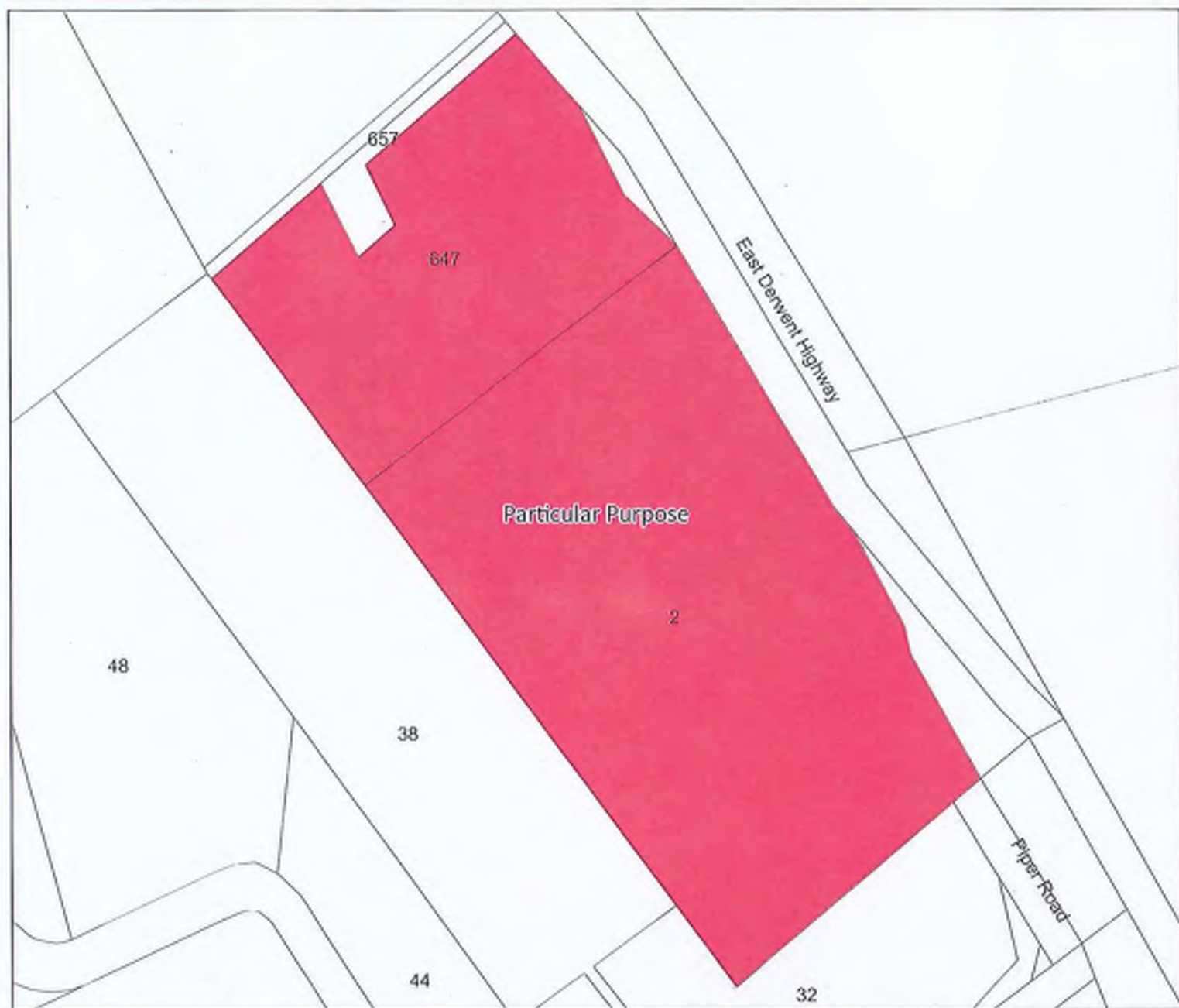
The proposed residential sub-division at 647 East Derwent Highway is deemed to satisfy clause C3.6.1 of the Tasmanian Planning Scheme - Clarence.

Should you have any queries, please do not hesitate to contact me directly.

Kind regards,



Jaye Parry



AMENDMENT TO LOCAL PROVISION SCHEDULE MAPPING PDPSPAMEND-2022/028417

To amend the Tasmanian Planning Scheme – Clarence Local Provision Map by:

- rezoning the entirety of 2 Piper Road, Geilston Bay (CT 226109/1) and 647 East Derwent Highway, Risdon (CT 115696/1) from Rural Living Zone B to Particular Purpose Zone – Clarence Lifestyle Village.

THE COMMON SEAL OF THE CLARENCE CITY COUNCIL HAS BEEN HEREUNTO AFFIXED, THIS 24th DAY OF 2026, PURSUANT TO A RESOLUTION OF THE COUNCIL PASSED THE 20th DAY OF JULY 2026, IN THE PRESENCE OF:



CHIEF EXECUTIVE OFFICER

Scale - 1:3,000 (at A4)

This map has been produced by Clarence City Council using data from a range of agencies.

CLA-P4.0 Particular Purpose Zone - Clarence Lifestyle Village

CLA – P4.1 Zone Purpose

The purpose of the Clarence Lifestyle Village Specific Area Plan is:

- CLA-P4.1.1 To provide for the existing Clarence Lifestyle Village located at 2 Piper Road and the limited expansion to 647 East Derwent Highway.
- CLA-P4.1.2 To provide and maintain communal facilities that encourage social and recreational opportunities for residents.
- CLA-P4.1.3 To promote consistency in the siting and design of new dwellings throughout the Lifestyle Village.
- CLA-P4.1.4 To provide and maintain an appropriate level of residential amenity through:
- (a) Appropriate noise attenuation measures to the Tasman Highway; and
 - (b) Provision of reasonable private and communal open space.

CLA – P4.2 Local Area Objectives

This sub-clause is not used in this particular purpose zone.

CLA – P4.3 Definition of Terms

CLA – P4.4.1 In this Particular Purpose Zone, unless the contrary intention appears:

Terms	Definition
Communal building	Means a building designed to provide and support communal recreational or wellbeing facilities, activities and functions for residents.
Dwelling site	Means: - The areas numbered 1 to 54, shown in Figure CLA P4.9; and - The areas numbered 2/2 to 114/2, shown in Figure CLA P4.9
Dwelling site boundaries	Means the boundaries shown for each dwelling site in Figure CLA P4.9

Internal Access Road	Means the areas providing vehicular and pedestrian access within the site.
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CLA – P4.5 Use Table

Use Class	Qualification
No Permit Required	
Natural and Cultural Values Management	
Passive Recreation	
Utilities	If for minor utilities.
Permitted	
Residential	If for residential aged care facility or retirement village.
Discretionary	
Utilities	If not listed as No Permit Required.
Prohibited	
All other uses	

CLA – P4.6 Use Standards

This sub-clause is not used in this specific area plan.

CLA – P4.7 Development Standards for Buildings and Works

CLA – P4.7.1 Building height

Objective:	That building height is consistent with the height and character of existing development within the Clarence Lifestyle Village.	
Acceptable Solution		Performance Criteria
A1.1 For dwellings and communal buildings, there is no acceptable solution.	P1 For dwellings and communal buildings, building height must be not more than: (a) 5m, for all dwelling types (b) 6.5m, for communal buildings.	
A1.2 For outbuildings (unless otherwise exempt), building height must be not more than 2.4m.		
A1.3 For alterations and extensions to an existing building, building height must be not more than the height of the existing building.		

CLA – P4.7.2 Siting and setbacks

Objective:	To provide consistency in the siting and setbacks of development within the Clarence Lifestyle Village and ensure the efficient use of the site for: (a) retirement living through a consistent dwelling site layout; and (b) communal buildings through compatible scale.	
Acceptable Solution		Performance Criteria
A1 The siting and layout of buildings and internal access roads must be in accordance with the layout shown in Figure P4.9.	P1 The siting and layout of buildings and internal access roads may only be varied where it is demonstrated that:	

	(a) Dwelling site areas are not reduced below the minimum specified in Clause P4.7.3 A1; (b) Dwelling sites are no closer to the East Derwent Highway than that shown in Figure P4.9; and (c) The floor area and capacity of existing communal facilities is not unreasonably reduced.
A2 All new Dwellings and communal buildings must be setback: a) No less than 5m from the lot side and rear boundaries for Communal buildings; and b) No less than 5m from the lot side boundaries for dwellings; and A2.1 New dwellings or communal buildings (except non-habitable buildings) must have a setback from a rear (southern) lot boundary of not less than 13m. (Figure CLA-P4.9.2)	P2 Dwellings and communal buildings must be sited to not cause an unreasonable loss of amenity to adjoining properties, having regard to: (a) the topography of the site; (b) the size, shape and orientation of the site; (c) the setbacks of surrounding buildings; (d) the height, bulk and form of existing and proposed buildings; (e) the character of the development existing on established properties in the area; and (f) any overshadowing of adjoining properties or public places. P2.1 No Performance Criteria.
A3 Dwellings must have a setback from dwelling site boundaries of not less than: (a) 2m from a frontage to the internal access road; (b) 0m from a side boundary to a carport, or 1m otherwise; and (c) 2m from a rear boundary.	P3 The setback and siting of dwellings must be compatible with the character of established dwellings within the lifestyle village, having regard to: (a) the setback of existing dwellings to dwelling site boundaries; (b) provision of gardens and landscaping; and

A3.1 For dwelling sites 11 to 19, dwellings must have a setback from a rear dwelling site boundary of not less than 4m.	(c) the appearance when viewed from the internal access roads. P3.1 For dwelling sites 11 to 19, there is no performance criteria for rear dwelling site setback.
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CLA – P4.7.3 Design

Objective: That buildings are designed to ensure the efficient use of the site and maintain the existing character of the village, facilitating: (a) retirement living, through consistent dwelling density; and (b) communal buildings of a scale compatible with the existing character of the village.	
Acceptable Solutions	Performance Criteria
A1 Each dwelling must have a dwelling site area of: (a) not less than 220m²; and (b) not more than 275m².	P1 For dwelling site areas less than 220m², there is no performance criteria. P1.1 Dwellings with a site area greater than 275m² must be compatible with the layout and character of the Clarence Lifestyle Village, having regard to: (a) the average size of existing sites within the village; and (b) any changes to the layout and route of the internal access road.
A2 The gross floor area of dwellings and communal buildings must be not more than: (a) 150m² per dwelling; and (b) 300m² per communal building.	P2 The gross floor area of dwellings and communal buildings must be compatible with the character and scale of established dwellings and communal buildings within the Clarence Lifestyle Village, having regard to: (a) the layout of the site;

	(b) the size and design of established dwellings and communal buildings; (c) the provision of appropriate private open space and communal space; and (d) any constraints on the site.
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CLA – P4.7.4 Privacy and Private Open Space

Objective:	That dwellings within the Clarence Lifestyle Village are provided with reasonable levels of amenity and safety, including: (a) private open space that is conveniently located and has access to sunlight (b) opportunities for the planting of gardens and landscaping; and (b) reasonable opportunity for privacy.	
Acceptable Solution	Performance Criteria	
A1 Each dwelling must have an area of private open space that: (a) is not less than 24m²; and (b) has a gradient not steeper than 1 in 10.	P1 A dwelling must have private open space that includes an area capable of serving as an extension of the unit for outdoor relaxation, dining, entertaining and children's play that is: (a) conveniently located in relation to a living area (b) orientated to take advantage of sunlight; and (d) provides sufficient space for landscaping.	
A2 Windows or glazed doors, to a habitable room of a dwelling that has a floor level more than 1m above existing ground level, must satisfy (a), unless it satisfies (b): (a) The window or glazed door: (i) is to have a setback of not less than 4m from a window or glazed door, to a habitable room, of an adjoining dwelling (excluding carports);	P2 A window or glazed door, to a habitable room of dwelling, that has a floor level more than 1m above existing ground level, must be screened, or otherwise located or designed, to minimise direct views to: (a) window or glazed door, to a habitable room of another dwelling; and (b) the private open space of another dwelling.	

(b) The window or glazed door: (i) is to be offset, in the horizontal plane, not less than 1.5m from the edge of a window or glazed door, to a habitable room of another dwelling; (ii) is to have a sill height of not less than 1.7m above the floor level or have fixed obscure glazing extending to a height of at least 1.7m above the floor level; or (iii) is to have a permanently fixed external screen for the full length of the window or glazed door, to a height of not less than 1.7m above floor level, with a uniform transparency of not more than 25%.	
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CLA – P4.7.5 Landscaping

Objective:	To ensure that landscaping is provided to: (a) maintain and enhance the visual qualities of the site (b) provide screening from the East Derwent Highway; and (c) provide amenity for residents.	
Acceptable Solutions		Performance Criteria
A1 Along the frontage to the East Derwent Highway, landscaping must be provided and have: (a) a depth of no less than 10m; and (b) include a variety of plant types and sizes.		P1 Landscaping must be provided along the frontage to the East Derwent Highway, having regard to: (a) the effectiveness of the landscaping treatment to: (i) enhance the visual qualities of the site; and (ii) provide reasonable screening from the East Derwent Highway. (b) any advice from a suitably qualified person; and (c) have a depth of no less than 5m.

CLA – P4.7.6 Waste storage

Objective:	To provide for the storage of waste and recycling bins for all dwellings.	
Acceptable Solution	Performance Criteria	
A1 Each dwelling must have a storage area, for waste and recycling bins, that is not less than 1.5m² per dwelling and is within one of the following locations: (a) an area for the exclusive use of each dwelling, excluding the area in front of the dwelling; or (b) a common storage area with an impervious surface that: (i) has a setback of not less than 4.5m from a frontage (ii) is not less than 5.5m from any dwelling; and (iii) is screened from the frontage and any dwelling by a wall to a height not less than 1.2m above the finished surface level of the storage area.	P1 Each dwelling must have storage for waste and recycling bins that is: (a) capable of storing the number of bins required (b) screened from the frontage and any dwellings; and (c) if the storage area is a common storage area, separated from any dwellings to minimise impacts caused by odours and noise.	

CLA-P4.7.7 Noise

This clause is in addition to C3.6.1, of the C3.0 Road and Railway Assets Code.

Objective:	To minimise the effects of noise on sensitive uses within the site from existing and future major roads.	
Acceptable Solution	Performance Criteria	
A1 All new habitable buildings for a sensitive use and not otherwise located within a road or railway attenuation area shown on an	P1 Habitable buildings for a sensitive use must be sited, designed or screened to minimise adverse effects of noise from a major road, in	

overlay map in the relevant Local Provisions Schedule, must: (a) be located or designed so that external noise levels are not more than the level in Table C3.2 measured in accordance with Part D of the <i>Noise Measurement Procedures Manual, 2nd edition, July 2008</i>.	accordance with a report prepared by a suitably qualified person, having regard to: (a) the topography of the site; (b) the proposed setback; (c) any buffers created by natural features; (d) the location of any private open space; (e) the speed limit and traffic volume of the road; (f) any traffic impact assessment; and (g) any mitigation measures proposed
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CLA – P4.8 Development Standards for Subdivision

CLA – P4.8.1 Lot Design

Objective:	To provide for subdivision that is compatible with the zone purpose and does not have an unreasonable impact on the layout of the site.	
Acceptable Solutions	Performance Criteria	
A1 Each lot, or a lot in a plan of subdivision, must: (a) be for the consolidation of a lot with another lot, provided each lot is within the same zone (b) be required for public use by the Crown, a Council or State authority; or (c) be required for the provision of Utilities.	P1 No performance criteria.	
A2 Each lot, or a lot proposed in a plan of subdivision, must be provided with a vehicular access from the boundary of the lot to a road in accordance with the requirements of the road authority.	P2 Each lot, or a lot 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: (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.
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CLA – P4.8.2 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 have a connection to a full water supply service.		P1 No performance Criterion.
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 connection to a reticulated sewerage system.		P2 No Performance Criterion.
A3 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.		P3 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 accommodating an on-site stormwater management system adequate for the future use and development of the land, having regard to: (a) the size of the lot; (b) topography of the site;

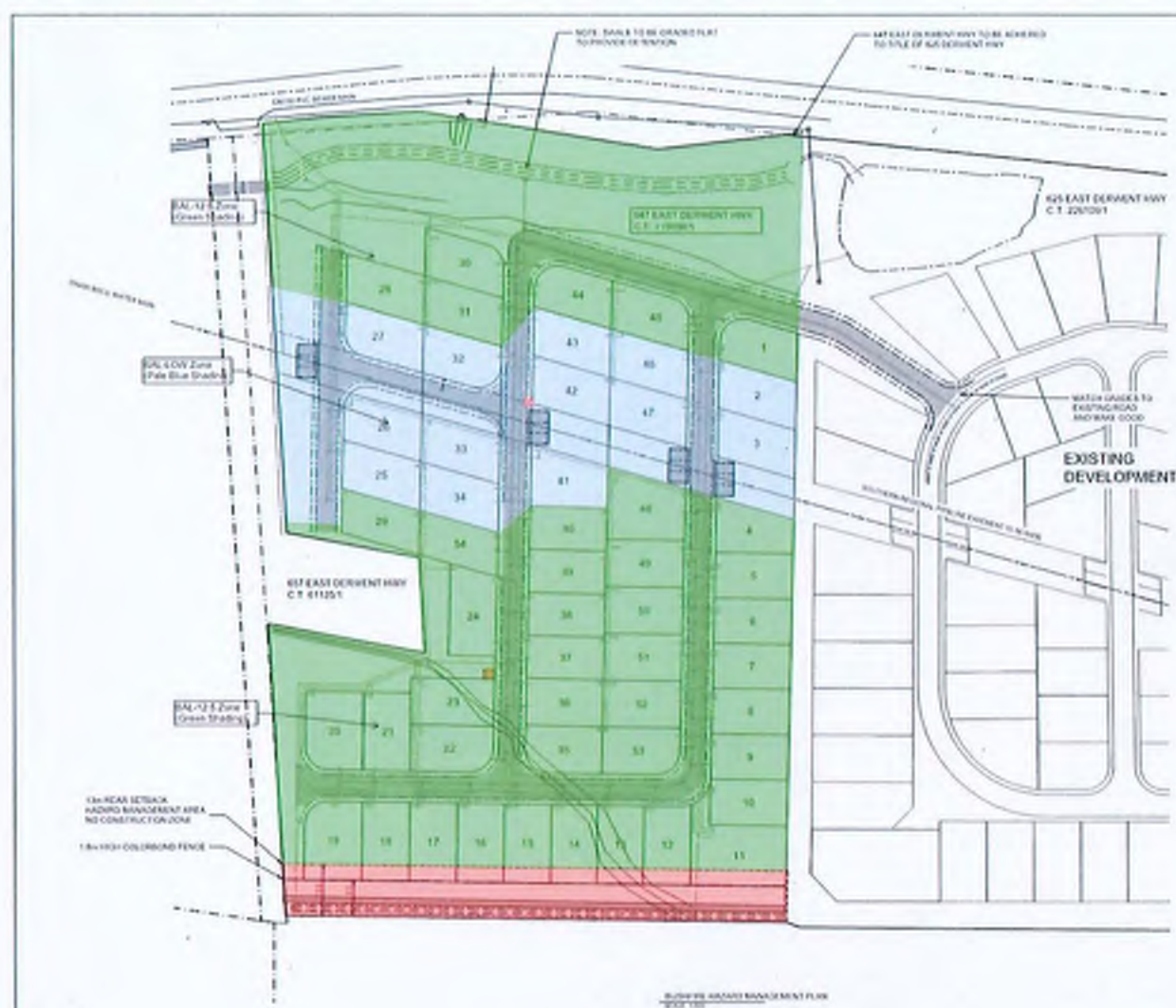
	(c) soil conditions; (d) any existing buildings on the site; (e) any area of the site covered by impervious surfaces; and (f) any watercourse on the land.
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CLA – P4.9 Tables

Figure CLA-S4.9.1 – Clarence Lifestyle Village Layout



**Figure CLA – P4.9.2 – 13m setback Hazard Management Area as required
by clause CLA – P4.7.2 A2.1**



AMENDMENT TO LOCAL PROVISION SCHEDULE MAPPING

**PDPSPAMEND-2022/028417 - Planning Scheme Amendment and Permit
Application - 2 Piper Road, 647 East Derwent Highway & 657 East Derwent
Highway, Risdon**

To amend the Tasmanian Planning Scheme - Clarence Local Provision Map by
rezoning:

- The entire land of 2 Piper Road, Geilston Bay (Volume 226109 Folio 1) and 647 East Derwent Highway (Volume 115696 Folio 1) , Risdon from Rural Living Zone B to Particular Purpose Zone – Clarence Lifestyle Village.

THE COMMON SEAL OF THE CLARENCE CITY COUNCIL HAS BEEN HEREUNTO
AFFIXED THIS *24th* DAY OF *JULY* 2026, PURSUANT TO A RESOLUTION OF THE
COUNCIL PASSED THE 20th DAY OF JULY 2026 IN THE PRESENCE OF:



CHIEF EXECUTIVE OFFICER





Clarence... a brighter place

Clarence City Council

DRAFT PLANNING PERMIT

LAND USE PLANNING AND APPROVALS ACT 1993

Development No: PDPSPAMEND-2022/028417

Approval Date:

Description: Consolidation of Two Lots (2 Piper Rd & 647 East Derwent Highway), 54 Residential (Retirement Village) Units, Demolition of existing dwelling & Outbuilding at 647 East Derwent Highway and Associated Works.

Address: 2 Piper Road, Geilston Bay 647 East Derwent Highway & 657 East Derwent Highway, Risdon

This permit is granted, subject to the following conditions:

General Conditions:

1. The use or development must only be undertaken in accordance with the endorsed plans and any permit conditions and must not be altered without the consent of Council.
2. Development must occur in accordance with the recommendations contained within the Clarence Lifestyle Village - Noise Impact Assessment by Noise Impact Consulting, dated 28 October 2024. These measures are to be certified by a recognized Acoustic Engineer or other appropriately qualified person and submitted as part of a Building Permit.
3. An updated Bushfire Report must be submitted showing the following:
 - All dwellings be designed and built to BAL-12.5 minimum standard under AS 3959:2018.
 - An updated TFS-endorsed bushfire emergency plan drafted in accordance with the current template documents found on the TFS website.
 - All new dwellings be designed with a basic ember protection at a minimum.
 - The whole site must be maintained as a hazard management area.

must be submitted to and approved by Chief Executive Officer or delegate prior to the commencement of the use / prior to the issue of a certificate of likely compliance (CLC) for building works, (whichever occurs first). When approved, the plans will form part of the permit.

4. Suitable covenants must be included in the Schedule of Easements with respect to:
 - Establishing the 13m setback to the rear (southern boundary) of the subject property an exclusion zone with no new habitable buildings to be built within this zone.
 - the whole site must be maintained in a low fuel state as a hazard management area.

Additional covenants or other controls must not be included on the titles to the lots created by the subdivision where they are in conflict with any provisions of, or seek to prohibit any use provided for within, the relevant Planning Scheme applying to the lot.

5. The proposed non-combustible fence must be designed in accordance with the specifications referred to in the bushfire hazard report and the construction of the non-combustible fence must be implemented as part of the site civil works to the satisfaction of Council's Chief Executive Officer or delegate.
6. A landscape plan must be submitted to and approved by Council's Chief Executive Officer or Delegate prior to the commencement of the use / prior to the issue of a certificate of likely compliance (CLC) for building works, (whichever occurs first). The landscape plan must be to a standard scale, provide the designer's contact details and be legible when reproduced at A3 size. The landscape plan must clearly document the following:
 - a north point/arrow,
 - existing property information such as building footprints, location of underground and overhead services, boundary lines, outdoor structures, garden beds and fences,
 - existing trees identified, marked clearly as "retained" or "for removal". An outline of tree protection measures – inclusive of calculated Tree Protection Zones in line with AS 4970-2009 – is required for all "retained" trees,
 - existing contours, relevant finished floor levels and any proposed alterations to ground levels,
 - areas of proposed landscape hard work treatments such as driveways, paths, buildings, carparks, retaining walls, edging and fencing,

- areas of proposed landscape soft work treatments including garden beds and lawns,
- proposed planting design with locations of individual plants at intended spacing and clearly identified species (use of symbols with a legend or direct labelling of plants preferred),
- a table listing selected species' botanical names, mature height, mature width, pot size and total quantities,
- avenue type plantings adjacent to the Commerce Road boundary with the inclusion of Ornamental pear species,
- details of proposed ongoing maintenance schedule (e.g. watering, weeding), and
- estimated cost for the installation of landscape works.

Note: Refer to "Preparing Landscape Plans for Development Applications" pamphlet for further information. Installed landscape works (soft and hard) will be inspected for adherence to the approved landscape plan and for quality of workmanship.

7. The detailed landscape plan must be consistent with the hazard management area requirements.
8. The Final Plan and accompanying Schedule of Easements must describe all existing easements and any additional easements required in respect of all utilities infrastructure required to service the lots in a form to the satisfaction of the relevant utility service provider.
9. The Final Plan and accompanying Schedule of Easements must describe all existing easements and any additional easements required in respect of all Council infrastructure required to service the lots in a form to the satisfaction of Council's Chief Executive Officer or Delegate.
10. Engineering designs, prepared by a suitably qualified person, are required for:
 - access arrangements;
 - carpark and driveways construction;
 - service upgrades or relocations;

and must show the extent of any vegetation removal proposed for these works. Such designs must be submitted to and approved by Council's Chief Executive Officer or Delegate.

The detailed engineering plans must also include the internal accessways, car parking and manoeuvring areas, pedestrian paths and crossings, and demonstrate

appropriate grades, dimensions, turning movements, parking delineation and pedestrian safety treatments.

A 'start of works' permit must be obtained prior to the commencement of any works.

A Works in Road Reservation Permit must also be obtained if any proposed works are to be conducted within the road reservation or Council land.

Works for all stages shown on the design plans must be commenced within 2 years of the date of their approval or the engineering designs will be required to be resubmitted.

11. Driveways, parking areas and other areas accessible to vehicles must be constructed in bituminous concrete or concrete, providing for adequate stormwater drainage, prior to the commencement of the use. Details of the construction must be submitted to and approved by Council's Head of Infrastructure and Natural Assets prior to the commencement of any works. The detailed engineering plans must also include the internal accessways, car parking and manoeuvring areas, pedestrian paths and crossings, and demonstrate appropriate grades, dimensions, turning movements, parking delineation and pedestrian safety treatments.
12. The owner must, at their expense, repair any Council services (eg pipes, drains) and any road, crossover, footpath or other Council infrastructure that is damaged as a result of any works carried out by the developer, or their contractors or agents pursuant to this permit. These repairs are to be in accordance with any directions given by the Council.

If the owner does not undertake the required repair works within the timeframe specified by Council, the Council may arrange for the works to be carried out at the owner's expense.
13. Any existing services on the land must be contained within a single lot. For any services extending beyond the property boundary, a suitable easement must be created on the affected titles and the service replaced in PVC or copper type A for water.
14. All services must be sealed off prior to any demolition works.
15. Stormwater reticulation is to be designed in accordance with the requirements of Council's Local Highways Standard Requirements By- Law and the State Stormwater Strategy to the satisfaction of Council's Head of Infrastructure and Natural Assets. The design is to identify and design overland flow paths and run-off handling systems for 1% AEP events. These systems shall ensure that no concentrated flow or overflow from street drainage and stormwater reticulation is directed across or through proposed lots (unless dedicated as an overland flow path with easements in favour of Council). Designs shall ensure that net discharge of stormwater does not exceed predevelopment levels and water quality characteristics of receiving waters are maintained or improved. The design must incorporate Water Sensitive Urban Design principles and be submitted for approval by Council's Chief Executive Officer

or delegate prior to the commencement of the use / prior to the issue of a building permit or a certificate of likely compliance (CLC) for building works.

16. Prior to the issue of Engineering Approval, detailed and coordinated stormwater and flood management design, prepared by a suitably qualified engineer, must be submitted to and approved by Council's Chief Executive Officer or delegate.

The design must be consistent with the approved development plans and address the relevant findings of the supporting stormwater and flood reports. The design must demonstrate that:

- a) the proposed drainage, detention and major overland flow systems safely manage the 1% AEP event, inclusive of the adopted climate change allowance;
- b) post-development stormwater discharge from the development does not exceed pre-development discharge at the relevant discharge points;
- c) the cut-off drain, check dams, headwalls, pipe network, detention basins, internal roads and overflow paths are coordinated and adequately designed to safely manage site runoff and external overland flows, including relevant design calculations, hydraulic modelling, longitudinal sections, cross sections, profiles, levels, pipe schedules, basin details and capacity calculations;
- d) the proposed works do not cause or contribute to adverse flooding, permanent scour or erosion impacts on the site, adjoining land, East Derwent Highway or public infrastructure; and
- e) finished floor levels and relevant access levels are set in accordance with the approved flood and drainage design, including appropriate freeboard where required.

The submission must include sufficient supporting calculations, modelling outputs and detailed engineering drawings to demonstrate compliance with this condition.

When approved, the amended plans will form part of this permit. If compliance with this condition cannot be demonstrated, the approved development must not proceed in its approved form, and a further planning approval may be required.

17. An erosion and sedimentation control plan, in accordance with the Derwent Estuary Program Soil & Water Management on Building & Construction Sites document, must be submitted and approved by Council's Chief Executive Officer or delegate prior to the commencement of the works / prior to the issue of a certificate of likely compliance (CLC) for building works, (whichever occurs first). All debris/construction materials must be contained within the property. All works must be carried out in compliance with the approved erosion and

sediment control plan or to the satisfaction of Council's Chief Executive Officer or delegate prior to the commencement of works.

18. A weed management plan identifying methods to control weeds, must be submitted to and approved by Council's Chief Executive Officer or delegate prior to commencement of works. The plan must:
- reference any Weeds of National Significance and Declared Weeds under the Weed Management Act and address the spread of soil-based pathogens in accordance with the Tasmanian Washdown Guidelines for Weed and Disease Control,
 - identify the weed species, initial treatment, on-going management and maintenance period thereof. The plan may include manual removal of larger plants and/or chemical control as recommended by the relevant Government department, and
 - include a detailed breakdown of estimated costs.

The Final Plan and Schedule of Easements for any stage will not be sealed until the weed management plan for that stage has been implemented and maintained to the satisfaction of Council's Chief Executive Officer or delegate. Alternatively, a bond of 1.5 times the estimated cost of works associated with implementing the weed management plan for that stage must be submitted prior to sealing. The bond will be held as security to ensure both development and maintenance of each lot is undertaken in accordance with the approved plan until each of the newly created lots are sold or the management period has expired, whichever comes first. The bond is to be a cash deposit or a bank guarantee.

19. All works must be undertaken generally in accordance with the Wetlands and Waterways Works Manual produced by the Tasmanian Department of Primary Industries, Water and the Environment 2003 [copy available at <https://nre.tas.gov.au/conservation/flora-of-tasmania/tasmanias-wetlands/wetlands-waterways-works-manual>].
20. Certificates of Title for subject land, Volume 226109/1 and Volume 115696/1 must be consolidated into one title prior to the issue of a building/plumbing permit or commencement of works, whichever occurs first. To consolidate the titles, the final plan and schedule of easements must be submitted to Council for sealing.
21. The development must meet all required Conditions of Approval specified by TasWater notice dated 05/07/2024 (TWDA 2022/0088 - CCC).

The following advice is also provided:

- a. This permit will lapse after 2 years from the date on which it is granted in accordance with Section 42C(2) (a) of the Act unless the development / use has been substantially commenced.

In accordance with Section 42C(3) an application may be made to the Planning Authority for an extension in accordance with Section 42C (2) (b) or (c), any time before the period of 6 months from the day on which the permit has lapsed

- b. This is a town planning permit only. Please be aware that a building permit and / or a plumbing certificate of likely compliance or plumbing permit may be required before the development can proceed. It is recommended that you contact Council's Building Department on (03) 6217 9580 to discuss the requirement for any additional permits or certification.
- c. Non-compliance with this permit is an offence under Section 63 of the *Land Use Planning and Approvals Act 1993* and may result in enforcement action under Division 4A of the *Land Use Planning and Approvals Act 1993* which provides for substantial fines and daily penalties.
- d. All units and other structures are to comply with Fire Separation under the relevant National Construction Code and the Building Act 2016.

Daniel Marr

HEAD OF CITY PLANNING

THIS APPROVAL IS GIVEN UNDER DELEGATION GRANTED BY COUNCIL ON 14 DECEMBER 2020

Submission to Planning Authority Notice

Council Planning Permit No.	PDPSPAMEND-2022/028417	Council notice date	12/07/2022
TasWater details			
TasWater Reference No.	TWDA 2022/00888-CCC	Date of response	05/07/2024
TasWater Contact	Elio Ross	Phone No.	0467 874 330
Response issued to			
Council name	CLARENCE CITY COUNCIL		
Contact details	cityplanning@ccc.tas.gov.au		
Development details			
Address	647 EAST DERWENT HWY, RISDON	Property ID (PID)	5116539
Description of development	Planning Scheme Amendment and Permit Application, Rezoning and Specific Area Plan and 53 Additional Units		
Schedule of drawings/documents			
Prepared by	Drawing/document No.	Revision No.	Date of Issue
ireneinc	s.40T Combined Planning Permit & Scheme Amendment Submission	--	April 2022
JSA	Project: 17E99-118 Sheets: C00, N01 to N03, C01 to C06.	A	25/10/2023
JSA	Water Supply Design Report	--	30/05/2024
Conditions			
Pursuant to the <i>Water and Sewerage Industry Act 2008 (TAS)</i> Section 56P(1) TasWater makes the following submission(s):			
1. TasWater does not object to the draft amendment to the planning scheme has no formal comments for the Tasmanian Planning Commission in relation to this matter and does not require to be notified of nor attend any subsequent hearings.			
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 connections and sewerage system and connections to the development 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 /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. Prior to applying for a Certificate for Certifiable Works & Engineering Design Approval, the developer must physically locate all existing infrastructure to provide sufficient information for accurate design and physical works to be undertaken.
Advice: Refer to advice section below for additional details and comments around the bulk water mains.
5. Plans submitted with the application for Certificate(s) for Certifiable Work (Building and/or Plumbing) & Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.
6. Prior to applying for a Permit to Construct 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.
7. 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.
8. Prior to undertaking any works related to water and sewerage, physical markers must be in place that clearly identify where water and/or sewer connections are to be made in accordance with any approved plan to TasWater's satisfaction.
9. 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.
10. 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 and are to be constructed at the expense of the developer to the satisfaction of TasWater, with live connections performed by TasWater.
11. 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.
12. 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.
13. 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.

14. The developer must take all precautions to protect the 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.
15. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater.
16. 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 the 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.

EASEMENTS & ENDORSEMENTS

17. 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 and requirements.
18. Prior to the issue of a Certificate of Water & Sewerage Compliance (Building and or Plumbing) / Certificate of Practical Completion from TasWater, the applicant must submit a copy of the completed Transfer for the provision of a Pipeline and Services Easement(s) to cover existing/proposed TasWater infrastructure as required by condition 17. All costs and expenses related to the transfer of easement(s)/lots to TasWater are to be paid by the developer.

DEVELOPMENT ASSESSMENT FEES

19. The applicant or landowner as the case may be, must pay a development assessment fee of \$1,263.70 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.

Advice

Existing Infrastructure & Asset Creation

Prior to completing the detailed engineering design;

- a. The DN100 water main (id: A248221) should be site investigated and TasWater consulted as to its future requirement. As there may be an opportunity to remove this connection and not be reinstated/realigned. At the time of writing this, the connection point has been proposed to have a hydrant placed as flushing point (painted black) and used as a scour valve at the connection to the bulk main and DN100 line abandoned. Consideration to be given so this flushing point gets directed to stormwater and other remedial works that may be required.
- b. Water pits (ID A248612, A248613, A248614) on the DN495 bulk main must be site investigated and locations confirmed with all access, drains, sours, and discharge locations that may be required for continued operation must addressed appropriately.
- c. Other considerations relating to the bulk main. Prior to detailed design the bulk main should be accurately located and pot-holed. TasWater should present be given the opportunity to view the condition of the bulk main once uncovered. It is likely that bands would be required to be placed on joints to provide security for any leaks around joints, particularly in the in trafficable zones. As

well and detailed plans and long section will be required showing the levels and supporting information confirming all landscaping in the zones of the bulk mains.

Water

Modelling indicates there is capacity in the existing network at Piper Road (pipe A248225 and pipe A248538) to supply this proposed development without impacting adversely on the existing infrastructure or customers. Total boundary heads (HGL), not pressures, at the proposed connection point(s) are:

Location	H.G.L. Peak hour	H.G.L Peak day + 10 l/s fire flow
A248225 and A248538	103	103

These are heads within the Taswater network, so they do not account for losses in customer piping and fittings. This is a result from modelling of the conditions in question and those who use this information should allow an appropriate margin of error in their design.

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>

Water Submetering

As of July 1 2022, TasWater's Sub-Metering Policy no longer permits TasWater sub-meters to be installed for new developments. Please ensure plans submitted with the application for Certificate(s) for Certifiable Work (Building and/or Plumbing) reflect this. For clarity, TasWater does not object to private sub-metering arrangements. Further information is available on our website (www.taswater.com.au) within our Sub-Metering Policy and Water Metering Guidelines.

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 permit is required to work within TasWater's easements or in the vicinity of its infrastructure. Further information can be obtained from TasWater.
- TasWater has listed a number of service providers who can provide asset detection and location services should you require it. Visit <https://www.taswater.com.au/building-and-development/service-locations> for a list of companies.
- Sewer drainage plans or Inspection Openings (IO) for residential properties are available from your local council.

Declaration

The drawings/documents and conditions stated above constitute TasWater's Submission to Planning Authority Notice.

TasWater Contact Details

Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au

CLARENCE LIFESTYLE VILLAGE
S.40T APPLICATION



CLARENCE LIFESTYLE VILLAGE

s.40T Combined Planning Permit & Scheme Amendment Submission

Last Updated – March 2026

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ireneinc PLANNING & URBAN DESIGN

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1. INTRODUCTION

Ireneinc Planning and Urban Design has been engaged by the Clarence Lifestyle Village, to prepare a request for an S40T application for the sites at 1 Pipers Road and 647 East Derwent Highway. The report is divided into two parts.

Part A deals with the proposed amendment to the Planning Scheme including the strategic background and consideration against the requirements of LUPAA and State Policies.

Part B deals with the proposed development, which will be assessed as though the requested amendments have been approved. The following documents accompany the application:

- Particular Purpose Zone provisions
- Civil & Hydraulic Engineering Documentation
- Stormwater Design Report (JSA) and Hydraulic Design Report (Flussig)
- Bushfire Hazard Management Plan & Evacuation Plan
- Traffic Impact Assessment & addendum
- Acoustic Assessment
- Concept Landscape Plan
- Dwelling plans, Indicative layout and Lot consolidation plan
- Flood Hazard Report; and
- Letters of support from village residents

1.1 BACKGROUND

The Clarence Lifestyle Village was originally approved on 28th June, 2010 under the former *Clarence Planning Scheme 2007 (CPS 2007)*. In 2015, the Clarence Interim Planning Scheme came into effect that resulted in the land being zoned Rural Living. As a result, community living use became a prohibited use.

To rectify this and allow for future expansion, a combined planning scheme amendment, consisting of a Specific Area Plan and accompanying development application was submitted in 2019. The amendment sought to implement site-specific use and development standards to cater for the established development and facilitate the proposed expansion of the village. Under that proposal, the underlying Rural Living zoning was to be retained.

As part of Council's assessment of the proposal, the following shortfalls were identified:

1. The amendment/SAP did not provide sufficient standards to provide and protect residential amenity such as privacy, overshadowing and landscaping that would normally be applicable to residential development.
2. The proposal sought unit/residential densities that would normally be provided within an urban area. However, the site was not located within an 'urban area' and fell outside of the Urban Growth Boundary.

3. The purpose of the SAP contradicted the purpose of the underlying Rural Living Zone.

As a result, Council determined that the proposed amendment was not consistent with LUPAA or the STRLUS and subsequently rejected the proposal on the 31st of August 2020. In 2023, the State Government made amendments to the Urban Growth Boundary, which now includes the site at 1 Piper Road and 647 East Derwent Highway.

1.2 SITE DESCRIPTION

1.2.1 2 Piper Road (CT 226109/1)

The existing site is located at 2 Piper Road, Geilston Bay (formerly identified as 625 East Derwent Highway) and is comprised of a 6.1ha lot, supporting the existing 'Clarence Lifestyle Village'. The existing village comprises of 111 single storey independent living units, along with associated support facilities, including:

- Clubhouse – which provides a cinema, pool tables, computer area, visiting consultant rooms (i.e. hairdresser, doctor and podiatrist, fitness instructor) and a library.
- Leisure Centre – includes heated spas, gym facility, sauna and massage room;
- Bowling green, Men's shed and Craft cottage; and
- Landscaped communal outdoor recreation areas.

1.2.2 647 East Derwent Highway (CT 115696/1)

The proposed expansion is to be sited at 647 East Derwent Highway, which is owned by the Clarence Lifestyle Village and directly adjoins the village. The property has an area of 2.6ha and currently supports a vacant dwelling and outbuilding which are to be removed. The property is currently accessed via a right-of-way over the adjoining property at 657 East Derwent Highway.

Pending approval of the scheme amendment and development application, 2 Piper Road and 647 East Derwent Highway will be consolidated into a single title. The existing right-of-way access over 657 East Derwent Highway will be expunged, with access to be provided from Pipers Road.

1.2.3 657 East Derwent Highway (CT 61125/1)

Due to a previous agreement struck between Clarence Lifestyle Village and the owner of 657 East Derwent Highway, it is proposed that 657 East Derwent Highway will be connected into the new sewer infrastructure (as this property currently relies on an on-site wastewater system).

As a result, the property at 657 East Derwent Highway forms part of the application.



Figure 1: Site location with cadastre and topographic plan. Blue area denotes the proposed expansion area, whilst the orange area denotes the existing site (source: www.theLIST.tas.gov.au © the State of Tasmania).



Figure 2: Blue area denotes the property at 657 East Derwent Highway – the red area denotes the subject site, comprising 2 Piper Road and 647 East Derwent Highway (source: www.thelist.tas.gov.au © State of Tasmania)

The proposal also includes a portion of the adjoining Highway road reservation, for the provision of infrastructure connections.

1.3 SERVICES

The site and surrounding areas are fully serviced by existing reticulated water and sewer infrastructure – however, additional upgrades will be required and undertaken by TasWater at the developers cost.

These works are detailed in section 3.3 of this report.

1.4 ADJOINING LAND USES & ZONING

The site is adjoined to the west and south by an existing Rural Living residential area, supporting dwellings on moderate to large lifestyle lots.

To the north, the site adjoins an existing caravan park which is also zoned Rural Living and further to the north, the Willows Tavern and bottle shop, which is zoned Local Business. To the east, the site adjoins the Tasman Highway with the Risdon Prison complex located on the adjacent side. This area is zoned Community Purpose.

The site is in relatively close proximity to a number of key residential growth areas within Risdon, as shown by the red and orange areas in the figure below.

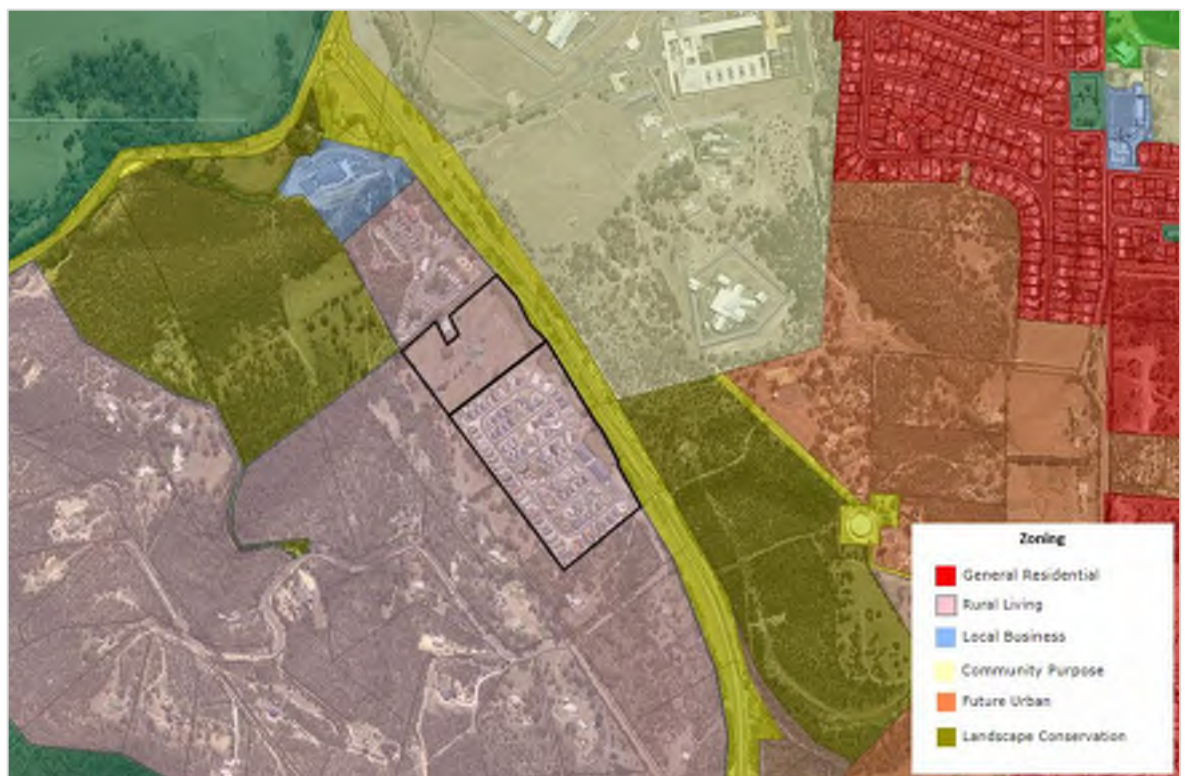


Figure 3: Land zoning in the immediate area, denoting large rural residential area (pink), local shop (blue), Risdon Prison Complex (light yellow) and nearby general residential (red), future urban (orange) and landscape conservation areas (green) (source: www.thelist.tas.gov.au © State of Tasmania)

2. EXISTING PLANNING CONTROLS

2.1 ZONING

The site is currently zoned Rural Living under the *Tasmanian Planning Scheme* and *Clarence Local Provisions Schedules*.

2.1.1 Use

The current use of the site is for residential use, which is defined as follows:

use of land for self-contained or shared living accommodation. Examples include an ancillary dwelling, boarding house, communal residence, home-based business, hostel, residential aged care home, residential college, respite centre, retirement village and single or multiple dwellings.

The use qualifications under the Rural Living zone currently restrict residential use to the following:

Rural Living Zone

11.2 – Use Table

Use Class	Qualification
No Permit Required	
Residential	If for a single dwelling.
Permitted	
Residential	If for a home-based business

Within the Rural Living Zone, Residential use other than a single dwelling or home-based business is prohibited.

In its current form, the Clarence Lifestyle Village is an existing non-conforming use and development.

2.2 CODES AND OVERLAYS

The following Codes/Overlays apply under the *Tasmanian Planning Scheme*.

2.2.1 Bushfire-Prone Areas Code

The site and surrounding area is identified as being prone to bushfire. A bushfire hazard management plan and evacuation plan were prepared for the original lifestyle village and these documents have been updated to encompass the proposed expansion.

The site is considered a vulnerable use, therefore the provisions of the Code apply and will be addressed under Part B of this report.

2.2.2 Road and Railway Assets Code

A portion of the site is covered by a road/railway attenuation area. This has been addressed within section 5.5 under Part B of this report.

2.2.3 Natural Assets Code

The Natural Assets Code seeks to protect and minimise impacts on natural assets, including vegetation, waterways and water quality. The extent of the waterway overall across the subject sites is illustrated below.

A response to the relevant Code provisions will be provided under Part B of this report.



Figure 4: Extent of the waterway/coastal protection areas across the subject sites (source: www.thelist.tas.gov.au © State of Tasmania)

2.2.4 Flood-Prone Areas Code

The site is also subject to the Flood Prone Areas Code, due to the two dams and existing drainage lines which run through the site, as illustrated below.

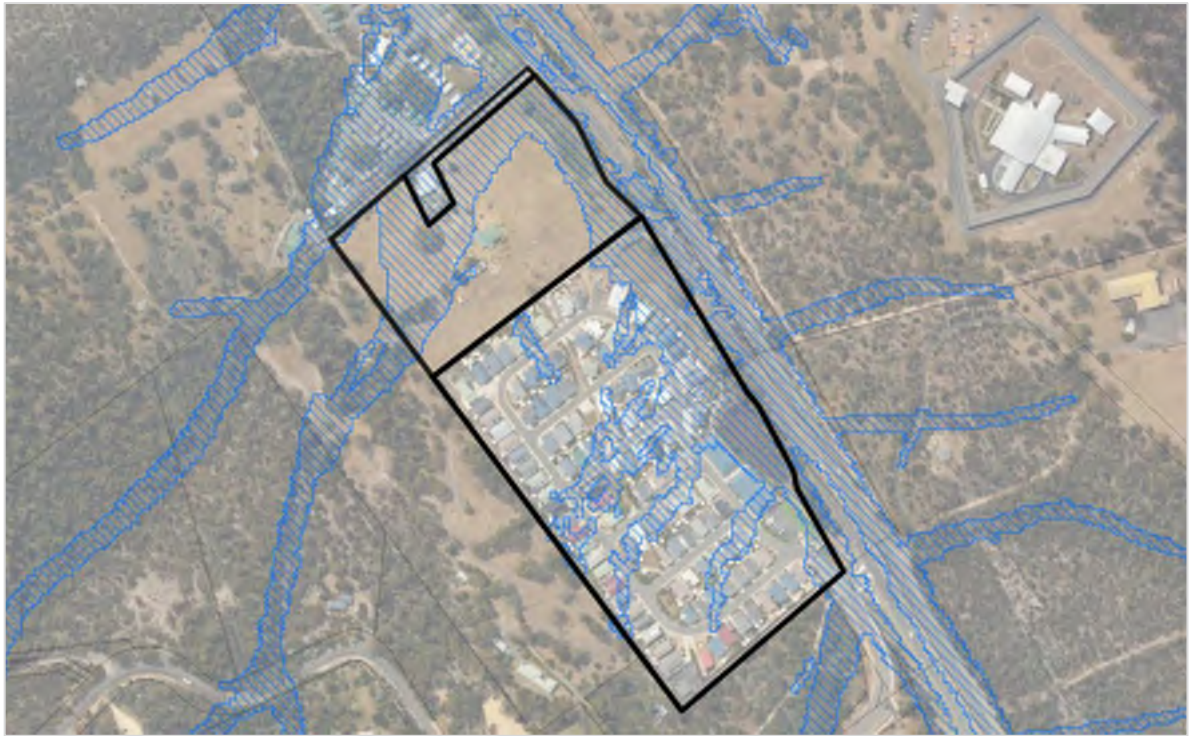


Figure 5: Extent of Flood Prone Areas across the subject sites (source: www.thelist.tas.gov.au © State of Tasmania)

The provisions of the Code will be assessed in Part B of this report.

2.2.5 Safeguarding of Airports Code

This Code controls building height to minimise conflict with aircraft utilising the Cambridge Aerodrome. The proposed development does not include any buildings which would trigger consideration under the Code.

3. S.40T OVERVIEW

The application seeks approval to amend the *Tasmanian Planning Scheme – Clarence*, to insert a new Particular Purpose Zone which is required to bring the existing lifestyle village into greater conformity with the planning scheme and to accommodate the proposed expansion.

The following outlines the various amendment mechanisms explored, along with an overview of the development application component.

3.1 AMENDMENT CONSIDERATIONS

The following options were considered to determine the most appropriate strategic/planning mechanism to facilitate the proposed development and bring the existing site/development into greater conformity with the scheme.

- Option 1 - Retain the existing zoning and apply a Specific Area Plan.
- Option 2 - Rezone the site to General Residential
 - o Including a Specific Area Plan; or
- Option 3 - Apply a Particular Purpose Zone.

3.1.1 Option 1 – Retain existing zone and apply a new SAP

This option was explored in 2022 prior to the Urban Growth Boundary amendments in April 2023.

Due to the existing Lifestyle village being a non-conforming use within the Rural Living Zone, presenting development akin to that found in urban areas, the Specific Area Plan would have been required to completely override the provisions of the underlying Rural Living Zone.

Option 1 would have constituted a significant departure from the intent of the Tasmanian Planning Scheme and had little strategic basis. As such, it was not pursued further.

3.1.2 Option 2 – Apply the General Residential Zoning

The application of the General Residential Zone is restricted to urban areas within the Urban Growth Boundary, and it is generally preferred that new residential land should adjoin existing residential land. Whilst the site is now within the Urban Growth Boundary, the closest residential land is located 543m to the east, encompassing land at Risdon Vale. This includes several large subdivisions currently under development.

There is additional residential land approximately 654m south of the site, beginning at 22 Napier Street and extending south. This area constitutes the northern most edge of Geilston Bay and has already been subdivided, with most lots now supporting dwellings. This is similarly the case to the east, with several large landholdings currently zoned Landscape Conservation, Community Purpose and Future Urban.

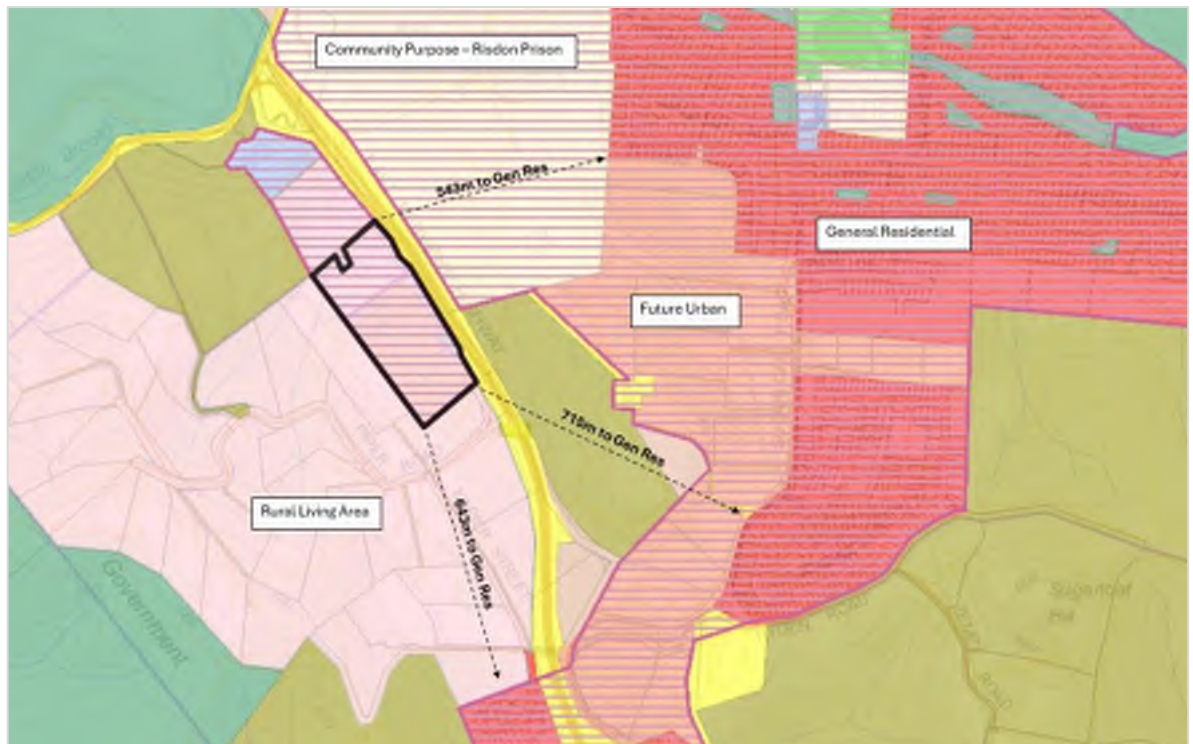


Figure 6: Site location in black. Urban Growth Boundary areas shown hatched, with current land use zoning underlay and notations (source: www.thelist.tas.gov.au © State of Tasmania)

The land between the subject site and the residential zoned land to the south in Geilston Bay was not included in the Urban Growth Boundary adjustments made in April 2023.

The Regional Land Use Strategy does provide a mechanism for residential zoning to be applied to land outside the UGB, however the land must directly adjoin land *within* the UGB. Whilst there may be opportunities to rezone smaller parcels north of 22 Napier Street to general residential and include those lots within the UGB, it is highly unlikely that a new strip of general residential zoning could be extended to join the northern edge of Geilston Bay and the subject site.

Despite the subject site being recognised as an urban area, applying the General Residential zone would create an isolated piece of general residential land which does not adjoin any existing residential land. In addition, SRD 2.12 of the Regional Land Use Strategy would then present opportunities for land outside the UGB (such as immediately adjoining Rural Living lots) to be considered for rezoning.

This would not appear consistent with SRD 1.1A, which allows more residential land to be made available, where the additional growth:

SRD 1.1A ...

- (a) supports urban consolidation or contiguous development;
- (b) does not significantly alter the intended relative growth between the settlements in the region and their proposed regional function listed in Table 3;

...

Applying the General Residential Zone to the site would constitute an ad-hoc, spot-rezoning that is inconsistent with the STRLUS and settlement strategy for Clarence, where growth is focused around Risdon Vale, Pass Road/Glebe Hill and Droughty Point.

Zone Application Guidelines:

GRZ 1 - *The General Residential Zone should be applied to the main urban residential areas within each municipal area which:*

- (a) are not targeted for higher densities (see Inner Residential Zone); and*
- (b) are connected, or intended to be connected, to a reticulated water supply service and a reticulated sewerage system.*

The Urban Growth Boundary broadly encompasses land which already supports or is intended to support urban development and is not restricted to residential. Whilst the site is now located within the UGB, it is significantly detached from existing urban residential areas in Geilston Bay and Risdon Vale and does not constitute an urban residential area.

GRZ 2 - *The General Residential Zone may be applied to green-field, brown-field or grey-field areas that have been identified for future urban residential use and development if:*

- (a) within the General Residential Zone in an interim planning scheme;*
- (b) within an equivalent zone under a section 29 planning scheme; or*
- (c) justified in accordance with the relevant regional land use strategy, or supported by more detailed local strategic analysis consistent with the relevant regional land use strategy and endorsed by the relevant council; and*
- (d) is currently connected, or the intention is for the future lots to be connected, to a reticulated water supply service and a reticulated sewerage system.*

The site may be considered consistent with the definitions which identify green-field/grey-field sites; however, it is our understanding the site and surrounding properties were included within the UGB as they represent and support existing urban development.

Whilst the site is currently connected to reticulated services, it was not previously zoned General Residential under the Interim Planning Scheme or the previous Clarence Planning Scheme 2007. The analysis provided in this report indicates the strategic merits to support the application of the General Residential zone are limited and unlikely to be supported.

GRZ 3 - *The General Residential Zone should not be applied to land that is highly constrained by hazards, natural values (i.e. threatened vegetation communities) or other impediments to developing the land consistent with the zone purpose of the General Residential Zone, except where those issues have been taken into account and appropriate management put into place during the rezoning process.*

The site is subject to overland flow and potential flooding during a 1 in 100 year ARI event. It is also subject to noise emissions from the East Derwent Highway, which is addressed via the road attenuation area overlay.

Whilst the existing development and proposed expansion have been designed to appropriately manage overland flow and 1 in 100-year ARI events, specific controls are proposed within the Particular Purpose Zone to address noise attenuation in addition to the requirements set out in the Road and Railway Assets Code.

These controls have been implemented following expert advice and via a recommendation by the Department of State Growth.

The existing development on the site and the proposed expansion are unique and the controls set out in the General Residential zone, such as dwelling density, site coverage, lot size and residential amenity are not aligned with the design and layout of the existing and proposed development on the site. In addition, the lifestyle village and proposed expansion provide for a unique type of residential development, along with existing community expectations that are a core aspect and attraction for new residents.

This requires site-specific controls to maintain the built form and character of the village (which is vital to its operation). Therefore, applying the General Residential Zone would also necessitate a Specific Area Plan to address the above, with new and overriding standards creating unnecessary complexity.

However, if the Planning Authority or the Tasmanian Planning Commission believe rezoning to General Residential is more appropriate, a review of the existing and proposed development against the provisions of the zone demonstrate compliance will all applicable standards be achieved.

3.1.3 Option 3 – Apply the Particular Purpose Zone

The proposed expansion and existing Lifestyle Village require a unique approach to ensure appropriate use/development standards are applied to maintain and enhance the existing built form, character and sense of community that is crucial to the viability of the village.

Particular Purpose Zones have been prepared and applied to similar residential retirement villages within Clarence and Brighton, which are also located within the Urban Growth Boundary and constitute urban development.

Zone Application Guidelines:

PPZ 1 - A Particular Purpose Zone (PPZ) may be applied to a particular area of land where the intended planning outcomes cannot be achieved through the application of one or more State Planning Provision zones. It may be applied to land that provides major facilities or sites which require a unique or tailored approach to both use and development standards, such as a university campus, or major hospital site.

Given the analysis above and presented within this report, applying the Particular Purpose Zone to the site is appropriate, as the existing and proposed development requires a unique/tailored approach.

A rezoning to any other zone would also require a SAP, creating an additional layer of complexity which is unnecessary.

3.2 DEVELOPMENT APPLICATION COMPONENT

The associated development application component seeks approval for the expansion of the existing Clarence Lifestyle Village, comprising of the following:

- Demolition of the existing dwelling and shed on the site at 647 East Derwent Highway
- Provision of fifty-four (54) additional dwelling sites and associated dwellings

- Internal road, sewer, water and stormwater infrastructure; and
- Connection of the existing dwelling at 657 East Derwent Highway to the proposed reticulated sewer infrastructure.



Figure 7: Proposed expansion, illustrating 54 additional dwellings and associated works (source: JSA Engineers)

3.2.1 Dwellings

Each dwelling site will provide for one of six dwelling types, each with a different floor area and layout to provide flexibility and cater for the variable needs of future/prospective residents.

All dwelling types are of a single-storey construction, pre-fabricated off-site and clad with pre-set materials to improve affordability and maintain the existing character of the village. The specification for each dwelling type is as outlined below:

Type A:

- 3 x bedroom layout. Total floor area of 100m² (14m Long x 7.2m Wide), including 5.25m² covered deck.

Type B:

- 2 x bedroom layout. Total floor area of 100m² (14m Long x 7.2m Wide), including 5.25m² covered deck.

Type C:

- 2 x bedroom layout. Total floor area of 70m² (14m Long x 5m Wide), **excluding** uncovered 14.4m² deck.

Type D:

- 2 x bedroom layout. Total floor area of 100m² (14m Long x 7.2m Wide), including 5.25m² covered deck.

Type E:

- 3 x bedroom layout. Total floor area of 115m² (14m Long x 8.2m Wide), including 7.14m² covered deck.

Type F:

- 1 x bedroom layout. Total floor area of 60m² (12m Long x 5m Wide).

All dwelling types are provided with a 6m long x 3.6m wide carport, plus provision for a 3m x 2.25m garden shed. Dedicated visitor parking is also provided throughout the village. Please refer to the accompanying documentation for a copy of the dwelling floor plans and standard elevations.

The Type B and D layouts will be the most common, providing a two-bed variable layout – as indicated on the indicative dwelling layout plan.

Typical elevations for the Type C dwellings are included in the submitted plan set and reproduced below. These elevations are reflective of all six dwelling types, with minor variations to floor layouts.



Figure 8: Typical elevations across each dwelling type (source: Dwelling Plans, Clarence Lifestyle Village)

3.2.2 Communal Services / Facilities

The existing communal facilities within the Lifestyle Village were constructed to account for future resident demand and are sufficient to cater for the projected increase in residents.

These facilities include:

- A cinema room and library

- Men's Shed & Women's Shed
 - o Providing equipment/facilities for art/crafts, pottery, woodwork etc.
- 2 x Saunas and 15 x spas pools
- A bowling green
- Communal open space, gardens and walking tracks

Additional services provided include:

- a regular shuttle bus service to shopping precincts at Rosny Park and/or Glenorchy and trips to outer areas on occasion; and
- Scheduled on-site visits by a local GP and Hairdresser.

The proposal also includes an extension of the existing landscape buffer between the existing village and the East Derwent Highway. This will be designed to account for the water sensitive urban design and on-site retention areas outlined in the accompanying flood/overland flow assessment and stormwater design.

The proposed amendment will ensure the full utilisation of existing infrastructure and facilities on the site which is already well established by the existing Lifestyle Village.

3.2.3 Lot Consolidation

647 East Derwent Highway (expansion site) will be consolidated with 2 Piper Road (existing village) to form a single title.

This requires the following benefitting and burdening easements to be removed from the expansion site and adjoining property at 657 East Derwent Highway:

- Drainage easement over 647 East Derwent highway (benefitting 657 East Derwent Highway).
 - o As stated in section 1.2.3 and 1.2.4 of this report, 657 East Derwent Highway will be provided with a gravity sewer connection to the reticulated network, removing the need for the current drainage easement.
- Right-of-way (benefitting 647 East Derwent Highway) over the access strip forming part of 657 East Derwent Highway.
 - o Expunging this easement was stipulated by Department of State Growth, to ensure only one vehicle access to the highway is provided per lot.

A new easement will be required in the north-eastern corner of the subject site, to accommodate a new water pipe (as shown on the accompanying civil plans).

The above requirements are shown on the accompanying concept subdivision plan (consolidation). A final plan of subdivision and associated survey will be completed and submitted to Council for approval, prior to the issue of any subsequent building approvals.

3.3 PROPOSED INFRASTRUCTURE

The proposed development will require the following upgrades to service the site.

- New DN100 SN10 Lot Connection by TasWater at developers cost;

- New DN1050 Maintenance Hole and pipe by TasWater and developer's cost – this will connect into a new DN150 uPVC SN8 sewer lot connection within the subject site.

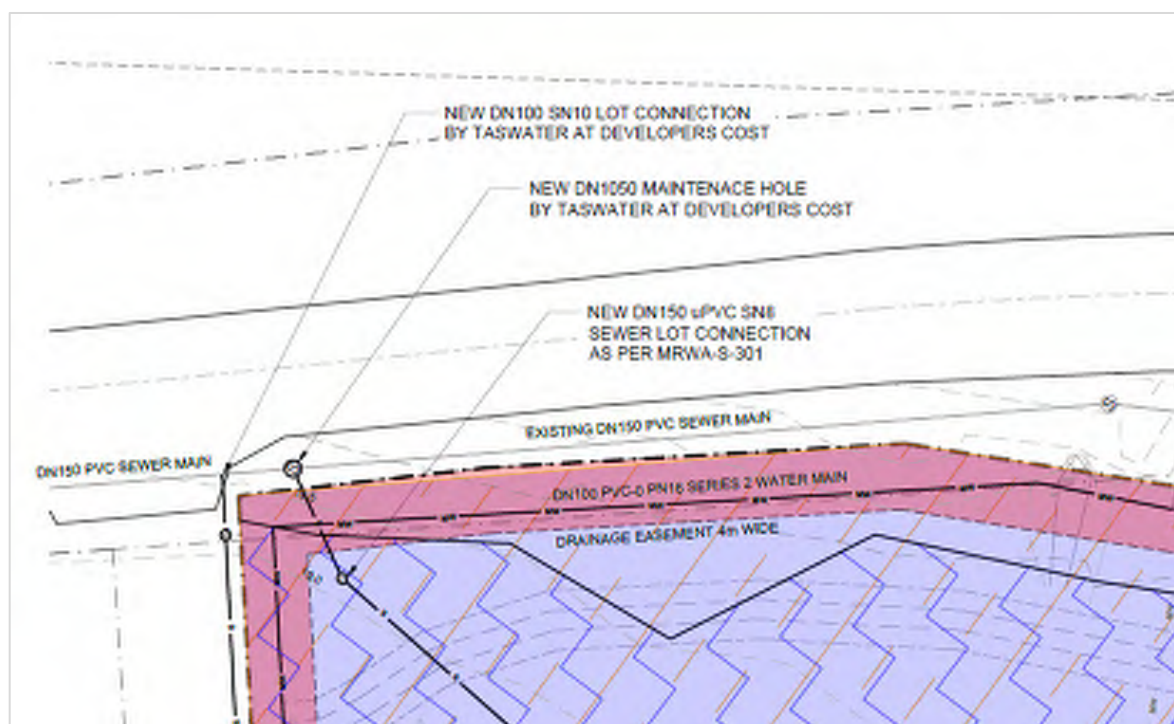


Figure 9: Proposed service infrastructure – indicating works within the road reserve (source: JSA Consulting Engineers)

Consent from the Department of State Growth was granted and forms part of the submission.

3.3.1 Initial Stormwater Design

The application is accompanied by the following reports, which address stormwater design/management (including overland flow and on-site detention).

- **Stormwater Design Proposal report (JSA) – 2023; and**
- **17E99-118 – C - Civil & Hydraulic Plans (JSA) - 2024**

The report was prepared in 2023 to detail the proposed stormwater management system shown in the accompanying civil plans. The plans have a more recent revision date, due to minor adjustments required to the site layout in response to various RFI's received from Council.

The stormwater system detailed in the report and shown on the plans is comprised of the following components:

Swale drains

- To manage potential overland flow entering the property from the south-west, a swale drain is proposed along the south-western boundary. From here, stormwater is directed via inlet headwalls to the proposed underground piped system.

Underground pipe system

- A conventional pipe system is proposed beneath the private internal access/road network, capturing and directing water to the proposed bio-retention / detention basins along the north-eastern side of the property.
 - o The pipe system is sized to accommodate runoff from a 5% AEP storm event. The layout of the dwelling sites and access/road network has been designed to allow for overland flow in the event the pipes do not have sufficient capacity (due to blockage or major storm event).

Detention basins

- Two (2) x detention basins are proposed along the north-eastern side of the property, to accommodate a 5% AEP event.

3.3.2 Altered Design

Following revisions to Clarence City Council's flood maps in 2024, the overland flow path from the south-west of the site (which previously terminated at the boundary) was expanded, and now implicated a larger portion of the site.

This also meant an expansion of the Flood Prone Hazard Areas Code, which previously only applied to the north-eastern portion of the site. The Department of State Growth also required this to be addressed (to minimise potential impact to the highway), prior to issuing Crown landowner consent.

Although minor updates to the JSA documentation were completed to acknowledge the revised mapping (including adjustments to the site layout), JSA did not have capacity at the time to complete updates to the stormwater system design (due to a business restructure).

To address these implications and ensure the system was sufficiently designed to cater for the increase and reduce post-development discharge, Flussig Engineers were engaged to prepare the following additional report.

- **Hydraulic Design Report (Flussig Engineers) – 2024**

The report undertook a review of the JSA Stormwater Design Report and proposed civil plans, and identified adjustments required to enable the system to accommodate the additional overland flow and limit post-development discharge.

Upon completion of the review and additional modelling, the Flussig report made the following recommendation:

- That both detention basins should be increased in depth by 0.2m (for a total depth of 0.9m), to increase overall detention volume to accommodate the development and additional overland flow during a 1% AEP event.

Appendix A of Flussig's report includes an updated detention basin design, which confirms the following:

- Basin 1 will have a total volume of 292m³, providing 146m³ of detention.
- Basin 2 will have a total volume of 265m³, providing 133m³ of detention

These adjustments will provide a total detention volume of approximately 557m³, which has been accepted as sufficient to manage overland flow.

Advice received from Council - 2025:

Council have subsequently advised that the initial bio-retention component of the stormwater system proposed by JSA cannot be accepted, as the system:

- *Does not include pre-treatment devices; and*
- *Is designed as an 'online' basin.*

As such, it is accepted that the basins will provide detention only and that Council will impose a cash-in-lieu contribution toward quality and treatment.

3.3.3 Food Management

Following the revisions to Clarence City Council's flood maps, the Code was also revised and applies to a section of the site that was previously unimpacted. The following Flood Hazard Assessment was prepared to address the provisions of the Flood Prone Hazard Areas Code.

- **Flood Hazard Assessment Report (Rare.) – 2025.**

The report addresses the revised Council flood mapping, the additional overland flow path from the south-west and the applicable provisions of the *C12.0 - Flood-Prone Hazard Areas Code*.

Part A

4. PROPOSED AMENDMENT

4.1 PURPOSE AND INTENT

The purpose of the amendment is to bring the existing lifestyle village operations into greater conformity with the planning scheme and facilitate the proposed expansion of the village.

To achieve this, the amendment seeks to modify the *Tasmanian Planning Scheme*, specifically the *Clarence Local Provisions Schedules*, to rezone the site from Rural Living to Particular Purpose – Clarence Lifestyle Village.

The site, existing development and proposed expansion require a unique approach to ensure appropriate use/development standards are provided to cater for the existing development on the site.

This is consistent with the approach taken for similar lifestyle/retirement villages such as the Fairway Rise and Springvale developments located along Gordons Hill Road, and the St. Anne's Retirement Living development in Bridgewater. The above facilities are all located within the urban growth boundary.

Ultimately, the intent of the proposed amendment is:

- (a) To provide for the existing Clarence Lifestyle Village located at 2 Piper Road and 647 East Derwent Highway;
- (b) To provide convenient access to communal facilities that encourage social and recreational opportunities for residents.
- (c) To promote consistency in the siting of dwellings throughout the Lifestyle Village.

4.2 PROVISIONS AND RATIONALE

The following briefly outlines the basis for the core provisions proposed as part of the PPZ.

CLA – P4.7.1 - Building Height

Standards for building height are a core element of all zones within the TPS. The proposed height standard reflects the consistent one-storey built form and character of the village and seeks to retain that character by limiting the height of dwellings and communal buildings to:

- no more than 5m, for dwellings; and
- no more than 6.5m, for communal buildings.

This will be imposed through the performance criteria, with no acceptable solution. The reason for this is to provide certainty of compliance in the absence of separate elevations for every dwelling site / type configuration.

These heights provide flexibility to accommodate on-site variations including slope/gradient and overland flow, whilst ensuring the height and character of all proposed dwellings remain consistent with the character of the village.

Several acceptable solutions are also included under this standard, to provide a permitted pathway for outbuildings (e.g. garden sheds, carports etc) not otherwise exempt and for alterations / extensions to existing buildings.

CLA – P4.7.2 - Siting and Setbacks

Clause P4.7.2 requires development to be sited in accordance with the overall site plan, as identified in Figure CLA P4.9 within the PPZ. The purpose is to ensure that dwellings and communal facilities are sited in a manner which maintains residential amenity, promotes efficient functionality of the village and retains the character of the village which enhances the tight-knit community which is a significant drawcard for prospective residents and key element for existing residents.

The overall site plan specifies the location and size of each dwelling site, internal roads and communal buildings/facilities. The performance criteria does allow for variations to the layout, provided the dwelling site areas are not reduced below the minimum and that no dwellings are sited closer to the East Derwent Highway than that currently shown on the overall site plan.

Setbacks from the property boundaries are also imposed, to maintain consistent separation from adjoining properties and ensure compliance with the bushfire hazard management plan. Setbacks from dwellings to dwelling site boundaries are also provided to maintain consistency in the siting across the site. Each dwelling is allocated a parcel of land for the exclusive use of the occupants via a rental lease arrangement.

CLA – P4.7.3 - Design

The design clause provides several standards to control density, the gross floor area of communal buildings and specific requirements to address noise attenuation for dwellings located within 50m of the East Derwent Highway.

During Council's assessment of the original application, the proposed density was raised as an issue due to the similarities to that found within general and inner residential zones. As a result, Council's view was that the proposal should be located within an urban area. This issue has now been addressed through the inclusion of the site within the Urban Growth Boundary.

As outlined in this report, the proposal requires tailored controls that address the design of the existing lifestyle village as well the proposed expansion. The provision of the Particular Purpose Zone acknowledges this type of residential development and is consistent with the approach for similar developments which have utilised Particular Purpose Zones.

CLA – P4.7.4 - Privacy & Private Open Space

A requirement for private open space has been implemented into the PPZ. The provision requires an area of at least 24m² for each dwelling. This ensures the design and siting of each dwelling type provides and maintains appropriate private open space.

Additional standards include an acceptable solution and performance criteria to control privacy, specifying minimum separation distances from windows to habitable rooms where finished floor levels exceed 1m above existing ground level. The provision is adapted from the General Residential Zone, providing additional controls to ensure appropriate levels of privacy and amenity are maintained.

CLA – P4.7.5 - Landscaping

The purpose of this provision is to ensure appropriate landscaping is provided along the frontage of the site to the East Derwent Highway. The acceptable solution specifies a minimum depth of 10m, and a requirement to include a variety of plant types and sizes.

The performance criteria allows discretion, provided the landscaping treatment is sufficient to:

- Enhance the visual qualities of the site
- Provide reasonable screening from the East Derwent Highway, and include a variety of plant types and sizes
- Take into account any advice from a suitably qualified person; and
- Have a depth of no less than 5m.

An indicative concept landscaping plan has been submitted with the application. However, it is expected a condition will be imposed requiring a detailed landscaping plan, prepared by a suitably qualified person, to be submitted for approval.

CLA – P4.7.6 - Waste Storage

A clause has been included to control the provision and location of waste storage on the site. The existing dwellings on the site have individual waste and recycling bins, which are serviced from the kerbside.

Whilst this arrangement will continue, the acceptable solution provides flexibility for the village operator to provide a communal bin storage area if required.

CLA – P4.7.6 - Noise

The provision of habitable buildings within 50m of a State highway or major road are subject to the road and railway attenuation area, forming part of the Road and Railway Assets Code.

The applicable provisions require habitable buildings to be sited within a row of existing habitable buildings and be sited no closer to the road or railway. Alternatively, the habitable buildings must be designed so that external noise levels are not more than the levels in Table C3.2.

However, habitable buildings located just beyond the buffer are not subject to the Code, despite the possibility of experiencing similar levels of noise.

This was raised by the Department of State Growth as part of the landowner consent process. It was suggested the buffer should be expanded, to accommodate a greater area. However, DSG

were advised that this would require changes to the SPPs and corresponding Local Provisions Schedules which is outside the scope of this application.

Whilst the accompanying acoustic report confirms the proposed dwelling sites and types located within the buffer can comply with the Code requirements, an additional standard has been drafted in the PPZ. The purpose of this standard is to expand the Code provisions via the PPZ, to ensure appropriate noise mitigation measures are adopted for all new habitable buildings within the village.

CLA – P4.8.1 - Lot Design

The operator has confirmed there is no current or future intentions to subdivide the site. However, a Particular Purpose Zone must provide a format that includes standards consistent with those within other zones. Subdivision within the PPZ is restricted to consolidation only, unless for public use by the Crown, a Council or Statutory authority, or for the provision of Utilities.

General requirements for the provision of vehicular access to a road is also accommodated.

CLA - P4.8.2 – Services

Provisions requiring any lot to be connected to reticulated water and sewer infrastructure are a standard requirement for any Particular Purpose Zone and have been included.

This standard also includes consideration of stormwater, requiring a connection to public infrastructure or appropriate on-site detention and management.

4.3 FORMAT OF THE AMENDMENT

The following changes are proposed to the *Tasmanian Planning Scheme – Clarence*, to implement the proposed Particular Purpose Zone.

4.3.1 Ordinance

Implement the Particular Purpose Zone - Clarence Lifestyle Village, with numbering to correspond with the Local Provisions Schedule.

4.3.2 Mapping

Amend the current zone mapping, as follows:

- Rezone CT 226109/1 and CT 115696/1 from Rural Living to Particular Purpose – Clarence Lifestyle Village, as illustrated in the figure below.

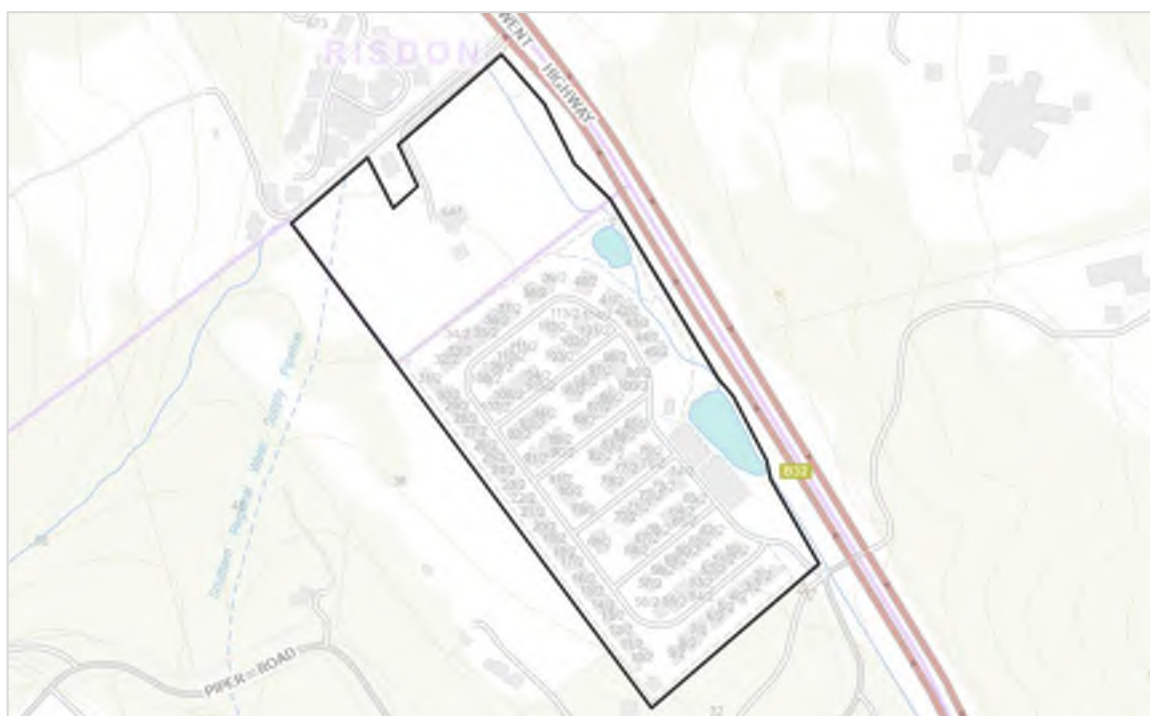


Figure 10: Area to form part of Particular Purpose Zone (source: www.thelist.tas.gov.au © State of Tasmania)

5. STRATEGIC ANALYSIS

The following is an assessment of the strategic documents that are relevant to the future use of the subject land. The *Southern Tasmania Regional Land Use Strategy 2010-2035* (amended 2023, STRLUS) is the key strategic document.

5.1 SOUTHERN TASMANIA REGIONAL LAND USE STRATEGY

The STRLUS provides a broad policy framework to manage change and facilitate growth in Southern Tasmania over the next 25 years. The document provides in-depth strategic policies, directions and actions to guide economic, social and cultural growth throughout the southern region. The following strategic directions are particularly relevant to the proposed use of the building on the site.

The following is relevant given the nature of the site and surrounding rural residential areas.

SD10 – Creating Liveable Communities

Liveability refers to the degree to which a place supports quality of life, health and wellbeing for the people who live, work or visit. While it can depend upon individual circumstances, liveable environments are generally characterised by areas which are attractive, safe, accessible to people with disabilities and provide a high standard of amenity through such things as public transport, well designed open spaces, access to education and health services, recreational opportunities, air and water quality. The unique identity of a community defined by cultural development, landmarks, urban design, the developing local economy and the natural landscape are also important to how liveable a place is.

Ensuring that our land use planning responses contribute to making the region ‘liveable’ will be a key competitive strength for Southern Tasmania into the future in increasing migration, visitation, trade and investment.¹

The strategic directions provide the overarching guidance, whilst the following regional policies provide further detailed guidance on implementation.

5.1.1 Managing Risks and Hazards

The site is within a bushfire prone area, with sections also subject to overland flow.

MRH 1.1 - Provide for the management and mitigation of bushfire risk at the earliest possible stage of the land use planning process (rezoning or if no rezoning required; subdivision) by the identification and protection (in perpetuity) of buffer distances or through the design and layout of lots.

MRH 1.2 - Subdivision road layout designs are to provide for safe exit points in areas subject to bushfire hazard.

The proposed amendment and development application is accompanied by a bushfire hazard management plan and evacuation plan, which implements requirements for hazard management areas and assesses the layout of the site.

MRH 2.1 - Provide for the mitigation of flooding risk at the earliest possible stage of the land use planning process (rezoning or if no rezoning required; subdivision) by avoiding locating sensitive uses in flood prone areas.

¹ STRLUS 2010-2035 (revised 2023, p: 20)

MRH 2.2 - Include provisions in the planning scheme for use and development in flood prone areas based upon best practice in order to manage residual risk.

The flood prone areas mapping was modified within the Clarence LGA in 2021 and now encompasses a wider area across the site. However, the mapping does not strictly follow waterways. The accompanying documentation confirms the proposed layout is able to reasonably accommodate stormwater and overland flow/flooding during 5% and 1% AEP events.

All dwellings have been sited outside the primary flood area along the north-eastern boundary, and those within the overland flow path from the south-west will have raised floor levels, above the max. defined flow height of 0.2m.

Please refer to the accompanying civil plans and reports for further detail.

5.1.2 Activity Centres

With regard to Strategic Direction 3, Activity Centres serve as focus areas for services, employment and social interaction in towns and cities, whilst also functioning as primary retail and commercial centres. These centres also serve as community meeting places, centres for government and community services, locations for education and employment as well as entertainment and recreation.

The STRLUS identifies Activity Centres within the following hierarchy, beginning with:

- Primary Activity Centres - such as greater Hobart and Launceston;
- Principal Activity Centres - such as Rosny Park, Kingston and Central Glenorchy;
- Major Activity Centres;
- Rural Services Centre;
- Minor or Neighbourhood Centre;
- Local Centres; and
- Specialist Centres²

Rosny Park and Glenorchy are both identified as Principal Activity Centres, with Moonah identified as a Major Activity Centre which provides a range of services and facilities (including offices for business and government) to serve the surrounding area with a substantial focus on commercial and retail sectors.

The subject site sits between Rosny Park and Glenorchy and is accessible by car.

However, the Clarence Lifestyle Village is a unique retirement village, in that it provides an array of services on site for residents, reducing reliance on services/facilities within the abovementioned activity centres.

These services include a weekly hair-dresser who provides services for residents within the main community building. In addition, there is a weekly consultant doctor who attends the site, as well as a massage therapist.

² STRLUS 2010-2035 (revised 2023, p: 74-76)

The village also provides swimming and sauna/spa facilities, along with other recreational spaces and activities. There is a weekly shuttle bus service, which drops and picks-up residents in Rosny Park or Glenorchy if they choose not to drive or for those that do not have access to transportation.

The availability of grocery deliveries offered by Woolworths and Coles ensures that residents are able to receive groceries and other goods without having to travel. The proposed increase in units and residents on the site will likely result in an increased offering of services on the site, through similar arrangements to those outlined above.

Ultimately, this ensures that existing and future residents are not solely reliant on access or proximity to identified activity centres.

The following relevant regional policies directly relate to Strategic Direction 3 with regard to Activity Centres.

***AC1** - Focus employment, retail and commercial uses, community services and opportunities for social interaction in well-planned, vibrant and accessible regional activity centres that are provided with a high level of amenity and with good transport links with residential areas.*

***AC1.4** - Promote a greater emphasis on the role of activity centres, particularly neighbourhood and local activity centres, in revitalising and strengthening the local community.*

The existing and proposed Lifestyle Village emulates much of the same functions/services and facilities provided within an activity centre, but at a macro level.

***AC1.8** - Encourage new development and redevelopment in established urban areas to reinforce the strengths and individual character of the urban area in which the development occurs.³*

Whilst the site is located on the outer fringes of established urban areas, the Clarence Lifestyle Village is already well established and forms part of the individual character of the area, which supports a number of different land uses.

Given that the proposal is for an expansion of the existing lifestyle village, the proposed amendment and associated development application will reinforce the strengths and varied character of the surrounding area.

The following figure from the STRLUS indicates the activity centres in greater Hobart and surrounding areas, including the overlap between these areas ensuring ease of access to key services, employment, community services and recreation.

³ STRLUS 2010-2035 (amended 2023, p: A 21)

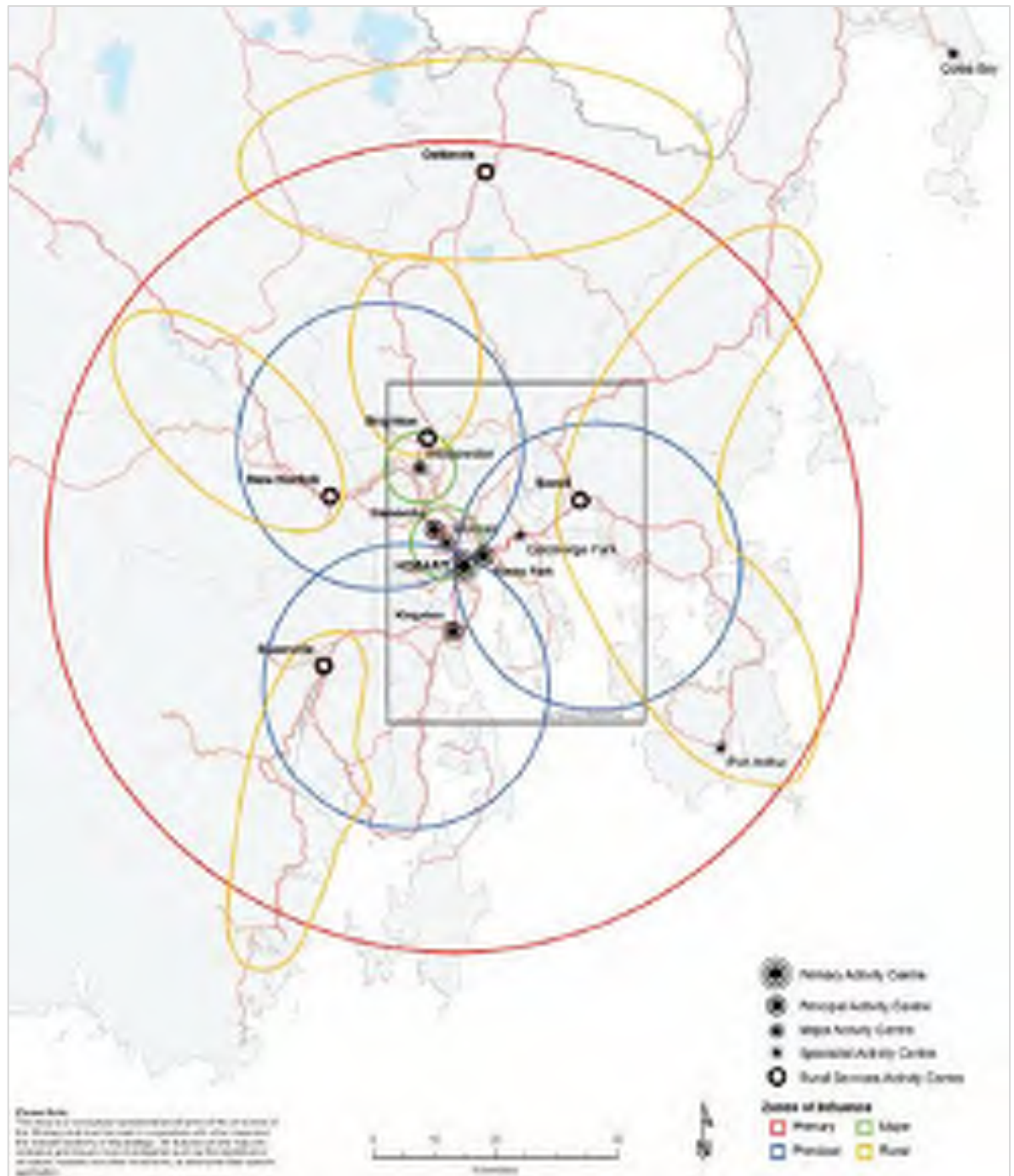


Figure 11: Activity centre network (source: STRLUS 2010-2035, p: 83)

5.1.3 Land Use and Transport Integration

Strategic Direction 10 relates directly to regional policy 13 which outlines the importance of improved integration of transport and land use planning within urban areas.

For example, the spatial distribution between locations where people live in relation to places for employment and shopping is a significant determining factor in transport demand and provision of infrastructure.

The STRLUS states that:

Improved integration of transport and land use planning is both a major challenge and critical factor in the development of efficient and liveable urban areas and becoming a more environmentally sustainable community in the face of a changing climate.⁴

Activity Centres, such as Rosny Park (as detailed above) ensure that key services and amenities are located in a central area where multiple activities are catered for in one location, minimising the need for additional and potentially unnecessary travel time, thereby reducing demand on existing public transport and infrastructure. Whilst proximity to activity centres is important for most residential areas/communities, retirement villages are unique in that many services and facilities that residents require are provided either on-site, or via ongoing services provided to residents within the community (i.e. grocery deliveries, shuttle bus service, visiting GPs, barbers, physios etc). This ensures that residential retirement villages, whether within established residential areas or not, provide appropriate connectivity for residents.

For those residents that do not rely on private vehicle use, the village operates a weekly shuttle bus providing access to shops and service areas (Rosny Park and Glenorchy). Residents also have access to Community Transport Services Tasmania, which is a state-wide community based not-for-profit organisation that provides affordable door-to-door community transport for people over 65. The service already provides transport options to and from the Lifestyle Village, supported by access to mobile doctors and other taxi/uber services which ensure the key daily and weekly needs of residents are reasonably accessible.

The operator has confirmed that use of public transport by current and former residents is limited, given the general demographic of the village and the services provided by the village, in addition to private/family vehicle use.

Notwithstanding, earlier iterations of the proposed amendment included a pedestrian pathway, beginning at the north-eastern corner of the site and extending approximately 235m to the Willows Tavern at 691 East Derwent Highway. The Department of State Growth suggested any such a link should consider access to the existing bus stops on each side of the highway.

The proposed route would have required works within the adjoining Holiday Park and preliminary discussions with the owner/operator at the time indicated detailed plans, ongoing management responsibilities and associated legal/liability issues would need to be determined and provided before further consideration could be given. Even if were provided and extended to the Piper Road junction, the site and immediately adjoining properties are somewhat isolated from denser residential/urban areas. Therefore, the pathway would only service a limited number of private properties, and the overall public benefit would appear limited.

Any such pathway would constitute public infrastructure and tying it directly to this application would significantly expand the scope and complexity. Given the proposed application does not rely upon this infrastructure, it has not been included.

Notwithstanding the above, the client/operator of the village has confirmed they are willing to provide a financial contribution toward the construction of the pedestrian footpath. It is understood this may be a condition of approval and would assist in addressing pedestrian connectivity and promote use of the existing public transport network.

⁴ STRLUS 2010-2035 (revised 2023, p: A-15)

If approved, the proposed expansion will ultimately consolidate the use/development and bring the use/development into greater conformity with the scheme, given that it is currently a non-conforming/prohibited use.

5.1.4 Settlement and Residential Development

The residential growth strategy identified within the STRLUS for greater Hobart is managed by the Urban Growth Boundary (UGB). The extent of the UGB accounts for a 20-year supply of residential land, including densification areas, consolidation and greenfield sites.

The proposed expansion of the existing lifestyle village falls within the residential use classification. Generally, residential use/development is provided within the following zones which control residential density and urban expansion:

- Inner Residential Zone;
- General Residential Zone; and
- Low-Density Residential Zone.

These zones are generally applied in descending order, with higher densities encouraged within the Inner Residential Zone, with the density decreasing as urban development moves away from established urban areas.

A key factor in Clarence City Council's original refusal of the proposed expansion, was that the type of development and the density proposed was akin to that found within an Inner or General Residential Zone. The application of these zones are generally restricted to areas within the established extent of the Urban Growth Boundary.

As a result of a recent amendment to the Urban Growth Boundary (April 2023), the site and surrounding land is now within the extent of the UGB.

Whilst the application of the General Residential Zone was considered, the site does not adjoin any existing General Residential areas and the existing/proposed density is below the minimum required within that zone. Retirement living is a unique residential use, in that it provides for a specific demographic who seek and often require on-site communal support and recreation facilities and therefore requires a specific approach.

SRD 2.9 - Encourage a greater mix of residential dwelling types across the area with a particular focus on dwelling types that will provide for demographic change including an ageing population.⁵

As outlined above, the land contained within the Urban Growth Boundary caters for a broader type and range of residential use and development, including (1, 2, 3 and 4 bedroom) single and multiple dwellings and small to moderate lots, which also attract a much broader demographic profile (i.e. young couples, families with or without children etc).

Tasmania supports the oldest population in Australia. The following table provides data from the ABS between 2016 and 2021 outlining population levels and percentages of those aged between 55 and 85+.

⁵ STRLUS 2010-2035 (revised 2023, p: A-27)

Whilst there appears to have been a drop in the number of people aged 55-59 in Tasmania between 2016 and 2021, the percentage of those aged between 65 and 85+ increased to 20.9% in 2021 compared with 19.5% in 2016.

The national average in 2021 was 17.2%.

Age <i>All people</i>	Tasmania 2021	%	Tasmania 2016	%	Australia 2021	%
55-59	36,993	6.6	37,383	7.3	1,541,911	6.1
65-69	35,137	6.3	32,946	6.5	1,298,460	5.1
70-74	31,856	5.7	24,433	4.8	1,160,768	4.6
75-79	22,029	4.0	17,610	3.5	821,920	3.2
80-84	14,617	2.6	11,992	2.4	554,598	2.2
85 +	12,995	2.3	11,762	2.3	542,342	2.1
		20.9% total		19.5% total		17.2% total

Table 1: Data extracted from ABS Census data 2016-2021 for Tasmania.

This trend appears consistent with previous predictions, indicating Tasmania's population is ageing faster than the Australian average.⁶

It is well known that an ageing population increases demand for residential support services and retirement living opportunities as people look to downsize.

The *Strong Liveable Communities: Tasmania's Active Ageing Plan 2017-2022*, outlines the concept of active ageing, which seeks to encourage and promote continued belonging, involvement, learning and purpose as people age.⁷

As a result, many older Tasmanian's are looking for smaller, alternative living arrangements where their needs can be met in a consolidated location, along with the added benefit of community and social support provided by existing and future residents.

Discussions with existing residents of the Clarence Lifestyle Village indicate how important these concepts are for ageing in place and that the facilities and overall sense of community provided within the village is unique and is not easily found in other facilities in Southern Tasmania. In their opinion, the growth of the village will enhance the sense of community that has been created, ensure that the existing facilities are used to their full potential and assist in the implementation of active ageing.

The following provides several letters from current residents.

Mr & Mrs Taylor

We have now been residents of Clarence Lifestyle Village for three years.

After researching other retirement villages in Tasmania and other states we found that with their Deferred Management Fees, exit fees and high weekly management fees Clarence Lifestyle Village to be the most affordable.

⁶ ABS Census of Population and Housing 2016

⁷ *Strong Liveable Communities: Tasmania's Active Ageing Plan 2017-2022*, p: 35.

The family atmosphere of the residents offer friendship and security.

A Craft Cottage and Workshop (Men's Shed) offers physical and mental stimulation for the participants. The Craft Cottage offers painting, pottery and many other crafts. The well equipped Workshop allows men to gather and produce small woodcraft projects. There is a weekly morning coffee gathering which is attended by up to fourteen men in an atmosphere of "how ya do'in and ruok" is present.

There are many other organised activities in which the residents can participate. We would like to see other families be given the same opportunity and be part of this secure and family life style by the proposed extension of the village.

Ms McPherson and Mr Martin.

TO WHOM THIS MAY CONCERN

In opening may I say that 5 years ago with some trepidation we moved, for family reasons from Latrobe to Hobart. After lots of deliberation we decided on the CLV. We could not have made a better choice.

The friendships we have made in this time are quite amazing, we as a couple have hit a lot of hurdles in the past few years and the compassion and caring from both friends and management has been nothing but incredible.

The amenities are just fantastic, from the clubhouse (incorporating the library, theatre, kitchen, indoor bowls, line dancing, availability for birthday celebrations even funerals , to name just a few.) We also have the gymnasium, the pools and saunas. The mens shed the ladies shed, the walking track and barbeques scattered throughout, the list goes on.

We also have for those who are unable to get around weekly or bi weekly outings on the village bus for lunch or various other activities. There is also a bi weekly bus to Eastlands to enable people who are housebound to do their shopping, there is too a monthly bus trip to Bunnings, No Frills and other establishments. If the village was to extend how many more like minded people would we get to know. In short, what more could you want.

Thank you CLV.

Ms Lampkin

About 3 years ago I placed a deposit on a block of land in the Clarence Lifestyle Village, to have a new home built to suit my retirement lifestyle.

For the past few years I have noticed continuous information in current magazines etc. about the value of having lots of social interaction as you aged.

About 5 years ago, I attended an Open Weekend at the Clarence Lifestyle Village, and while the blocks were small, the living conditions were the best I had seen. I had previously assessed retirement villages such as Vacluse in Hobart, a village in Seven Mile Beach, the Fairway Rise retirement village in Lindisfarne, and units at the Queen Victoria Home for the Aged in Lindisfarne.

None of them came even close to the lifestyle choices available at the Clarence Lifestyle Village. While some of the above offered clubrooms for events, the CLV offers that, plus a movie theatre, men's shed, ladies craft workshop, 2 saunas and 15 jet-spa pools, plus a bus to the shopping centres close by, and bus trips to outer areas to have lunch (lunch paid for by the residents).

Except for paying the volunteer bus driver a gold coin or similar for his trouble, there are no direct payments for any of these services. I presume they are included in the small fortnightly payment from each resident, as the owners do have to cover their expenses, but they are there to be used freely by the residents every day. Certainly not at any other retirement village that I had researched.

The opportunity for daily interaction with other residents is crucial for older adults to enjoy a happy, healthy lifestyle and I sincerely hope this sub-division is able to go ahead.

Whilst residential retirement villages and aged care in general can be supported on residential zoned land within the Urban Growth Boundary, the speciality nature of these uses is often managed by the provision of Particular Purpose Zones. Such zones have been applied to similar developments within Clarence and Brighton, including the Gordons Hill Precinct, Springvale and Fairway rise developments and St. Anne's Retirement Living.

The Springvale/Fairway Rise developments directly adjoin general residential land, however the unique requirements of these developments indicates that general residential zoning was not sufficient, hence the provision of a particular purpose zone.

The ability to cater for specific types of residential use provides flexibility in managing existing residential land supply and growth. It also allows existing land and land earmarked for expansion within residential zones to be retained to support housing for new families/professionals.

The provision of an adequate supply of retirement living options within Greater Hobart, allows people looking to downsize to sell/add their properties to the market – which goes some way as to alleviating the current housing shortages. The provision of a Particular Purpose Zone will appropriately cater for the specific nature of the proposed use in an established location.

SRD 2.11 – Increase the supply of affordable housing.

The proposed expansion of the Clarence Lifestyle Village provides additional housing choice for the aging population in Greater Hobart, particularly for individuals or couples who are seeking to downsize but maintain ongoing independent living with the added benefit of support services and community facilities in one location.

The financial cost associated with aged care and retirement living is well known and the provision of more cost-effective options is vital, allowing existing properties to be added to the market to reduce the need for further greenfield sites.

The *Aged Care Market Analysis 2024* prepared by KPMG indicates that in Tasmania, 6.2% of people 65 years or older were using residential aged care, increasing to 30.5% of those aged 85 years or older.⁸

The report also states the number of residential home care providers in Australia increased to 861 in 2023, whilst the number of aged care providers steadily decreased from 873 in FY 2015, to 661 in FY 2023. It is understood this is due to financial viability, increased regulatory burdens following recent and ongoing sector reform and an increased preference for 'ageing in place', under the home-care umbrella.

The proposed expansion to the Clarence Lifestyle Village bridges these gaps, providing new and existing residents with a sense of community and the ability to 'age in place', whilst providing

⁸ Aged Care Market Analysis, KPMG (2024, p: 14)

access to community facilities, amenities and care providers who attend the site on a scheduled basis.

5.2 CITY OF CLARENCE STRATEGIC PLAN

Clarence City Council's Strategic Plan has been reviewed as part of this assessment. The document generally provides high-level strategic goals and milestones to be achieved through several existing mechanisms, such as the Planning Scheme, Economic Development Plan and other reports and strategies.

The primary goals of the Strategic Plan are as follows:

A people city:

Clarence is a city which values diversity and encourages equity and inclusiveness, where people of all ages and abilities have the opportunity to improve their health and quality of life.

The strategies to achieve this goal relate to improving liveability within activity centres through urban design initiative such as streetscape and landscaping projects and improving community health and wellbeing. The plan also seeks to promote health care and active lifestyles through the provision of active and passive recreation programs combined with actions to manage and conserve the local environment.

The proposed expansion of the Clarence Lifestyle Village will contribute and reinforce this objective, by providing additional high-quality retirement living options within an established operation. The benefits of the existing village and proposed expansion to the community and residents is outlined in the accompanying letters and the examples provided on pages 18-20 of this report.

A well planning liveable city:

Clarence will be a well-planned liveable city with services and supporting infrastructure to meet current and future needs.

The strategies also bear similarities with the STRLUS regarding land use planning and urban design strategies to enhance the vibrancy and accessibility of activity centres and community hubs through design and liveability projects.

A prosperous city:

Clarence will develop its economy, improve prosperity, and expand both the level and equity of personal opportunity within its communities.

The economic development plan forms a primary aspect in achieving this goal, by providing a framework to guide economic development and activity within the LGA and specifically in Rosny Park and Cambridge Park.

An environmentally responsible city:

Clarence is a city that values its natural environment and seeks to protect, manage, and enhance its natural assets for the long term environmental, social and economic benefit of the community.

A creative and innovative city:

Clarence is a city that fosters creativity, innovation and enterprise.⁹

⁹ City of Clarence Strategic Plan 2016-2026, p: 16.

These goals relate to ensuring the Clarence LGA continues to improve sustainability and protection and enhancement of natural values. The goals also seek to generate improved creative industries and support for arts and entertainment.

5.3 POTENTIAL FOR LAND USE CONFLICT

The surrounding area is comprised of several different zones. The immediately adjoining land to the south of the site is zoned Rural Living (pink), as is the land to the immediate north and west. To the east, the site is adjoined by the East Derwent Highway, which is zoned Utilities (yellow), with the adjoining land on the other side of the highway zoned Community Purpose (light yellow).

The diagram below illustrates the current zoning for the area.

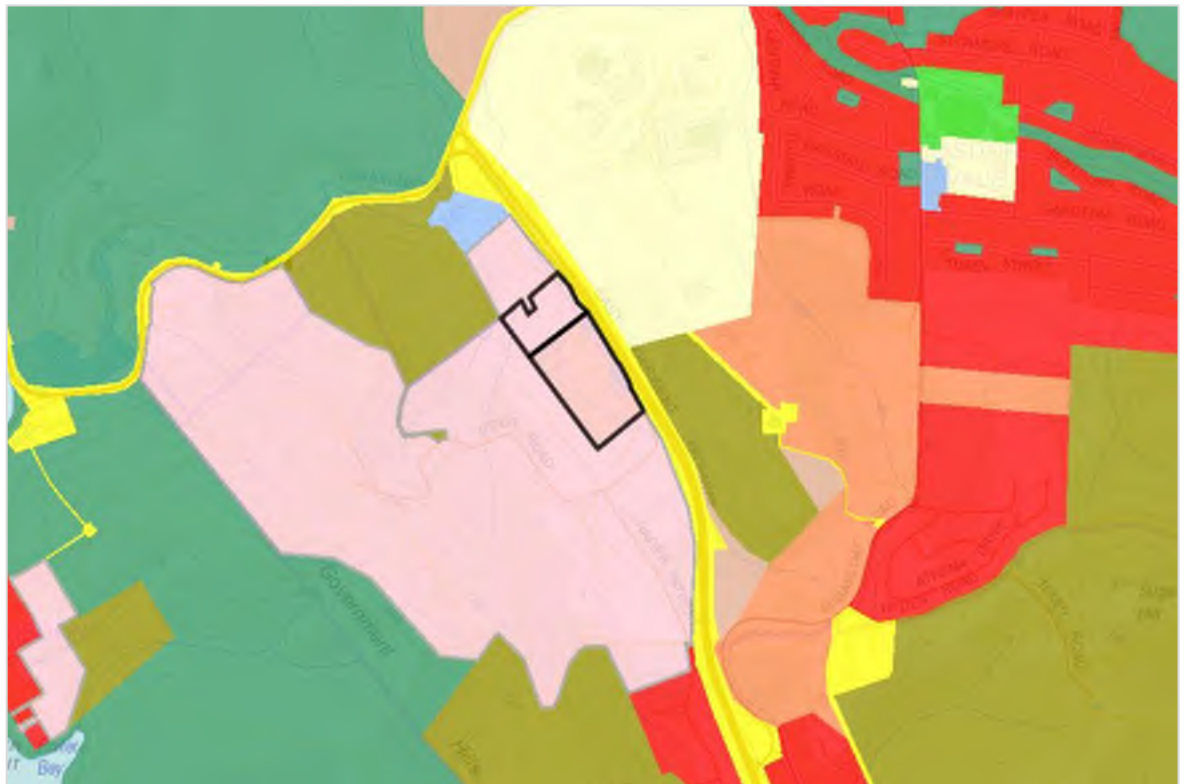


Figure 12: Current zoning (source: www.thelist.tas.gov.au © State of Tasmania)

The Clarence Lifestyle Village already exists on the immediately adjoining land to the south, and is surrounded by existing Rural Living communities, the Risdon Prison complex and several local businesses, including the Holiday Park and tavern. Given that the site and surrounding area are now within the Urban Growth Boundary, which will facilitate further urban growth, the expansion of the Lifestyle Village is unlikely to result in any substantial land use conflicts.

The detail of the amendment has been prepared to ensure that it is consistent with the common provisions of the scheme.

As detailed in section 2 of this report, the proposed amendment is consistent with the relevant goals and strategic directions of the Southern Tasmanian Regional Land Use Strategy.

6. ASSESSMENT UNDER LUPAA

6.1 CONTENT OF LPS

Section 32(3) and (4) of the *Land Use Planning and Approvals Act 1993*, sets out the aspects/ordinance that an LPS can/must consist of, as follows:

(3) Without limiting subsection (2) but subject to subsection (4), an LPS may, if permitted to do so by the SPPs, include –

(a) a particular purpose zone, being a group of provisions consisting of –

(i) a zone that is particular to an area of land; and

(ii) the provisions that are to apply in relation to that zone; or

(b) a specific area plan, being a plan consisting of –

(i) a map or overlay that delineates a particular area of land; and

(ii) the provisions that are to apply to that land in addition to, in modification of, or in substitution for, a provision, or provisions, of the SPPs; or

(c) a site-specific qualification, being a provision, or provisions, in relation to a particular area of land, that modify, are in substitution for, or are in addition to, a provision, or provisions, of the SPPs.

(4) An LPS may only include a provision referred to in subsection (3) in relation to an area of land if –

(a) a use or development to which the provision relates is of significant social, economic or environmental benefit to the State, a region or a municipal area; or

(b) the area of land has particular environmental, economic, social or spatial qualities that require provisions, that are unique to the area of land, to apply to the land in substitution for, or in addition to, or modification of, the provisions of the SPPs.

(5) An LPS must be in accordance with the structure, if any, that is indicated, or specified, in the SPPs to be the structure to which an LPS is to conform.

The proposed amendment is consistent with Section 32(3a).

With regard to Section 32(4), the proposal and associated instruments (Particular Purpose Zone), is for a use/development that is of significant social and economic benefit to the municipal area and wider region. The area of land to which the zone is applied also has particular social and spatial qualities that require unique provisions. These qualities include the presence of the existing Clarence Lifestyle Village, which has a unique character created through consistent built form, design, appearance and provision of communal facilities that is not representative of a standard residential neighbourhood. These qualities are a key component of the village's appeal to current and prospective residents and to retain these qualities, site-specific controls that vary from the standard SPPs are necessary.

As outlined below and throughout this document, this approach is similar to other residential retirement and aged-care facilities in the LGA.

As detailed under section 2 of this report, Tasmania's ageing population is driving demand for affordable retirement living options across Tasmania, with many establishments experiencing long waitlists.

The Clarence Lifestyle Village has approximately fifty (50) prospective residents currently on the waiting list. The expansion will serve as an extension to the existing village, which provides a high-quality offering at a cost that is generally more affordable compared to other competitors, as indicated in the experiences shared by current and prospective residents.

- The proposal will provide additional, affordable retirement living options for an ageing population, for which there is an existing shortfall and increasing demand.
- The site is within the Urban Growth Boundary and provides for higher-density development within an urban area which is consistent with the objectives and policies for settlement and residential development under the STRLUS.
- The proposal will support local businesses during construction.
- The proposal is for an extension to an existing retirement village within an urban area.

According to a new report commissioned by the Property Council of Australia, retirement villages are helping to save taxpayers almost \$1 billion in health care costs, by delaying their entry into aged care – as outlined below.

A new report has revealed Australians living in retirement villages are helping save taxpayers almost \$1 billion in health care costs by delaying their entry into aged care.

The Retirement Living Council (RLC) today launched a national report – Better Housing for Better Health – outlining the industry's contribution to housing, healthcare and the 250,000 people who live in age-friendly communities across Australia.

RLC Executive Director Daniel Gannon said while the retirement living industry is often confused with aged care, the first-of-its-kind report sends a strong message to governments about the value of the sector, the affordability it provides in an otherwise unaffordable housing market and why its residents live healthier lives.

"Retirement villages across Australia are already saving the government a billion dollars a year, by delaying residents' entry into aged care, and quite simply, we need more of them," Mr Gannon said.

"People who live in retirement communities are less lonely and less depressed than older Australians who live independently, because retirement communities encourage physical wellbeing and social interaction – which all translates to economic benefits for governments.

"For the first time, this report shows how our sector has actual solutions to Australia's two biggest worrying trends – our housing crisis and our rapidly ageing population," he said.

Some of the key findings from Better Housing for Better Health include:

- *National expenditure on aged care reduces by \$945 million annually by delaying entry of ~11,600 people into residential aged care by two years.*
- *Residents interact less frequently with healthcare systems, and are:*

- 20 per cent less likely to require hospitalisation after only nine months, and
- Avoid 14,000 annual hospitalisations.
- The current pipeline of retirement communities will reduce the housing shortage by 18 per cent.
- Growing this pipeline to meet current demand levels could reduce Australia's housing shortage by 67 per cent.

In addition, the report also reveals that residents in retirement communities are:

- 15 per cent more physically active.
- 41 per cent happier, and both physically and mentally healthier.
- Five times more socially active.
- Twice as likely to catch up with family or friends.
- Have reduced levels of depression and loneliness, saving governments almost \$5 million in additional healthcare costs.

Mr Gannon said there are currently two million Australians aged over 75 and this cohort will increase by 70 per cent to 3.4 million by 2040.

"This population shift will have socio-economic impacts on Australia, including the housing supply shortage and the pressure on an already struggling residential aged care sector," he said.

"Age-friendly housing can reduce interactions between older Australians, GPs and hospitals, which releases capacity back into health systems for those who need it most when they need it most.

"Better housing that enables better health outcomes for ageing Australians is imperative, and the bonus is that it's good for governments too."¹⁰

For the reasons outlined in section 2 of this report and those identified above, the proposal will provide a significant ongoing social benefit to the municipal area and wider region and the site-specific controls are necessary to account for existing development and the unique social and spatial qualities of the site.

6.2 LPS CRITERIA

Section 34(2) of the *Land Use Planning and Approval Act 1993*, sets out the LPS Criteria, for which amendments to the Local Provisions Schedules must satisfy, as follows:

- (2) The LPS criteria to be met by a relevant planning instrument are that the instrument –*
- (a) ...*
 - (b) ...*
 - (c) furthers the objectives set out in Schedule 1; and*

¹⁰ Media Release, Property Council of Australia - *New report reveals a billion reasons for more supply of retirement villages'* (November 2023)

- (d) is consistent with each State policy; and*
- (da) satisfies the relevant criteria in relation to the TPPs; and*
- (e) as far as practicable, is consistent with the regional land use strategy, if any, for the regional area in which is situated the land to which the relevant planning instrument relates; and*
- (f) has regard to the strategic plan, prepared under section 66 of the Local Government Act 1993, that applies in relation to the land to which the relevant planning instrument relates; and*
- (g) as far as practicable, is consistent with and co-ordinated with any LPSs that apply to municipal areas that are adjacent to the municipal area to which the relevant planning instrument relates; and*
- (h) has regard to the safety requirements set out in the standards prescribed under the Gas Safety Act 2019.*

(2A) A relevant planning instrument satisfies the relevant criteria in relation to the TPPs if-

- (a) where the SPPs and the relevant regional land use strategy have not been reviewed under section 30T(1) or section 5A(8) after the TPPs, or an amendment to the TPPs, is or are made – the relevant planning instrument is consistent with the TPPs, as in force before the relevant planning instrument is made; and*
- (b) whether or not the SPPs and the applicable regional land use strategy have been reviewed under section 30T(1) or section 5A(8) after the TPPs, or an amendment to the TPPs, is or are made – the relevant planning instrument complies with each direction, contained in the TPPs in accordance with section 12B(3) , as to the manner in which the TPPs are to be implemented into the LPSs.*

(3) An amendment of an LPS, or a draft amendment of an LPS, is taken to meet the LPS criteria if the amendment of the LPS, or the draft amendment of the LPS, if made, will not have the effect that the LPS, as amended, will cease to meet the LPS criteria.

The following sections provide a response to the objectives of Schedule 1, State policies and the relevant criteria under the TPPs.

A detailed response to the Regional Land use Strategy is provided under section 2 of this report.

The relevant strategic plan for Clarence has also been addressed under section 2.

6.3 SCHEDULE 1 OBJECTIVES OF LUPAA

The objectives are considered in the following table:

6.3.1 Part 1 – Objectives of the Resource Management and Planning System of Tasmania	
PROVISION	RESPONSE
<i>(a) to promote the sustainable development of natural and physical resources and the</i>	Not directly applicable to the amendment.

<i>maintenance of ecological processes and genetic diversity; and</i>	
<i>(b) to provide for the fair, orderly and sustainable use and development of air, land and water: and</i>	The proposed amendment has been prepared in accordance with the relevant planning controls, which provide for fair, orderly and sustainable use and development.
<i>(c) to encourage public involvement in resources management and planning; and</i>	The planning process provides for public involvement.
<i>(d) to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c): and</i>	The proposal will facilitate economic development through employment of local contractors during construction and local consulting firms which have been engaged to prepare the associated documentation forming part of the application.
<i>(e) to promote the sharing of responsibility for resource management and planning between the different spheres of Government, the community and industry in the State.</i>	The assessment process promotes the involvement of the public as well as different spheres of government.

6.3.2 Part 2 – Objectives of the Planning Process Established by this Act

PROVISION	RESPONSE
<i>(a) to require sound strategic planning and co-ordinated action by State and local government; and</i>	The amendment has been prepared with respect to relevant strategic outcomes of state and local government.
<i>(b) to establish a system of planning instruments to be the principle way of setting objectives, policies and controls for the use, development and protection of land;</i>	The proposal seeks to amend the planning scheme standards and has been prepared with respect to the provisions of the scheme and demonstrates consistency with the relevant objectives and policies of the Act.
<i>(c) to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land;</i>	Not directly applicable to the proposed amendment.
<i>(d) to require land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies at State, regional and municipal levels;</i>	This is achieved through the existing planning mechanisms and amendment process.
<i>(e) to provide for the consolidation of approvals for land use and development and related matters,</i>	Not directly applicable to the proposed amendment.

<i>and to co-ordinate planning approvals with related approvals;</i>	
<i>(f) to secure a pleasant, efficient and safe working environment for all Tasmanians and visitors to Tasmania;</i>	Not directly applicable to the proposed amendment. This is achieved through state and local government initiatives.
<i>(g) to conserve those buildings and areas or other places which are of scientific , aesthetic, architectural or historical interest, or otherwise of special cultural value;</i>	Not directly applicable.
<i>(h) to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community; and</i>	The proposed amendment will not impact on any existing public infrastructure.
<i>(i) to provide a planning framework which fully considers land capability.</i>	This is achieved through the planning controls and consideration of state policies as part of the amendment process.

6.4 STATE POLICIES

The following are the state policies and have been considered as part of this application.

6.4.1 The State Coastal Policy 1996

The purpose of the policy is to ensure that;

- *Natural and cultural values of the coast shall be protected;*
- *The coast shall be used and developed in a sustainable manner.*
- *Integrated management and protection of the coastal zone is a shared responsibility.*

As the site is not within 1km of the high-water mark, consideration of the policy for the purposes of this amendment is not necessary.

6.4.2 The State Policy on Water Quality Management 1997

The purpose of this Policy is:

To achieve the sustainable management of Tasmania's surface water and groundwater resources by protecting or enhancing their qualities while allowing for sustainable development in accordance with the objectives of Tasmania's Resource Management and Planning System.

The amendment does not alter any provision which relates to the sustainable management of surface water or groundwater resources.

The associated development includes a detailed stormwater system (accounting for overland flow) that includes on-site detention and WSUD principals in accordance with stormwater quality and quantity targets set out in the associated State Stormwater Strategy.

6.4.3 The State Policy on the Protection of Agricultural Land 2009

The purpose of this Policy is:

To conserve and protect agricultural land so that it remains available for the sustainable development of agriculture, recognising the particular importance of prime agricultural land.

The Objectives of the Policy are:

To enable the sustainable development of agriculture by minimising:

(a) conflict with or interference from other land uses; and

(b) non-agricultural use or development on agricultural land that precludes the return of that land to agricultural use.

The land is not categorised for its agricultural potential.

6.4.4 National Environment Protection Measures (NEPMs)

NEPMs are taken to be State Policies in Tasmania. NEPMs are made under Commonwealth legislation and given effect in Tasmania through the State Policies and Projects Act.

The current NEPMs are:

- Air Toxics
- Ambient Air Quality
- Assessment of Site Contamination
- Diesel Vehicle Emissions
- Movement of Controlled Waster
- National Pollutant Inventory
- Used Packaging

The Codes within the Scheme deal in detail with the relevant matters (noise and air quality) and the assessment of the submitted application can be undertaken against the appropriate Use and Development Standards.

Part B

7. PERMIT APPLICATION

The following is an assessment of the proposed development against the applicable statutory controls under the proposed *Particular Purpose Zone – Clarence Lifestyle Village*, forming part of the *Tasmanian Planning Scheme - Clarence*.

The assessment is undertaken on the basis that the requested amendment has been approved.

As stated in section 3.2, the proposal is for the construction of 54 new dwellings and associated infrastructure works, which will form part of the existing Clarence Lifestyle Village.

The design of each dwelling is based on six different types, identified as Types A, B, C, D, E & F. The layout and design of each type is consistent with the existing dwellings within the village, providing flexibility for prospective residents to meet their needs whilst also ensuring every dwelling site can support each desired type.

The associated infrastructure works include the following:

- Extension to the existing private internal driveway/access/circulation network;
- New connections and internal pipework for reticulated sewer/water services;
- Upgrades and provision of new stormwater infrastructure; and
- Connection of the existing dwelling located at 657 East Derwent Highway, Risdon to the reticulated sewerage infrastructure and removal of the drainage absorption easement off the adjoining property within the Lifestyle Village expansion site.

A pedestrian footpath was suggested by Council as part of its assessment of the original submission, to provide access between the site, bus stop and tavern at 691 East Derwent Highway. Following discussions with adjoining landowners, a decision was made to investigate the footpath link via a separate application at a later date.

Further discussions with State Growth and Council have confirmed the footpath link should be explored through a separate application, and that a condition will be imposed requiring the proponent to provide a financial contribution toward the development of the footpath.

7.1 PARTICULAR PURPOSE ZONE – CLARENCE LIFESTYLE VILLAGE

The following addresses the relevant provisions of the Particular Purpose Zone, in relation to the proposed development.

7.1.1 Zone Purpose Statements

The purpose of the Particular Purpose Zone – Clarence Lifestyle Village is as follows:

CLA- P4.1.1

To provide for the Clarence Lifestyle Village located at 2 Piper Road and the limited expansion to 647 East Derwent Highway.

CLA P4.1.2

To provide and maintain communal facilities that encourage social and recreational opportunities for residents.

CLA P4.1.3

To promote consistency in the siting and design of dwellings throughout the Lifestyle Village.

CLA P4.1.4

To provide and maintain an appropriate level of residential amenity through:

(a) Appropriate noise attenuation measures to the Tasman Highway; and

(b) Provision of reasonable private and communal open space.

The existing development, including the proposed development/expansion is consistent with the purpose of the Particular Purpose Zone.

7.1.2 Use

The proposed use is for residential use, specifically the expansion of the existing retirement village.

Residential use is defined as follows:

use of land for self-contained or shared accommodation. Examples include a secondary residence, boarding house, communal residence, home-based business, home-based child care, residential care facility, residential college, respite centre, assisted housing, retirement village and single or multiple dwellings.

Residential use is a permitted use within the zone, provided it is:

If for a home-based business, residential aged care facility or retirement village.

Retirement village is further defined as:

means use of land to provide permanent accommodation for retired people or the aged and includes communal recreational or medical facilities for residents of the village.

The proposal is consistent with these definitions and satisfies the use qualification.

7.1.3 Development Standards

P4.7.1 – Building height

Objective: *That building height is consistent with the height and character of existing development within the Clarence Lifestyle Village.*

SCHEME REQUIREMENTS

A1.1 - *For dwellings and communal buildings, there is no acceptable solution.*

A1.2 - *For outbuildings (unless otherwise exempt), building height must be not more than 2.4m.*

A1.3 - *For alterations and extensions to an existing building, building height must be not more than the height of the existing building.*

P1 - *Building height must be not more than:*

- (a) 5m, for all dwelling types; and
 - (b) 6.5m, for communal buildings.
-

RESPONSE

Complies with P1

All dwelling types are single-storey, with the following standard vertical dimensions:

- Minimum FFLs of 0.35 to 0.5m
- 2.4m standard floor-to-ceiling height; and
- Up to 1m maximum roof cavity space.

This equates to a standard height of 3.8m to 4m above NGL.

When installed on-site, dwellings within the identified overland flow path will have FFLs up to 0.5m to accommodate building and flood hazard management requirements. Dwellings outside the flow path will have minimum FFLs between 0.2 and 0.3m.

To account for slope/gradient variations across the site, most dwelling sites will require a degree of grading and levelling, along with cuts of up to 1m in depth to provide level parking, access and private open space areas. Accounting for these factors, the variable FFL of each dwelling will increase along the north/north-eastern elevations. Whilst the permitted height of 5m allows a maximum FFL of up to 1.5m, the client has confirmed that most existing and proposed dwellings will have FFLs that range between 1m – 1.2m above NGL at the highest point.

The typical section and elevation diagram for dwelling sites 11 to 19 demonstrate the above.

As there is no performance criteria, the analysis above and submitted documentation confirms that all dwelling type/site arrangements will comply.

P4.7.2 – Siting and setbacks

Objective: *To provide consistency in the siting and setbacks of development within the Clarence Lifestyle Village and ensure the efficient use of the site for:*

- (a) retirement living through a consistent dwelling site layout; and*
- (b) communal buildings through compatible scale.*

SCHEME REQUIREMENTS

A1 – *The siting and layout of buildings and internal access roads must be in accordance with the layout shown in Figure P4.9.*

...

RESPONSE

Complies with A1

The existing development and proposed dwellings have been sited and designed in accordance with Figure 2 P4.9.

A2 – *Dwellings and communal buildings must be setback no less than 5m from the side and rear boundaries of the site.*

...

RESPONSE

Complies with A1

The site plan demonstrates that all dwellings within proximity to the site boundaries will achieve setbacks at, or greater than 5m.

A continuation of the bushfire hazard management fence is to be constructed along the rear western boundary. The fence is located 13 metres from the rear boundary of the site and will be clear of the northern side boundary by a minimum of 5 metres.

Internal fencing will also be clear of the 5-metre setback.

A3 – *Dwellings must have a setback from dwelling site boundaries of not less than:*

- (a) 2 metres from a frontage to the internal access road.*
- (b) 0 metres from a side boundary to a carport, or 1m otherwise; and*
- (c) 2m from a rear boundary.*

A3.1 – *For dwelling sites 11 to 19, dwellings must have a setback from a rear dwelling site boundary of not less than 4m.*

P3 - The setback and siting of dwellings must be compatible with the character of established dwellings within the lifestyle village, having regard to:

- (a) the setback of existing dwellings to dwelling site boundaries
- (b) provision of gardens and landscaping; and
- (c) the appearance when viewed from the internal access roads.

P3.1 – For dwelling sites 11 to 19, there is no performance criteria for rear setback.

RESPONSE

Compliance with A3

The majority of the proposed dwelling sites and types comply with A3, achieving setbacks in accordance with (a), (b) and (c) – as shown below.



Figure 13: Indicative dwelling arrangement for sites 27, 28, 30, 31 and 32 (Type A and Type B), with relevant setbacks shown in red - illustrating compliance with A2(a), (b) & (c).

The only exceptions are the dwellings on sites 1, 22, 44 and 45 – which have dual frontage to the internal road and cannot meet A3(a), and the dwellings on sites 12 to 19.

Dwelling site 54 also cannot comply with A3(a).

A response to the performance criteria is provided below.

Compliance with A3.1

The indicative dwellings on sites 11 to 19 include a minimum 4m setback from their respective rear dwelling site boundary in accordance with the requirements set out in the accompanying bushfire hazard management plan. This setback is shown on the accompanying site layout drawings, ensuring compliance.

The dwelling designs and dwelling site areas are consistent with those already provided within the lifestyle village, providing consistent setbacks to site boundaries and adjoining dwellings – maintaining the character of the village.

P3

Dwelling sites 1, 22, 44 and 45 have dual frontage to the internal road which constrains the building area. As a result, dwellings on these sites will have minimum frontage setbacks of approximately 0.6m.

Dwelling site 54 will support a Type E dwelling, as shown on the indicative dwelling layout plan. The frontage setback is limited to approximately 1.4m. However, this is due to the dimensions and orientation of site 54, necessitating a Type E dwelling.

There are several dwelling sites within the established village that are similarly constrained and possess reduced setbacks, including but not limited to sites 63, 74, 85, 100, 101, 114 and 113 – as shown below.



Figure 14: Established dwellings with dual frontage and reduced front/rear boundary setbacks (source: www.thelist.tas.gov.au © State of Tasmania)

Notwithstanding, each site retains ample private open space, gardens and landscaping. For example, dwelling sites 1, 22, 44 and 45 will have private open space exceeding 50m², with at least 24m² provided behind the building line (as per acoustic report recommendations).

These sites and dwelling arrangements are consistent with the setback and visual character of established dwellings in the village.

Dwelling site 54 will also be provided with at least 27m² of POS, located behind the dwelling at the highway.

Dwelling types located on sites 12 to 19 will also require reduced frontage setbacks of approximately 1.3m, with priority given to the required rear setback in accordance with the BHMP. Notwithstanding, these dwelling sites and indicative dwelling types will maintain a consistent setback pattern that is compatible with the character of the village.

The proposal complies with P3.

P4.7.3 – Design

Objective: *That buildings are sited and designed to ensure the efficient use of the site and maintain the existing character of the village, facilitating:*

- (a) retirement living, through consistent dwelling density; and*
- (b) communal buildings of a scale compatible with the existing character of the village.*

SCHEME REQUIREMENTS

A1 – *Each dwelling site must have a dwelling site area of:*

- (a) not less than 220m²; and*
- (b) not more than 275m².*

P1 – *For dwelling site areas less than 220m², there is no performance criteria.*

P1.1 – *Dwellings with a site area greater than 275m² must be compatible with the layout and character of the Clarence Lifestyle Village, having regard to:*

- (a) the average size of existing sites within the village; and*
- (b) any changes to the layout and route of the internal access road.*

RESPONSE

The bulk of the proposed dwelling sites range between 220m² and 275m².

Dwelling Sites 4, 14, 19, 24, 29, 37, 38, 39, 40 & 54 (220m² – 228m²)

These sites have areas ranging between 220m², 225m² and 228m² and have the following dimensions:

- 20m long x 11-11.5m wide.

Due to the orientation and layout, dwelling site 4 has a variable width of 14.2m at the frontage and narrowing to 8.6m at the rear.

These sites will generally accommodate the 1 x bedroom (Type F) dwellings, which have a width of 8.6m (including carport) and a length of 12m. This allows sufficient space for a 2m frontage setback and 18m to accommodate the 12m length of the dwelling type with a 6m rear setback, accommodating sufficient private open space. All carports adjoin the dwelling to which they relate and abut the dwelling site boundary, in accordance with A3(b).

As illustrated on the dwelling layout plan, Type F dwellings will be sited in accordance with A3.

Dwelling Sites 1 - 5, 8 – 10, 12 - 18, 32, 35, 44 & 53 (231 - 234m²)

These sites have areas ranging between 231m² up to 234m², with the following dimensions:

- 20m long x 11-11.5m wide.

These sites can accommodate dwelling types A, B, D and F, which have widths ranging between 7.2m and 10.8m (including carports) and lengths between 12m and 14m.

This allows for minimum 2m frontage setbacks and sufficient private open space to the rear, at or exceeding 24m².

Dwelling Sites 2, 3, 4, 21 - 22, 24, 25 - 28, 30 - 31, 33 - 34, 35, 36, 42 - 43, 45 - 47, 49 – 53 (240 - 248m²)

These sites range between 240m² up to 248m², and are generally 20m long x 11.9 - 12m wide, with the additional width able to accommodate dwelling types A, B, C, D and F. These types have widths ranging between 7.2m and 10.8m (including carports) and lengths between 12m and 14m.

Again, this allows for minimum 2m frontage setbacks and ample private open space exceeding 24m².

Dwelling Sites 11 and 54 (254 - 409m²)

These sites range in size from 254m² to a maximum of 409m².

The Type E dwellings have a length of 17.8m (including carport) and a width of 8.2m. This is due to their design and orientation and will be accommodated on sites 11 and 54, which provide the required orientation and length and have sufficient overall size to also accommodate ample private open space and separation from adjoining dwellings. Notwithstanding the above, there are several proposed dwelling sites that exceed 275m², with the largest being site 11 with an area of 409m².

A response to P1.1 is required.

Complies with P1.1

The existing character of the village is defined by small, close-knit dwelling sites which promote a sense of community, safety and neighbour interactions which are elements desired by existing and prospective residents.

Of the 54 dwelling sites proposed, only four (4) have areas exceeding 275m². This is due to variations in the layout to accommodate the southern regional pipeline easement which runs through the site, along with the internal access road layout and setback requirements for each site. Dwelling site 11 is a primary example, requiring a small access strip and 4m rear boundary setback to accommodate recommendations in the accompanying Bushfire Hazard Management Plan.

Given the number of dwelling sites exceeding 275m² is limited to just four, the average size of dwelling sites remains broadly consistent and compatible with the character of the village and no adjustments to the layout or route of the internal access road is required.

A2 – *The gross floor area of dwellings and communal buildings must be not more than:*

- (a) 150m² per dwelling; and*
- (b) 300m² per communal building.*

P2 - *The gross floor area of dwellings and communal buildings must be compatible with the character and scale of established dwellings and communal buildings within the Clarence Lifestyle Village, having regard to:*

- (a) the layout of the site;*
- (b) the size of established dwellings and communal buildings;*
- (c) the provision of appropriate private open space and communal space; and*
- (d) any constraints on the site.*

RESPONSE

Complies with A2

Each of the six dwelling types proposed have gross floor areas ranging from 60m² (1 x bedroom Type F) up to 115m² (3 x bedroom Type E) and therefore comply with A2.

At this stage no new communal buildings are proposed. The proposal complies with A2.

P4.7.4 – Privacy and Private Open Space

Objective: *That dwellings within the Clarence Lifestyle Village are provided with reasonable levels of amenity and safety, including:*

- (a) private open space that is conveniently located and has access to sunlight*
- (b) opportunities for the planting of gardens and landscaping; and*
- (b) reasonable opportunity for privacy.*

SCHEME REQUIREMENTS

A1 – *Each dwelling must have an area of private open space that:*

- (a) is not less than 24m²; and*
 - (b) has a gradient not steeper than 1 in 10.*
-

P1 – Each dwelling must have private open space that includes an area capable of serving as an extension of the dwelling for outdoor relaxation, dining, entertaining and children’s play and is:

- (a) conveniently located in relation to a living area
 - (b) orientated to take advantage of sunlight; and
 - (c) provides sufficient space for landscaping.
-

RESPONSE

Complies with A1

Existing and proposed dwelling site areas vary, ranging from a minimum of 220m² to a maximum of 409m². The proposed floor areas for each dwelling type (ranging from 60m² to a maximum of 115m²). As shown on the indicative dwelling layout plan, each dwelling will have private open space that exceeds that required by the acceptable solution.

This includes minimum areas at or over 24m² that also comply with the acoustic report recommendations.

To account for the gradient variations across the site, dwelling sites along the north-eastern side of the site will require up to 1m of cut to provide level parking and entry and appropriate private open space.

A2 – A window or glazed door, to a habitable room of a dwelling that has a floor level more than 1m above existing ground level, must satisfy (a), unless it satisfies (b):

(a) The window or glazed door:

(i) is to have a setback of not less than 4m from a window or glazed door, to a habitable room, of an adjoining dwelling (excluding carports);

(b) The window or glazed door:

(i) is to be offset, in the horizontal plane, not less than 1.5m from the edge of a window or glazed door, to a habitable room of another dwelling;

(ii) is to have a sill height of not less than 1.7m above the floor level or have fixed obscure glazing extending to a height of at least 1.7m above the floor level; or

(iii) is to have a permanently fixed external screen for the full length of the window or glazed door, to a height of not less than 1.7m above floor level, with a uniform transparency of not more than 25%.

P2 - A window or glazed door, to a habitable room of dwelling, that has a floor level more than 1m above existing ground level, must be screened, or otherwise located or designed, to minimise direct views to:

-
- (a) window or glazed door, to a habitable room of another dwelling; and
- (b) the private open space of another dwelling.
-

RESPONSE

Complies with A2(a)

Due to a consistent rise in grade from east to west across the site, the terracing effect evident across the established portion of the village will also be apparent across the proposed expansion.

Whilst the following diagrams are indicative and do not directly represent FFL variations, they do assist in providing a visual representation of the general terracing effect, which is a key characteristic across the village.

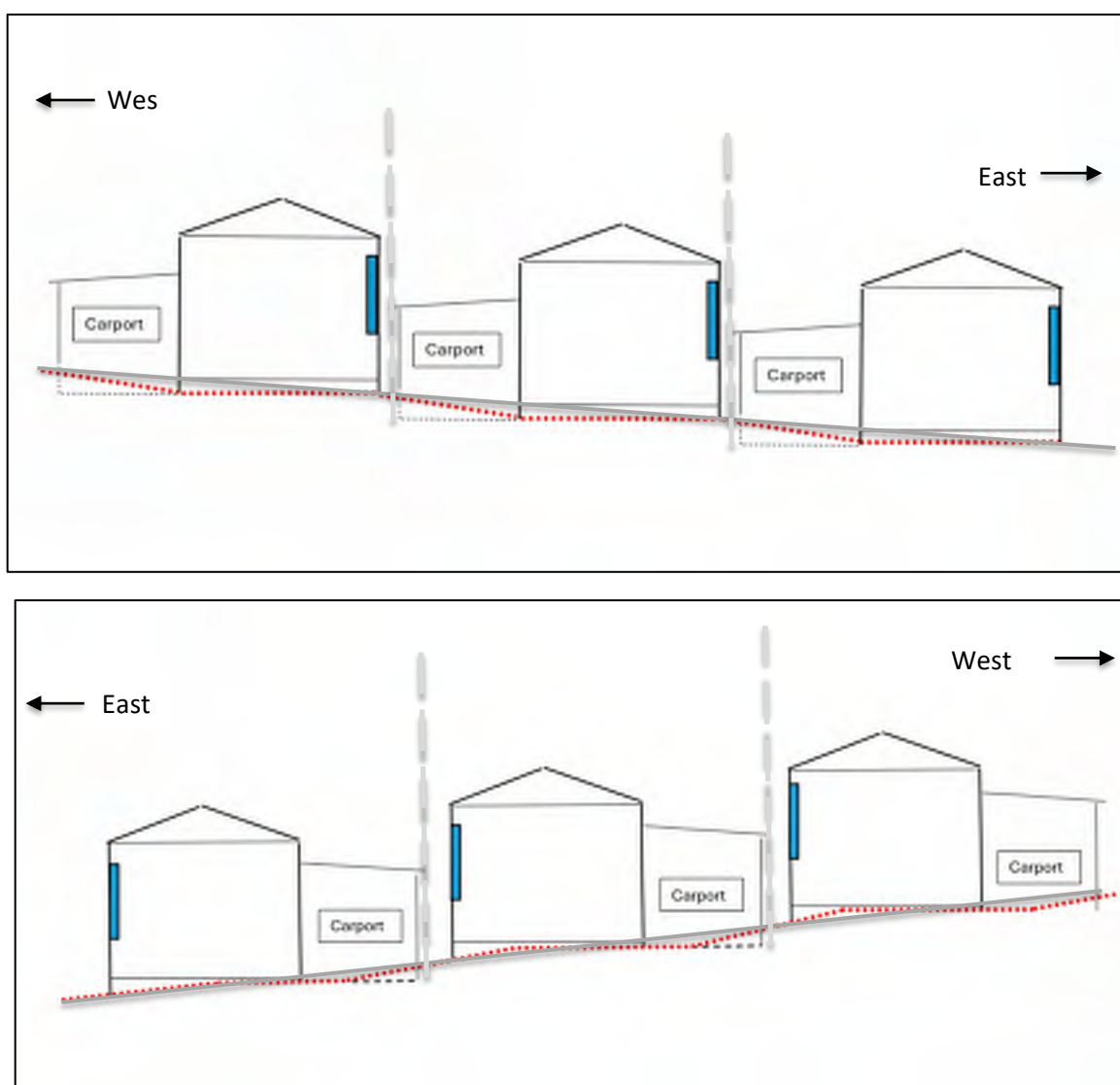


Figure 15: Indicative illustration showing the typical arrangement of existing and proposed dwellings, associated carports and separation from windows/doors along the higher east/north-eastern elevations

Whilst the gradient variations appear notably softer, the north/north-eastern elevation of each dwelling type will be elevated, with FFLs ranging between 0.5m – up to 1.2m above natural ground level.

A2(a)

Each dwelling includes a 3.6m wide carport, situated along the western elevation. The carport enforces a minimum 3.6m setback between the dwelling and its respective western site boundary. This setback is maintained along the entire length of the boundary for each dwelling site/type arrangement.

Adjoining dwellings on the higher side incorporate minimum 1m setbacks from their respective eastern side boundary. This ensures all dwelling site/type arrangements are able to achieve minimum separation distances of at least 4.6m, as illustrated in the indicative dwelling layout plan and reproduced below.



Figure 16: Indicative dwelling arrangement, setbacks and separation for sites 27, 28, 31 and 32 (Type A and Type B) - illustrating compliance with A2(a), (b) & (c).

The only exception to this is dwelling sites 6, 8 and 10, where Type B or Type D dwellings are provided. In this instance, the Type B and D dwellings have a setback to their respective eastern boundaries of less than 1m. To compensate for this and ensure compliance with A2(a)(i), the dwelling sites which adjoin these to the east will support Type F dwellings, which ensure over 4.5m separation.

This can be achieved due to the standard pre-fab design of each dwelling type, which has informed the design and layout of the dwelling sites to ensure the minimum separation distance required under A2(a) (i) will be achieved for all dwelling type/site arrangements.

P4.7.5 - Landscaping

Objective: To ensure landscaping is provided to:

- (a) maintain and enhance the visual qualities of the site
- (b) provide screening from the East Derwent Highway; and

(c) provide amenity for residents.

SCHEME REQUIREMENTS

A1 – *Along the frontage to the East Derwent Highway, landscaping must be provided and have:*

- (a) a depth of no less than 10m; and*
- (b) include a variety of plant types and sizes.*

P1 – *Landscaping must be provided along the frontage to the East Derwent Highway, having regard to:*

- (a) the effectiveness of the landscaping treatment to:*
 - (i) enhance the visual qualities of the site; and*
 - (ii) provide reasonable screening from the East Derwent Highway.*
 - (b) any advice from a suitably qualified person; and*
 - (c) have a depth of no less than 5m.*
-

RESPONSE

Complies with A1

A large section of the frontage to the East Derwent Highway is already screened with vegetation, which also includes recreation areas and BBQ/picnic sites for residents and guests. These areas provide screening from the highway and are in excess of 10m.

It is intended that similar landscaping will be extended along the additional 137m of frontage created by the expansion, achieving variable depths over 10m. A concept landscape plan has been prepared, demonstrating where landscaping treatments will be provided and the depths able to be achieved.

Whilst a detailed landscaping plan (prepared by a suitably qualified person) will be required as a condition of any subsequent approval, the concept plan demonstrates landscaping can be achieved in accordance with A1.

P4.7.6 – Waste storage

Objective: *To provide for the storage of waste and recycling bins for all dwellings.*

SCHEME REQUIREMENTS

A1 – *Each dwelling must have a storage area, for waste and recycling bins, that is not less than 1.5m² per dwelling and is within one of the following locations:*

- (a) an area for the exclusive use of each dwelling, excluding the area in front of the dwelling; or*
 - (b) a common storage area with an impervious surface that:*
-

-
- (i) has a setback of not less than 4.5m from a frontage*
 - (ii) is not less than 5.5m from any dwelling; and*
 - (iii) is screened from the frontage and any dwelling by a wall to a height not less than 1.2m above the finished surface level of the storage area.*

P1 – *Each dwelling must have storage for waste and recycling bins that is:*

- (a) capable of storing the number of bins required*
- (b) screened from the frontage and any dwellings; and*
- (c) if the storage area is a common storage area, separated from any dwellings to minimise impacts caused by odours and noise.*

RESPONSE

Complies with A1

Each dwelling will be provided with a dedicated area for waste and recycling bins, consistent with that provided for existing dwellings in the village, in compliance with A1(a).

P4.7.7 – Noise

Objective: *To minimise the effects of noise on sensitive uses within the site from existing and future major roads.*

SCHEME REQUIREMENTS

A1 – *All new habitable buildings for a sensitive use and not otherwise located within a road or railway attenuation area shown on an overlay map in the relevant Local Provisions Schedule, must:*

- (a) be located or designed so that external noise levels are not more than the level in Table C3.2 measured in accordance with Part D of the Noise Measurement Procedures Manual, 2nd edition, July 2008.*

P1 – *Habitable buildings for a sensitive use must be sited, designed or screened to minimise adverse effects of noise from a major road, in accordance with a report prepared by a suitably qualified person, having regard to:*

- (a) the topography of the site;*
 - (b) the proposed setback;*
 - (c) any buffers created by natural features;*
-

-
- (d) the location of any private open space;
 - (e) the speed limit and traffic volume of the road;
 - (f) any traffic impact assessment; and
 - (g) any mitigation measures proposed
-

RESPONSE

The acceptable solution requires habitable buildings located beyond the road attenuation area to demonstrate external noise levels can be achieved, in accordance with Table C3.2. The accompanying noise assessment indicates compliance with A1 cannot be achieved.

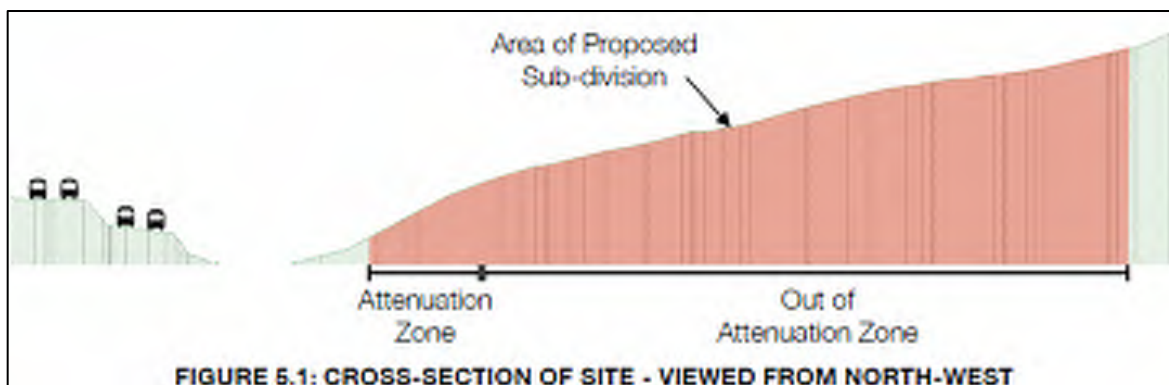
Therefore, a response to the performance criteria is provided.

Complies with P1

(a) The site has a gradual and consistent topographic rise to the west, away from the East Derwent Highway and as a result, most of the existing and proposed dwellings sit at or above the highway.

The elevated position of the site means existing and proposed dwellings are more susceptible to noise impacts, with the accompanying noise assessment noting the following:

Given the site slopes down toward the highway and the elevated location of the road surface (see Figure 5.1, below), mitigating vehicle noise emissions via a barrier on the boundary adjacent the highway would be impractical, as it would require an extremely tall barrier to block line of sight.



(b) The proposed dwelling sites and associated dwellings are setback a minimum of 30m+ from the highway reservation. This is considerably greater than the setback of the established dwellings in the village, where the minimum setback is just 7m. The proposed setback provides sufficient land to accommodate an additional landscaping buffer, along with water sensitive urban design measures and on-site detention ponds – designed in accordance with the accompanying stormwater and flood hazard documentation.

The physical setback and positioning of the dwellings and outdoor spaces will assist in mitigating noise, in conjunction with other measures discussed in this report and the accompanying noise assessment.

(c) Due to the topography of the site, there are no existing topographical features which assist. However, the existing landscaping buffer between the established dwellings and the highway is to

be extended along the full width of the frontage. This buffer is expected to increase noise attenuation and improve visual amenity for residents.

(d) the noise assessment recommends that dwellings be positioned so that areas of outdoor space are located behind the building line, where possible. These measures will be accompanied by boundary fencing, provided in accordance with the noise report recommendations along with the primary façade design requirements.

(e) The East Derwent Highway accommodates speed limits ranging from 70-100km/hr. Whilst noise levels are naturally higher during the day, the acoustic data presented in the noise report indicates ambient noise levels during the night are significantly quieter, due to reduced traffic volumes as indicated in the traffic impact assessment.

(f) The application is accompanied by a traffic impact assessment.

(g) The following mitigation measures are to be implemented, as recommended in the accompanying noise assessment:

- A 30m minimum setback from the highway reservation.
- Extension to the existing landscape buffer from the highway reservation. The buffer is to have a depth ranging between 5m and 10m.
- Where possible, areas of private open space are to be situated behind building lines and all north/north-east facing boundary fences are to be designed in accordance with the recommendations in the accompanying noise assessment; and
- All north/north-west facing dwelling façades are to be designed and constructed in accordance with the recommendations in the noise assessment.

The adoption of the recommended façade design and fencing measures are considered sufficient to achieve acceptable internal noise levels, as stated in the noise assessment.

The additional measures outlined above will also assist in reducing noise levels, to ensure an appropriate level of amenity. It is expected that a condition will be imposed on any subsequent permit, requiring submission of detailed design demonstrating the siting and façade treatment of each dwelling complies with the recommendations in the report, prior to any approval(s) under the Building Act.

7.1.4 Development Standards for Subdivision

P4.8.1 – Lot Design

Objective: *To provide for subdivision that is compatible with the zone purpose and does not have an unreasonable impact on the layout of the site.*

SCHEME REQUIREMENTS

A1 – Each lot, or a lot in a plan of subdivision, must:

- (a) *be for the consolidation of a lot with another lot, provided each lot is within the same zone*

(b) be required for public use by the Crown, a Council or State authority; or

(c) be required for the provision of Utilities

...

RESPONSE

Complies with A1

The two lots forming part of the lifestyle village (2 Piper Road and 647 East Derwent Highway) will be consolidated in accordance with A1.

A2 – Each lot, or a lot proposed in a plan of subdivision, must be provided with a vehicular access from the boundary of the lot to a road in accordance with the requirements of the road authority.

...

RESPONSE

Complies with A1

The right-of-way benefitting 647 East Derwent Highway, over the access strip forming part of 657 East Derwent Highway, will be expunged as part of the title consolidation – as required by the Department of State Growth.

The proposed dwellings within the expansion area (formerly 647 East Derwent Highway) will have access to Piper Road, via the existing and proposed internal access ways.

P4.8.2 – Services

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

SCHEME REQUIREMENTS

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 have a connection to a full water supply service.

...

RESPONSE

Complies with A1.

The proposed consolidated lot will maintain a connection to reticulated water infrastructure in accordance with A1.

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 connection to a reticulated sewerage system.

...

RESPONSE

Complies with A2

The consolidated lot will be provided with a connection to the existing reticulated sewer system.

A3 – 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.

P3 – 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 accommodating an on-site stormwater management system adequate for the future use and development of the land, having regard to:

- (a) the size of the lot;
 - (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.
-

RESPONSE

Complies with A3

Stormwater The proposed stormwater system will collect and drain surface water to the on-site detention basins located along the north-eastern boundary. Flows will then be directed to existing stormwater infrastructure within the State road reservation (i.e. swales and drainage channels).

If this infrastructure is not taken to be 'public stormwater infrastructure', the on-site stormwater system, including swales and detention basins is able to comply with P3. It has been designed to accommodate stormwater generated by the proposed development whilst also catering for overland flow and climate change loading.

7.2 PARKING AND SUSTAINABLE TRANSPORT CODE

7.2.1 Use Standards

C2.5.1 – Car Parking Numbers

Objective: *That an appropriate level of car parking spaces are provided to meet the needs of the use.*

SCHEME REQUIREMENTS

A1 - *The number of on-site car parking spaces must be no less than the number specified in Table C2.1, excluding if:*

P1.1 - *The number of car parking spaces for dwellings must meet the reasonable needs of the use, having regard to:*

- (a) *the nature and intensity of the use and car parking required;*
- (b) *the size of the dwelling and the number of bedrooms; and*
- (c) *the pattern of parking in the surrounding area.*

RESPONSE

Complies with A1

Table C2.1 specifies the following requirement for residential use in any zone, other than the general residential zone:

1 x car parking space per bedroom, plus 1 visitor space for every 5 multiple dwellings

The proposed expansion seeks approval for 54 additional dwellings, comprising a mix of 1, 2 and 3 bedroom configurations, depending on the dwelling type:

Type A & E - three-bedroom configurations;

Type B, C & D - two-bedroom configurations; and

Type F - one-bedroom configuration.

The exact mix of one, two or three-bedroom dwelling types has not been confirmed at this stage. However, given the nature of the use and the fact that all existing / prospective residents consist of couples and/or individuals, the vast majority of dwellings to be constructed will be one and two-bedroom configurations (Type B, C, D & F). In many cases, second and third bedrooms (where provided) are often utilised as extensions to living spaces, for storage or as studies/libraries/reading rooms. The proponent and operator of the village have confirmed that none of the existing, nor any prospective residents have dependents and very rarely accommodate other family members that might otherwise result in the need for more than one-bedroom.

Given the nature of use and the details above, a rate of 2 x spaces per dwelling is far more logical and reflects the standard rate applied in residential zones.

On this basis, **the TIA has identified a requirement for 108 residential spaces and 11 x visitor spaces, for a total of 119 spaces.**

Each dwelling type is provided with a 6m x long carport, positioned alongside the dwelling but setback from the front building line. As shown in the Indicative Dwelling Layout, the combined length of each carport and driveway provides sufficient space to accommodate the required 2 x spaces per dwelling.

This is similarly the case for the three-bedroom configurations (Type A and Type E).

Whilst the number of 3-bedroom configurations to be constructed will be very low, the purpose of including these examples on the Indicative Dwelling Layout is to demonstrate that all types can be accommodated in accordance with the proposed PPZ provisions.

To accommodate the smaller dwelling sites, 9 x one-bedroom (Type F) configurations have been shown on the Indicative Dwelling Layout. Although only requiring 1 x car parking space, each will have sufficient carport and driveway lengths to accommodate 2 x vehicles (if / where required), or in the event a two-bedroom configuration were provided.

Whilst the TIA indicates the actual car parking demand will be significantly less than 2 x spaces per dwelling, the Indicative Dwelling Layout plan demonstrates the required 108 x residential spaces (2 x spaces per dwelling) and 12 x visitor spaces can be accommodated on the site, in accordance with A1.

C2.5.3 – Motorcycle parking numbers

Objective: *That the appropriate level of motorcycle parking is provided to meet the needs of the use.*

SCHEME REQUIREMENTS

A1 – *The number of on-site motorcycle parking spaces for all uses must:*

- (a) be no less than the number specified in Table C2.4; and*
- (b) if an existing use or development is extended or intensified, the number of on-site motorcycle parking spaces must be based on the proposed extension or intensification, provided the existing number of motorcycle parking spaces is maintained.*

P1 - *Motorcycle parking spaces for all uses must be provided to meet the reasonable needs of the use, having regard to:*

- (a) the nature of the proposed use and development;*
 - (b) the topography of the site;*
 - (c) the location of existing buildings on the site;*
 - (d) any constraints imposed by existing development; and*
-

(e) the availability and accessibility of motorcycle parking spaces on the street or in the surrounding area.

RESPONSE

Complies with P1

The proposed expansion generates a requirement for approximately 117 car parking spaces, based on an average of 2 x spaces per dwelling - which would require provision of 6 motorcycle spaces.

In response to P1, the existing Lifestyle Village and proposed expansion cater for a specific demographic. Whilst the proposal does not provide any designated motorcycle parking, there is sufficient space to accommodate motorcycles within the existing car parking provision – given the nature of the development.

Given the above, the demand for motorcycle parking on the site is anticipated to be very low.

For these reasons, the proposal seeks discretion for the 6 motorcycle spaces.

7.2.2 Development Standards

C2.6.1 – Construction of Parking Areas

Objective: *That parking areas are constructed to an appropriate standard.*

SCHEME REQUIREMENTS

A1 - *All parking, access ways, manoeuvring and circulation spaces must:*

(a) be constructed with a durable all weather pavement;

(b) be drained to the public stormwater system, or contain stormwater on the site; and

(c) excluding all uses in the Rural Zone, Agriculture Zone, Landscape Conservation Zone, Environmental Management Zone, Recreation Zone and Open Space Zone, be surfaced by a spray seal, asphalt, concrete, pavers or equivalent material to restrict abrasion from traffic and minimise entry of water to the pavement.

RESPONSE

Complies with A1

The car parking spaces, internal access ways, manoeuvring and circulation spaces are to be constructed with a durable, all-weather pavement. Stormwater will be drained to an existing and expanded on-site detention system, before draining to existing swales and culverts.

Please refer to the accompanying traffic impact assessment and civil documentation.

C2.6.2 – Design and layout of parking areas

Objective: *That parking areas are designed and laid out to provide convenient, safe and efficient parking.*

SCHEME REQUIREMENTS

A1.1 - *Parking, access ways, manoeuvring and circulation spaces must either:*

(a) comply with the following:

(i) have a gradient in accordance with Australian Standard AS 2890 - Parking facilities, Parts 1-6;

(ii) provide for vehicles to enter and exit the site in a forward direction where providing for more than 4 parking spaces;

(iii) have an access width not less than the requirements in Table C2.2;

(iv) have car parking space dimensions which satisfy the requirements in Table C2.3;

(v) have a combined access and manoeuvring width adjacent to parking spaces not less than the requirements in Table C2.3 where there are 3 or more car parking spaces;

(vi) have a vertical clearance of not less than 2.1m above the parking surface level; and

(vii) excluding a single dwelling, be delineated by line marking or other clear physical means; or

(b) comply with Australian Standard AS 2890- Parking facilities, Parts 1-6.

RESPONSE

Complies with A1.1(b)

The proposed car parking layout complies with AS 2890. Further detail is provided in the accompanying TIA and civil documentation.

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.

SCHEME REQUIREMENTS

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

Complies with A1

The existing access to the site via Piper's Road will remain unchanged, in accordance with A1.

C2.6.5 – Pedestrian access

Objective: That pedestrian access within parking areas is provided in a safe and convenient manner.

SCHEME REQUIREMENTS

A1 - Uses that require 10 or more car parking spaces must:

(a) have a 1m wide footpath that is separated from the access ways or parking aisles, excluding where crossing access ways or parking aisles, by:

(i) a horizontal distance of 2.5m between the edge of the footpath and the access way or parking aisle; or

(ii) protective devices such as bollards, guard rails or planters between the footpath and the access way or parking aisle; and

(b) be signed and line marked at points where pedestrians cross access ways or parking aisles.

P1 - Safe and convenient pedestrian access must be provided within parking areas, having regard to:

(a) the characteristics of the site;

(b) the nature of the use;

(c) the number of parking spaces;

(d) the frequency of vehicle movements;

(e) the needs of persons with a disability;

(f) the location and number of footpath crossings;

(g) vehicle and pedestrian traffic safety;

(h) the location of any access ways or parking aisles; and

(i) any protective devices proposed for pedestrian safety.

RESPONSE

Footpaths are provided along each side of the internal roads, consistent with the existing provision within the village.

However, the footpaths abut the road and a response to P1 is required.

P1

(a) The existing and proposed use of the site is for a residential retirement village. Due to the nature of the use, traffic volumes within the site are very low, with vehicle speeds at or below 10km/h.

The site provides sufficient car parking for residents and guests, however the primary mode of transport for many residents is walking, given that the nature of traffic movement within the site is entirely residential and the frequency of movements is relatively low.

(e), (f) (g) The relatively low frequency of vehicles, combined with the preference for many residents to walk through the property is not dissimilar to other residential retirement villages, such as Springvale Lifestyle Village and Fairway Rise, where no internal pedestrian footpaths are provided.

Given the demographic of residents, the lack of footpaths actually provides greater safety and efficiency of movement, by reducing the extent of hard-edge gutters/kerbs to navigate whilst walking through the property.

Given the low-risk nature of the use and traffic/pedestrian environment, designated footpaths are not considered necessary to continue to ensure safe and convenient pedestrian access.

(h) & (i) The access ways and parking aisles have also been designed to cater for vehicles, whilst prioritising pedestrian movement. Given all of the above, the provision of protective devices has not been considered necessary to ensure the safety and efficiency of pedestrian movement within the site.

The proposal satisfies P1.

7.3 ROAD AND RAILWAY ASSETS CODE

7.3.1 Use Standards

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.*

SCHEME REQUIREMENTS

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

(a) the amounts in Table C3.1; or

(b) allowed by a licence issued under Part IVA of the Roads and Jetties Act 1935 in respect to a limited access road.

A1.5 - Vehicular traffic must be able to enter and leave a major road in a forward direction.

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

- (a) any increase in traffic caused by the use;
- (b) the nature of the traffic generated by the use;
- (c) the nature of the road;
- (d) the speed limit and traffic flow of the road;
- (e) any alternative access to a road;
- (f) the need for the use;
- (g) any traffic impact assessment; and
- (h) any advice received from the rail or road authority.

RESPONSE

The existing access arrangements to the site comply with A1.5.

However, the TIA indicates the anticipated increase in traffic movements resulting from the proposed expansion will exceed the amounts specified under Table C3.1. Therefore, a response to P1 is required.

P1

As outlined in the accompanying TIA, the expansion is anticipated to generate an additional 113 vehicle movements per day. However, a morning and evening peak hour survey undertaken on the site indicates a marginal total of 33 vehicle movements.

This is supported by the nature/character of the development, with most current and future residents having already retired, which would suggest that vehicle movements to and from the site would be significantly lower than that specified in the RMS Guide, which was used to calculate anticipated vehicle movements.

Notwithstanding, the access to the site is from Pipers Road, which is a low volume road. In addition, recent roadworks have been undertaken to improve the junction between Pipers Road and the East Derwent Highway, ensuring that the access can cater for the anticipated increase in vehicle movements.

The proposal complies with P1.

7.3.2 Development Standards for Buildings or Works

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

Objective: *To minimise the effects of noise, vibration, light and air emissions on sensitive uses within a road or railway attenuation area, from existing and future major roads and the rail network.*

SCHEME REQUIREMENTS

A1 - *Unless within a building area on a sealed plan approved under this planning scheme, habitable buildings for a sensitive use within a road or railway attenuation area, must be:*

- (a) within a row of existing habitable buildings for sensitive uses and no closer to the existing or future major road or rail network than the adjoining habitable building;*
- (b) an extension which extends no closer to the existing or future major road or rail network than:
 - (i) the existing habitable building; or*
 - (ii) an adjoining habitable building for a sensitive use; or**
- (c) located or designed so that external noise levels are not more than the level in Table C3.2 measured in accordance with Part D of the Noise Measurement Procedures Manual, 2nd edition, July 2008.*

P1 - *Habitable buildings for sensitive uses within a road or railway attenuation area, must be sited, designed or screened to minimise adverse effects of noise, vibration, light and air emissions from the existing or future major road or rail network, having regard to:*

- (a) the topography of the site;*
 - (b) the proposed setback;*
 - (c) any buffers created by natural or other features;*
 - (d) the location of existing or proposed buildings on the site;*
 - (e) the frequency of use of the rail network;*
 - (f) the speed limit and traffic volume of the road;*
 - (g) any noise, vibration, light and air emissions from the rail network or road;*
 - (h) the nature of the road;*
 - (i) the nature of the development;*
 - (j) the need for the development;*
 - (k) any traffic impact assessment;*
-

(l) any mitigating measures proposed;

(m) any recommendations from a suitably qualified person for mitigation of noise; and

(n) any advice received from the rail or road authority.

RESPONSE

The acceptable solution requires habitable buildings to be within a row of existing habitable buildings for sensitive uses and no closer to the existing or future major road or rail network than the adjoining habitable building.

Within the existing lifestyle village, there are five (5) dwellings along the north-eastern boundary which constitute an existing row of habitable buildings. These dwellings have setbacks ranging from 17.5m to 28m from the boundary to the East Derwent Highway.

Within the proposed expansion, dwelling sites 1, 30, 33 and 45 represent an extension to the existing row of habitable buildings. Dwelling site 30 represents the closest of these to the highway, with a minimum setback of 28.9m from the highway – as illustrated below.

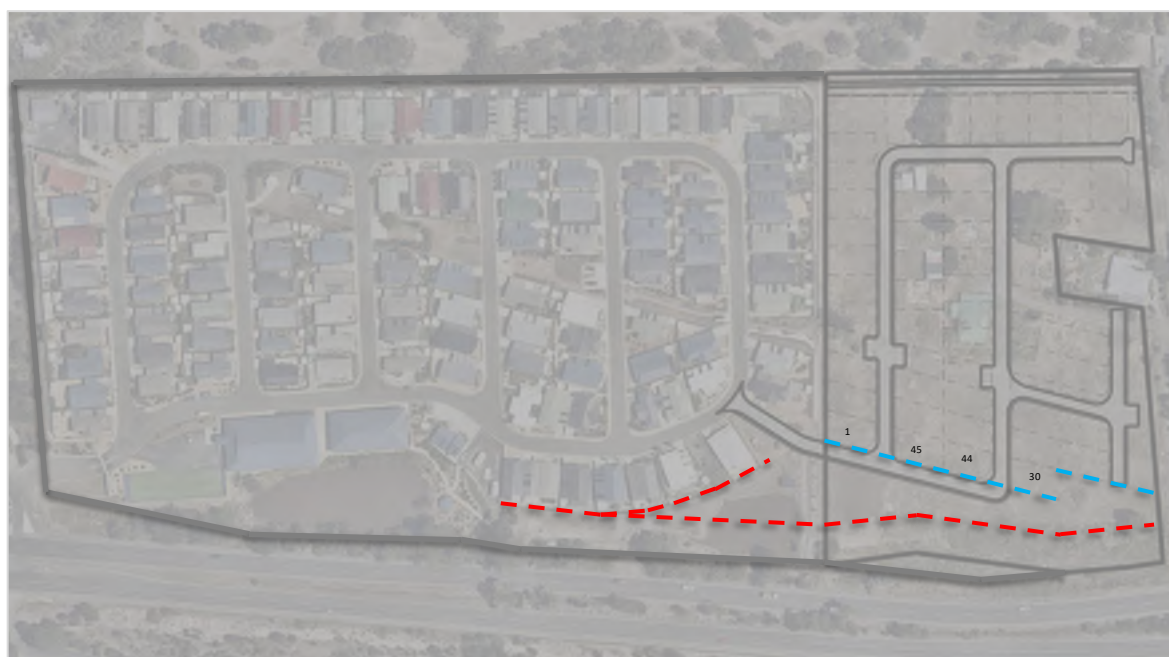


Figure 17: Site context/layout plan. Red line depicts the minimum setback/siting established by the existing row of habitable buildings. The blue line depicts the siting/setback of the proposed dwellings (sites 1, 28, 30, 44 and 45).

The above demonstrates that the proposed dwellings/sites constitute an extension to the existing row of habitable buildings, and do not extend closer to the highway than the existing row. Therefore, it is argued the proposal is in-fact compliant with A1(a).

If this interpretation is not accepted, a response to the performance criteria is provided below.

P1

The proposal is for an expansion of the existing Clarence Lifestyle Village, which was developed prior to the implementation of the road and railway attenuation overlay.

As a result, there are approximately 9 existing dwellings and communal buildings located within the overlay. Comparatively, seven (7) of the proposed dwelling sites (no. 27, 28, 30, 31, 44, 45 and 1) will fall within the extent of the overlay.

The extent of intrusion for dwelling sites 1 and 27 is minimal.

(a), (b) & (c) the site slopes gradually up from the East Derwent Highway, with the proposed dwellings setback a minimum of approximately 22m from the frontage to the highway. The setback has been provided for this reason and to provide an appropriate area to direct stormwater and overland flow. As a result, the area between the dwellings and the highway will be vegetated and utilised for recreational purposes.

Whilst the operator of the Lifestyle Village has not received any complaints from existing residents with regard to noise or other emissions, all dwellings will be constructed in accordance with the recommendations in the acoustic report and the relevant building regulations, specifying double glazing and wall insulation which will substantially reduce noise emissions.

We are not aware of any noise complaints received by the operator from residents.

(d) the orientation of the site ensures that light from passing vehicles will be perpendicular to the dwellings, thereby minimising direct light intrusion.

(e) n/a

(f) & (g) the East Derwent Highway supports vehicle speeds of up to 100km/hr, before speeds drop to 70km/hr toward the northern portion of the site.

The accompanying acoustic assessment provides modelling of traffic noise, which indicates most noise spikes are associated with heavy vehicles. However, the traffic impact assessment notes that larger vehicles only comprise approximately 4.5% of the total traffic volumes along the highway.

The operator is not aware of any noise complaints from residents.

Internally, the speed limits within the site are set at a maximum of 10km/hr and the existing communal/support buildings sit between the existing dwellings and the highway.

The minimum setback of the proposed dwelling sites to the highway is approximately 22m. This area will be used for stormwater drainage and retention and will also be landscaped to provide additional amenity for residents and provide screening from the highway.

All dwellings are to be constructed using double glazing (specifications are provided within the Acoustic Report) and sited to minimise noise intrusions to external areas of private open space.

Solid fencing to a height of 2.1m will be provided along the boundaries of the dwellings within the overlay, as recommended in the acoustic report.

(h) The Clarence Lifestyle Village has been established and operating without any known issues for well over a decade. The extension is not anticipated to result in any additional impacts as a result of the proximity to the highway and appropriate measures to mitigate noise intrusion are recommended in the accompanying acoustic report.

(i) The proposal is for an extension to the existing Clarence Lifestyle Village.

(j) As outlined in this report, there is an acute need and shortage of affordable aged care/retirement living options in Greater Hobart. Despite the development having not yet been approved, there is already high demand for the dwellings on the site. Future residents will add to the vibrancy of the existing community.

The development is not new, it is simply an extension to the existing Lifestyle Village.

(k) a traffic impact assessment has been provided.

(l) & (m) please refer to the accompanying Acoustic Assessment, which provides additional analysis of noise emissions and recommendations to mitigate noise intrusion.

(n) n/a.

The proposal complies with the performance criteria.

Please refer to the accompanying Acoustic Report prepared by NVC.

7.3.3 Development Standards for Subdivision

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

Objective: *To minimise the effects of noise, vibration, light and air emissions on lots for sensitive uses within a road or railway attenuation area, from existing and future major roads and the rail network.*

SCHEME REQUIREMENTS

A1 - *A lot, or a lot proposed in a plan of subdivision, intended for a sensitive use must have a building area for the sensitive use that is not within a road or railway attenuation area.*

P1 - *A lot, or a lot proposed in a plan of subdivision, intended for sensitive uses within a road or railway attenuation area, must be sited, designed or screened to minimise the effects of noise, vibration, light and air emissions from the existing or future major road or rail network, having regard to:*

- (a) the topography of the site;*
- (b) any buffers created by natural or other features;*
- (c) the location of existing or proposed buildings on the site;*
- (d) the frequency of use of the rail network;*
- (e) the speed limit and traffic volume of the road;*
- (f) any noise, vibration, light and air emissions from the rail network or road;*
- (g) the nature of the road;*
- (h) the nature of the intended uses;*

-
- (i) the layout of the subdivision;*
 - (j) the need for the subdivision;*
 - (k) any traffic impact assessment;*
 - (l) any mitigating measures proposed;*
 - (m) any recommendations from a suitably qualified person for mitigation of noise; and*
 - (n) any advice received from the rail or road authority.*
-

RESPONSE

Complies with P1

As outlined previously, the proposal is for an expansion of the existing Clarence Lifestyle Village, which was developed prior to the implementation of the road and railway attenuation overlay.

As a result, there are approximately 9 existing dwellings and communal buildings located within the overlay which extends 50m either side of the highway. Comparatively, seven (7) of the proposed dwelling sites (no. 27, 28, 30, 31, 44, 45 and 1) will fall within the extent of the overlay. P1 outlines similar criteria to those addressed under Clause C3.6.1, provided in section 5.3.1 of this report. That response, along with the accompanying acoustic report confirm the dwelling sites and dwelling types can be designed to appropriately minimise noise and other impacts from the highway.

The 'subdivision' component is limited to the consolidation of 2 Piper Road and 647 East Derwent Highway and does not alter the design, siting or layout of the development.

7.4 NATURAL ASSETS CODE

7.4.1 Development Standards for buildings and works

C7.6.1 – Buildings and works within a waterway and coastal protection area or a future coastal refugia area

Objective: *That buildings and works within a waterway and coastal protection area or future coastal refugia area will not have an unnecessary or unacceptable impact on natural assets.*

SCHEME REQUIREMENTS

P1.1 – Buildings and works within a waterway and coastal protection area must avoid or minimise adverse impacts on natural assets, having regard to:

- (a) impacts caused by erosion, siltation, sedimentation and runoff;*
 - (b) impacts on riparian or littoral vegetation;*
 - (c) maintaining natural streambank and streambed condition, where it exists;*
-

-
- (d) impacts on in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation;*
 - (e) the need to avoid significantly impeding natural flow and drainage;*
 - (f) the need to maintain fish passage, where known to exist;*
 - (g) the need to avoid land filling of wetlands;*
 - (h) the need to group new facilities with existing facilities, where reasonably practical;*
 - (i) minimising cut and fill;*
 - (j) building design that responds to the particular size, shape, contours or slope of the land;*
 - (k) minimising impacts on coastal processes, including sand movement and wave action;*
 - (l) minimising the need for future works for the protection of natural assets, infrastructure and property;*
 - (m) the environmental best practice guidelines in the Wetlands and Waterways Works Manual; and*
 - (n) the guidelines in the Tasmanian Coastal Works Manual.*
-

RESPONSE

Complies with P1.1

The site does not contain any identified natural values (i.e. native vegetation/threatened species) and does not contain any named watercourses.

P1.1

(a) The areas of the site subject to the waterway overlay serve as natural drainage lines from both the East Derwent Highway and the properties across higher ground to the west.

These areas do not contain any designated waterways. The existing lifestyle village provides a substantial buffer between the dwellings and the highway, providing vegetation and two ponds which improve the biodiversity values of the site and improve the amenity for residents.

The proposed expansion also seeks to retain an approximate 22m buffer between the closest dwelling site along the north-eastern side of the expansion site and the boundary to the East Derwent Highway. This will allow an expansion of the existing landscape buffer and will also allow this space to be used for recreation and as a natural drainage area.

The proposed treatment train will ensure that runoff is managed appropriately, thereby minimising erosion and/or sedimentation.

(b) there is no identified riparian or littoral vegetation on the site.

(c) there is no natural streambank or streambed on the site, aside from natural drainage areas. It is anticipated that the proposed expansion will serve to improve biodiversity values on the site, through an expansion of the green landscaping buffer along the north-western boundary.

(d) n/a

(e) The proposed expansion has been designed to ensure runoff is directed to the existing drainage areas along the north-western side of the site, which will be further enhanced through vegetation and the proposed stormwater infrastructure.

(f) & (g) n/a

(h) The layout of the proposed expansion must be consistent with that provided within the existing village, to maintain the desirable characteristics of the village, as well as familiarity for existing residents and ensuring ease of access/movement through the site.

The layout is also required to respond to the existing TasWater water main and associated easement that runs through the site.

(i) the site has relatively gentle undulations, ensuring that cut and fill can be kept to a minimum.

(j) the proposed expansion has been designed to respond to the topography of the site and the variation of dwelling types also allows greater flexibility for new residents to ensure dwellings responds logically to the topography of the site.

(k) n/a

(l) JSA Engineers have advised that no future protection works are required.

(m) & (n) n/a

The proposal complies with P1.

P3 - *Development within a waterway and coastal protection area or a future coastal refugia area involving a new stormwater point discharge into a watercourse, wetland or lake must avoid or minimise adverse impacts on natural assets, having regard to:*

(a) the need to minimise impacts on water quality; and

(b) the need to mitigate and manage any impacts likely to arise from erosion, sedimentation or runoff.

RESPONSE

Complies with P3

The proposed expansion seeks to extend the existing stormwater management system, which includes a combination of infiltration systems, swales and ponds which are to be provided along the north-eastern section of the site which abuts the East Derwent Highway.

As outlined in the stormwater report, the effectiveness of the stormwater treatment train has been modelled using MUSIC to provide an 86.4% reduction in total suspended solids, 45.5% reduction in total phosphorus, 66.5% reduction in total nitrogen and 90.8% reduction in gross pollutants.

Therefore, it is anticipated that the proposal will minimise impacts on water quality and is unlikely to result in any additional erosion, sedimentation or runoff – which cannot be contained within the system.

7.4.2 Development Standards for Subdivision

C7.7.1 Subdivision within a waterway and coastal protection area or a future coastal refugia area

Objective: That:

- (a) works associated with subdivision within a waterway and coastal protection area or a future coastal refugia area will not have an unnecessary or unacceptable impact on natural assets; and*
- (b) future development likely to be facilitated by subdivision is unlikely to lead to an unnecessary or unacceptable impact on natural assets.*

SCHEME REQUIREMENTS

A1 - Each lot, or a lot proposed in a plan of subdivision, within a waterway and coastal protection area or a future coastal refugia area, must:

- (a) be for the creation of separate lots for existing buildings;*
- (b) be required for public use by the Crown, a council, or a State authority;*
- (c) be required for the provision of Utilities;*
- (d) be for the consolidation of a lot; or*
- (e) not include any works (excluding boundary fencing), building area, services, bushfire hazard management area or vehicular access within a waterway and coastal protection area or future coastal refugia area.*

...

RESPONSE

Complies with A1

The 'subdivision' seeks to consolidate 2 Piper Road and 647 East Derwent Highway into a single lot, in accordance A1(d).

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.*

SCHEME REQUIREMENTS

A1 - Each lot, or a lot proposed in a plan of subdivision, within a priority vegetation area must:

-
- (a) *be for the purposes of creating separate lots for existing buildings;*
 - (b) *be required for public use by the Crown, a council, or a State authority;*
 - (c) *be required for the provision of Utilities;*
 - (d) *be for the consolidation of a lot; or*
 - (e) *not include any works (excluding boundary fencing), building area, bushfire hazard management area, services or vehicular access within a priority vegetation area.*

...

RESPONSE

Complies with A1.

A small section of the site, at the entrance to 2 Piper Road is mapped as a priority vegetation area. The area mapped comprises the entrance to the existing lifestyle village and is void of any vegetation.

Whilst the inclusion of the priority vegetation overlay appears to be a mapping anomaly, the 'subdivision' component is for the consolidation of two existing lots to form one, and complies with A1(d).

7.5 FLOOD PRONE AREAS HAZARD CODE

A portion of the site is subject to the flood prone areas hazard, as illustrated in Part A of this report - Figure 7.

Prior to the revised *Clarence City Council Flood Mapping (2021)*, all dwelling sites were located outside of the mapped overlay. As a result of the mapping revisions, a larger portion of the site is now subject to the Code.

7.5.1 Use Standards

C12.5.2 – Critical use, hazardous use or vulnerable use

Objective: *That critical, hazardous and vulnerable uses, located within a flood-prone hazard area can achieve and maintain a tolerable risk from flood.*

SCHEME REQUIREMENTS

P1 - *A critical, hazardous, or vulnerable use within a flood-prone hazard area must achieve a tolerable level of risk from flood, having regard to:*

- (a) *the type form and duration of the use; and*
 - (b) *a flood hazard report that demonstrates that:*
 - (i) *any increase in the level of risk from flood does not warrant any specific hazard reduction or protection measures; or*
-

(ii) the use can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures.

RESPONSE

Complies with P1

A preliminary flood assessment was prepared by JSA, prior to the mapping changes. Further analysis was then prepared in the accompanying Stormwater Design Proposal report.

The updated JSA documentation notes the following:

There are two sections of flood overlay relevant to the site. The north-eastern zone of the property is an existing drainage path, and is also subject to the waterway and coastal protection area. This drainage path is not a constructed swale or a permanent waterway, but is a natural low point where stormwater runoff accumulates in rainfall events, and forms part of the drainage system for the surrounding catchments and the East Derwent Highway. Council's flood model in this area indicates water depths in the 1% AEP storm event of up to 1.5m.

The section of the site from the south-western property boundary to the north-western property boundary is subject to the flood hazard zone associated with a concentration of overland flow south-west of the development site. The development site itself is relatively flat by comparison, resulting in the accumulated water spreading wide and shallow across the property. Council's flood model in this area indicates water depths in the 1% AEP storm event are generally in the range of less than 0.02m, and 0.05m to 0.2m.

The primary flood hazard area is located along the north-eastern side of the site. Within this area, no buildings are proposed. Works in this area are limited to the driveway, stormwater detention systems, and water and sewer infrastructure.

The overland flow approaching the site from the south-west will be cut off by and collected in a proposed swale drain along the south-western boundary. The water is then directed to a series of pipes which in turn directs the flow north-east to the on-site detention basins. In the event the pipes do not have sufficient capacity for the water (due to blockage or major storm event), the site design, road and lot layout, stormwater swales, and pipe arrangement have been designed to facilitate water entering the site from the south-western overland flow path and surface runoff generated on the developed site.

The network has been designed to accommodate a 1% AEP event with climate change loading applied to the inundation rate. This includes the on-site detention basins which have been upsized to accommodate additional runoff generated during such an event.

As outlined in the accompanying Flood Hazard Report prepared by RARE, the proposed development can maintain a tolerable risk from flood for the life of the development provided the recommendations in the report are implemented. In response to P1, the report notes:

...It is expected that the level of risk from flooding for the users of the site will decrease from current levels with the various measures of stormwater control implemented. The recommendation to position habitable floor levels 300mm above existing surface level will

also ensure that risk to users is minimised in the event that site controls fail or larger storm events than those assessed are encountered.

Existing likely flood risks for the south-western flows were assessed to be up to hazard classification H2 – ‘unsafe for small vehicles’. Hazard classification H3 specifically describes the point at which flows become unsafe for the elderly which relates to the use of the site as a retirement village.

With existing flows not considered to pose a significant risk to the elderly (not exceeding H2), the likely further reduced risks due to the implementation of stormwater controls is considered to maintain a tolerable risk for vulnerable use.

All proposed dwelling types require minimum finished floor levels between 0.3 - 0.4m above ground level, to meet building requirements for ground clearance. If the total clearance is increased by an additional 100-150mm, all floor levels will sit at least 0.3m above the max. defined flood height within the overland flow path – in accordance with the *Director’s Determination - Riverine Inundation Hazard Areas 2021*.

The submitted documentation confirms that no designated flood protection measures are required within the primary flood area, along the north-eastern boundary. The risk within the overland flow path from the south-west is negligible, therefore no protection measures are required.

P4 - *In addition to the requirements in clause C12.5.2 P1, a vulnerable use within a flood-prone hazard area, must be protected from flood, having regard to:*

- (a) any protection measures, existing or proposed;*
- (b) the ability and capability of people in a flood event who may live, work or visit the site, to:*
 - (i) protect themselves;*
 - (ii) evacuate in an emergency; and*
 - (iii) understand and respond to instructions in the event of an emergency;*
- (c) any emergency evacuation plan;*
- (d) the level of risk for emergency personnel involved in evacuation and rescue tasks;*
- (e) the advice contained in a flood hazard report; and*
- (f) any advice from a State authority, regulated entity or a council.*

RESPONSE

Complies with P4

As outlined in the JSA report, the design of the proposed development has considered the flood prone area and overland flow paths.

The development has been designed to accommodate overland flow from the south-west via a swale, which is then directed via a pipe system and internal roadways to the on-site detention

basins which have been upsized to accommodate additional flows generated during a 1% AEP event. No buildings are located in the primary flood area along the north-eastern boundary.

In response to P4, the accompanying Flood Hazard Report prepared by Rare, provides the following assessment:

The proposed use of the site as an extension to the existing Clarence Lifestyle Village (retirement village) ensures that the use remains consistent for implementation of existing emergency procedures and training of staff to ensure the safety of residents in the event of flood. Existing procedures and evacuation plans are to be updated to include the additional site expansion.

Should flooding be encountered, the site is situated such that safe uphill areas located clear of any mapped flooding can be reached from all parts of the site. Minimum floor levels in flood-prone mapped areas of 300mm above existing surface level will ensure residents who may not be able to self-evacuate can be protected from flooding until assisted. The proposed flood protection measures (e.g. cut-off drain) as discussed in this report will assist in reducing the risk of flooding and increasing the warning time for staff and residents to react to potential flooding and evacuate if required.

An evacuation plan has been prepared as part of the Bushfire Hazard Management Plan and can be updated if necessary to provide details on flood emergency procedures and evacuation points.

7.5.2 Development Standards

C12.6.1 – Buildings and works within a flood-prone hazard area

Objective: That

- (a) buildings and works within a flood-prone hazard area can achieve and maintain a tolerable level of risk from flood;
- (b) buildings and works do not increase the risk from flood to adjacent land and public infrastructure.

SCHEME REQUIREMENTS

P1.1 - Buildings and works within a flood-prone hazard area must achieve and maintain a tolerable risk from a flood, having regard to:

- (a) the type, form, scale and intended duration of the development;
- (b) whether any increase in the level of risk from flood requires any specific hazard reduction or protection measures;
- (c) any advice from a State authority, regulated entity or a council; and
- (d) the advice contained in a flood hazard report.

P1.2 - A flood hazard report also demonstrates that the building and works:

(a) do not cause or contribute to flood on the site, on adjacent land or public infrastructure; and

(b) can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures.

RESPONSE

Complies with P1.1 and P1.2

The accompanying Flood Hazard Report by Rare provides the following response to P1.1.

In conjunction with the discussions within this report, the proposed development maintains a tolerable risk from flood. The form of development is an extension to the existing Clarence Lifestyle Village located on the neighbouring property and intends to maintain the same form of use with construction of 54 residential dwellings and associated internal road access infrastructure and services infrastructure.

The site is potentially subject to two separate sources of flood waters, one within the north-eastern existing drainage channel and one from the south-west which sheet flows across the western portion of the site. The development intends to maintain the existing north-eastern drainage channel along with improvements in the form of two new stormwater detention basins which ensure stormwater runoff generated from the site is maintained at pre-development levels. The proposed building works are to be located clear of this portion of mapped flooding. A small portion of the entry access road is encroached by the outside extents of the flood mapping, however is indicated to be $\leq 0.05\text{m}$ in depth and is expected to maintain a low hazard classification of H1 – ‘generally safe for people, vehicles and buildings,’ which is considered a tolerable risk should no further risk reduction measures be undertaken here.

A new stormwater cut-off drain is proposed along the south-western boundary of the site to intercept flood water from the south-west and is an improvement to the existing informal minor depression/swale drain that runs through the site. The addition of multiple new headwall discharges along the length of this drain as well as check dams at regular intervals will improve safe passage of these flow by slowing, capturing and discharging flood water underground to the north-eastern drainage channel. This will reduce the occurrence of overland flows through the site due to flood waters and reduce risk. Proposed dwellings are to be constructed with raised floor levels to reduce any residual risk of overland flows, with recommendations made in this report to provide an optimal minimum floor level of 300mm above existing surface levels.

Should this recommendation be followed and as discussed previously in this report, the residual risk is expected to be reduced to H1 – ‘generally safe for people, vehicles and buildings,’ in this portion of the site, which is considered a tolerable risk.

With regard to P1.2, the works in the north-eastern area are either below ground or designed to control and distribute the existing water flow.

As discussed further in the report prepared by Rare, the proposed development is expected to improve the risk of flooding on downstream properties in addition to providing a lower risk to the site itself. The report goes on to state that:

Council's flood mapping indicates that flooding may occur in a 1% AEP event (climate change inclusive) across the site which also has impacts on downstream properties. Existing flows from the south-west are shown to impact the entire property of the neighbouring 657 East Derwent Highway residence as well as overflowing from the open drain located next to the northern driveways which spills into the holiday park.

By intercepting these flows in a more controlled manner with the new cut-off drain, check dams and multiple headwall inlets, the flows can be largely redirected towards the north-eastern drainage course in a safer manner. The major overland drainage routes (internal roads) proposed within the development site will direct any remaining overland flows east also and have been designed for the 1% AEP storm event as detailed in JSA's report. A reduction in the flows reaching the existing neighbouring residence and northern driveway swales is expected and is expected to reduce the risk or severity of inundation to neighbouring downstream properties.

The proposed stormwater detention basins will ensure that any increase in runoff generated by the proposed development's increase in impervious areas is controlled and discharged at pre-development levels as detailed in the associated JSA and Flussig reports and will not cause additional nuisance to neighbouring properties.

As discussed in the response to P1.1 above, the proposed mitigation measures for control of the south-western overland flows as well as remaining clear of the existing north-eastern drainage channel ensure that the proposed development maintains a tolerable risk from flood for a 1% AEP event (climate change inclusive).

The overall stormwater infrastructure has been designed to accommodate the expected 1% AEP levels for overland flow, and the 5% AEP levels for the reticulated networks.

The NCC requires habitable buildings to achieve minimum finished floor levels of 300mm above the defined flood level for a 1% AEP event. Part 3.4.1 of the NCC also specifies minimum clearances between the underside of floor joists and natural ground level for ventilation.

This generally ranges between 300mm to 400mm of clearance between the ground and the bottom of the joists. The client has confirmed that in addition to the joist clearance, all dwelling types will have finished floor levels 150mm – 200mm above this, providing a total vertical clearance between 450mm to 500mm above natural ground level.

This complies with the required clearance above the defined (max.) flood level of 0.2m + 300mm freeboard across the overland flow path.

7.5.3 Subdivision Standards

As per Clause 12.4.1 (d), the consolidation of lots is exempt from the Code.

However, a response to Clause C12.7.1 has been provided in the accompanying Flood Hazard Report.

7.6 BUSHFIRE PRONE AREAS CODE

7.6.1 Use Standards

C13.5.1 – Vulnerable uses

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

SCHEME REQUIREMENTS

P1 - *A vulnerable use must only be located in a bushfire-prone area if a tolerable risk from bushfire can be achieved and maintained, having regard to:*

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

RESPONSE

Complies with P1

An emergency management strategy and bushfire hazard management plan has been prepared and accompanies the application. The BHMP demonstrates a tolerable level of risk can be achieved, with all buildings able to achieve BAL-19, as required under AS 3959.

With regard to P1(a) the proposal results in the expansion of the existing Clarence Lifestyle Village, which is already well established.

The location of the site adjacent to the East Derwent Highway and the relatively sparse development density to the south, west and north (aside from the Discovery Holiday Park) also serves to potentially reduce the risk of bushfire. Whilst the lots to the west are heavily vegetated, there are several access roads and trails which ensures a high level of access to these areas for firefighting purposes.

The risk associated with the existing village has previously been determined to be tolerable and better management of the site related to bushfire hazard management provides benefit to the Lifestyle Village, as well as the broader community.

With regard to P1 (b), the existing Lifestyle Village already provides a significant community benefit, by providing affordable retirement living options within Greater Hobart, for which there is high demand. The proposed expansion will value add to the existing community, whilst also providing additional units for prospective future residents.

P1(c) 647 East Derwent Highway provides the only logical and practical location for the proposed expansion – given that the site:

- directly adjoins the existing lifestyle village; and
- does not contain substantial existing vegetation (which would otherwise need to be cleared).

Based on the above, there is no alternative lower-risk site.

P1(d) please refer to the accompanying emergency management plan and bushfire hazard management plan.

(e) n/a.

The proposal complies with P1.

A2 – *An emergency management strategy (vulnerable use) is endorsed by the TFS or accredited person.*

A3 – *A bushfire hazard management plan that contains appropriate bushfire protection measures that is certified by the TFS or an accredited person.*

RESPONSE

Complies with A2

A BHMP emergency management plan has been prepared and certified by the TFS. A copy is provided within the submitted BHMP, which has been prepared/certified by an accredited person.

7.6.2 Development Standards for Subdivision

C13.6.1 - Provision of hazard management areas

Objective: *That subdivision provides for hazard management areas that:*

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

SCHEME REQUIREMENTS

A1 –

- (a) ...*
 - (b) The proposed plan of subdivision:*
-

-
- (i) shows all lots that are within or partly within a bushfire-prone area, including those developed at each stage of a staged subdivision;*
- (ii) shows the building area for each lot;*
- (iii) shows hazard management areas between bushfire-prone vegetation and each building area that have dimensions equal to, or greater than, the separation distances required for BAL 19 in Table 2.6 of Australian Standard AS3959:2018 Construction of buildings in bushfire-prone areas; and*
- (iv) is accompanied by a bushfire hazard management plan that addresses all the individual lots and that is certified by the TFS or accredited person, showing hazard management areas equal to, or greater than the separation distances required for BAL 19 in Table 2.6 of Australian Standard AS3959:2018 Construction of buildings in bushfire-prone Areas; and*
- (c) if hazard management areas are to be located on land external to the proposed subdivision the application is accompanied by the written consent of the owner of that land to enter into an agreement under section 71 of the Act that will be registered on the title of the neighbouring property providing for the affected land to be managed in accordance with the bushfire hazard management plan.*

P1 - *A proposed plan of subdivision shows adequate hazard management areas in relation to the building areas shown on lots within a bushfire-prone area, having regard to:*

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

RESPONSE

Complies with A1

A1(b) (i) The subdivision component of this application is limited to the consolidation of two existing titles. 2 Piper Road supports the established portion of the Lifestyle Village, whilst 647 East Derwent Highway supports the proposed expansion.

A1(b)(i) & (ii) The application is accompanied by a Bushfire Hazard Management Plan, which includes a site plan showing the layout of the expansion and extent of the existing village. The plan includes existing/proposed dwelling sites which effectively constitute 'building areas'.

The accompanying BHMP illustrates all parts of the site subject to bushfire, noting the established portion of the village is managed under a separate BHMP.

(iii) & (iv) The BHMP includes a BAL assessment and hazard management areas, confirming that all dwelling sites within the consolidated lot achieve the required rating of BAL-19.

The plan has been prepared by an accredited person, as defined under the *Fire Service Act 1979*.

(c) Hazard management is not required on any land external to the site.

C13.6.2 Public and fire fighting access

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

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

SCHEME REQUIREMENTS

A1 –

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

...

RESPONSE

Complies with A1

The internal vehicular access arrangements are for private vehicles and visitors only. As such, it does not meet the definition of a road(s), which comprises land over which the general public has permanent right of passage.

As outlined in the Bushfire Hazard Management Plan & Report, the primary access to the lot is via Piper Road which is a sealed public road. All accesses demonstrate likely compliance with Part 2.3.2 of the Director's Determination – Bushfire Hazard Areas and Table 2, B and D - Refer to the Certified Bushfire Hazard Management Plan Specification Notes and/or **Appendix A** – for details/specification.

Within the property boundaries, the access to the perimeter of the building is to be provided to facilitate fire-fighting to attempt to defend the building and to allow reasonable egress for residents.

C13.6.3 Provision of water supply for fire fighting purposes

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

SCHEME REQUIREMENTS

A1 – *In areas serviced with reticulated water by the water corporation:*

(a) TFS or an accredited person certifies that there is an insufficient increase in risk from bushfire to warrant the provision of a water supply for fire fighting purposes;

(b) A proposed plan of subdivision showing the layout of fire hydrants, and building areas, is included in a bushfire hazard management plan approved by the TFS or accredited person as being compliant with Table C13.4; or

(c) A bushfire hazard management plan certified by the TFS or an accredited person demonstrates that the provision of water supply for fire fighting purposes is sufficient to manage the risks to property and lives in the event of a bushfire.

P1 – *No performance criteria.*

RESPONSE

Complies with A1

As outlined in the Bushfire Hazard Management Plan, Fire fighting vehicles will be able to enter the property and utilise the proposed reticulated hydrant water supply system for fire-fighting purposes.

The system is to be in accordance with the Deemed to Satisfy requirements of part 2.3.3 of the Directors Determination – Bushfire Hazard Areas and Table 3A, all parts – Refer to the Certified

Bushfire Hazard Management Plan Specification Notes and/or **Appendix A** – for detailed requirements.

Compliance certification for the existing hydrant system meeting the Directors Determination – Bushfire Hazard Areas, Table 3A all parts is to be provided to the Building Surveyor prior to Building Occupancy.

8. SUMMARY

This application is for a combined permit and amendment and has been prepared under Section 40T of the *Land Use Planning and Approvals Act 1993*.

The application has been facilitated by the amendment to the Urban Growth Boundary, which now includes the site and recognises the existing urban development in this area.

The format of the amendment includes rezoning of the subject site (2 Piper Road & 647 East Derwent Highway) from Rural Living to Particular Purpose Zone – Clarence Lifestyle Village under the *Tasmanian Planning Scheme – Clarence*.

The proposed Particular Purpose Zone provides use/development standards which are specifically tailored to acknowledge the built form and character of the existing lifestyle village and applies those principals to the proposed expansion. The basis for developing a PPZ in-lieu of the General Residential Zone is outlined in section 1.5 of this report.

The proposal brings the existing and proposed development into greater conformity with the planning scheme and relevant considerations under LUPPA and the Regional Land Use Strategy, whilst avoiding conflicts that were present in the original application, which proposed a rezoning and Specific Area Plan.

The expansion of the Lifestyle Village will provide additional, much needed retirement living options for Tasmania's ageing population - catering for a specific demographic, without jeopardising existing and future supply of General and Inner Residential land – which is more suited to general residential use/development and a wider demographic. Each dwelling type reflects the existing floor area and design characteristics evident within the established village, retaining and enhancing the character of the village – whilst providing appropriate levels of amenity and support.

The amendment has been assessed against the relevant criteria under the following statutory/strategic documents:

- Southern Tasmania Regional Land Use Strategy
- City of Clarence Strategic Plan; and
- All relevant State Policies.

The proposal has also been assessed against the objectives and requirements of the *Land Use Planning and Approvals Act 1993*.



Clarence Lifestyle Village
625 East Derwent Highway Aged
Care Development
Traffic Impact Assessment
September 2023



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1. Introduction

1.1 Background

Midson Traffic were engaged by Clarence Lifestyle Village to prepare a traffic impact assessment for a proposed extension to the existing aged care facility at 625 East Derwent Highway, Risdon.

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*, of the Tasmanian Planning Scheme – Clarence, 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:

- 27 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 647 East Derwent Highway, Risdon. The site currently consists of a residential dwelling and is located immediately adjacent to the Clarence Lifestyle Village to the south. A right of way access connects to East Derwent Highway along the northern boundary of the site.

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 - Clarence, 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)

2. Existing Conditions

2.1 Transport Network

For the purposes of this report, the transport network relevant to the development proposal consists of East Derwent Highway and Piper Road.

The East Derwent Highway is part of the State road network, owned and maintained by the Department of State Growth. It connects between the Tasman Bridge at its southern end, to Midland Highway at its northern end.

The East Derwent Highway is classified as 'Category 3 Roads: Regional Access Roads' under the Tasmanian Road Hierarchy. Regional Access Roads are of strategic importance to regional and local communities and economies; they link important towns to the Category 1 and Category 2 roads. Heavy freight vehicles use regional Access Roads, but this use is less than that of Regional Freight Roads.

East Derwent Highway adjacent to the site is a four-lane divided carriageway with an average pavement width of 7 m. The posted speed limit is 100-km/hr adjacent to the site, reducing to 70-km/h immediately north of the subject site. The traffic volume on East Derwent Highway is 15,150 vehicles per day, with approximately 4.5% heavy vehicles¹. Peak hour flows are approximately 1,800 vehicles per hour during both the AM and PM peak periods.

East Derwent Highway at the Piper Road junction is shown in Figure 2.

Figure 2 East Derwent Highway



¹ Department of State Growth traffic data, 2021.

Piper Road is a local, narrow sealed road, which provides access to a relatively small residential catchment located on both Piper Road and Napier Street. Piper Road and the existing access to the Lifestyle Village is shown in Figure 3.

Figure 3 Piper Road



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 2018 and 30th July 2023 for East Derwent Highway between Grasstree Hill Road and Sugarloaf Road, and the full length of Piper Road.

The findings of the crash data is summarised as follows:

- No crashes were reported in Piper Road.
- A total of 51 crashes were reported in the East Derwent Highway.
- Severity. 1 crash involved serious injury; 9 crashes involved minor injury; 6 crashes involved first aid at the scene; and 35 crashes involved property damage only.
- Time of day. Afternoon crashes were dominant, with 20 crashes reported between 3:00pm and 6:00pm. The distribution of crashes by time of day is shown in Figure 4.

- **Day of week.** Crashes were relatively evenly disbursed by day of the week. The crash rate by day of week is shown in Figure 5.
- **Crash types.** Rear end crashes were dominant with 17 reported incidents. Vehicles striking animals, 'right-off-carriageway' and 'left-rear' collisions were the next most frequent crash types. Crash types are summarised in Figure 6.
- **Crash locations.** Crashes were generally concentrated near road junctions. The crash locations are shown in Figure 7.
- **Vulnerable road users.** 3 crashes involved motorcycles (1 x serious injury, 2 x minor injury). 2 crashes involved bicycles (1 x first aid, 1 x minor injury).

The crash history on East Derwent Highway is considered to be consistent with a busy highway road through an urban environment. The crash data does not provide an indication that there are any serious road safety deficiencies in the network that may be exacerbated by traffic generated by the development proposal.

Figure 4 Crashes by Time of Day



Figure 5 Crashes by Day of Week

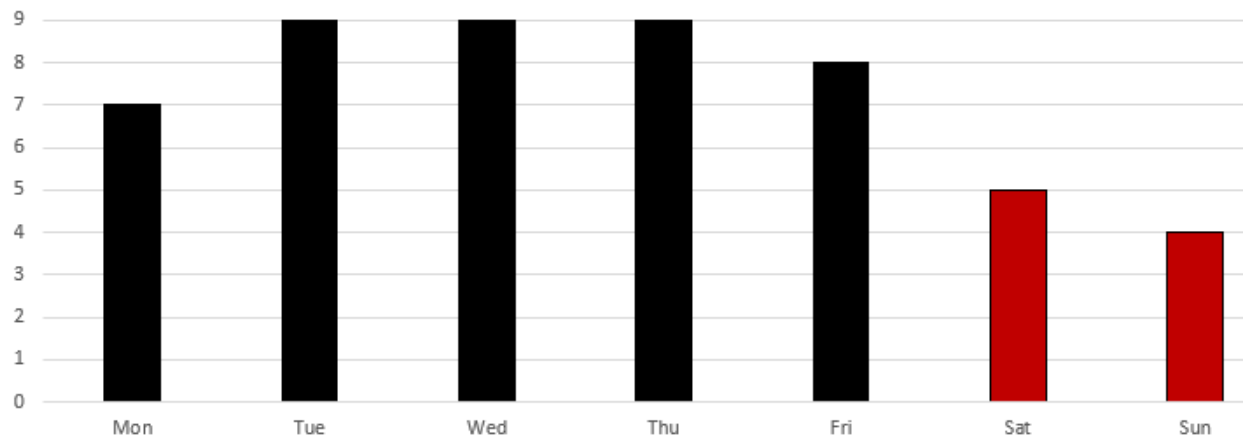


Figure 6 Crash Types

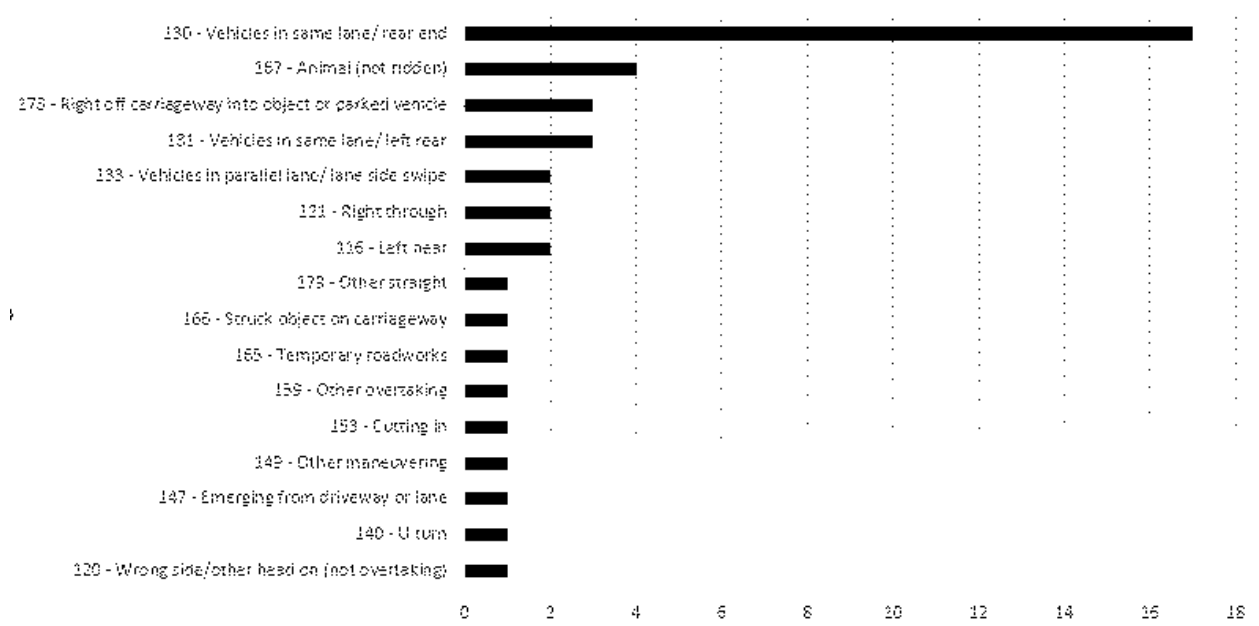
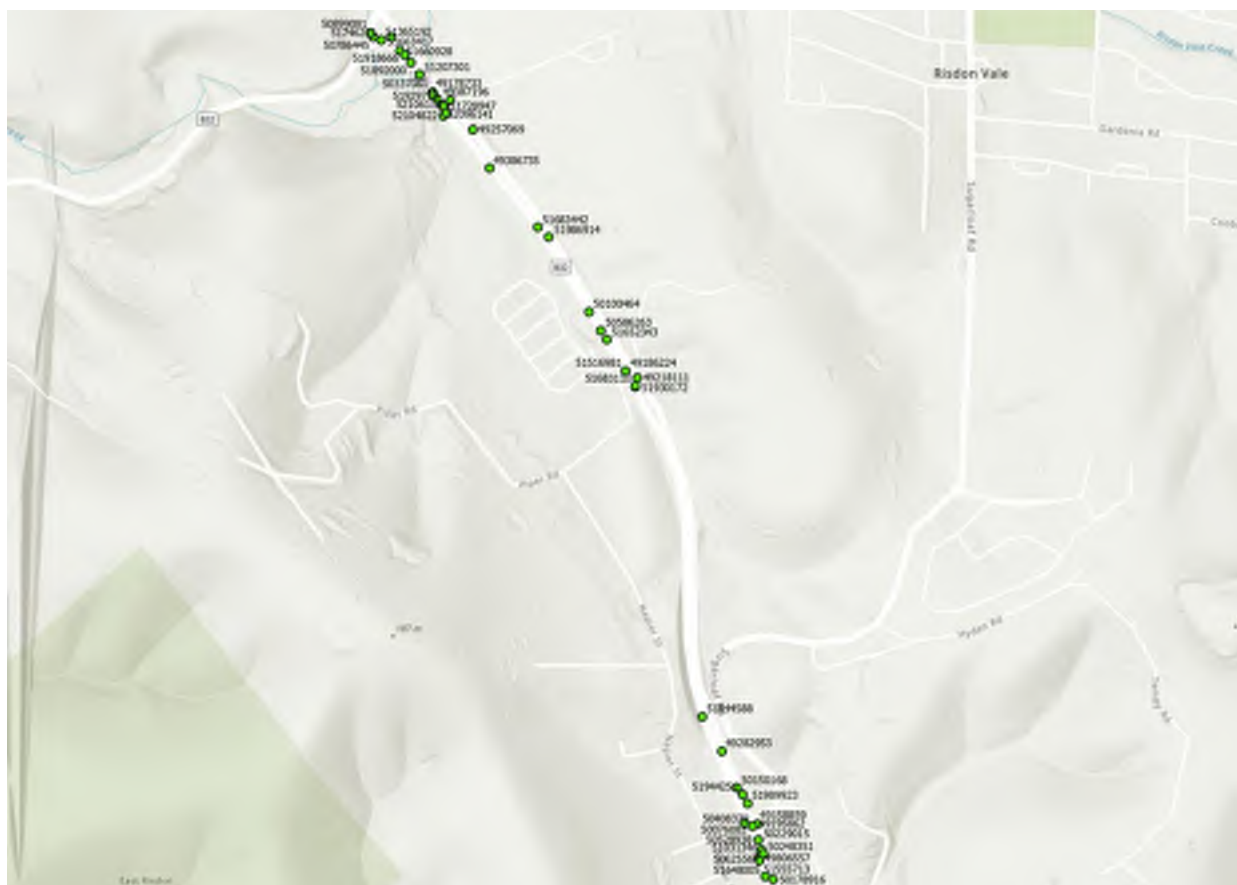


Figure 7 Crash Locations



Source: Department of State Growth

3. Proposed Development

3.1 Development Proposal

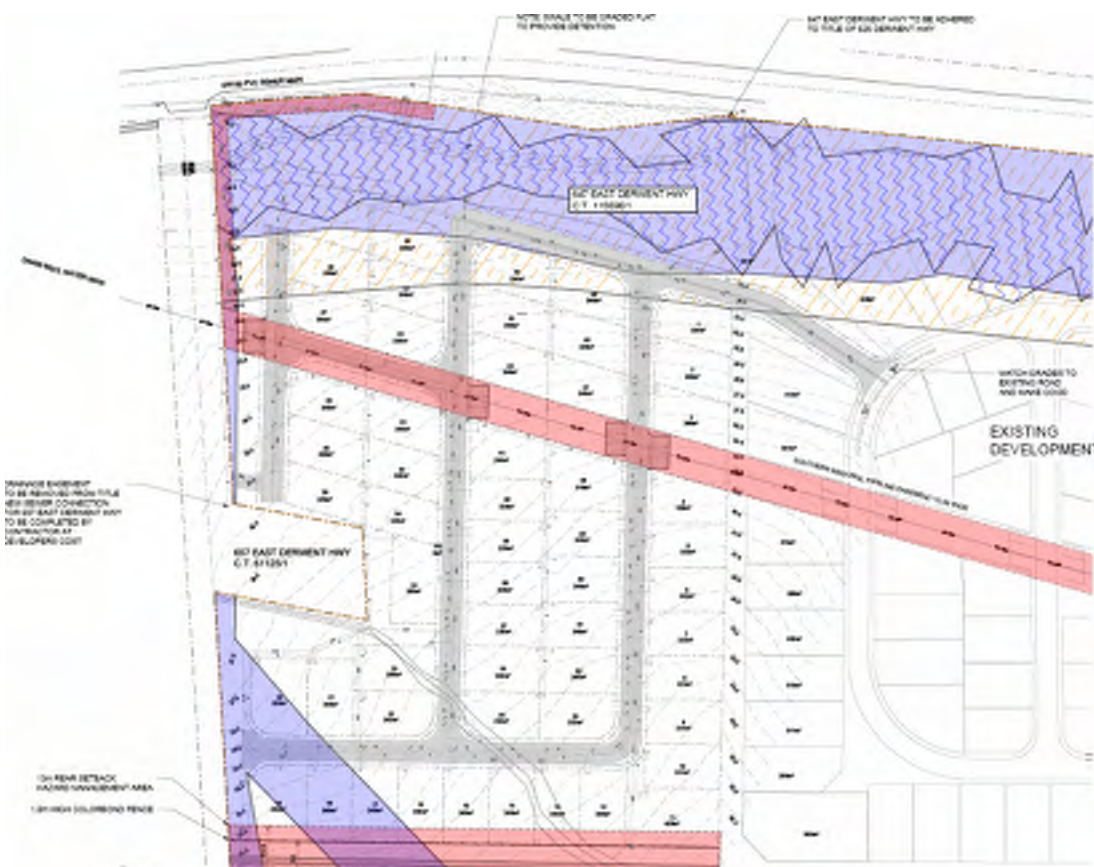
The proposed development involves the construction of 54 independent living units as an extension to the existing Clarence Lifestyle Village. The new independent living units will connect to the existing site via a new internal road located at the northern corner of the existing site. The units will be a mix of 1, 2 and 3 bedroom dwellings. Each dwelling will have a carport and a driveway which provides up to 8-metres of length for parking of an additional car in front of the carport.

A total of 12 on-street visitor car parking spaces are proposed. These are provided as 4 bays of 3 angle parking spaces within the internal road network.

Each unit will have parking for two cars (one garage and one jockey style space in front of the garage), a total of 108 spaces. The total on-site car parking provision is therefore 120 spaces.

The proposed development is shown in Figure 8.

Figure 8 Proposed Development Plans



4. Traffic Impacts

4.1 Trip Generation

4.1.1 RMS Guide Traffic Generation – Retirement Village

The RMS Guide provides traffic generation rates for 'Housing for the aged and disabled persons'. It is defined as follows:

"Housing for aged or disabled persons refers to residential accommodation (in any building form), which is used or is intended to be used permanently as accommodation for aged persons or disabled persons. Housing of this kind may consist of hostels, a grouping of self-contained dwellings, or a combination of both. This accommodation usually includes one or more of the following facilities:

- *accommodation for staff employed or to be employed in connection with the development.*
- *chapel or other place of worship.*
- *medical consulting room.*
- *meeting room, recreation facility.*
- *shops.*
- *therapy room.*
- *any other facilities for the use or benefit of aged or disabled persons".*

The traffic generation rates provided in the updated RMS Guide are summarised as follows:

- 2.1 trips per day per dwelling
- 0.4 trips per hour per dwelling during peak periods. It further states that "morning site peak hour does not generally coincide with the network peak hour).

Based on these traffic generation rates, the proposed development may generate the following trips:

- 113 trips per day
- 22 trips per hour during peak periods.

4.1.2 Traffic Surveys

Peak hour traffic surveys were undertaken by Midson Traffic at the existing Clarence Lifestyle Village on Monday 7th March 2016. The results are summarised in Table 1.

Table 1 Clarence Lifestyle Village Traffic Generation Surveys

Peak Period	Vehicles Entering	Vehicles Exiting	Total Vehicles
Morning Peak (8:00-9:00am)	12 vehicles	9 vehicles	21 vehicles
Evening Peak (5:00-6:00pm)	6 vehicles	6 vehicles	12 vehicles

At the time of the survey, the Clarence Lifestyle Village currently has 56 occupied units. This equates to the following peak hour generation:

- 0.375 trips per dwelling during the morning peak period. The directional split is 57% inward trips/ 43% outward trips.
- 0.214 trips per dwelling during the afternoon peak period. The directional split is 50%/ 50% inward/ outward trips.

Applying this traffic generation rate to the proposed expansion of the Lifestyle Village development (52 units), we have the following:

- Morning peak traffic generation: 20 trips per hour (11 inward/ 9 outward)
- Evening peak traffic generation: 12 trips per hour (6 inward/ 6 outward)

The peak hour trip rates surveyed are generally consistent with the RMS Guide recommendations. The RMS Guide recommends a peak rate of 0.4 trips per hour, but notes that the development peak does not coincide with the transport network peak. In this case, the network peak hour (8:00am to 9:00am) was surveyed and this rate was similar, but less than, the RMS Guide rate of 0.4 trips per hour.

4.2 Trip Distribution

All traffic movements are restricted to left-in/ left-out at the Piper Road junction.

4.3 Traffic Capacity Analysis

The development proposal will generate traffic that will intensify the existing access junction at Piper Road. The access is shown in Figure 9.

Figure 9 Existing Piper Road Site Access



The Acceptable Solution A1.4 of Clause C3.5.1 of the Planning Scheme states: "*Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than the amounts in Table C3.1*".

Table C3.1 states that the maximum permitted increase at the existing access is 20% or 40 vehicles per day, whichever is greater. In this case the development will exceed 20% of the existing traffic volume at the access and therefore does not comply with the requirements of Acceptable Solution A1.4 of Clause C3.5.1 of the Planning Scheme. The Performance Criteria P1 of Clause C3.5.1 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 to the proposed development:

- a. Increase in traffic. The increase in traffic is expected to be 113 vehicles per day. During peak times, traffic generation will be in the order of 22 vehicles per hour. This equates to an increase of an average of around 1 vehicle every 3 minutes during peak periods only.
- b. Nature of traffic. The traffic generated by the development will be consistent with existing traffic that is currently utilising the access.
- c. Nature of road. Piper Road is a low volume road. The intersection at the site's access is clear and obvious for all road users.
- d. Speed limit and traffic flow of road. The general urban speed limit of 50-km/h is applicable to Piper Road. The traffic volume is approximately 1,000 vehicles per day.
- e. Alternative access. Alternative access was considered at the right-of-way at the northern boundary of the subject site, but discounted as it is a low volume driveway rather than a road junction. The use of the existing access to Clarence Lifestyle Village was considered the most appropriate location.
- f. Need for use. The expansion of the Lifestyle Village is based on demand.
- 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) with respect to the use of the access.

Based on the above findings, the development meets the requirements of Performance Criteria P1 of Clause C3.5.1 of the Planning Scheme.

4.4 Access Impacts

The existing junction of the subject site with Pipers Road is well defined. Clear visibility is available for approaching traffic, with clearly defined priorities at the Pipers Road junction, including its junction with East Derwent Highway.

The additional traffic generation associated with the proposed development can be adequately absorbed by the junction without any significant loss of operational efficiency (noting the peak generation will be in the order of 22 vehicles per hour, which represents an increase of slightly higher than 1 vehicle every 3 minutes).

4.5 Pedestrian Impacts

There is little pedestrian activity in the surrounding road network. A bus stop is located on the Highway south of the Piper Road intersection. The lack of pedestrian infrastructure along the Highway currently prevents pedestrian activity to other destinations from the subject site.

The proposed development will facilitate a pedestrian path to the north of the subject site. This will enable pedestrians to access destinations such as the Tavern to the north of the site.

4.6 Road Safety Impacts

No significant adverse road safety impacts are therefore foreseen as a result the proposed development.

The additional traffic generated by the proposed development can be adequately absorbed by the surrounding road network. The intersection of the site's junction with Piper Road and the intersection of Piper Road/ East Derwent Highway will continue to operate at a high level of service for all approaches.

It is noted that the intersection of Piper Road/ East Derwent Highway has been modified in recent years to ban right turn movements from Piper Road to the Highway. A right turn lane into Piper Road has also been constructed. The crash rate at the East Derwent Highway/ Pipers Road junction is relatively low.

5. Parking Assessment

5.1 Parking Provision

The proposed development will provide a total of 122 spaces as follows:

- 12 on-street visitor car parking spaces. These are 90-degree spaces at various locations within the internal road network.
- 108 parking spaces associated with the independent living units. This consists of one garage and one jockey style space in front of the garage.

5.2 Parking Demand

The RMS Guide states that the following parking requirements are applicable to resident funded retirement developments:

- 2 spaces per 3 units
- + 1 space per 5 units for visitor parking

This equates to a parking provision of 47 spaces. The provision of 120 spaces therefore exceeds this amount.

5.3 Planning Scheme Requirements

The Acceptable Solution A1 of Clause C2.5.1 of the Planning Scheme states:

"The number of on-site car parking spaces must be no less than the number specified in Table C2.1, excluding if:

- (a) the site is subject to a parking plan for the area adopted by council, in which case parking provision (spaces or cash-in-lieu) must be in accordance with that plan;*
- (b) the site is contained within a parking precinct plan and subject to Clause C2.7;*
- (c) the site is subject to Clause C2.5.5; or*
- (d) it relates to an intensification of an existing use or development or a change of use where:*
 - (i) the number of on-site car parking spaces for the existing use or development specified in Table C2.1 is greater than the number of car parking spaces specified in Table C2.1 for the proposed use or development, in which case no additional on-site car parking is required; or*
 - (ii) the number of on-site car parking spaces for the existing use or development specified in Table C2.1 is less than the number of car parking spaces specified in Table*

C2.1 for the proposed use or development, in which case on-site car parking must be calculated as follows:

$$N = A + (C - B)$$

N = Number of on-site car parking spaces required

A = Number of existing on site car parking spaces

B = Number of on-site car parking spaces required for the existing use or development specified in Table C2.1

C = Number of on-site car parking spaces required for the proposed use or development specified in Table C2.1".

In this case, sub-points (a), (b), (c), and (d) are not applicable. The car parking requirements in Table C2.1 for the Particular Purpose Zone is:

- 1 space per bedroom; plus
- 1 dedicated space per 5 dwellings for visitor parking for residential uses not within the general residential zone.

An average of 2 bedrooms per unit has been assumed (the actual mix of 1, 2 and 3 bedroom units will depend upon demand). This equates to a parking requirement for 117 spaces. The provision of 120 spaces therefore meets the requirements of Acceptable Solution A1 of Clause C2.5.1 of the Planning Scheme.

6. Conclusions

This traffic impact assessment (TIA) investigated the traffic and parking impacts of a proposed development at 647 East Derwent Highway.

The key findings of the TIA are summarised as follows:

- The development is estimated to generate 113 vehicle trips per day, with a peak of 22 vehicles per hour.
- The traffic generation will not have any significant adverse impact on the traffic efficiency or road safety of the network. The traffic generation associated with the development meets the requirements of Performance Criteria P1 of Clause C3.5.1 of the Planning Scheme.
- The provision of 120 on-site car parking spaces meets the requirements of Acceptable Solution A1 of Clause C2.5.1 of the Planning Scheme.

Based on the findings of this report the proposed development is supported on traffic grounds.

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Document Status

Revision	Author	Review	Date
0	Keith Midson	Zara Kacic-Midson	7 th September 2023
1	Keith Midson	Zara Kacic-Midson	11 th September 2023



CELEBRATING
15 YEARS
2008 - 2023



Keith Midson
Midson Traffic Pty Ltd
28 Seaview Avenue
Taroona TAS 7053
0437 366 040

30 September 2024

Phil Gartrell
IreneInc Planners
2/49 Tasma Street
Hobart TAS 7000

Dear Phil,

2 PIPER RD, 647 EAST DERWENT HWY & 657 EAST DERWENT HWY – RESPONSE TO COUNCIL RFI

This letter provides a response to Council's request for further information regarding the proposed expansion to the Clarence Lifestyle Village at the abovementioned address.

The responses to the matters raised regarding traffic are addressed in the following sections.

1. Traffic Generation

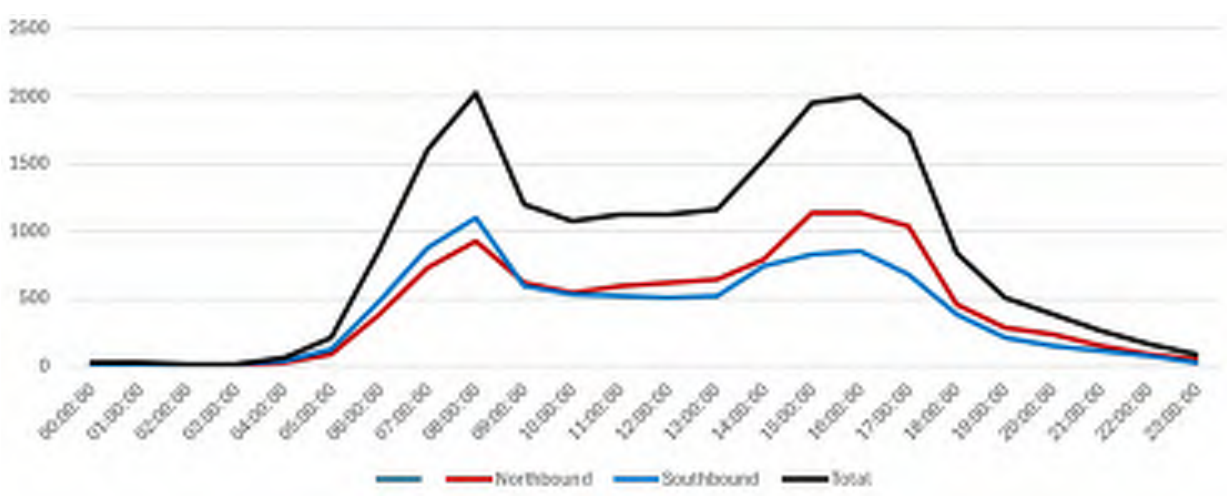
Council stated:

"The Traffic Impact Assessment sec 4.1.2-traffic survey refers the data from March 2016 and Council's engineers believe the data presented is outdated and not relevant. It is understood that more than 50% of the existing units were built and occupied after 2016 and all developments at Napier Street were post 2016, it is logical to collect recent data for the intersection capacity and safety assessment".

The traffic surveys undertaken in 2016 identified that the 56 occupied dwellings at the time of the survey generated 0.375 trips per dwelling per hour during the morning peak period, and 0.214 trips per dwelling per hour during the afternoon peak period.

Updated surveys were conducted on 26th September 2024 at the Piper Road junction. The surveys were undertaken during the peak periods associated with East Derwent Highway. The weekday hourly flow of the East Derwent Highway near the subject site is shown in Figure 1. Peak hourly flows on the Highway are approximately 2,000 vehicles per hour during the morning (8:00am – 9:00am) and afternoon peak (4:00pm – 5:00pm) periods respectively.

Figure 1 East Derwent Highway Weekday Hourly Flows



The survey results are summarised in Table 1.

Table 1 Clarence Lifestyle Village Traffic Generation Surveys

Peak Period	Vehicles Entering	Vehicles Exiting	Total Vehicles
Morning Peak (8:00-9:00am)	22 vehicles	19 vehicles	41 vehicles
Evening Peak (4:00-5:00pm)	17 vehicles	12 vehicles	29 vehicles

At the time of the survey, the Clarence Lifestyle Village had 111 occupied units. This equates to the following peak hour generation:

- AM peak. 0.37 trips per dwelling per hour. The directional split was 54% inward trips/ 46% outward trips.
- PM peak. 0.26 trips per dwelling per hour. The directional split was 59% inward trips/ 41% outward trips.

The surveys compare well to the original surveys conducted in 2016. The 2024 AM peak generation was the same as the 2016 survey results. The PM peak generation was slightly higher (0.26 versus 0.21 trips per unit per hour) due to the difference in the selection of the peak hour time (4-5pm versus 5-6pm). The earlier time was selected for the 2024 surveys as this reflected the peak period of the highway.

2. East Derwent Highway/ Piper Road Junction

Council have stated:

"It is also noted that the TIA has only assessed the access to the lifestyle village and has not consider capacity/safety assessment of the Piper Road/ East Derwent Highway intersection. Due to the proximity and the likely intensification of the intersection, it is suggested to include full assessment for the junction of Piper Road/East Derwent Highway".

Peak hour turning movement counts were undertaken at the Lifestyle Village access with Piper Road as well as the East Derwent Highway/ Piper Road junction on 26th September 2024. The turning movement summaries are provided in Table 2 and Table 3.

Table 2 AM Peak Turning Movement Surveys – East Derwent Hwy/ Piper Road

Approach – 8:00 – 9:00am	Left Turn	Through	Right Turn
East Derwent Hwy south	67	923	-
East Derwent Hwy north	-	1,098	12
Piper Road west @ East Derwent Hwy	46	0	-
Lifestyle Village Access	19	-	0

Table 3 PM Peak Turning Movement Surveys – East Derwent Hwy/ Piper Road

Approach – 4:00 – 5:00pm	Left Turn	Through	Right Turn
East Derwent Hwy south	51	1,142	-
East Derwent Hwy north	-	856	16
Piper Road west @ East Derwent Hwy	30	0	-
Lifestyle Village Access	11	-	1

The existing access arrangements at the Lifestyle Village were modelled using SIDRA Intersection modelling software. Two scenarios were tested for the East Derwent Highway/ Pipers Road junction:

- Existing conditions during AM and PM peaks.
- 10-year forecast conditions during AM and PM peaks, accounting for background growth on the highway and all traffic generation associated with the proposed expansion of the Lifestyle Village utilising the existing access (ie. traffic generation not utilising the proposed junction directly onto East Derwent Highway to the north).

The growth rate on East Derwent Highway is approximately 2.4% per annum compound growth (based on 2018 to 2023 volumes). The traffic generation associated with the proposed Lifestyle Village expansion is likely to be:

- 0.37 trips per dwelling per hour during the AM peak = 20 vehicles per hour
- 0.26 trips per dwelling per hour during the PM peak = 14 vehicles per hour

The trip generation is based on the updated traffic survey results conducted in 2024, as well as the directional splits of inward and outward traffic.

The 10-year forecast AM and PM turning movements based on the above assumptions are summarised in Tables 3 and 4 respectively.

Table 4 2034 AM Peak Turning Movement Surveys – East Derwent Hwy/ Piper Road

Approach – 8:00 – 9:00am	Left Turn	Through	Right Turn
East Derwent Hwy south	90	1,170	-
East Derwent Hwy north	-	1,392	15
Piper Road west @ East Derwent Hwy	62	0	-
Lifestyle Village Access	28	-	0

Table 5 2034 PM Peak Turning Movement Surveys – East Derwent Hwy/ Piper Road

Approach – 4:00 – 5:00pm	Left Turn	Through	Right Turn
East Derwent Hwy south	68	1,448	-
East Derwent Hwy north	-	1,085	20
Piper Road west @ East Derwent Hwy	40	0	-
Lifestyle Village Access	16	-	1

The SIDRA modelling outputs for the existing conditions during the AM and PM peaks are summarised in Tables 6 and 7 respectively.

Table 6 AM Peak Existing Conditions East Derwent Hwy/ Piper Rd SIDRA

Movement Performance - Vehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m
South: RoadName								
1	L	71	1.0	0.050	7.6	LOS A	0.2	1.4
2	T	972	0.4	0.263	0.0	LOS A	0.0	0.0
Approach		1042	7.9	0.263	0.5	NA	0.2	1.4
North: RoadName								
8	T	1156	0.4	0.313	0.0	LOS A	0.0	0.0
9	R	13	1.0	0.029	15.3	LOS C	0.1	0.7
Approach		1169	0.3	0.313	0.2	NA	0.1	0.7
West: RoadName								
10	L	48	1.0	0.075	11.8	LOS B	0.2	1.5
Approach		48	1.0	0.075	11.8	LOS B	0.2	1.5
All Vehicles		2259	0.0	0.313	0.6	NA	0.2	1.5

Level of Service (LOS) Method: Delay (HCM 2000).

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.

Table 7 PM Peak Existing Conditions East Derwent Hwy/ Piper Rd SIDRA

Movement Performance - Vehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m
South: RoadName								
1	L	54	1.0	0.030	7.7	LOS A	0.2	1.1
2	T	1202	0.4	0.325	0.0	LOS A	0.0	0.0
Approach		1256	0.1	0.325	0.3	NA	0.2	1.1
North: RoadName								
8	T	901	0.4	0.244	0.0	LOS A	0.0	0.0
9	R	17	1.0	0.056	19.6	LOS C	0.2	1.3
Approach		918	0.3	0.244	0.4	NA	0.2	1.3
West: RoadName								
10	L	32	1.0	0.061	13.2	LOS B	0.2	1.2
Approach		32	1.0	0.061	13.2	LOS B	0.2	1.2
All Vehicles		2205	0.1	0.325	0.5	NA	0.2	1.3

Level of Service (LOS) Method: Delay (HCM 2000).

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.

It can be seen that the existing intersection performs at a relatively high level of service, with all movements at LOS C or better.

The SIDRA modelling outputs for 2034 AM and PM peaks are summarised in Tables 8 and 9 respectively. Note that traffic movements associated with the eastern leg of Piper Road was not included in the modelling. This approach to the intersection operates independently from the western approach, with no through movements occurring between eastern and western approaches and vice versa.

Table 8 AM Peak 2034 Conditions East Derwent Hwy/ Piper Rd SIDRA

Movement Performance - Vehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m
South: RoadName								
1	L	95	1.0	0.067	7.7	LOS A	0.3	1.9
2	T	1232	8.4	0.333	0.0	LOS A	0.0	0.0
Approach		1328	7.9	0.333	0.5	NA	0.3	1.9
North: RoadName								
8	T	1465	8.4	0.396	0.0	LOS A	0.0	0.0
9	R	18	1.0	0.056	20.3	LOS C	0.2	1.3
Approach		1481	8.3	0.396	0.2	NA	0.2	1.3
West: RoadName								
10	L	65	1.0	0.132	13.6	LOS B	0.4	2.7
Approach		65	1.0	0.132	13.6	LOS B	0.4	2.7
All Vehicles		2873	7.9	0.396	0.7	NA	0.4	2.7

Level of Service (LOS) Method: Delay (HCM 2000)

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.

Table 9 PM Peak 2034 Conditions East Derwent Hwy/ Piper Rd SIDRA

Movement Performance - Vehicles								
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m
South: RoadName								
1	L	72	1.0	0.051	7.7	LOS A	0.2	1.4
2	T	1524	8.4	0.412	0.0	LOS A	0.0	0.0
Approach		1596	8.1	0.412	0.3	NA	0.2	1.4
North: RoadName								
8	T	1142	8.4	0.389	0.0	LOS A	0.0	0.0
9	R	21	1.0	0.134	31.1	LOS D	0.4	2.9
Approach		1163	8.3	0.389	0.6	NA	0.4	2.9
West: RoadName								
10	L	42	1.0	0.117	16.5	LOS C	0.3	2.3
Approach		42	1.0	0.117	16.5	LOS C	0.3	2.3
All Vehicles		2801	8.0	0.412	0.7	NA	0.4	2.9

Level of Service (LOS) Method: Delay (HCM 2000)

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.

It can be seen that the 10-year forecast conditions result in the intersection continuing to operate at an acceptable level of service, LOS D or better. The left turn movement from Piper Road to East Derwent Highway reduces from LOS C to LOS D within the 10-year period, however this is on the assumption that all traffic associated with the proposed Lifestyle Village expansion will utilise the Piper Road junction.

The East Derwent Highway/ Piper Road junction has undergone modifications in recent years. The junction only permits left-turn movements from Piper Road to East Derwent Highway. The junction also provides channelised left-turn and right-turn movements from the highway into Piper Road.

The junction of East Derwent Highway and Piper Road is adequate and acceptable from a capacity and safety perspective to cater for traffic generated by the proposed Lifestyle Village expansion.

3. External Pedestrian Movements

Council have stated:

"One of the major challenges for existing use and proposed development at this location is the access to the amenities including bus stops/shops etc. The application and Traffic Impact Assessment notes a pedestrian pathway along north of the proposed development however these details are missing from the plan or have not been included. It is understood that any works for such pedestrian access/pathway will require works within the land controlled by the Department of State Growth (DSG) and a Crown consent will be required".

It is understood that a pedestrian footpath is not being pursued along the East Derwent Highway.

4. Internal Pedestrian Movements

Council have stated:

"The traffic impact Assessment is to clearly address the risk of pedestrian and access within the site/location and provide clear recommendation for improvements".

The existing Lifestyle Village does not provide separate footpaths within the site. Traffic within the site is low-volume and low-speed and effectively operates as a 'shared zone'. The design of the internal road network will provide a low-speed environment. All traffic within the site relates to residents and visitors who are highly familiar with the environment.

A pedestrian path is provided through the site along the Southern Regional Pipeline easement. This path extends through the proposed expansion, as well as the existing Village site.

5. Public Transport

Council have stated:

"The site is poorly connected with the public transport infrastructure including the bus stop, especially city bound, and the Traffic Impact Assessment is expected to elaborate and provide recommendation for improvement/useability".

A northbound bus stop is located immediately south of the Piper Road junction on the highway. This provides convenient access from public transport to the site for residents/ visitors/ staff travelling from Lindisfarne/ Hobart.

A southbound bus stop is located directly opposite the Piper Road junction. This bus stop is not considered safely accessible for elderly pedestrians. No formalised pedestrian crossing location is provided on the highway to access the bus stop. It is not recommended to encourage pedestrians to cross the highway at this location due to the high volume and high speed environment.

The Lifestyle Village currently operates a 12-seater minibus that takes residents on many trips throughout a typical week, including shopping trips. This service therefore provides a safe alternative to the Metro services that operate on the highway.

Please contact me on 0437 366 040 if you require any further information.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'K Midson', is positioned above the typed name.

Keith Midson BE MTraffic MTransport FIEAust CPEng EngExec NER

DIRECTOR

Midson Traffic Pty Ltd



Bushfire Hazard Management Plan Report
Vulnerable Use - Clarence Lifestyle Village, 2 Piper Road & 647 East Derwent Highway, Risdon

Client: Clarence Lifestyle Village
Date: December 2025 - Rev2.3

Prepared by: Rhys Menadue

BUSHFIRE PRONE DEVELOPMENT SOLUTIONS — 14 Reynolds Court, Dynnyrne, TAS 7005

T: 0407 595 317 E: rhmenadue@gmail.com

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Appendix A – Compliance Specification

Appendix B – Site Images

Appendix C – Site Plan with Bushfire Hazard Management Area Overlay; Hydrant Plans; Bushfire-Prone Areas Code Certificate; and Certificate of Qualified Person (Form 55) 2025.12 – Clarence Lifestyle Village

Appendix D – Bushfire Emergency Plan & Bushfire Action Plan

1. Introduction

The intent of this report is to confirm the suitability of the bushfire prone parcel of land to be successfully further developed for the Vulnerable Use of the Clarence Lifestyle Village in accordance with the Building Regulations 2016. Bushfire-Prone Areas and Planning C13.0 of the Tasmanian Planning Scheme – Clarence.

The assessment describes the site and surrounding area, classifying the vegetation, assessing the slope and environmental features. This report and Appendices also address the Vulnerable Use requirements in accordance with the Tasmanian Planning Scheme – Clarence and the Building Regulations 2016.

This report should be included with approval documentation forming part of and in support of the Bushfire Hazard Management Plan and accompanying Certification.

2. Limitation of Report

This report has been prepared for the abovementioned clients for their use and distribution only. The intent of the report is to provide technical specification for the Bushfire Hazard Management Plan and to be used as supporting documentation for the Regulatory Application. Should submitted Regulatory Application Plans differ from the Certified Plans in this reports Appendix then an amended design review should be conducted to determine the suitability of any amendments in relation to the Bushfire Prone Area Requirements of the Building Regulations 2016.

It is also to be noted that the site assessment been conducted in October 2018 and does not consider the possibility of altered site conditions either naturally occurring or where currently maintained or excluded vegetation conditions change due to a lack of ongoing maintenance.

This Report and Appendices is also reliant upon the detailed Bushfire Attack Level Assessment undertaken by the Tasmania Fire Service – refer to Section 4 below.

It should be noted that compliance with the recommendations contained in this assessment does not mean that there is no residual risk to life safety or property as a result of bushfire. A residual level of risk remains which recognizes that removing the risk to life and property in absolute terms is not achievable while people continue to build in bushfire prone areas. This limitation is expressed in the following extract from AS 3959 (2018) which states (in the forward),

It should be borne in mind that the measures contained in this Standard cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behavior of fire, and extreme weather conditions.

This level of residual risk is inherent in all bushfire standards and also applies to this assessment. Should the recommendations and requirements of this Report and accompanying Bushfire Hazard Management Plan be appropriately implemented the use/development is unlikely to cause or contribute to the occurrence or intensification of bushfire on the site or adjacent land.

3. Site Description and Background

The Property consists of an already developed and approved Lifestyle Village wholly located on 2 Piper Road, this existing Use consists predominantly of residential dwellings and also provides a Village clubhouse, Pool house / gymnasium, men's shed and administration office. The proposed development on 647 East Derwent Highway is an existing land parcel, zoned rural living. 647 East Derwent Highway is located in the municipality of the Clarence Council.

The property is currently combination of grasses within the allotment; and adjacent to the development lots are a combination of grass/woodland, road corridor and developed maintained lots. This development will provide continued infill between the existing Clarence Lifestyle Village and the Bowen Holiday Cabins at 673 East Derwent Highway.

When considering the definition of Bushfire Prone Area under the Tasmanian Planning Scheme – Clarence & the Building Regulations 2016, it is evident the proposed development is located is within 100 metres of greater than 1 hectare of vegetation classified in accordance with AS 3959-2018 and is therefore considered *Bushfire Prone*. The site is also within a planning scheme bushfire prone area map overlay.

The site has direct access to a pre-approved public road – East Derwent Highway, as well as connection to the existing Clarence Lifestyle Village. The allotment is provided with a reticulated hydrant water supply for fire-fighting.

3.1 Property Details

Address: 647 East Derwent Highway, Risdon

Municipality: Clarence Council

Bushfire Prone Area Planning Scheme Overlay: YES

Zoned: 13.0 Rural Resource

Lot Number: 114659/1

Type of Development/Use: Lifestyle / Retirement Village / Vulnerable Use



Photo 1 - Aerial Photo with Cadastral Overlay

3.2 Classification of Vegetation

The vegetation affecting the site has been classified in accordance with Clause 2.2.3 of AS 3959-2018.

The site is surrounded by a combination of vegetation types, the highest of hazard levels being Woodland to the South-West & North-East. All other azimuths are currently well maintained. The Bushfire-Prone vegetation affecting the site is predominantly the **Woodland** – Group B in accordance with AS3959-2018, as described above.

In this case, in accordance with Clause 2.2.2 of AS 3959-2018, the relevant Fire Danger Index for Tasmania of 50 (FDI 50).

Note: in a bushfire there is a possibility of fire attack from any direction, not just the direction of the highest hazard.

Photo 1, above indicates the Bushfire Prone Vegetation described.

3.3 Slope

The Effective slope of the land under the classified vegetation is determined in accordance with Clause 2.2.5 of AS 3959-2018.

The *effective* slope under the bushfire prone vegetation to the South-West & North-East is Upslope/Flatland 0°. Refer to Appendix A Image for topographic contour information.

4. Bushfire Attack Level (BAL) Assessment

The site Bushfire Assessment was undertaken in October 2018.

In accordance with Clause 2.2 of AS 3959-2018, the Simplified Procedure has been applied to determine the Bushfire Attack Level (BAL) for the proposed development site. In accordance with the Building Regulations 2016, fire-fighting water supply and vehicle access are also considered and discussed in the following sections.

Considering the current conditions, in accordance with AS3959-2018 the site is capable of achieving BAL-12.5 Hazard Management Area (HMA), which is the minimum standard required for a Vulnerable Use.

Bush Fire Attack Level (BAL) AS3959-2018 Practical Workings (Table and figures below refer to AS3959-2018)

Assess the vegetation within 100m in all directions (denote relevant group)

Note 1: Refer to Table 2.3 and Figures 2.3 & 2.4 for description and classification of vegetation.

Note 2: If there is no classified vegetation within 100 m of the site then the BAL is LOW for that part of the site.

Vegetation classification (see Table 2.3)	North ☐ North-East ☒	South ☐ South-West ☒	East ☐ South-East ☒	West ☐ North-West ☒
Group B – Woodland	YES	YES	N/A	N/A

Exclusions (where applicable)	Highlight relevant paragraph descriptor from clause 2.2.3.2.			
	(b) (c) (d) (e) (f)	(b) (c) (d) (e) (f)	(b) (c) (d) (e) (f)	(b) (c) (d) (e) (f)

	North-East	South-West	South-East	North-West
--	------------	------------	------------	------------

Distance to classified vegetation	Show distances in metres			
	80m	15m	N/A - >100m	N/A - >100m
Effective slope	Upslope			
Slope under the classified vegetation	Upslope/o° ☒	Upslope/o° ☒	Upslope/o° ☐	Upslope/o° ☐
	Downslope – N/A			
	>0 to 5 ☐	>0 to 5 ☐	>0 to 5 ☐	>0 to 5 ☐
	>5 to 10 ☐	>5 to 10 ☐	>5 to 10 ☐	>5 to 10 ☐
	>10 to 15 ☐	>10 to 15 ☐	>10 to 15 ☐	>10 to 15 ☐
	>15 to 20 ☐	>15 to 20 ☐	>15 to 20 ☐	>15 to 20 ☐
BAL value for each side of the site	BAL-12.5	BAL-12.5*	BAL-LOW	BAL-LOW

Determination of Bushfire Attack Level (BAL)

The BAL for this site is:	BAL-12.5
NOTE:	*BAL-12.5 achieved in accordance with TFS detailed BAL Rating analysis, refer to letter below. The TFS detailed BAL Rating analysis is reliant upon a combination of design features being a minimum setback from the property boundary, a 1.8m high colourbond fence and the assumption that eave heights will be lower than the top of the 1.8m high colourbond fence – refer to Appendix C Typical Sections and Section Locations Plans for required general arrangement. This Assessment does not allow for future changes or alteration to the state of the hazardous vegetation.



Tasmania Fire Service

Bushfire Risk Unit

Rhys Menadue
Development Solutions
rhmenadue@gmail.com

Dear Rhys,

**RE: 652 EAST DERWENT HIGHWAY, GEILSTON BAY – PROPOSED EXPANSION
OF RETIREMENT VILLAGE – BUSHFIRE PROTECTION**

I am writing in response to your request for preliminary advice regarding your client's proposed expansion of the Clarence Lifestyle Village.

The proposed use and development is consistent with the definition of 'retirement village' as defined in the *Clarence Interim Planning Scheme 2015* (the 'Planning Scheme'). Accordingly, the proposal is considered to be a 'vulnerable use' and must satisfy Section E1.0 Bushfire-Prone Areas Code.

Clause E1.5.1 P1 requires the Planning Authority to exercise discretion in relation to proposed vulnerable uses in bushfire-prone areas. The key consideration is whether risk can be mitigated to a tolerable level for the proposed use in the given context.

To satisfy the Code requirements it will be necessary to prepare a bushfire hazard management plan and an emergency management strategy.

Bushfire hazard management plan

The bushfire hazard management plan must identify appropriate standards for building construction, hazard management areas, access and firefighting water supplies.

Ordinarily, the minimum expected hazard management area for a vulnerable use would be that required for BAL-12.5, as prescribed in Table 2.4.4 of AS3959-2009. This would equate to a 22m rear setback behind the eastern row of dwellings.

The proposed alternative - as shown on the supplied drawings - is to provide a 13m rear boundary with a 1.8m non-combustible fence that will sit on a 1.15m high retaining wall.

Page 1 of 3

Headquarters/Southern Region Cnr Argyle and Melville Streets | GPO Box 1526 Hobart Tasmania 7001 | Phone (03) 6230 8600 Fax (03) 6234 6647
Northern Region 339 Hobart Road Youngtown Tasmania 7249 | Phone (03) 6336 5633 Fax (03) 6344 6801
North West Region 15 Three Mile Line | PO Box 1015 Burnie Tasmania 7320 | Phone (03) 6434 6700 Fax (03) 6433 1551

www.fire.tas.gov.au



A detailed analysis has been undertaken for the eastern exposure of the rear row of units. Using a Method 2 assessment (AS3959-2009) with shielding calculation, it is concluded that the solution will adequately reduce radiant heat flux on the rear facades to under 12.5kW/m². Therefore, the proposed alternative is considered acceptable subject to the fence being designed and constructed to the following specifications:

- a. Minimum height 1.8m (above 1.15m retaining wall);
- b. Constructed from non-combustible materials;
- c. Solid with no gaps;
- d. Sealed to ground;
- e. Constructed to withstand 45 km/h wind; and
- f. Must be free of attached combustible materials (e.g. wooden lattice).

The design and construction of the eastern (rear) row of dwellings to BAL-12.5 minimum standard under AS3959-2009 is considered acceptable, provided the above-mentioned fencing is maintained for the life of the buildings.

Construction requirements for the remainder of the units can be determined using Method 1 of AS3959-2009. It is recommended that all buildings be designed to achieve basic ember protection at a minimum.

Outdoor areas within the site should be established and maintained as a hazard management area. It is appropriate that the BHMP provides direction with regards to future landscaping of the site (e.g. no flammable mulch against building facades or other vulnerable building elements). Ongoing maintenance requirements should be integrated into the facility's maintenance schedule where appropriate.

TFS considers it appropriate that internal roadways and water supplies be designed to a minimum standard no less than the specifications in the Code's Tables. Notwithstanding this, consideration should be given to additional specifications if and where warranted to facilitate efficient emergency procedures.

Emergency management strategy

Emergency planning is a key risk mitigation measure for vulnerable uses.

In preparing the strategy, consideration must be given to the suitability of any nominated on-site refuges. Given the density of the proposed dwellings and potential for fire to spread from building-to-building, using individual dwellings as refuges may not be a suitable strategy (except as a last resort). It is recommended that the suitability of the existing communal buildings be examined.

Consideration also needs to be given to available access/egress routes available for occupant evacuation and firefighter access. Identifying and reducing the potential for

bottlenecks and providing alternative access where possible (as part of the BHMP) is recommended.

The practical aspects of communicating with and managing a large number of occupants in an emergency situation needs to be considered.

The advice contained in this letter should be used to inform the documentation (i.e. bushfire hazard management plan and design drawings) produced for planning application purposes.

If you require further clarification, please contact the Bushfire Risk Unit office at bfp@fire.tas.gov.au.

Yours Sincerely,



Tom O'Connor

PLANNING & ASSESSMENT OFFICER

6th December 2018

4.1 BAL Rating Schedule

The attached Bushfire Hazard Management Plan in Appendix C indicates the areas where BAL-12.5 construction applies along with the Required 13m setback HMA (this assumes a 15m wide HMA due to an additional 2m being maintained along the fence line between 647 East Derwent Highway and 38 Piper Road, Geilston Bay.

BAL Rating Lot Schedule

BAL-12.5	BAL-LOW
1, 4 to 24	2 to 3
28, 30 to 31	25 to 27
35 to 40	32 to 34
44 to 45	41 to 43
48 to 53	46 to 48

5. Property Access

The primary access to the lot is from a sealed public road – East Derwent Highway.

It is expected fire fighting vehicles would enter the property and fight a fire by hose connected to a reticulated hydrant water supply.

Within the property boundaries, the access to the perimeter of the building is to be provided to facilitate fire-fighting to attempt to defend the building and to allow reasonable egress for residents.

Emergency vehicle access is provided to the Lifestyle Village via the main entrance at Piper Road and also an alternate emergency entrance exit onto the shared access of 657 East Derwent Highway.

All access demonstrates likely compliance with Part 2.3.2 of the Director's Determination – Bushfire Hazard Areas and Table 2, B and D - Refer to the Certified Bushfire Hazard Management Plan Specification Notes and/or **Appendix A** – for details/specification.

6. Water Supply

The development does have access to a reticulated water supply suitable for firefighting. It is assumed these provisions are to be accounted for via the detailed engineering design for the development.

Fire-fighting water supply is provided by a reticulated private fire hydrant system – the system is to be in accordance with the Deemed to Satisfy requirements of part 2.3.3 of the Directors Determination – Bushfire Hazard Areas and Table 3A, all parts – Refer to the Certified Bushfire Hazard Management Plan Specification Notes and/or **Appendix A** – for detailed requirements.

Compliance certification for the existing hydrant system meeting the Directors Determination – Bushfire Hazard Areas, Table 3A all parts is to be provided to the Building Surveyor prior to Building Occupancy.

7. Hazard Management Areas

Within the property the hazard management is required to be undertaken regularly and is to ensure that all areas within the development can be considered *low threat* in accordance with AS3959-2018. The Bushfire Hazard Management Plan (BHMP) indicates the area of the lot being managed to a low threat state provides for suitable separation distances from the development building to hazard to achieve the BAL-12.5 Separation distances (the minimum standard to be achieved is BAL-12.5). The Hazard Management Area (HMA) has/is to be established in accordance with the Bushfire Hazard Management Plan.

The BHMP specified HMA demonstrates compliance with the Directors Determination – Bushfire Hazard Areas, Table 4E – Hazard management areas for new buildings and additions and alterations to existing buildings classified as vulnerable use as defined in the relevant planning scheme - Refer to the Certified Bushfire Hazard Management Plan Specification Notes and/or **Appendix A** – for detailed requirements.

Maintenance of the Hazards within the lot are to include (but are not limited to):

HAZARD MANAGEMENT AREAS - (HMA) –

Hazard Management Area includes the area to protect the buildings as well as the access and water supplies.

Vegetation in the Hazard Management Area (the entire site) is to be managed and maintained in a minimum fuel condition, *Low Threat* vegetation in accordance with AS3959-2018.

Maintenance Schedule

- Removal of fallen limbs, leaf & bark litter
- Cut lawns short (less than 100mm) and maintain
- Remove pine bark and other flammable garden mulch
- Complete under-brushing and thin out the understorey
- Prune low hanging trees to ensure separation from ground litter
- Prune larger trees to establish and maintain horizontal and vertical canopy separation
- Minimise storage of petroleum fuels
- Maintain road access to the buildings to be defended and water storage area
- Remove fallen limbs, leaf & bark litter from roofs, gutters and around the building

8. Emergency Management Strategy

To satisfy Planning Code C13.5 Vulnerable Uses, Part A2. The Emergency Management Strategy is addressed by provision of a TFS approved *Bushfire Emergency Plan* and *Bushfire Action Plan*, also in accordance with Part 2.3.5 and Table 5 of the Director's Determination – Bushfire Hazard Areas. Refer to **Appendix D** for the approved Bushfire Emergency Plan.

9. Subdivision/Consolidation

The development application proposes to consolidate lots. Technically this triggers assessment of subdivision and subsequently consideration of the development as a subdivision in accordance with clause C13.2.1 of the code.

As the subdivision is a consolidation of lots and not a division/increase of lots it is reasonable to consider it as an *insufficient increase in risk*. Risk for the development is addressed sufficiently by this Bushfire Hazard Management Plan as it applies a more conservative approach than a subdivision would under the code – BAL rating of BAL-12.5 applied as opposed to BAL-19. Water supply and access for fire-fighting is comparative. This development also applies an Emergency Management Strategy.

Therefore, the subdivision component for this application is certified as an *insufficient increase in risk*.

10. Conclusion

The Bushfire Hazard Management Plan indicates BAL Rating requirements within the development lot and demonstrates the development will be able to achieve compliant Hazard Management and HMA.

The proposed Bushfire Hazard Management Plan, read in conjunction with this document, along with the Certification of referenced documents demonstrates likely compliance with the Tasmanian Planning Scheme – Clarence and Building Regulations 2016 and associated Directors Determination – refer above sections 5 to 8 where applicable compliance is referenced.

11. References

- Tasmanian Planning Scheme - Clarence;
- Building Regulations 2016 and its referenced documents;
- LIST map version. Aerial Photograph [online]. Available from: <http://www.thelist.tas.gov.au/listmap/listmap>; and
- Standards Australia 2018, *Construction of buildings in bushfire prone areas*, AS 3959-2018.

Appendix A – Compliance Specification

Clarence Lifestyle Village – Stage 2

Compliance Specification Notes:

The following specification are the minimum requirements for the development in accordance with the Building Regulations 2018

The dwellings are to be constructed to BAL-12.5 or BAL-LOW as per their designation on the Bushfire Hazard Management Plan.

Requirements for Property Access

B. Property access length is 30 metres or greater, or access is required for a fire appliance to access a firefighting water point.

The following design and construction requirements apply to property access:

- a. all-weather construction;
- b. load capacity of at least 20 tonnes, including for bridges and culverts;
- c. minimum carriageway width of 4 metres;
- d. minimum vertical clearance of 4 metres;
- e. minimum horizontal clearance of 0.5 metres from the edge of the carriageway;
- f. cross falls of less than 3 degrees (1:20 or 5%);
- g. dips less than 7 degrees (1:8 or 12.5%) entry and exit angle;
- h. curves with a minimum inner radius of 10 metres;
- i. maximum gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 unsealed roads; and
- j. terminate with a turning area for fire appliances provided by one of the following:
 - i. a turning circle with a minimum outer radius of 10 metres;
 - ii. a property access encircling the building; or
 - iii. a hammerhead "T" or "Y" turning head 4 metres wide and 8 metres long.

D. Property access length is greater than 30 metres, and access is provided to 3 or more properties.

The following design and construction requirements apply to property access:

- a. complies with requirements for B above; and
- b. passing bays of 2 metres additional carriageway width and 20 metres length must be provided every 100 metres.

Requirements for reticulated Hydrant Water Supply for Fire Fighting

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 120 metres of a fire hydrant; and
- b. the distance must be measured as a hose lay between the firefighting water point and the furthest part of the building area.

B. Design criteria for fire hydrants

The following requirements apply:

- 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 Edition V2.0; 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 three metres from the hydrant measured as a hose lay;
- b. no closer than six metres from the building area to be protected;
- c. a minimum width of three metres 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.

Standards for Hazard Management Areas Requirements shall be compliant with Table 4, Part E

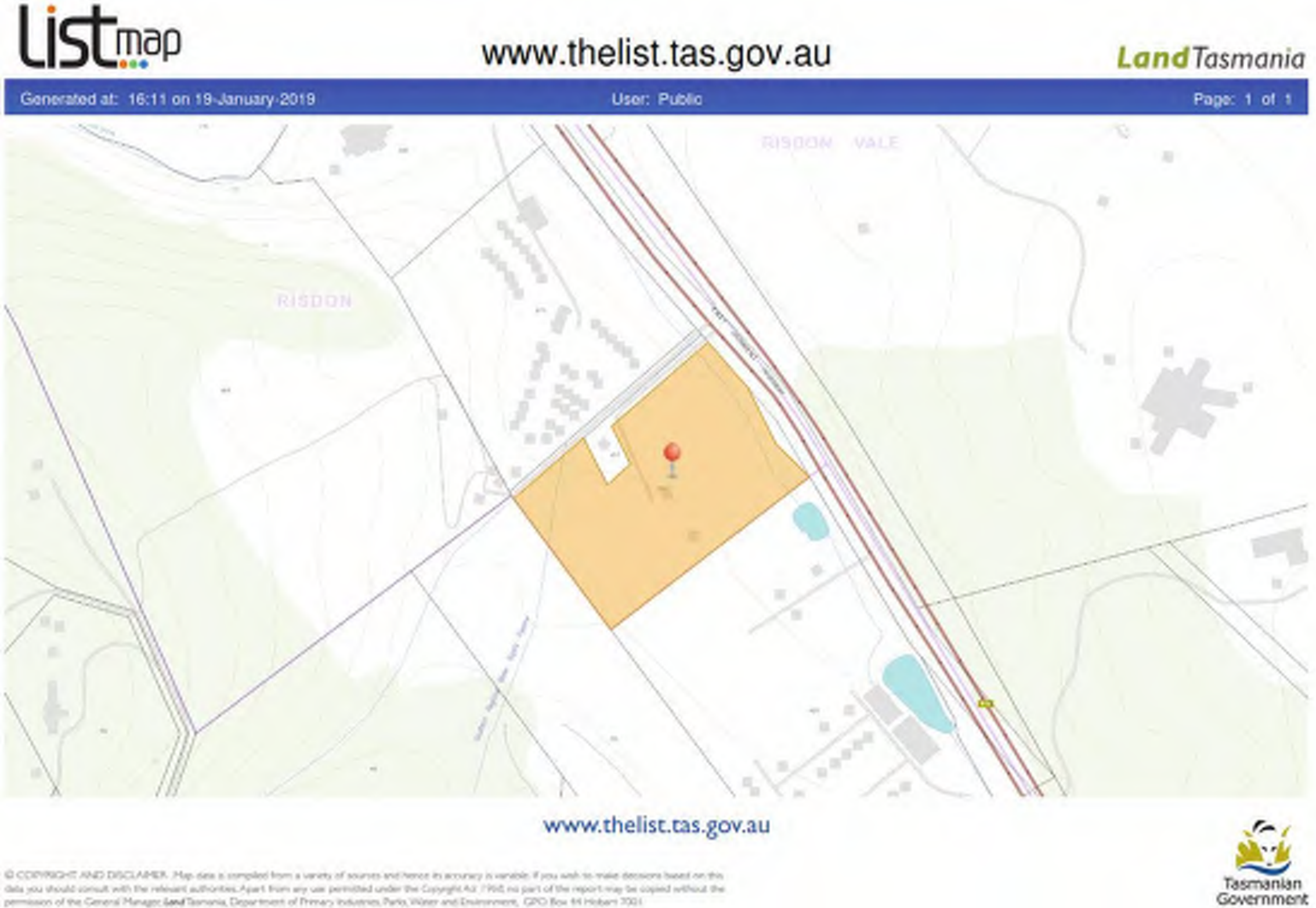
- E. Hazard management areas for new buildings and additions and alterations to existing buildings classified as vulnerable use as defined in the Bushfire- Prone Areas Code (Planning Directive 5.1)

A new building or an alteration or addition including change of use must:

- a. Be:
 - i. located on the lot so as to be provided with HMAs no smaller than the separation distances required for BAL 12.5; or
 - ii. provided with a certificate from an accredited person that a bushfire hazard management plan provides, to the degree necessary, separation of the building from the bushfire hazard, appropriate resistance to ignition from bushfire, property access and water supply for fire fighting; and
- b. Have an HMA established in accordance with a certified bushfire hazard management plan.

Appendix B – Site Images

Topographic Map with Cadastral & Contour Overlay - indicates subject site – Not to Scale

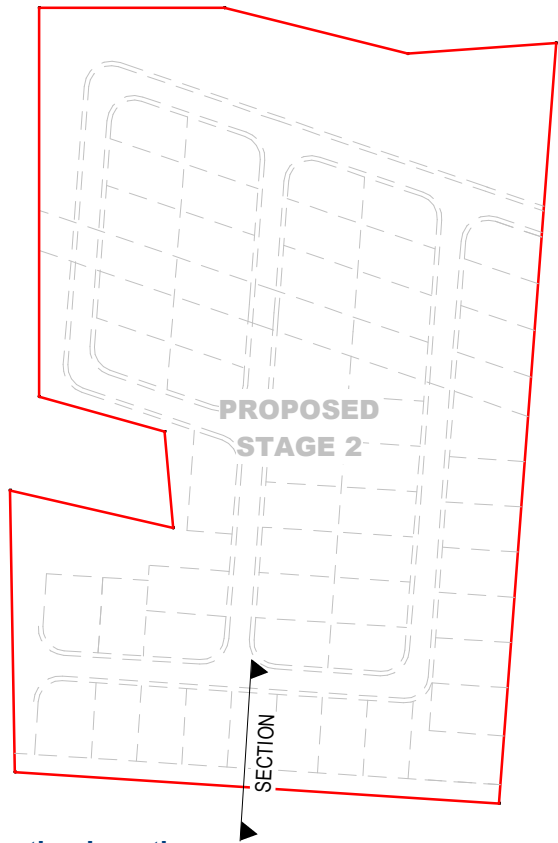


Aerial Image depicting Site in yellow shading – note Woodland Hazard to South-West & North-East



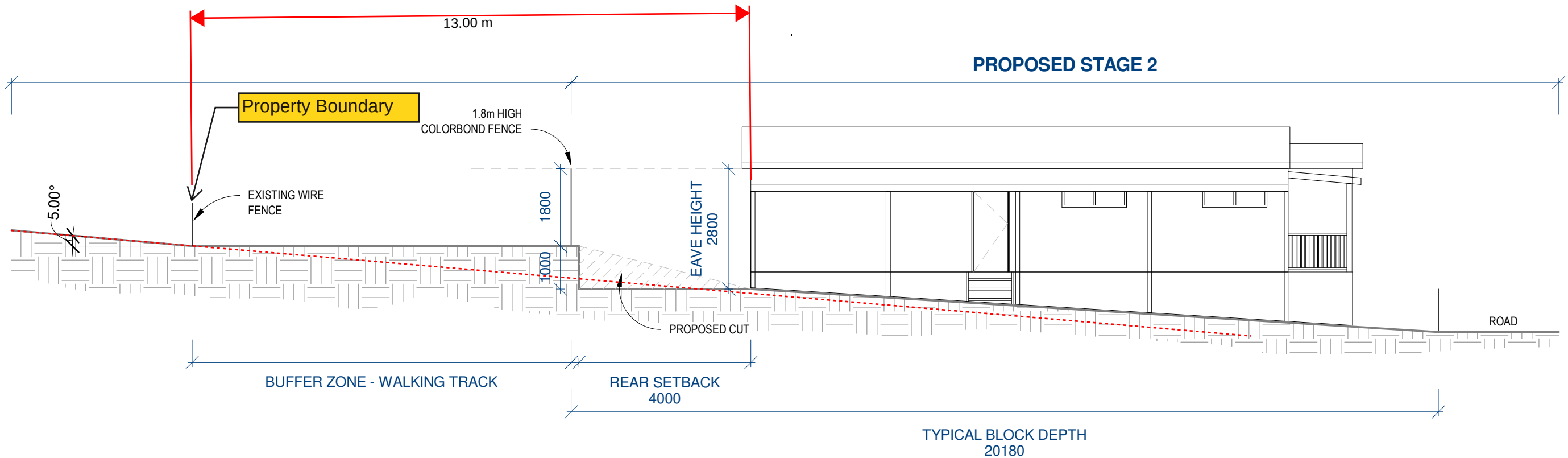
Appendix C

- Typical Sections and Section Locations Plans;
- Site Plan with Bushfire Hazard Management Area Overlay;
- Bushfire-Prone Areas Code Certificate; and
- Certificate of Qualified Person (Form 55) 2025.12 – Clarence Lifestyle Village



Section Location

1 : 2000



Typical Section

1 : 100



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CLARENCE LIFESTYLE VILLAGE
625 EAST DERWENT HIGHWAY
RISDON

1 Piper Road
Geelong Bay, TASMANIA 7015
Document Set ID: 5993069

Mobile: 0400 652 985
0438 051 268

Drawn by: G Ryrie

Date: 9/11/2018 3:53:39 PM

Scale: As indicated

Drg. No.

Drg. Title:

TYPICAL SECTION

Version: 3, Version Date: 30/07/2026



Compliance Specification Notes:

The following specification are the minimum requirements for the development in accordance with the Building Regulations 2014.

Standards for Property Access shall be compliant with Directors determination – Requirements for Building in Bushfire-Prone Areas (Transitional) Table 4.18 and D all parts

B. Property access length is 30 metres or greater, or access is for a fire appliance to a firefighting water point, and access is provided to 3 or more properties

The following design and construction requirements apply to property access:

- a) All-weather construction;
- b) Load capacity of at least 20 tonnes, including for bridges and culverts;
- c) Minimum carriageway width of 4 metres;
- d) Minimum vertical clearance of 4 metres;
- e) Minimum horizontal clearance of 0.5 metres from the edge of the carriageway;
- f) Cross falls of less than 1° (1:20 or 5%);
- g) Dips less than 1° (1:8 or 12.5%) entry and exit angle;
- h) Curves with a minimum inner radius of 30 metres;
- i) Maximum gradient of 15° (1:3.5 or 28%) for sealed roads, and 10° (1:5.5 or 18%) for unsealed roads; and
- j) Terminate with a turning area for fire appliances provided by one of the following:
 - i. A turning circle with a minimum outer radius of 30 metres;
 - ii. A property access encircling the building; or
 - iii. A hammerhead "T" or "Y" turning head 4 metres wide and 8 metres long.
- k) Passing bays of 2 metres additional carriageway width and 20 metres length must be provided every 100 metres.

Standards for Reticulated Water Supply for Fire Fighting shall be compliant with Directors determination – Requirements for Building in Bushfire-Prone Areas (Transitional) Table 4.1A all parts

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 120 metres of a fire hydrant; and
- b) The distance must be measured as a hose lay, between the firefighting water point and the furthest part of the building area.

B. Design criteria for hydrants

The following requirements apply:

- a) Fire hydrant system must be designed and constructed in accordance with TasWater Supplement to Water Supply Code of Australia WSA 03 – 2011:1 MRWA Edition 2.0; and
- b) Fire hydrants are to be installed outside of the minimum access road width, and clear of any passing bay or parking area, to ensure access at all times to reticulated water for fire suppression.

C. Hardstand

A hardstand area for fire appliances must be provided:

- a) No more than three metres from the hydrant, measured as a hose lay;
- b) No closer than six metres from the building area to be protected;
- c) With a minimum width of three metres 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.

Standards for Hazard Management Areas Requirements shall be compliant with Table 4.4, Part B

B. Hazard management areas for new buildings on lots not provided with a BAL at the time of subdivision

A new building must:

- a) Be located on the lot so as to be provided with a HMA no smaller than the separation distances required for BAL 29; and
- b) Have an HMA established in accordance with a certified bushfire hazard management plan.

HAZARD MANAGEMENT AREA (HMA) IS DENOTED BY THE RED HATCH. THE HMA IS TO BE MAINTAINED TO A LOW THREAT LEVEL IN ACCORDANCE WITH AS 1959-2018. FURTHER DETAILS REGARDING THE MAINTENANCE OF THE HMA IS DESCRIBED IN SECTION 7 OF THE ACCOMPANYING BUSHFIRE HAZARD MANAGEMENT PLAN REPORT.

DWELLING UNIT BAL RATING SCHEDULE

BAL-12.5 UNIT LOTS - 1, 4 - 24, 28, 30, 31, 35 - 40, 44, 45 and 48 - 53.

BAL-LOW UNIT LOTS - 2, 3, 25 - 27, 32 - 34, 41 - 43, 46 and 47.

Dwelling construction measures are to be in accordance with AS3959-2018 and as per the designated BAL Ratings above.

Certified By: Rhys Menadue - BFP-106
Certificate No.: 2024.11 - Clarence
Lifestyle Village
Date: 29.11.2024

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:

647 East Derwent Highway

Certificate of Title / PID:

115696/1; 5116539

2. Proposed Use or Development

Description of proposed Use and Development:

Vulnerable Use, Retirement Village

Applicable Planning Scheme:

Tasmanian Planning Scheme - Clarence

3. Documents relied upon

This certificate relates to the following documents:

Title	Author	Date	Version
Bushfire Hazard Management Plan Report – Vulnerable Use – Clarence Lifestyle Village, 627 & 647 East Derwent Highway, Risdon (inclusive of appendices)	Rhys Menadue	17.12.2025	2.3

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:

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

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

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

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

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

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

5. Bushfire Hazard Practitioner

Name: Rhys Menadue

Phone No: 0407 595 317

Postal Address: 14 Reynolds Ct. Dynnyrne

Email Address: rhmenadue@gmail.com

Accreditation No: BFP – 106

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: Rhys Menadue

Date: 17.12.2025

Certificate Number: 2025.12 – Clarence Lifestyle Village

(for Practitioner Use only)

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form **55**

To: Owner /Agent
 Address
 Suburb/postcode

Qualified person details:

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

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 Hazard Management Plan Report – Vulnerable Use – Clarence Lifestyle Village, 2 Piper Road & 647 East Derwent Highway, Risdon, by Rhys Menadue dated December 2025 Rev2.3 (inclusive of appendices)

Relevant calculations:

- In Accordance with AS3959-2009; and
- the Building Regulations (TAS).

References:

- AS3959-2009;
- the Building Regulations (TAS); and
- Building Code of Australia (BCA).

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

BAL Rating & Bushfire Hazard Management Plan

Scope and/or Limitations

The assessment has been conducted according to information provided by the designer/client and freely available historical data and does not take into account the possibility of altered site conditions from the data relied upon.

It should be noted compliance with the recommendations contained in the certified documents does not mean that there is no residual risk to life safety and property as a result of bushfire. The limitation is expressed in the following extract from AS3959-2009, which states:

It should be borne in mind that the measures contained in this Standard cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the degree of vegetation management, the unpredictable nature and behaviour of fire, and extreme weather conditions.

The level of residual risk is inherent in all bushfire standards and also applies to this certification.

The assessment has been undertaken and certification provided on the understanding that; -

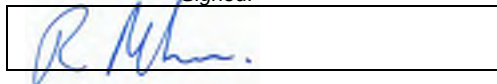
1. The certificate only deals with the potential bushfire risk all other statutory assessments are outside the scope of this report.
2. The report only identifies the size, volume and status of vegetation at the time the site inspection was undertaken and cannot be relied upon for any future development.

Impacts of future development and vegetation growth have not been considered.

I certify the matters described in this certificate.

Qualified person:

Signed:



Certificate No:

2025.12 – Clarence Lifestyle Village

Date:

17.12.2025

Appendix D – Bushfire Emergency Plan & Bushfire Action Plan

BUSHFIRE EMERGENCY PLAN

Name of Site / Facility

Clarence Lifestyle Village

Address of Site / Facility

627 & 647 East Derwent Highway, Risdon, 7017

Plan Prepared By Rhys Menadue

Plan Approved By Craig Swan

BFP No. 106

Date Approved 31 Aug 2023

Plan Version V.1

The purpose of this plan is to identify procedures for occupants and site managers to follow in the event of bushfire emergency.

This plan is comprised of:

1. Bushfire Emergency Plan
2. Bushfire Action Plan

This plan must be reviewed annually, prior to the bushfire season.

Information within this plan must be maintained, and key personnel must review their responsibilities under this plan.



REVIEW ANNUALLY

COPY TO TFS

fire@fire.tas.gov.au

Contents

1.0	Primary Emergency Management Action.....	3
2.0	Site Contact(s) & Details.....	3
3.0	Roles & Responsibilities	4
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5.0	Preparations prior to bushfire season	5
6.0	Evacuation Procedures.....	6
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Document Control

Revision	Date	Details
1	December 2018	Draft
2	August 2023	For TFS review and Approval

1.0 Primary Emergency Management Action

The **Primary Action** to follow under **normal** bushfire conditions is to:

EVACUATE

Refer to Pre-Emptive Procedures when forecast conditions exceed normal

2.0 Site Contact(s) & Details

2.1 Site Emergency Contact(s)

Primary contact	Dianne Reynolds		
Position / role	Village Manager		
Phone number (BH)	1800 559 037	Phone number (AH)	As for BH
Secondary contact	Craig Swan		
Position / role	Manager		
Phone number (BH)	0438 051 268	Phone number (AH)	As for BH

2.2 Site Details

Type of facility / site	Lifestyle / Retirement Village		
Number of buildings	Up to 164	Number of employees	2
Number of occupants	240	Number with support needs	5
Description of support needs			

1 x Wheelchair bound resident requiring assistance in the event of evacuation

4 x walking frame residents requiring assistance in the event of evacuation

All residents on site are retired and vary in age, predominantly residents are able bodied and do not require assistance, however there are six residents requiring assistance / support.

3.0 Roles & Responsibilities

The following table identifies the emergency control organisation (ECO) – the individuals responsible for implementing the emergency procedures in the event of a bushfire emergency.

Position	Name	Area of Responsibility	Mobile Phone No.
Village Manager	Dianne Reynolds	Fire Warden and Initial Contact	1800 559 037
Manager	Craig Swan	Deputy Warden	0438 051 268

4.0 Emergency Contacts



Dial '000' for emergency assistance.

The following table identifies important contacts and information sources for bushfire emergency management purposes.

Name / Organisation	Details	Phone No. / Website
Fire, Police, Ambulance	Fire or Emergency	000
Tasmania Fire Service	Bushfire Hotline	1800 000 699
Tasmania Fire Service	Incident Information	www.fire.tas.gov.au
Bureau of Meteorology	Fire Weather Information	www.bom.gov.au
Tas Alert	Emergency Information	www.alert.tas.gov.au
Tas Police Community Alerts	Road Closures	www.police.tas.gov.au/ community-alerts/
Local ABC Radio Station	Bushfire Alerts	936AM Radio

5.0 Preparations prior to bushfire season

5.1 Site Maintenance

Actions

1. Maintain the Hazard Management Area ensuring lawns and grassed areas are kept below 100 mm in height
2. Ensure that site hydrant water supply system is maintained in accordance with the provision of the Directors Specified List.
3. Ensure no hazards are present which would contribute to increased fire intensity, removing rubbish piles etc.
4. Ensure property access is kept clear and easily trafficable
5. Ensure first aid kits, fire extinguishers, emergency lighting etc. are current and serviceable
6. Ensure Roofs and gutters are free from leaf litter and debris
7. Ensure that vegetation adjacent to site boundary fences is maintained to prevent hazards accumulating

5.2 Emergency Management

Actions

1. Review Bushfire Emergency Plan to ensure details, procedures and contact phone numbers are correct.
2. Ensure Staff have been informed of, and are familiar with, the procedures laid out in the Bushfire Emergency Plan.
3. Ensure nominated off-site shelter is still a safe choice, confirming contact details if appropriate.
4. Make contact with management at off-site refuges if necessary confirming use during fire season.
5. Place current version of emergency plan and action plan in Clubhouse
6. Ensure that all residences and residents are provided with current version of emergency plan and action plan
7. Ensure the nominated escape route to offsite refuge shelter is still a viable choice. If not, update Action Plan
8. Ensure adequate levels of drinking water are available to residents when assembling and evacuating

6.0 Evacuation Procedures

Evaluation of bushfire risk and the safety of employees and occupants has determined that the **PRIMARY** action to follow under normal bushfire conditions is to evacuate to a designated off-site refuge.

6.1 Assembly Points

Designated Evacuation Assembly Points

1. Assemble in Village Club House

2.

3.

4.

6.2 Off-Site Refuge(s)

Primary Off-Site Refuge

Name of venue:	Risdon Vale Sports Oval
Address of venue:	26 Sugarloaf Road, Risdon Vale
Nearest cross-street:	Sycamore Road
Map reference:	GDA94 - 528752E, 5260108N
Venue phone number:	No phone number
Travel time to venue:	5 minutes by car or bus

Secondary Off-Site Refuge

Name of venue:	Geilston Bay Recreation Area
Address of venue:	Debomfords Lane
Nearest cross-street:	East Derwent Highway
Map reference:	
Venue phone number:	No phone number
Travel time to venue:	5 minutes by car or bus

6.3 Evacuation Transportation Arrangements

Primary Transportation Arrangements

Number & type of vehicles required: Residents not requiring supported needs will be required to use own vehicles

Name of transport provider:

Phone number:

Time required before transport on-site:

Nil

Secondary Transportation Arrangements

Number & type of vehicles required: Clarence Lifestyle Village Bus – supported needs residents

Name of transport provider: Clarence Lifestyle Village

Phone number: 1800 559 037

Time required before transport on-site:

0 minutes

6.4 Evacuation Procedures

Trigger(s)	Actions
1. Watch and Act Bushfire Alert for Area; or	Fire Warden to direct evacuation and advise Emergency Services
2. Emergency Warning Alert for Area;	Residents to Proceed to Evacuation Assembly point – The Clubhouse
3. Direction to evacuate from TFS or TASPOL	All persons are to be accounted for. – Wardens to confirm all residents are accounted for
4.	Resident to Close all doors and windows of their dwellings. Wardens to secure all other buildings
5.	Wear sturdy clothing and footwear if available.
6.	Using Bushfire Action Plan Map, residents to evacuate to nominated Off-site Shelter
7.	Do not drive through smoke or flame. If path is blocked, return to premises and shelter on site.
8.	Wardens are to account for all residents post evacuation

Once the threat has passed, refer to: ***Procedures Following Bushfire.***

SHELTER-IN-PLACE

7.0 Shelter-In-Place Procedures

Evaluation of bushfire risk and the safety of occupants has determined that the **SECONDARY** action to follow under normal bushfire conditions is to shelter at a designated on-site refuge.

7.1 On-Site Refuge(s)

Designated On-Site Refuges

1. The Clubhouse – Residents are to assemble in the Clubhouse when directed by Emergency Services and / or Wardens. Direction to residents may be by site wide alarm , load hailer instruction by Wardens, SMS to residents, active sweep of property to ensure all residents

7.2 Sheltering Procedures

Trigger(s)	Actions
1. Instructed by TFS/TAS Police; or	Wardens to account for all residents; Advise TFS, 000 that people are sheltering at premises
2. Prevented from Evacuation due to road closure etc.; or	Take shelter in The Clubhouse protecting guests from radiant heat
3. Fire in close proximity, considered too dangerous to leave.	Wardens to monitor building interior for outbreaks of fire within and extinguish if possible
4.	Soak towels and place under doors to exclude embers
5.	Wear sturdy clothing and footwear if available.
6.	Ensure people can exit structure if it catches fire.

Once the threat has passed, refer to: ***Procedures Following Bushfire.***

8.0 Procedures Following Bushfire

8.1 Shelter-In-Place

Actions

1. Ensure the safety of all people and seek medical assistance for those requiring it.
2. Ensure TFS /TASPOL are aware of situation with staff and guests. (Sheltering, Safe/ injured etc.)
3. Ensure all people drink plenty of water to avoid dehydration.
4. Staff or owners to extinguish any spot fires still burning around premises if safe to do.
5. Chief warden to seek information and ensure fire front has passed.
6. No person should attempt to re-enter fire affected buildings or areas until safe and advised by TFS/TASPOL.
7. Fire warden to arrange alternate accommodation for guests if required and if possible.
8. Fire warden to establish through TFS that it is safe to leave the refuge and roads are clear.
9. Chief Warden to review Emergency Plan for effectiveness, make note of weaknesses and amend as necessary.

8.2 Evacuate

Actions

1. Ensure the safety of all people and seek medical assistance for those requiring it.
2. Fire warden to establish through TFS that it is safe to leave the refuge and roads are clear.
3. Fire warden to arrange alternate accommodation for guests if required and if possible.
4. No person should attempt to re-enter fire affected buildings or areas until safe and advised by TFS/TASPOL
5. Chief Warden to review Emergency Plan for effectiveness, make note of weaknesses and amend as necessary.

9.0 Pre-emptive Procedures

Evaluation of bushfire risk and the safety of occupants has determined that the following pre-emptive measures should be implemented outside of normal bushfire conditions.

Each dwelling/building is to be provided with their own dedicated *Bushfire Action Plan* – to be developed for each existing dwelling/building and when future development occurs.

Trigger(s)	Actions
1. Bushfire season	Wardens to daily monitor fire weather forecasts – checking TFS website daily. Wardens are to conduct an annual Bushfire Season briefing to residents. New residents are to be made aware of the site <i>Bushfire Hazard Management Plan</i> and associated <i>Bushfire Emergency Plan / Bushfire Action Plan</i>
2. Extreme Catastrophic Fire Conditions forecast	Warden to assess and monitor situation and keep Residents and Staff informed of dangers. Consider closing facility and evacuating site.
3. Watch and Act advised for area	Warden to assess and monitor situation and keep Personnel informed of dangers
4. Emergency Warning issued for Fire in Area	Warden to immediately assess situation and begin emergency action, shelter or evacuate.
5. Advice from the Tasmania Fire Service or Police.	Follow the instructions of Emergency Services.

10.0 Attachments

- ☒ Occupant/employee register
- ☐ Parent/guardian contact register
- ☒ Bushfire Action Plan
- ☒ Off-Site refuge map

EMERGENCY
DIAL
000

IN CASE OF BUSHFIRE

ENSURE ALL STAFF AND RESIDENTS
ARE ACCOUNTED FOR
FOLLOW INSTRUCTIONS FROM
FIRE WARDENS

PRIMARY ACTION

PROCEED TO OFF-SITE REFUGE
ONCE ACCOUNTED FOR
CHIEF FIRE WARDEN OR DELEGATE
TO DIAL 000 AND ADVISE EMERGENCY
SERVICES OF SITUATION

SECONDARY ACTION

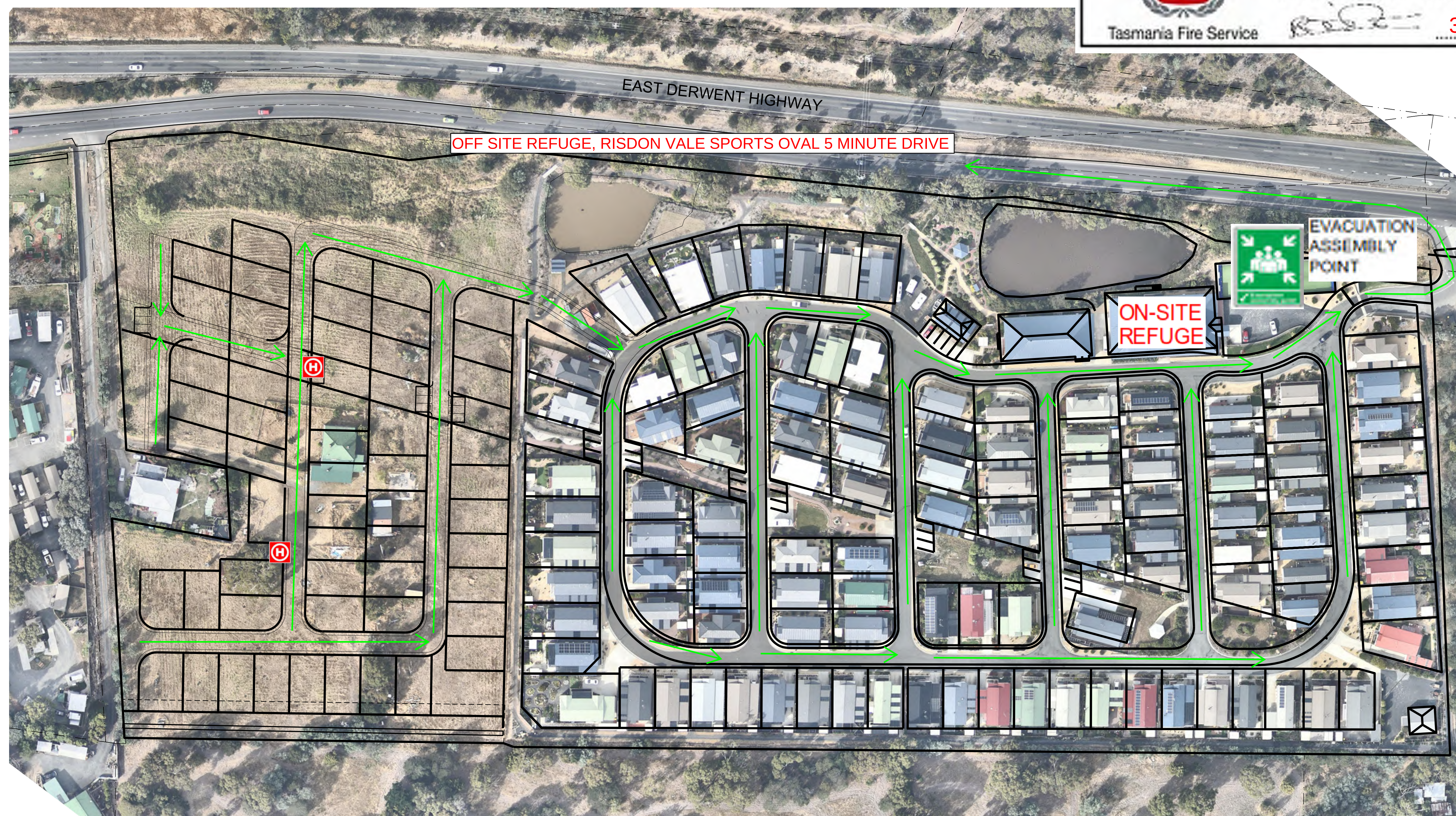
IF EVACUATION ID NO LONGER SAFE TO DO SO,
MOVE TO ASSEMBLY AREA AND SHELTER IN
ON-SITE REFUGE



Tasmania Fire Service

APPROVED
CHIEF OFFICER, TASMANIA FIRE SERVICE
PER HILSTON, BUSHFIRE RISK UNIT

[Signature] 31 / 08 / 2023

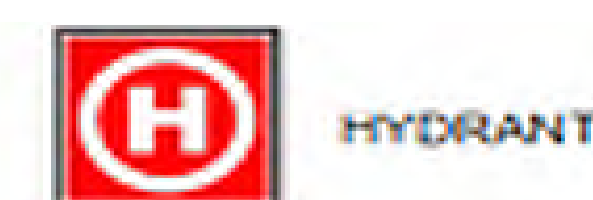


BUSHFIRE ACTION PLAN
CLARENCE LIFESTYLE VILLAGE
627 & 647 EAST DERWENT
HIGHWAY, RISDON 7017

PLAN CURRENT AS OF AUGUST 2023

SITE CONTACT 1
DIANNE REYNOLDS
CHIEF FIRE WARDEN
MANAGER
PHONE 1800 559 037

SITE CONTACT 2
CRAIG SWAN
DEPUTY CHIEF FIRE WARDEN
BUSINESS MANAGER
PHONE 0438 051 268





Tasmania Fire Service

Community Bushfire Protection Plan

RISDON VALE AREA

Incl: Risdon

October, 2015 | Version 1.0

Tasmania Fire Service may
not be able to protect you
during some bushfires.

Know what to do and
where to go when
threatened by bushfire.

Receive bushfire updates from Tasmania Fire Service



www.facebook.com/TasmaniaFireService



[@TasFireService](https://www.twitter.com/TasFireService)



www.fire.tas.gov.au RSS feeds

For more information please call
1800 000 699 or visit our website

www.fire.tas.gov.au

Are **YOU** bushfire ready? PREPARE • ACT • SURVIVE

Most of Tasmania is bushfire-prone. Every summer you need to be bushfire-ready.

This plan sets out the things you should do to survive a bushfire. **Get the latest version and use it to update your personal Bushfire Survival Plan.**



Tasmanian
Government

PREPARE | before the fire

- 1) **Prepare your home for bushfire.**
 - Use the Tasmania Fire Service *Bushfire Prepare to Survive* booklet or DVD.
 - Even if you plan to leave early, preparing your home gives you another shelter option, and firefighters a better chance to save it.
- 2) **Decide what you will do and write down your plan.**
 - Will you leave early, or will you stay and defend your home?
 - Decide now, and fill out your *Bushfire Survival Plan*.
- 3) **If you can, talk with your neighbours.**
 - What are their plans? Are they aware of your plans?
- 4) **Review your insurance policy.**
 - Are your home and contents covered for bushfire?

ACT | when fires are likely, or nearby

- 1) **Keep informed.**
 - Check the weather forecast and Fire Danger Rating daily.
 - Listen to ABC Local Radio, monitor the Tasmania Fire Service website www.fire.tas.gov.au and watch for smoke and fires.
 - If bushfires are in your area, don't wait for an official warning.
- 2) **Put your *Bushfire Survival Plan* into action.**
 - **The safest option for all bushfires is to leave early, before a bushfire threatens you and your home.**
 - Consider leaving immediately if 'Severe', 'Extreme' or 'Catastrophic' Fire Danger Ratings are forecast for the following day.
 - Leaving the day before because of a bad fire danger forecast isn't always practical. So, if waiting until a bushfire breaks out in your district, leave early before roads are cut by fire, fallen trees or power-lines.
 - Be prepared to stay away for several days. Head away from any fires; towards a town centre is often best.
 - **A safe option for some bushfires.**
For less intense bushfires, you may stay & defend your home if:
 - a) You have prepared it for bushfires, with fire-fighting equipment and plenty of water.
 - b) You are fit and emotionally prepared (it is best to evacuate children and other dependents early).
 - **An unsafe option is to 'wait and see', then flee at the last minute.**
 - If you don't have a plan, leave immediately.
 - If a bushfire catches you by surprise and it's unsafe to stay at home but too late to leave the area, go to a nearby safer place and wait for the fire front to pass through.

SURVIVE | after the fire

- 1) Make sure everyone's safe, check on your neighbours if you can.
- 2) Tune in to the Information Sources (listed on the map overleaf).
- 3) If at home, put out any embers and spot-fires threatening your home.
- 4) If your home is destroyed, contact your local council for assistance.



**In an emergency dial triple zero 000
or if a TTY user call 106**

Get your free *Bushfire Survival Plan* &
Bushfire Prepare to Survive booklet & DVD
www.fire.tas.gov.au | Free call 1800 000 699

NEARBY SAFER PLACES

A nearby safer place is somewhere close by you should be able to reach quickly and safely, and that gives shelter from radiant heat.



**Using nearby safer places is not without risk.
They are a last resort, not your only option.**

Nearby safer places may include town centres; ground level water e.g. rivers, in-ground pools, dams; large open areas e.g. beaches, ploughed or green fields, golf courses, recreation grounds and community parks with very short grass; and approved bushfire bunkers.

Tasmania Fire Service has identified some nearby safer places in this area (see below).

- List other nearby safer places, close to where you live, in your personal *Bushfire Survival Plan*.
- Prepare your home and identify nearby safer places. Otherwise, leave early.
- Travelling through fire impacted areas is unsafe and should be avoided, even in a car.

Nearby Safer Places:

• Risdon Vale Sports Oval

26 Sugarloaf Road Road
Map Grid: E5 (Risdon Vale)

• Store Point

Corner of Saundersons Road & Risdon Street
Map Grid: A8 (Risdon Vale)

• Neighboring plans may have additional Nearby Safer Places.

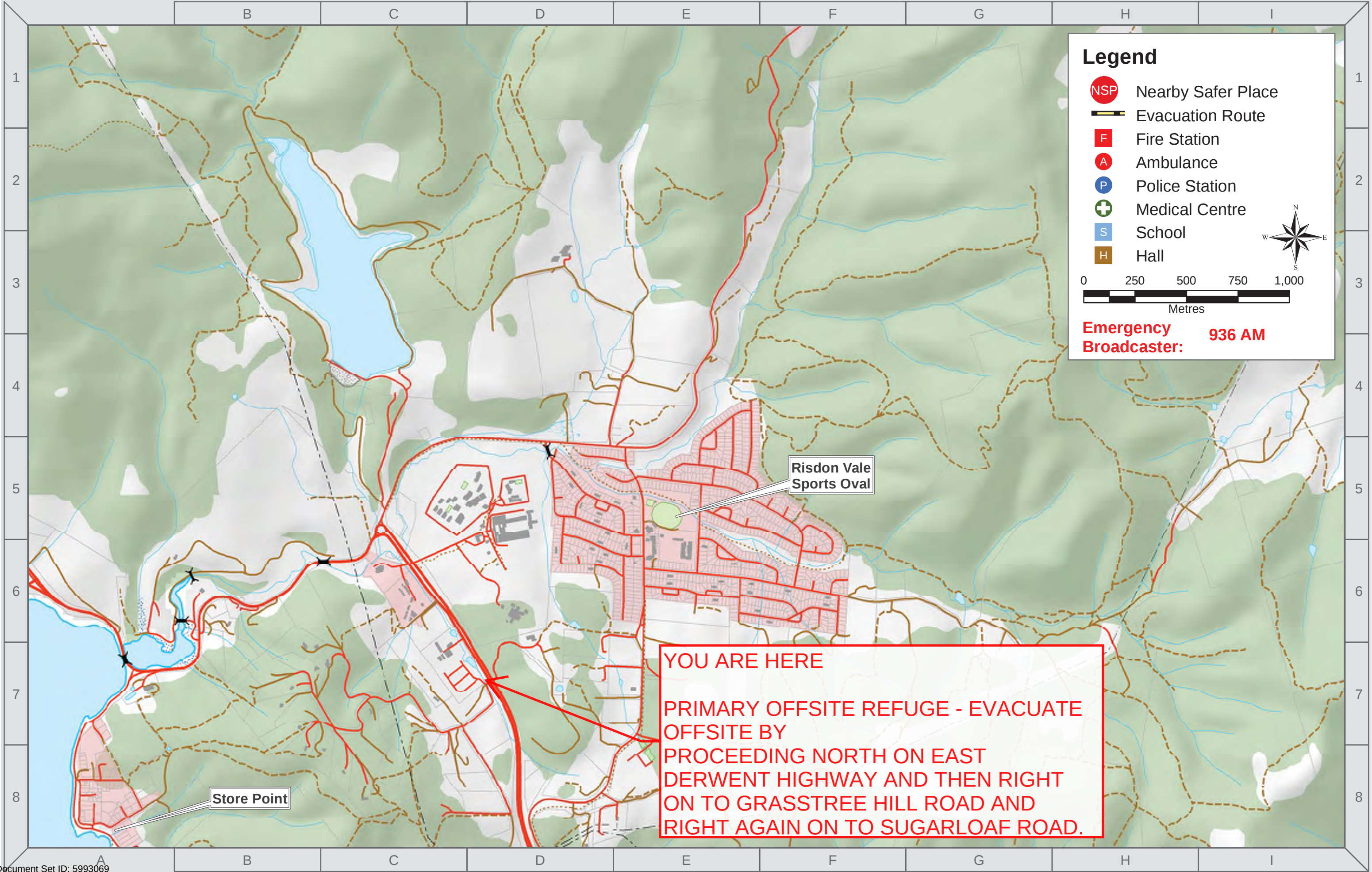
**Add nearby safer places to your
Bushfire Survival Plan.**



Plan: Risdon Vale Area
Issue date: October 2015

Map:
Risdon Vale

Disclaimer: The following map product has been produced by Emergency Services GIS (ES-GIS) on behalf of the Tasmania Fire Service. While all efforts have been taken to ensure the accuracy of this product, there may be errors or omissions in the data presented. Users are advised to independently verify all data for accuracy and completeness prior to use.
FOR OFFICE USE ONLY: (2015)



PROPOSED MULTI-UNIT DEVELOPMENT
647 EAST DERWENT HIGHWAY,
RISDON, 7017
TASMANIA

INDEX

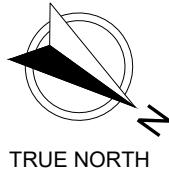
C00	INDEX & COVER SHEET
N01	CIVIL & HYDRAULIC NOTES
N02	SYMBOLS & LINE LEGENDS
N03	PIPE TRENCH DETAILS
C01	EXISTING SITE PLAN
C02	PROPOSED SITE PLAN - SHEET 1
C03	PROPOSED SITE PLAN - SHEET 2
C04	TYPICAL DRIVEWAY & FOOTPATH SECTIONS (CONCRETE)
C05	DETENTION BASIN SECTIONS
C06	TYPICAL SWALE DRAIN & HEADWALL SECTIONS

IMPORTANT
DRAWING MUST BE
PRINTED & READ IN COLOUR

NOT FOR
CONSTRUCTION



LOCALITY PLAN
SCALE: NTS



				 SCIENCE IN DESIGN 121 Sandy Bay Road, Sandy Bay TAS 7005 Phone (03) 6240 9911 www.jsa.com.au	CHECKED M. HORSHAM CC5865 I	SCALE AS SHOWN	SIZE A3	PROJECT CLARENCE LIFESTYLE VILLAGE 647 EAST DERWENT HIGHWAY, RISDON, 7017	DRAWING TITLE INDEX & COVER SHEET			
C	ADDED LOT AREAS	R.H.	M.H.		08/11/2024	CIVIL DESIGNER M. BEKKER	HYDRAULIC ENGINEER R. HORNER		PROJECT NO 17E99-118	DWG NO C00	REV C	
B	REMOVAL OF EMERGENCY EXIT	S.M.	M.H.		05/08/2024	STATUS PLANNING APPROVAL						
A	FOR PLANNING APPROVAL	M.B.	M.H.		25/10/2023							
REV	DESCRIPTION	BY	CHK		DATE							

CIVIL AND HYDRAULIC NOTES

IMPORTANT
DRAWING MUST BE
PRINTED & READ IN COLOUR

NOT FOR
CONSTRUCTION

GENERAL NOTES

1.

THE MAIN CONTRACTOR AND ALL SUB CONTRACTORS SHALL COMPLY WITH THE STATE WORK HEALTH AND SAFETY ACT AND ALL RELEVANT CODES OF PRACTICE.

2.

ALL HYDRAULICS WORKS TO BE CARRIED OUT IN ACCORDANCE WITH IPWEA STANDARD DRAWINGS AND SPECIFICATIONS, (WSAA SEWERAGE CODE OF AUSTRALIA & WATER SUPPLY CODE OF AUSTRALIA) AND TO THE SATISFACTION OF COUNCIL'S DEVELOPMENT ENGINEER.

3.

THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR CONTACTING TASNETWORKS TO APPLY FOR NEW CONNECTIONS AND/OR ADDITIONAL SUPPLY. SUFFICIENT TIME FOR TASNETWORKS DESIGN AND REVIEW PROCESSES SHOULD BE ALLOWED FOR.

4.

NO TOP SOIL SHALL BE REMOVED FROM THE SITE WITHOUT THE CONSENT OF COUNCIL. TOP SOIL DISTURBED OR REMOVED AS A RESULT OF WORKS SHALL BE STOCK-PILED ON SITE AND LATER USED FOR REDRESSING ANY DISTURBED SURFACES.

5.

ALL DISTURBED SURFACES ON SITE, EXCEPT THOSE SET ASIDE FOR ROADWAYS AND FOOTPATHS SHALL BE DRESSED WITH IMPORTED FILL AND REVEGETATED TO THE SATISFACTION OF THE COUNCIL'S DEVELOPMENT ENGINEER.

6.

ALL EXISTING SERVICES TO BE LOCATED ON SITE PRIOR TO THE COMMENCEMENT OF WORKS.

7.

ALL LEVELS TO BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

8.

ALL CONNECTIONS TO EXISTING STORMWATER MAINS TO BE CARRIED OUT BY COUNCIL AT DEVELOPERS COST UNLESS APPROVED OTHERWISE, ALL CONNECTIONS TO SEWER/WATER MAINS TO BE CARRIED OUT BY TASWATER AT DEVELOPERS COST UNLESS APPROVED OTHERWISE

9.

GENERAL MATERIALS, INSTALLATION AND TESTING SHALL COMPLY WITH TASMANIAN MUNICIPAL STANDARDS PART 4.

10.

EXCAVATED AND IMPORTED MATERIAL USED AS FILL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.

11.

ANY DEPARTURES FROM THE DESIGN DRAWINGS ARE TO BE AT THE WRITTEN APPROVAL OF THE ENGINEER AND APPROVAL FROM THE AUTHORITY. CHANGES INCLUDES CONFLICTS WITH EXISTING SERVICES.

12.

UNLESS NOTED OTHERWISE, THESE NOTES SHALL APPLY TO ALL DRAWINGS IN THE SET

13.

BATTERS:

MAX EMBANKMENT SLOPE

1:3.0

MAX CUTTING SLOPE

1:2.0 (LOOSE ROCK)

1:3.0 (SOIL)

14.

FOR EMBANKMENTS HEIGHTS IN EXCESS OF 2.0m, THE DESIGN MUST BE APPROVED BY JSA DURING CONSTRUCTION.

APPROVALS:

1.

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT A VALID BUILDING AND PLUMBING PERMIT IS IN PLACE FOR THE WORK AND THAT THE BUILDING SURVEYOR IS NOTIFIED OF ALL SITE INSPECTION REQUESTS.
2.

THE APPLICANT SHALL NOT COMMENCE CIVIL CONSTRUCTION WORKS WITHIN A ROAD RESERVE UNTIL THE FOLLOWING REQUIREMENTS ARE MET:
3.

A 'PERMIT TO CARRY OUT WORKS WITHIN A COUNCIL ROAD RESERVATION' HAS BEEN ISSUED BY THE COUNCIL AND THE ASSOCIATED FEE PAYMENT MADE
4.

TRAFFIC MANAGEMENT AND PEDESTRIAN PLAN HAS BEEN PRODUCED AND FOLLOWED IN ACCORDANCE WITH DEPARTMENT OF INFRASTRUCTURE, ENERGY AND RESOURCES 'TRAFFIC CONTROL AT WORK SITES' CODE OF PRACTICE.

GENERAL HYDRAULICS NOTES:

1.

DURING CONSTRUCTION ANY OPEN PIPES TO BE SEALED TEMPORARILY DURING WORKS TO PREVENT ENTRY OF FOREIGN MATTER
2.

CONCEAL ALL PIPEWORK IN DUCTS, CEILING SPACES, WALL CAVITIES UNLESS OTHERWISE NOTED
3.

CONFIRM ALL INVERT LEVELS PRIOR TO EXCAVATION.
4.

THE LOCATION OF EXISTING SERVICES SHOULD BE CONFIRMED ONSITE INCLUDING: MAINS WATER, GAS, TELECOMMUNICATIONS, POWER, SEWER STORMWATER.
5.

ALL PIPEWORK UNDER TRAFFICABLE AREAS TO BE BACKFILLED TO FULL DEPTH WITH DIER CLASS A 19MM FCR COMPACTED TO AS3798.
6.

FOR CLASS H AND E SITES, JOINTS IN PLUMBING SHALL BE ARTICULATED WITHIN 3M OF THE BUILDING UNDER CONSTRUCTION TO ACCOMMODATE GROUND MOVEMENT WITHOUT LEAKAGE.
7.

ALL PIPEWORK SHALL BE ADEQUATELY SUPPORTED. SUPPORT SHALL ALLOW FOR EXPANSION AND BE FITTED AT THE TIME OF PIPE INSTALLATION
8.

WHERE PIPEWORK PENETRATES FIRE RATED WALL OR FLOORS A FIRE STOP COLLAR SHALL BE INSTALLED

SEWER NOTES:

1.

ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH WSAA SEWERAGE CODE OF AUSTRALIA WSA 02-2014-3.1 MRWA EDITION V2.0, TASWATERS SUPPLEMENT TO THIS CODE, CURRENT VERSION OF AS/NZS3500 AND TO THE SATISFACTION OF TASWATER'S DEVELOPMENT ENGINEER.
2.

ALL EXISTING SERVICES TO BE LOCATED ON SITE PRIOR TO THE COMMENCEMENT OF WORKS.
3.

ALL CONNECTIONS TO EXISTING MAINS TO BE CARRIED OUT BY TASWATER'S APPROVED CONTRACTOR AT DEVELOPERS COST UNLESS APPROVED OTHERWISE.
4.

GENERAL MATERIALS, INSTALLATION & TESTING SHALL COMPLY WITH WSAA SEWERAGE CODE OF AUSTRALIA WSA 02-2014-3.1 MRWA EDITION V2.0, TASWATERS SUPPLEMENT TO THIS CODE, CURRENT VERSION OF AS/NZS3500.2 AND TO THE SATISFACTION OF TASWATER'S DEVELOPMENT ENGINEER.
5.

ALL DROPS MUST BE INTERNAL AND IN ACCORDANCE WITH MRWA S-311.
6.

ALL PIPE WORK UNDER TRAFFICABLE AREAS, INCLUDING DRIVEWAYS, IS TO BE BACKFILLED WITH FCR.
7.

LOT CONNECTIONS SHALL BE DN100 UPVC U.N.O. AS PER MRWA S-302 AND BRING INSPECTION OPENING TO SURFACE INSIDE LOT BOUNDARY.
8.

ALL SEWER MAINS TO BE PIPE CLASS SN8 FOR PUBLIC WORKS, AND SN6 FOR PRIVATE WORKS UNO. MATERIAL TYPE PER PLAN.
9.

PIPEWORK SHALL BE PRESSURE TESTED PROGRESSIVELY DURING INSTALLATION TO ENSURE ABSENCE OF LEAKS.
10.

ALL PIPEWORK SHALL BE INSTALLED AS CLOSE AS PRACTICABLE TO THE UNDERSIDE OF FLOORS.

STORMWATER NOTES:

1.

ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL MUNICIPAL STANDARDS, CURRENT VERSION OF AS/NZS3500 AND IPWEA (TAS) MUNICIPAL STANDARD DRAWINGS AND SPECIFICATIONS WHERE APPLICABLE AND TO THE SATISFACTION OF COUNCIL'S MUNICIPAL ENGINEER
2.

ALL EXISTING SERVICES TO BE LOCATED ON SITE PRIOR TO THE COMMENCEMENT OF WORKS. ALL CONNECTIONS TO EXISTING MAINS TO BE CARRIED OUT BY COUNCIL AT DEVELOPERS COST UNLESS APPROVED OTHERWISE.
3.

GENERAL MATERIALS, INSTALLATION & TESTING SHALL COMPLY WITH TASMANIAN MUNICIPAL STANDARDS PART 4.
4.

ALL PIPE WORK UNDER TRAFFICABLE AND NON TRAFFICABLE AREAS TO BE BACKFILLED IN ACCORDANCE WITH SPECIFICATION TABLE SHOWN ON N03.
5.

LOT CONNECTIONS SHALL BE DN150 UPVC UNO MINIMUM PIPE CLASS TO BE CLASS SN4. PIPE UNDER ROADS TO BE CLASS SN8.
6.

ALL MAINTENANCE HOLES DEEPER THAN 1m FROM FINISHED SURFACE LEVEL TO MAINTENANCE HOLE BASE TO BE FITTED WITH APPROVED STEP IRONS.
7.

IPWEA STANDARD DRAWINGS REFERENCED ARE THE MOST RECENT DRAWING SET UNO.

INSPECTION OPENINGS

8.

FOR OTHER THAN SINGLE DWELLINGS, INSPECTION OPENINGS FOR MAINTENANCE OF SITE STORMWATER DRAINS SHALL BE EXTENDED TO AND CAPPED AT THE FINISH SURFACE LEVEL AND INSTALLED AT:-

8.1.

EACH POINT OF CONNECTION;

8.2.

EVEN SPACING NOT MORE THAN 30m APART;

8.3.

EACH END OF INCLINED JUMP-UP THAT EXCEED 6m IN LENGTH;

8.4.

EACH CONNECTION TO AN EXISTING SITE STORMWATER DRAIN; AND

8.5.

AT ANY CHANGE OF DIRECTION GREATER THAN 45°.
- NOTE:

INSPECTION OPENINGS MAY BE REPLACED BY AN INLET OR STORMWATER PIT.
9.

THE NOMINAL SIZE OF INSPECTION OPENINGS FOR SITE STORMWATER DRAINS SHALL BE -

9.1.

FOR NOMINAL PIPE SIZE LESS THAT OR EQUAL TO DN150, THE SAME SIZE AS THE SITE STORMWATER DRAIN; AND

9.2.

FOR NOMINAL PIPE SIZES GREATER THAN DN150, NOT LESS THAN DN150
10.

ACCESS A BELOW-GROUND INSPECTION OPENINGS SHALL BE EITHER BY:-

10.1.

A STORMWATER PIT; OR

10.2.

A SEALED RISER TERMINATED AT GROUND LEVEL OR FLOOR LEVEL IN AN ACCESSIBLE POSITION
11.

INSPECTION OPENINGS AND UNUSED SOCKETS SHALL BE SEALED WITH AIRTIGHT REMOVAL PLUGS OR CAPS FITTED WITH AN ELASTOMERIC SEAL AND SECURELY HELD IN POSITION BY A CLIP, STRAP OR THREADED CONNECTION. EACH PLUG OR CAP SHALL BE LEGIBLY MARKED 'SW'.

WATER NOTES:

1.

ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH WSAA WATER SUPPLY CODE OF AUSTRALIA WSA 03-2011-3.1 MRWA EDITION V2.0, TASWATERS SUPPLEMENT TO THIS CODE AND TO THE SATISFACTION OF TASWATERS DEVELOPMENT ENGINEER.
2.

ALL EXISTING SERVICES TO BE LOCATED ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
3.

ALL CONNECTIONS TO EXISTING MAINS TO BE CARRIED OUT BY TASWATER AT DEVELOPERS COST UNLESS APPROVED OTHERWISE.
4.

GENERAL MATERIALS INSTALLATION AND TESTING SHALL COMPLY WITH WSA 03-2011-3.1 AND TASWATER APPROVED PRODUCTS CATALOGUE.
5.

WATER MAIN TO BE oPVC SERIES 2 CLASS 16 OR APPROVED EQUIVALENT, WITH RODS AND CONNECTIONS BEING POLY PN16 PE100.
6.

THRUST BLOCKS SHALL BE INSTALLED AT ALL TEES, BLANK ENDS, VALVES, FIRE HYDRANTS, REDUCERS AND BENDS GREATER THAN 5°.
7.

INDIVIDUAL LOT CONNECTIONS TO BE MIN DN25 ID20 PN16 POLY UNO.
8.

DEVELOPER TO SUPPLY 20mm WATER METER SUBMETERS AND BOX. SUBMETERS TO BE INSTALLED BY PLUMBING CONTRACTOR.
9.

ALL ISOLATION VALVES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS. VALVES LOCATED IN WALLS OR DUCTS SHALL BE FITTED WITH APPROVED ACCESS COVERS.
10.

INTERNAL PLUMBING SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT VERSION OF AS/NZS3500 PARTS 1, 2 & 3 AND THE TASMANIAN PLUMBING CODE
11.

THE PLUMBER SHALL ARRANGE FOR ALL INSPECTIONS AND PRESSURE TESTING REQUIRED BY TASWATER OR THE LOCAL AUTHORITY PRIOR TO CONCEALMENT.
12.

ALL STOP VALVES TO BE CLOCKWISE CLOSING.
13.

PROVIDE C.I. VALVE BOX COVERS TO ALL VALVES AND FIRE PLUG.
14.

STOP VALVES AND FIRE PLUGS SHALL BE MARKED IN ACCORDANCE WITH THE IPWEA FIRE HYDRANT GUIDELINES: TASMANIA DIVISION.
15.

FIRE PLUGS AND VALVE POSITIONS TO BE MARKED ON KERB BACKS WITH HIMARK CONCRETE PAINT.
16.

PROVIDE ELECTROMAGNETIC, METAL IMPREGNATED TAPE IN ALL NON METALLIC PIPE TRENCHES. ENSURE TAPE TERMINATIONS ARE ACCESSIBLE.
17.

ALL PROPERTY CONNECTIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MRWA-W-110 AND MRWA-W-111 AND TASWATER STANDARD DRAWING TWS-W-0002 SERIES. ALL FITTINGS TO BE F.B.E.
18.

FIRE PLUGS TO HAVE 100mm RISERS WITH SPRING TYPE PLUGS.
19.

TASWATER TO WITNESS PRESSURE TEST TO 1200kPa PRIOR TO BACKFILL AT JOINTS.
20.

MAIN TO BE DISINFECTED PRIOR TO CONNECTION TO THE RETICULATION NETWORK. REFER TO WSA CODE FOR DETAILS.
21.

PLACEMENT OF WATER MAINS IN FILL REQUIRES THE CONTRACTOR TO PROVIDE DOCUMENTARY EVIDENCE INCLUDING; THE COMPOSITION OF FILL MATERIAL, VERIFYING THAT IT CONTAINS NO ORGANIC OR OTHER MATERIALS THAT DECOMPOSE OR OTHERWISE LEAD TO LONG TERM SETTLEMENT.

ROAD NOTES:

1.

MINIMUM SUB BASE THICKNESS TO BE 200mm.
2.

PRIOR TO PLACEMENT OF SUB BASE COURSE, PAVEMENT CUT IS TO BE ROLLED AND TESTED FOR CBR VALUES BY METHOD APPROVED BY THE SUPERINTENDENT. WHERE THE CBR VALUES ARE LESS THAN 5 WITHIN THE FIRST 200mm THEN ADDITIONAL TESTS WILL BE REQUIRED TO ALLOW SUFFICIENT DESIGN ALTERATIONS TO THE SUB BASE.
3.

PAVEMENT DESIGN BASED ON A CBR VALUE OF 3-4%.
4.

ROAD MARKINGS AND SIGNS AS PER AS1742
5.

IF THE CBR VALUE IS LESS THAN 2 AT ANY DEPTH GREATER THAN 200mm THEN THE SUB BASE IS TO BE INCREASED GENERALLY ACCORDING TO THE FOLLOWING TABLE & CONSULT ENGINEER:

CBR VALUES: DESIGN:

3-4	AS PER PAVEMENT DETAIL
~2	ADVISE & CONSULT ENGINEER. TYPICALLY INCREASE SUB BASE TO 400mm THICK (SUBGRADE REPLACEMENT)
<1	ADVISE & CONSULT ENGINEER. SPECIAL PAVEMENT DESIGN TO BE SPECIFIED.

DRIVEWAY NOTES:

1.

EXCAVATED AND IMPORTED MATERIAL USED AS FILL IS TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.
2.

FILL MATERIAL SHALL BE WELL GRADED AND FREE OF BOULDERS OR COBBLES EXCEEDING 150mm IN DIAMETER UNLESS APPROVED OTHERWISE.
3.

FILL REQUIRED TO SUPPORT DRIVEWAYS INCLUDING FILL IN EMBANKMENTS THAT SUPPORT DRIVEWAYS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
4.

TOP SOIL AND ORGANIC MATTER SHALL BE STRIPPED TO A MINIMUM OF 100mm.
5.

THE SUB GRADE SHALL BE CHECKED FOR A MINIMUM BEARING CAPACITY OF 50 kPa.
6.

FILL IN EMBANKMENTS SHALL BE KEYED 150mm INTO NATURAL GROUND.
7.

THE FILL SHALL BE COMPACTED IN HORIZONTAL LAYERS OF NOT MORE THAN 200mm.
8.

EACH LAYER SHALL BE COMPACTED TO A MINIMUM DENSITY RATIO OF 95%. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT THIS IS ACHIEVED.
9.

WHERE THE ABOVE REQUIREMENTS CANNOT BE ACHIEVED THE ENGINEER SHALL BE CONSULTED AND THE FORMATION SHALL BE PROOF ROLLED (UNDER SUPERVISION OF THE ENGINEER) TO DEMONSTRATE COMPACTION PRIOR TO THE PLACEMENT OF BASE OR SUB-BASE COURSES.
10.

UNREINFORCED CONCRETE KERBS AND CHANNELS SHALL HAVE TROWELLED JOINTS AT NOT MORE THAN 3.0m CRS

CONTROLLED FILL:

1.

CONTROLLED FILL SHALL BE LAID IN STRICT ACCORDANCE WITH AS2870 AND AS3798 REQUIREMENTS. THE FOLLOWING METHOD IS APPROVED:
2.

FILL MATERIAL SHALL BE WELL GRADED FCR OR SITE ROCK REVIEWED DURING EXCAVATION.
3.

THE SUB GRADE SHALL BE CHECKED FOR BEARING CAPACITY WHICH IS A MINIMUM OF 50kPa FOR SLABS AND A MINIMUM OF 100kPa FOR FOOTINGS.
4.

THE FILL SHALL BE COMPACTED IN HORIZONTAL LAYERS OF NOT MORE THAN 150mm
5.

THE FILL SHALL BE COMPACTED TO A MINIMUM DENSITY RATIO OF 95% FOR RESIDENTIAL APPLICATIONS. IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT THIS LEVEL OF COMPACTION IS ACHIEVED. IMPORTED MATERIAL, CONTRARY TO THE ABOVE SPECIFICATION, INTENDED FOR USE AS STRUCTURAL FILL SHALL BE APPROVED IN WRITING BY THE ENGINEER PRIOR TO USE.

CONCRETE:

1.

CONCRETE SHALL BE NOT LESS THAN N25 GRADE, WITH 20mm NOMINAL MAXIMUM AGGREGATE SIZE, SLUMP SHALL BE SELECTED TO SUIT THE CONSTRUCTION CONDITIONS. UNLESS NOTED OTHERWISE THE MINIMUM APPROPRIATE SPECIFICATIONS FROM AS3600 AND AS2870 SHALL BE ADOPTED.
2.

SAWN CONTROL JOINTS SHALL BE CONSTRUCTED AS SOON AS POSSIBLE WITHOUT RAVELING THE JOINT, GENERALLY THIS SHALL BE WITHIN 24 HOURS.
3.

CONCRETE SHALL BE CURED FOR A MINIMUM OF 7 DAYS USING CURRENT BEST PRACTICE METHODS. SPRAY APPLIED CURING COMPOUNDS ARE GENERALLY NOT DEEMED SATISFACTORY AS SOLE CURING METHOD.
4.

CONCRETE SHALL BE MECHANICALLY VIBRATED U.N.O.
5.

ADDITIONAL WATER SHALL NOT BE ADDED TO THE CONCRETE ON SITE UNLESS SIGNED BY THE DRIVER AND APPROVED BY THE SUPPLIER.

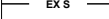
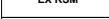
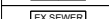
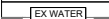
DISCLAIMER

ENGINEERING NOTES ARE INTENDED FOR USE AS A GUIDE TO RELEVANT CODES, REGULATIONS AND STANDARDS FOR THE BUILDER OR CONTRACTOR DURING THE CONSTRUCTION PROCESS, THEY SHALL NOT REPLACE THEM IN ANY WAY. THESE NOTES ARE NOT SITE SPECIFIC AND SHALL NOT BE USED TO CONTRAVENE APPROVED PLANS OR TO SPECIFY ANY UNAPPROVED WORKS.

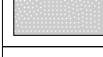
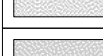
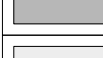
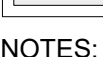
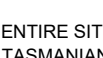
								CHECKED M. HORSHAM CC5865 I	SCALE AS SHOWN	SIZE A3	PROJECT CLARENCE LIFESTYLE VILLAGE 647 EAST DERWENT HIGHWAY, RISDON, 7017	DRAWING TITLE CIVIL & HYDRAULIC NOTES
								CIVIL DESIGNER M. BEKKER	HYDRAULIC ENGINEER R. HORNER			
								STATUS PLANNING APPROVAL				
C	ADDED LOT AREAS		R.H.	M.H.	08/11/2024							
B	REMOVAL OF EMERGENCY EXIT		S.M.	M.H.	05/08/2024							
A	FOR PLANNING APPROVAL		M.B.	M.H.	25/10/2023							
REV	DESCRIPTION	BY	CHK	DATE								

IMPORTANT
DRAWING MUST BE
PRINTED & READ IN COLOUR

NOT FOR
CONSTRUCTION

PIPE LEGEND	
MARK	DESCRIPTION
	SLOTTED HDPE SN8 DRAINAGE PIPE
	PROPOSED STORMWATER PIPE
	PROPOSED SEWER PIPE
	PROPOSED RISING SEWER MAIN
	PROPOSED PE PN16 WATER SUPPLY
	PROPOSED PUBLIC STORMWATER MAIN
	PROPOSED PUBLIC SEWER MAIN
	PROPOSED PUBLIC WATER MAIN
	POWER CIRCUIT
	COMMUNICATIONS
	DN100 PVC-M PN16 PVC
	EXISTING SLOTTED AG DRAINAGE PIPE.
	EXISTING WATER SUPPLY
	EXISTING SEWER PIPE
	EXISTING RISING SEWER MAIN
	EXISTING STORMWATER
	EXISTING POWER
	EXISTING PUBLIC STORMWATER MAIN
	EXISTING PUBLIC SEWER MAIN
	EXISTING PUBLIC WATER MAIN
	DEMOLISHED MAIN WATER
	DEMOLISHED STORMWATER
	DEMOLISHED SEWER
	DEMOLISHED WATER
	SWALE DRAIN

SYMBOL LEGEND	
MARK	DESCRIPTION
	WATER METER. REFER TO PLAN FOR DETAILS.
	GRATED PIT - REFER TO PLAN FOR DETAILS.
	CHANNEL DRAIN & INCLINE PIT - REFER TO PLAN FOR DETAILS.
	STORMWATER MAINTENANCE HOLE. REFER TO PLAN FOR DETAILS.
	SEWER MAINTENANCE HOLE. REFER TO PLAN FOR DETAILS.
	SEWER LOT CONNECTION INSPECTION OPENING. REFER TO PLAN FOR DETAILS.
	FIRE PLUG. REFER TO PLAN FOR DETAILS.
	ISOLATING VALVE. REFER TO PLAN FOR DETAILS.
	POWER TURRET
	COMMUNICATIONS PIT

HATCH LEGEND	
MARK	DESCRIPTION
	EASEMENT REFER TO PLAN FOR TYPE & WIDTH
	FLOOD PRONE AREA AS PER TASMANIAN PLANNING SCHEME - CLARENCE
	WATERWAY & COASTAL PROTECTION AREA AS PER TASMANIAN PLANNING SCHEME - CLARENCE
	ROAD OR RAILWAY ATTENUATION AREA AS PER TASMANIAN PLANNING SCHEME - CLARENCE
	PROPOSED CONCRETE DRIVEWAY
	PROPOSED FOOTPATH
	PROPOSED SERVICE PATHWAY
	EXISTING HARDSTAND

NOTES:

ENTIRE SITE IS SUBJECT TO THE FOLLOWING OVERLAYS AS PER THE TASMANIAN PLANNING SCHEME - CLARENCE LOCAL PROVISION;

- AIRPORT OBSTACLE LIMITATION AREA
- BUSHFIRE PRONE AREAS

SURFACE LEGEND	
MARK	DESCRIPTION
FSL XX.XX	PROPOSED FINISHED SURFACE LEVEL
Δ XX.XX	HEIGHT OF PROPOSED SURFACE RELATIVE TO NATURAL SURFACE (FILL REQUIRED)
Δ -XX.XX	HEIGHT OF PROPOSED SURFACE RELATIVE TO NATURAL SURFACE (CUT REQUIRED)

C	ADDED LOT AREAS	R.H.	M.H.	08/11/2024
B	REMOVAL OF EMERGENCY EXIT	S.M.	M.H.	05/08/2024
A	FOR PLANNING APPROVAL	M.B.	M.H.	25/10/2023
REV	DESCRIPTION	BY	CHK	DATE



SCIENCE IN DESIGN
121 Sandy Bay Road, Sandy Bay TAS 7005
Phone (03) 6240 9911 www.jsa.com.au

CHECKED M. HORSHAM CC5865 I	SCALE AS SHOWN
CIVIL DESIGNER M. BEKKER	HYDRAULIC ENGINEER R. HORNER
STATUS PLANNING APPROVAL	

SIZE A3	PROJECT CLARENCE LIFESTYLE VILLAGE 647 EAST DERWENT HIGHWAY, RISDON, 7017
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DRAWING TITLE SYMBOL & LINE LEGENDS		
PROJECT NO 17E99-118	DWG NO N02	REV C

NOTES:

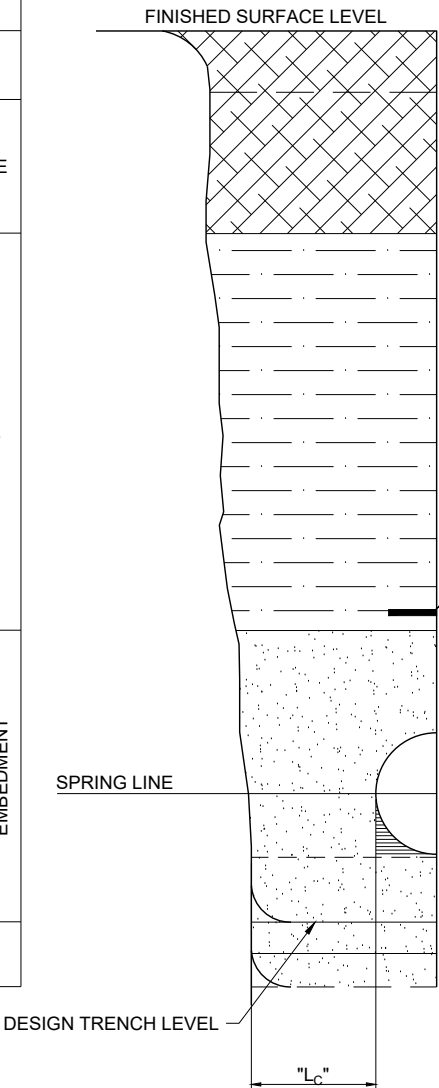
- ALL DIMENSIONS IN MILLIMETRES.
- BEDDING - SPECIAL BEDDING SHALL BE SPECIFIED TO SUIT THE CONDITIONS IF THE TRENCH FLOOR HAS: - IRREGULAR OUTCROPS OF ROCK, OR UNCONTROLLED GROUND WATER HAS DISTURBED THE FLOOR OF THE TRENCH EMBEDMENT.
- SIDES OF EXCAVATION TO BE KEPT VERTICAL TO AT LEAST 150 ABOVE THE PIPE.

IMPORTANT
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CONSTRUCTION

MATERIAL			ZONE	
DRIVEWAY SURFACE	ROAD SURFACE	VERGE & TRACK		
DRIVEWAY SURFACE LAYER	ROAD SURFACE LAYER	TO MATCH EXISTING	SURFACE COURSE	
DRIVEWAY BASE COURSE	TO MATCH EXISTING ROAD BASE OR TO ROAD OWNER'S REQUIREMENTS	TO ROAD OWNER'S REQUIREMENTS OR ORIGINAL MATERIAL OR INORGANIC FILL WITH MAXIMUM 75mmSTONE SIZE	BASE COURSE	
ORIGINAL MATERIAL OR INORGANIC FILL WITH MAXIMUM 75mmSTONE SIZE	20mm FCR COMPACTED IN 150mm LAYERS		TRENCH FILL	
7mm COMPACTED CLEAN METAL			OVERLAY	EMBEDMENT
7mm COMPACTED CLEAN METAL			SIDE SUPPORT	
7mm COMPACTED CLEAN METAL. BEDDING MAY BE OMITTED IF TRENCH BASE IS GRANULAR SAND			BEDDING	
			OVER EXCAVATION	

VEHICULAR LOADING



MINIMUM PIPE COVER (PVC)

LOCATION	STORMWATER		SEWER	
	PRIVATE MINIMUM COVER 'D' TO AS/NZS 3500.3	PUBLIC MINIMUM COVER 'D' TO TSD-G02	PRIVATE MINIMUM COVER 'D' TO AS/NZS 3500.2	PUBLIC MINIMUM COVER 'D' TO MRWA-S-201
NO PAVEMENT (SINGLE DWELLINGS - PRIVATE)	100	450	300	600
NO PAVEMENT (OTHER - PRIVATE)	300	450	300	600
PAVEMENT (NO VEHICULAR LOADING - PRIVATE)	100*	450	50*	600
DRIVEWAYS (UNSEALED - PRIVATE)	450	600	500	750
DRIVEWAYS (LIGHT VEHICLE LOADING - PRIVATE)	100*	600	50*	750
DRIVEWAYS (HEAVY VEHICLE LOADING - PRIVATE)	100*	600	50*	750
SEALED ROADS (PUBLIC)	600	900	500	900
UNSEALED ROADS (PUBLIC)	750	900	500	900
MAJOR/ARTERIAL ROADWAYS (PUBLIC)	750	1200	500	1200

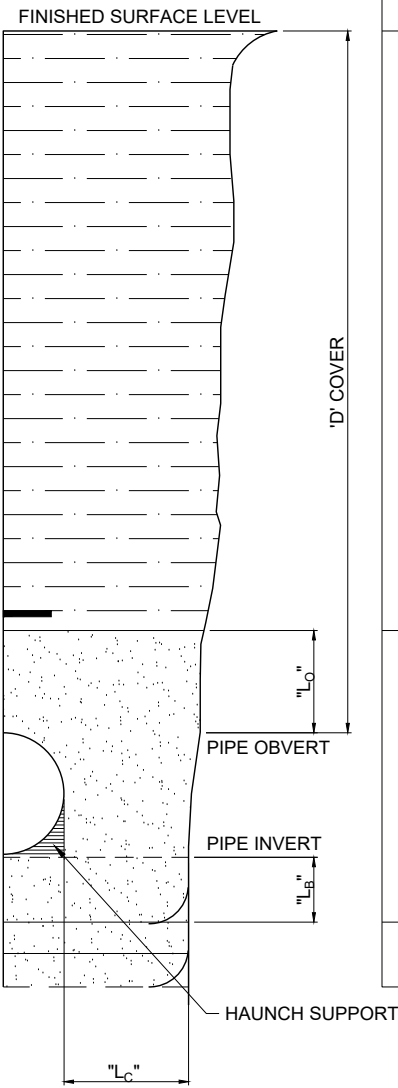
- * BELOW UNDERSIDE OF PAVEMENT
- FOR PUBLICLY OWNED PIPES - MINIMUM COVER MUST ALSO COMPLY WITH THE SERVICE PROVIDERS REQUIREMENTS.

- 1. MARKING TAPE IN ACCORDANCE WITH AS2648.1

EMBEDMENT GEOMETRY

NOMINAL DIAMETER (D _E)	MINIMUM CLEARANCE "L _C "			MINIMUM BEDDING "L _B "			MINIMUM OVERLAY "L _O "		
	SEW+SW PRIVATE	SEWER PUBLIC	SW PUBLIC	SEW+SW PRIVATE	SEWER PUBLIC	SW PUBLIC	SEW+SW PRIVATE	SEWER PUBLIC	SW PUBLIC
	AS2566.1	MRWA-S-201	TSD-G01	AS2566.1	MRWA-S-201	TSD-G01	AS2566.1	MRWA-S-201	TSD-G01
<151	100	100	N/A	75	75	100	100	100	150
>151 - <301	150	150	N/A	100	100	100	150	150	150
>301 - <451	200	200	N/A	100	100	100	150	150	150
>451 - <901	300	250	N/A	150	150	150	150	150	150
>901 - <1501	350	300	N/A	150	150	150	200	200	150

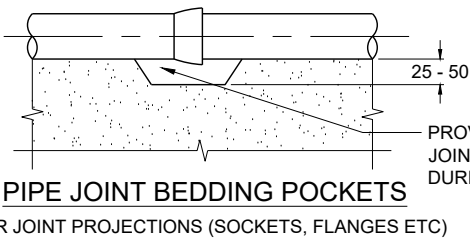
- TRENCH WIDTH TO BE SUFFICIENT TO SAFELY LAY THE PIPE AND COMPACT THE SIDE SUPPORT ZONE
- FOR PUBLICLY OWNED PIPES - MINIMUM EMBEDMENT GEOMETRY MUST ALSO COMPLY WITH THE SERVICE PROVIDERS REQUIREMENTS
- REFER BELOW FOR TRENCH WIDTHS FOR STORMWATER PIPES IN ACCORDANCE WITH TSD-G01 IN LIEU OF MINIMUM CLEARANCES L_C



ZONE		MATERIAL
TRENCH FILL		ORIGINAL MATERIAL OR INORGANIC FILL WITH 75mm MAXIMUM STONE SIZE
EMBEDMENT	OVERLAY	7mm COMPACTED CLEAN METAL
	SIDE SUPPORT	7mm COMPACTED CLEAN METAL
	BEDDING	7mm COMPACTED CLEAN METAL. BEDDING MAY BE OMITTED IF TRENCH BASE IS GRANULAR SAND
OVER EXCAVATION		

NO VEHICULAR LOADING

(INCLUDES LOCATIONS WHERE OCCASIONAL VEHICLES LOADINGS OCCUR EG. PARKLANDS, FOOTWAYS)



MINIMUM TRENCH WIDTH TO TSD-G01 (PUBLIC SW MAINS)

NOMINAL DIAMETER (D _E)	CONCRETE PIPES	OTHER PIPES
100	400	300
150	450	450
225	525	600
300	600	600
450	750	750
451- 1500	D _E + 300	D _E + 600

REV	DESCRIPTION	BY	CHK	DATE
C	ADDED LOT AREAS	R.H.	M.H.	08/11/2024
B	REMOVAL OF EMERGENCY EXIT	S.M.	M.H.	05/08/2024
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CHECKED M. HORSHAM CC5865 I	SCALE AS SHOWN	SIZE A3
CIVIL DESIGNER M. BEKKER	HYDRAULIC ENGINEER R. HORNER	
STATUS PLANNING APPROVAL		

PROJECT CLARENCE LIFESTYLE VILLAGE 647 EAST DERWENT HIGHWAY, RISDON, 7017
--

DRAWING TITLE PIPE TRENCH DETAILS		
PROJECT NO 17E99-118	DWG NO N03	REV C

NOTES:

- SURVEY DATA COMPLETED AND PROVIDED BY NICK GRIGGS & CO LAND SURVEYORS, DATED 03/05/2018, REFERENCE No. 4312/01
- HORIZONTAL DATUM GDA, VERTICAL DATUM AHD AS PER SPM 7842, CONTOUR INTERVALS AT 0.5m.
- WATER MAIN DETERMINED ON-SITE VIA MANUAL EXCAVATION.

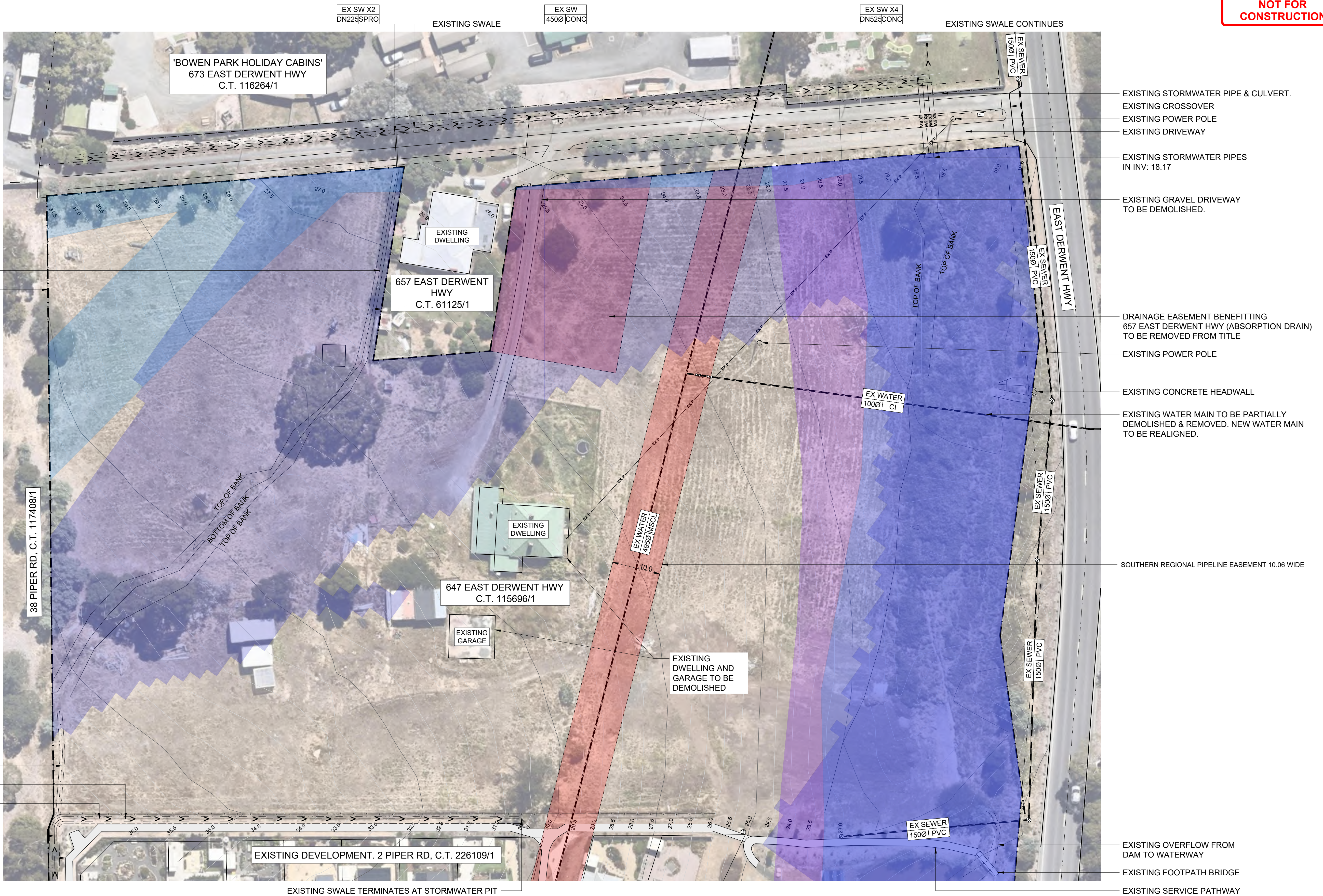
HATCH LEGEND

- EASEMENT REFER TO PLAN FOR TYPE & WIDTH
- FLOOD PRONE AREA AS PER TASMANIAN PLANNING SCHEME - CLARENCE
- WATERWAY & COASTAL PROTECTION AREA AS PER TASMANIAN PLANNING SCHEME - CLARENCE
- ROAD OR RAILWAY ATTENUATION AREA AS PER TASMANIAN PLANNING SCHEME - CLARENCE

NOTES:

- ENTIRE SITE IS SUBJECT TO THE FOLLOWING OVERLAYS AS PER THE TASMANIAN PLANNING SCHEME - CLARENCE LOCAL PROVISION:
- AIRPORT OBSTACLE LIMITATION AREA
 - BUSHFIRE PRONE AREAS

NOT FOR
CONSTRUCTION



WARNING:

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EXISTING SITE PLAN

SCALE: 1:400

IMPORTANT
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CHECKED
M. HORSHAM CC5865 I
CIVIL DESIGNER
M. BEKKER
STATUS

SCALE
AS SHOWN
HYDRAULIC ENGINEER
R. HORNER

SIZE
A1

PROJECT

CLARENCE LIFESTYLE VILLAGE
647 EAST DERWENT HIGHWAY,
RISDON, 7017

4m 0 4 8 12 16 20m
SCALE 1:400 AT A1 SHEET



DRAWING TITLE

EXISTING SITE PLAN

PROJECT NO

17E99-118

DWG NO

C01

REV

C

NOTES:

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- WATERWAY & COASTAL PROTECTION AREA AS PER TASMANIAN PLANNING SCHEME - CLARENCE
- ROAD OR RAILWAY ATTENUATION AREA AS PER TASMANIAN PLANNING SCHEME - CLARENCE
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED FOOTPATH
- PROPOSED SERVICE PATHWAY
- EXISTING HARDSTAND

NOTES:

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 - BUSHFIRE PRONE AREAS

STORMWATER LEGEND

- GP1 450x450x600 DEEP STORMWATER PIT WITH GRATED CLASS 'B' LID. 'ACO' TYPE 45 OR SIMILAR.
- PROPOSED DN1050 STORMWATER MANHOLE
- INSPECTION OPENING TO SURFACE
- DN 100 uPVC SN6 BRANCHES & CONNECTIONS TO EACH UNIT. I.O. BEFORE MAIN SW LINE.
- PIT OUTLET PIPE DN150 U.N.O.
- PROPOSED STORMWATER PIPE. REFER TO PLAN FOR SIZING AND PIPE CLASS
- PROPOSED PUBLIC STORMWATER MAIN. REFER TO PLAN FOR SIZING AND PIPE CLASS
- PROPOSED SWALE DRAIN
- PROPOSED CONCRETE HEADWALL TO FUTURE ENGINEERS DETAIL
- PROPOSED SWALE CHECK DAM. REFER C06.
- EX SW EXISTING STORMWATER
- EXISTING SWALE DRAIN
- EXISTING PUBLIC STORMWATER MAIN

WARNING:

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REV	DESCRIPTION	BY	CHK	DATE	REV	DESCRIPTION	BY	CHK	DATE
C	ADDED LOT AREAS			08/11/2024					
B	REMOVAL OF EMERGENCY EXIT			05/08/2024					
A	FOR PLANNING APPROVAL			05/10/2023					

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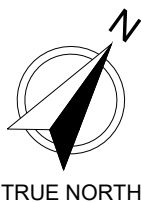
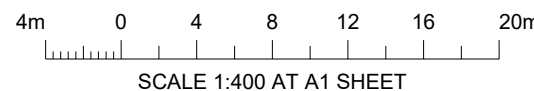
CHECKED	M. HORSHAM CC5865 I	SCALE	AS SHOWN	SIZE	A1
CIVIL DESIGNER	M. BEKKER	HYDRAULIC ENGINEER	R. HORNER		
STATUS	PLANNING APPROVAL				

CLARENCE LIFESTYLE VILLAGE
647 EAST DERWENT HIGHWAY,
RISDON, 7017

DRAWING TITLE	PROJECT NO	DWG NO	REV
PROPOSED SITE PLAN - SH 1	17E99-118	C02	C

PROPOSED SITE PLAN - SHEET 1

SCALE: 1:400



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HATCH LEGEND

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REFER TO PLAN FOR TYPE & WIDTH
- FLOOD PRONE AREA
AS PER TASMANIAN PLANNING SCHEME - CLARENCE
- WATERWAY & COASTAL PROTECTION AREA
AS PER TASMANIAN PLANNING SCHEME - CLARENCE
- ROAD OR RAILWAY ATTENUATION AREA
AS PER TASMANIAN PLANNING SCHEME - CLARENCE
- PROPOSED CONCRETE DRIVEWAY
- PROPOSED FOOTPATH
- PROPOSED SERVICE PATHWAY
- EXISTING HARDSTAND

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 - BUSHFIRE PRONE AREAS

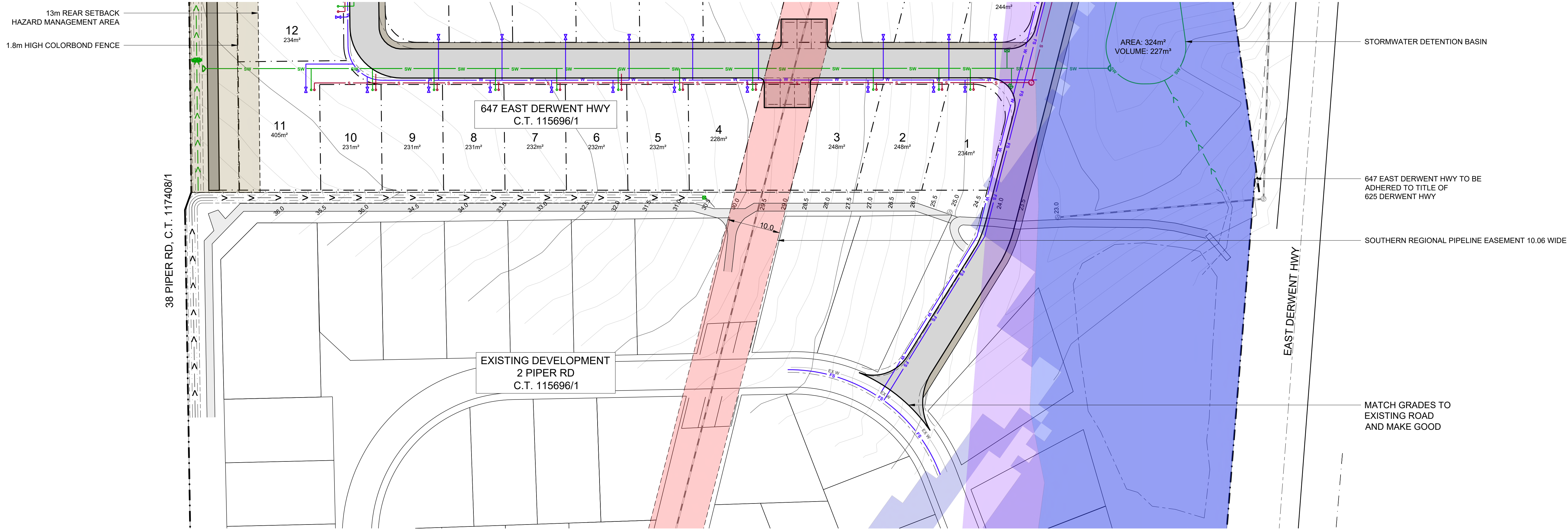
STORMWATER LEGEND

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- PROPOSED DN1050 STORMWATER MANHOLE
- INSPECTION OPENING TO SURFACE
- DN 100 uPVC SN6 BRANCHES & CONNECTIONS TO EACH UNIT. I.O. BEFORE MAIN SW LINE.
- PIT OUTLET PIPE DN150 U.N.O.
- PROPOSED STORMWATER PIPE. REFER TO PLAN FOR SIZING AND PIPE CLASS
- PROPOSED PUBLIC STORMWATER MAIN. REFER TO PLAN FOR SIZING AND PIPE CLASS
- PROPOSED SWALE DRAIN
- PROPOSED CONCRETE HEADWALL TO FUTURE ENGINEERS DETAIL
- PROPOSED SWALE CHECK DAM. REFER C06.
- EX SW EXISTING STORMWATER
- > EXISTING SWALE DRAIN
- EXISTING PUBLIC STORMWATER MAIN

SEWER & WATER LEGEND

- WATER PIPE PE100 PN16 SDR11. REFER TO PLANS FOR SIZING, FUSION TYPE CONNECTIONS WITH 90° BENDS FORMED THROUGH 30° ELBOWS.
- WATER PIPE TO UNIT STOP VALVE DN25mm ID20mm PE100 PN16 SDR11. FUSION TYPE CONNECTIONS WITH 90° BENDS FORMED THROUGH 30° ELBOWS.
- DEDICATED FIRE SERVICE LINE
DN100 SERIES 2 PN16 oPVC
- PROPOSED PUBLIC WATER MAIN
- BALL VALVE (1No. PER UNIT) - WITH QUARTER TURN BRASS DZR, RESILIENT SEATED WITH EXTENDABLE NUT & TAIL TO BE SUPPLIED AND INSTALLED BY DEVELOPERS CONTRACTOR AT DEVELOPERS COST. CONNECTION TO TRUNK LINE VIA ID20mm BRANCH USING FUSION CONNECTION TEE. LID & SURROUNDS TO BE CLASS 'B'.
- PROPOSED DUAL HEAD ABOVE GROUND FIRE HYDRANT (TO FUTURE DETAIL)
- DN100 uPVC SN6 SEWER LINE U.N.O. REFER TO LONG SECTIONS FOR GRADES (MIN 1.6% U.N.O.)
- DN 100 uPVC SN6 BRANCHES & CONNECTIONS TO EACH UNIT. I.O. AFTER ORG (BEFORE CONNECTING INTO MAIN SEWER LINE)
- PROPOSED PUBLIC SEWER MAIN
DN150 UPVC SN8
- I.O. INSPECTION OPENING TO SURFACE
- PROPOSED DN1050 MAINTENANCE HOLE
- EXISTING PUBLIC SEWER MAIN
- EXISTING PUBLIC WATER MAIN

NOT FOR
CONSTRUCTION

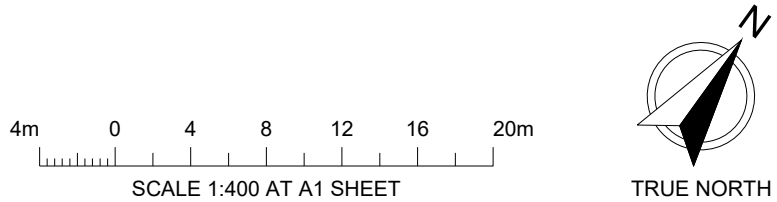


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BEFORE YOU DIG
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PROPOSED SITE PLAN - SHEET 2
SCALE: 1:400



REV	DESCRIPTION	BY	CHK	DATE	REV	DESCRIPTION	BY	CHK	DATE
C	ADDED LOT AREAS	R.H.	M.H.	08/11/2024					
B	REMOVAL OF EMERGENCY EXIT	S.M.	M.H.	05/08/2024					
A	FOR PLANNING APPROVAL	D.G.	M.H.	25/10/2023					

**IMPORTANT
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CHECKED M. HORSHAM CC5865 I	SCALE AS SHOWN	SIZE A1
CIVIL DESIGNER M. BEKKER	HYDRAULIC ENGINEER R. HORNER	
STATUS PLANNING APPROVAL		

PROJECT
CLARENCE LIFESTYLE VILLAGE
647 EAST DERWENT HIGHWAY,
RISDON, 7017

DRAWING TITLE PROPOSED SITE PLAN - SH 2	PROJECT NO 17E99-118	DWG NO C03	REV C
--	-------------------------	---------------	----------

GENERAL

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE SERVICES AUTHORITY AND LOCATE EXISTING UNDER GROUND SERVICES PRIOR TO ANY EXCAVATION WORKS COMMENCING ON SITE.
2. AREAS DISTURBED BY EARTHWORKS ARE TO BE STRIPPED OF TOPSOIL TO A DEPTH OF 100mm (OR AS DIRECTED BY THE SUPERINTENDENT). TOPSOIL IS TO BE STOCKPILED ON SITE AND RE-SPREAD AFTER EARTHWORKS ARE COMPLETE.
3. A 100mm THICK LAYER OF SUB 2 40mm FCR MAY BE USED DURING CONSTRUCTION FOR TEMPORARY ACCESS. FOR WET GROUND WITH POOR DRAINAGE & BEARING CAPACITY, ADDITIONAL SUB GRADE REPLACEMENT USING 100mm SPALLS MAY BE REQUIRED. CONSULT ENGINEER.

DRIVEWAY NOTES:

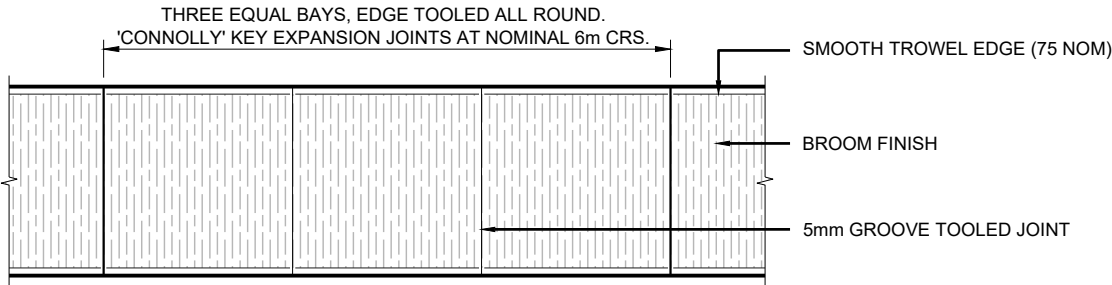
4. EXCAVATED AND IMPORTED MATERIAL USED AS FILL IS TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.
5. FILL MATERIAL SHALL BE WELL GRADED AND FREE OF BOULDERS OR COBBLES EXCEEDING 150MM IN DIAMETER UNLESS APPROVED OTHERWISE.
6. FILL REQUIRED TO SUPPORT DRIVEWAYS INCLUDING FILL IN EMBANKMENTS THAT SUPPORT DRIVEWAYS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

a. TOP SOIL AND ORGANIC MATTER SHALL BE STRIPPED TO A MINIMUM OF 100MM.

b. THE SUB GRADE SHALL BE KEYED 150MM INTO NATURAL GROUND.

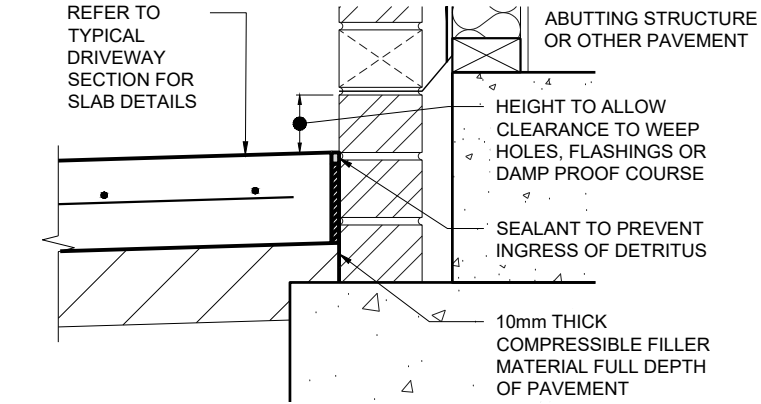
c. THE FILL SHALL BE COMPACTED TO A MINIMUM DENSITY RATIO OF 95%, IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT THIS IS ACHIEVED.
7. WHERE THE ABOVE REQUIREMENTS CANNOT BE ACHIEVED THE ENGINEER SHALL BE CONSULTED AND THE FORMATION SHALL BE PROOF ROLLED (UNDER SUPERVISION OF THE ENGINEER) TO DEMONSTRATE COMPACTION PRIOR TO THE PLACEMENT OF BASE OR SUB BASE COURSES.
8. UNREINFORCED CONCRETE KERBS AND CHANNELS SHALL HAVE TROWELED JOINT AT NOT MORE THAN 3.0M CENTRES.
9. 40x3 SAW CUTS AT MAX 5m CENTRES ALONG DRIVEWAY SLAB, CONTROL JOINTS AT MAX 15m, REFER TO DRIVEWAY SETOUT PLAN FOR LOCATION.
10. CONCRETE FOOTPATH. CONTROL / EXPANSION JOINTS (REFER TO DIAGRAM) .
11. FOR SPECIFICATIONS AND DETAILS NOT SHOWN WITH THIS DRAWING, THE BUILDER SHALL REFER TO AND COMPLY WITH CONSTRUCTION DETAIL PER AS3727.1 2016 PAVEMENTS PART 1: RESIDENTIAL.

CONCRETE QUALITY					
ELEMENT	SLUMP	AGGREGATE (MAX. SIZE)	CEMENT TYPE	ADMIXTURE	F'c (MPa)
DRIVEWAY	100	20	SL	NIL	25



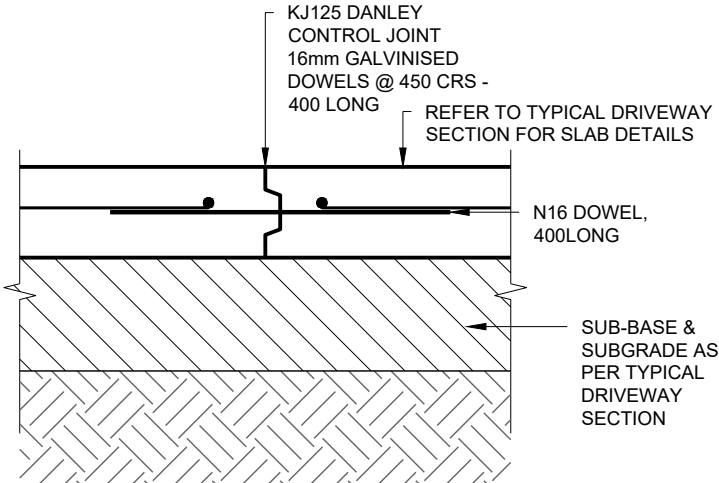
TYP. JOINT - ISOLATION

SCALE: 1:10



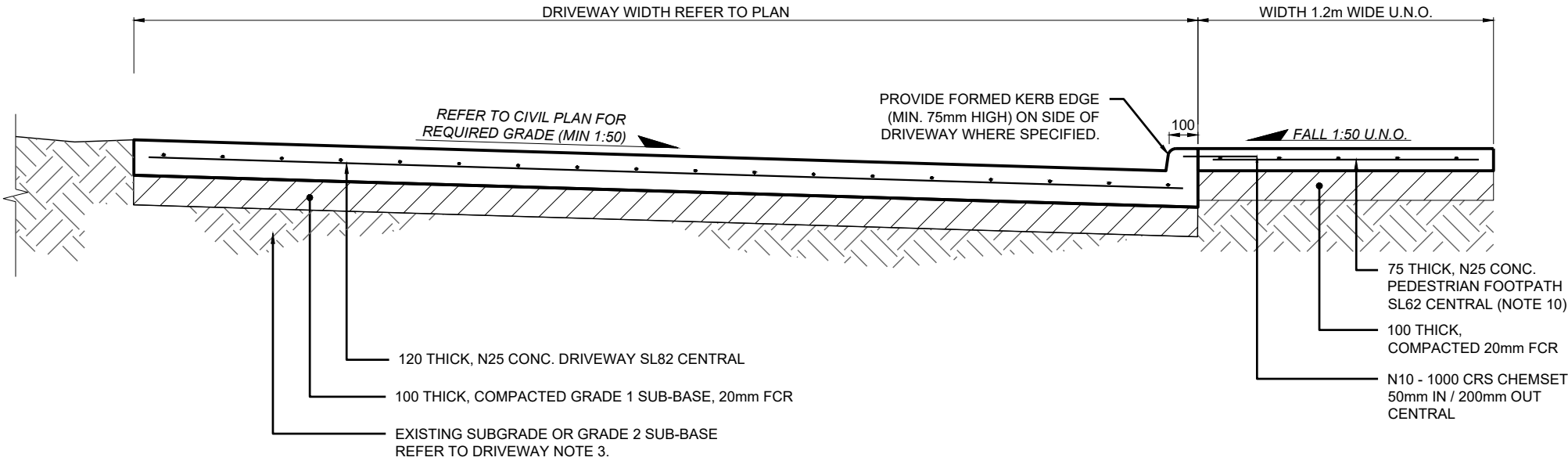
TYP. JOINT - ISOLATION

SCALE: 1:10



TYPICAL DANLEY JOINT

SCALE: 1:10

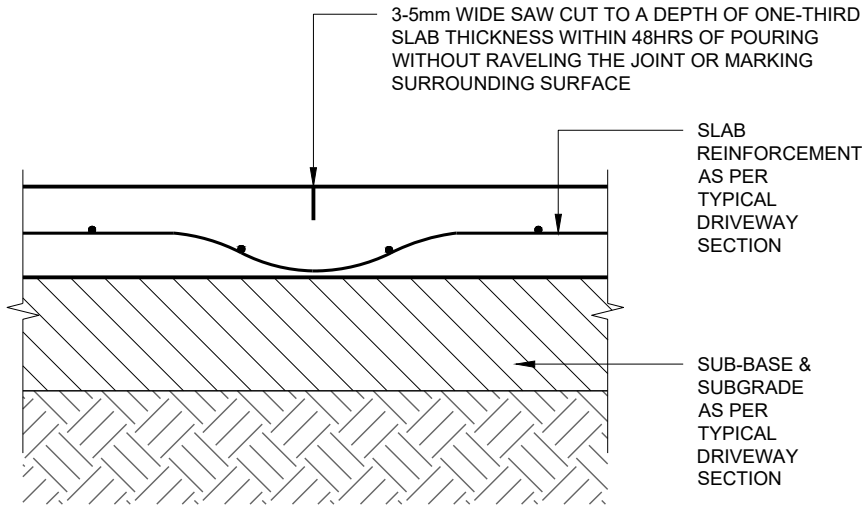


TYP. DRIVEWAY SECTION (CONCRETE)

SCALE: 1:20

TYP. FOOTPATH SECTION

SCALE: 1:20



TYPICAL SAWCUT

SCALE: 1:10

REV	DESCRIPTION	BY	CHK	DATE
C	ADDED LOT AREAS	R.H.	M.H.	08/11/2024
B	REMOVAL OF EMERGENCY EXIT	S.M.	M.H.	05/08/2024
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CHECKED	M. HORSHAM CC5865 I
CIVIL DESIGNER	M. BEKKER
STATUS	PLANNING APPROVAL

SCALE	AS SHOWN
HYDRAULIC ENGINEER	R. HORNER

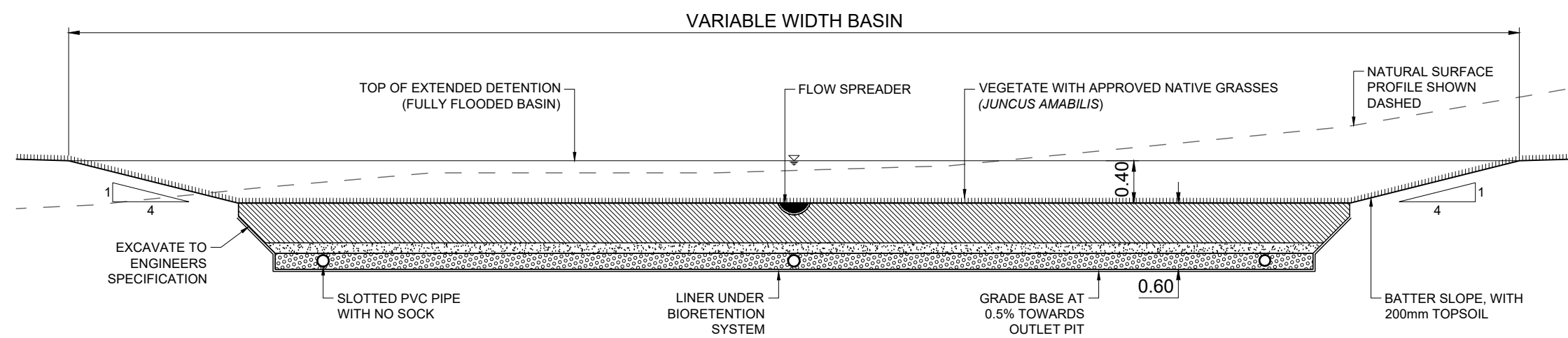
SIZE
A3

PROJECT
CLARENCE LIFESTYLE VILLAGE
647 EAST DERWENT HIGHWAY,
RISDON, 7017

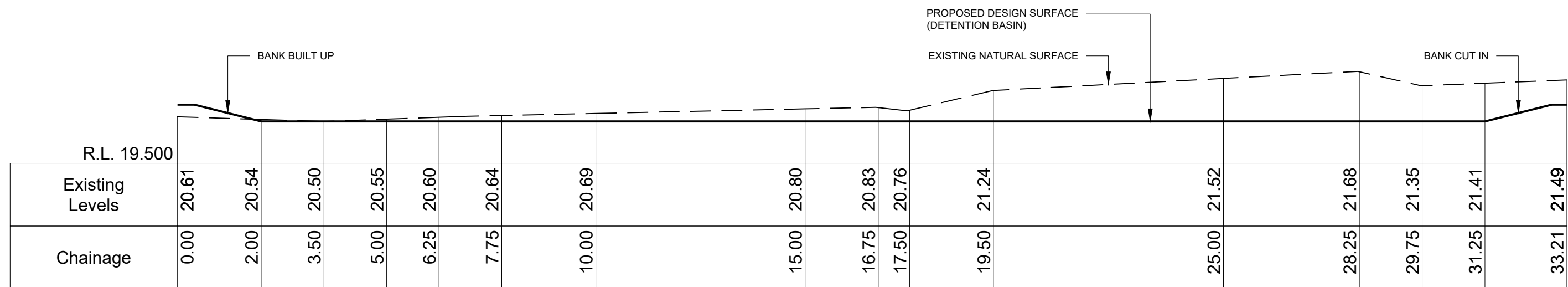
DRAWING TITLE		
TYP. DRIVEWAY & FOOTPATH SECTIONS (CONCRETE)		
PROJECT NO	DWG NO	REV
17E99-118	C04	C

IMPORTANT
DRAWING MUST BE
PRINTED & READ IN COLOUR

NOT FOR
CONSTRUCTION



B-B
C02
TYPICAL BASIN SECTION
SCALE: 1:50



A-A
C02
EXISTING SURFACE BASIN SECTION
SCALE: H 1:100 V 1:100

REV	DESCRIPTION	BY	CHK	DATE
C	ADDED LOT AREAS	R.H.	M.H.	08/11/2024
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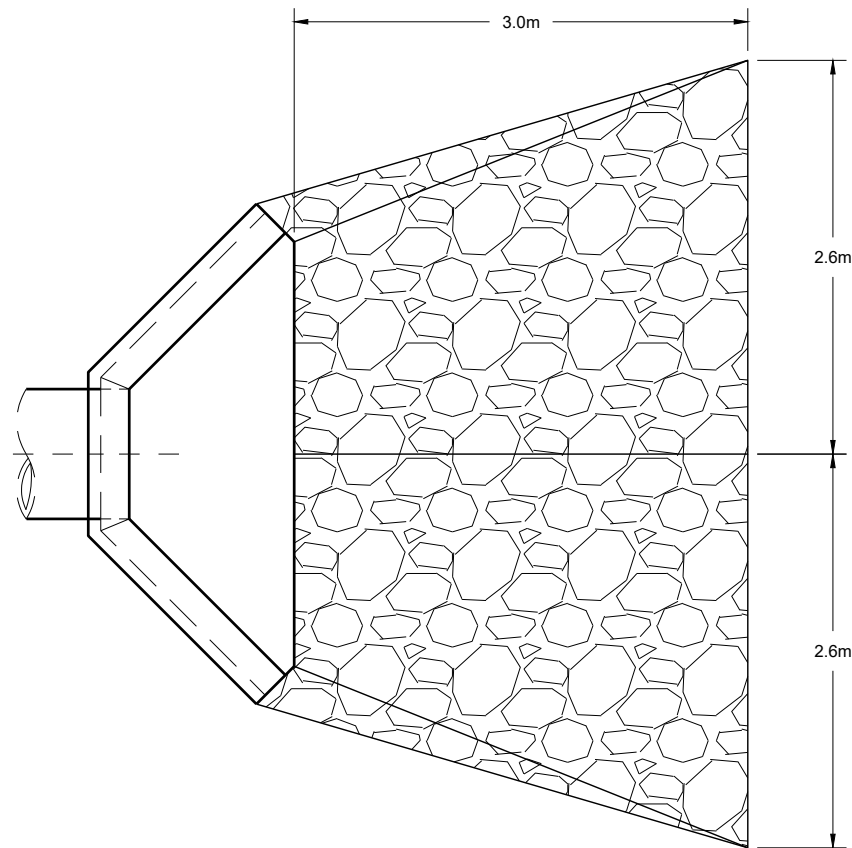
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CIVIL DESIGNER M. BEKKER	HYDRAULIC ENGINEER R. HORNER	
STATUS PLANNING APPROVAL		

PROJECT CLARENCE LIFESTYLE VILLAGE 647 EAST DERWENT HIGHWAY, RISDON, 7017
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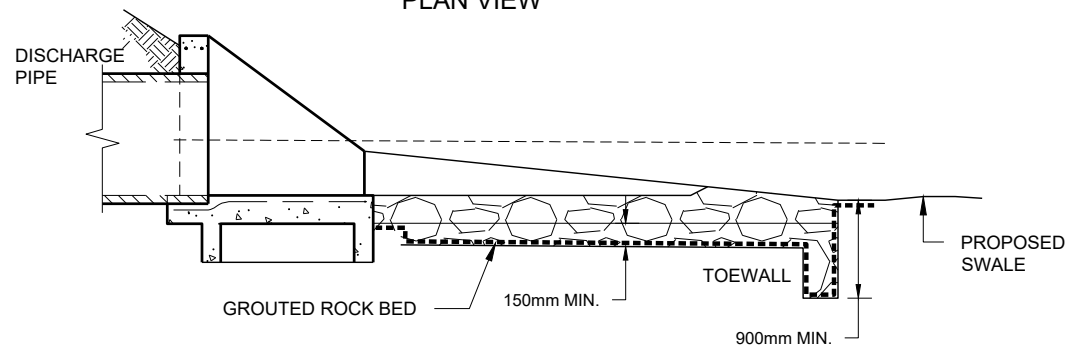
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PROJECT NO 17E99-118	DWG NO C05	REV C

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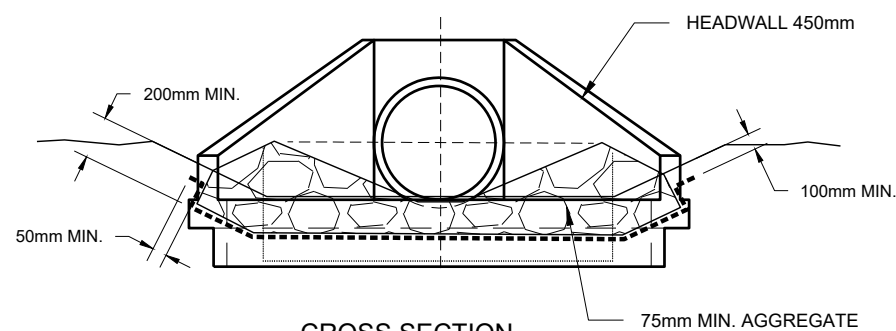
NOT FOR
CONSTRUCTION



PLAN VIEW



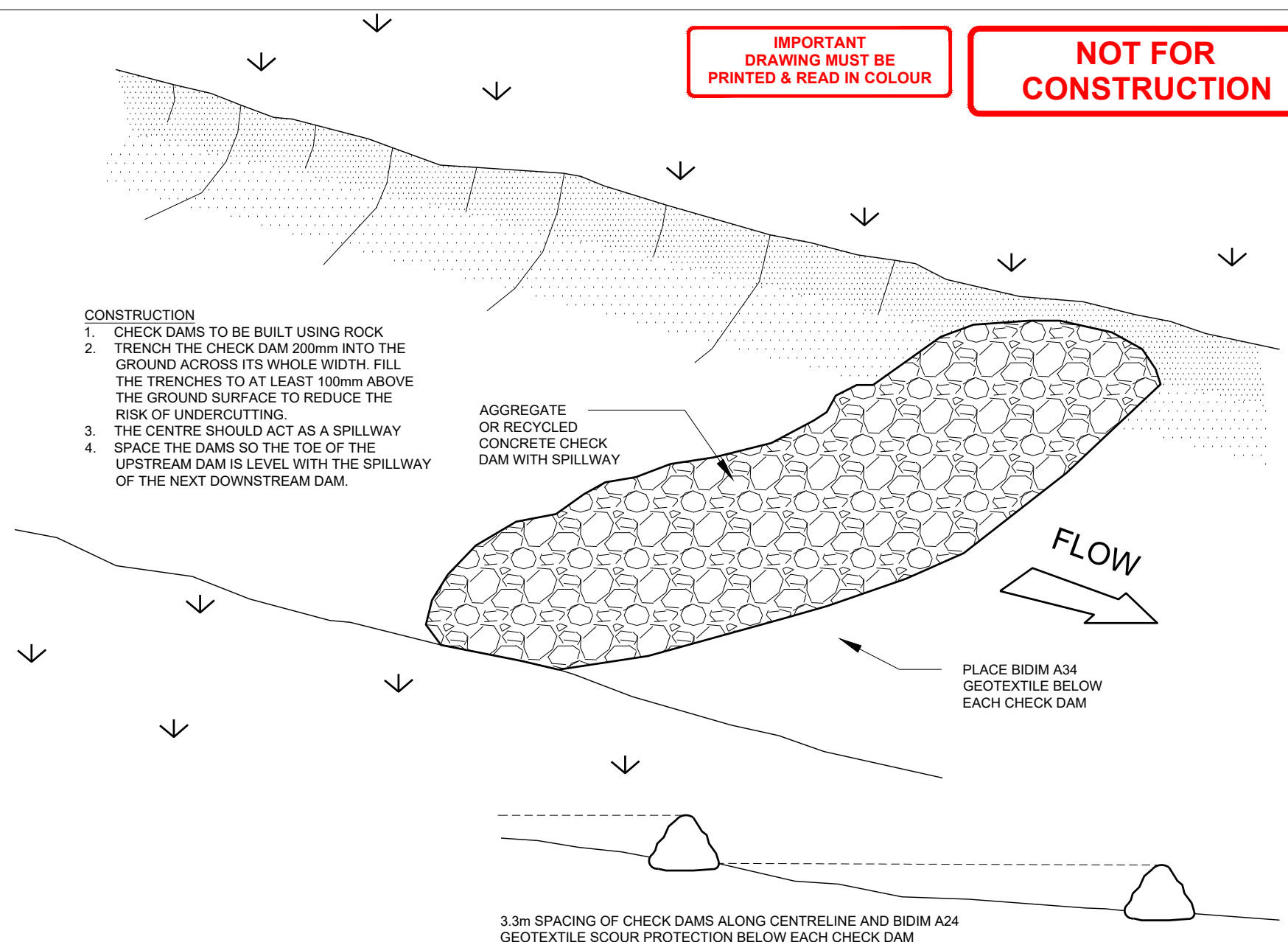
PROFILE VIEW



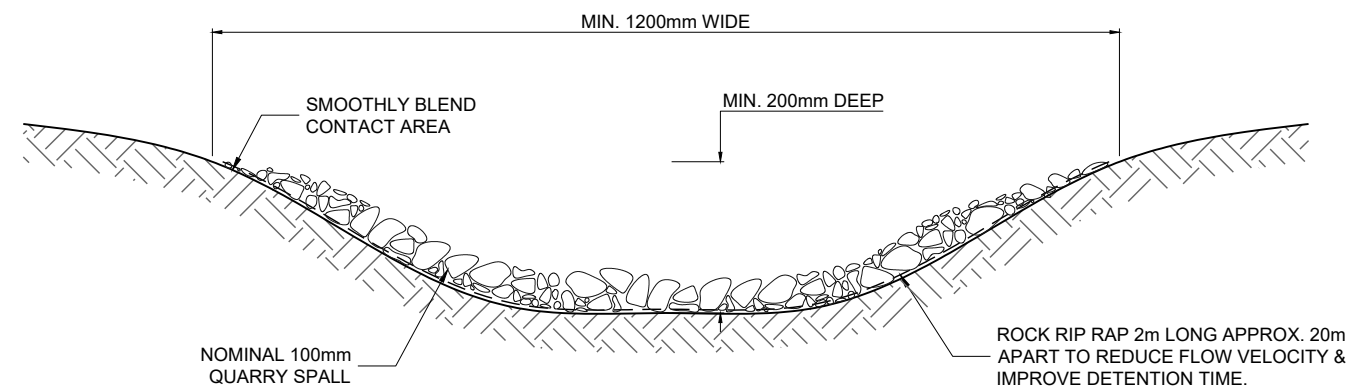
CROSS SECTION

C-C HEADWALL - SWALE DETAIL
SCALE: 1:50

- CONSTRUCTION
- CHECK DAMS TO BE BUILT USING ROCK
 - TRENCH THE CHECK DAM 200mm INTO THE GROUND ACROSS ITS WHOLE WIDTH. FILL THE TRENCHES TO AT LEAST 100mm ABOVE THE GROUND SURFACE TO REDUCE THE RISK OF UNDERCUTTING.
 - THE CENTRE SHOULD ACT AS A SPILLWAY
 - SPACE THE DAMS SO THE TOE OF THE UPSTREAM DAM IS LEVEL WITH THE SPILLWAY OF THE NEXT DOWNSTREAM DAM.



CHECK DAM DETAIL ALONG SWALE
SCALE: NTS



D-D TYPICAL SWALE DRAIN - SECTION VIEW
SCALE: 1:10

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PROJECT CLARENCE LIFESTYLE VILLAGE 647 EAST DERWENT HIGHWAY, RISDON, 7017
--

DRAWING TITLE TYP. SWALE DRAIN & HEADWALL SECTIONS		
PROJECT NO 17E99-118	DWG NO C06	REV C

Flood Hazard Report

Clarence Lifestyle Village
647 East Derwent Highway,
Risdon (CT 115696/1)

Prepared for: Clarence Lifestyle Village
Project No: 251041
Document No: 251041-RPT-001
Issue No: 01
Revision No: A



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DOCUMENT CONTROL

Project	CLV – Flood Report – 647 East Derwent Highway, Risdon
Report Title	Flood Hazard Report
Project No	251041
Document ID	251041-RPT-001
File Path	R:\Projects\2025\251000 Civil\251041-CLV Flood Report-IR-RI\4 Internal\Flood Report
Client	Craig Swan – Clarence Lifestyle Village

Record of Report					
Issue	Reason	Revision	Date	Prepared By	Approved By
01	Client Issue	A	26/06/25	JWS	RJ

Distribution of Report			
Company	Name & Address	Contact	Copies
Craig Swan C/- Phil Gartrell (IreneInc)	Phil Gartrell 49 Tasma Street, North Hobart, TAS, 7001	E: phil@ireneinc.com.au Ph: 6234 9281	1 (elec)

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1.	INTRODUCTION	3
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2.2.	Land Description	4
2.3.	Proposed Works.....	5
3.	FLOOD RISK.....	6
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3.2.	Flood Hazard Vulnerability Classification	8
3.3.	Development Effects & Building Works	10
3.4.	Residual Risk.....	12
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4.	FLOOD CODE ASSESSMENT	14
5.	SUMMARY	20

1. INTRODUCTION

Rare Innovation have been engaged to provide a flood hazard report for the proposed extension of the existing Clarence Lifestyle Village at 647 East Derwent Highway, Risdon. The purpose of this flood hazard report is to undertake a desktop review and analysis of the existing site and proposed works as undertaken by others, to assess the likely hazard to structures and persons due to flooding and to address the Flood Prone Areas Code of the Tasmanian Planning Scheme. This report has been prepared based on available data for the site at the time of investigation.

This report should be read in conjunction with the *Stormwater Design Proposal* by JSA (JSA reference: 17L99-118-4 dated 24/10/23), *Hydraulic Design Report* by Flussig (Doc No. FE-24035 Rev 1 dated 18/07/24) and the JSA Planning Approval issue design drawings (dated 08/11/24).

2. SITE EVALUATION

2.1. Location & Property Details

The proposed development is located on a single existing land title at 647 East Derwent Highway, Risdon (Property ID: 5116539, Title Reference: 115696/1) as shown in Figure 1 and is proposed as part of an extension to the existing Clarence Lifestyle Village located on the adjacent land title of 2 Piper Road, Geilston Bay. The site is currently zoned as Rural Living and noted to be part of a rezoning application. The site is bounded by The East Derwent Highway to the north-east, an existing holiday park to the north-west, the existing Clarence Lifestyle Village to the south-east and existing undeveloped bushland to the south-west.



Figure 1 – Existing Site Aerial Image

2.2. Land Description

The site is currently largely undeveloped but contains a single residential dwelling and garage structure. An additional single dwelling is located on a separate land title that abuts into the property outline on the north-western side. Access to the site is currently provided via a gravel driveway from the East Derwent Highway along the northern side of the property through the adjacent property title.

The site's topography generally falls towards the north and north-east with moderate grades of typically 7% - 14%.

An existing mapped watercourse is located along the north-eastern boundary which is noted to not contain permanent running water but is instead a natural topographical low point that drains runoff during rainfall events from the surrounding catchments including the East Derwent Highway.

An additional minor natural depression/swale runs through the site from the south-western boundary to the north alongside the existing adjacent residential property and is expected to direct flows from the south-western natural/rural catchment during rainfall events.

Both existing drainage paths through the property discharge via multiple culverts to a series of existing open drains along the northern side of the driveways outside the north of the property before continuing down the length of the East Derwent Highway.



Figure 2 – Surrounding Topography & Drainage

2.3. Proposed Works

The proposed development includes the construction of 54 new prefabricated dwellings as part of an expansion of the existing Clarence Lifestyle Village. The development also includes construction of associated services and internal road infrastructure to service the new dwellings. The existing dwelling and garage currently located on-site are proposed to be demolished.

The new dwellings are to be prefabricated off-site before being installed and are proposed to be installed with raised floor levels at a minimum within areas subject to potential flooding.

New drainage infrastructure including the construction of two stormwater detention basins within the north-eastern drainage course and a cut-off drain with check dams along the south-western boundary are also proposed.

An image of the proposed works plan by JSA is shown in Figure 3.

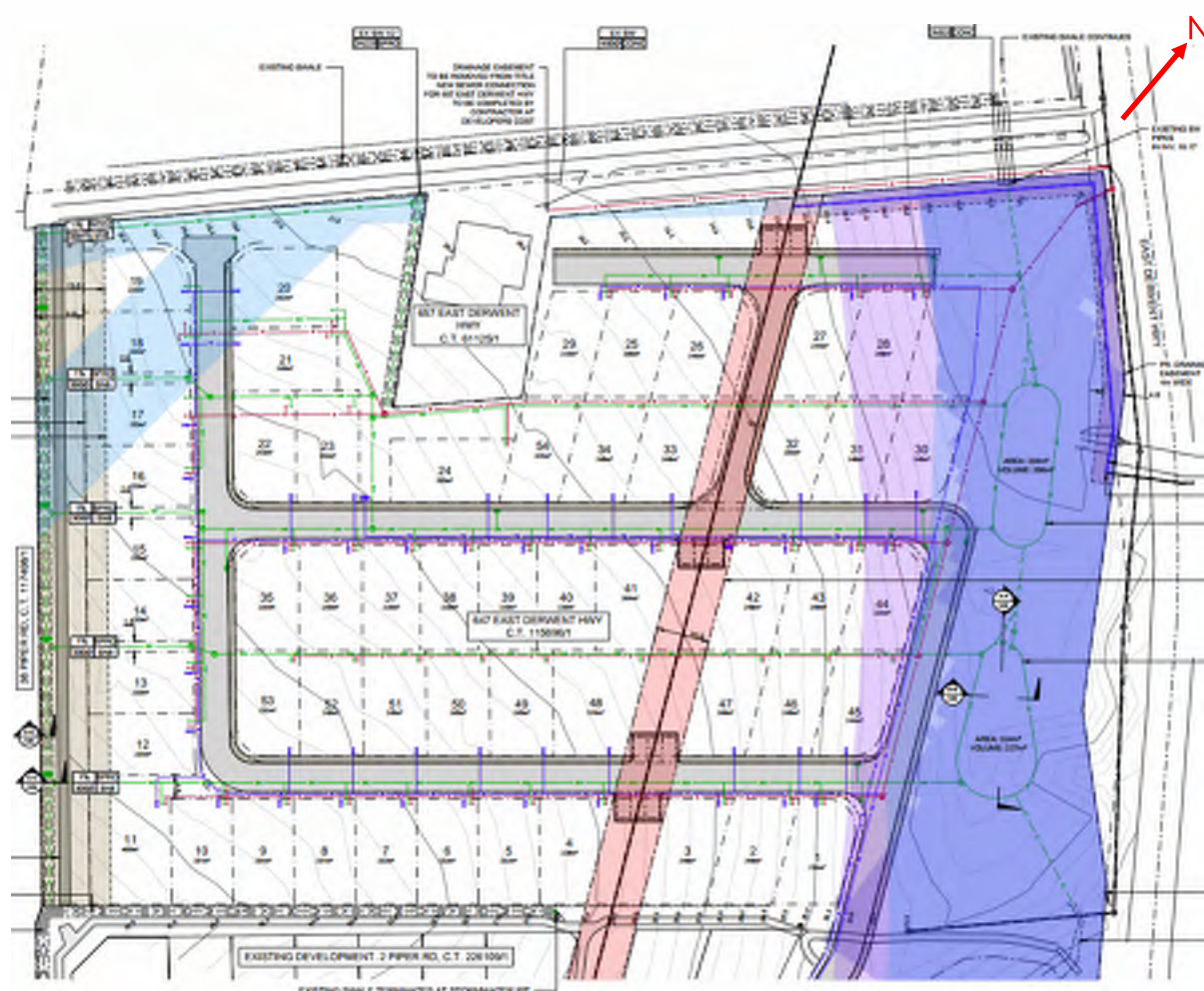


Figure 3 – Proposed Site Plan – JSA

3. FLOOD RISK

3.1. Existing Flood Risk

Clarence City Council have undertaken flood modelling for the municipality for the 1% AEP (Annual Exceedance Probability) event, inclusive of climate change loading. The resulting flood mapping produced from this modelling is available through council's website and indicates that portions of the development site are potentially subject to flooding in such 1% AEP event. A screenshot of the flood mapping for the development area is shown in Figure 4 along with annotations of the observed typical maximum flood depths.

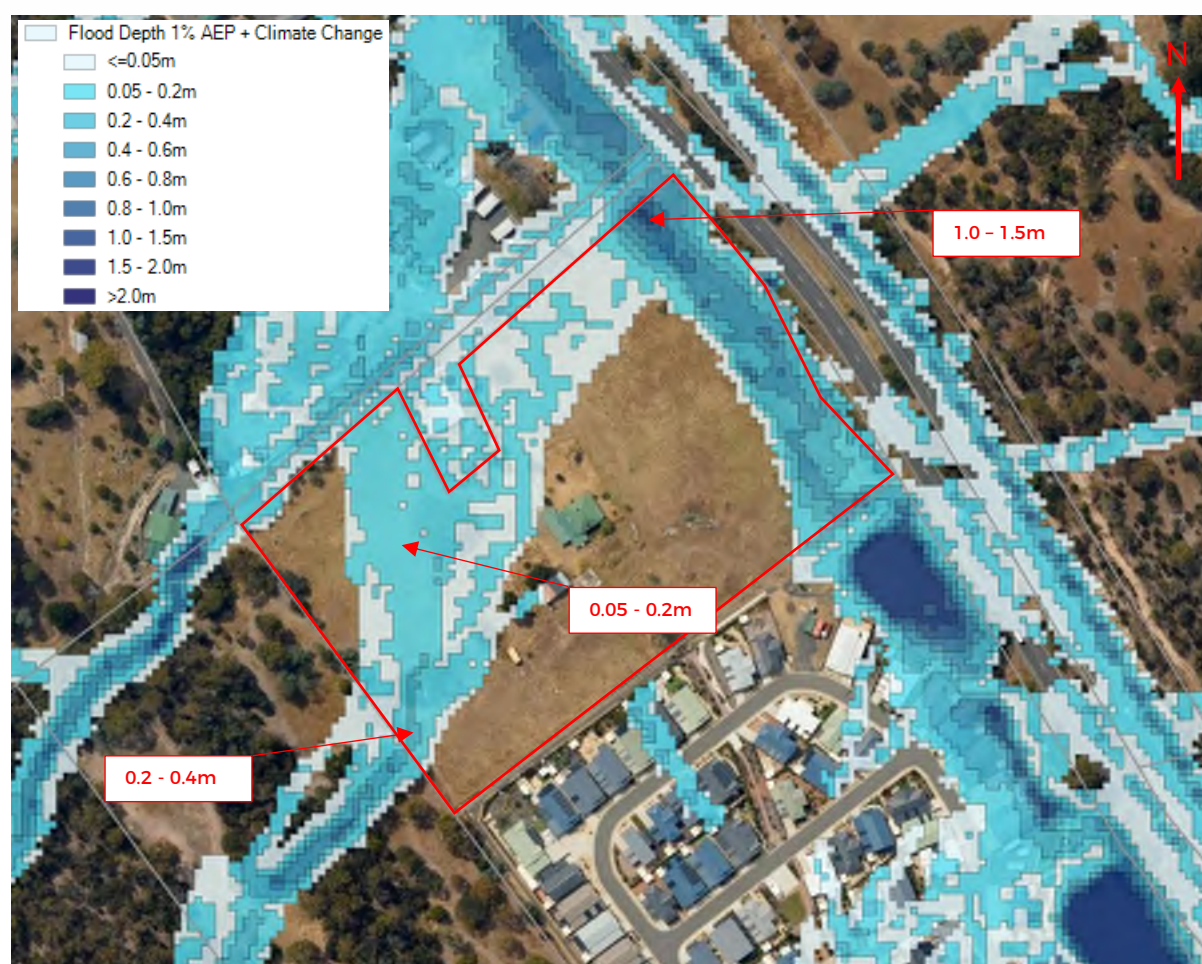


Figure 4 – Clarence City Council 1% AEP Flood Extents/Depths

The flooding is shown to occur in two primary locations including within the existing drainage course along the north-eastern boundary and from the south-west, through the existing minor depression/swale, with all flows heading in a northerly direction.

Mapped flows within the north-eastern drainage course are shown to predominantly reach maximums in the range of 0.4-0.6m depth with a concentrated area of increased depth at the northern corner of the site reaching 1.0-1.5m depth as shown in Figure 4. These flows are shown to be largely contained within the existing drainage course and originate from the drain alongside the existing Clarence Lifestyle Village and upstream rural and East Derwent Highway catchment areas.

Mapped flows across the western side of the site originate from a largely rural/natural catchment area extending up near Piper Road as shown in Figure 5. The flows enter the site at the location of the existing minor depression/swale and are shown to spill across the site with predominantly shallow sheet flows of 0.05-0.2m depth, before collecting at the existing open drain running outside the northern boundary of the site alongside the existing driveways.



Figure 5 – Approximate South-Western Catchment

3.2. Flood Hazard Vulnerability Classification

To determine the likely risk posed to both persons and structures due to flooding, a Flood Hazard Vulnerability Classification has been used in accordance with Australian Rainfall & Runoff (AR&R) 2019 Guidelines Book 6 Chapter 7. A summary of these classifications is shown in Figure 6, ranging from H1 to H6, and is based on flow depths and velocities.

Likely flood depths for the 1% AEP rainfall event (climate change inclusive), as previously shown in Figure 4, have been sourced from Council's flood mapping data. To determine likely velocities for these flows, Council's flood mapping has been overlaid onto freely available lidar data for the site to determine a representative cross section of flow at the locations shown in Figure 7, and subsequently a resulting velocity based on a Manning's Equation calculation. It is to be noted that the resulting velocities from these calculations are approximate only in the absence of detailed flood modelling data (or additional flood mapping data from Clarence City Council) and are used to demonstrate an indicative existing flood risk. Further discussions in this report on the impact of proposed works may necessitate further modelling and hazard assessment if residual risks are expected to be sufficiently high.

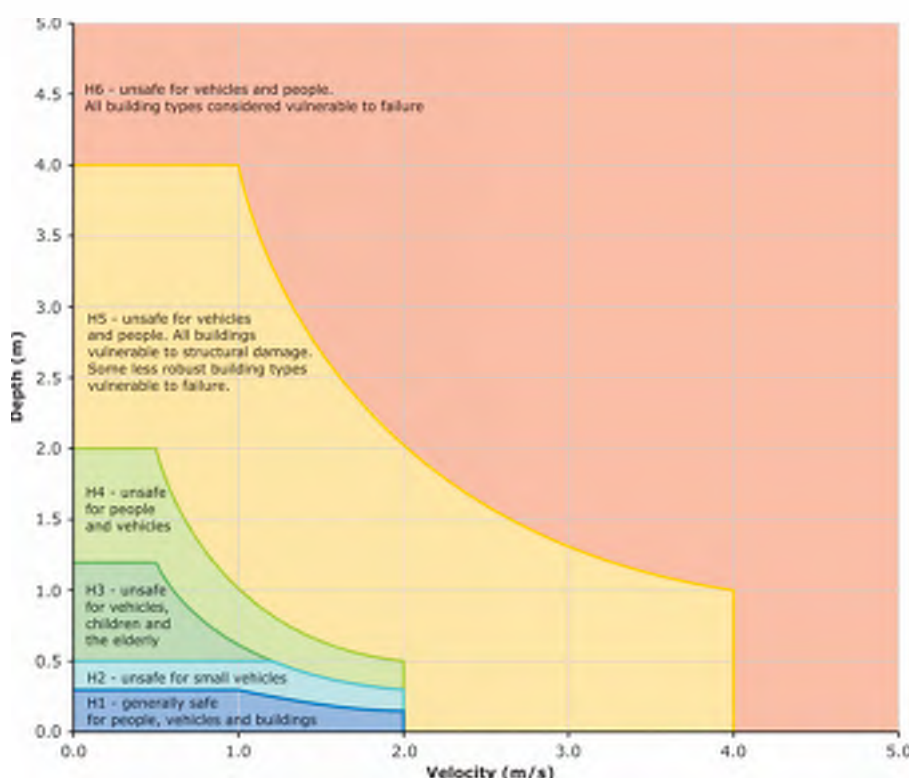


Figure 6 – Combined Flood Hazard Curves (AR&R 2019 Figure 6.7.9)

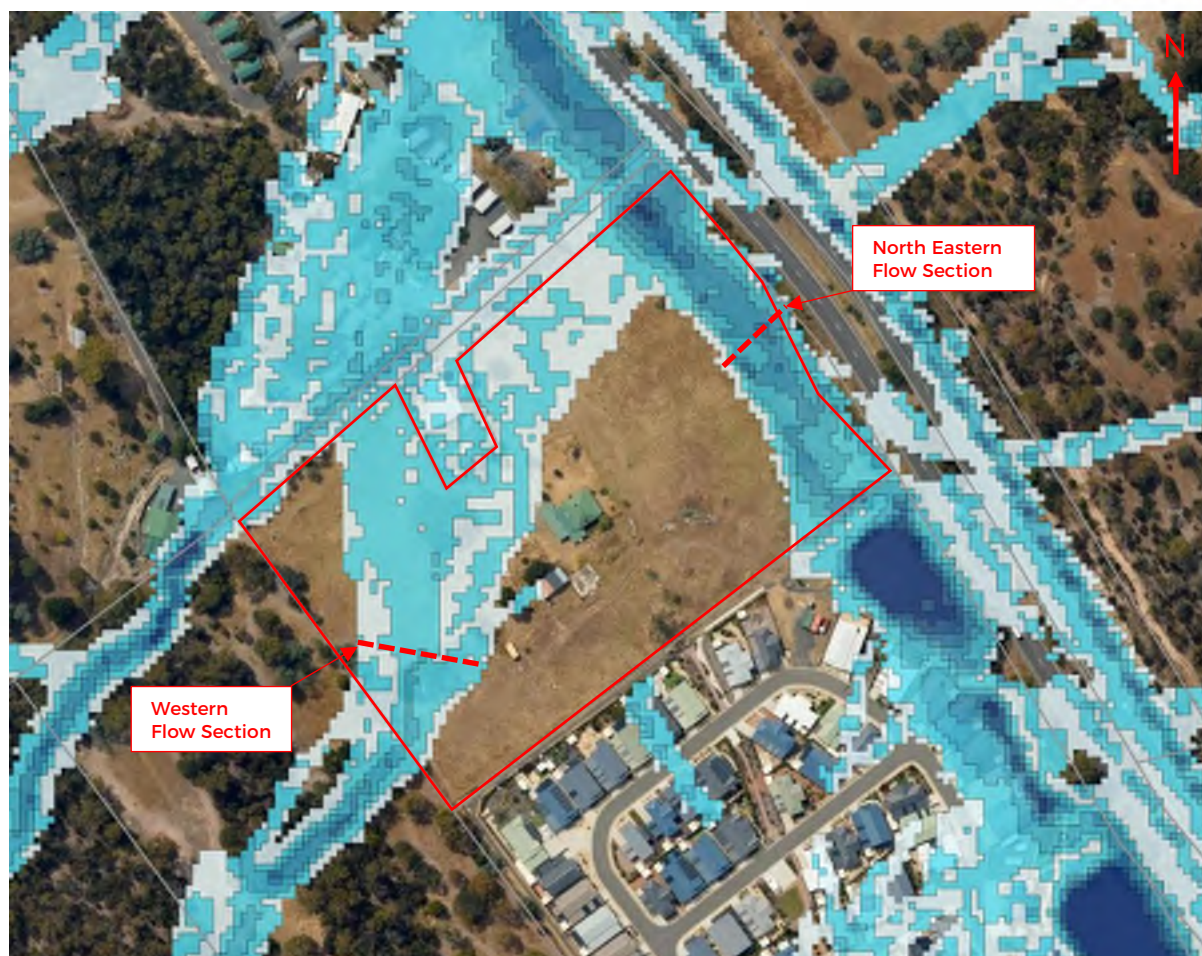


Figure 7 – Flood Cross Section Locations

Manning's Equation:

$$V = (1/n) R^{2/3} S^{1/2}$$

Where:

V = Velocity (m/s)

n = Manning's roughness coefficient

R = Hydraulic radius

S = Slope

Western Flows:

n = 0.035

R = 0.155

S = 0.07 (7%)

V = 1.69 m/s

An approximate flow velocity of 1.69 m/s with a maximum depth up to 0.4m for the flows through the western portion of the site indicate a flood hazard classification of up to H2 – ‘Unsafe for small vehicles’ is likely.

North-Eastern Flows:

$n = 0.040$

$R = 0.339$

$S = 0.022$ (2.2%)

$V = 1.80$ m/s

An approximate flow velocity of 1.80 m/s with a maximum depth up to 0.8m for the flows through the north-eastern portion of the site indicate a flood hazard classification of up to H5 – ‘Unsafe for vehicles and people. All buildings vulnerable to structural damage. Some less robust building types vulnerable to failure.’ is likely. Further increased depths towards the northern corner of up to 1.5m also indicate a likely hazard classification of H5.

3.3. Development Effects & Building Works

The proposed development works are detailed on JSA’s design drawings and both JSA and Flussig’s hydraulic design reports which include provisions for new drainage infrastructure and alterations to the existing drainage courses within the site to manage stormwater flows.

Both of the above-mentioned reports detail the design intent for the minor and major stormwater systems to convey flows for the 5% and 1% AEP (climate change loading inclusive) rainfall events. A stormwater detention system has been detailed to limit flows to pre-development levels and consists of two new proposed detention basins to be situated within the existing north-eastern drainage course. Checks/calculations have not been undertaken on the design as part of this report and it is assumed that the design as described in both the JSA and Flussig reports is true and correct.

The proposed works plan has been overlaid onto Council’s flood mapping to highlight which areas may be affected by flood waters and is shown in Figure 8.

All building works are proposed to remain clear of the mapped flood extents from the north-eastern drainage course. One minor section of the proposed internal road is shown to be impacted by the flood mapping near the connection to the existing Clarence Lifestyle Village site, although the indicated flood depth in this location is only ≤ 0.05 m and so is expected to be of H1 flood classification only and not expected to pose a risk to use. The addition of the stormwater detention basins is also expected to provide some benefit in reducing flow velocities through the north-eastern drainage channel by effectively acting as check dams for through flows from the upstream catchment. This will assist in reducing downstream impacts such as scouring and overtopping of culverts from excessive flow velocities. The precise effect of this has not been assessed in this report and is an informed observation only that conditions are likely to improve from pre-development conditions in this respect.

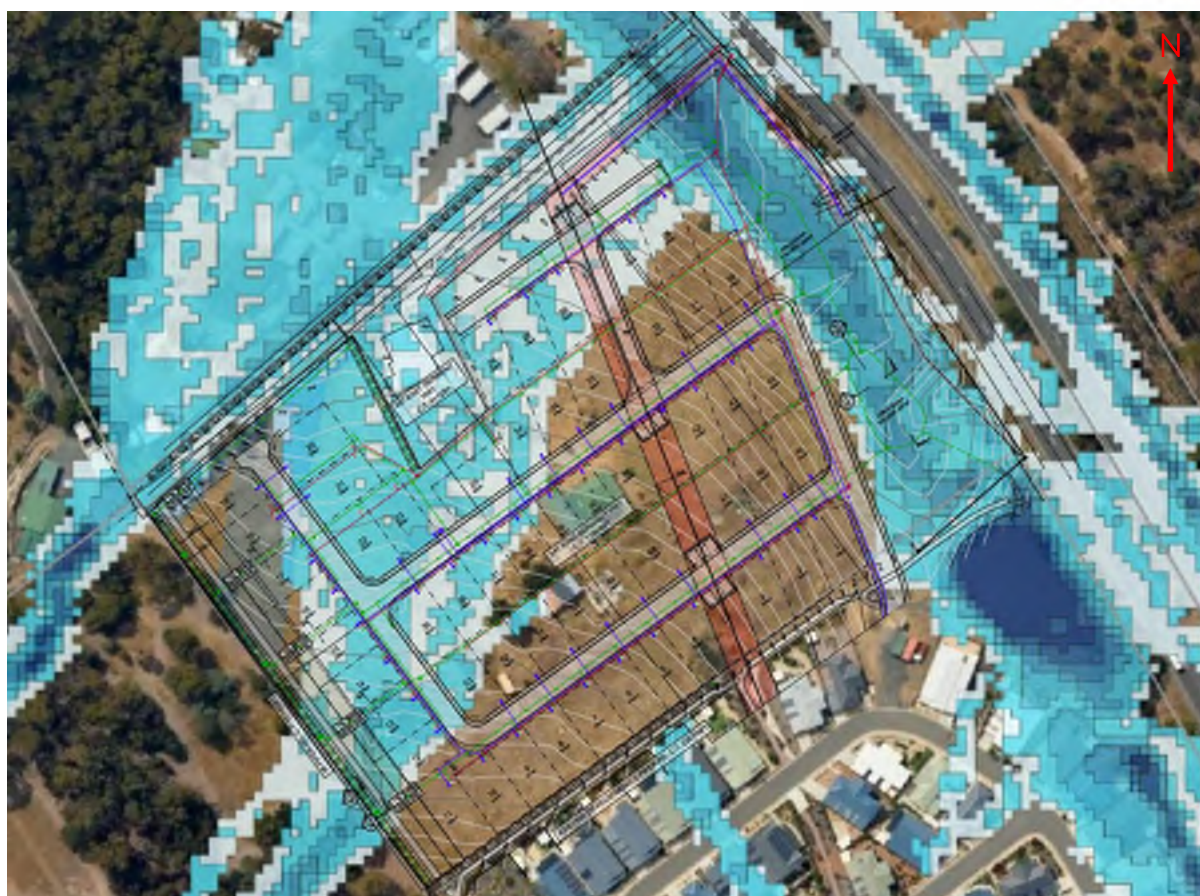


Figure 8 – JSA Site Plan Overlaid onto Clarence City Council Flood Mapping

To manage flood flows potentially entering the site from the south-west, a new cut-off drain is proposed to extend along the length of the south-western boundary. This new drain is proposed to feature check dams at regular intervals with individual stormwater headwalls to drain flows into the reticulated system at each check dam location. Each check dam is expected to slow the velocity of flows through the channel. Flows that are captured into the reticulated system are directed to the proposed detention basins, however the final discharge pipe located at the northern end of the new cut-off drain continues to discharge into the existing open drain adjacent to 657 East Derwent Highway. It is expected that the multiple headwall collection points will reduce the overall quantity of flows that ultimately reach the end of the new cut-off drain and that the discharges to the existing open drain and culvert adjacent to 657 East Derwent Highway will be reduced compared to pre-development levels. This is expected to assist in reducing overtopping of the existing drain along the northern driveway outside of the site which is shown to be at capacity and spill across the neighbouring holiday park as shown in Figure 4.

The addition of the new internal road network is also expected to assist in intercepting and directing flows towards the north-eastern drainage course in large rainfall events. This will further reduce the risk of any overland flows that do enter the site due to being in excess of the capacity of the new cut-off drain or from the existing Clarence Lifestyle Village, from continuing to flow downhill and into neighbouring properties.

In the event that overtopping of the new cut-off drain does occur and that flows overtop into the site, the floor levels of the dwellings within the flood path are proposed to be raised above ground to provide additional safety. The existing flood mapping indicated maximum typical flood depths of up to 0.2m within the western flood path. Any overtopping flows are expected to be significantly less than those mapped with a large portion of the flows being directed underground through the new reticulated system. Minimum floor levels set at 200mm above surface level would be expected to remain clear of potential flood waters. Any additional floor height would be beneficial in providing additional safe freeboard allowance with a floor level of 300mm above surface level considered optimal, as this would provide 300mm freeboard to the top of the cut-off drain at a minimum.

3.4. Residual Risk

With the proposed building works located clear of the north-east portion of the mapped 1% AEP flood extents, it is expected that the residual risk from flooding to buildings and persons will be low. Flows within the drainage course itself are still expected to remain at higher levels of risk classification (Up to H4) due to depths within the channel and detention basins, however are not a usable space and will not impact on the proposed structures or intended site use.

The western portion of the site, as described in Section 3.2 of this report, was potentially subject to flood hazard classification of H2 – ‘Unsafe for small vehicles.’ This is predominantly due to overtopping of the existing minor depression/swale causing flood flows to sheet across the site. These flows are considered low risk to structures and persons, however have the potential to cause some shifting or inundation of small vehicles which would be best managed to be reduce potential financial damage to property.

The addition of the cut-off drain and multiple flow collection points as described previously are expected to more effectively capture, control and discharge these flows through the site to the controlled detention systems and site discharges elsewhere. With the cut-off drain located along the full length of the south-western boundary, any flows that are not immediately captured at the top of the system can be intercepted further down the boundary line. It is to be noted that the flow rate of flood waters from the south-west and the full capacity of the cut-off drain and the combined headwall inlets has not been assessed as part of this report, so it cannot be determined if the system will fully capture flood flows or if some minor overtopping will still occur. It is therefore recommended as a minimum additional control measure (unless design calculations are provided to prove the drain/culvert capacity against actual flows) that the drain be locally deepened or a low berm be constructed alongside the inside edge of the cut-off drain for the length of drain coinciding with mapped flood inflows. This will assist in full capture of the overland inflows and help prevent flows from directly passing over the drain when full, reducing further risk to the site. A minimum drain deepening or berm height of 300mm is recommended. It is noted however that the size of the proposed cut-off drain is at a minimum equal to or larger than the existing minor drainage depression/swale at the lower end of the site and so is expected to improve capture rates with the addition of five DN300 piped outlets. Any flows above the capacity of the reticulated stormwater network which continue to spill into the site in large rainfall events are expected to be low velocity after initially being intercepted by the cut-off drain. These flows can then be safely conveyed by the proposed internal road network to the site discharge locations as noted in the JSA report. With a reduction in overland flow volumes and velocity, it is expected that a maximum flood hazard of H1 – ‘Generally safe for people, vehicles and buildings,’ would be present for any flows that continue to enter the site. With the dwellings proposed to be constructed above ground, the previously recommended minimum floor level of 300mm above surface level will provide sufficient freeboard to enable a low risk from flood waters.

3.5. Recommendations

With the proposed flood mitigation measures in place, the identified flood paths are likely to pose a low risk to persons and structures for the proposed development, however some measures are recommended to ensure that overland flows in large events do not cause a nuisance and that long-term effects are minimised.

- It is noted that it is already proposed to construct dwellings with a floor level above ground. It is recommended that an optimal minimum floor level of 300mm above the existing surface be adopted to ensure any remaining overland flows do not impact on habitable areas.
- It is recommended to locally deepen by 300mm or construct a 300mm high berm/wall on the inside edge of the proposed cut-off drain for the length of drain that coincides with the mapped flood path from the south-west to improve flow capture and reduce the risk of flows directly passing over the drain when already full.
- It is recommended that the final levels of the internal access road on the eastern side of the site (near where connecting into the adjacent existing Clarence Lifestyle Village site) be constructed above the levels at the mapped flood extents to ensure these continue to remain clear of potential inundation to enable safe egress from the site.

4. FLOOD CODE ASSESSMENT

Tasmanian Planning Scheme

C12.0 Flood Prone Areas Hazard Code

C12.5 Use Standards

C12.5.2 Critical use, hazardous use or vulnerable use

Objective: That critical, hazardous and vulnerable uses, located within a flood-prone hazard area can achieve and maintain a tolerable risk from flood.	
Acceptable Solutions	Performance Criteria
A1 No Acceptable Solution	P1 A critical, hazardous, or vulnerable use within a flood-prone hazard area must achieve a tolerable level of risk from flood, having regard to: (a) the type form and duration of the use; and (b) a flood hazard report that demonstrates that: (i) any increase in the level of risk from flood does not warrant any specific hazard reduction or protection measures; or (ii) the use can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures.
A4 No Acceptable Solution	P4 In addition to the requirements in clause C12.5.2 P1, a vulnerable use within a flood-prone hazard area, must be protected from flood, having regard to: (a) any protection measures, existing or proposed; (b) the ability and capability of people in a flood event who may live, work or visit the site, to:

	(i) protect themselves; (ii) evacuate in an emergency; and (iii) understand and respond to instructions in the event of an emergency; (c) any emergency evacuation plan; (d) the level of risk for emergency personnel involved in evacuation and rescue tasks; (e) the advice contained in a flood hazard report; and (f) any advice from a State authority, regulated entity or a council.
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Response

P1

As discussed in this report and responses to previous clauses, the design has demonstrated along with the recommendations in this report that the proposed development can maintain a tolerable risk from flood for the life of the development, noting that Council's flood data on which assessments have been based is inclusive of future climate change loading.

It is expected that the level of risk from flooding for the users of the site will decrease from current levels with the various measures of stormwater control implemented. The recommendation to position habitable floor levels 300mm above existing surface level will also ensure that risk to users is minimised in the event that site controls fail or larger storm events than those assessed are encountered.

Existing likely flood risks for the south-western flows were assessed to be up to hazard classification H2 – 'unsafe for small vehicles'. Hazard classification H3 specifically describes the point at which flows become unsafe for the elderly which relates to the use of the site as a retirement village. With existing flows not considered to pose a significant risk to the elderly (not exceeding H2), the likely further reduced risks due to the implementation of stormwater controls is considered to maintain a tolerable risk for vulnerable use.

P4

The proposed use of the site as an extension to the existing Clarence Lifestyle Village (retirement village) ensures that the use remains consistent for implementation of existing emergency procedures and training of staff to ensure the safety of residents in the event of flood. Existing procedures and evacuation plans are to be updated to include the additional site expansion.

Should flooding be encountered, the site is situated such that safe uphill areas located clear of any mapped flooding can be reached from all parts of the site. Minimum floor levels in flood-prone mapped areas of 300mm above existing surface level will ensure residents who may not be able to self-evacuate can be protected from flooding until assisted. The proposed flood protection measures (e.g. cut-off drain) as discussed in this report will assist in reducing the risk of flooding and increasing the warning time for staff and residents to react to potential flooding and evacuate if required.

C12.6 Development Standards for Buildings and Works

C12.6.1 Buildings and works within a flood-prone hazard area

Objective: That: (a) building and works within a flood-prone hazard area can achieve and maintain a tolerable risk from flood; and (b) buildings and works do not increase the risk from flood to adjacent land and public infrastructure	
Acceptable Solutions	Performance Criteria
A1 No Acceptable Solution	P1.1 Buildings and works within a flood-prone hazard area must achieve and maintain a tolerable risk from a flood, having regard to: (a) the type, form, scale and intended duration of the development; (b) whether any increase in the level of risk from flood requires any specific hazard reduction or protection measures; (c) any advice from a State authority, regulated entity or a council; and (d) the advice contained in a flood hazard report. P1.2 A flood hazard report also demonstrates that the building and works: (a) do not cause or contribute to flood on the site, on adjacent land or public infrastructure; and (b) can achieve and maintain a tolerable risk from a 1% annual exceedance probability

	flood event for the intended life of the use without requiring any flood protection measures
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Response

P1.1

In conjunction with the discussions within this report, the proposed development maintains a tolerable risk from flood. The form of development is an extension to the existing Clarence Lifestyle Village located on the neighbouring property and intends to maintain the same form of use with construction of 54 residential dwellings and associated internal road access infrastructure and services infrastructure.

The site is potentially subject to two separate sources of flood waters, one within the north-eastern existing drainage channel and one from the south-west which sheet flows across the western portion of the site. The development intends to maintain the existing north-eastern drainage channel along with improvements in the form of two new stormwater detention basins which ensure stormwater runoff generated from the site is maintained at pre-development levels. The proposed building works are to be located clear of this portion of mapped flooding. A small portion of the entry access road is encroached by the outside extents of the flood mapping, however is indicated to be $\leq 0.05\text{m}$ in depth and is expected to maintain a low hazard classification of H1 – ‘generally safe for people, vehicles and buildings,’ which is considered a tolerable risk should no further risk reduction measures be undertaken here.

A new stormwater cut-off drain is proposed along the south-western boundary of the site to intercept flood water from the south-west and is an improvement to the existing informal minor depression/swale drain that runs through the site. The addition of multiple new headwall discharges along the length of this drain as well as check dams at regular intervals will improve safe passage of these flow by slowing, capturing and discharging flood water underground to the north-eastern drainage channel. This will reduce the occurrence of overland flows through the site due to flood waters and reduce risk. Proposed dwellings are to be constructed with raised floor levels to reduce any residual risk of overland flows, with recommendations made in this report to provide an optimal minimum floor level of 300mm above existing surface levels. Should this recommendation be followed and as discussed previously in this report, the residual risk is expected to be reduced to H1 – ‘generally safe for people, vehicles and buildings,’ in this portion of the site, which is considered a tolerable risk.

P1.2

As discussed further in this report, the proposed development is expected to improve the risk of flooding on downstream properties in addition to providing a lower risk to the site itself. Council's flood mapping indicates that flooding may occur in a 1% AEP event (climate change inclusive) across the site which also has impacts on downstream properties. Existing flows from the south-west are shown to impact the entire property of the neighbouring 657 East Derwent Highway residence as well as overflowing from the open drain located next to the northern driveways which spills into the holiday park. By intercepting these flows in a more controlled manner with the new cut-off drain, check dams and multiple headwall inlets, the flows can be largely redirected towards the north-eastern drainage course in a safer manner. The major overland drainage routes (internal roads) proposed within the development site will direct any remaining overland flows east also and have been designed for the 1% AEP storm event as detailed in JSA's report. A reduction

in the flows reaching the existing neighbouring residence and northern driveway swales is expected and is expected to reduce the risk or severity of inundation to neighbouring downstream properties.

The proposed stormwater detention basins will ensure that any increase in runoff generated by the proposed development's increase in impervious areas is controlled and discharged at pre-development levels as detailed in the associated JSA and Flussig reports and will not cause additional nuisance to neighbouring properties.

As discussed in the response to P1.1 above, the proposed mitigation measures for control of the south-western overland flows as well as remaining clear of the existing north-eastern drainage channel ensure that the proposed development maintains a tolerable risk from flood for a 1% AEP event (climate change inclusive).

C12.7 Development Standards for Subdivision

C12.7.1 Subdivision within a flood-prone hazard area

Objective: That subdivision within a flood-prone hazard area does not create an opportunity for use or development that cannot achieve a tolerable risk from flood.	
Acceptable Solutions	Performance Criteria
A1 Each lot, or a lot proposed in a plan of subdivision, within a flood-prone hazard area, must: (a) be able to contain a building area, vehicle access, and services, that are wholly located outside a flood-prone hazard area; (b) be for the creation of separate lots for existing buildings; (c) be required for public use by the Crown, a council or a State authority; or (d) be required for the provision of Utilities.	P1 Each lot, or a lot proposed in a plan of subdivision, within a flood-prone hazard area, must not create an opportunity for use or development that cannot achieve a tolerable risk from flood, having regard to: (a) any increase in risk from flood for adjacent land; (b) the level of risk to use or development arising from an increased reliance on public infrastructure; (c) the need to minimise future remediation works; (d) any loss or substantial compromise by flood of access to the lot, on or off site; (e) the need to locate building areas outside the flood-prone hazard area;

	(f) any advice from a State authority, regulated entity or a council; and (g) the advice contained in a flood hazard report.
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Response

P1

The rezoning of the land will allow for additional use and development types on the existing title. The proposed use/development being of expansion to the existing Clarence Lifestyle Village (retirement village) demonstrates a vulnerable use of the site. This proposed use, as outlined in this report and from supporting information and design by others, has shown that the site can achieve a tolerable risk to flood for a development that encroaches into the mapped flood-prone hazard area without the need to locate buildings entirely outside of the mapped flood-prone hazard areas.

Additional stormwater controls are proposed, with further recommendations made in this report that show that the site can be fully developed while maintaining adequate control and risk mitigation of regular stormwater and flood waters. The proposed development limits controlled site discharges to pre-development levels through the use of detention infrastructure to ensure the site does not negatively impact on downstream infrastructure or increase the reliance on public infrastructure to accommodate these flows.

As detailed in this report, the proposed works demonstrate that overland flows across the site can be controlled in a manner that lowers the risk to neighbouring properties by managing previously uncontrolled external flooding passing through the site. Access to the site is proposed to be provided through the adjacent Clarence Lifestyle Village and maintains an acceptable risk of use. Potential improvements to the severity of flooding across the northern driveway are expected and demonstrate that risks can be lowered here, however should any other alternative developments be proposed on the site in the future, further assessment and controls may be required to ensure safe access to the site if not provided through the adjacent retirement village.

5. SUMMARY

The proposed development site has been identified by Clarence City Council mapping as being situated within a flood prone area for a 1% AEP event. The mapping indicates that the flows may enter the site from the south-west and within the existing north-eastern drainage course. The proposed development has been assessed using available council flood information, design reports by JSA and Flussig as well as additional flow analysis to determine approximate hazard vulnerability classifications in line with mapped flood depths. With structures proposed to remain clear of the north-eastern drainage channel and flooding occurring there, the remaining risk is expected to come from the south-western flood waters. New drainage infrastructure has been proposed to intercept and control these flows, with raised floor levels also proposed for new dwellings (recommendations of 300mm minimum above existing surface level made in this report). With these mitigation measures in place, the residual risk to persons, vehicles and buildings is considered low and at a tolerable level.

The development is not considered to worsen the effect of flooding or contribute to flooding on adjacent properties, with improvements expected.

The proposed development works are considered acceptable in regard to flood risk for the site.

Should you have any further queries please do not hesitate to contact us.

Yours faithfully,



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24 October 2023
JSA Reference: 17L99-118-4

Stormwater Design Proposal

647 East Derwent Highway, Risdon (Clarence Lifestyle Village)

This stormwater design proposal is provided to support the rezoning application for the proposed development at 647 East Derwent Highway, Risdon. This proposal summarises the concept stormwater design for the site, including treatment, detention and management of overland flow. It is anticipated that prior to engineering approval a full Stormwater Management Plan (SWMP) would be required and submitted.

Existing Site Conditions and Overland Flow

647 East Derwent Highway is located adjoining the existing Clarence Lifestyle Village development at 2 Piper Road, Geilston Bay. The development site is approximately 2.6ha in area, and is predominantly undeveloped grassed area, with a single dwelling located on the property. Stormwater runoff from the existing site drains as distributed sheet flow towards the north-western property boundary and the existing above ground drainage path on the north-eastern side of the property. The development site is subject to a flood-prone area based on Clarence City Council flood mapping for 1% AEP inundation with climate change loading.

There are two sections of flood overlay relevant to the site. The north-eastern zone of the property is an existing drainage path, and is also subject to the waterway and coastal protection area. This drainage path is not a constructed swale or a permanent waterway, but is a natural low point where stormwater runoff accumulates in rainfall events, and forms part of the drainage system for the surrounding catchments and the East Derwent Highway. Council's flood model in this area indicates water depths in the 1% AEP storm event of up to 1.5m.

The section of the site from the south-western property boundary to the north-western property boundary is subject to the flood hazard zone associated with a concentration of overland flow south-west of the development site. The development site itself is relatively flat by comparison, resulting in the accumulated water spreading wide and shallow across the property. Council's flood model in this area indicates water depths in the 1% AEP storm event are generally in the range of less than 0.05m, and 0.05m to 0.2m.

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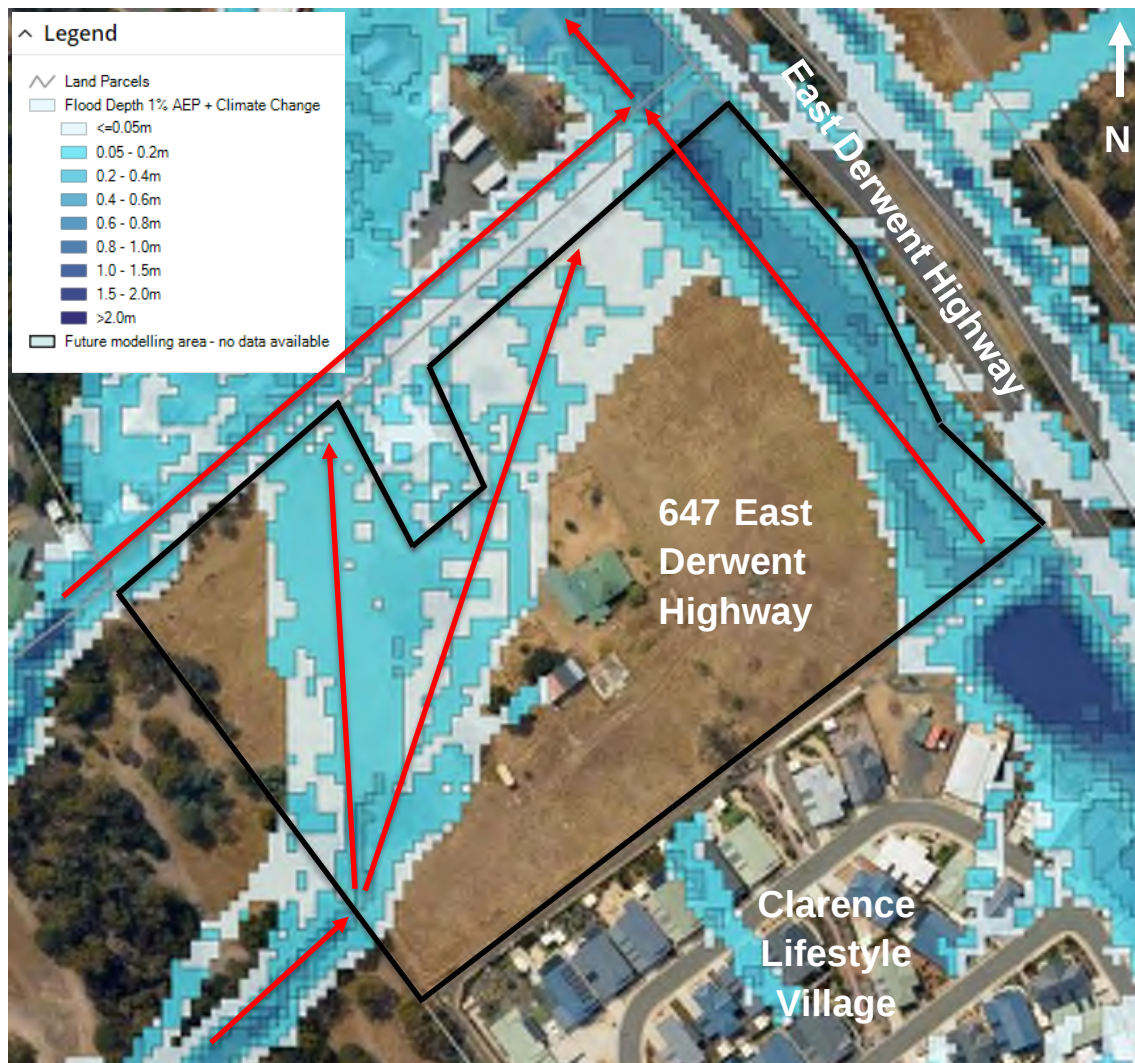


Figure 1: Council flood model depths at 647 East Derwent Highway, Risdon (red arrows show direction of flow)

Proposed Site Design and Management of Overland Flow

The proposed development has been designed with consideration of the flood hazard overlay and the movement of surface water across the site.

No buildings are proposed in the section of the property subject to flood hazard and waterway protection codes along the north-eastern side. Works in this area are limited to the driveway, stormwater detention systems, and water and sewer infrastructure.

The site design, including the layout of the roads and lots, stormwater swales, and pipe arrangement, have been designed to facilitate movement of water entering the site from the south-western boundary, and surface runoff generated on the developed site. The overland flow approaching the site from the south-west is proposed to be cut off by and collected in a proposed swale drain along the south-western boundary. From here, stormwater is directed to the underground piped system for the site through proposed inlet headwalls. The piped stormwater system runs underneath the road network and directs the water to the proposed detention basins along the north-eastern side of the property. The pipes are sized to accommodate the runoff from a 5% AEP storm event. The layout of the lots and roads has been designed to allow for overland flow in the event that the pipes do not have sufficient capacity for the water (due to blockage or major storm event). The road network forms the primary overland flow route for the developed site, with pedestrian walkways between the south-western lots to transfer overland flow from the swale along the south-western boundary through to the road network. The overland flow routes will be designed to

accommodate the overland flow anticipated in the 1% AEP event with climate change loading applied to the inundation rate.

The flood hazard overlay associated with this overland flow, covering a large portion of the western side of the property, is not applicable to the developed site. Dwellings in this part of the site will not be in a flood prone area and will not need to address the associated design criteria.

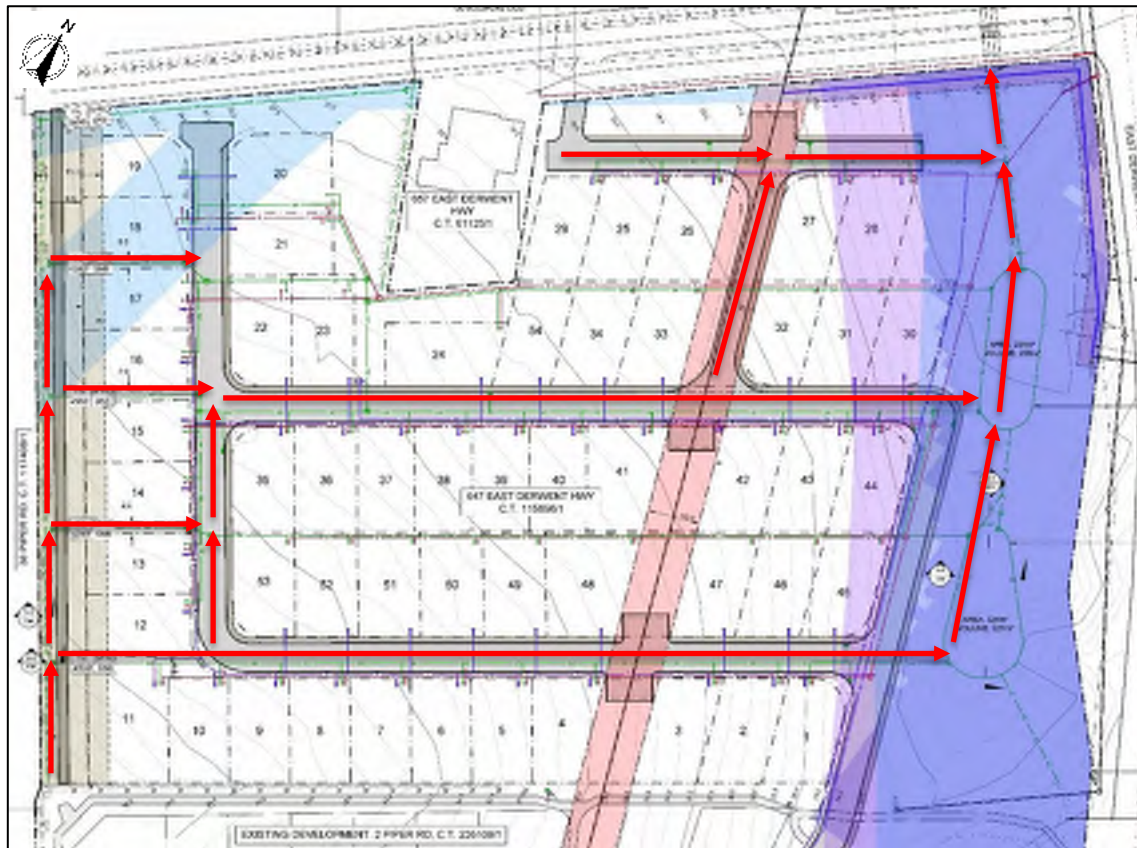


Figure 2: Part of proposed site plan C02 (red arrows show direction of overland flow)

Stormwater System Design – Detention and Treatment

The proposed development results in an intensification of stormwater discharged from the property, and has therefore been designed to meet the requirements of Council's Stormwater Management Procedure for New Developments. Combined detention and bioretention basin systems are proposed to provide detention and treatment of stormwater runoff collected from the site.

Stormwater Detention

DRAINS software was utilised to run an initial loss - continuing loss (IL-CL) model of the development site, to ensure peak runoff rate from the developed site does not exceed peak pre-development runoff rate in the 5% AEP event. Ensembles of storms in the 5% event were modelled in accordance with ARR 2019 procedures using the following inputs and assumptions:

- Design rainfalls were imported from BOM 2016 IFD design rainfalls for Risdon, with pervious area initial and continuing losses, pre-burst rainfall and temporal patterns imported from ARR data hub.
- Pre-development catchment is modelled as 1% impervious area and 99% pervious area, based on existing site conditions.
- Post-development catchment is modelled as 62% impervious area and 38% pervious area, as determined based on proposed site plans and assuming similar dwelling sizes as the existing Clarence Lifestyle Village development.

Two 200m³ stormwater detention basins are proposed to collect the runoff from the majority of the new impervious areas and provide combined treatment and detention for the stormwater runoff collected on the site. The detention basins are provided with DN300 concrete headwall outlet to limit the outflow from the detention basins. The overflow weir level is 400mm above the base of the detention basin, to limit the water depth in the detention basin in frequent rainfall events.

The peak post-development flow rate (with detention) in a 5% AEP storm event is 134L/s, occurring in the 1 hour duration storm burst. This does not exceed the peak pre-development flow rate for the site of 167L/s.

Stormwater Treatment

The following reductions in average annual load based on typical urban stormwater concentrations are required under the Council's Stormwater Management Procedure for New Developments: 90% reduction in gross pollutants (GP), 80% reduction in total suspended solids (TSS), 45% reduction in total phosphorous (TP), and 45% reduction in total nitrogen (TN).

The stormwater treatment system for 647 East Derwent Highway, Risdon has been modelled utilising Model for Urban Stormwater Improvement Conceptualisation (MUSIC) software using the following inputs and assumptions:

- The model input was based on the Hobart Ellerslie Rd 1/5/1996 – 1/10/2001 6-minute rainfall, which includes only valid data (no accumulated or missing data).
- The catchment area was split into three source node types (roof, hardstand and landscape), with three separate catchment zones to model the catchment areas collected to the two bioretention basins and the smaller catchment at the north of the site which bypasses the detention and treatment systems.
- In the absence of standard pollutant generation rates supplied for use in MUSIC modelling in Tasmania, the catchment source nodes have been set up with the default pollutant generation rates provided in MUSIC, in accordance with the MUSIC user manual.

The modelled reductions in average annual load based on typical urban stormwater concentrations for the proposed treatment system are: 90.8% reduction in GP, 86.4% reduction in TSS, 45.5% reduction in TP, and 66.5% reduction in TN.

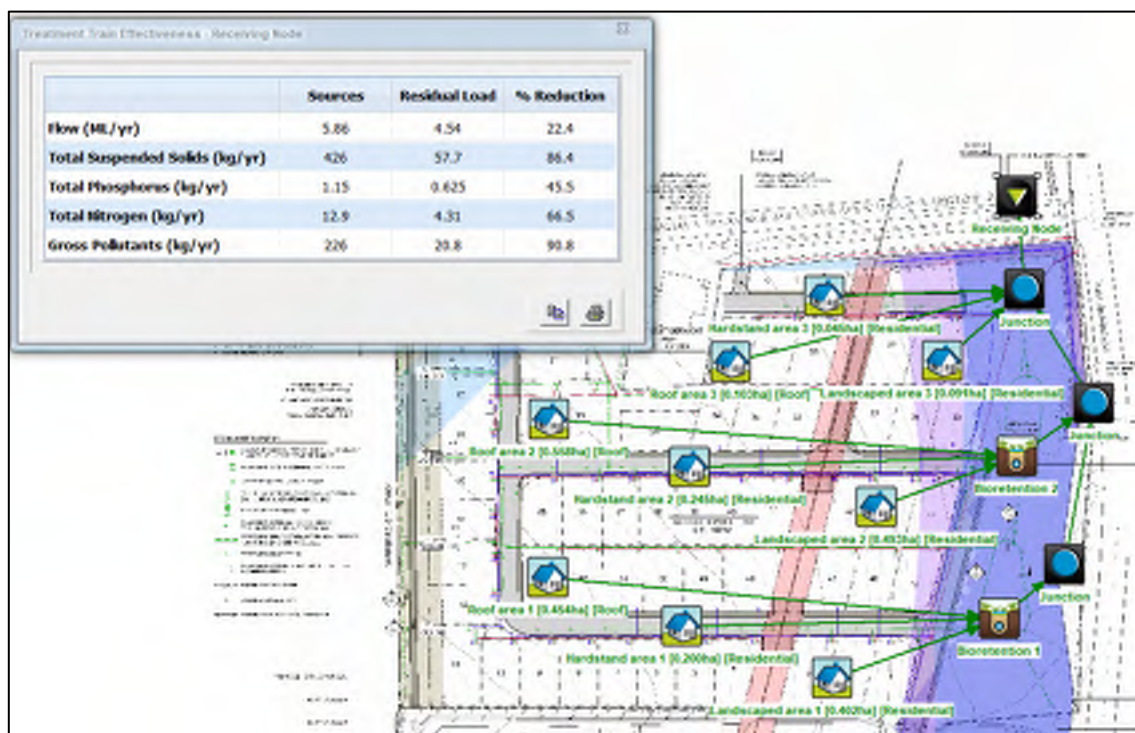
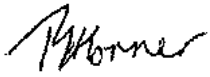


Figure 3: MUSIC model and treatment train effectiveness

Please contact Rachel Horner on 6240 9911 or rachel@jsa.com.au if you require any further information.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'R Horner', written in a cursive style.

Rachel Horner

Civil / Environmental Engineer

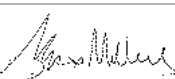
HYDRAULIC DESIGN REPORT

FE-24035 PERFORMANCE SOLUTION REPORT

Document Information

Title	Client	Document Number	Project Manager
647 East Derwent Hwy, Risdon TAS 7015 Performance Solution Report	Clarence Lifestyle Village	FE-24035	Manuri Alwis <i>BEng (Hons)</i> Civil Engineer

Document Initial Revision

REVISION 00	Staff Name	Signature	Date
Prepared by	Manuri Alwis Civil Engineer		20/05/2024
Reviewed by	Ash Perera Civil Hydraulic Engineer		29/05/2024
Authorised by	Max W. Möller Principal Hydraulic Engineer		29/05/2024

Document Revision History

Rev No.	Description	Reviewed by	Authorised by	Date
01	Flow rate summary table	Max W. Möller	Max W. Möller	18/07/2024

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Flüssig Engineers – Level 4, 116 Bathurst Street, Hobart 7000, TASMANIA – Ph 03 6288 7704

INTRODUCTION

This report details the stormwater management strategies for the proposed development at 647 East Derwent Hwy, Risdon TAS 7015. The objective of the report is to demonstrate how stormwater runoff will be captured and conveyed from the subject site safely to the receiving drainage network, while considering stormwater quantity management and the incorporation of bioretention basins.

This report should be read in conjunction with the Stormwater Design Proposal by JSA (JSA Reference: 17L99-118-4) dated 24th October 2023, and the Planning Approval Drawings named “17E99-118-A - Civil & Hydraulic – 20231025” dated 25th October 2023.

EXISTING CONDITIONS AND ASSUMPTIONS

The site covers an area of approximately 26,000m². The pre-development site is modelled as 1% impervious and 99% pervious, while the post-development site is modelled as 62% impervious and 38% pervious, as described in the Stormwater Design Proposal by JSA (refer to appendix C).

The stormwater management report is prepared in accordance with the design criteria listed below:

- The stormwater drainage system is designed using Bureau of Meteorology (BOM) published rainfall Intensity Frequency Duration (IFD) data as a minor / major system to accommodate the 1% AEP / 20 min storm events.
- The flow rate of stormwater leaving the site shall be designed so that it does not exceed the pre-developed flow rate for both the minor and major rain events.
- The total site discharges are modelled as described in *Storm Drainage Design in Small Urban Catchments*, a handbook for Australian practice by *Australian Rainfall and Runoff (ARR2019)*, Book 9 – Runoff in Urban Areas.

Stormwater from the site will be routed through the proposed conventional underground drainage system, comprising grated sumps and PVC pipes, coupled with bioretention basins. The runoff from all proposed impervious areas will be directed through the underground pipe network into the bioretention basins.

PERFORMANCE SOLUTION COMPLIANCE

AS 3500.3 – CL 7.10	7.10.1 – Overflow is safe and does not compromise freeboard to habitable spaces.
General	- AS/NZS 3500.3: Part 3 Stormwater Drainage - Australian Rainfall and Run-off Volume 8: Urban Stormwater Management - Australian Runoff Quality – A Guide to Water Sensitive Urban Design - Storm drainage design in small urban catchments: A handbook for Australian practice - Water Sensitive Urban Design (WSUD) Engineering Procedure: Stormwater - Water Services Association of Australia Code (WSAA).

DETENTION DESIGN

Detention calculations for 1% AEP are provided in Appendix B with the following summary:

Detention = 259.2m³

Permissible Site Discharge (PSD) = 145.88L/s

Pre-development			Post-development	
Land Use	Area m ²	% Total land	Area m ²	% Total land
Total Pervious	25740	99	9880	38
Total Impervious	260	01	16120	62

As per stormwater management best practices, the post-development allowable site discharge must not exceed the pre-development site discharge. As shown in the figures above, this is exceeded during the 1% AEP 20-minute storm duration, with a PSD of 145.88 L/s from the impervious areas. Therefore, the site must detain the difference using an onsite stormwater detention (OSD) system with a total minimum detention volume of 259.2m³ within the bioretention basins.

BIORETENTION BASIN DESIGN

Current calculation for 5% AEP

In accordance with the Stormwater Design Proposal by JSA (JSA Reference: 17L99-118-4) and planning Approval Drawings the current bioretention basins for 5% AEP as follows.

	Note	Bioretention basin 1	Bioretention basin 2
Current total volume (m³)	Planning approval drawing DWG NO C03 by JSA	227.0	206.0
Area (m²)	Planning approval drawing DWG NO C03 by JSA	324.0	294.0
Filter depth (m)	MUSIC model by JSA	0.45	0.45
Calculated total depth (m)	Current total volume (m ³)/ Area (m ²)	0.70	0.70
Calculated extended detention depth (m)	Calculated total depth (m) – Filter depth (m)	0.25	0.25
Calculated current detention volume (m³)	Calculated extended detention depth (m) X Area (m ²)	81.2	73.7

As per the above calculation, the total current detention volume within bioretention basins is 154.9m³ for 5% AEP.

Proposed calculation for 1% AEP

According to the 1% AEP calculations, minimum detention required is 259.2m³. As per above calculations, the total current detention volume available is 154.9m³. Therefore, to meet the detention requirements for the 1% AEP, an additional 104.3m³ detention is required.

To meet this demand, an additional extended detention depth of 0.20m is proposed in each bioretention basin. Therefore, each detention basin will be 0.90m deep with 0.45m filter depth and 0.45m proposed extended detention depth. Thus, bioretention basin 1 and bioretention basin 2 required to have proposed detention volume of 146m³ and 133m³ respectively totalling 279.0m³ of total proposed detention volume.

The total proposed detention volume of 279.0m³ exceeds the minimum required 259.2m³ for 1% AEP detention calculations as per Appendix B.

	Note	Bioretention basin 1	Bioretention basin 2
Proposed total volume (m³)	By calculations	292.0	265.0
Area (m²)	Planning approval drawing DWG NO C03 by JSA	324.0	294.0
Filter depth (m)	MUSIC model by JSA	0.45	0.45
Proposed total depth (m)	Proposed extended detention depth (m) + filter depth (m)	0.90	0.90
Proposed extended detention depth (m)	Additional extended detention depth (m) + Calculated extended detention depth (m)	0.45	0.45
Proposed detention volume (m³)	Proposed extended detention depth X Area (m ²)	146.0	133.0

PROPOSED BIORETENTION BASIN SUMMARY

Area (m²) of bioretention basins is kept constant as per Planning Approval Drawings named “17E99-118-A - Civil & Hydraulic – 20231025”.

Filter depth (m) is kept constant as per MUSIC modelling on Stormwater Design Proposal by JSA (JSA Reference: 17L99-118-4).

	Bioretention basin 1	Bioretention basin 2
Area (m²)	324	294
Filter depth (m)	0.45	0.45
Proposed detention depth (m)	0.45	0.45
Proposed total depth (m)	0.90	0.90
Proposed detention volume (m³)	146	133
Proposed total volume (m³)	292	265

FLOW RATE & DETENTION SUMMARY

Scenario	Pre-development flow rate (L/s)	Post development flow rate with detention or Permissible Site Discharge (L/s)	Minimum detention required (m ³)	Proposed total volume (Filter & detention volume) (m ³)	Calculation method
5% AEP (JSA)	167.00	134.00	N/A	433.00	DRAINS Software
1% AEP (Flussig Engineers)	141.37	145.88	259.20	557.00	Structural toolkit Swinburne method

GENERAL MAINTENANCE

To ensure the ongoing operation of all treatment systems, bioretention basins and all treatment devices should be regularly maintained. This includes, but is not limited to, the general maintenance information described below.

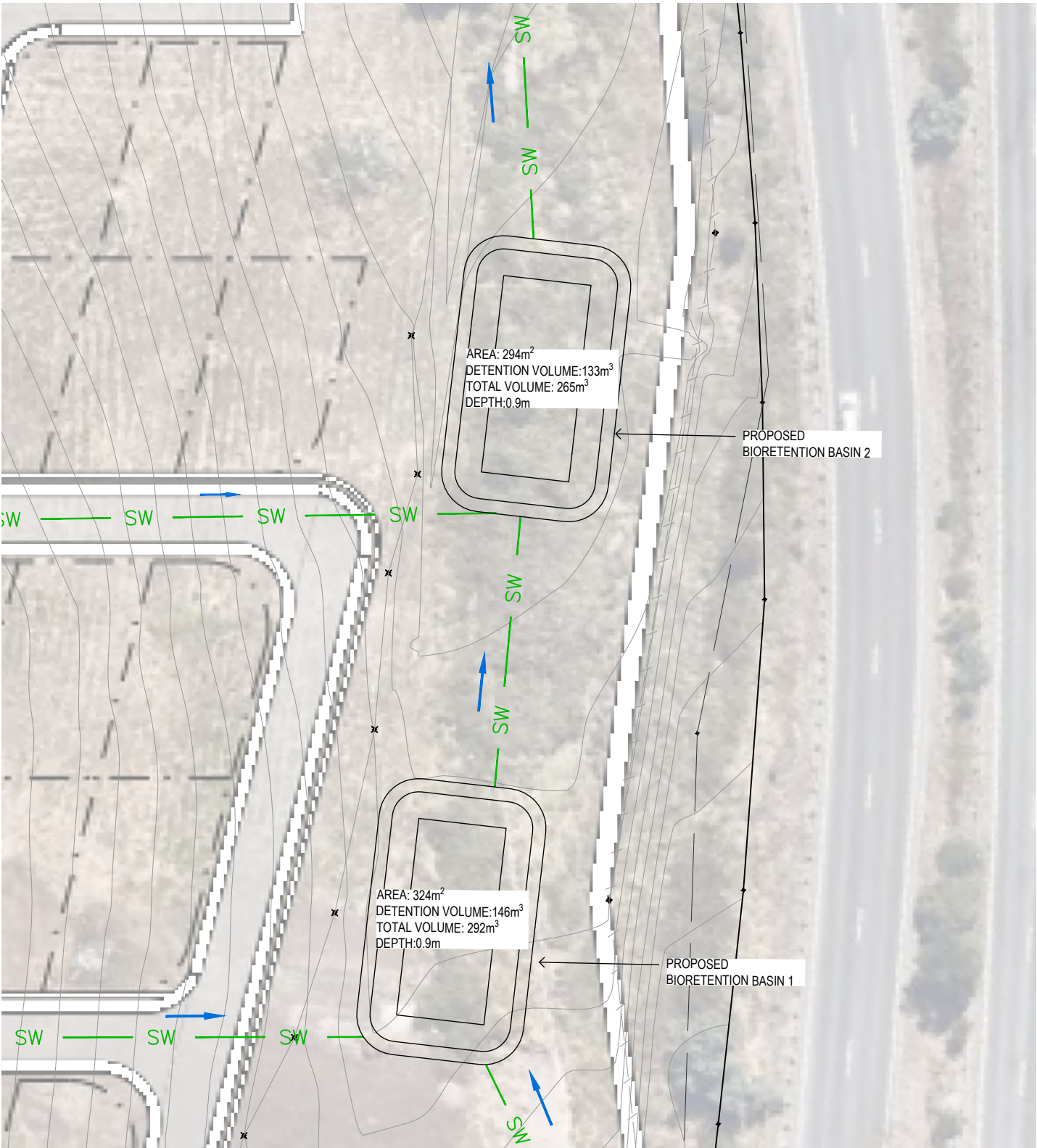
Task	Action	Frequency
General Cleaning – gutters, downpipe, filters etc.	Clear all pollutants from storage and device filters, ensure operational	Every 3 months
Specialised cleaning and inspection	Inspect all storage, inflow, and outflow – clean and flush if required. Visually inspect bioretention basin for defects and blockage.	Yearly
Maintenance	Perform detailed inspection and maintenance of basin and associated infrastructure by a qualified person.	Every 5 years

SUMMARY AND CONCLUSIONS

- Detention requirements to be adopted as per design and documentation.
- The designed solution complies with the performance solution design check carried out above.
- The total proposed detention volume of 279.0m³ exceeds the minimum required 259.2m³ detention as per calculations on Appendix B.

APPENDIX A

STORMWATER DESIGN DRAWINGS



NEW SERVICES

- SW STORMWATER PIPE
- STORMWATER FLOW DIRECTION

STORMWATER SERVICES NOTES:

- 1. ALL SITE SAFETY & MANAGEMENT PROCEDURES SHALL BE IN ACCORDANCE WITH THE DEPARTMENT OF STATE GROWTH SPECIFICATIONS: SECTION 168 OCCUPATIONAL HEALTH AND SAFETY & SECTION 176 ENVIRONMENTAL MANAGEMENT.
- 2. ALL PIPES UNDER TRAFFIC ABLE AREAS ARE TO BE BACK FILLED FULL DEPTH WITH 20 F.C.R. AND FULLY COMPACTED.
- 3. ALL STORM WATER PIPES TO BE PVC-U-SWJ CLASS "SN8" TO AS 1254 UNO.
- 4. ALL DRAIN AND TRENCH CONSTRUCTION SHALL COMPLY WITH THE LGAT STANDARD DRG TSD G01.
- 5. ANY EXCAVATED TRENCHES IN EXCESS OF 1.5M IN DEPTH ARE TO BE ADEQUATELY SHORED TO PREVENT COLLAPSE DURING WORKS.

SITE AREA=26,000m²
PROPOSED IMPERVIOUS AREA 16,120m²
PROPOSED PERVIOUS AREA 9,880m²

STORMWATER DETENTION CONCEPT PLAN
NTS

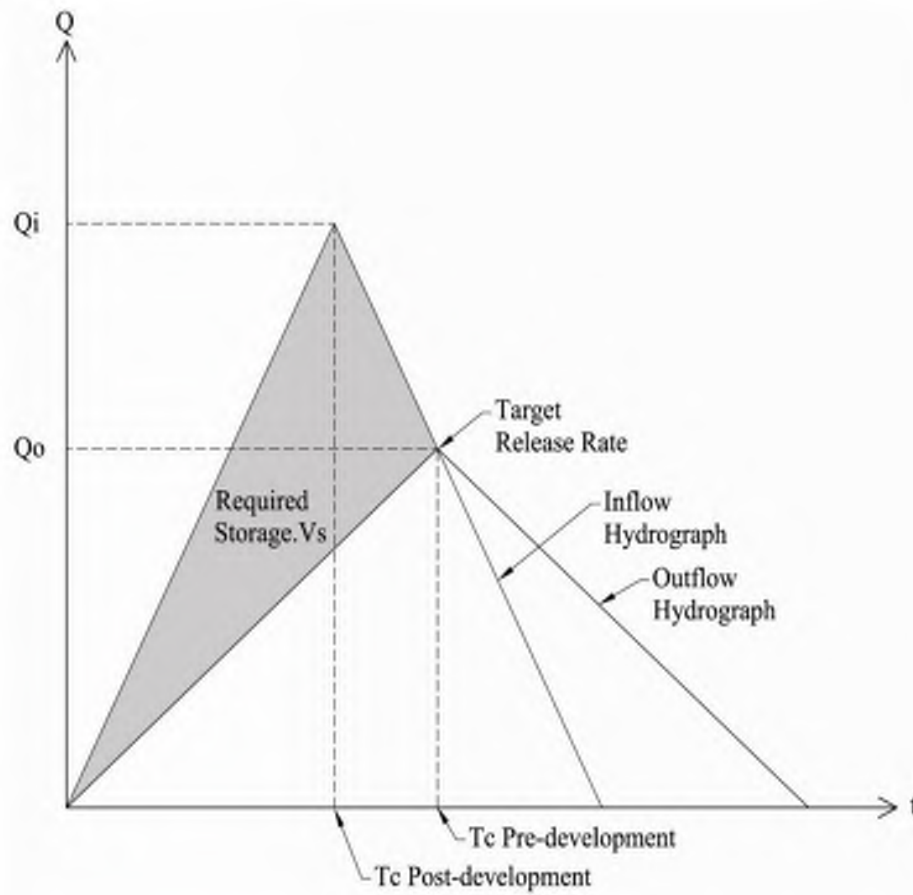


NOT FOR CONSTRUCTION
CONCEPT ONLY - DRAWINGS MUST BE USED IN CONJUNCTION
WITH FLUSSIG ENGINEERS REPORT

NOTES :										 e: admin@flussig.com.au p: (03) 6288 7704 w: www.flussig.com.au a: 116 Bathurst St, Level 4 Hobart, 7000, TASMANIA		CLIENT: CLARENCE LIFESTYLE VILLAGE		SITE: 647 EAST DERWENT HWY, RISDON TAS 7015			
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3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S, SERVICE ENGINEER'S AND FLUSSIG SPATIAL DRAWINGS AND SPECIFICATIONS.												PROJECT NO: FE-24035		DRAWING NO: C-100		REVISION: 00	
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APPENDIX B

DETENTION COMPUTATIONS



Triangular Hydrograph Method Schematic

Detention Design 1% AEP

STORMWATER DETENTION V5.05

Flüssig Engineers

Location: Risdon TAS
Site: 26000m² with tc = 20 and tcs = 15 mins.
PSD: AEP of 1%, Above ground PSD = 145.88L/s
Storage: AEP of 1%, Above ground volume = 259.20m³

Design Criteria (Custom AEP IFD data used)

Location = Risdon TAS
Method = E (A)RI 2001,A(E)P 2019

PSD annual exceedance probability (APE) = 1 %
Storage annual exceedance probability (APE) = 1 %

Storage method = A (A)bove,(P)ipe,(U)nderground,(C)ustom

Site Geometry

Site area (As) = 26000 m² = 2.6 Ha
Pre-development coefficient (Cp) = 0.31
Post development coefficient (Cw) = 0.73
Total catchment (tc) = 20 minutes
Upstream catchment to site (tcs) = 15 minutes

Coefficient Calculations

Pre-development				Post development			
Zone	Area (m ²)	C	Area * C	Zone	Area (m ²)	C	Area * C
Concrete	0	0.90	0	Concrete	0	0.90	0
Roof	260	1.00	260	Roof	16120	1.00	16120
Gravel	0	0.50	0	Gravel	0	0.50	0
Garden	25740	0.30	7722	Garden	9880	0.30	2964
Total	26000	m²	7982	Total	26000	m²	19084
Cp = $\Sigma \text{Area} * C / \text{Total} = 0.307$				Cw = $\Sigma \text{Area} * C / \text{Total} = 0.734$			

Permissible Site Discharge (PSD) (AEP of 1%)

PSD Intensity (I) = 63.8 mm/hr For catchment tc = 20 mins.
Pre-development (Qp = Cp*I*As/0.36) = 141.37 L/s
Peak post development (Qa = 2*Cw*I*As/0.36) = 676.01 L/s = (10.602 x I) Eq. 2.24
Storage method = A (A)bove,(P)ipe,(U)nderground,(C)ustom
Permissible site discharge (Qu = PSD) = 145.882 L/s

Above ground - Eq 3.8

$$0 = \text{PSD}^2 - 2 * Q_a / t_c * (0.667 * t_c * Q_p / Q_a + 0.75 * t_c + 0.25 * t_{cs}) * \text{PSD} + 2 * Q_a * Q_p$$

Taking x as = PSD and solving

$$a = 1.0 \quad b = -1456.1 \quad c = 191139.7$$

$$\text{PSD} = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$\text{PSD} = 145.882 \text{ L/s}$$

Below ground pipe - Eq 3.3

$$Q_p = \text{PSD} * [1.6 * t_{cs} / \{t_c * (1 - 2 * \text{PSD} / (3 * Q_a))\} - 0.6 * t_{cs}^{2.67} / \{t_c * (1 - 2 * \text{PSD} / (3 * Q_a))\}^{2.67}]$$

$$= 141.37$$

$$\text{PSD} = 144.294 \text{ L/s}$$

Below ground rectangular tank - Eq 3.4

$$t = t_{cs} / \{t_c * (1 - 2 * \text{PSD} / (3 * Q_a))\} = 0.871$$

$$Q_p = \text{PSD} * [0.005 - 0.455 * t + 5.228 * t^2 - 1.045 * t^3 - 7.199 * t^4 + 4.519 * t^5]$$

$$= 141.37$$

$$\text{PSD} = 140.486 \text{ L/s}$$

Detention Design 1% AEP

STORMWATER DETENTION V5.05

Flüssig Engineers

Design Storage Capacity (AEP of 1%)

$$\begin{aligned} \text{Above ground (Vs)} &= [0.5 \cdot Q_a \cdot t_d - [(0.875 \cdot \text{PSD} \cdot t_d)(1 - 0.917 \cdot \text{PSD}/Q_a) + (0.427 \cdot t_d \cdot \text{PSD}^2/Q_a)]] \cdot 60/10^3 \text{ m}^3 & \text{Eq 4.23} \\ \text{Below ground pipe (Vs)} &= [(0.5 \cdot Q_a - 0.637 \cdot \text{PSD} + 0.089 \cdot \text{PSD}^2/Q_a) \cdot t_d] \cdot 60/10^3 \text{ m}^3 & \text{Eq 4.8} \\ \text{Below ground rect. tank (Vs)} &= [(0.5 \cdot Q_a - 0.572 \cdot \text{PSD} + 0.048 \cdot \text{PSD}^2/Q_a) \cdot t_d] \cdot 60/10^3 \text{ m}^3 & \text{Eq 4.13} \end{aligned}$$

td (mins)	I (mm/hr)	Qa (L/s)	Above Vs (m³)	Pipe Vs (m³)	B/G Vs (m³)
5	117.8	1249.0	150.97		
8	101.1	1071.8	199.53		
10	92.1	976.5	221.26		
11	88.2	934.6	229.82		
13	81.2	860.7	243.35		
15	75.2	797.8	253.13		
16	72.6	769.8	256.92		
18	67.9	719.6	262.72		
19	65.7	697.1	264.88		
21	61.9	656.3	267.97		

Table 1 - Storage as function of time for AEP of 1%

Type	td (mins)	I (mm/hr)	Qa (L/s)	Vs (m³)
Above Pipe B/ground	16.7	70.9	751.4	259.20

Table 2 - Storage requirements for AEP of 1%

Frequency of operation of Above Ground storage

$$\begin{aligned} Q_{p2} &= 0.75 \text{ CI 2.4.5.1} \\ Q_{p2} = Q_{p2} \cdot Q_{p1} \text{ (where } Q_{p1} = \text{PSD)} &= 109.41 \text{ L/s at which time above ground storage occurs} \\ I = 360 \cdot Q_{p2} / (2 \cdot C_w \cdot A_s \cdot 10^3) &= 10.3 \text{ mm/h} & \text{Eq 4.24} \end{aligned}$$

Period of Storage

Time to Fill:

$$\begin{aligned} \text{Above ground (tf)} &= t_d \cdot (1 - 0.92 \cdot \text{PSD}/Q_a) & \text{Eq 4.27} \\ \text{Below ground pipe (tf)} &= t_d \cdot (1 - 2 \cdot \text{PSD}/(3 \cdot Q_a)) & \text{Eq 3.2} \\ \text{Below ground rect. tank (tf)} &= t_d \cdot (1 - 2 \cdot \text{PSD}/(3 \cdot Q_a)) & \text{Eq 3.2} \end{aligned}$$

Time to empty:

$$\begin{aligned} \text{Above ground (te)} &= (V_s + 0.33 \cdot \text{PSD}^2 \cdot t_d / Q_a \cdot 60/10^3) \cdot (1.14 / \text{PSD}) \cdot (10^3/60) & \text{Eq 4.28} \\ \text{Below ground pipe (te)} &= 1.464 / \text{PSD} \cdot (V_s + 0.333 \cdot \text{PSD}^2 \cdot t_d / Q_a \cdot 60/10^3) \cdot (10^3/60) & \text{Eq 4.32} \\ \text{Below ground rect. tank (te)} &= 2.653 / \text{PSD} \cdot (V_s + 0.333 \cdot \text{PSD}^2 \cdot t_d / Q_a \cdot 60/10^3) \cdot (10^3/60) & \text{Eq 4.36} \end{aligned}$$

$$\text{Storage period (Ps = tf + te)} \quad \text{Eq 4.26}$$

Type	td (mins)	Qa (L/s)	Vs (L/s)	tf (mins)	te (mins)	Ps (mins)
Above Pipe B/ground	16.7	751.4	259.2	13.7	35.0	48.7

Table 3 - Period of Storage requirements for AEP of 1%

Orifice

$$\begin{aligned} \text{Permissible site discharge (Qu=PSD)} &= 145.88 \text{ L/s (Above ground storage)} \\ \text{Orifice coefficient (CD)} &= 1 \text{ For sharp circular orifice} \\ \text{Gravitational acceration (g)} &= 9.81 \text{ m/s}^2 \\ \text{Maximum storage depth above orifice (H)} &= 900 \text{ mm} \\ \text{Orifice flow (Q)} &= CD \cdot A_o \cdot \sqrt{2 \cdot g \cdot H} \\ \text{Therefore:} \\ \text{Orifice area (Ao)} &= 34716 \text{ mm}^2 \\ \text{Orifice diameter (D = } \sqrt{4 \cdot A_o / \pi}) &= 210.2 \text{ mm} \end{aligned}$$

IFD Design Rainfall

Location

Label: 617 E Dorset St, Roston TAS 7015
Latitude: -42.816 (nearest grid cell: 42.8125 (S))
Longitude: 147.329 (nearest grid cell: 147.3375 (E))



IFD Design Rainfall Intensity (mm/h)

Issued: 23 May 2024

Rainfall intensity for Durations, Exceedance per Year (EP), and Annual Exceedance Probability (AEP).
[FAQ for new AEP probability terminology.](#)

	Annual Exceedance Probability (AEP)						
Duration	63.2%	50%*	20%*	10%	5%	2%	1%
1 min	63.4	60.7	57.7	138	140	171	196
2 min	52.9	50.6	47.2	96.4	112	130	144
3 min	46.7	52.8	72.4	86.3	100	118	132
4 min	42.1	47.2	65.9	79.0	92.4	110	124
5 min	38.5	43.8	60.7	73.1	85.9	104	118
10 min	27.9	31.2	44.2	56.4	64.6	79.6	92.1
15 min	22.6	25.7	36.3	44.2	52.6	64.9	75.2
20 min	19.3	22.0	31.0	37.7	44.8	55.1	63.8
25 min	17.1	19.4	27.3	33.1	39.3	48.2	55.5
30 min	15.5	17.5	26.6	29.8	35.2	43.0	49.4
45 min	12.3	14.0	19.4	23.4	27.3	33.1	37.7
1 hour	10.5	11.8	16.5	19.7	23.0	27.5	31.1
1.5 hour	8.45	9.56	13.1	15.6	18.1	21.3	23.8
2 hour	7.24	8.19	11.2	13.3	15.3	17.9	19.9
3 hour	5.83	6.46	9.02	10.6	12.2	14.2	15.7
4.5 hour	4.69	5.33	7.39	8.59	9.82	11.4	12.7
6 hour	4.01	4.57	6.38	7.40	8.47	9.90	11.0
9 hour	3.19	3.65	5.06	5.99	6.88	8.10	9.02
12 hour	2.69	3.09	4.32	5.14	5.92	7.01	7.85
18 hour	2.09	2.40	3.40	4.08	4.76	5.66	6.38
24 hour	1.73	1.99	2.83	3.42	3.99	4.80	5.43
30 hour	1.67	1.70	2.44	2.95	3.46	4.18	4.74
36 hour	1.29	1.48	2.14	2.60	3.06	3.70	4.24
48 hour	1.04	1.20	1.72	2.00	2.48	3.00	3.40
72 hour	0.746	0.860	1.23	1.51	1.79	2.15	2.45
96 hour	0.586	0.673	0.962	1.17	1.38	1.66	1.88
120 hour	0.484	0.556	0.788	0.953	1.12	1.34	1.52
144 hour	0.415	0.475	0.669	0.804	0.939	1.12	1.27
168 hour	0.365	0.417	0.583	0.686	0.807	0.954	1.09

Note:

* The 50% AEP IFD **does not** correspond to the 2 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 1.44 ARI.

* The 20% AEP IFD **does not** correspond to the 5 year Average Recurrence Interval (ARI) IFD. Rather it corresponds to the 6.48 ARI.

APPENDIX C

Clarence City Council
38 Bligh Street
PO Box 96
Rosny Park TAS 7018

24 October 2023
JSA Reference: 17L99-118-4

Stormwater Design Proposal

647 East Derwent Highway, Risdon (Clarence Lifestyle Village)

This stormwater design proposal is provided to support the rezoning application for the proposed development at 647 East Derwent Highway, Risdon. This proposal summarises the concept stormwater design for the site, including treatment, detention and management of overland flow. It is anticipated that prior to engineering approval a full Stormwater Management Plan (SWMP) would be required and submitted.

Existing Site Conditions and Overland Flow

647 East Derwent Highway is located adjoining the existing Clarence Lifestyle Village development at 2 Piper Road, Geilston Bay. The development site is approximately 2.6ha in area, and is predominantly undeveloped grassed area, with a single dwelling located on the property. Stormwater runoff from the existing site drains as distributed sheet flow towards the north-western property boundary and the existing above ground drainage path on the north-eastern side of the property. The development site is subject to a flood-prone area based on Clarence City Council flood mapping for 1% AEP inundation with climate change loading.

There are two sections of flood overlay relevant to the site. The north-eastern zone of the property is an existing drainage path, and is also subject to the waterway and coastal protection area. This drainage path is not a constructed swale or a permanent waterway, but is a natural low point where stormwater runoff accumulates in rainfall events, and forms part of the drainage system for the surrounding catchments and the East Derwent Highway. Council's flood model in this area indicates water depths in the 1% AEP storm event of up to 1.5m.

The section of the site from the south-western property boundary to the north-western property boundary is subject to the flood hazard zone associated with a concentration of overland flow south-west of the development site. The development site itself is relatively flat by comparison, resulting in the accumulated water spreading wide and shallow across the property. Council's flood model in this area indicates water depths in the 1% AEP storm event are generally in the range of less than 0.05m, and 0.05m to 0.2m.

Directors: Dr Jane Sargison BE DPhil FIEAust CPEng NER CC6193N
Mr Matthew Horsham BE MIEAust CPEng NER CC5865I RPEQ
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JSA (Tas) Pty Ltd | ABN 45 165 277 681

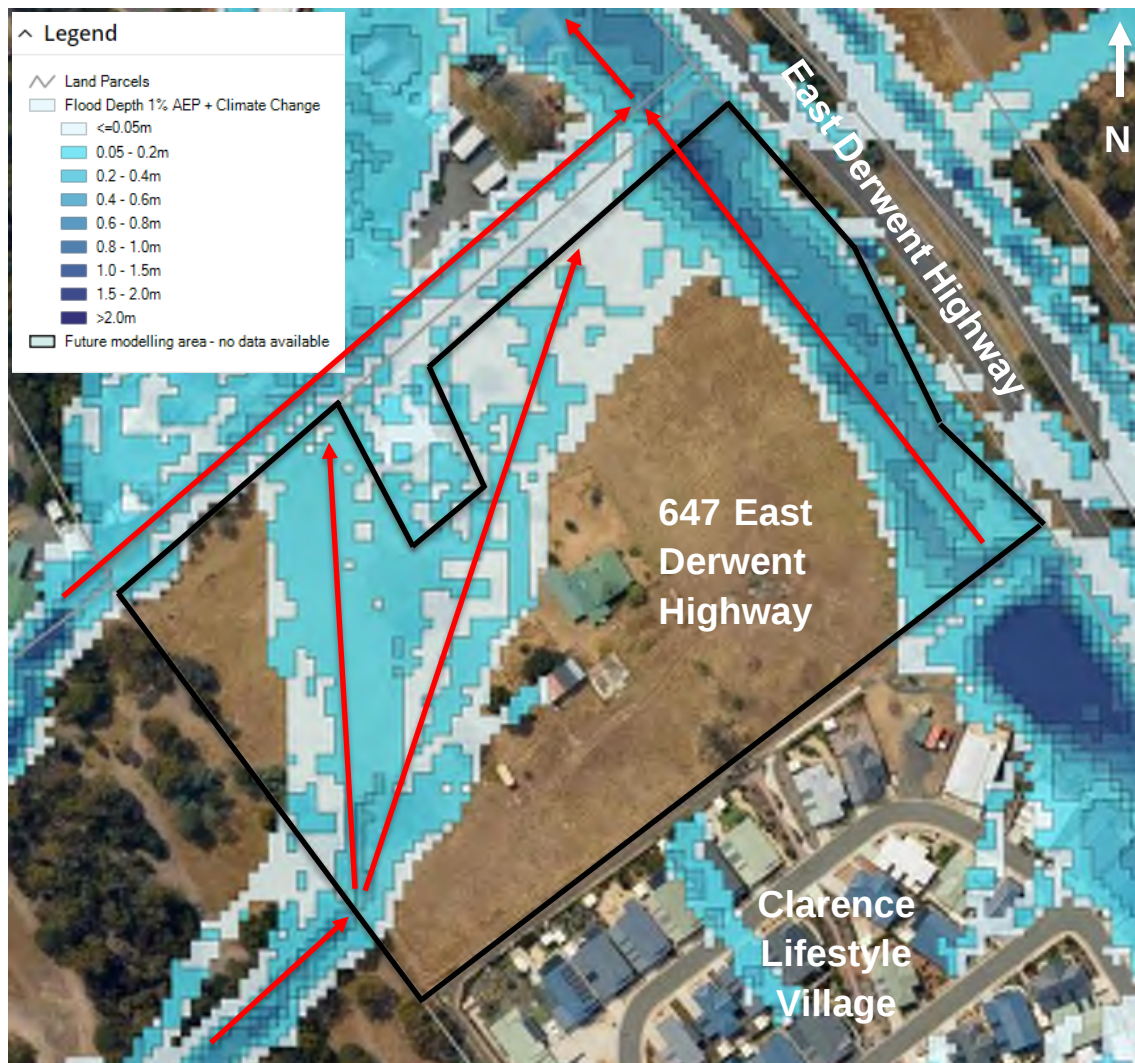


Figure 1: Council flood model depths at 647 East Derwent Highway, Risdon (red arrows show direction of flow)

Proposed Site Design and Management of Overland Flow

The proposed development has been designed with consideration of the flood hazard overlay and the movement of surface water across the site.

No buildings are proposed in the section of the property subject to flood hazard and waterway protection codes along the north-eastern side. Works in this area are limited to the driveway, stormwater detention systems, and water and sewer infrastructure.

The site design, including the layout of the roads and lots, stormwater swales, and pipe arrangement, have been designed to facilitate movement of water entering the site from the south-western boundary, and surface runoff generated on the developed site. The overland flow approaching the site from the south-west is proposed to be cut off by and collected in a proposed swale drain along the south-western boundary. From here, stormwater is directed to the underground piped system for the site through proposed inlet headwalls. The piped stormwater system runs underneath the road network and directs the water to the proposed detention basins along the north-eastern side of the property. The pipes are sized to accommodate the runoff from a 5% AEP storm event. The layout of the lots and roads has been designed to allow for overland flow in the event that the pipes do not have sufficient capacity for the water (due to blockage or major storm event). The road network forms the primary overland flow route for the developed site, with pedestrian walkways between the south-western lots to transfer overland flow from the swale along the south-western boundary through to the road network. The overland flow routes will be designed to

accommodate the overland flow anticipated in the 1% AEP event with climate change loading applied to the inundation rate.

The flood hazard overlay associated with this overland flow, covering a large portion of the western side of the property, is not applicable to the developed site. Dwellings in this part of the site will not be in a flood prone area and will not need to address the associated design criteria.

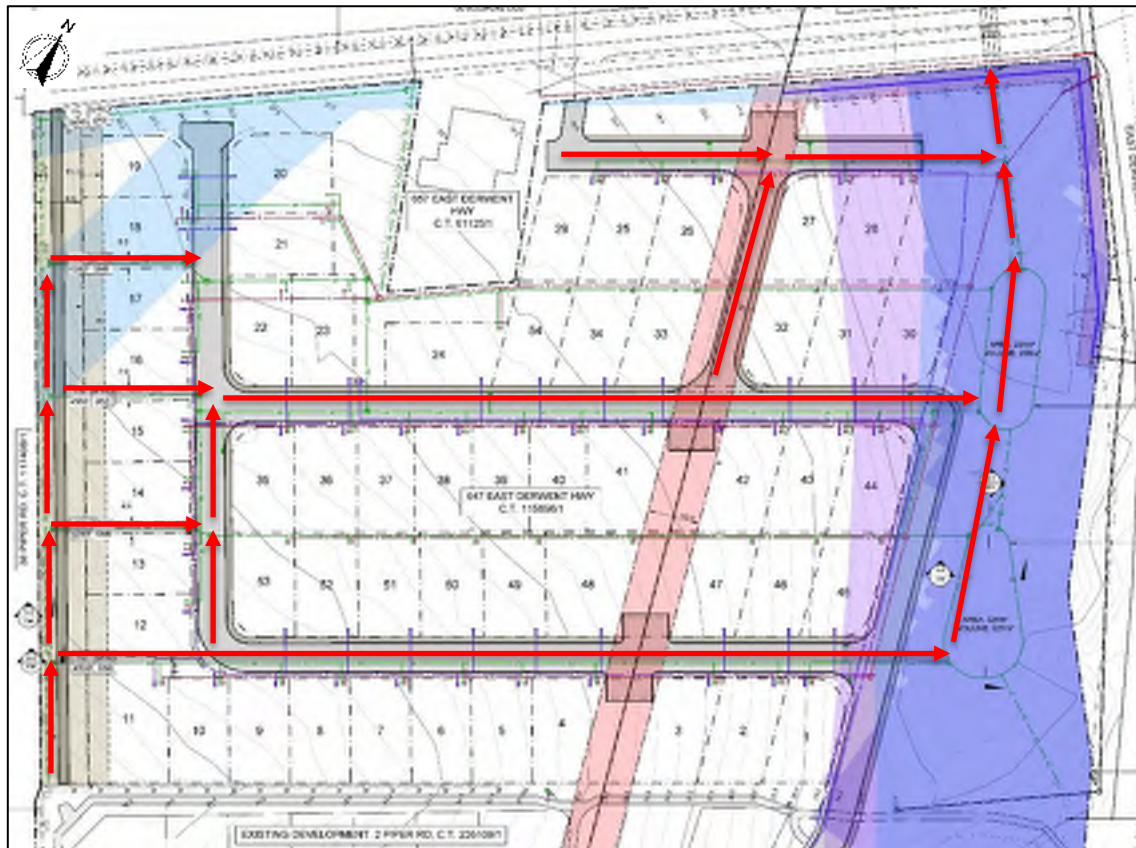


Figure 2: Part of proposed site plan C02 (red arrows show direction of overland flow)

Stormwater System Design – Detention and Treatment

The proposed development results in an intensification of stormwater discharged from the property, and has therefore been designed to meet the requirements of Council's Stormwater Management Procedure for New Developments. Combined detention and bioretention basin systems are proposed to provide detention and treatment of stormwater runoff collected from the site.

Stormwater Detention

DRAINS software was utilised to run an initial loss - continuing loss (IL-CL) model of the development site, to ensure peak runoff rate from the developed site does not exceed peak pre-development runoff rate in the 5% AEP event. Ensembles of storms in the 5% event were modelled in accordance with ARR 2019 procedures using the following inputs and assumptions:

- Design rainfalls were imported from BOM 2016 IFD design rainfalls for Risdon, with pervious area initial and continuing losses, pre-burst rainfall and temporal patterns imported from ARR data hub.
- Pre-development catchment is modelled as 1% impervious area and 99% pervious area, based on existing site conditions.
- Post-development catchment is modelled as 62% impervious area and 38% pervious area, as determined based on proposed site plans and assuming similar dwelling sizes as the existing Clarence Lifestyle Village development.

Two 200m³ stormwater detention basins are proposed to collect the runoff from the majority of the new impervious areas and provide combined treatment and detention for the stormwater runoff collected on the site. The detention basins are provided with DN300 concrete headwall outlet to limit the outflow from the detention basins. The overflow weir level is 400mm above the base of the detention basin, to limit the water depth in the detention basin in frequent rainfall events.

The peak post-development flow rate (with detention) in a 5% AEP storm event is 134L/s, occurring in the 1 hour duration storm burst. This does not exceed the peak pre-development flow rate for the site of 167L/s.

Stormwater Treatment

The following reductions in average annual load based on typical urban stormwater concentrations are required under the Council's Stormwater Management Procedure for New Developments: 90% reduction in gross pollutants (GP), 80% reduction in total suspended solids (TSS), 45% reduction in total phosphorous (TP), and 45% reduction in total nitrogen (TN).

The stormwater treatment system for 647 East Derwent Highway, Risdon has been modelled utilising Model for Urban Stormwater Improvement Conceptualisation (MUSIC) software using the following inputs and assumptions:

- The model input was based on the Hobart Ellerslie Rd 1/5/1996 – 1/10/2001 6-minute rainfall, which includes only valid data (no accumulated or missing data).
- The catchment area was split into three source node types (roof, hardstand and landscape), with three separate catchment zones to model the catchment areas collected to the two bioretention basins and the smaller catchment at the north of the site which bypasses the detention and treatment systems.
- In the absence of standard pollutant generation rates supplied for use in MUSIC modelling in Tasmania, the catchment source nodes have been set up with the default pollutant generation rates provided in MUSIC, in accordance with the MUSIC user manual.

The modelled reductions in average annual load based on typical urban stormwater concentrations for the proposed treatment system are: 90.8% reduction in GP, 86.4% reduction in TSS, 45.5% reduction in TP, and 66.5% reduction in TN.

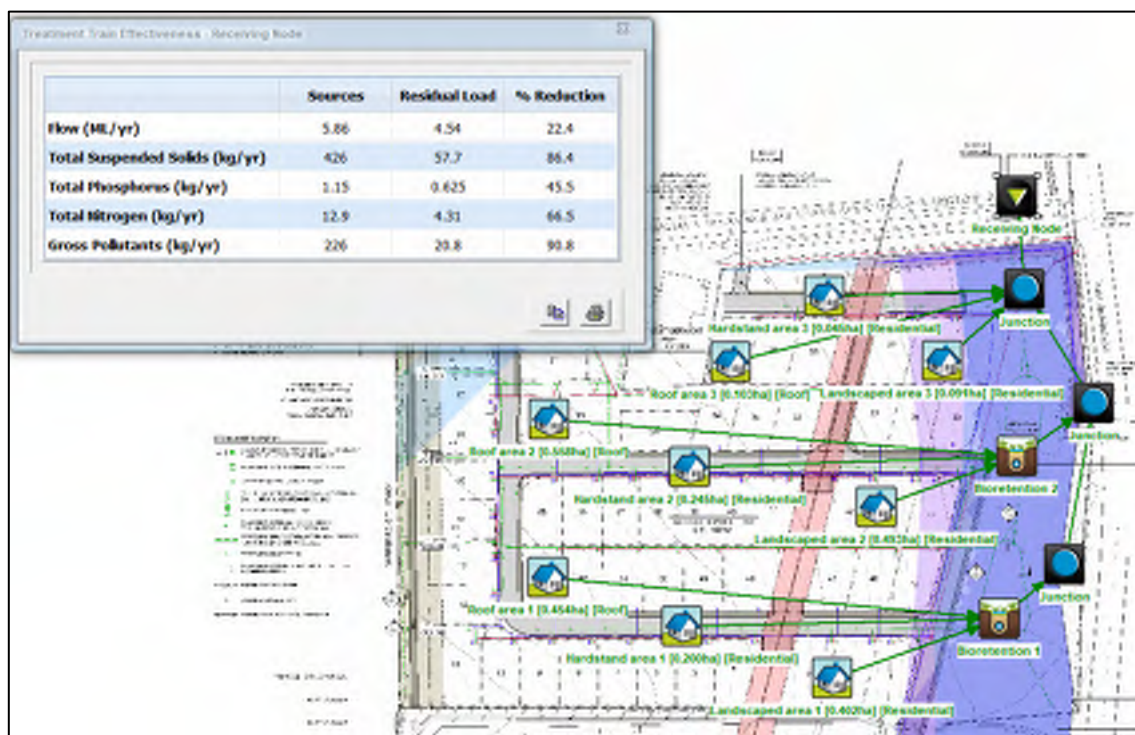
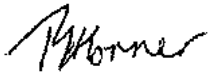


Figure 3: MUSIC model and treatment train effectiveness

Please contact Rachel Horner on 6240 9911 or rachel@jsa.com.au if you require any further information.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'R Horner', with a stylized, cursive script.

Rachel Horner

Civil / Environmental Engineer

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

Form **35**

To: Owner name
 Address
 Suburb/postcode

Designer details:

Name: Category:
Business name: Phone No:
Business address:
 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:

On-Site stormwater system - design
(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
	☐ Building design	Architect or Building Designer
	☐ Structural design	Engineer or Civil Designer
	☐ Fire Safety design	Fire Engineer
	☒ Civil design	Civil Engineer or Civil Designer
	Hydraulic design	Building Services Designer
	☐ Fire service design	Building Services Designer
	☐ Electrical design	Building Services Designer
	☐ Mechanical design	Building Service Designer
	☐ Plumbing design	Plumber-Certifier; Architect, Building Designer or Engineer
	☐ Other (specify)	

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

Other details:
Onsite stormwater retention

Design documents provided:	
-----------------------------------	--

The following documents are provided with this Certificate –

Document description:

Drawing numbers: FE-24035_REV00-C100	Prepared by: Flussig Engineers	Date: 29.05.24
Schedules:	Prepared by:	Date:
Specifications: Performance Solution Report	Prepared by: Flussig Engineers	Date: 18.07.24
Computations: Performance solution Report	Prepared by: Flussig Engineers	Date: 29.05.24
Performance solution proposals: Onsite stormwater retention	Prepared by: Flussig Engineers	Date: 29.05.24
Test reports:	Prepared by:	Date:

Standards, codes or guidelines relied on in design process:	
--	--

AS1547-2012 On-site domestic wastewater management.

AS3500 (Parts 0-5)-2013 Plumbing and drainage set.

Any other relevant documentation:	
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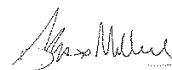
Attribution as designer:	
---------------------------------	--

I Max W. Moller, 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.

Max W. Moller



18.07.24

Licence No: 650370893

Assessment of Certifiable Works: (TasWater)

Note: single residential dwellings and outbuildings on a lot with an existing sewer connection are not considered to increase demand and are not certifiable.

If you cannot check ALL of these boxes, LEAVE THIS SECTION BLANK.

TasWater must then be contacted to determine if the proposed works are Certifiable Works.

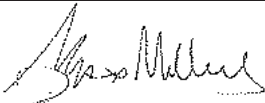
I confirm that the proposed works are not Certifiable Works, in accordance with the Guidelines for TasWater CCW Assessments, by virtue that all of the following are satisfied:

- ☒ The works will not increase the demand for water supplied by TasWater
- ☒ The works will not increase or decrease the amount of sewage or toxins that is to be removed by, or discharged into, TasWater's sewerage infrastructure
- ☒ The works will not require a new connection, or a modification to an existing connection, to be made to TasWater's infrastructure
- ☒ The works will not damage or interfere with TasWater's works
- ☒ The works will not adversely affect TasWater's operations
- ☒ The work are not within 2m of TasWater's infrastructure and are outside any TasWater easement
- ☒ I have checked the LISTMap to confirm the location of TasWater infrastructure
- ☒ If the property is connected to TasWater's water system, a water meter is in place, or has been applied for to TasWater.

Certification:

I Max W. Moller..... being responsible for the proposed work, am satisfied that the works described above are not Certifiable Works, as defined within the *Water and Sewerage Industry Act 2008*, that I have answered the above questions with all due diligence and have read and understood the Guidelines for TasWater CCW Assessments.

Note: the Guidelines for TasWater Certification of Certifiable Works Assessments are available at: www.taswater.com.au

	Name: (print)	Signed	Date
Designer:	Max W. Moller		18.07.24

WATER SUPPLY DESIGN REPORT

EPANET Model

In accordance with:

AS/NZS 3500.1:2021 Plumbing and Drainage Part 1: Water services

AS 2419.1:2021 Fire hydrant installations part 1: System design, installation and commissioning

Water Supply Code of Australia WSA 03 – 2011-3.1 MRWA Edition V2.0 and TasWater's Supplement to this Code.

DOCUMENT INFORMATION

PROJECT ADDRESS:	647 East Derwent Highway, Risdon & 2 Piper Road, Geilston Bay
DOCUMENT TITLE:	WATER SUPPLY DESIGN REPORT
DOCUMENT NUMBER:	17R99-118-4
DATE OF REPORT:	30 May 2024
CLIENT COMPANY:	Clarence Lifestyle Village
REPORT AUTHOR:	Rachel Horner, BE(Hons) BSc MIEAust
CHECKED BY:	Dr Jane Sargison, BE DPhil FIEAust CPEng NER CC6183N

Directors: Dr Jane Sargison BE DPhil FIEAust CPEng NER CC6193N
Mr Matthew Horsham BE MIEAust CPEng NER CC5865I RPEQ
121 Sandy Bay Road, Sandy Bay 7005 Phone (03) 6240 9911 Email mail@jsa.com.au
JSA (Tas) Pty Ltd | ABN 45 165 277 681

REVISION HISTORY					
Revision Number	Revision Description	Prepared By	Reviewed By	Authorised By	Date Prepared
0	For Approval	Rachel Horner	Jane Sargison	Matthew Horsham	30/05/2024

SUMMARY

The proposed development at 647 East Derwent Highway, Risdon includes adhesion of the property title with 2 Piper Road, and construction of 54 multiple dwellings, along with associated driveway and hydraulic services. The proposed private water supply network to service the development is connected to the existing private infrastructure and has been modelled in EPANET.

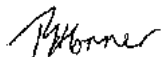
The existing site, 2 Piper Road, is serviced by an existing DN150 water connection with DN100 master meter and DN100 fire assembly, and features 113 existing residential units (two and three bedroom) and communal facilities, serviced by a DN100 water supply loop through the existing site. A new DN63 ID50 offtake from the existing DN100 supply line is proposed to service the additional development, along with extension of the existing separate DN100 fire service line to supply the additional hydrants.

The property is serviced by the Risdon Vale Reservoir, which is located between the 100m and 110m contour lines. The existing connection is approximately 480m from the reservoir by pipe length. TasWater recommends a 5m/km loss from the reservoir to the property connection when estimating available pressure at the property connection based on the pressure in the supply zone. Over 480m length, this is a pressure loss of 2.4m. For the purposes of modelling the supply network for the site, the available static pressure is estimated to be 100m, which is sufficiently conservative to account for the approximate elevation of the reservoir and the 2.4m loss to the connection.

Water demands for the proposed development have been modelled in EPANET based on the modelling procedure described in Appendix A and B of the TasWater Supplement to Water Supply Code of Australia WSA 03 – 2011-3.1 MRWA Edition V2.0 (TasWater Supplement).

The probable simultaneous demand (PSD) in AS/NZS 3500.1:2021 and fire flow rate based on AS 2419.1:2021 have also been calculated and run in EPANET model to confirm that pressures and pipe flow velocities are acceptable.

The minimum required supply pressures and flow rates are achieved at the proposed dwellings and hydrants.



Rachel Horner

Civil / Environmental Engineer

RESPONSE TO TASWATER RAI

This report is prepared in response to the request for additional information from TasWater dated 18 July 2022. The following points are addressed:

1. *To allow TasWater to determine potential hydraulic service capacity limitations, please provide the following for both existing and proposed development:*
 - a. *The required Peak day flow rate in L/s and the required residual pressure (kPa) at the point of connection.*
 - b. *Peak day usage in L/day*
 - c. *Probable simultaneous water demand (PSD) for the existing + proposed development;*
 - d. *The required fire flow rate in L/s and the required residual pressure (kPa) at the point of connection.*

NOTE: The pressures will need to include losses through the actual connection, the associated pipework and the elevation changes.

- e. *Calculations of the number of Equivalent Tenements.*

NOTE: The engineering design calculations must comply with AS/NZS 3500.0:2003 Plumbing and Drainage and the Sewerage and Water Codes of Australia - Melbourne Retail Water Agencies Integrated Code version(s) published by the Water Services Association of Australia, and as amended by TasWater's Supplements.

Response:

The total available static pressure for the site is estimated to be 100m. The property connection is at approximately 35m elevation, resulting in an available static pressure at the property connection of $100 - 35 = 65\text{m}$ (650kPa).

The existing site has base demand of 74.2 residential equivalent tenements (ETs) (from 32 three bedroom units x 0.8 ETs and 81 two bedroom units x 0.6 ETs).

The ETs for the existing commercial buildings, including gym/pool complex, community hall, men's shed, and craft shed, are approximated from fixture unit loadings in AS/NZS 3500.1. Based on equivalent fixture unit loadings, the commercial buildings are conservatively each approximated as equivalent to a single dwelling. Thus, they are modelled as 4 commercial ETs in total for the existing site.

The proposed development includes 43.2 additional residential ETs for the site, based on 0.8 ETs per 3 bedroom unit x 54 units.

The peak day usage from the existing and proposed development is calculated in EPANET based on the number of equivalent tenements, the 24 hour residential & commercial demand patterns, and the base demand of 0.017836L/ET/s. The peak day usage from the existing development is 2.76L/s, the additional peak day usage from the proposed additional dwellings is 1.54L/s, and the total peak day usage from the post-development site is 4.30L/s.

The PSD based on the AS/NZS 3500.1 calculation is 9.38L/s existing and 4.96L/s additional (14.34L/s total).

Additional hydrants are proposed for the site, and are required to flow at 10L/s. There is no additional loading on the existing connection from the inclusion of additional hydrants. The most disadvantaged new hydrant is modelled with 10L/s flow rate to verify supply pressures can be achieved. The peak day usage with fire hydrant flowing is calculated in EPANET to be 12.84L/s,

based on the total number of equivalent tenements, the 24 hour residential, commercial & fire demand patterns, and the base demand of 0.017836L/ET/s.

Losses through the existing property connection are accounted for by including a loss coefficient for the pipes connected to the node representing the meter assembly in the model. Roughness coefficient is applied to all pipes in accordance with TasWater Supplement.

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PROJECT DESCRIPTION

Existing Conditions

The existing site (2 Piper Road) is an existing residential retirement village, featuring 113 existing dwellings (32 three bedroom units and 81 two bedroom units), along with community facilities including gym complex, community hall, men's shed, and craft shed. The property is serviced by an existing DN150 connection, with DN100 master meter and DN100 fire assembly. Refer to Figure 1 for existing site conditions.



Figure 1: Existing site conditions at 647 East Derwent Highway and 2 Piper Road [1]



Figure 2: Existing water meter assembly

Proposed Development

The proposed development includes construction of 54 multiple dwellings, along with associated driveway and hydraulic services. For the purposes of the water supply calculation, all new multiple dwellings are assumed to be three bedroom, although they are likely to be a mix of two and three bedroom units as at the existing site. The water supply network to service the additional units is proposed to be connected to the existing private supply line through the site and be serviced by the existing master meter and property connection. Additional private fire hydrants internal to the development are proposed, to achieve required fire hydrant coverage in accordance with AS 2419.1:2021.

A new DN63 ID50 supply loop is proposed, connected off the existing private DN100 water supply loop, to service the new dwellings. The separate DN100 line for the hydrants will be continued through to the new part of the development to service the additional hydrants. There are no proposed changes to the existing meter assembly.

The demand loadings for the multiple dwellings are calculated in accordance with Appendix A and B of the TasWater Supplement to Water Supply Code of Australia WSA 03 – 2011-3.1 MRWA Edition V2.0 (TasWater Supplement) and modelled in EPANET. The demand is also modelled in accordance with the method in AS/NZS 3500.1:2021, and modelled in EPANET given that the size of the project is outside of the values provided in the tables in AS/NZS 3500.1:2021 Appendix C. A description of the EPANET model is provided in this report.

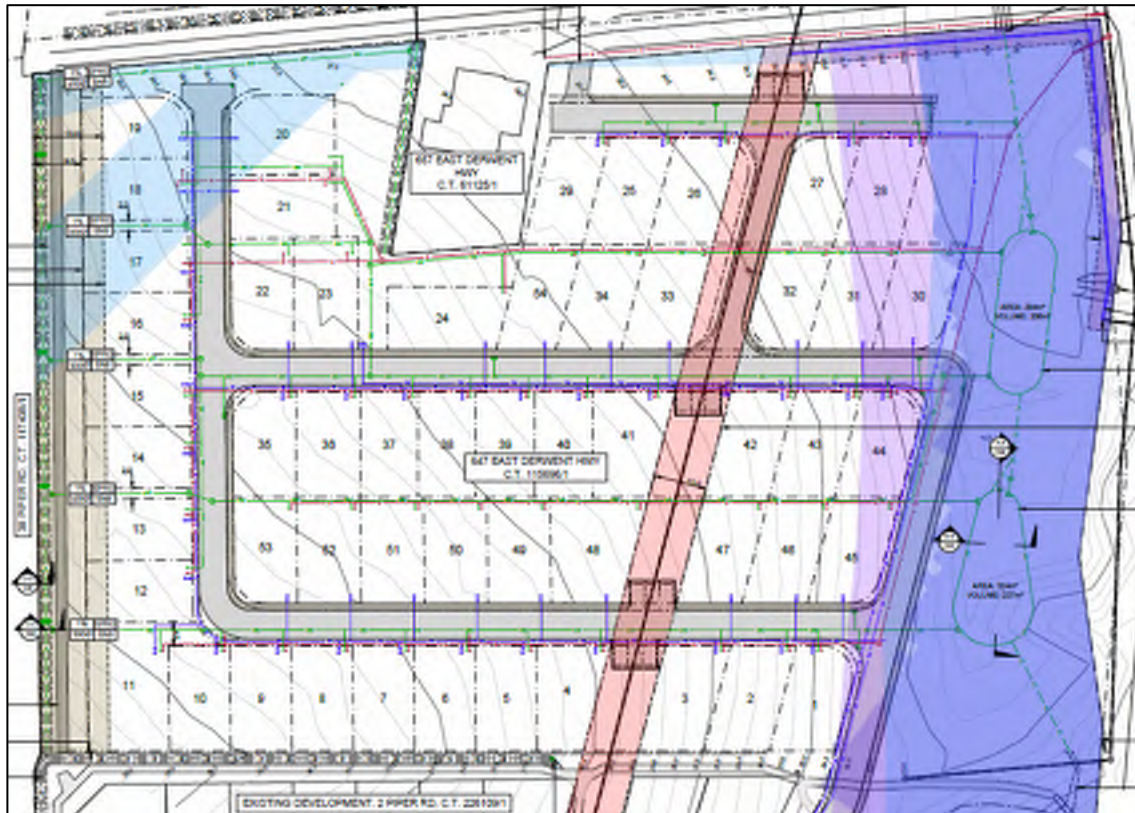


Figure 3: Proposed development at 647 East Derwent Highway

EPANET MODEL

Model Scenarios

The private water supply network for the proposed additional 54 units at 647 East Derwent Highway has been modelled using EPANET. Two flow condition scenarios have been modelled:

1. 43.2 additional equivalent tenements (ETs) for the site, based on 0.8ET per 3 bedroom unit x 54 units, in accordance with Appendix A of the TasWater Supplement, and 10L/s flow rate for a period of 4 hours in accordance with Table 3.1.5 at the most disadvantaged proposed private hydrant (adjacent to unit 23), modelled as a 72 hour period in accordance with Appendix B. The existing load from the existing site is modelled as 74.2ETs residential and 4ETs commercial.
2. Probable simultaneous demand (PSD) of 4.96L/s, based on 54 dwellings in accordance with AS/NZS 3500.1:2021 Table 3.2.3, and 10L/s flow rate in accordance with AS2419.1:2021 Table 2.2.6(A), at the most disadvantaged private fire hydrant (adjacent to unit 23), modelled as a single period. The existing load from the existing site is modelled as PSD of 9.38L/s.

Design Parameters

The supply pipe sizes have been determined to ensure:

1. Minimum head at any node of 50kPa (5m) as per AS/NZS 3500.1:2021 Clause 3.3.2,
2. Maximum flow velocity of 3m/s as per AS/NZS 3500.1:2021 Clause 3.4, and
3. Minimum pressure at private fire hydrant of 200kPa (20m) flowing at 10L/s as per AS 2419.1:2021 Table 2.2.6(A).

Minimum pressures given in the TW Supplement (minimum head at connection of 220kPa (22m) and minimum head at hydrant of 250kPa (25m) flowing at 10L/s) are required only for property connections & TasWater hydrants, but are used as a point of comparison in the model.

Inputs and Assumptions

Model Setup

The additional 54 units are proposed to be serviced by a DN63 ID50 supply loop connected to the existing DN100 supply in the existing site, with two smaller offtakes for Units 15-21 & 25-29, along with extension of the existing separate DN100 line to supply the private fire hydrants. Refer to Figure 2 and JSA drawing C02.

Demand for each proposed unit and hydrant is modelled via individual nodes along the supply loop. Refer to Figure 4 for node locations.

The demand for the existing site is modelled via two nodes at the modelled offtake point to the existing DN100 line, one for the units and one for the commercial buildings such that they can have different demand patterns applied.

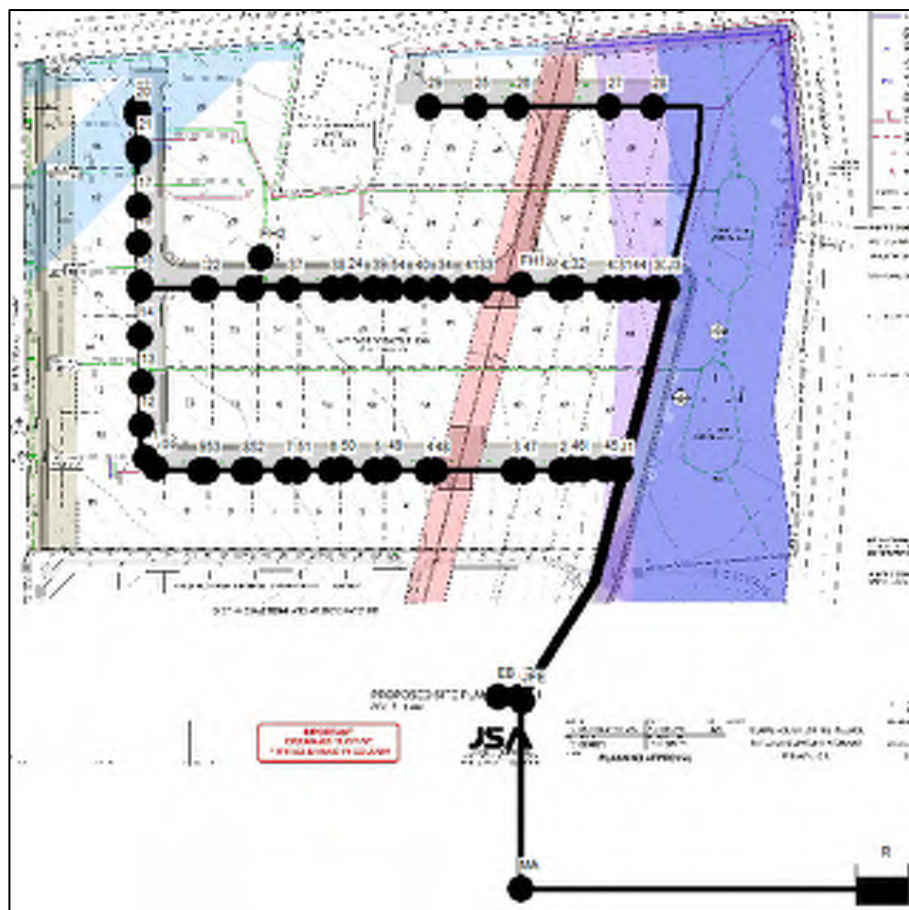


Figure 4: EPANET model layout

Pipe Parameters

Pipe friction was modelled utilising Hazen Williams Coefficient, C, determined according to Table 3.1.6.3 of the TasWater Supplement, C = 130.

All new pipes are modelled according to their actual lengths as scaled from the site plan C02 by JSA. Existing pipe lengths are estimated from LISTmap as the distance from the reservoir to the master meter (480m) and the distance from the master meter through the private system to the point of connection for the new branch line to service the new units (280m). The lines representing the existing pipes are not drawn to scale in the model, the lengths are adjusted manually.

The existing property connection is DN150 with two DN100 supply lines through the site (one for water use and one for hydrant supply). The existing pipe from the reservoir to the master meter varies in size according to LISTmap data, but is conservatively modelled as the smallest diameter (DN150) for the entire 480m length. Two DN100 lines are modelled from the master meter through to the point of connection for the new branch lines to service the new units, to represent the existing private water supply and fire hydrant supply in the existing site.

Fittings losses in the property connection and meter assembly are accounted for by applying loss coefficients to the sections of pipe connected to the node representing the meter assembly. The loss coefficients are estimated to be $k = 0.88$ for the fire assembly and $k = 3.86$ for the master meter assembly [2].

Proposed pipes are modelled as an ID50 supply loop for the new units, with two ID32 offtakes to service the smaller branches. The continuation of the separate supply line for the fire hydrants is DN100.

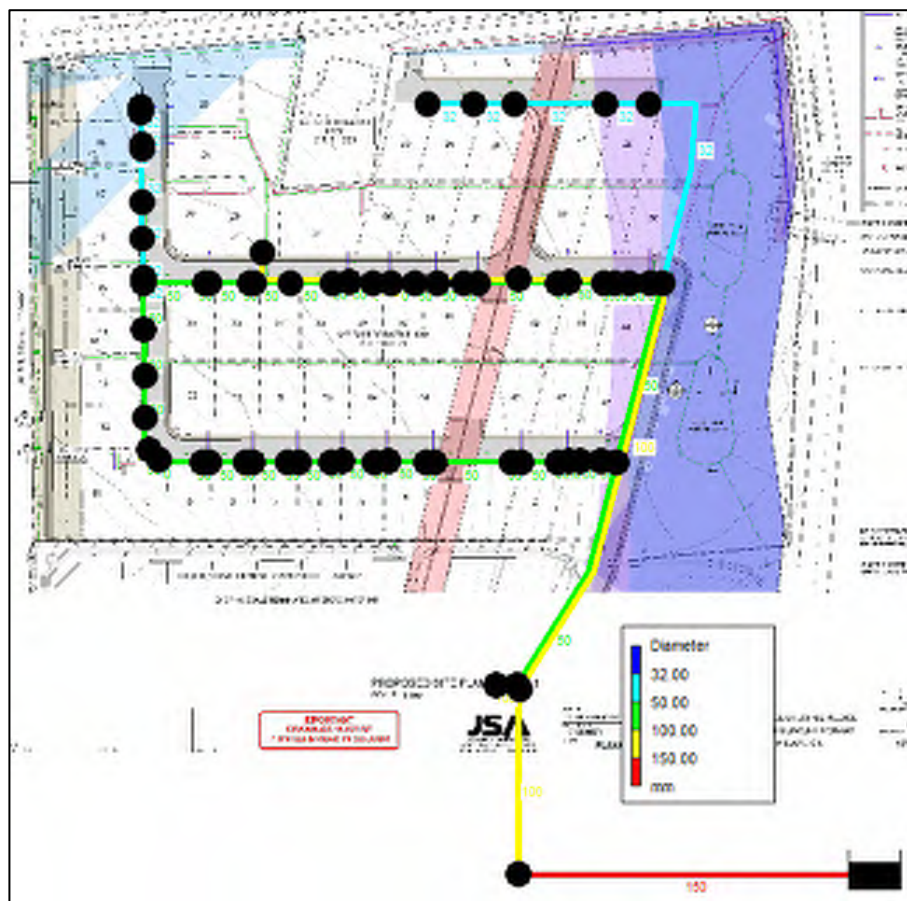


Figure 5: Pipe diameter in EPANET model

Node Parameters

Each of the new units is represented by a node, with base demand of 0.8ETs (for a 3 bedroom unit per TW Supplement Appendix A). The floor levels of the proposed units are not known; the elevation of each node is conservatively estimated as the highest natural surface level on each unit lot with 2m added, to account for potential FFL and height of fixtures inside the unit.

The existing site demand is represented by two nodes, located at the point of connection for the new ID50 branch to the existing DN100 line. The residential node has base demand of 74.2ETs (calculated from 32 three bedroom units x 0.8 ET and 81 two bedroom units x 0.6 ET). The demand pattern for this node is based on the TasWater Residential Demand Pattern of 24 hours duration repeated over 3 days (per Appendix B).

A second node is applied for the commercial buildings, with the ETs approximated from fixture unit loadings in AS/NZS 3500.1, including gym/pool complex (22 loading units), community hall (17 loading units), men's shed (6 loading units), and craft shed (6 loading units). Based on equivalent fixture unit loadings, the commercial buildings are conservatively each approximated as equivalent to a single dwelling (approximately equivalent to 31 loading units). Thus, they are modelled as 4 commercial ETs in total for the existing site, with the TasWater Commercial Demand Pattern of 24 hours repeated over 3 days (per Appendix B) applied to this node.

For the model of the flow over a 72hour period, the base demand number of ET's is multiplied by the demand multiplier of 0.017836L/s to provide the requisite load in L/s per node, in accordance with Appendix A and B of the TasWater Supplement.

The demand pattern for the hydrants is based on the TasWater Fire Demand Pattern of 24 hours duration repeated over 3 days. The most disadvantaged new hydrant (adjacent to Unit 23) is applied an ET demand of 561 ETs in accordance with TW Supplement Appendix B, such that the demand is 10L/s for 4 hours.

The AS/NZS 3500.1:2021 calculation is modelled as a single period. The probable simultaneous demand (PSD) for 54 dwellings is 4.96L/s, as per AS/NZS 3500.1:2021 Table 3.2.3. Therefore, demand multiplier in the EPANET model is $4.96 / 54 = 0.092\text{L/s}$, with each unit applied base demand of 1.

Database Checks

Standard database checks as outlined in Appendix B of TasWater Supplement were conducted to check the following elements:

- All pipes modelled to accurate length
- All pipes modelled to accurate size (internal diameter) and C = 130
- All nodes specified at correct, non-zero elevation

Model Results

The lowest pressure available is at Unit 11, with hydrant running at FH2, with pressure head of 58.06m at 9am and 58.03m at 6pm in the model based on TasWater Supplement, and 30.99m in the model based on AS/NZS 3500.1 calculation. This exceeds the required minimum head at any node of 22m (TasWater) or 5m (AS/NZS 3500.1). Refer to Figure 6 and Figure 7.

The modelled pressure for the private fire hydrant flowing at 10L/s is 58.12m in the model based on TasWater Supplement, and 53.63m in the model based on AS/NZS 3500.1 & AS 2419.1 calculation. This exceeds the minimum pressure at private fire hydrant of 200kPa (20m) flowing at 10L/s per AS 2419.1 & 250kPa (25m) flowing at 10L/s per TW Supplement.

Noting that required pressures given in the TW Supplement are required only for property connections & TasWater hydrants; they are achieved in the model although it is for a private development and not necessarily required.

The maximum pipe flow velocity is 2.53m/s, in the model based on the AS/NZS 3500.1 calculation (since flow rates & velocities are higher in this model). This does not exceed the maximum flow velocity of 3m/s. Refer to Figure 8.

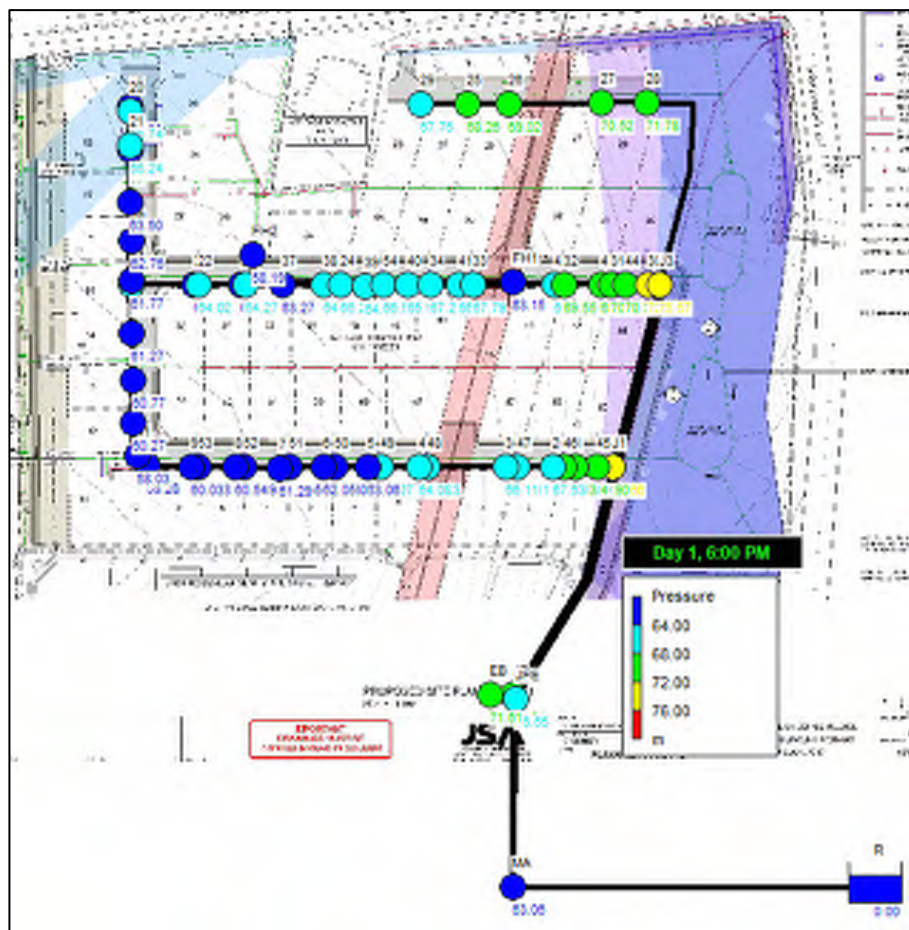


Figure 6: Pressure at nodes for demand calculation based on Appendix A and B of the TasWater Supplement & 10L/s at hydrant (at 7pm)

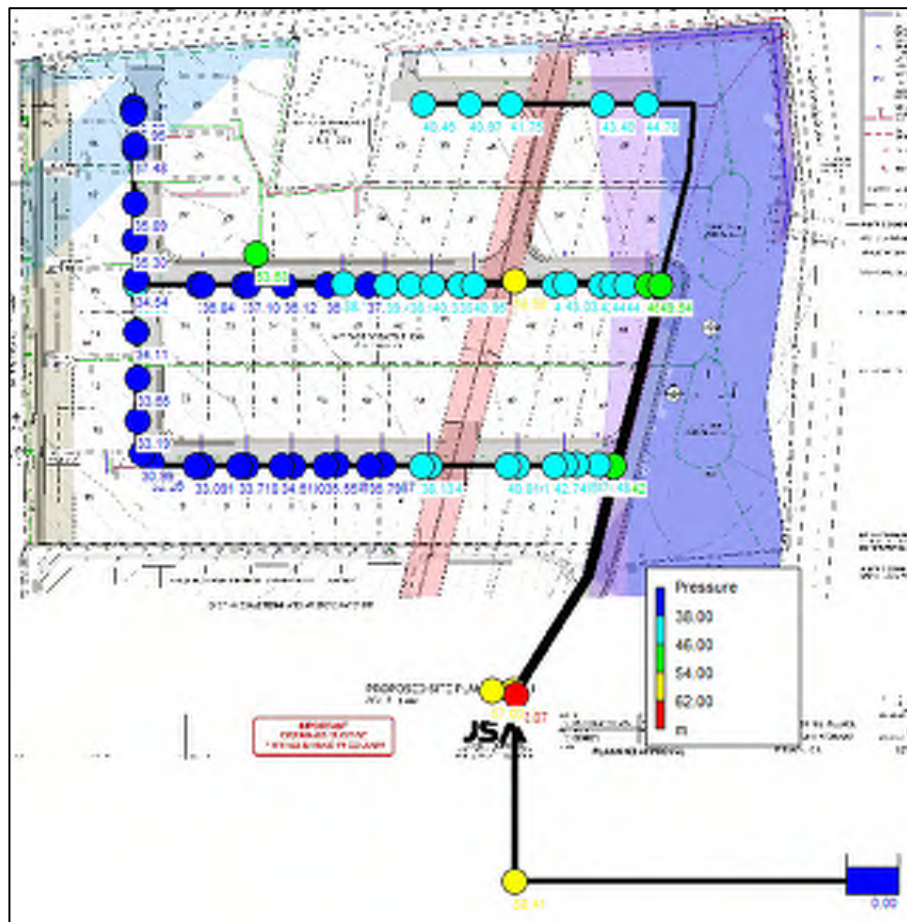
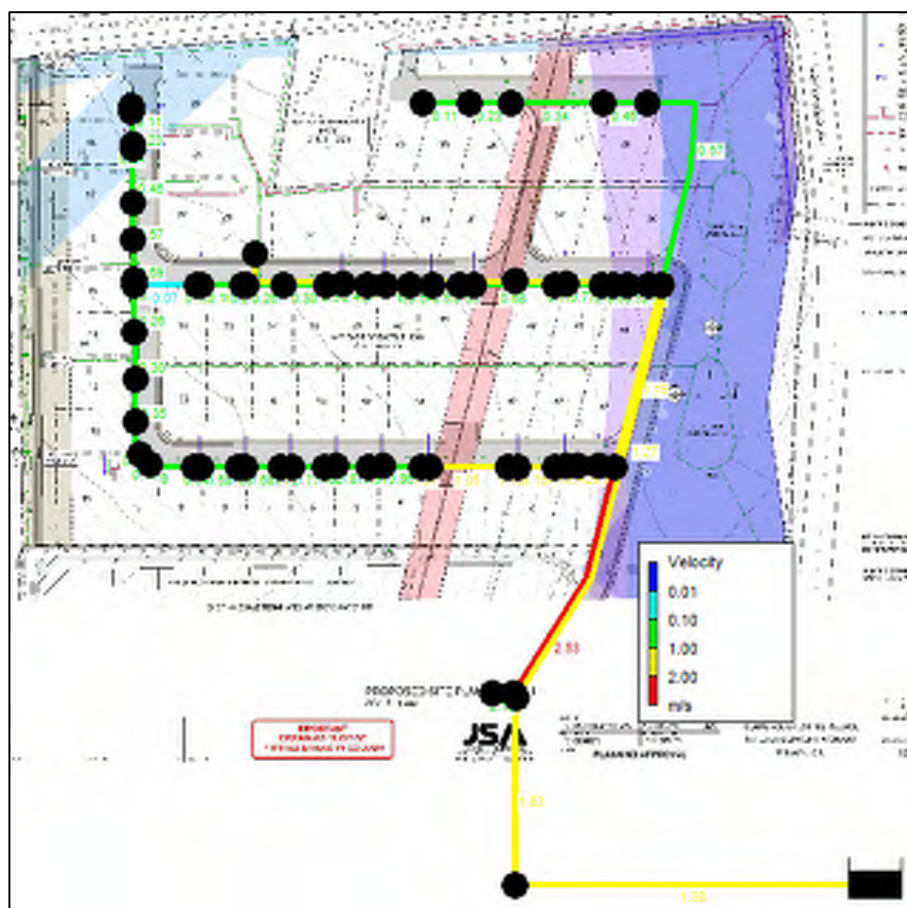


Figure 7: Pressure at nodes for demand calculation based on AS/NZS 3500.1 calculation (single period)



REFERENCES

- [1] Land Tasmania, "LISTmap," 2018. [Online]. Available: <http://maps.thelist.tas.gov.au/listmap/app/list/map>. [Accessed May 2024].
- [2] Australian Pipe Friction Handbook Fourth Edition, Pump Industry Australia Incorporated, 2013.
- [3] TasWater, *TasWater Supplement to Water Supply Code of Australia WSA 03-2011-3.1 MRWA Edition V2.0 Issue Number: Public 04*, TasWater, 2015.
- [4] Water Services Association of Australia, *Water Supply Code of Australia WSA 03-2011-3.1 Melbourne Retail Water Agencies Edition Version 2.0*, Water Services Association of Australia, 2012.
- [5] Joint Technical Committee WS-014, Plumbing and Drainage, *AS/NZS 3500.1:2021 Australian/New Zealand Standard Plumbing and drainage Part 1: Water services*, Standards Australia Limited, 2021.
- [6] Committee FP-009, Fire Hydrant Installations, *AS 2419.1:2021 Australian Standard Fire hydrant installations Part 1: System design, installation and commissioning*, Standards Australia Limited, 2021.

APPENDIX A: LIST OF ACRONYMS

AS 2419.1:2021	Australian Standard Fire hydrant installations Part 1: System design installation and commissioning
AS/NZS 3500.1:2021	Australian/New Zealand Standard Plumbing and drainage Part 1: Water services
C	Hazen Williams Coefficient
DN	Nominal Diameter
ET	Equivalent Tenements
ID	Internal Diameter
PSD	Probable Simultaneous Demand
TasWater Supplement	TasWater Supplement to Water Supply Code of Australia WSA 03-2011-3.1 MRWA Edition V2.0
TW	TasWater

7.5 LOCAL PROVISIONS SCHEDULE AMENDMENT AND COMBINED DEVELOPMENT APPLICATION PDPSPAMEND-2022/028417 – 2 PIPER ROAD, GEILSTON BAY, 647 EAST DERWENT HIGHWAY AND 657 EAST DERWENT HIGHWAY, RISDON**EXECUTIVE SUMMARY****PURPOSE**

The purpose of this report is for the Planning Authority to consider the application made for a combined Amendment to the Clarence Local Provision Schedule (LPS) under Section 37(1) of the *Land Use Planning and Approvals Act 1993* (LUPAA) and development application under Section 40T (1) of LUPAA.

The application relates to land at 2 Piper Road, Geilston Bay (CT: 226109/1), 647 East Derwent Highway, (CT: 115696/1), and 657 East Derwent Highway, Risdon (CT: 61125/1).

The land at 2 Piper Road, Geilston Bay and 647 East Derwent Highway is to be rezoned from Rural Living B to a Particular Purpose Zone – Clarence Lifestyle Village to enable the expansion of the existing residential development (Retirement Village) and associated infrastructure.

The proposal also seeks to consolidate the land at 2 Piper Road, Geilston Bay and 647 East Derwent Highway into one title with the existing right-of-way access over 657 East Derwent Highway, Risdon removed as part of the consolidation.

RELATION TO PLANNING PROVISIONS

The land is currently zoned Rural Living B under the Tasmanian Planning Scheme - Clarence. It is also subject to the following codes: Parking and Sustainable Transport Code, Road and Railway Assets Code, Natural Assets Code, Bushfire-prone areas Code, Flood-prone areas Code and Safeguarding of Airports Code.

The proposed residential development (Retirement Village) would be prohibited under the current provisions of the Local Provisions Schedule (LPS).

LEGISLATIVE REQUIREMENTS

The report on this item details the basis and reasons for the recommendation. Any alternative decision will require a full statement of reasons in order to maintain the integrity of the Planning approval process and to comply with the requirements of the *Judicial Review Act 2000* and the *Local Government (Meeting procedures) Regulation 2025*.

Section 37 of LUPAA provides for the Planning Authority to consider a request to amend the Clarence LPS. Section 40T of LUPAA provides for the lodging of an application for a permit which would not be allowed if the planning scheme were not amended as requested.

In determining this matter, the Planning Authority must consider whether it is satisfied that the draft amendment meets the LPS criteria under Section 34 of LUPAA. The Planning Authority is required to make a decision in relation to this matter within the statutory period, which expires on 27 July 2026.

CONSULTATION

Unless directed otherwise by the Tasmanian Planning Commission (the Commission), if Council agrees to a request to prepare a draft amendment to the LPS, it will then be subject to public exhibition and open for public comment for a period of 28 days, in accordance with statutory requirements.

FINANCIAL IMPLICATIONS

No significant implications.

RECOMMENDATION:

- A. That, pursuant to Section 38(1) of the *Land Use Planning and Approvals Act 1993*, the Planning Authority is satisfied that the requested amendment of the Clarence Local Provisions Schedule PDPSPAMEND-2022/028417 to rezone 2 Piper Road, Geilston Bay and 647 East Derwent Highway, Risdon from Rural Living Zone B to the Particular Purpose Zone - Clarence Lifestyle Village meets the LPS criteria.
- B. That, pursuant to Section 40F (2) of the Act, the Planning Authority certifies the modified draft amendment as meeting the LPS Criteria.
- C. That, once certified, the Planning Authority will provide a copy of the draft amendment to the Tasmanian Planning Commission, give notice and place the draft amendment on public exhibition for a period of 28 days as required under Section 40H of the *Land Use Planning and Approvals Act 1993*.
- D. That, pursuant to Section 40Y (2) of the *Land Use Planning and Approvals Act 1993*, the planning application for 54 Residential (Retirement Village) Units, Demolition of the Existing Dwelling & Outbuilding at 647 East Derwent Highway and Associated Works at 2 Piper Road, 647 East Derwent Highway & 657 East Derwent Highway, Risdon be approved subject to the following conditions and advice.
 1. GEN 01 – ENDORSED PLANS.
 2. Development must occur in accordance with the recommendations contained within the Clarence Lifestyle Village - Noise Impact Assessment by Noise Impact Consulting, dated 28 October 2024. These measures are to be certified by a recognized Acoustic Engineer or other appropriately qualified person and submitted as part of a Building Permit.
 3. An updated Bushfire Report must be submitted showing the following:
 - All dwellings be designed and built to BAL-12.5 minimum standard under AS 3959:2018,
 - An updated TFS-endorsed bushfire emergency plan drafted in accordance with the current template documents found on the TFS website,
 - All new dwellings be designed with a basic ember protection at a minimum,
 - The whole site must be maintained as a hazard management area,

must be submitted to and approved by Council’s Chief Executive Officer or delegate prior to the commencement of the use / prior to the issue of a certificate of likely compliance (CLC) for building works, (whichever occurs first). When approved, the plans will form part of the permit.

4. Suitable covenants must be included in the Schedule of Easements with respect to:
 - Establishing the 13m setback to the rear (southern boundary) of the subject property an exclusion zone with no new habitable buildings to be built within this zone.
 - the whole site must be maintained in a low fuel state as a hazard management area.

Additional covenants or other controls must not be included on the titles to the lots created by the subdivision where they are in conflict with any provisions of, or seek to prohibit any use provided for within, the relevant Planning Scheme applying to the lot.

5. The proposed non-combustible fence must be designed in accordance with the specifications referred to in the bushfire hazard report and the construction of the non-combustible fence must be implemented as part of the site civil works to the satisfaction of Council’s Chief Executive Officer or delegate.
6. A landscape plan must be submitted to and approved by Council’s Chief Executive Officer or Delegate prior to the commencement of the use / prior to the issue of a certificate of likely compliance (CLC) for building works, (whichever occurs first). The landscape plan must be to a standard scale, provide the designer’s contact details and be legible when reproduced at A3 size. The landscape plan must clearly document the following:
 - a north point/arrow,
 - existing property information such as building footprints, location of underground and overhead services, boundary lines, outdoor structures, garden beds and fences,
 - existing trees identified, marked clearly as “retained” or “for removal”. An outline of tree protection measures – inclusive of calculated Tree Protection Zones in line with AS 4970-2009 – is required for all “retained” trees,
 - existing contours, relevant finished floor levels and any proposed alterations to ground levels,
 - areas of proposed landscape hard work treatments such as driveways, paths, buildings, carparks, retaining walls, edging and fencing,
 - areas of proposed landscape soft work treatments including garden beds and lawns,
 - proposed planting design with locations of individual plants at intended spacing and clearly identified species (use of symbols with a legend or direct labelling of plants preferred),
 - a table listing selected species’ botanical names, mature height, mature width, pot size and total quantities,

- avenue type plantings adjacent to the Commerce Road boundary with the inclusion of Ornamental pear species,
- details of proposed ongoing maintenance schedule (e.g. watering, weeding), and
- estimated cost for the installation of landscape works.

Note: Refer to “Preparing Landscape Plans for Development Applications” pamphlet for further information. Installed landscape works (soft and hard) will be inspected for adherence to the approved landscape plan and for quality of workmanship.

7. The detailed landscape plan must be consistent with the hazard management area requirements.
8. ENG M8A – SERVICE EASEMENTS.
9. ENG M8 – EASEMENTS.
10. ENG M1 –DESIGNS DA.
11. ENG A5 – SEALED CAR PARKING.
12. ENG S1 – INFRASTRUCTURE REPAIR.
13. ENG S2 – SERVICES.
14. ENG S11 – SEALING OF SERVICES.
15. ENG S5 - STORMWATER PRINCIPLES.
16. Prior to the issue of Engineering Approval, detailed and coordinated stormwater and flood management design, prepared by a suitably qualified engineer, must be submitted to and approved by Council’s Chief Executive Officer or delegate.

The design must be consistent with the approved development plans and address the relevant findings of the supporting stormwater and flood reports. The design must demonstrate that:

- (a) The proposed drainage, detention and major overland flow systems safely manage the 1% AEP event, inclusive of the adopted climate change allowance.
- (b) Post-development stormwater discharge from the development does not exceed pre-development discharge at the relevant discharge points.

- (c) The cut-off drain, check dams, headwalls, pipe network, detention basins, internal roads and overflow paths are coordinated and adequately designed to safely manage site runoff and external overland flows, including relevant design calculations, hydraulic modelling, longitudinal sections, cross sections, profiles, levels, pipe schedules, basin details and capacity calculations.
- (d) The proposed works do not cause or contribute to adverse flooding, permanent scour or erosion impacts on the site, adjoining land, East Derwent Highway or public infrastructure.
- (e) Finished floor levels and relevant access levels are set in accordance with the approved flood and drainage design, including appropriate freeboard where required.

The submission must include sufficient supporting calculations, modelling outputs and detailed engineering drawings to demonstrate compliance with this condition.

When approved, the amended plans will form part of this permit. If compliance with this condition cannot be demonstrated, the approved development must not proceed in its approved form, and a further planning approval may be required.

- 17. An erosion and sedimentation control plan, in accordance with the Derwent Estuary Program Soil & Water Management on Building & Construction Sites document, must be submitted and approved by Council's Head of Infrastructure and Natural Assets prior to the commencement of the works / prior to the issue of a certificate of likely compliance (CLC) for building works, (whichever occurs first). All debris/construction materials must be contained within the property. All works must be carried out in compliance with the approved erosion and sediment control plan or to the satisfaction of Council's Chief Executive Officer or delegate prior to the commencement of works.
- 18. A weed management plan identifying methods to control weeds, must be submitted to and approved by Council's Head of Infrastructure and Natural Assets prior to commencement of works. The plan must:
 - reference any Weeds of National Significance and Declared Weeds under the Weed Management Act and address the spread of soil-based pathogens in accordance with the Tasmanian Washdown Guidelines for Weed and Disease Control,
 - identify the weed species, initial treatment, on-going management and maintenance period thereof. The plan may include manual removal of larger plants and/or chemical control as recommended by the relevant Government department, and
 - include a detailed breakdown of estimated costs.

The Final Plan and Schedule of Easements for any stage will not be sealed until the weed management plan for that stage has been implemented and maintained to the satisfaction of Council's Head of Infrastructure and Natural Assets. Alternatively, a bond of 1.5 times the estimated cost of works associated with implementing the weed management plan for that stage must be submitted prior to sealing. The bond will be held as security to ensure both development and maintenance of each lot is undertaken in accordance with the approved plan until each of the newly created lots are sold or the management period has expired, whichever comes first. The bond is to be a cash deposit or a bank guarantee.

19. All works must be undertaken generally in accordance with the *Wetlands and Waterways Works Manual* produced by the Tasmanian Department of Primary Industries, Water and the Environment 2003 [copy available at <https://nre.tas.gov.au/conservation/flora-of-tasmania/tasmanias-wetlands/wetlands-waterways-works-manual>].
20. Certificates of Title for subject land, Volume 226109/1 and Volume 115696/1 must be consolidated into one title prior to the issue of a building/plumbing permit or commencement of works, whichever occurs first. To consolidate the titles, the final plan and schedule of easements must be submitted to Council for sealing.
21. The development must meet all required Conditions of Approval specified by TasWater notice dated 05/07/2024 (TWDA 2022/0088 - CCC).

E. That the permit be accompanied by standard advice.

F. That the details and conclusions included in the Associated Report be recorded as the reasons for Council's decision in respect of this matter.

Decision: **MOVED** Cr Ritchie **SECONDED** Cr James

"That the Recommendation be adopted".

CARRIED UNANIMOUSLY

Cr Mulder left the meeting at this stage (7.45pm).

Council now concludes its deliberations as a Planning Authority under the Land Use Planning and Approvals Act, 1993.